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National Management Effectiveness and Capacity Assessment

Report on the  
**Management  
Effectiveness and  
Capacity  
Assessment**  
of Protected Areas  
in the Philippines

# PROTECTING OUR CHILDREN'S FUTURE

Addressing Threats and Issues in Biodiversity Protection



On behalf of



Federal Ministry for the  
Environment, Nature Conservation,  
Building and Nuclear Safety

of the Federal Republic of Germany

# Imprint

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Report on the  
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**Capacity**  
**Assessment**  
of Protected Areas  
in the Philippines

## MESSAGE OF THE DENR SECRETARY

The Department of Environment and Natural Resources highly appreciates and recognizes the initiatives of the Protected Areas and Wildlife Bureau now the Biodiversity Management Bureau, in carrying out the management effectiveness and assessment of the 61 Protected Areas under the National Integrated Protected Areas System or NIPAS nationwide. It was not an easy feat, but it was made possible with the support of the Government of the Federal Republic of Germany through its Protected Areas Management Enhancement or PAME Project.

The results of the study showed the challenges in protected area management. This was welcomed as it shed light, not only to the Department but to our conservation partners, on how we will go about addressing the gaps and limitations that are plaguing us from fully implementing the intent of the NIPAS.

The study provided direction to the Protected Areas Sector of the Department particularly on the strategies to be adopted and on what enabling policies to be formulated. Through the study, our partner donor agencies, which have been very supportive with this sector since the beginning, are also provided with a clear picture on where to focus its support and assistance. Based on our foreign-assisted portfolio, grants for the biodiversity sector amounted to around US \$ 66.28 million from 2013 to 2017.

On the other hand, aside from the challenges, the study affirmed the efforts of more than 20 years on protected area management in the country. With the *NIPAS Act*, the irresponsible utilization of resources is curtailed and conservation measures were put in place.

Clearly, the Protected Areas Sector of the Department has modest but significant accomplishments. The challenge now is to scale-up these best practices and learnings. The Department can not do this alone. The Department shares its responsibility with partners who have been there from the beginning, and hopefully will still be there throughout the endeavor. The result of the study as reflected in this report should serve as baseline in moving forward towards a functional and effective protected areas management

- End -

SECRETARY RAMON J.P. PAJE  
Department of Environment and Natural Resources

# FOREWORD

For over two decades, the Philippines has been in a constant quest to conserve its diverse biological resources to benefit the present and future Filipino generations. Despite this, biodiversity in the country still appears to be threatened. After the enactment of the *National Integrated Protected Areas System (NIPAS) Act*, a comprehensive and exhaustive effort to conduct nationwide assessment on the management effectiveness and capacities of the country's protected areas is still necessary to further advance the goals of the NIPAS.

The Department of Environment and Natural Resources (DENR) through its Biodiversity Management Bureau (BMB), formerly Protected Areas and Wildlife Bureau (PAWB), and the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH commissioned the creation of a National Management Effectiveness and Capacity Assessment (NMECA) Report on Protected Areas in the Philippines under the Protected Area Management Effectiveness (PAME) Project. This study covers 25% of the 240 established protected areas nationwide. Its approach builds on the Management Effectiveness and Tracking Tool (METT) formulated around the framework of World Commission on Protected Areas (WCPA). The 3-stage process of the NMECA study enhanced the use of METT by introducing key informant interviews (KIIs), focus group discussions (FGDs), validation meetings and feedback discussions with local stakeholders, summary and analyses by regional cluster groups followed by validation and consultation with DENR, local government units, and civil society organizations (CSOs).

The NMECA report is divided into five sections with a background on the history of protected area management and international commitments of the Philippines to biodiversity conservation presented in the first section. The second section introduces the methodology used and processes undertaken by the study. This is followed by the results of the enhanced METT painting the state of management effectiveness of 61 protected areas in the Philippines. These are followed by three sections that apply different kinds of lenses such as the (i) NIPAS Law and IRR; (ii) changes in forest diversity and marine and coastal resources; and (iii) DENR Major Final Outputs and Rationalization Plan in giving more breadth to the contextual appreciation of state of management of protected areas. Lastly, overall findings, lessons learned, best practices, and key recommendations within and outside DENR's mandate are offered by the NMECA study. List of references and annexes supporting the findings of the study is provided at the end of the report.

From this end onwards, this report will, indeed, serve as valuable basis for describing and improving the state of management effectiveness and capacity of Protected Areas in the Philippines. On behalf of all Filipinos and for the benefit of our children and future generations, taking the recommendations of this study, we will work towards advancing the advocacies and common goals on the protected area management.



Director

Department of Environment and Natural Resources  
Biodiversity Management Bureau

# ACKNOWLEDGEMENT

The National Management Effectiveness and Capacity Assessment (NMECA) on Protected Areas in the Philippines Report 2014 represents a collaborative undertaking between the Department of Environment and Natural Resources (DENR) – Biodiversity Management Bureau (BMB) and the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, for the joint implementation of the Protected Area Management Enhancement (PAME) Project. The NMECA Report is a consolidation and analysis of seven (7) Cluster Reports and 61 MECA Reports.

BMB, together with the GIZ-PAME would like to extend deep appreciation to the people and organizations, who in one way or the other contributed to the completion of the Report.

First, Dr. Ernesto Guiang and Prof. Gilbert Magno Braganza, who wrote the NMECA Report and provided several lenses in analyzing the cluster and MECA Reports. Secondly, the Study Teams who had administered the Management Effectiveness Tracking Tool (METT) to the 61 PA sites and prepared the Cluster Reports, specifically CFG Team, Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), Silliman University, and the University of the Philippines Los Banos (UPLB) Foundation, Inc. Appreciation is also extended to the PAME Technical Working Group composed of representatives from other government agencies, and the BMB Technical Divisions, who willingly provided their technical expertise and experience during the review and enhancement of the NMECA.

Heartfelt gratitude is herewith extended to the Protected Area Superintendents (PASUs) of the 61 PAs, DENR Regional Technical Directors and Regional Executive Directors and Staff, members of the Protected Area Management Boards, Local Government Units, NGOs, and local communities, who participated in the conduct of the MECA.

Special thanks is also given to the GIZ-PAME Team composed of Mr. Berthold Schirm, Dr. Oliver Puginier, Mr. Jose Antonio, Dr. Andre Uychiaoco, who not only made it possible for the Study to be conducted, but also provided valuable inputs in the review process.

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## LIST OF ACRONYMS

<b>ACCBio</b>	Adaptation to Climate Change and Protection of Biodiversity
<b>ADMU</b>	Ateneo de Manila University
<b>ADSDPP</b>	Ancestral Domain Sustainable Development Protection Plan
<b>AIP</b>	Annual Investment Plan
<b>ACB</b>	Asean Centre for Biodiversity formerly known as ARCBC
<b>ASEAN</b>	Association of South East Asian Nations
<b>AWFP</b>	Annual Work and Financial Plan
<b>AWP</b>	Annual Work Plan
<b>BFAR</b>	Bureau of Fisheries and Aquatic Resources
<b>BMB</b>	Biodiversity Management Bureau
<b>BMUB</b>	German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
<b>BZ</b>	Buffer Zone
<b>CADT</b>	Certificate of Ancestral Domain Title
<b>CAR</b>	Cordillera Administrative Region
<b>CARP</b>	Comprehensive Agrarian Reform Program
<b>CBD</b>	Convention on Biological Diversity
<b>CCT</b>	Conditional Cash Transfer
<b>CDIP</b>	Comprehensive Development and Investment Plans
<b>CENRO</b>	Community Environment and Natural Resources Officer
<b>CI</b>	Conservation International
<b>CITES</b>	Convention on International Trade in Endangered Species of Wild Fauna and Flora
<b>CLOA</b>	Certificate of Land Ownership Award
<b>CLUP</b>	Comprehensive Land Use Plan
<b>CPPAP</b>	Conservation of Priority Protected Areas in the Philippines
<b>CSO</b>	Civil Society Organization
<b>DA</b>	Department of Agriculture
<b>DAO</b>	Department Administrative Order
<b>DAP</b>	Development Academy of the Philippines
<b>DAR</b>	Department of Agrarian Reform
<b>DENR</b>	Department of Environment and Natural Resources
<b>DILG</b>	Department of the Interior and Local Government
<b>DMC</b>	Department Memorandum Circular
<b>DOT</b>	Department of Tourism
<b>DRRM</b>	Disaster Risk Reduction and Management
<b>EcoGov</b>	Ecosystems Governance Project
<b>EEPSEA</b>	Economy and Environment Program for Southeast Asia
<b>EIA</b>	Environmental Impact Assessment
<b>ENR</b>	Environment and Natural Resources
<b>EO</b>	Executive Order
<b>ESSC</b>	Environmental Science for Social Change
<b>EU</b>	European Union
<b>FGD</b>	Focus Group Discussion
<b>FISH</b>	Fisheries Improved for Sustainable Harvest

<b>FLA</b>	Fishpond Lease Agreement
<b>FLUP</b>	Forest Land Use Plan
<b>FPE</b>	Foundation for Philippine Environment
<b>GAA</b>	General Appropriations Act
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
<b>GMP</b>	General Management Plan
<b>HLURB</b>	Housing and Land Use Regulatory Board
<b>IPAF</b>	Integrated Protected Area Fund
<b>IPAP</b>	Initial Protected Area Plan
<b>IPRA</b>	Indigenous Peoples Rights Act
<b>IRA</b>	Internal Revenue Allotment
<b>IRR</b>	Implementing Rules and Regulations
<b>IUCN</b>	International Union for Conservation of Nature
<b>JMC</b>	Joint Memorandum Circular
<b>LGC</b>	Local Government Code
<b>LGU</b>	Local Government Unit
<b>LIDAR</b>	Light Detection and Ranging
<b>KBA</b>	Key Biodiversity Area
<b>KII</b>	Key Informant Interview
<b>MECA</b>	Management Effectiveness and Capacity Assessment
<b>METT</b>	Management Effectiveness Tracking Tool
<b>MFO</b>	Major Final Output
<b>MPA</b>	Marine Protected Area
<b>MUZ</b>	Multiple Use Zone
<b>NAMRIA</b>	National Mapping and Resource Information Authority
<b>NBSAP</b>	National Biodiversity Strategies and Action Plan
<b>NCIP</b>	National Commission on Indigenous Peoples
<b>NGO</b>	Non-Government Organization
<b>NIPA</b>	NGOs for Integrated Protected Areas, Inc.
<b>NIPAP</b>	National Integrated Protected Areas Programme
<b>NIPAS</b>	National Integrated Protected Area System
<b>NMECA</b>	National Management Effectiveness and Capacity Assessment
<b>NRMC</b>	Natural Resources Management Center
<b>OIDCI</b>	Orient Integrated Development Consultants Incorporated
<b>PA</b>	Protected Area
<b>PD</b>	Presidential Decree
<b>PAMB</b>	Protected Area Management Board
<b>PAME</b>	Protected Area Management Enhancement
<b>PAO</b>	Protected Area Office
<b>PASu</b>	Protected Area Superintendent
<b>PAWB</b>	Protected Areas and Wildlife Bureau
<b>PAWD</b>	Protected Areas and Wildlife Division
<b>PBCPP</b>	Philippine Biodiversity Conservation Priority-setting Program
<b>PENRO</b>	Provincial Environment and Natural Resources Officer
<b>PES</b>	Payment for Environmental Services

<b>PP</b>	Presidential Proclamation
<b>PPA</b>	Programs, Projects, and Activities
<b>RA</b>	Republic Act
<b>RAT Plan</b>	Rationalization Plan
<b>RAA</b>	Responsibility, Accountability, and Authority
<b>RBME</b>	Results-based Monitoring and Evaluation
<b>RED</b>	Regional Executive Director
<b>SAFDZ</b>	Strategic Agriculture and Fisheries Development Zones
<b>SEARCA</b>	Southeast Asian Regional Center for Graduate Study and Research in Agriculture
<b>SPZ</b>	Strict Protection Zone
<b>TLA</b>	Timber License Agreement
<b>UN</b>	United Nations
<b>UNEP</b>	United Nations Environment Program
<b>UPLB</b>	University of the Philippines at Los Baños
<b>UPLBFI</b>	University of the Philippines at Los Baños Foundation Inc.
<b>USAID</b>	United States Agency for International Development
<b>WB</b>	World Bank
<b>WCPA</b>	World Commission on Protected Areas
<b>WWF</b>	World Wildlife Fund for Nature

Note: Acronyms of the 61 protected areas are found in Table 2 (List of 61 Protected Areas Surveyed)

## EXECUTIVE SUMMARY

Sixty one (61) protected areas (PAs) in the Philippines underwent a thorough and comprehensive assessment of the state of management effectiveness and performance, with respect to biodiversity conservation under the *National Integrated Protected Area Systems (NIPAS) Act*, using the management effectiveness tracking tool (METT) and complementing participative appraisal methods. The METT was enhanced with key informant interviews (KIIs), focus group discussions (FGDs), validation meetings and feedback discussions with local stakeholders, summary and analyses by regional cluster groups, followed by validation and consultation activities with DENR field staff, local government units, and civil society organizations (CSOs). With the individual METT results, findings from cluster assessments, and recent related reviews and studies, the state of effectiveness of PA management in the 61 sites was determined and courses of key actions were identified to improve overall PA management effectiveness in the country.

In the Philippines, the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) - Protected Area and Wildlife Bureau (PAWB) - Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH support under the Protected Area Enhancement Project (PAME) conducted the enhanced METT in 61 PA sites to serve as baseline for providing capacity building support, policy improvement, and relevant technical assistance. This initiative is the most comprehensive review of the Philippine's protected area management efforts. Since the passage of *NIPAS Act* in 1992, there has not been an organized and massive effort to assess the effectiveness of each PA with respect to conserving biodiversity and meeting the key objectives of the *NIPAS Act*. Although the METT instrument has limitations, especially regarding the lack of and inappropriateness of some of the indicators, the instrument was enhanced by KIIs, FGDs, validations and consultations with local stakeholders as means to triangulate emerging patterns and results. The overall enhanced METT results and findings proved to be useful as starting points for connecting the dots with respect to the continuing decline in closed and open canopy forests and coastal and marine resources. The overall METT findings also revealed areas where the NIPAS law could be made more effective by simply improving or developing specific guidelines for implementation, by allocating more resources, strengthening on-site management capacities, and by initiating legislative actions that will remove the impediments for improving on-site management effectiveness.

The overall average METT percentage scores for the 61 PAs surveyed was calculated at 58%. However, the general observations and feedback from the KIIs and FGDs indicate that the METT results are overestimations of the real conditions and further articulates and clarifies many of the key challenges and opportunities that substantiate and qualifies the METT survey results. Therefore, the overall management effectiveness in all the 61 PAs surveyed is POOR TO FAIR. The reasons for this assessment are the following:

- Only 4 PAs are covered by Republic Acts (RAs) while the remaining 57 PAs are legitimized with Presidential Proclamations indicating that regular and sustained funding is not present;
- All the 61 PAs have Protected Area Management Boards (PAMBs) as their local governance bodies but their relevance and impact is affected by limited operational

resources, low buy-in from local government units and political interventions;

- Most have PA management plans to guide operational planning and implementation of programs, projects, and activities (PPAs) but are outdated and not based on the current condition of the resources thus not having the necessary strategic conservation and protection strategy;
- In all of the MECA reports, it was consistently mentioned that overall management of the PAs is significantly affected by limited financial and manpower resources. This is shown by the following:
  - For many years (2007-2011), the protected area and wildlife sector (for both PAWB and the Protected Area and Wildlife Division, or PAWDs, in the regions) was only getting an average share of 8% of the DENR's total allocation from the *General Appropriations Acts (GAAs)*.
  - Compared with the national average calculation of PhP 2,213 per ha in 2009, the peso per hectare ratio of the 61 MECA sites is about PhP39:1 hectare.
  - While the PAs have a national average of 7.46 staff per 1000 hectares, the METT results show that the staff per hectare ration of 1:2,300 hectares in the 61 sites.
- The enhanced METT results also revealed, except in a few places, that there had been limited buy-ins of LGUs and communities in PA management.
- In most PAs, their strict protection zones (SPZs) and multiple use zones (MUZs) have not been incorporated in the Comprehensive Land Use Plans (CLUPs) of respective LGUs.
- In areas where ancestral domain claims and ancestral domain titles exist, PAMBs and PASus have not been quite effective in harmonizing conflicting land and resource uses, boundary conflicts, and zoning regimes.
- Very few sites reported on how the PAs are contributing to the local economy especially in generating economic opportunities from ecotourism, supply of key ecosystems goods and services to the downstream areas, and PA-dependent livelihoods.
- Technical assistance support for capacity building, biodiversity assessment, planning and implementation are urgently needed.

The METT results combined with an analysis of changes in the closed and open canopy forests from 2003 and 2010, and the expected output and outcome requirements of the NIPAS law demand key actions to improve PA management. These actions must address the following key issues:

- a) Biodiversity in PAs and those in KBAs that are not in PAs continue to be threatened. The current NIPAS strategies are not able to adequately address the above threats

to biodiversity. Land and forest cover from 2003 and 2010 show that closed and open canopy forests continue to decline even in PAs. Biodiversity in coastal and marine areas, even those under the NIPAS system, continue to decline because of open access, and overlaps in management responsibility between DENR and the LGUs thus resulting to local inaction and weak enforcement of zones. There is also a continuing decline in marine and coastal biodiversity in areas that are under the responsibilities of local government units. The major threats are the following:

- o increasing conversion of PAs for agriculture and other uses,
  - o increasing encroachments, settlements and establishments,
  - o unregulated tourism,
  - o illegal extraction, and
  - o lack of local buy-ins and political interventions which are affecting land allocation and resource uses in PAs.
- b) Government's resource allocation for biodiversity conservation under the NIPAS has been extremely limited (for adequate manpower, financial, and logistics). Limited resources have contributed to ineffective on-site PA management from planning, implementing, monitoring, and coordinating PA activities. Allocated funds in support of PA management do not adequately reflect the actual requirements for managing a state lands that are allocated as set asides for conserving biophysical assets, and as a management unit to ensure biodiversity for the present and future generations. Moreover, current allocations and incentives have only targeted the national government through DENR, as the designated entity with sole responsibility, accountability, and authority. And yet, the PAs are located in LGUs that are better off as co-managers of the state set asides. The LGUs do not get additional internal revenue allotments (IRA) to co-manage PAs that have to be managed with restrictive land and resources uses.
- c) Weak technical capacities of PASu, PAO staff, PAMB members, and LGU counterparts to jointly and individually plan and implement PA activities that are consistent with intent and purpose of PAs. This has resulted in outdated management plans, lack of database, and limited initiatives. Presently, there is simply no clear trajectory for professional growth, advancement, and future for many of the PASus and PAO staff. This issue must be adequately addressed in the implementation of the DENR Rationalization Plan and by legislating PAs to ensure staff tenure and future of professionals in biodiversity conservation.
- d) Overlapping areas of PAs and ancestral domains which are both considered to be "resource management units". This is also exacerbated by the weak institutional arrangements that are put in place based on administrative issuances. Thus, collaborative governance between DENR, NCIP and LGUs for the management of PAs as "state set asides" is largely built on volunteerism, personalities, and willingness to cooperate. PAs also overlap with ancestral domains, CBFMAs, mining claims, LGU zones. Administrative mechanisms for resolving overlaps are not effectively working or not fully exhausted for lack of "champions". This results to impasse, dilemma,

standoff, and inaction for biodiversity conservation by the concerned parties. This is also exacerbated by PAMBs that have limited decision-making authority and most are not fully equipped to deal with issues with respect to functional and area overlaps.

- e) The NIPAS implementation largely depends on fragmented PA database system. There is no complete and accurate data base on the PAs' resources and operational capacities that can serve as basis for establishing results-based monitoring and evaluation system (RBME) for short, medium, and long-term planning, complementation, investments, enforcement, and implementation of other related activities at the site, LGU, regional, sectoral, and national levels. Thus, there are no common PA output indicators that are being periodically measured, analysed, and reported over time. There is, therefore, a weak basis in formulating overall biodiversity conservation strategies and implement performance-based PA management.
- f) The implementation of PA management system is not fully anchored on “what are their reasons for their being”. A PA was declared or legislated with an intent and a purpose. This has to be adequately understood, packaged, made relevant, communicated and connected with the needs of local stakeholders, opportunities in the markets and with market players, and the larger context of socio-economic and biophysical development in a highly diverse island and ridge-to-reef dominated landscapes and seascapes. There is thus a need to link the PA planning and management with the “clients” of the PAs. Forty-two percent (42%) of the PAs are categorized as “watersheds”, which means their major ecosystems goods and services are “water, recreation, fisheries, regulation of water flow, minimization of siltation in waterways, among others”. At least 83 of the 240 PAs are going to be part of the 78 ecotourism sites that are being marketed by the Department of Tourism (DOT) under its “It’s more fun in the Philippines” campaign. The current direction of DENR/PAWB with DOT to develop “conservation-based tourism development programs” in these 83 PAs is highly commendable and in the right direction.

For improving the policy and governance system for conserving biodiversity in PA, the National Management Effectiveness and Capacity Assessment (NMECA) initiative is recommending the following legislative and administrative policy actions.

### **Legislative Policy Actions**

- Through a collaborative DENR and DILG initiative, and in consultation with NCIP, a new legislation should be enacted to clarify the key provisions of NIPAS, IPRA, and LGC laws with respect to the roles, powers, limits, responsibility, accountability, and authority of domain holders, DENR, PAMB, and LGUs in PAs for conserving biodiversity to ensure ecological, human, and economic security of the present and future generations. Together with DENR, the LGUs must be empowered as co-managers of “set asides” as state-managed PAs with the participation of ancestral domain holders as “resource management units” and other stakeholders. This new legislation should address threats and issues that are constraining efforts of the DENR, the NCIP, and the ancestral domain holders to resolve conflicts arising

from overlapping mandate as resource management units, different management objectives, and accountability with respect to the country's biodiversity conservation programs.

The new legislation should also ensure that collaborative governance through an independent PAMB with rule and decision making powers must be in place. Under the NIPAS law, the DENR must retain its power and authority to ensure that the independent PAMB is still accountable to DENR as the State-appointed body for managing PAs. This is to ensure that the national objective to conserve biodiversity and to increase the resiliencies of ecosystems adaptation of communities, livelihoods, enterprises, and industries that are largely dependent on the PA must be upheld and achieved.

- Both DENR and the DILG should take actions to amend the Local Government Code (LGC) to currently address gaps, limitations, and weaknesses with respect to the LGUs participation as “co-managers” in PA management.
- Additional IRA for LGUs as incentives to co-manage the PAs within their political jurisdictions and to support their constituents in and outside the PAs.
- Provide complementary and supportive local legislations in support of DENR's conservation and enforcement efforts in the PAs.
- Incorporate the approved PA zones in their CLUPs and enforce them.
- A percent share from the IPAF and other ENR-sourced revenues from PAs for re-investments and support to communities that are near or in the PAs.
- Accountability of LGUs in conserving biodiversity in PAs within their political jurisdiction.
- Safeguard biodiversity from the potential negative impacts of LGU's socioeconomic development including those of the private sector investments.
- The DENR Regions in collaboration with PAWB and the Congress should initiate actions to build stakeholder-driven efforts to get into legislation the PAs with PPs. This will secure and affirm local buy-ins in the allocation and setting aside a protected area for the benefit of the present and future generations. This process, however, has to be consistent with the requirements and specifications of the NIPAS Revised IRR in 2008.

### Administrative Issuances

Administrative measures may be individually or jointly formulated by DENR, NCIP, DOT, HLURB, DILG and DA to clearly define operational guidelines on the limits and boundaries of investments, zoning, land and resources uses in a PA consistent with the provisions of the *NIPAS Law*, *IPRA*, *Local Government Code*, *EIA Law* and other related

ENR regulations. This whole process, however, has to be driven by the need to reduce the threats to the PAs, improve PA management, provide safeguards for marginalized or displaced communities in and outside the PAs, and serve as interim measure while the legislative actions are taking place.

The immediate areas of concerns for DENR for joint administrative issuances to improve, modify, add, replace guidelines are the following:

- Incorporating the approved PA zones in CLUPs consistent with the integrated ecosystem management approach in a watershed or ecosystem;
- Guidelines for co-investments between the government, private sector, and the communities in the MUZs of PAs with adequate ENR safeguards and incentives for the private sector;
- Standard guidelines for establishing PES systems and mechanism for re-investments of revenues in the PAs;
- Harmonizing various ENR laws in a PA such as the *Clean Water Act*, *Environmental Impact Assessment (EIA) Law*, *Climate Change Act*, *Ecological Solid Waste Management Act*, and others; and
- IRR for retaining the 75% of IPAF at the local level with the PAMB based on the newly-signed Republic Act 10629. The role and accountability of the PAMB, sharing, and other operational details must be made clear in order for the PAMB as an administrative body composed of all the local government units and tribal communities in charge of regulating the protected area must be effective.

### Recommendations from the National Conference Panelists

A National Conference was held on January 15, 2014 to present and validate the findings, analysis and recommendations of the NMECA Report. To provide in-depth feedback and insights, five resource persons were invited to review and provide their reactions to the NMECA overall findings and recommendations, namely Honorable Edgardo Angara (former Senator and author of the *NIPAS Act*), Mr. Victor O. Ramos (former DENR Secretary), Honorable Mayor Ferdinand Abesamis (incumbent Mayor of the Municipality of Penaranda, Nueva Ecija Province and the Vice President of the League of Municipalities of the Philippines), Ms. Elvira Baladad (President of the Pambansang Koalisyon ng Kababaihan at Kanayunan), and Dr. Jose Prospero E. de Vera III (Vice President of UP for Public Affairs)

Overall, there was a general recommendation to comprehensively revisit the *NIPAS Act* especially in terms of its relevance to local stakeholders and the disconnect between policy and implementation. There is a need to make PA management meaningful to poor communities in order for them to fully participate in conservation and protection efforts. Specific recommendations are grouped into key focal areas of (a) Institutions and Governance, (b) Policy, (c) Financing, (d) Partnerships, and (e) Management and Operations.

## Institutional/Governance

At the central level, there was a strong emphasis for the DENR to establish greater harmony and coordination among its own offices (bureaus) such that mandates, functions, strategies, programs, and resources do not overlap, if not conflicting each other. It is important to realize that the Rationalization Plan will not completely solve the contradictions and conflicts within and among agencies. The DENR will thus need to look beyond the Rationalization Plan if fundamental institutional challenges need to be addressed.

At the on-site level, it was noted that PAMBs are becoming too large, unwieldy and generally ineffective mainly resulting from inappropriate set of members and weak technical knowledge and operational orientation that are key to PA management. It was thus recommended that membership composition in the PAMB needs to have a firm and strong technical and operational capacity such that PA management is implemented in a more professional manner. Furthermore, it may be necessary to put in place a ‘strong ecology executive’ in each of the PA. On-site support to PA management and governance issues will also require simple and relevant on-site indicators that reflect how the ultimate goals of NIPAS are achieved.

## Policy

Policy related recommendations include processes and strategies, and specific policy modifications. On the aspects of processes and strategies, in order to initiate and sustain policy change, it is imperative that legislators buy into the belief and agenda of protected area management. A way to get legislators to become aware and commit themselves to PA management and biodiversity conservation is to provide them with relevant information and messages that are aligned with their political agenda and position.

On specific policy concerns, it was recommended that the DENR take a more proactive and leadership role in harmonizing policies that are either overlapping or in conflict with the *NIPAS Act*. It was recommended that there should be greater attention and advocacy to repeal the outdated *PD 705* in order to clearly define roles and functions of forestry and protected area management under DENR.

It was also recommended that the DENR provide greater and focused attention in addressing the needs to upland dwellers, especially in areas that are identified as critical watersheds and PAs mainly through clarifying and strengthening the PACBRMA.

With regards to devolution and the Local Government Code, especially in the context of putting the LGUs in a more prominent and role as PA managers, it is recommended that LGUs are provided examples and cases of PA management successfully being implemented and those that work toward generating additional resources, combined with incentives for compliance. It is recommended that the DENR, and other stakeholders, understand that effective and sustainable PA management requires an asymmetrical approach to fully appreciate and address specific contexts, needs, and nuances.

## Financing

Financing PA management remains a serious challenge given the scope and extent of management needs, and the limited resources available. One strategy to ensure appropriate and timely financing would be to seek ways and means for developing incentives that would attract social entrepreneurs for the outstanding PAs. Another recommendation to provide sustainable financing to PA management is to seek mechanisms and strategies that develop a sense of self sufficiency in the aspects of PA funding and financial resources.

## Partnership

A key recommendation to ensure effective PA management is building strong partnerships with LGUs. It was noted that LGUs have enormous powers and authorities over their resources, hence they can leverage change if guided properly. The most effective way of encouraging LGUs to work towards sustainable and effective PA management is to employ the use of the “hiya” (shame). It was recommended that LGUs be given the full authority/mandate to manage the PAs because local chief executives are familiar with the people and the natural resources in their localities.

## Management and Operations

A key recommendation to improve PA management is to revisit the selection of PAs. It is recommended that areas to be placed under the PA system must have remarkable/unique features, valuable scientific value, contain the habitat for endangered species, have anthropological value, and include those considered as natural heritage.

Effective PA management should always begin with accurate technical information. The DENR should consider employing current and practical technologies such as LIDAR to provide up-to-date visual assessments of forest cover and land use.

With the right information, it may be easy to get the media and other forms of communication to share data will serve well in advocating protected area management. This indicates the importance of effective communication and advocacy in PA management. There should be ways to develop the proper storyline and employ tools and strategies for effectively sharing the PA story.

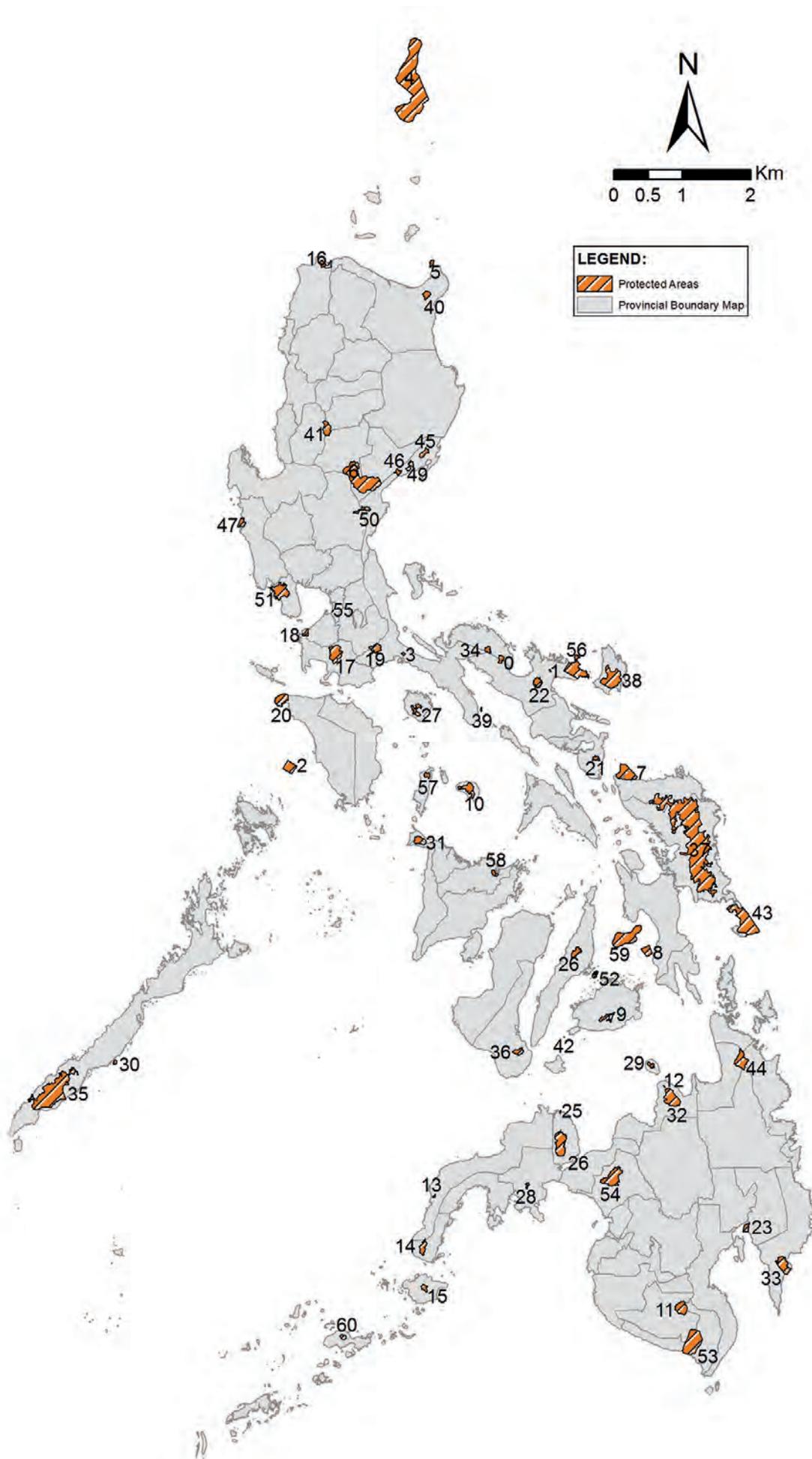
# PROTECTED AREAS OF PAME PROJECT

## ID Name of Protected Area

0	Bicol Natural Park (BNP)
1	Lagonoy Natural Biotic Area (LNBA)
2	Apo Reef Natural Park (ARNP)
3	Quezon Protected Landscape (QPL)
4	Batanes Protected Landscape and Seascape (BPLS)
5	Palau Island Protected Landscape and Seascape (PIPLS)
6	Casencan Protected Landscape (CPL)
7	Biri-Larosa Protected Landscape and Seascape (BLPLS)
8	Cuatro Isles Protected Landscape and Seascape (CIPLS)
9	Rajah Sikatuna Protected Landscape (RSPL)
10	Mt. Guiting-guiting Natural Park (MGGNP)
11	Mt. Matutum Protected Landscape (MMPL)
12	Mimbilisan Protected Landscape (MPL)
13	Siocon Resource Reserve (SRR)
14	Pasonanca Natural Park (PNP)
15	Basilan Natural Biotic Area (BNBA)
16	Kalbario-Patapat Natural Park (KPNP)
17	Taal Volcano Protected Landscape (TVPL)
18	Mts. Palay-palay and Mataas na Gulod Protected Landscape (MPPMGPL)
19	Mts. Banahaw-San Cristobal Protected Landscape (MBSCPL)
20	Mt. Calavite Wildlife Sanctuary (MCWS)
21	Bulusan Volcano Natural Park (BVNP)
22	Mt. Isarog Natural Park (MINP)
23	Mabini Protected Landscape and Seascape (MPLS)
24	Mt. Malindang Range Natural Park (MMRNP)
25	Baliangao Protected Landscape and Seascape (BPLS)
26	Central Cebu Protected Landscape (CCPL)
27	Marinduque Wildlife Sanctuary (MWS)
28	Mt. Timolan Protected Landscape (MTPL)
29	Mt. Timpoong-Hibok-hibok Natural Monument (MTHHNM)
30	Rasa Island Wildlife Sanctuary (RIWS)
31	Northwest Panay Peninsula Natural Park (NWPPNP)
32	Mt. Balatukan Range Natural Park (MBR NP)

## ID Name of Protected Area

33	Pujada Bay Protected Landscape and Seascape (PBPLS)
34	Abasig-Matogdon-Mananan Natural Biotic Area (AMMNBA)
35	Mt. Mantalingahan Protected Landscape (MMPL)
36	Balinsasayao Twin Lakes Natural Park (BTLNP)
37	Samar Island Natural Park (SINP)
38	Catanduanes Watershed Forest Reserve (CWFR)
39	Alibijaban Island Wilderness Area (AWA)
40	Baua-Wangag Watershed Forest Reserve (BWWFR)
ID	Name of Protected Area
41	Mt. Pulag National Park (MPNP)
42	Panglao Island Protected Seascape (PIPS)
43	Guian Marine Reserve and Protected Landscape and Seascape (GMRPLS)
44	Alamio, Buyaan, Carac-an, Panikian Rivers and Sipangpang Falls Watershed Forest Reserve (ABCPRSFWR)
45	Amor River Protected Landscape (ARPL)
46	Dinadiawan River Protected Landscape (DRPL)
47	Masinloc-Oyon Bay Marine Biodiversity Reserve (MOBMR)
48	Simbahan-Talagas Protected Landscape (STPL)
49	Talaytay Protected Landscape (TPL)
50	Aurora Memorial National Park (AMNP)
51	Bataan National Park (BNP)
52	Olango Island Wildlife Sanctuary (OIWS)
53	Sarangani Bay Protected Seascape (SBPS)
54	Lake Lanao Watershed Forest Reserve (LLWFR)
55	Las Piñas -Paranaque Critical Habitat and Ecotourism Area (LPPCHEA)
56	Caramoan National Park (CNP)
57	Calatrava, San Andres, San Agustin Watershed Forest Reserve (CALSANAG)
58	Panay River Watershed Forest Reserve (PRWFR)
59	Camotes Island Mangrove Swamp Forest Reserve (CIMSFR)
60	Bud Datu National Park (BDNP)



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# National Management Effectiveness and Capacity Assessment of Protected Areas in the Philippines



## 1 BACKGROUND

The Philippines' ancient and complex geological origins, combined with its location in the warm tropics between the bio-rich regions of Sundaland Southeast China and New Guinea, have given rise to an exceptional array of biological and physical diversity. This diversity includes the richness in unique life forms and the various manifestations of matchless attractions and landscapes (DENR and UNEP 1997, ARCBC 2001, Heaney and Regalado 1998, USAID/DAI 2008). The “variety and variability among all living organisms and the ecological complex in which they occur” (*Mt. Apo Protected Area Act of 2003*) are revealed in the high numbers and frequencies of genes, species, and ecosystems that are found (and mostly endemic) in different biodiversity sectors – forests, wetlands, marine and agricultural, and protected areas (DENR and UNEP, Heaney and Regalado 1998). In fact, within its



seas and coastal areas exists unparalleled marine biodiversity, making it the “epicenter” of biodiversity and evolution (Carpenter and Springer, 2005). These highly diverse and rich biophysical assets have put the Philippines as one of the 17 mega diverse countries in the world (CI 2006, Mittermeier et al 1997).

Over the years, the Philippines has remained to be one of the world’s “hotspots” – a country with exceptional levels of plant endemism but experiencing serious levels of habitat loss (Myers 1988). A country that has one of the “richest and most threatened reservoirs of plant and animal life on Earth” (CI 2013) and continues to struggle and search for ways to effectively conserve its biodiversity assets. A country whose biodiversity is endangered from unabated agricultural expansion, habitat destruction, over extraction, illegal activities that are mainly due to worsening poverty, and limited capacity and resources for effective on-site management of protected areas.

## 1.1

# Brief Historical Overview of Protected Area Management

On 1 June 1992, the Philippines approved a historical legislative landmark by approving the “*National Integrated Protected Area Systems*” (*NIPAS*) *Act*. This was before the famous “Earth Summit” in Rio de Janeiro – the UN Conference on Environment and Development. NIPAS opened a new perspective and paradigm in resource management in the Philippines -a legislation that reflects the sentiments of the 1987 Constitution and the post-Marcos regime under the term of President Corazon C. Aquino. The NIPAS embodies the ideals of sustainable development and the vision of the future. The NIPAS approval, however, was the first step towards a thousand miles, especially in a country that has long been embroiled in a culture of patronage, political dynasty, social injustice, inequitable access to resources, and lack of participatory governance. The *NIPAS Act* is the country’s commitment to conserve its biological diversity.

The NIPAS seeks to sustainably manage terrestrial, wetlands, coastal, and marine resources in the Philippines for the benefit of the present and future generations. The law provided a sound governance framework for setting aside highly diverse landscapes, watersheds, seascapes, habitat, monument and others for the sole purpose of conserving biological diversity. It lays down the basis for planning, managing, regulating, and financing the conservation of protected areas in support of sustainable development. The NIPAS embodies early efforts to assess and consider the values of the country’s biological diversity (e.g., wildlife resources and critical habitats) in terrestrial, wetlands, coastal and marine areas, including agricultural areas.

In the forestry sector, the Philippines started with the government imposing “diameter limits” in harvesting the dominant dipterocarps and eventually enforcing the policy on sustained yield timber cut to ensure adequate timber volume during the next harvest cycle. In 1932, the Philippines enacted *Act 3915*, “An Act Providing for the Establishment of National Parks, Declaring such Parks as Game Refuges, and for other Purposes”. This law, however, had an explicit objective to protect wildlife while allowing the cutting of trees under specific conditions. In fact the Act’s implementing rules and regulations (Forestry Administrative Order No. 11 in 1934) allowed leasing of areas inside the park for logging and the establishment of sawmills (OIDCI, NIPA and DENR 2001). Several laws and decrees were enacted until the 1970s for creating national parks. During this time, park management objective was simply to remove occupants and settlers, enhance recreation and tourism, and carry out reforestation efforts (Villamor 2006, La Viña and Kho 2010, and Pulhin, et.al. 2006). In 1975, two major Presidential Decrees (PDs) were signed - the *Forestry Code (PD 705)* and the *Fisheries Code (PD 704)*. These PDs provided some kind of restraints in converting or using highly diverse areas and national parks for other purposes.

In the coastal and fisheries sector, most early efforts in conserving marine and coastal biodiversity consisted of local and community initiatives. These were known to be “fish sanctuaries, marine reserves, marine parks” (White et. al. 2002). The incorporation of *PD 704 in the Fisheries Code of 1998 (RA 8550)*, and the passage of *NIPAS Law in 1992* facilitated the evolution of coastal management legal support mechanisms in the Philippines from a predominately open access regime under national government to a more localized management framework (Courtney et al 2000). The Fisheries Code placed the management and conservation of municipal waters - include not only streams, lakes, inland bodies of water and tidal waters - with municipalities provided that these are not included in the protected



areas as defined under *Republic Act No. 7586 (The NIPAS Law)*. The *Fisheries Code (RA 8550)* together with the *Local Government Code (LGC) of 1991* have facilitated the establishment of marine protected areas (MPAs) that are under the management of the local governments (Castillo 2010, ELAC 2009, Weeks et. al. 2010, Aliño 2002). The *NIPAS Law* included those that were covered by previous proclamations and decrees as part of its initial components. These areas include not only terrestrial, but also wetlands, seascapes, and coastal areas. The terrestrial areas that are in the initial components of NIPAS are to be carved out of the “forest lands” land category under the 1987 Constitution and are under the category of “national parks” requiring site-specific legislation.

Realizing the increasing loss of tropical forests and the need for rehabilitation, the School of Forestry at the University of the Philippines in Los Banos (now UPLB College of Forestry and Natural Resources) started to train students on reforestation for several designated areas (Pulhin, et.al. 2006). Also, during the American regime in the Philippines (Commonwealth years), The Field Museum of Chicago conducted biological research on Philippines fauna. This effort continued with several public and private institutions in the Philippines. Various organizations in the US partnered with selected Philippines organizations resulting to the conduct of several botanical and fauna inventories, bird surveys, research, and training activities. In the Philippines, these were carried out with the Philippine National Herbarium, Silliman University, and other institutions. The result of almost a century of partnership was the publication of the book, “Vanishing Treasures of the Philippine Rain Forest” by Lawrence R. Heaney and Jacinto C. Regalado, Jr. (Heaney and Regalado 1998).

Before and after World War II, the use of heavy equipment for logging combined with the expanding world markets of Philippine mahogany<sup>1</sup>, increasing population, policies on financing heavy equipment and exporting raw logs, and the government’s “land for the landless” program exacerbated deforestation, degradation and conversion of highly diverse tropical forests into other uses. During the martial law years, deforestation peaked between 1977 and 1980 from an all-time high of 300,000 hectares annually. Deforestation declined to approximately 100,000 hectare per year in the 1990s (Guiang 2001). The major loss of forests after 1986 has been largely attributed to illegal logging (small, medium, and large scales) after most timber license agreements (TLAs) were cancelled, not renewed, and suspended because of non-compliance to forestry rules and regulations. Most of the remaining forests became “open access” when the TLA holders abandoned their areas. Previous logging activities provided access to primary forests for slash and burn farming, agricultural expansion, and illegal harvesting activities. The skewed land distribution in fertile and arable lowlands combined with increasing population facilitated upland migration. At least 60% of denudation has been attributed to upland farming and agricultural expansion (Tenorio 1999). From the late 1980s up to the present, the government has been closing the “open access” in lands of the public domains especially those with remaining primary tropical forests (those under closed and open canopy natural forests) under various forms of instruments and agreements. These include those areas under the NIPAS coverage, industrial forest management agreements (IFMAs), community-based forest management agreements (CBFMAs), ancestral domains, co-management agreements, watershed reservations, and others (Pulhin et.al. 2008). The

<sup>1</sup>A brand name for high quality wood from major dipterocarp species.

management effectiveness in these areas spells the future of biodiversity conservation in the Philippines.

During the martial law years, the Marcos administration did not seriously consider the recommendations of various assessments and evaluation of the existing system of national parks in the Philippines, especially those that were carried out by the Development Academy of the Philippines (DAP) in 1975 and those of the Natural Resources Management Center (NRMC) in 1981 (OIDCI, DENR, and NIPA 2001). In the meantime, the country continued to lose its forests – from as high as 70% forest cover of the country's total area in the 1930 to about 18.3% in 1999 (ESSC 1999). Most of the country's rain forests were lost because of greed, the government's land for the landless programs, intense mechanization combined with equipment financing, setting aside mangroves and coastal areas for fishpond development, booming population, and continuing poverty. Several authors have documented the historical and drastic loss of abundant tropical forests in the Philippines (NALCO 1984, FMB-GTZ 1988, USAID 1989, ESSC 1999, Guiang 2001, Pulhin, et.al. 2006).

The above observation holds true with the coastal and marine resources especially in allowing the conversion of mangroves into fishpond areas under the “fishpond lease agreements” (FLAs) that may access loan financing from government financial institutions. The conversion from 1973-2002 caused a significant damage to the mangrove ecosystem (Castillo 2010).

Overfishing and illegal fishing damaged most of the reefs, seagrasses, and pelagic fisheries over the years. Only 4% of the corals in Philippine coastal areas are in good condition. Some 30-50% seagrass beds have been lost, and two thirds of natural mangrove forests were destroyed during the last 75 years (EcoGov 1 Project Terminal Report 2005). The degradation of these habitats precipitated the decline in fisheries affecting the fishers who are the poorest of the poor. At least 60% of the more than 90 million Filipinos are directly dependent on coastal and marine resources that are found in 60 of 73 provinces in the coastal areas (DENR, DA, BFAR, USAID, 2010).

The decline in forest and biodiversity resources continued and has negatively impacted the terrestrial, wetlands, and coastal biodiversity despite the increasing number of advocates of sustained yield management and banning log exports in the late 1960s. In the coastal and marine areas, the increasing population, poverty, pollution, mining, overfishing, illegal fishing and weak governance have exacerbated the degradation in coastal and marine resources. Rampant conversion of mangroves into fishponds made matters worse (USAID/DAI 2008, USAID/ADMU 2011). To a large extent, the decline has affected the dynamism and functioning of highly diverse ecosystems in the Philippines.

The impacts of the decline combined with natural disasters and erratic weather conditions brought about by changing climatic conditions are not clearly understood especially on the patterns and behaviors of adaptation of various ecological processes that further trigger complexity and diversity and enrich existing variety and variability of ecosystems, species, and genes. Over the years, however, the country continued to gradually lose its natural forest cover, habitats, coastal, and marine resources due to many factors. Because of inadequate



governance, management, and policy measures, the Philippines has become a “global hotspot.” The high diversity and endemism of the country’s terrestrial, marine, wetlands, and coastal biodiversity are in danger of extinction, massive decline, and loss (Myers 2000, Mittermeier et al, 2001, USAID/DAI 2008, USAID/ADMU 2011).

After the EDSA People Revolution in 1986 and the adoption of the 1987 Constitution, the newly gained freedom of expression combined with the increasing advocacies on environmental protection, social justice, and the rights of the indigenous peoples resulted in the formulation of the framework for a Philippine Strategy for Sustainable Development. The Cabinet approved this through a resolution in 1989 with the goal to: “Achieve economic growth with adequate protection of the country’s biological resources and its diversity, vital ecosystem functions, and overall environmental quality.”

In 1987, the establishment of an “integrated protected area system” was included as one of the strategies to “preserve variety of genes, species, and ecosystems” (Philippine Government 1989, La Viña and Kho 2010). With technical assistance and grants from Japan and the World Bank, the *National Integrated Protected Areas System (NIPAS) Act (RA 7586)* was eventually approved in 1 June 1992. The *NIPAS Act* provides the legal framework for the establishment and management of a national system of protected areas. Its overall goal is to:

*“Secure for the Filipino people of present and future generations the perpetual existence of all native plants and animals through the establishment of a comprehensive system of integrated protected areas within the classification of a national park as provided for in the Constitution.”*

The *NIPAS Law* recognizes the existence of previously declared conservation areas and treats these as initial components. NIPAS intends to rationalize the previous site-specific delineations of various parks, reserves and the like into a national system of classified protected areas, and to remove previously proclaimed areas which, upon ground verification, no longer satisfy the new criteria. The NIPAS Law enjoins intentional implementation of strategies that will address the following threats (Section 2):

- Impacts of increasing population
- Resource exploitation
- Industrial advancement

The formulation of NIPAS Law and even its current implementation have benefited from several studies and reports that provide benchmarks, assessments, reports, and various recommendations on how to effectively conserve, manage, and regulate land and resources uses in highly diverse ecosystems and protected areas. Some of these are the following: DENR and UNEP 1997, Mallari et. al. 2001, DENR and NIPA 2001, CI-DENR/PAWB-Haribon Foundation 2010, USAID/DAI 2008, USAID/ADMU 2011, La Viña and Kho 2010, and the Joint GIZ-DENR PAWB Silliman Study. These reflect the current thinking and approaches on the technical, institutional, governance, financing, and policy requirements of effective on-site biodiversity conservation program.



The administration of the *NIPAS Law* requires consistency with the principles of biological diversity, good governance, and sustainable development. As the law states, this is “possible only through cooperation among national government, local government, and concerned private organizations. In the Philippines, the effective implementation of NIPAS needs to consider the extensive ENR and governance framework that directly or indirectly affect, on-site conservation and management of programs, plans and activities.

Legislations that have direct impact on *NIPAS Law* implementation are as follows:

- *Executive Order 192 (EO 192) in 1987* provides the overall mandate of the Department of Environment and Natural Resources (DENR). This created the Protected Areas and Wildlife Bureau (PAWB) as a DENR staff bureau with the DENR regional offices as the accountable, responsible, and authorized units to implement “on-site” conservation, protection, development, management, and enforcement as defined in the *NIPAS Law*. PAWB provides overall policy, strategic programs, technical direction and oversight, monitoring and evaluation, consolidating field reports with respect to state of the art of PA management in the Philippines, sector level capacity building, and coordination of national conservation strategy implementation. The *NIPAS Law* is implemented in the context of *EO 192*.
- *The Philippine Fisheries Code of 1998* stipulates the roles, functions, authority, and responsibility of cities, municipalities, and provinces in the conservation and protection of coastal and marine areas within their municipal waters. Municipal waters that are in NIPAS areas directly under DENR’s responsibility but will require co-management or partnership arrangements since these are located within the political boundaries of LGUs.
- *Presidential Decree 705 or the Revised Forestry Code of the Philippines* underlines the conservation and protection of biodiversity in forest lands. NIPAS areas that have been dis-established will revert back to “forest lands category” and could be designated as protection or production forest lands. Highly diverse areas and habitats in forest lands may be conserved as part of the resource management plans of the tenure holders.
- *The National Caves and Cave Resources Management and Protection Act and the Wildlife Resources Conservation and Protection Act of 2001* underline for DENR and/or DA-BFAR to manage, regulate and conserve caves, cave resources, critical habitats, and highly threatened wildlife species. These laws cover all areas in the country including the NIPAS areas.
- *Local Government Code of 1991* defines the roles, functions, powers, limits and boundaries, responsibility and accountability of local government units (LGUs) within their jurisdiction. LGUs have territorial jurisdictions of all NIPAS areas in the Philippines. All PAs may be found in one or more territorial jurisdictions of LGUs. The LGUs exercise certain powers and responsibilities within their defined boundaries. The computation of the LGUs’ share from the national revenues



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(internal revenue allotments of LGUs) is based on its total land area, population and equal share. LGC also underlines the role and functions of LGUs in the formulation, implementation and enforcement of various zones in their comprehensive land use plans (CLUPs). The CLUPs also cover zones in land of the public domains – forest lands, national parks/protected areas, and others .

- The *Indigenous Peoples Rights Act of 1997 (IPRA Law)* recognizes, protects, and promotes the rights of indigenous cultural communities and indigenous peoples even in protected areas as stated in the NIPAS Law. The *NIPAS Law* and *IPRA* recognize the need to harmonize land and resource uses in protected areas. In PAs, the ancestral domain holders as sub-management units plan and carry out their conservation, protection, and development programs consistent with their indigenous practices and customary laws. These are defined in the ancestral domain sustainable development and protection plans (ADSDPPs) of the IPs.
- The *Comprehensive Agrarian Reform Program (CARP Law)* includes the implementation of agrarian reform program in lands of the public domains (under Program D). This program was designed for the issuance of community forestry tenure instruments. Over the years, however, some portions of PAs under CARP program were issued with Certificate of Land Ownership Award (CLOA) which is equivalent to alienated agricultural land.
- The *Philippine Mining Act of 1995* and the *People's Small Scale Mining Act of 1991* prohibit mining in protected areas and reservations.

Other national legislations that may directly or indirectly affect NIPAS Law implementation are the following:

- *Climate Change Act of 2009* which provides the overall legal framework on how to plan, coordinate, direct, and implement measures that will increase the resiliencies of ecosystems, communities, and livelihoods with the worsening impacts of climate change.
- *Disaster Risk Reduction and Management (DRRM) Law* underlines how various government agencies, especially the local government units, should plan, coordinate and carry out measures for effective adaptation during and after major natural and man-made disasters.
- The *Philippine Clean Water Act of 2004*, the *Ecological Solid Waste Management Act*, and the *Philippine Environmental Impact Statement Law (PD 1586)* are relevant environment and natural resources (ENR) policies that are applicable in the implementation of NIPAS especially in multiple-use and buffer zones where sustainable development activities are allowed.

Further studies and assessments revealed that the extent of biological diversity of the Philippines has not been fully captured by the PAs that are currently under the *NIPAS*

*Law*. In the course of implementing the *NIPAS Law*, the Philippines' key biodiversity areas (KBAs), which are the "sites of global significance for biodiversity conservation", have been identified using globally standard criteria and thresholds that are consistent with the framework of vulnerability and irreplaceability. An inter-agency, multi-sectoral, participatory, and science-based processes determined the country's KBAs in terrestrial, coastal and marine areas that need priority actions for biodiversity conservation with safeguards and attention to scale. The identified KBAs are "large enough or sufficiently inter-connected to support population of the species for which they are important". These areas should be homogenous units that may be delineated for conservation management (Langhammer et. al. 2007, CI-DENR/PAWB and Haribon 2010).

Thus, the *Wildlife Resources Conservation and Protection Act of 2001* with *Section 3 of EO 578* which is known as "Establishing the National Policy on Biological Diversity, Prescribing its Implementation Throughout the Country" provides for the establishment of critical habitats within key biodiversity areas (KBA) which are known to harbour habitats and ecosystems critical for the survival of threatened, restricted-range, and congregatory species. This process could help conserve the trigger species and critical habitats that are in KBAs that are not part of NIPAS. The institutional mechanisms remain to be a challenge for conservation in KBAs that are outside of the NIPAS coverage such as those in forest lands, non-NIPAS reservations, and ancestral domains. The NIPAS Revised Implementing Rules and Regulations in 2008 provide an avenue to assess the NIPAS initial component areas and other potential sites in the light of the Key Biodiversity Areas (KBAs) in the Philippines as shown in **Figures 1 and 7** (see pages **35 and 74**). Some of these highly diverse areas outside the NIPAS coverage may be supported to become part of the NIPAS system.

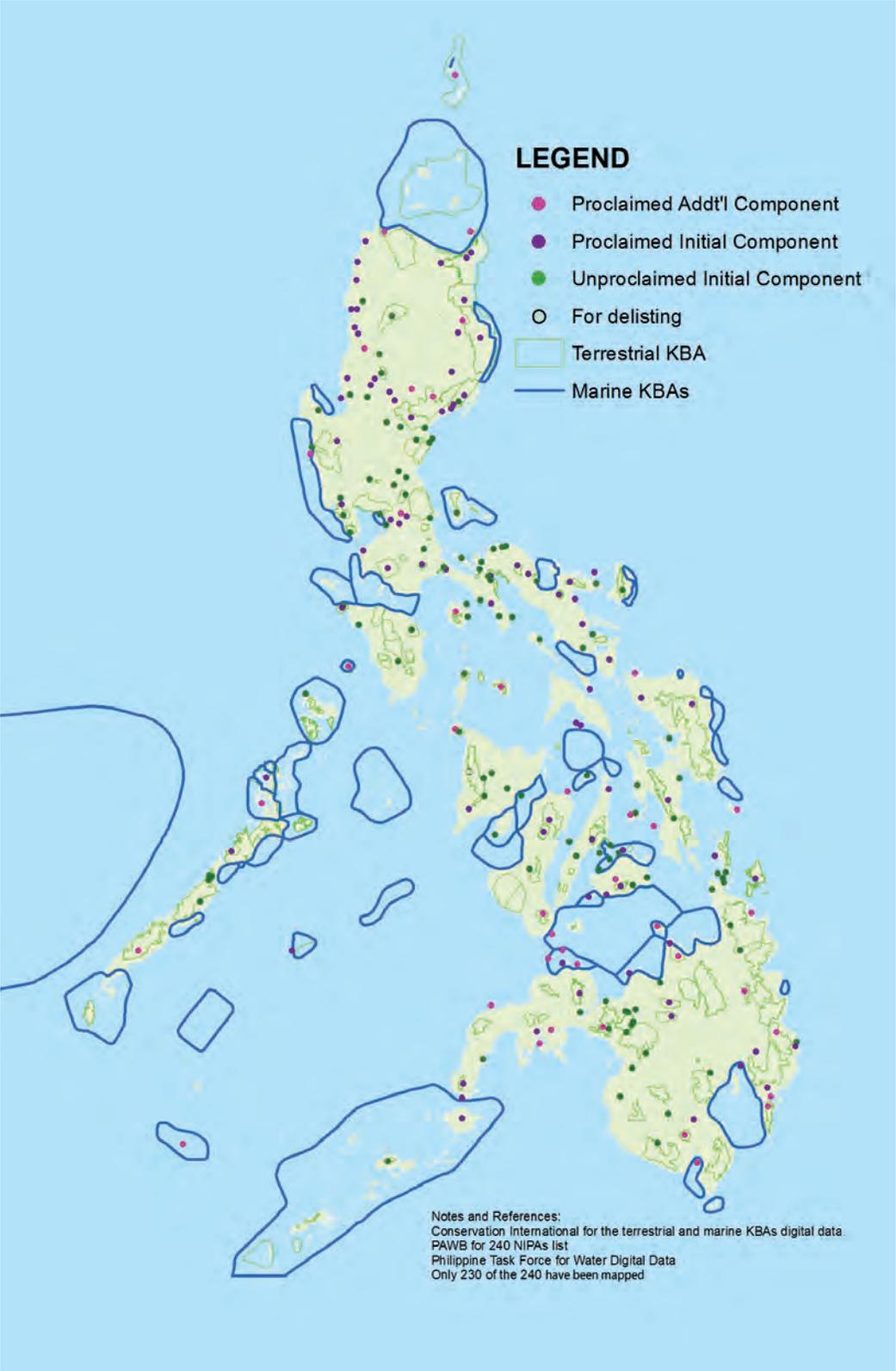
**Table 1** indicates that the current NIPAS sites only capture 35% to 51% of the priority biodiversity areas in the Philippines for terrestrial, bird, and marine areas. There is a need to capture the bio-geographical representativeness in areas where significant ecological gaps exist. Innovative governance in conserving biodiversity outside the NIPAS areas may be able to fill these gaps and conserve biodiversity.

As of June 2012, there are 83 protected areas within the 228 identified KBAs (10 million plus hectares) covering 3.64 million hectares. Thus, only about 34.8 % of KBAs are under current NIPAS coverage and protection (Molinyawe 2012).

**Table 1.** Comparison of sites identified as priority for conservation with the present components of NIPAS (Ambal 2005, CI-DENR-PAWB-Haribon 2010)

Basis	No. of Sites Identified as Priority	No. of Overlaps with NIPAS
Philippines Biodiversity Conservation Priority setting Program (PBCPP)	206-170 terrestrial, 36 marine	105 (51%) - 84 terrestrial, 21 marine overlap with NIPAS areas
Important Bird Areas	117	44 (38%)
Key Biodiversity Areas (KBA)	128 plus 51 candidates	45 (35%) overlap with NIPAS areas

**Figure 1.** Map showing the distribution of terrestrial and marine key biodiversity areas (KBAs) and the proclaimed protected areas in the Philippines



The *NIPAS Law* has triggered initial external assistance and support to conserving the exceptional biophysical diversity of the Philippines. USAID provided one of the largest grant for improving natural resources management in the Philippines from 1991-1999 through its Natural Resources Management Program. This amounted to US \$ 125 million grant that included a debt-to-nature swap support for the creation of the Foundation for the Philippine Environment (FPE). The World Bank (US \$ 20 million), GEF and EU provided grants to the Philippines and the non-government organizations amounting to selected protected areas to partly translate and operationalize the goals and objectives of the *NIPAS Law*. The World Bank-GEF Project supported ten sites under the “Conservation of Priority Protected Areas Project” (CPPAP). The EU-funded “National Integrated Protected Areas Programme” supported 8 sites (DENR-NIPA 2001).

The above projects provided lessons and best practices for crafting or refining related laws and administrative issuances for improving protected area management. For instance, over the years, there is now a deeper understanding on how collaborative management with local government units and other stakeholders may work. Joint circulars and implementation agreements were signed and issued between DENR, BFAR, the DILG, NCIP and other parties to facilitate the process and procedures in harmonizing land and resources uses in a protected area especially those with holders of ancestral domains, community forestry agreements, and other usufruct rights. The NIPAS IRR (implementing rules and regulations) was significantly improved with the revised guidelines that came out in 2008. Among others, the guidelines were more operational in nature compared with the previous version. The Revised IRR clearly defines delineation of two major PA zones (i.e., strict protection zones and multiple-use zones), PAMB’s roles and functions, establishment and legitimization of additional PAs, dis-establishment procedures, PA management planning process and the content of the plan, buffer zone establishment, integration of the PA zones in the LGU’s comprehensive land use plans (CLUP) and harmonization of the PA management plan with the ADSDPPs of the IPs.

**Figure 2.** The Philippines multilateral agreements that are related with biodiversity conservation



The *NIPAS Law* will continue to serve as the main legal instrument for conserving biophysical diversity in the Philippines. With collaborative and intentional efforts to harmonize the seemingly conflicting provisions of other related laws with the NIPAS implementation, well-managed NIPAS-covered protected areas are expected to render the Philippines compliant to various international multilateral agreements as shown in **Figure 2**. The key international agreements are briefly described below:

**Conference for the Adoption of the Convention on Biological Diversity (CBD 2013) -**

The objectives are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding. Parties to the CBD are to develop national strategies, plans or programs for the conservation and sustainable use of biological diversity or adapt existing strategies, plans or program that indicate measures to implement the Convention, including integrating them into relevant sectoral or cross-sectoral plans, programs and policies. This is the basis of the current country efforts to update the National Biodiversity Strategy and Action Plan (NBSAP), which was developed and published in 1997.

**The Convention on Wetlands of International Importance (known as RAMSAR Convention, Heinin 2007)** came into force in 1975 but was first signed 1971. It is the oldest of the multilateral international conservation conventions and the only one to deal with one ecosystem type and one taxonomic group. A Contracting Party shall designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance. As of December, 2006, Ramsar had 153 Parties. Moreover, 1,630 wetland sites worldwide, covering almost 1.5 million square km were designated for inclusion into Ramsar's List of Wetlands of International Importance, hereafter referred to as the List. The Philippines has several wetlands that are included in the List.

**Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention in 1979).** Among others, the Parties acknowledge the importance of migratory species being conserved and of Range States agreeing to take action to this end whenever possible and appropriate, paying special attention to migratory species the conservation status of which is unfavorable, and taking individually or in cooperation appropriate and necessary steps to conserve such species and their habitat. The Parties acknowledge the need to take action to avoid any migratory species becoming endangered.

**The World Heritage Convention.** The Convention sets out the duties of Parties in identifying potential sites and their role in protecting and preserving them. By signing the Convention, each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage. The Parties are encouraged to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community.



Photo by DENR - BMB / Klaus Nigge



**The Philippine Eagle** (*Pithecophaga jefferyi*) fits a lot of superlatives as a bird of prey: one of the world's largest, tallest, most beautiful, and most powerful birds. However, it is also one of the rarest and most critically endangered.

**The Association for Southeast Asian Nations (ASEAN) Heritage Parks** are representative of efforts to conserve areas of particular biodiversity importance or exceptional uniqueness throughout ASEAN member states. The ASEAN Ministers of Environment cooperatively signed the ASEAN Declaration on Heritage Parks on 18 December 2003. The ASEAN Member Countries agreed that: “common cooperation is necessary to conserve and manage the AHP for the development and implementation of regional conservation and management action plans as well as regional mechanisms complementary to national efforts to implement conservation measures.”

The Philippines compliance to these agreements and commitments will largely depend on how the governance and management systems will take shape in each protected area under the NIPAS and those outside the NIPAS coverage. Effective PA management, to a large extent, demands adequate support for staff, logistics, and operations; requires huge investments to improve capacities and capabilities; and needs adequately incentives for communities, local government units, private sector, and protected area management staff. Only then can actions be carried out to address the continuing threats of increasing population, overexploitation and resource use, and industrial expansion in its many forms.

The CBD during the tenth meeting of the Conference of the Parties in 2010, in Nagoya, Aichi Prefecture, Japan, adopted a revised and updated Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets, for the 2011-2020 period. The Parties agreed to translate this overarching international framework into national biodiversity strategies and action plans within two years. The Aichi Strategic Goals are listed below with the 20 targets that are broken down per goal in Annex A (CBD 2013).

- Strategic Goal A**      Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society
- Strategic Goal B**      Reduce the direct pressures on biodiversity and promote sustainable use
- Strategic Goal C**      To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
- Strategic Goal D**      Enhance the benefits to all from biodiversity and ecosystem services
- Strategic Goal E**      Enhance implementation through participatory planning, knowledge management and capacity building

Of specific concerns for the Philippines (Molinyawe 2012) is Target 11 under the Strategic Goal C, which is the following:

### Target 11

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

The ongoing process of updating the Philippines National Biodiversity Strategic Action Plan (NBSAP) is set to address biodiversity conservation targets under the NIPAS and the non-NIPAS areas. The governance framework for the PAs under the *NIPAS Law* is clear although there are several areas that will need clearer guidelines to pinpoint responsibility, accountability, and authority for conserving biodiversity in the NIPAS set asides. Highly diverse areas in non-NIPAS areas must consider the governance frameworks that cover forestlands, civil and military reservations, ancestral domains, local government units, coastal and fisheries sector, and tourism. It is obvious that the on-site conservation and management of highly diverse areas outside the NIPAS areas have to be embedded in the resource and development plans of tenure and domain holders, holders of contracts and agreements, and other conservation plans. DENR, however, has to continue assessing the value and importance of highly diverse areas that are not currently under NIPAS as possible expansion of protected areas. There are currently highly diverse areas that are currently under the protection and conservation of indigenous peoples, local government units, and other resource management regimes.

It is expected that the updated NBSAP will help the country keep up with its international commitments especially the AICHI Targets of the CBD. It will also ensure that the Aichi targets are anchored on effective conservation efforts of highly diverse areas in both NIPAS and non-NIPAS areas. In the next few years, the government of the Philippines will continue to face the challenge of improving protected area management because of the increasing awareness of Filipinos, the deepening level of the importance of biodiversity with respect to sustaining the ecosystems goods and services to different users, and the growing complexity in the governance and management of protected areas. With the growing realization that the *NIPAS Law* and the initial components are only able to capture less than 50% of the key biodiversity areas in the country, DENR faces the challenge in developing a road map that will ensure that diversity is conserved in both the NIPAS-covered sites and those that are outside but are found in key biodiversity areas (KBAs).

## 1.2

# The Protected Area Management Enhancement (PAME) Project

The Protected Areas and Wildlife Bureau (PAWB)<sup>2</sup> of the Department of Environment and Natural Resources (DENR), in partnership with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), implemented the Protected Area Management Enhancement in the Philippines (PAME) project. The project is being implemented over a period of five years, from October 2012 to March 2017, with the overall project goal of improving the protection and management of Key Biodiversity Areas (KBAs) in the Philippines. The project will support in-depth assessments of PA management and provide conservation efforts in KBAs both in the NIPAS and non-NIPAS areas. Innovative and governance-based strategies will be adopted for conservation in non-NIPAS areas.

At the end of the five year period, the project should have produced the following outputs:

- Improved management and technical capacities of relevant DENR-tBMB staff at all levels
- Management of 60 existing terrestrial and marine protected areas in KBAs improved
- Additional 100 conservation areas established under innovative conservation management systems
- Improved knowledge management to raise awareness about the values of biodiversity

The PAME project supports the Philippines' effort to reduce the threats in highly diverse Protected Areas and KBAs. It will contribute to help managing several areas that within the 228 terrestrial and marine KBAs in order to increase the number of KBAs that are being protected. Currently, only 50 of the KBAs are protected and a further 41 are partially protected, while the remaining 137 KBAs are not protected. The PAME project will also support efforts to facilitate legislation that will legally protect the target KBAs and strengthen PA management capacities.

The PAME project aims to support the Philippine Government with its international commitments to the Convention on Biological Diversity (CBD) by improving the legislative conditions for protection and management of KBAs. This will be achieved through the capacitation and institutional development of the DENR-BMB and through specific support for PAs in the different KBAs in the country. Specifically, it will enhance the management of 60 existing PAs, and establish at least 100 new terrestrial or marine PAs in selected Key Biodiversity Areas.

The CBD's Strategic Goal for 2020 includes the target of effectively conserving 17% of terrestrial and inland waters and 10% for marine and coastal areas of high biodiversity importance through protected areas establishment. In order to achieve its commitment, the Philippine government, through the DENR has developed and adopted in 1997 a National

<sup>2</sup>The Department of Environment and Natural Resources has, through the 2013 Rationalization Plan, re-organized the Protected Areas and Wildlife Bureau (PAWB) as the Biodiversity Management Bureau (BMB).



Biodiversity Strategic Action Plan (NBSAP) to address the biodiversity conservation issues. This plan is currently being updated.

The project corresponds to the Philippine Government's commitments to the UN Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention of Wetlands of International Importance (Ramsar). This is also expressed by the Program of Work on Protected Areas, highlighting the following targets:

- Improve site-based planning and management of Protected Areas;
- Prevent and mitigate threats to biodiversity within Protected Areas;
- Promote access and benefit sharing of natural resources in the Protected Areas;
- Enhance and secure active involvement of indigenous and local communities and other stakeholders;
- Strengthen communication, education and awareness on the value of biodiversity;
- Evaluate and improve Protected Area management effectiveness; and
- Ensure Protected Area management on the basis of scientific knowledge and principles.

The project supports the Philippine Strategy on Climate Change Adaptation developed by the DENR and supported by the recently concluded BMUB Project Adaptation to Climate Change and Protection of Biodiversity (ACCBio). Likewise, it also follows the Philippine National Plan of Action of the Coral Triangle Initiative. Both plans provided the basis for developing the *Philippine Medium Term Development Plan 2011-2016*, which calls for the improved administration and expansion of PAs.

Figure 3. List of 61 Protected Areas Surveyed

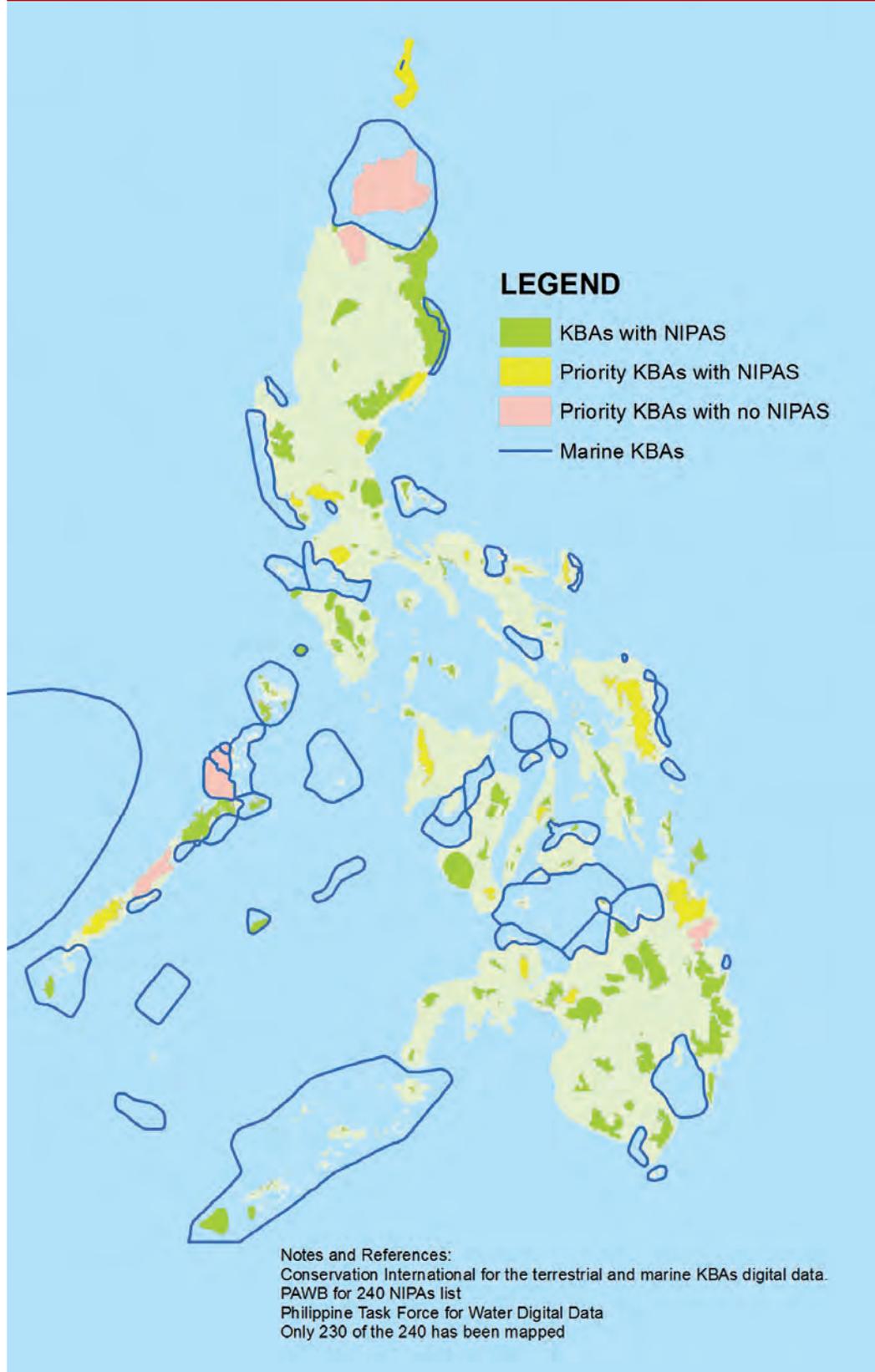






Photo by DENR - BMB / New CAPP / KASAPI / Manuel Domes



# 2 METHODOLOGY

The methodological process for developing a comprehensive assessment on the management effectiveness of the 61 PAME sites, and coming up with a set of recommendations and a policy strategy to improve protected area management, comprised three key stages (Figure 4, see page 48).

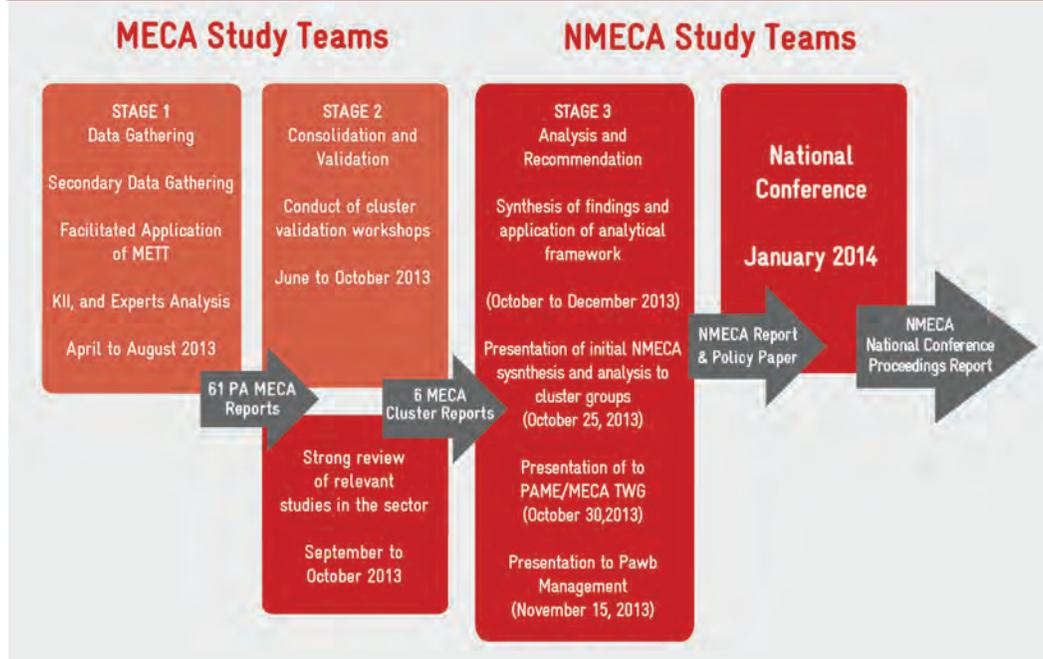


**Stage 1: Data Gathering**

**Stage 2: Consolidation and Validation**

**Stage 3: Analysis and Recommendations**

Figure 4. Process Flow of Activities



## 2.1

### Stage 1: Data Gathering

This stage mainly comprised the conduct of surveys in the selected 61 sites using the Management Effectiveness Tracking Tool (METT). The METT is an assessment tool developed by the World Bank/WWF Alliance for Forest Conservation and Sustainable Use to facilitate reporting on effectiveness of management interventions in WWF and World Bank projects that have protected areas. The METT is one of several assessment tools built around the framework developed by the World Commission on Protected Areas (WCPA), which seeks to provide overall guidance in the development and conduct of management assessments and reporting. A detailed discussion of the METT is presented in **Annex D**.

The survey mainly makes use of questions, with corresponding scores, on a variety of specific indicators in each management parameter. The management parameters are Context, Planning, Input, Process, Output, and Outcome. It is generally acknowledged that the METT is severely limited by its qualitative nature, weak basis for comparison across sites, and the lack of detailed evaluation of outputs and outcomes. The METT, being a simple and rapid site assessment tool, helps monitor management effectiveness in target sites specifically to provide managers the needed baseline and progress information regarding state of the resources, intervention impacts, operational gaps and management challenges<sup>3</sup>. To strengthen the METT survey and elaborate on the key aspects of protected area management in each

<sup>3</sup>Management Effectiveness Tracking Tool – Reporting Progress at Protected Area Sites (second edition); WWF International, July 2007

of the sites, key informant interviews (KIIs) with local resource persons and focus group discussions (FGDs) were simultaneously conducted. The resource persons for the KIIs and FGD activities were members of the PAMB, officers and staff of the Protected Area Office (PAO) and relevant field offices of the DENR, local government officials, and community members, among others. The survey, KIIs, and FGDs were facilitated by contracted firms<sup>4</sup> and conducted from March to June 2013. Each PA surveyed submitted a MECA Report containing the results of the METT survey, KIIs, and FGDs. **Figure 5 (see page 53)** shows the distribution of the 61 PAME sites while **Table 2 (see page 50)** lists the sites with their corresponding METT scores.

## Stage 2: Consolidation and Validation

2.2

The 61 protected areas surveyed were grouped into seven clusters based on their geographical location **Table 2 (see page 50)**. Each cluster was assigned a contracting firm to facilitate the survey and consultation activities, as well as consolidate the key results and findings, which is contained in the Cluster MECA reports. There are six MECA Cluster Reports<sup>5</sup>. The MECA Cluster Reports were presented in cluster validation workshops to confirm the findings, clarify issues, and provide recommendations for improvements. The clusters' respective MECA Study Teams facilitated the consultation workshops which were conducted from September to October 2013. Final Cluster MECA Reports were submitted in November 2013.

## Stage 3: Analysis and Recommendations

2.3

The Cluster MECA Reports was utilized as the main source for developing the National MECA (NMECA) Report, which mainly contained the synthesis, analysis and key recommendations for improving protected area management in the country. Developing the NMECA Report was entrusted to a consultant team mainly to (a) synthesize and analyze the results of the Cluster MECA Reports, (b) provide a set of recommendations for improving management effectiveness of protected areas in the country, and (c) facilitate the conduct of a national consultation on the results and recommendations contained in the NMECA Report. To synthesize the survey results, the consultants mainly referred to the Cluster MECA Reports, and when needed, revisited the individual site MECA reports. To create an indicative picture of the current state of management effectiveness in 61 protected areas, the NMECA

<sup>4</sup>University of the Philippines Los Baños Foundation Inc. (Clusters A and B), Southeast Asian Regional Center for Graduate Study and Research in Agriculture (Cluster C), Siliman University (Clusters D and E), and CFG Team (Clusters F and G)

<sup>5</sup>The survey and consultation results of Cluster F and G were combined in one Cluster MECA Report

consultants made use of the average METT percentage scores. The NMECA consultant team noted the limitations of METT scores as a reliable gauge of management effectiveness and as a comprehensive basis for distinguishing management needs based on the geophysical characteristics of the surveyed sites (terrestrial – coastal; landscape – seascape; sanctuary – natural park, etc.). However, the METT percentage scores is helpful in providing clues as to how the management parameters (i.e., context, planning, input, etc.) are being provided focused attention to meet the outcomes, and as a baseline dataset, albeit in a qualitative manner.

**Table 2.** List of 61 Protected Areas surveyed and their specific METT scores

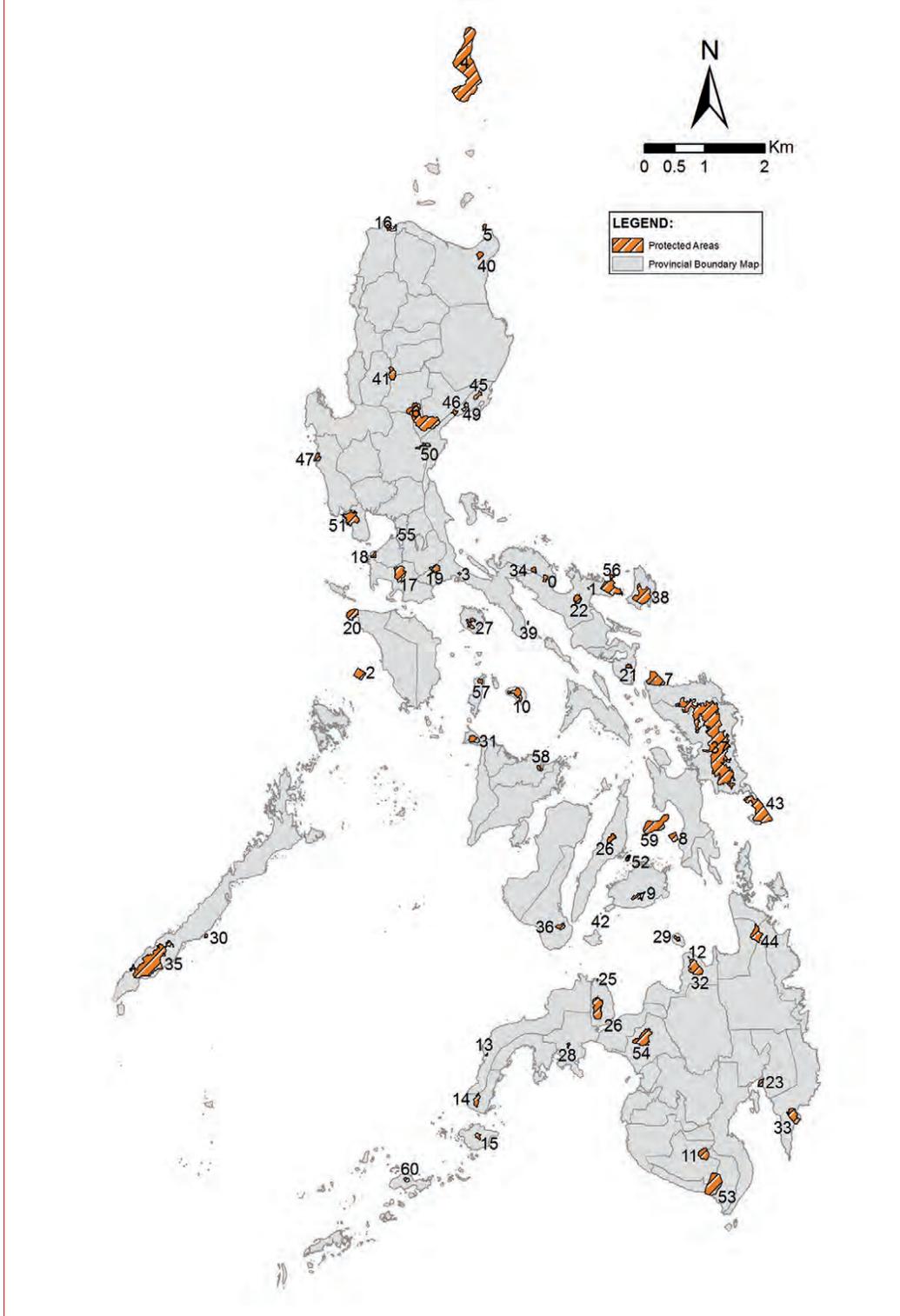
Cluster	Region	Protected Area	Map Location Number	METT Score
A	2	Batanes Protected Landscape and Seascape (BPLS)	1	85
	2	Baua-Wangag Watershed Forest Reserve (BWWFR)	2	61
	2	Casecnan Protected Landscape (CPL)	3	57
	1	Kalbario-Patapat Natural Park (KPNP)	4	53
	CAR	Mt. Pulag National Park (MPNP)	5	74
	2	Palaui Island Protected Landscape and Seascape (PIPLS)	6	61
B	3	Amro River Protected Landscape (ARPL)	7	57
	3	Simbahan-Talagas Protected Landscape (STPL)	8	64
	3	Talaytay Protected Landscape (TPL)	9	62
	3	Dinadiawan River Protected Landscape (DRPL)	10	38
	3	Aurora Memorial National Park (AMNP)	11	66
	3	Bataan National Park (BNP)	12	72
	3	Masinloc-Dyon Bay Marine Biodiversity Reserve (MOBMR)	13	77
	NCR	Las Piñas -Paranaque Critical Habitat and Ecotourism Area (LPPCHEA)	14	69
C	4a	Alibjaban Island Wilderness Area (AWA)	15	64
	4a	Quezon Protected Landscape (OPL)	16	59
	4a	Mts. Banahaw-San Cristobal Protected Landscape (MBSCPL)	17	78
	4a	Taal Volcano Protected Landscape (TVPL)	18	79
	4a	Mts. Palay-palay and Mataas na Gulod Protected Landscape (MPPMGPL)	19	63
	5	Abasig-Matogdon-Mananan Natural Biotic Area (AMMNBA)	20	62
	5	Bicol Natural Park (BNP)	21	79
	5	Mt. Isarog Natural Park (MINP)	22	68
	5	Lagonoy Natural Biotic Area (LNBA)	23	52
	5	Caramoan Natural Park (CNP)	24	41
	5	Catanduanes Watershed Forest Reserve (CWFR)	25	55
	5	Bulusan Volcano Natural Park (BVNP)	26	68

D	4b	Apo Reef Natural Park (ARNP)	27	84
	4b	Mt. Calavite Wildlife Sanctuary (MCWS)	28	37
	4b	Calatrava, San Andres, San Agustin Watershed Forest Reserve (CALSANAG)	29	17
	4b	Mt. Guiting-guiting Natural Park (MGGNP)	30	52
	4b	Rasa Island Wildlife Sanctuary (RIWS)	31	79
	4b	Mt. Mantalingahan Protected Landscape (MMPL)	32	57
	4b	Marinduque Wildlife Sanctuary (MWS)	33	42
E	6	Northwest Panay Peninsula Natural Park (NWPPNP)	34	43
	6	Panay River Watershed Forest Reserve (PRWFR)	35	36
	7	Balinsasayao Twin Lakes Natural Park (BTLNP)	36	69
	7	Camotes Island Mangrove Swamp Forest Reserve (CIMSFR)	37	49
	7	Central Cebu Protected Landscape (CCPL)	38	44
	7	Olango Island Wildlife Sanctuary (OIWS)	39	78
	7	Panglao Island Protected Seascope (PIPS)	40	47
	7	Rajah Sikatuna Protected Landscape (RSPL)	41	70
	8	Biri-Larosa Protected Landscape and Seascope (BLPLS)	42	26
	8	Cuatro Isles Protected Landscape and Seascope (CIPLS)	43	61
	8	Guiuan Marine Reserve and Protected Landscape and Seascope (GMRPLS)	44	45
	8	Samar Island Natural Park (SINP)	45	63
	F	9	Mt. Timolan Protected Landscape (MTPL)	46
9		Pasonanca Natural Park (PNP)	47	85
9		Siocon Resource Reserve (SRR)	48	40
ARMM		Basilan Natural Biotic Area (BNBA)	49	42
ARMM		Bud Dajo National Park (BDNP)	50	25
ARMM		Lake Lanao Watershed Forest Reserve (LLWFR)	51	25
12		Mt. Matutum Protected Landscape (MMPL)	52	61
12		Sarangani Bay Protected Seascope (SBPS)	53	53
G	10	Baliangao Protected Landscape and Seascope (BPLS)	54	67
	10	Mimbilisan Protected Landscape (MPL)	55	43
	10	Mt. Balatukan Range Natural Park (MBRNP)	56	55
	10	Mt. Timpoong-Hibok-hibok Natural Monument (MTHHNM)	57	73
	10	Mt. Malindang Range Natural Park (MMRNP)	58	80
	11	Mabini Protected Landscape and Seascope (MPLS)	59	70
	11	Pujada Bay Protected Landscape and Seascope (PBPLS)	60	73
	13	Alamio, Buyaan, Carac-an, Panikian Rivers and Sipangpang Falls Watershed Forest Reserve (ABCPRSFWR)	61	22

## ID Name of Protected Area

0 Bicol Natural Park (BNP)	33 Pujada Bay Protected Landscape and Seascape (PBPLS)
1 Lagonoy Natural Biotic Area (LNBA)	34 Abasig-Matogdon-Mananan Natural Biotic Area (AMMNBA)
2 Apo Reef Natural Park (ARNP)	35 Mt. Mantalingahan Protected Landscape (MMPL)
3 Quezon Protected Landscape (QPL)	36 Balinsasayao Twin Lakes Natural Park (BTLNP)
4 Batanes Protected Landscape and Seascape (BPLS)	37 Samar Island Natural Park (SINP)
5 Palaui Island Protected Landscape and Seascape (PIPLS)	38 Catanduanes Watershed Forest Reserve (CWFR)
6 Casecnan Protected Landscape (CPL)	39 Alibijaban Island Wilderness Area (AWA)
7 Biri-Larosa Protected Landscape and Seascape (BLPLS)	40 Baua-Wangag Watershed Forest Reserve (BWWFR)
8 Cuatro Isles Protected Landscape and Seascape (CIPLS)	ID Name of Protected Area
9 Rajah Sikatuna Protected Landscape (RSPL)	41 Mt. Pulag National Park (MPNP)
10 Mt. Guiting-guiting Natural Park (MGGNP)	42 Panglao Island Protected Seascape (PIPS)
11 Mt. Matutum Protected Landscape (MMPL)	Guiuan Marine Reserve and Protected Landscape and
12 Mimbilsan Protected Landscape (MPL)	43 Seascape (GMRPLS)
13 Siocon Resource Reserve (SRR)	Alamio, Buyaan, Carac-an, Panikian Rivers and Sipangpang
14 Pasonanca Natural Park (PNP)	44 Falls Watershed Forest Reserve (ABCPRSFWR)
15 Basilan Natural Biotic Area (BNBA)	45 Amor River Protected Landscape (ARPL)
16 Kalbario-Patapat Natural Park (KPNP)	46 Dinadiawan River Protected Landscape (DRPL)
17 Taal Volcano Protected Landscape (TVPL)	47 Masinloc-Oyon Bay Marine Biodiversity Reserve (MOBMR)
Mts. Palay-palay and Mataas na Gulod Protected Landscape	48 Simbahan-Talagas Protected Landscape (STPL)
18 (MPPMGPL)	49 Talaytay Protected Landscape (TPL)
19 Mts. Banahaw-San Cristobal Protected Landscape (MBSCPL)	50 Aurora Memorial National Park (AMNP)
20 Mt. Calavite Wildlife Sanctuary (MCWS)	51 Bataan National Park (BNP)
21 Bulusan Volcano Natural Park (BVNP)	52 Olango Island Wildlife Sanctuary (OIWS)
22 Mt. Isarog Natural Park (MINP)	53 Sarangani Bay Protected Seascape (SBPS)
23 Mabini Protected Landscape and Seascape (MPLS)	54 Lake Lanao Watershed Forest Reserve (LLWFR)
24 Mt. Malindang Range Natural Park (MMRNP)	Las Piñas -Paranaque Critical Habitat and Ecotourism Area
25 Baliangao Protected Landscape and Seascape (BPLS)	55 (LPPCHEA)
26 Central Cebu Protected Landscape (CCPL)	56 Caramoan National Park (CNP)
27 Marinduque Wildlife Sanctuary (MWS)	Calatrava, San Andres, San Agustin Watershed Forest
28 Mt. Timolan Protected Landscape (MTPL)	57 Reserve (CALSANAG)
29 Mt. Timpoong-Hibok-hibok Natural Monument (MTHHNM)	58 Panay River Watershed Forest Reserve (PRWFR)
30 Rasa Island Wildlife Sanctuary (RIWS)	59 Camotes Island Mangrove Swamp Forest Reserve (CIMSFR)
31 Northwest Panay Peninsula Natural Park (NWPPNP)	60 Bud Datu National Park (BDNP)
32 Mt. Balatukan Range Natural Park (MBR NP)	

Figure 5. Protected Areas of the PAME Project



As explained in the METT document (WWF July 2007), the percentage scores, although highly susceptible to distortions and misinterpretations, may be valuable in highlighting the effectiveness of the six management parameters. The results of the KIIs and FGDs serve to enable a more substantive, qualified, and objective complement to the METT results. The synthesis of the METT scores and the KII and FGD results thus provide a more accurate summary of the state and effectiveness of management in the PAs. The synthesized results are then subjected to an analytical framework to identify key recommendations for improving PA management effectiveness. The analytical framework mainly consisted of three key “lenses”, namely (a) the NIPAS and its IRR, (b) forest cover (2003-2010), and (c) DENR Rationalization Plan (Figure 6). The *NIPAS Act* and IRR of 2008 provide the overall policy and implementation framework that guides national and local stakeholders on how protected areas are identified, managed, and monitored. The data on land and forest cover change from 2003 to 2010 generated by NAMRIA indicatively presents a technical basis on how management of protected areas (mainly containing closed and open canopy forests) are effective. Lastly, the DENR Rationalization Plan, containing the new DENR Major Final Outputs (MFOs), provides the translation of DENR’s general institutional strategy with respect to options on how protected area management may be re-oriented and strengthened.

Additional references were also used to provide deeper contextual appreciation of the results and the analysis. These references include, among others, GIZ’s policy review on NIPAS (DA-DAR-DENR, Silliman University and GIZ 2011), USAID/ADMU 201), USAID/DAI’s CBNRM Stocktaking report (2012), the World Bank’s NRM Sector Study and Way Forward Action Plan (2003 and 2005), PAWB and ADMU (2012), and Molinyawe (2012), Anda and Atienza (2013).

**Figure 6.** Analytical framework Diagram for Developing Recommendations to Improve PA Management

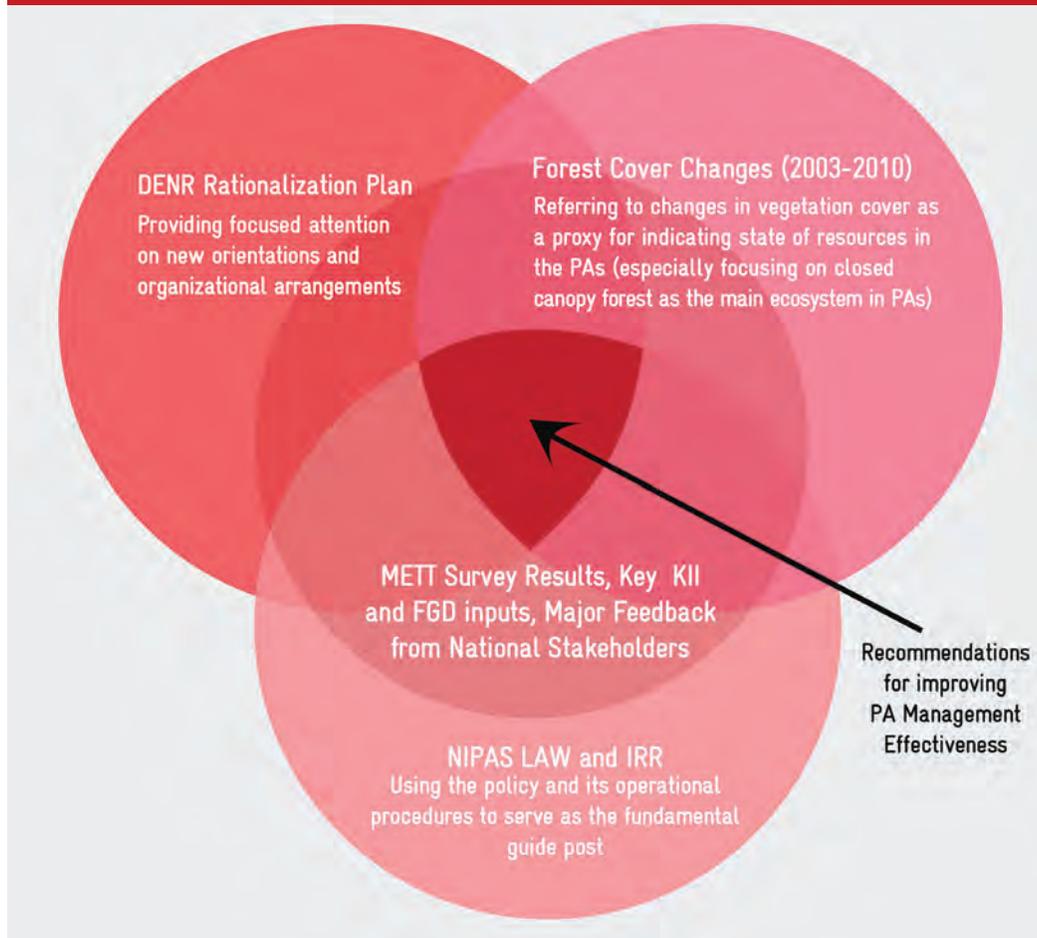




Photo by DENR - BMB / New CAPP / KASAPI / Manuel Domes

# 3 SUMMARY OF RESULTS: STATE OF MANAGEMENT IN THE 61 PROTECTED AREAS



Photo by Jacqueline Hernandez

The discussion below summarizes the survey results and key findings contained in the Cluster Reports (Stage 1) and their supporting documents, as well as feedback provided by government and key stakeholders during the subsequent meetings and consultations (Stage 2).

## 3.1

# Threats and Challenges to Effective Protected Area Management

The METT's Data Sheet 2 contains a list of generic threats classified in terms of residential and commercial development, agricultural and aquaculture activities within the protected area, biological resource use within the protected area, climate change and severe weather condition, and socio-cultural threats, among others. Those surveyed were asked to identify the threats that were present and affecting their respective PAs, and if possible rank these threats according to their impact on the protected area. The Cluster MECA reports and the individual site MECA Reports were inconsistent in presenting the results. Some reports were able to present the threats adhering to the instructions while most simply listed those that the stakeholders perceived as present.

Regardless of presentation, the reports clearly indicated that all those interviewed identified the threats within the climate change (Threats #11), biological resource use (Threats #6), and residential and commercial development (Threats #1), categories as those that are present and have significant adverse impacts on the PA's management. The threats that were identified by most as present and have considerable impact on the PAs are in the agriculture and aquaculture activities (Threats #2), human intrusions and disturbances (Threats #6), natural systems modification (Threats #7), pollution (Threats #9), geological events (Threats #10), and socio-cultural (Threats #12) categories. Threats from invasive species and genes, energy production and mining, and transportation categories were identified as present but not having severe impact by the stakeholders. Specific threats that were identified with least impact were drug cultivation (2.1b), oil and gas drilling (3.1), introduced genetic material (8.2), and volcanoes (10.1).

The KIIs and FGDs, further revealed a number of challenges constraining effective PA management and indicated which threats are more consistent with the realities on the ground. The major specific challenges and threats to effective PA management most frequently identified, and having direct correspondence to some of the threats listed in the METT, were increasing conversion of PAs into agricultural land (an elaboration of the METT's Threat #2), prevalence of illegal extraction of timber and non-timber products within the protected area (an affirmation of the METT's Threat #5), increasing human settlements and establishments within the PA (METT Threat #1), and increasing unregulated tourism activities (METT Threat #6).

Other challenges to effective PA management identified through the consultation processes and workshop activities were (a) overlapping policies and conflicting management regimes, (b) political intervention, (c) limited financial and manpower resources result to weak technical and enforcement capacities of staff, and (d) lack or absence of accurate technical data on the biological state of the PA. It was consistently mentioned in the various consultation activities that managing PAs is becoming more difficult because of the presence of various policies and management instruments being applied in the PA (e.g., IPRA and ADSDPP, mining, etc.) As a result, multiple interests pervade and overall management becomes fragmented and ineffective, thus further resulting in the creation of a "de facto" open access perspective over the PAs. Vested interests and local political dynamics distract managers and stakeholders from fully responding to the basic and fundamental management needs of the PA. Overall, most of the PA managers feel that their capacity to undertake effective implementation of the management plan and enforce policies are constrained by the lack of

funds. It was generally observed that with adequate funds, PA staff may be hired and trained, enforcement and other relevant monitoring equipment may be purchased and utilized, and operation activities may be undertaken. Accurate and current technical and scientific information on the state of resources in the PA is integral and crucial in determining the most effective management strategy. Because of the absence of such information, management plans are outdated and activities do not fully respond to the current management needs of the PA.

Overall, the threats that were identified in the Custer MECA Reports from the site METT survey, KIIs, and FGDs were consistent with survey results done by IUCN in various protected areas around the world in 2006 (IUCN 2006).

## Context

### 3.2

Context provides the relevant background information needed to plan and implement management and to shape and focus an evaluation on the most important aspects of management. The METT survey shows that all of the 61 surveyed PAs have legal basis, be it a Presidential Proclamation (PP) or a Republic Act (RA). Of the 61 sites, 57 have PPs as their legal basis while four are legislated by RAs. Of the sites with PPs, 12 have pending PA bills submitted in Congress. Only one site, Camotes Island Mangrove Swamp Forest Reserve (CIMSFR), was proposed to Congress for delisting through *House Bill (HB) 897* but was vetoed by President Aquino.<sup>6</sup> Although not factored in the METT survey, some of the PAs have been recognized internationally. A MECA Cluster B Report noted that the Las Piñas-Paranaque Critical Habitat and Ecotourism Area (LPPCHEA) is recognized as a RAMSAR site. Olango Island Wildlife Sanctuary (OIWS) is also a designated RAMSAR site, but was not mentioned in the MECA reports. While not indicated in the METT results, it is important to note that Batanes Island (BPLS) is a World Heritage Site and Mt. Malindang Range Natural Park is an ASEAN Heritage Site.

Of the PAs surveyed, 56% were established after 2000, 25% from 1990 to 1999, 11% from 1980 to 1989, and only 8% before 1980. Although the average age of the 61 PAs is 19.4 years, the results of the METT and validation activities show that age does not necessarily mean stability and high level of management effectiveness. Also, while it is generally acknowledged that the provision of a PP is sufficient enough for providing the legitimate framework for management, many still feel that it is preferable that an RA be accomplished based on the belief that this will provide a firm justification for accessing funds through its inclusion in the *General Appropriations Act (GAA)*, and securing the extent and boundaries of the PA. However, the study results show that only one of the PAs studied with an RA, Mt. Malindang (MMRNP), has received considerable budget cover for its operational expenses.

The PAs surveyed covered a total of about 1.5 million hectares. Of the total surveyed PA

<sup>6</sup>Congressmen Durano and Matugas submitted HB 897 (Camotes Islands Natural Resources Management Act of 2011) to Congress on November 2011. President Aquino vetoed the Bill on June 2013.

coverage, about 72% are covered by terrestrial PAs (e.g., landscapes, natural parks, etc.), 26% are covered by PAs with both coastal and terrestrial habitats (e.g., landscape-seascapes, marine reserves, etc.), and only 2% are purely coastal habitats. **Table 3** below shows that list of 61 PAs surveyed, their size in hectares, and the legal instrument that established them. Specifically highlighted legal status show the various forms of recognitions that emphasize its value and importance.

**Table 3. The 61 Protected Areas surveyed and their legal basis**

Cluster	Region	Protected Area	Size (has.)	Legal Basis
A	2	Batanes Protected Landscape and Seascape (BPLS)	213,578.00	PP 335 (Feb. 20, 1994), RA 8991 (Jan. 5, 2001)
	2	Baua-Wangag Watershed Forest Reserve (BWWFR)	15,947.00	PP 107 and 108 (May 13, 1987)
	2	Casecnan Protected Landscape (CPL)	88,846.00	PP 136 (Aug. 11, 1987), PP 289 (Apr. 23, 2000)
	1	Kalbario-Patapat Natural Park (KPNP)	3,800.00	PP 1275 (Apr. 20, 2007)
	CAR	Mt. Pulag National Park (MPNP)	11,550.00	PP 75 (Feb. 20, 1987)
	2	Palaui Island Protected Landscape and Seascape (PIPLS)	7,415.50	PP 447 (Aug. 16, 1994)
B	3	Amor River Protected Landscape (ARPL)	5,676.00	PP 633 (Aug. 28, 1990)
	3	Simbahan-Talagas Protected Landscape (STPL)	2,266.50	PP 267 (Apr. 23, 2000)
	3	Talaytay Protected Landscape (TPL)	3,526.10	PP 283 (Apr. 23, 2000)
	3	Dinadiawan River Protected Landscape (DRPL)	3,371.30	PP 278 (Apr. 23, 2000)
	3	Aurora Memorial National Park (AMNP)	5,676.00	PP 130 (May 19, 1949)
	3	Bataan National Park (BNP)	18,335.00	PP 24 (Dec. 1, 1945)
	3	Masinloc-Oyon Bay Marine Biodiversity Reserve (MOBMR)	7,568.00	PP 231 (Aug. 18, 1993)
	NCR	Las Piñas -Paranaque Critical Habitat and Ecotourism Area (LPPCHEA)	157.00	PP 1412 (Apr. 27, 2007)

Legend	
Declared thru RA	<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>
With pending PA Bill	<span style="background-color: #66B3FF; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>
RAMSAR Site	<span style="background-color: #FFDAB9; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>
Proposed for delisting	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

C	4a	Alibijaban Island Wilderness Area (AWA)	430.00	PP 2151 (Dec. 29, 1981)
	4a	Quezon Protected Landscape (QPL)	983.00	PP 394 (June 10, 2003)
	4a	Mts. Banahaw-San Cristobal Protected Landscape (MBSCPL)	10,900.60	PP 411 (June 25, 2003); RA 9847 (Dec. 11, 2009)
	4a	Taal Volcano Protected Landscape (TVPL)	62,292.10	PP 923 (Nov. 19, 1996)
	4a	Mts. Palay-palay and Mataas na Gulod Protected Landscape (MPPMGPL)	3,973.10	PP 1315 (June 27, 2007)
	5	Abasig-Matogdon-Mananan Natural Biotic Area (AMMNBA)	5,420.10	PP 318 (2000)
	5	Bicol Natural Park (BNP)	3,000.00	PP 431 (Dec. 29, 2000)
	5	Mt. Isarog Natural Park (MINP)	10,112.00	PP 214 (June 28, 2002)
	5	Lagonoy Natural Biotic Area (LNBA)	444.60	PP 500 (Sept. 26, 1939)
	5	Caramoan Natural Park (CNP)	4,091.00	PP 291 (July 30, 1938)
	5	Catanduanes Watershed Forest Reserve (CWFR)	41,392.00	PP 123 (June 23, 1987)
	5	Bulusan Volcano Natural Park (BVNP)	3,673.00	PP 421 (Nov. 2000)
	D	4b	Apo Reef Natural Park (ARNP)	27,469.00
4b		Mt. Calavite Wildlife Sanctuary (MCWS)	18,016.20	PP 292 (Apr. 23, 2000)
4b		Calatrava, San Andres, San Agustin Watershed Forest Reserve (CALSANAG)	2,670.00	PP 2186 (Apr. 29, 1982)
4b		Mt. Guiting-guiting Natural Park (MGGNP)	15,475.00	PP 746 (Feb. 20, 1996)
4b		Rasa Island Wildlife Sanctuary (RIWS)	1,194.40	PP 1000 (Feb. 15, 2006)
4b		Mt. Mantalingahan Protected Landscape (MMPL)	120,457.00	PP 1815 (June 23, 2009)
4b		Marinduque Wildlife Sanctuary (MWS)	3,230.00	PP 696 (Aug. 17, 2004)

E	6	Northwest Panay Peninsula Natural Park (NWPPNP)	12,009.30	PP 186 (Apr. 18, 2002)
	6	Panay River Watershed Forest Reserve (PRWFR)	4,350.00	PP 599 (June 28, 1990)
	7	Balinsasayao Twin Lakes Natural Park (BTLNP)	3,961.40	PP 414 (Nov. 21, 2000)
	7	Camotes Island Mangrove Swamp Forest Reserve (CIMSFR)	17,716.00	PP 2152 (Dec. 29, 1991)
	7	Central Cebu Protected Landscape (CCPL)	28,312.00	RA 9406 (June 7, 2007)
	7	Olango Island Wildlife Sanctuary (OIWS)	1,030.30	PP 903 (May 14, 1992)
	7	Panglao Island Protected Seascope (PIPS)	385.70	PP 426 (July 22, 2003)
	7	Rajah Sikatuna Protected Landscape (RSPL)	10,452.00	PP 287 (Apr. 23, 2000)
	8	Biri-Larosa Protected Landscape and Seascope (BLPLS)	33,492.00	PP 291 (Apr. 23, 2000)
	8	Cuatro Isles Protected Landscape and Seascope (CIPLS)	12,500.00	PP 270 (Apr. 23, 2000)
	8	Guiuan Marine Reserve and Protected Landscape and Seascope (GMRPLS)	60,448.00	PP 469 (Sept. 26, 2003)
	8	Samar Island Natural Park (SINP)	333,303.00	PP 442 (Aug. 13, 2003)
F	9	Mt. Timolan Protected Landscape (MTPL)	1,995.00	PP 354 (2000)
	9	Pasonanca Natural Park (PNP)	17,414.00	PP 132 (July 5, 1999)
	9	Siocon Resource Reserve (SRR)	980.00	PP 84 (Feb. 24, 1999)
	ARMM	Basilan Natural Biotic Area (BNBA)	4,497.00	PP 321 (May 31, 2000)
	ARMM	Bud Datu National Park (BDNP)	213.00	PP 261 (Feb. 28, 1938)
	ARMM	Lake Lanao Watershed Forest Reserve (LLWFR)	180,460.00	PP 871 (Feb. 26, 1992)
	12	Mt. Matutum Protected Landscape (MMPL)	15,600.00	PP 552 (March 20, 1995)
	12	Sarangani Bay Protected Seascope (SBPS)	21,595.00	PP 756 (March 5, 1996)

G	10	Baliangao Protected Landscape and Seascape (BPLS)	295.00	PP 418 (2000)
	10	Mimbilisan Protected Landscape (MPL)	66.00	RA 9494 (Aug. 22, 2007)
	10	Mt. Balatukan Range Natural Park (MBRNP)	9,645.00	PP 1249 (Mar. 6, 2007)
	10	Mt. Timpoong-Hibok-hibok Natural Monument (MTHHNM)	3,650.00	PP 570 (Mar. 9, 2004)
	10	Mt. Malindang Range Natural Park (MMRNP)	53,262.00	RA 9304 (2004)
	11	Mabini Protected Landscape and Seascape (MPLS)	6,106.00	PP 316 (May 31, 2000)
	11	Pujada Bay Protected Landscape and Seascape (PBPLS)	21,200.00	PP 431 (July 31, 1994)
	13	Alamio, Buyaan, Carac-an, Panikian Rivers and Sipangpang Falls Watershed Forest Reserve (ABCPRSFWR)	43,601.00	PP 1747 (Mar. 23, 2009)



## 3.3

### Planning

Planning as a management parameter, takes into consideration the design, guiding framework and strategic direction management will take to achieve the ultimate goal and purpose of the protected area. Indicators to measure the level of planning in the PAs were (a) presence of a management plan (b) presence of regulations, (c) activities are guided by clear objectives, and (d) the design (shape and size) of the PA is appropriate to meet objectives.

Fifty-four of the 61 PAs surveyed have approved management plans (either a General Management Plan or GMP, or an Initial Protected Area Plan or IPAP) while seven PAs do not have any such document (Caramoan NP, Basilan Natural Biotic Area, Alamio, Buyaan, Carac-an rivers and Sipangpang Falls Watershed Forest Reserve, Bud Dahu National Park, Biri-Larosa Protected Landscape and Seascape, Panglao Island Protected Seascape, Panay River Watershed Forest Reserve). Of those with management plans, only four are recent (Cuatro Islas Protected Landscape and Seascape and Guiuan Marine Reserve and Protected Landscape and Seascape in 2013, Apo Reef Natural Park and Mt. Mantalingahan Protected Landscape in 2010). All other existing management plans were found to require updating and the incorporation of current and accurate technical and scientific data. Sites with management plans were also reported to have Annual Work and Financial Plans (AWFPs) mainly containing a set of management activities identified through series of stakeholders' consultations. Funding for the activities contained in the AWFPs mainly identified the national government, specifically the DENR, as the funding source, though some include locally generated revenues as either an alternative or an augmentation. The AWFPs were observed to contain very little consideration and focus on accessing other fund sources.

There was a general observation in the cluster report that the management plans contain a comprehensive set of regulations and policy pronouncements supporting the overall management of the PA. However, there was also a general observation that the implementation of the targeted activities contained in these plans remains a serious challenge, citing limited financial, manpower, and logistical resources as constraining factors. In terms of the objectives and purpose for managing the PAs, the management plans were found to contain adequate reference to the objectives of managing the PAs. Some cluster reports though note that there are management plans that have vision-mission-goal statements. Insights from the KIIs and FGDs highlighted the possibility that there may be a disconnect between the stated objectives of the PA and its plan, with that of the reality and present need. It is also not indicated in the METT and cluster MECA reports whether the management plans have a monitoring and evaluation system in place. However, the survey and consultation results indicate the similar monitoring mechanisms are present in most PAs such as the conduct of resource based monitoring and a biodiversity monitoring system. The frequency of conduct of these activities is uncertain because of the issue on availability of funds. Only a few PAs (ROWS and MMPL) have programs for undertaking systematic monitoring and evaluation.

In all of the MECA cluster reports, it was reported that PA management plans are hardly integrated and synchronized with local development plans, Comprehensive Land Use Plans (CLUPs) and Forest Land Use Plans (FLUPs). Hence, there is a general observation of very limited and marginal buy-in from the LGUs to be an active partner in protected area management. Moreover, it was noted during the KIIs and FGDs that in protected areas where certificate of ancestral domains titles (CADTs) exist, the PA management plans are not harmonized with the Ancestral Domain Sustainable Development and Protection Plans (ADSDPPs) because of differences in goals, purpose, process, and interests between the two management regimes and their respective stakeholders.

Assessing input seeks to investigate the availability and adequacy of human resource, social capital, facilities, information, financial, and equipment integral to effective management. For the METT survey, assessing input as a management parameter included the indicators of (a) presence of information in the form of resource inventory, (b) number and capacity of staff, (c) sufficiency and security of budget, (d) law enforcement, and (e) fees and revenues.

All the cluster MECA reports show that there is hardly any systematic technical assessment and resource inventory being undertaken in most PAs. For those that have been able to do so, these PAs were able to update their management plans (refer to previous discussion). The ability to conduct current and comprehensive technical assessments and resource inventories were mainly due to the provision of appropriate funding and staffing support either by the LGU or, in most cases, through an external sources such as development agency and NGO supported projects.

In terms of staffing, all the sites indicated the lack of sufficient number of qualified technical and operational staff to ensure effective PA management. Although all of the PAs have PA Superintendents (PASus), they are confronted by multiple tasks and supported only by meager staffing. Based on the METT results from the individual site reports, the average number of staff per hectare in the 61 PAs surveyed is estimated at about 1 person per 2,300 hectares. In the 61 sites, only about 15% of the total protected area staffs are regular while about 25% are detailed<sup>7</sup>. The majority of the protected area staffs are composed of contractuales and volunteers. The position and designation of staff (e.g., administration, field, technical, etc.) is not clearly provided. However, it is important to highlight that the number of personnel directly and actively involved in the overall management of a protected area is not proportional to the size and scope of work needed to effectively manage the park's resources and address the threats.

A consistent feedback from all the sites is the lack of adequate financial, manpower and logistical resource to enable effective PA management. Although it is not clear as to what can be calculated as “adequate” (e.g., peso per hectare) fund allocation, most of the PAs are dependent on the funds being provided by the DENR. Based on the data provided in the individual site reports, the average budget provided to manage a protected area is about PhP 39 per hectare. There is no standard and ideal amount of fund per hectare that has so far been provided by the national government to effectively manage a PA. In all the cases studied, the money allocated to PA management is not adequate to maintain and sustain management activities.

Enforcement in all the surveyed PAs was perceived to be weak. The lack of manpower and budget constrain the Protected Area Office (PAO) to effectively conduct regular patrolling, monitoring, and enforcement activities. The fact that many of the major threats to effective PA management earlier identified such as encroachment, illegal extraction of PA resources, conversion of lands in agricultural plots, and increasing agricultural activities in the PA, indicate serious weaknesses in enforcement capacities. In a few PAs, it was reported that protection and enforcement activities are present and effective, which have been mainly

<sup>7</sup>A staff is detailed when he/she is moved from one agency to another without the issuance of an appointment and only allowed for a limited period of time.

attributed to presence and deputation of community members and established partnerships with local enforcement agencies.

With regards to fees and revenues, the Integrated Protected Area Fund (IPAF) would have been an ideal fund source. However, the tedious process for accessing the funds discourages many PAs to pursue this. Despite this perception, it was reported that a few PAs have established their IPAF, and have been able to open their respective bank accounts (nine in Cluster F/G, AMP, Bataan NP, and Talaytay PL). Some PAs that are not able to access their IPAFs rely on either the meager collections from user fees (e.g., MPNP, PIPLS, CPL and BPLS) or on the ad hoc support from the LGUs, either in cash or in kind (e.g., personnel, facilities, equipment, etc.), or both. In a few PAs (such as ARNP, RASA, MGGNP, and MMPL), NGO and external fund source are sustaining PA management activities. The feedback and observations from the KIIs, FGDs, and validation consultations indicate that operating expenses are mainly supported by funds from the national government, affirming the finding that 94.5% of all operating expenses in all the PAs in the country are shouldered by the DENR.

## 3.5

### Process

The value of assessing process as a management effectiveness parameter is mainly based on the importance it places on the standard of management within a protected area system. In the METT survey, the key indicators identified to assess process are (a) demarcation of PA boundary, (b) management of budget, (c) stakeholders participation, (d) partnerships, and (e) information and education campaign

Most PAs surveyed, especially the PAs with Presidential Proclamations, indicated that their area are delineated but not demarcated, which is an activity output expected once a PA is proclaimed thru a Republic Act. Although delineated, the reports are uncertain as to whether these PAs have the proper and accurate zoning to determine allowable protection and management activities.

In all the PAs, budget management is tasked to the PASUs. Given that the budget provided to the protected area is limited, the PASu can only do so much in terms of achieving expectations and the planned activities contained in the management plan. The KIIs and FGDs highlighted the disconnect between planning (demand) and budget allocation (supply). Like in most DENR field offices, the budget provided by the central office to the PAOs is always lower than the one proposed (based on plans) for funding.

In terms of participation, all of the reports show that there is high participation from the stakeholders in the development of the management plans. However, it was shared during the consultations that some indigenous peoples (IPs) are not fully participating in the

planning process and PAMB activities, especially where CADTs exist in the PAs. This is mainly attributed by the difficulties being experience by stakeholders in coordinating with NCIP, and in seeking constructive and collaborative working relations. The established PAMBs in all the 61 sites have complete sectoral representations, but it was noted during the KIIs and FGDs, that in some PAMBs, membership is becoming an issue, especially when decisions need to be made. Decision-making in many PAMBs is constrained by the frequency and prevalence of representatives of members attending PAMB meetings but not having the authority to decide on behalf of the member, as well as their lack of knowledge and awareness on conservation and PA management issues. Also, participation in PAMB activities and the conduct of PAMB meetings are constrained by limited budget. During the validation and consultation activities, it was shared that some PAMBs have been able to overcome this constraint by either rotating the hosting of the meetings by having the LGUs financially support the activity.

Most PAs do not have any established partnership arrangements with the private sector mainly due to the weak negotiating and social marketing skills of the PASu. However, it was reported that a few PAs have been able to establish positive inter-agency partnerships and collaborations with the private sector, especially in connection with eco-tourism. Overall, it is clear that partnerships, such as co-management agreements and shared tenure systems in the 61 PAs, are minimal, thus leaving most of the PAs as “de factor” open access, or those with very limited management accountability.

Most of the PAs reported that information and education campaigns are present. The KIIs and FGDs further show that these activities are mainly initiated and supported by either committed LGUs or external groups such as academe and civil society organizations, especially where projects are being implemented.

## Outputs

### 3.6

Ideally, the assessment of outputs looks at the number or level of products and services delivered as indicated in the management plans and its activities. But based on the METT instrument used, the primary indicator for output as a management effectiveness parameter is simply the presence or absence of a visitors’ center. This over simplistic reference to a single indicator severely limits a full and comprehensive appreciation of the complexity and sophistication of key indicators to better illustrate whether management activities are producing the outputs integral to achieving the outcomes.

Most of the PAs do not have the output indicator of a visitors’ center and only a few PAs have their own respective Protected Area Office (PAO) or similar infrastructure facility (e.g., MNP, BPLS, ARNP, MGGNP, RIWS, BTLNP, OIWS, RSPI, SINP, and CCPL).

The MECA site and cluster reports suggested other indicators to measure output as a management parameter, which are mainly consistent with the *NIPAS Law*:

- Number of hectares of diverse habitat protected, rehabilitated or restored,
- Number of hectares of MUZ covered with tenure, contract, or agreement for on-site conservation activities,
- Number of PA zones incorporated in CLUPs,
- Number of Functional PAMBs and PASus,
- Percent of completed map delineation, ground demarcation and monumenting of zones,
- Percent of AWP or GMP funded from IPAF, LGU contribution, DENR PAP, among others,
- Number of PAMB resolutions passed,
- Percent of planned tourism facilities or services established or operational,
- Number of user's fee systems established with PAMB resolution and ordinance
- Percent improvement in PAMB and PASus capacity,
- Percent increase in the level of PA awareness and understanding of communities

## 3.7

### Outcomes

Outcomes as a management parameter indicate whether the goals and objectives of management in a particular protected area were achieved. The overall METT and KII and FGD results show that there is a mixed level of awareness and observations on what the outcomes are and whether they have been achieved. This difficulty is further complicated without benchmark/baseline as points of reference. Overall, it is difficult to determine accurately whether the PAs' goals, purpose and objectives were achieved. There are essentially two outcome indicators being measured by the METT and these are (a) economic returns, and (b) increase in biodiversity.

In terms of economic benefits, most reported that the PAs are providing livelihood activities to the communities and LGUs, mainly resulting from ecotourism and resource extraction activities. It has been reported, for example, that in Mount Pulag National Park (MPNP), Batanes Protected Landscape and Seascape (BPLS) Palau Island Protected Landscape and Seascape (PIPLS), and Apo Reef National Park (ARNP), among others, members of the community are involved in tour guiding activities and making and selling novelty or souvenir items from non-wood products. The perception of economic benefits is also indicated by the presence of externally driven projects and activities that provide employment and livelihood within the PAs. Indirectly, stakeholders are aware of the value and contribution of water to agricultural production, which is the main income generation activity of communities living in and adjacent to the PAs.

With regards to the condition of Important Values (Biophysical/ Biodiversity), most reported that the forest cover has increased and resources are intact, though remaining to be vulnerable to exploitation. It was noted in most of the cluster MECA reports that the perception of improved biodiversity values is mainly based on the presence and reported conduct of regulations and policies on utilization and extraction. Also, the KII and FGD results indicate that the perceived quality of natural resources in their respective PAs had already improved because of effective enforcement despite of limited personnel and logistics. The consultation results also show that that there is no accurate

and objective basis for illustrating any change in the condition and state of the resource base.

Overall

3.8

Providing an overall assessment of the management effectiveness of the 61 PAs surveyed is not easy especially if the METT instrument is to be used as the primary bases.

The METT instrument, as noted, has limitations, especially regarding the lack of and inappropriateness of some of the indicators. Also, the treatment and presentation of the METT scores vary across the individual and cluster MECA reports. Furthermore, relying solely on the METT scores as a gauge of management effectiveness will not work primarily because METT scores are not grades. What the METT scores simply highlight is the state of management effectiveness at that point in time. Its main relevance is in providing a baseline. Thus the insights, clarifications, and observations from the KIIs and FGDs, as well as feedback generated during the cluster workshops, significantly contributed to the appreciation, complementation, and contextualization of the METT scores.

In order to further determine an appropriately accurate overall assessment of the 61 sites, the NMECA consultant team referred to current and relevant information to set a benchmark and assess how distant the MECA results are, specifically on two critical indicators, namely budget and staff. In all of the MECA reports, it was consistently mentioned that overall management of the PAs is significantly affected by limited financial and manpower resources. In 2013, a study was done as part of a cross-country analysis of the fiscal and resource gap of protected areas in the South East Asian region. The Philippine study focused on the protected areas that are under the jurisdiction of the DENR and looked into the extent of internal and external threats to PAs in the 16 regions of the country some of which are indicated by the number of staff filled up by the DENR and the budget allocated by the national government were also examined (Anda and Atienza 2013).

The fiscal gap study shows that in all the PAs in the country, the national average of operating costs for a PA is about PhP 2,213 per hectare based on 2009 data (Anda and Atienza, 2013). Compared with this calculation, the peso per hectare ratio in the 61 MECA sites of PhP 39:1 hectare ratio is way below the national average.

In terms of staffing, the fiscal gap study shows that PAs in the country have an average staff per hectare ratio of 7.46 staff per 1000 hectares, or 1 personnel per 133 hectare (Anda and Atienza, 2013). The METT results show a very disproportionate staff per hectare ratio of 1:2,300 hectares.

The overall average METT percentage scores for the 61 PAs surveyed was calculated to be 58%, which indicates that there is an average perception of substantive management effectiveness across the 61 sites. However, the general observations and feedback from the KIIs and FGDs indicate that this perceived level of effectiveness is overestimated. The KII and FGD results further substantiate, articulate and clarify many of the key challenges and opportunities that complement and accurately highlight the METT survey results. Therefore, based on the consolidated results from the METT, KIIs and FGDs, the overall management effectiveness in all the 61 PAs surveyed is POOR to FAIR.



# 4 LENSES FOR ASSESSING THE CONSOLIDATED FINDINGS OF THE CLUSTER REPORTS

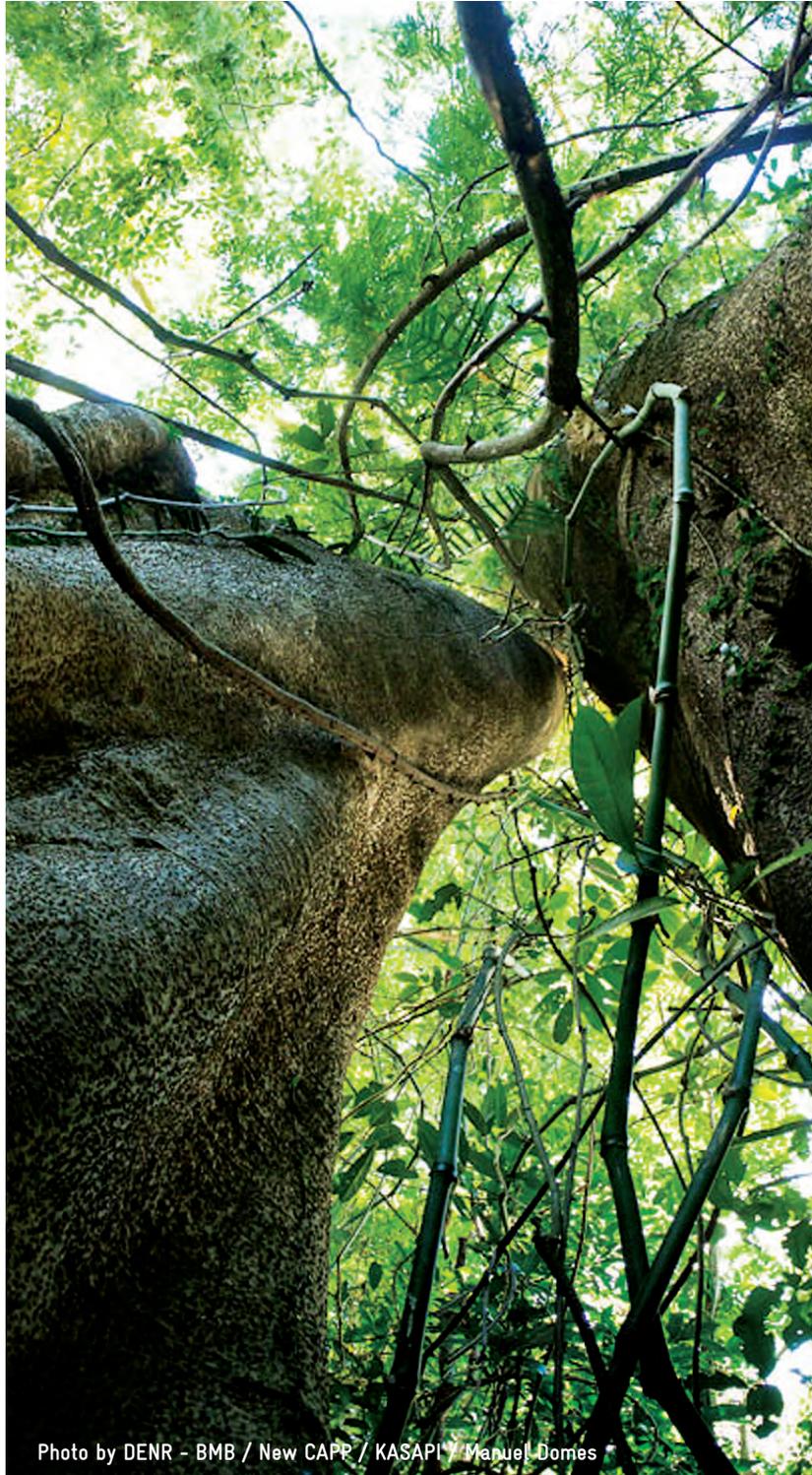


Photo by DENR - BMB / New CAPP / KASAPI / Manuel Domes

The national MECA assessment team compared the consolidated findings from the MECA cluster studies with various lenses as means to validate or triangulate and further understand PA management. The MECA results were compared with the current conditions of the forests, coastal and marine areas using available maps and reports; with the expected outputs and outcomes of the *NIPAS Law* based on generalized RBME model; and with the ongoing institutional changes in DENR that may impact NIPAS implementation. These are the DENR's new major final outputs (MFOs) from the Department of Budget Management (DBM) as basis of the agency's programs, projects, and activities (PPAs) for every budget cycle. The new MFOs are the vehicle for carrying out DENR's programs under its re-organized or re-structured organization under its approved Rationalization Plan that will take effect in 2014.

The first lens used the changes in land and forest cover using the 2003 and 2010

NAMRIA data and published reports on changes and trends in the conservation of coastal and marine areas. The land and forest cover of the two data sets used the same land and forest types using similar definitions. They also resulted from the processing of Landsat imageries. Although there remain issues<sup>8</sup> on the comparability of these two data sets, the results provide a good start and valuable in estimating changes in land and forest cover over a period of seven years especially on the changes in closed and open canopy natural forests. Changes in land and forest cover data at the national, regional, and in PAs in selected regions would indicate on-site conservation effectiveness of PA management especially on the changes in closed and open canopy forests and the mangroves. Other land and forest cover data may also be used, if necessary, especially for the rehabilitation and development of the wooded grasslands and shrub lands. The extent, coverage, and overall health of the closed and open canopy forests, mangroves, reefs, seas grasses, and pelagic fisheries would reflect the “resiliency” of these ecosystems from various impacts of erratic weather conditions – increasing temperature, increasing sea level, acidification in coastal waters, drought, and intense and prolonged rainfall - and resulting natural disasters (USAID, DENR/PAWB, and DA/BFAR 2010; Heaney and Regalado, 1998).

The decline or loss of the highly diverse ecosystems such as tropical closed and open canopy forests, habitats, mangroves, reefs, and seagrasses will limit the following ecological processes that enhance diversity, increase their resiliencies, and ability to survive over time (USAID 2005):

- Interactions of a natural community (biological life) with its physical and chemical environment and the resulting ecological processes of such interaction.
- The feeding relationships of species, in which some species eat other species, thereby allowing energy to flow through the food webs of ecosystems, as well as the pollination of plants by insects and the control of species by their predators.
- The cycling of nutrients that maintain soil fertility and the cycling of water through ecosystems are also ecological processes

Thus, it is important to look at the overall MECA findings as to how they match with some indicators or reports with respect to the conditions and overall health of biophysical diversity and ecological processes and functions.

Second, the overall MECA findings were compared with the governance and management requirements and expectations of the *NIPAS Law* and the Amended 2008 IRR. The comparative analysis used the generalized form of an output- and outcome-structure of a results-based monitoring and evaluation system (RBME) for a PA system. To gauge PA management effectiveness, the consolidated findings were compared with the output indicators

<sup>8</sup>There are discussions on the adequacy of ground validation for the 2003 data and not enough time to complete the image processing. Compared with the 2010 data that were validated with 100 validation points per province, FMB claimed that the results of the 2002-2004 national forest inventory assessment were more than adequate to provide ground validation of the 2003 land and forest cover. For baseline purposes, however, DENR/BMB may use the 2010 land and forest cover data as the starting point in establishing PA-based RBME in each of the site.

of the NIPAS and the Amended 2008 IRR. The comparison would reveal intentionality of DENR's programs, projects, and activities (PPAs) in support of biophysical conservation in each of the 61 sites. In the absence of a generalized and NIPAS-based results-based monitoring and evaluation system, a template was developed for comparison purposes. This template – with slight modification and improvement by DENR/PAWB- may be used to “measure” the management performance and effectiveness of on-site PA conservation and management. The *NIPAS Law* provides the extent, limits, coverage, outcomes or sub-outcomes, outputs and performance indicators to be measured by each site. This may be modified for determining progress in biodiversity conservation in other management units that are within KBAs but are under the governance frameworks such as those in forest lands, agricultural lands, and local government units e.g. marine protected areas in municipal waters not covered by *NIPAS Law*, and ancestral domains.

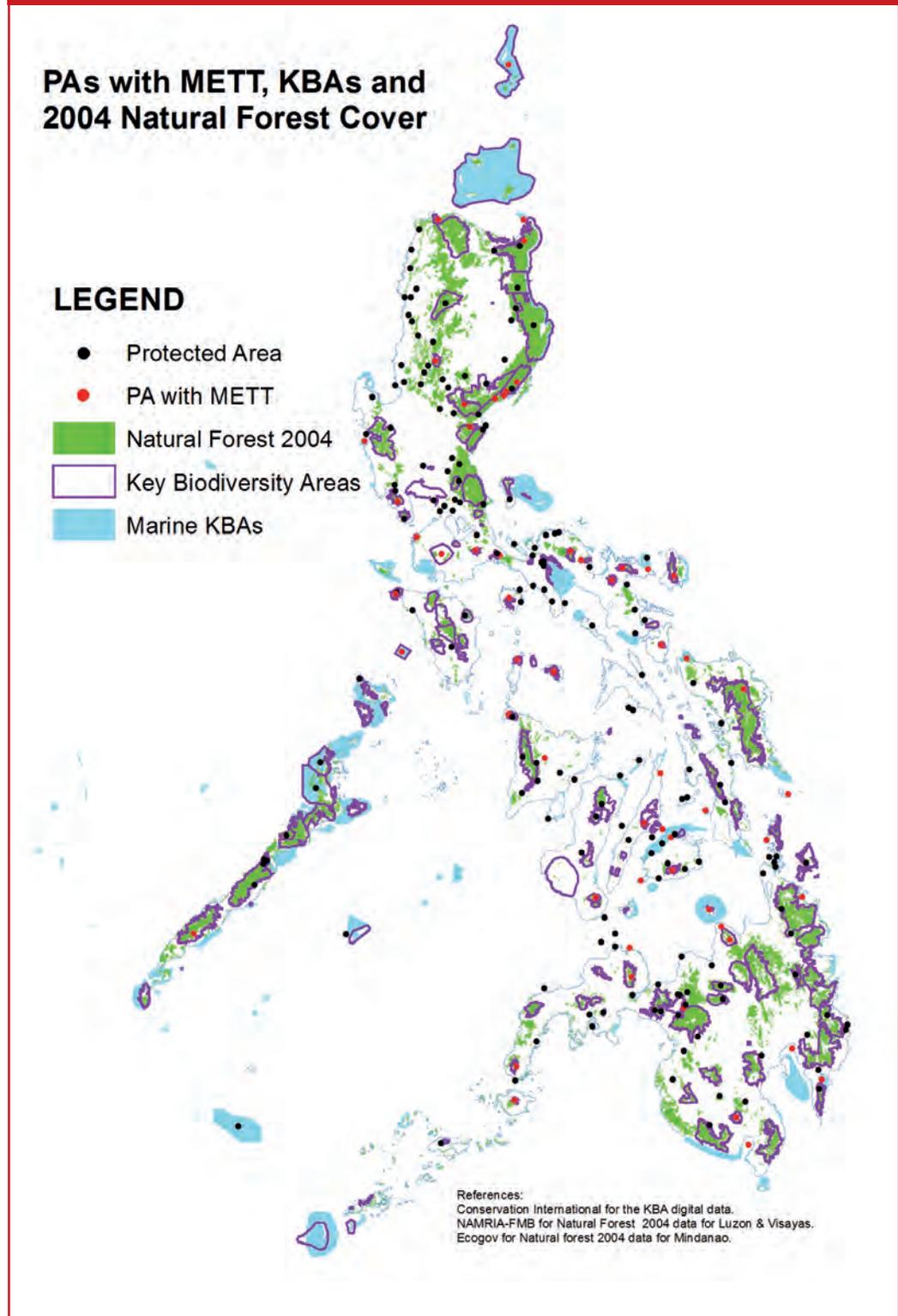
Lastly, the national assessment gauged the implications of the possible recommendations or actions required from the results of the MECA cluster studies with respect to DENR's ongoing Rationalization Plan in the DENR protected area management sector and the agency's shift towards new major final outputs (MFOs) as the basis in preparing programs, projects and activities (PPAs). The impacts of the Rationalization Plan will change reporting relationships and number of field staff in the Protected Area and Wildlife Sector. This will be further influenced by the implementation of the new MFOs as DENR budgeting and programming shifts towards a more integrated and ecosystems-based allocation of resources at the CENRO, PENRO, region, and national levels.

The consultants also relied on the reviews and perspectives of other recent assessments in discussing the results of the national MECA. For example, the GIZ and Silliman University (2011) provided an in-depth review of the *NIPAS Law* and related statutes on the establishment and management of PAs in the Philippines. La Viña and Kho (2010) summarized the legal framework for protected areas in the Philippines and gave a bit of a history of how the *NIPAS Law* came into being. The DENR/PAWB reported (Molinyawe 2012) the overall status of protected area management in the Philippines. The earlier assessments of USAID (2008 and 2011) listed key issues, constraints, and challenges on the conservation of tropical forests and biodiversity in the Philippines. These earlier studies have been useful and relevant in formulating the recommendations for the national MECA study. Other relevant recent assessments that were reviewed are those of Braganza (2011), BMB/ADMU (2012), and DENR/ENRMP (2013) reports.

# 4.1

## Changes in Highly Diverse Forests from 2003 to 2010 and Decline of Marine and Coastal Resources

Figure 7. Map showing the protected areas, the PAs with METT, and the KBAs in terrestrial and marine areas



### 4.1.1 Changes in Land and Forest Cover

Studies have shown that the “less rain forest that remains in a given region, the greater the proportion of endangered species”. Thus, “protecting the remaining old-growth rain forests is essential for both biological and economic stability” (Heaney and Regalado 1998). **Figure 7** shows the 2003 forest cover in the Philippines together with the PAs under the NIPAS coverage, the key biodiversity areas, and the 61 PAs that were covered by the METT study. It is visually obvious that in terrestrial areas, the KBAs almost correspond with those areas that have remaining forest cover in the country. Several of the 61 PAs are still located in areas that have relatively dense forest cover such as those in Regions 1, 2, 3, 4a, 4b, and 8. Several terrestrial PAs, however, have fairly minimal forest cover.

Over the years, the decline of forest cover in the Philippines as shown in **Figure 8** corresponded with the relatively high and increasing number of species that are listed in the IUCN Red List of Threatened Species. Currently, about 704 species are on this list. The closed and open canopy forests and the mangrove forests provide endemic resiliencies of terrestrial ecosystems. And given the dominance of watershed landscapes in the Philippines, the inter-connectedness and inter-dependence of various ecosystems are linked from the top of the ridge all the way down to agricultural lands, wetlands, mangroves, and coastal and marine areas. The decline of tropical rain forests also mimics those in the marine and coastal areas and in the wetlands. The flora and faunal species have been affected by the decline as their natural habitats were reduced, feeding chains were significantly impacted, and ecological cycling processes were negatively affected. The overall status and conditions of these natural ecosystems are good measures of healthy ecosystems functions, dynamism, and functioning of various ecological processes. In marine and coastal ecosystems, the mangroves, coral reefs, and sea grasses are the major ecosystems that need urgent conservation efforts. In wetlands, these are the highly diverse habitats of birds, plants, animals and other species. Unfortunately, these are not captured in the consolidated findings of the cluster MECA reports.

The main reason for including the changes in land and forest cover data from 2003 and 2010 is simply to link and triangulate the consolidated findings on “PA management effectiveness” with respect to the conservation status of the closed and open canopy forests and the mangroves. There could be other measures, but they are not easily available, especially those of marine and coastal resources. The land and forest cover data also help triangulate the consolidated ratings of each cluster with respect to the effectiveness of PA management. The land and forest cover data also indirectly imply whether or not the “threats from increasing population, over exploitation of resources, and industrial development” are being addressed by each of the PA and DENR and LGUs.

**Figure 8.** Forest cover change in the Philippines from 1934 to 2003 (Calderon 2013)

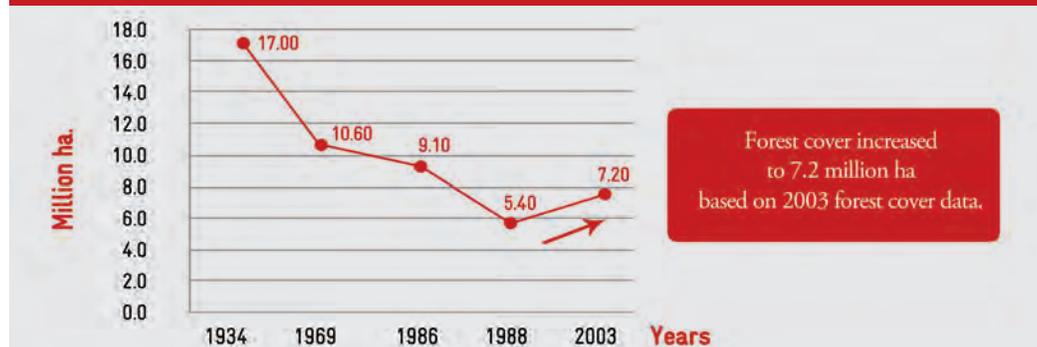




Photo by Jacqueline Hernandez



## DEFINITIONS OF FOREST CATEGORIES IN THE PHILIPPINES

**CLOSED CANOPY forests** are formations where trees in the various storeys and the undergrowth cover a high proportion (>40 percent) of the ground and do not have a continuous dense grass layer. They are either managed or unmanaged forest, in advanced state of succession and may have been logged-over one or more times, having kept their characteristics of forest stands, possibly with modified structure and composition.

**OPEN CANOPY forests** are formations with discontinuous tree layer with a coverage of at least 10 percent and less than 40 percent. They are either managed or unmanaged forests, in initial state of succession.

Source: DENR, 2005; FAO, 2000; PD 795, 1975

The main reason for including the changes in land and forest cover data from 2003 and 2010 is simply to link and triangulate the consolidated findings on “PA management effectiveness” with respect to the conservation status of the closed and open canopy forests and the mangroves. There could be other measures, but they are not easily available, especially marine and coastal resources. The land and forest cover data also help triangulate the consolidated ratings of each cluster with respect to the effectiveness of PA management.

The land and forest cover data also indirectly imply whether or not the “threats from increasing population, over exploitation of resources, and industrial development” are being addressed by each of the PA and DENR and LGUs.

As shown in **Tables 4 and 5**, the overall area of closed canopy forests in the country declined between 2003-2010 by almost 25% and probably most of these areas became open canopy forests, which increased by 14%.

There was an overall increase in mangrove forests by almost 25% which could reflect the increasing awareness among coastal communities, LGUs, and other stakeholders on the environmental and economic values of mangrove forests. The mangrove figure indicate increasing attention and support by DENR, DA/BFAR, and the LGUs in protecting and conserving the mangroves under various innovative institutional arrangements such as co-management agreements and joint management schemes. For instance, a hectare of managed mangrove could provide a benefit ranging from US \$ 500 to US \$1,550 from fisheries and wood production (FISH 2007). In addition, mangroves also serve as buffer for storm surges with several species that are effective for remediation.

The decline in closed canopy forests by almost 25% at the national level in all regions except regions 1, 5, 7, 8, 9, 10, and 13 indicate the uphill battle in protecting and conserving the remaining closed canopy in the country especially in areas that still have large areas of natural forests.

**Table 4.** Land and forest cover change from 2003-2010 in the Philippines

Note: The 2010 data are based on unofficial data from DENR/FMB but the 2003 data is based on data that were officially released for the public

Region	Forest				
	TOTAL Forest	Closed Forest	Open Forest	Mangrove Forest	
Philippines 2010	6,840,349	1,930,780	4,601,536	308,033	
Philippines 2003	6,838,822	2,560,872	4,030,588	247,362	
Net increase or Decrease in Percent	0.02	(24.60)	14.17	24.53	
Difference between 2010 and 2003	1,527	(630,092)	570,948	60,671	

In terms of magnitude, regions 4-A, 2, and 3 lost large areas of closed canopy forests. In fact, in 2010, Region 3 appears not to have any more closed canopy forest (Table 5, see page 80). The loss of closed canopy forest is generally linked with the increasing socio-economic development, urbanization, and access in Regions 3, 4-A and 4-B, 11, 5, 6, 11, 12, and CAR. The intensive campaigns on illegal logging in Region 13 could have effect in the decline of closed canopy in this area. The declining trend follows the closed and open canopy forests in protected areas except in regions 1, 2, 5, and 7 (Table 6, see page 81). This means that PA management in these regions are relatively effective in addressing illegal logging, poaching, and extraction; encroachment of occupants; and conversion of forests into other uses.

Over the years, especially after the issuance of *EO 23 in 2011* banning commercial logging in natural forests, the hotspots declined as a result of strengthening the campaign and logistics in forest law enforcement (Table 7, see page 84). Illegal logging was reduced in all hotspot provinces and municipalities by at least 80% (Calderon 2013).

Fortunately, despite the inadequacy of funds for PAMB and PAO operations (as shown in the consolidated findings from the MECA cluster reports), the closed canopy forests in Region 1, 7, 8, 9, 10, and 13 did not significantly decline over the years.

However, the open canopy forests in Regions 2, 3, 7, 10, and 12 declined. In regions where there are no decline in closed and open canopy forests (Regions 1, 8, 9), the data reflect certain effectiveness of forest law enforcement in the PAs, stronger multi-sectoral participation of LGUs, communities and other partners. In most cases, the regions which have lost closed canopy forests have increased the area under open canopy forests. This calls for increased support for forest protection and provision of right incentives to reduce the threats in the remaining highly diverse closed canopy forests.

	Other Wooded Land				Other Land
	TOTAL Other	Shrub	Fallow	Wooded Grassland	TOTAL Other Land
	7,247,213	3,420,217	7,381	3,819,515	14,984,629

Note: Based on FMB data from NAMRIA land and forest cover data of 2003 and 2010

**Table 5.** Forest Cover Changes in Closed and Open Canopy and Mangroves (2003-2010)

Note: The 2010 data are based on unofficial data from FMB 2013

	Total Closed Forests 2003	Total Closed Forests 2010	Difference	Total Open Canopy 2003	Total Open Canopy 2010	Difference	Mangroves -Natural 2003	Mangroves -Natural 2010	Difference
TOTAL	2,560,872	1,930,780	<b>(630,092)</b>	4,030,588	4,601,536	<b>570,948</b>	247,362	308,033	<b>60,671</b>
CAR	384,877	252,004	<b>(132,873)</b>	246,848	514,386	<b>267,538</b>	-	-	-
NCR	-	18,971	<b>18,971</b>	2,790	105,737	<b>102,947</b>	30	788	<b>758</b>
1	37,723	504,296	<b>466,573</b>	117,217	563,093	<b>445,876</b>	151	5,902	<b>5,751</b>
2	503,149	211,807	<b>(291,342)</b>	604,473	284,816	<b>(319,657)</b>	8,602	1,102	<b>(7,500)</b>
3	226,241	-	<b>(226,241)</b>	304,215	1,655	<b>(302,560)</b>	368	115	<b>(253)</b>
4-A	117,162	69,089	<b>(48,073)</b>	161,165	182,443	<b>21,278</b>	11,346	18,408	<b>7,062</b>
4-B	484,866	97,845	<b>(387,021)</b>	604,246	743,542	<b>139,296</b>	57,567	72,485	<b>14,918</b>
5	50,618	40,035	<b>(10,583)</b>	90,284	141,907	<b>51,623</b>	13,499	25,293	<b>11,794</b>
6	105,873	67,175	<b>(38,698)</b>	104,686	109,228	<b>4,542</b>	4,600	9,977	<b>5,377</b>
7	2,231	12,344	<b>10,113</b>	43,026	41,502	<b>(1,524)</b>	11,770	14,800	<b>3,030</b>
8	36,473	45,952	<b>9,479</b>	410,111	426,919	<b>16,808</b>	38,781	41,378	<b>2,597</b>
9	29,652	30,819	<b>1,167</b>	126,790	120,271	<b>(6,519)</b>	22,279	26,830	<b>4,551</b>
10	107,071	181,074	<b>74,003</b>	226,400	203,432	<b>(22,968)</b>	2,492	5,327	<b>2,835</b>
11	177,503	155,099	<b>(22,404)</b>	240,986	267,172	<b>26,186</b>	2,010	2,879	<b>869</b>
12	126,385	56,966	<b>(69,419)</b>	218,858	202,922	<b>(15,936)</b>	1,350	1,160	<b>(190)</b>
13	64,729	92,238	<b>27,509</b>	431,832	540,970	<b>109,138</b>	26,731	25,896	<b>(835)</b>
ARMM	106,319	95,066	<b>(11,253)</b>	96,661	151,541	<b>54,880</b>	45,786	55,693	<b>9,907</b>

**Table 6.** Changes in land and forest cover in protected areas in selected regions from 2003 to 2010 (Based on unofficial data from PAWB 2013)

Region and CLASS	Forest Cover 2003	Forest Cover 2010	Difference	%
<b>Cordillera Administrative Region</b>				
Closed forest, broadleaved	11,576	7,066	(4,509)	-0.39
Closed forest, coniferous	11,541	3,656	(7,886)	-0.68
Closed forest, mixed	528	2,314	1,786	3.38
Forest plantation, broadleaved	6,854	527	(6,327)	-0.92
Open forest, broadleaved	10,442	19,024	8,582	0.82
Open forest, coniferous	43,151	49,356	6,205	0.14
Open forest, mixed	2,291	2,876	585	0.26
<b>Region 1</b>				
Closed forest, broadleaved	3,847	5,556	1,709	0.44
Mangrove forest	1	33	32	54.04
Open forest, broadleaved	6,643	987	(5,656)	-0.85
Open forests, mixed	-	308	308	-
Open forest, coniferous	811	5	(806)	-0.99
<b>Region 2</b>				
Closed forest, broadleaved	230,773	234,893	4,119	0.02
Mangrove forest	505	732	227	0.45
Open forest, broadleaved	326,943	336,835	9,892	0.03
Open forest, coniferous	-	190	190	-

Region 3				
Closed forest, broadleaved	124,606	89,136	(35,470)	-0.28
Mangrove forest	-	52	52	-
Forest plantation, broadleaved	-	362	362	-
Open forest, broadleaved	60,245	93,792	33,547	0.56
Open forest, mixed	786	682	(104)	-0.13
Region 4A				
Closed forest, broadleaved	51,626	33,524	(18,102)	-0.35
Mangrove forest	153	193	40	0.26
Open forest, broadleaved	50,453	60,909	10,456	0.21
Region 4B				
Closed forest, broadleaved	109,149	33,407	(75,742)	-0.69
Mangrove forest	6,424	6,622	198	0.03
Open forest, broadleaved	98,899	184,491	85,592	0.87
Region 5				
Closed forest, broadleaved	12,197	26,492	14,295	1.17
Mangrove forest	232	412	180	0.78
Open forest, broadleaved	25,546	39,842	14,296	0.56

Region 6				
Closed forest, broadleaved	54,707	29,096	(25,611)	-0.47
Closed forest, mixed	192	-	(192)	-1.00
Mangrove forest	404	584	180	0.44
Open forest, broadleaved	23,501	45,163	21,662	0.92
Open forest, mixed	3,058	-	(3,058)	-1.00
Region 7				
Closed forest, broadleaved	2,529	9,310	6,781	2.68
Mangrove forest	2,849	2,900	51	0.02
Open forest, broadleaved	8,369	5,643	(2,726)	-0.33
Region 8				
Closed forest, broadleaved	47,113	21,661	(25,452)	-0.54
Mangrove forest	3,814	3,889	75	0.02
Open forest, broadleaved	233,296	24,815	(208,481)	-0.89

**Table 7.** Illegal logging hotspot areas before and after the issuance of EO No. 23 (Calderon 2013)

Major Island	No. of Provinces		No. of Municipalities	
	Before	After	Before	After
Luzon	30	4	121	6
Visayas	10	2	48	3
Mindanao	11	5	28	19
TOTAL	51	11	197	28

Hotspot provinces has been drastically reduced by 78% while 86% for hotspot municipalities.

The decline in closed and open canopy forests from 2003 and 2010 validate the poor (58%) PA management effectiveness in most of the 61 PAs. The decline in forest cover reflects the imbalance of resources that were allocated to different PA activities for forest protection, capacity building, and on-site PA management. There were more resources that went into “planning” and coordination, but not in resource management activities, enforcement, and support for the marginalized communities. It is a fact that without effective “on-site management in PAs,” biodiversity conservation does not happen. The ultimate evidence of NIPAS implementation is when each PA has put in place adequate management system to conserve biodiversity in collaboration with communities, LGUs, private sector, and other partners.

In the end, the limited resources for “on-site management” of PAs as “set asides explain the poor PA management effectiveness in terms of protecting the remaining areas of highly diverse assets of the PAs. And thus, the overall closed and open canopy forests declined in most regions. This decline means more closed canopy forests are being degraded and highlights the “disconnect” between what the NIPAS as a policy intends to achieve with the current on-site PA management strategies especially for protection, conservation, leveraging buy-ins from local stakeholders, communicating the values of biodiversity resources in protected areas, and contributing to reducing poverty in rural areas.

#### 4.1.2 Decline in Marine and Coastal Resources

Despite the increasing number of LGU and PO-managed marine protected areas (MPAs) in municipal waters and coastal and marine protected areas that are NIPAS-covered, the continuing habitat degradation and unsustainable fishing and climate remain to be the key threats to coastal and marine biodiversity. The fishers who are the poorest segment of the population have registered 78 per cent in poverty incidence (DENR, DA, BFAR, and USAID 2010; PhilReefs 2008; Aliño 2002).

The Philippines has one of the highly threatened reef areas in the world and in steady state of decline from 5% to 3% to >1%. There are widespread coral bleaching and increasing



population of invasive species and Crown of Thorns starfish infestations (Castillo 2010). The current extent and distribution of MPAs do not adequately represent biodiversity – both in size, areas of no-take zones, network of MPAs, and area requirements of larval connectivity that needs larger scale of MPAs (Weeks, et. al. 2009). Hence, of the more than 1300 existing and proposed MPAs, only 10-15% are effectively managed and many of these MPAs are either unmanaged or nonfunctioning (USAID 2011). More networks of connected and larger MPAs and improved representativeness are needed to increase spillovers in support of fishery production (Aliño 2002).

### 4.1.3 Impacts of Climate Change

The resiliencies of the ecosystems – forests, marine, wetlands, and coastal resources - are weakened by the continuing degradation and loss. This could be the decline of closed and open canopy forests or the over exploitation of marine resources and fisheries. As ecosystems degrade, they become more vulnerable from the impacts of climate change because the functioning ecological processes are compromised. Their capacity to supply ecosystems goods and services for the on- and off-site communities are negatively affected.

For water, irrigated agriculture will suffer either from drought or landslides. Healthy ecosystems over landscapes are needed in regulating water flow during flash floods, typhoons, and intense and prolonged monsoon season. Climate change will affect the “timing of biological events, species distribution, behavior in plants and animals, and frequency and intensity of pests and diseases” (Castillo 2010, CCC 2010). Overall, climate change will affect ecosystems that are more vulnerable (less resilient) and the overall productivity or capacity to produce direct and indirect ecosystems goods and services will also decline.

Highly vulnerable forests, wetlands, marine and coastal ecosystems are more

susceptible to the following impacts of climate change (Lansigan 2013, Castillo 2010):

- Increasing temperature changes with the “hot” days becoming “hotter”. This affects the photosynthetic process of trees and other forest species, evaporation, and other ecological processes
- Increasing and more intense rainfall events and their changing seasons resulting to more landslides, floods, droughts, fires, erosion, sedimentation, among others
- Extreme weather conditions and events e.g. heat waves, more intense rainfall events, stronger typhoons
- Increase in sea level rise resulting to inundation of mangrove areas and salinity intrusion
- Coral bleaching, sea acidification and sea level rise may severely impact on marine biodiversity

Accordingly strategic mitigation and adaptation measures should be part of the overall PA management planning and strategy.

This means adopting ecosystems approach for reducing emissions in the forests, in conserving biodiversity across the landscapes, for assisting communities and their livelihoods to properly adapt with climate changes, and for aligning land uses and zoning regimes that to minimize the risks and damages from natural disasters such as landslides, floods, storm surges, and others.

# The NIPAS Law and Its Revised Implementing Rules and Regulations (IRR) in 2008

## 4.2

The *NIPAS Law* serves as the main legal instrument for conserving biophysical diversity in the Philippines. It provides the governance and management framework for all NIPAS-covered protected areas – starting with the initial components of the NIPAS and additional sites based on the requirements of the law. *DAO 25 in 1992* was the first implementing rules and regulations of the *NIPAS Law*. This was revised in 2008.

The Revised Implementing Rules and Regulations (IRR) of NIPAS in 2008 (DAO 2008-26) provides clearer guidelines on how the *NIPAS Law* will be translated in each PA and how planning will be carried out to achieve effectiveness of conservation in the implementation phase.

As earlier mentioned, the formulation of *DAO 2008-26* benefited from the lessons and best practices from more than 15 years of NIPAS implementation.

Presently, the *NIPAS Law* and its Revised IRR in 2008 provide the guidelines and standards by which results of implementation of various activities in each PA will be gauged or evaluated. The *NIPAS Law* also underlines the overall goal and the desired objective of biophysical diversity conservation in the Philippines including how administration and strategies will be crafted in each PA.

NIPAS emphasizes the administration of a holistic PA management plan that represents the country's heritage. This is only possible through cooperation among national government, local government and concerned private organizations (NIPAS Section 2).

A summary of the protected areas in 2008 (**Table 8**) shows that only about 5% is under the administrative jurisdiction of other government agencies such as DA, DOE, local government units, and others. The bulk of the total range of protected areas is under the responsibility, accountability, and authority (RAA) of DENR.

Implementation at the PA level, however, will require collaboration and partnership with the concerned LGUs (cities, municipalities, and provinces), the communities, the private sector, and other stakeholders. For example, in the 61 PA sites that were subjected to METT, there will be at least 285 cities and municipalities and 48 provinces that will have to be involved or are being involved in the planning and implementation of the PA management plans (**Table 9**).

**Table 8.** Administrative jurisdiction of existing initial components of NIPAS

Category	DENR		Other Government Agency		TOTAL	
	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)
National Park	62	489,978	4	2,310	66	492,978
Game refuge/ Bird sanctuary	8	918,585	0	0	8	918,585
Wilderness Area	16	3,297 +	0	0	16	3,297
Watershed forest reserve	83	1,033,789	2	119,359	85	1,153,148
Mangrove swamp forest reserve	27	undetermined	0	-	27	undetermined
<b>TOTAL</b>	<b>196</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>202</b>	<b>-</b>

Collaborative implementation of the approved PA management plans with the active engagement of the PAMBs has the potential of leveraging US \$ 13/ha US \$ 217/ha of KBA from the LGUs' 20% development fund. This is about 4 to 5 times larger than what DENR had allocated for PA management in areas covered by KBAs from 2005-2007 (Table 10).

In addition, the LGUs may also provide various infrastructure and technical, and social services to communities in and near the protected areas. The LGU participation in PA management embodies the local contribution into the overall goal of supporting sustainable development in and out of the NIPAS areas. Through the LGUs barangay governance system and ordinance mechanism, enforcement of PA rules and regulations become community-based. These strengthen the enforcement that is being carried out by the PA forest guards and those in DENR check points.

**Table 9.** Number of Municipalities and Cities and Provinces in the 61 PA Sites

Cluster	Municipalities and Cities	Provinces
Cluster A	21	8
Cluster B	23	8
Cluster C	58	8
Cluster D	17	4
Cluster D	79	9
Cluster F&G	87	11
<b>TOTAL</b>	<b>285</b>	<b>48</b>
	>20% of total municipalities and cities in the Philippines	>60% of the total provinces in the Philippines

To help in comparing the overall MECA findings with the governance and management requirements of the *NIPAS Law* and its revised IRR, a template RBME structure for a PA was developed. This was developed based on the NIPAS requirements and the model of Kuzek and Rist (2004). This is shown in Figures 9 and 10.

The template simply demonstrates that in a NIPAS-consistent implementation of programs, projects, and activities, the ideal situation calls for intentional efforts to link the PA activities with approved PA general management plan. The activities have to achieve or deliver the required outputs that are measurable. In the template, the outputs are going to be produced or completed by those with responsibility, accountability, and have authority (RAA) in carrying out specific PA activities. Those with RAAs may be the PAMB or a PASu in providing secretariat support to the PAMB and in taking the lead in facilitating individual and collective implementation of PA activities.

Those with RAAs may also include the concerned LGUs and the tenured migrants, and holders of domains, agreements or contracts. In the end, the outputs will have to be consolidated and analysed as basis in reporting on the overall progress of achieving the outcomes that will contribute to the national goal.

**Table 10.** Estimated average DENR budget and potential amounts that LGUs can contribute from their internal revenue allocation (IRA) per hectare of Key Biodiversity Area, by region (USAID 2008)

Region	No. of LGUs with a KBA	Area of KBAs (ha)	DENR budget/ ha of KBA, 2005 - 2007 <sup>1</sup> (\$)	Potential amounts LGUs can allocate/ ha of KBA, 2006 - 2007 <sup>2</sup> (from their IRA) (\$)	Potential amounts LGUs can allocate/ ha of KBA, from their 20% Dev't. Fund, 2006 - 2007 <sup>3</sup> (\$)
1	3	Not available	Not available	Not available	Not available
2	5	2,035,173	2.5	65.2	13.0
3	7	463,139	17.1	515.1	103.0
4A	5	246,368	33.2	989.0	197.8
4B	5	1,294,868	4.0	93.8	18.8
5	4	91,503	51.5	1055.7	211.1
6	5	333,857	23.5	637.1	127.4
7	4	211,235	33.9	856.8	171.4
8	6	775,929	8.8	195.8	39.2
9	3	97,854	49.2	1087.2	217.4
10	5	335,413	20.2	432.5	86.5
11	4	455,059	14.8	282.1	56.4
12	6	260,381	32.6	700.3	140.1
13	4	354,849	17.9	280.8	56.2
ARMM	3	350,855	5.5	133.5	26.7
CAR	6	238,425	14.7	340.3	68.1

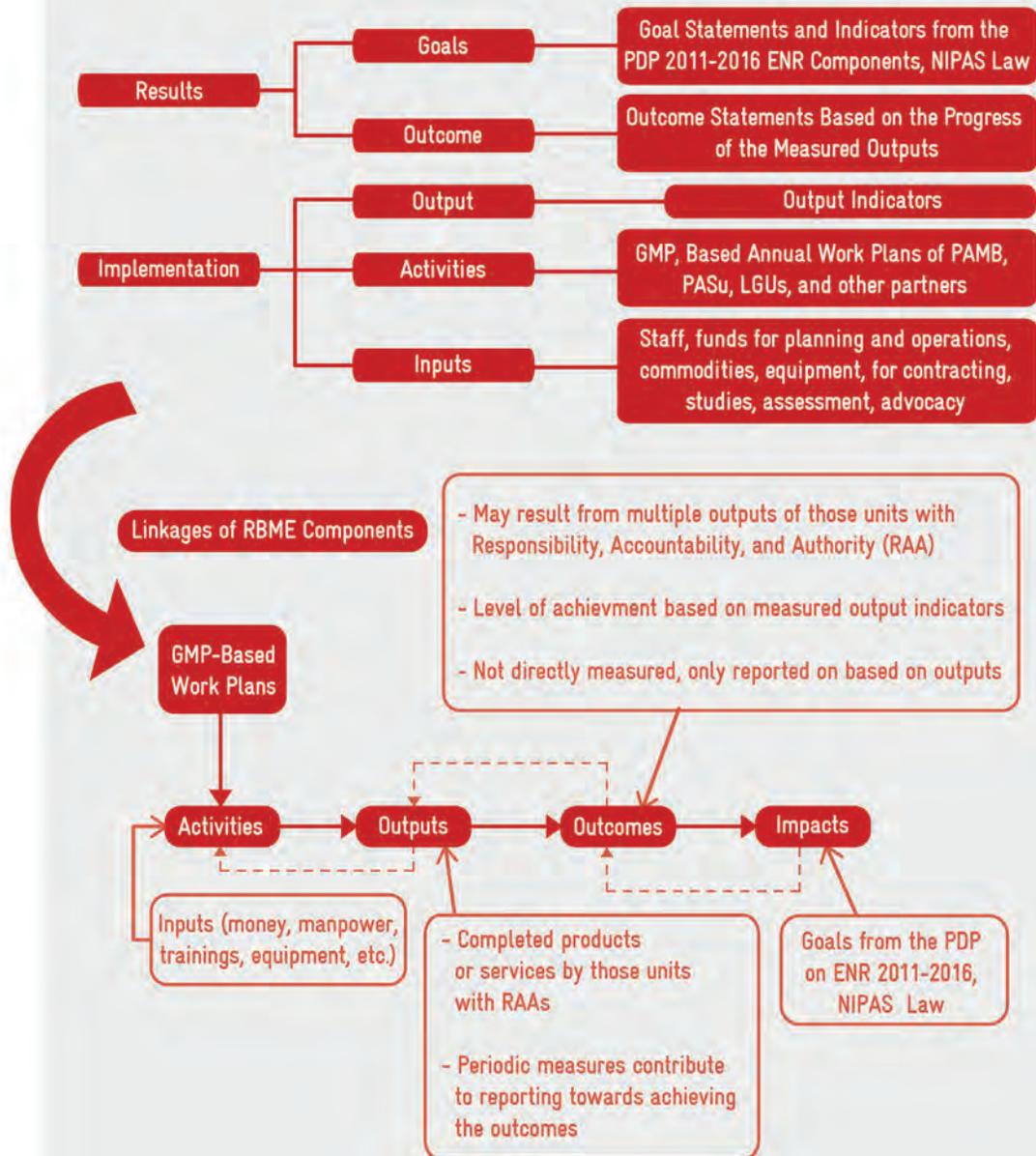
Source: Extrapolated from GAA appropriations from 2005 - 2007

<sup>1</sup>\$1= Php 50.8, based on averaging of US dollar - Philippine peso exchange rates of \$1 = 55.08 (2005), \$1 = 51.31 (2006) and \$1 = 46.15 (2007).

<sup>2</sup>\$1 = Php 48.73, based on averaging of 2006 and 2007 US dollar - Philippine peso exchange rates

<sup>3</sup>\$1 = Php 48.73, based on averaging of 2006 and 2007 US dollar - Philippine peso exchange rates

**Figure 9.** A generalized RBME-PA structure based on the NIPAS Law and its Revised IRR



The RBME-PA structure requires intentional alignment and support for the PA management plan. These are translated and supported through each of the DENR PPAs and the LGUs comprehensive land use plans (CLUPs), comprehensive development and investment plans (CDIPs), and annual investment plans (AIPs). The NGOs that are supporting a specific PA should also align their programs and activities in support of the approved PA GMP. The PAMB with the Protected Area Office (PAO) is mandated to provide the oversight and coordination of these activities that are carried out by the DENR PAO, each LGU, NGO, and the holders of agreements, contracts, tenure, or domains.

To make the template PA-specific and operational as a RBME, **Figure 10 (see page 92)** was developed as the basis for comparing the consolidated findings from the MECA cluster reports. There are 4 outputs that emerge from the NIPAS and its Revised IRR. These are the following: PA governance, planning and management systems, resiliencies of ecosystems and designated land uses, and benefits to communities. Accomplishments or achievements in each output will be measured through a set of specific output indicators. Most of the output indicators are stated, specified, or interpreted from the NIPAS Revised IRR. In theory, the baselines of each output indicator provide a benchmark for determining periodic progress of PA management effectiveness, which are dominantly captured by the METT instrument.

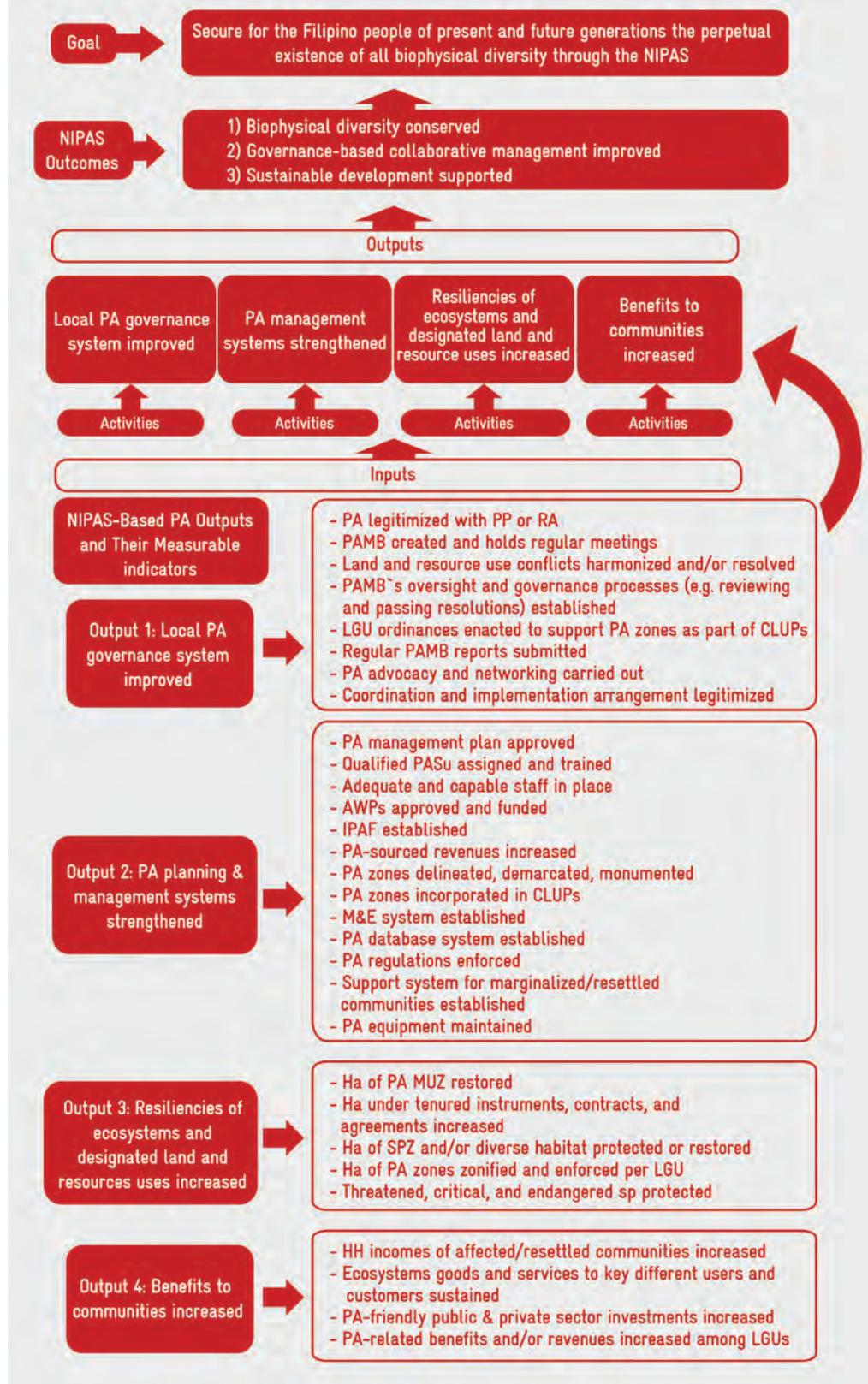
The outputs are expected to reflect the outcomes – biophysical diversity conserved in each PA site, governance-based collaborative management improved, and sustainable development supported. The approved DENR PAPs, the LGU AIPs, the NGO work plans, and the IPAF-financed work plans are intended to support activities meant to produce outputs that will be measured via the indicators.

Each outcome, output, and output indicators will have to be clearly defined, understood, agreed upon and adopted by the PAMB and implemented by the PASu, PAO staff, the LGU counterparts, and the NGO or private sector partners. Measurements and data gathering techniques will be part of the process in setting up the RBME system. A summary of the output indicators and outputs per PA can be consolidated, analysed, interpreted, and reported on at the regional, sectoral, and national level. Reports may be designed to fit the need of specific audiences – DENR Executive Committee, donor groups, NGOs, legislators and association of private sector groups.

**Figures 9 and 10** presents the required data base from each PA and the flow and process of how the approved outputs and output indicators are linked to the overall objectives. This system will have to be set up, periodically measured in terms of progress over time as shown in **Table 11 (see page 94)**.

The process in conducting the METT in the 61 PA sites and the ensuing process of field validation, conduct of KIIs and FGDs and the cluster workshops revealed that each of the site and the whole NIPAS implementation system simply need a NIPAS-based RBME system to track the progress of key outputs and their indicators. This could be the basis in reporting progress of the PA outcomes that contribute to the overall goal of the NIPAS and the national government.

**Figure 10. Outcomes, Outputs, and Output Indicators for a NIPAS-Based PA-RBME System**



The METT and the BMS instruments are tools that could help in conducting progress monitoring on a periodic basis. The consolidated findings, for instance, provided information on Outputs 1 and 2 (local governance and planning and management, respectively) but not much on the measures of the ecosystems resiliency and benefits to communities (Outputs 3 and 4). These are helpful for the overall assessment (at the site, province, regional, and national level and formulation of appropriate PPAs to achieve the NIPAS goals at the national level, and even reporting to the policy makers with respect to needs and challenges in PA management.

The national MECA findings when compared with the NIPAS governance and management requirements revealed the following:

**Under PA-RBME Output 1**, most of the requirements were achieved except the incorporation of the PA zones in the LGU CLUPs and are supported by ordinances. This could have helped galvanize local buy-ins, formulate and enforce PA rules and regulations at the local level, facilitate LGU and private sector investments, help harmonize land and resource uses between and among the different tenure and domain holders, and substantiate advocacy and networking with other stakeholders. The rule making power of LGUs which could be scaled up at the provincial level through a unified provincial ordinance could fill this task that could not be carried out by the PAMBs (GIZ and Silliman University GIZ 2011).

**Under PA-RBME Output 2**, all of the 61 sites have plans in one or the other – PA GMP, PA IPAP, updated or old. However, most of the programs, projects, and activities that were designed to meet the PA goals and targets were not achieved because of limited DENR resources for PA management, complete reliance on DENR funds, limited IPAF inflows, and voluntary contribution of concerned LGUs. The assessments showed limited participation of the private sector and the tenured migrants in implementing PA-specific conservation activities.

**Under PA-RBME Output 3**, the MECA findings did not provide hard data on the conditions and health of the highly diverse ecosystems in the PAs – forest cover, conditions of reefs and seagrasses, mangroves, threatened or endangered species or habitat, among others.

**Under PA-RBME Output 4**, measures on how the PAs contributed to the socio-economic development of communities or benefit of the PA to the LGUs appear limited.

The existing PAWB system for the periodic measurements of PA effectiveness based on RBME has not been adequately designed to meet the requirements of the NIPAS. The PA reporting system was not able to fully respond to the needs of NIPAS for local, provincial, regional, sectoral, national, and international reporting needs. The conduct of METT processes would have been made faster with functional PA-RBME system per site.

**Table 11. A Data Base System for PA Outputs and Output Indicators**

Outputs								
Output 1: Local PA governance system improved								
Output Indicators (Need a concise definition of each)	Unit of Measure	How, Who, When, Where?	Baseline in 2013	4-Year Target	Year 1	Year 2	Year 3	Year 4
PA Legitimized with PP or RA	1-PP 2-RA							
PAMB created and hold regular meetings	%							
Land and resource use conflicts harmonized and/or resolved	%							
PAMB's oversight and governance processes functioning	Number							
LGU ordinances enacted in support of PA zones	Number							
Regular PAMB reports submitted to PAWB	Number							
PAMB's oversight and governance processes (e.g. reviewing and passing resolutions) established	%							
PA advocacy and networking carried out	%							
Coordination and implementation arrangement legitimized	Number							

Output 2: PA planning & management systems strengthened

Output Indicators (Need a concise definition of each)	Unit of Measure	How, Who, When, Where?	Baseline in 2013	4-Year Target	Year 1	Year 2	Year 3	Year 4
Approved PA management plan	% (prepared, submitted, approved, implemented, updated)							
Qualified PASu assigned and trained	1- assigned, 2 - trained							
Adequate & capable staff in place	%							
AWPs approved and funded	%							
IPAF established	%							
PA-sourced revenues increased	%							
PA zones delineated, demarcated, monumented	%							
PA zones incorporated in CLUPs	Ha							
M&E system established	%							
PA database system established	%							
PA enforcement system functioning by barangay	%							
Support system for marginalized /resettled communities established	%							
PA equipment maintained	%							

Output 3: Increased resiliencies of ecosystems and designated land and resource uses

Output Indicators (Need a concise definition of each)	Unit of Measure	How, Who, When, Where?	Baseline in 2013	4-Year Target	Year 1	Year 2	Year 3	Year 4
PA MUZ restored	Ha							
Tenure instruments, contracts, and agreements for on-site stewardship and management increased	Number							
SPZ and/or diverse habitats protected or restored	Ha							
Threatened, critical, and endangered sp protected	Number							

Output 4: Benefits to communities increased

Output Indicators (Need a concise definition of each)	Unit of Measure	How, Who, When, Where?	Baseline in 2013	4-Year Target	Year 1	Year 2	Year 3	Year 4
Increase in HH incomes of affected/resettled communities	%							
Ecosystems goods and services to key different users and customers sustained	%							
Increase in PA-friendly public & private sector investments	%							
PA-related benefits and/or revenues increased among LGUs	%							

## New DENR Major Final Outputs and the Ongoing Rationalization Plan

### 4.3

In 2013, DENR has started to adopt new major final outputs as basis for planning, budgeting, spending, and reporting results. The new MFOs have replaced the old MFOs in preparing DENR's programs, plans, and activities (PPAs) (Table 12).

The new MFOs requires an integrated ecosystems approach in planning delivering DENR policy, management, and regulatory services to the agency's various clients – private sector, partner agencies and organizations, communities, LGUs, civil society, decision makers and policy makers. The new MFOs offer potentials to coordinate the process of policy formulation and implementation especially in target ecosystems such as a watershed, protected areas, sub-watershed, islands, a mineral reservation, ancestral domains, a political unit, and other specified unit of management.

This new set of MFOs is, to a certain extent, consistent with the Philippine Development Plan for 2011-2016. They also offer opportunities to focus various inter-sectoral initiatives in priority ecosystems or sites. All the key activities in the new MFOs (Table 13) are relevant to a given protected area. The MFOs are the starting point for DENR at the national, regional, and site levels to prioritize activities in a PA depending on the prevailing threats, issues, needs, problems, and opportunities.

**Table 12.** New DENR Major Final Outputs (DENR/DBM 2013)

OLD MFOs	NEW MFOs
<b>MFO 1</b> - Plans, policies and standards developed, promoted, monitored and evaluated	<b>MFO 1</b> - Ecosystem policy services
<b>MFO 2</b> - Ecosystems and natural resources managed, protected, conserved, enhanced and degraded ones rehabilitated	<b>MFO 2</b> - Ecosystem management services
<b>MFO 3</b> - Appropriate regulations and standards enforced and monitored	<b>MFO 3</b> - Ecosystem regulation services

**Table 13.** Details of the Various DENR Major Final Outputs (DENR/DBM 2013)

New Code	Description	Some NIPAS - Supportive Activities
A.03	III. Operations	-
MFO 1	Ecosystem policy services	-
A.03.a	Formulation and Monitoring of ENR Sector Policies, Plans, Programs and Projects	DAOs, MCs, PA mgt plans, programs
MFO 2	Ecosystem Management services	-
A.03.b	Forest Development, Rehabilitation and protection	Protection and rehabilitation of SPZ and MUZ
A.03.o	Land Survey, Disposition and Records Management	Zone delineation, boundaries of tenured migrants, agreements
A.03.d	Management of Protected Areas, Wildlife, Coastal and Marine Resources/Areas	Rehabilitation, agroforestry and tenure support, research, M&E
A.03.d.1	Protected areas development and management	Rehabilitaion, MUZ dev`t
A.03.d.2	Protection and conservation of wildlife	Habitat protection
A.03.d.3	Management of coastal and marine resources/Areas	Community-based Resource Mgt.
A.03.e	Clonal Nursery and Production of Quality Planting materials (OPM) of Premium and Indigenous Forest Species for National Greening Program	Nursery operations of indigenous sp for SPZ and MUZ rehabilitation, agroforestry materials
A.03.f	Technology Transfer and Extension Services	Social marketing, communication campaigns extension support
MFO 3:	Ecosystem Regulations Services	
A.03.g	Enforcement of Laws, Rules and Regulations	Protection, enforcement, regulations
A.03.g.1	Permit issuance and monitoring of forest and forest resource use	Evaluation and processing of permits, use rights, ECCs
A.03.g.2	Permit issuance and monitoring of land and land resource use	M&E of land and resource uses
A.03.g.3	Issuance of protected area community-based resource management agreement and monitoring of protected areas,wildlife, coastal and marine resources	Review, processing, and monitoring performance of holders of tenure, parties to contracts and agreements covering certain areas in PAs
A.03.g.4	Operations against illegal environment and natural resources activities	Communication campaigns, enforcement, litigation, others

The DENR Rationalization Plan becomes the vehicle for the new MFOs to be realized especially with the adoption of the Integrated Ecosystems Management (IEM). The IEM approach is expected to achieve sustainable exploration and development of the country's natural wealth. With IEM, DENR will shift from the present sectoral arrangement into a functional set-up in its regional and field operations. The DENR Rationalization Plan has been rationalized with the following statements (DBM, Attachment A of DENR Rationalization Plan 2013):

*The adoption by the DENR of the IEM approach in carrying out its mandate would enable the same to effectively take both roles as strategist and implementer for environment and natural resource management. The IEM system will enhance good governance thru open, transparent, coordinative, and participatory engagement with the different sectors and stakeholders on the planning, implementation, monitoring and evaluation leading to the attainment of the desired IEM outcomes such as conserved biodiversity, sustained and productive natural resource assets, and enhanced ecosystem services. Moreover, the adoption of the IEM approach may help the Department address such weaknesses/deficiencies as uncoordinated efforts, conflict/disharmony in planning systems, overlapping programs, and conflicting strategies and operations especially at the field level. The IEM approach will help eliminate coordination and implementation problems since it shall provide a common framework for the various stakeholders at the field level in the development of plans and strategies towards the attainment of their shared goal of sustaining natural resources.*

In the final draft of DENR on IEM as an approach, it is described as a holistic and systematic approach in the governance and management of land, water, and living resources in an ecosystem for conservation, socio-cultural preservation and economic development. It follows a process by which political and resource management units in an ecosystem jointly recognize the benefits of collective efforts in planning and implementing individual programs to achieve society's common goals. A participatory process is going to be mandated in preparing and legitimizing the IEM strategic plan for each site to serve as a guide to investments that will enhance the ecosystem's resiliency and its comparative advantages in support of the production of competitive goods and services (DENR 2013).

The DENR IEM has the following scope and coverage:

1. *A river basin, sub-river basin or large watershed*, the topographic divides of which, can be determined on the ground and may include the total area from ridge to reef, ridge to lake, or ridge to wetlands
2. *A sub-watershed, cluster of sub-watersheds, or portion* of sub-watershed based on topographic divides such as the upper portion of a watershed or sub-watershed
3. A total area of a *delineated key biodiversity area (KBA) or an identified area within a KBA* where concentrations and distribution of vulnerable, irreplaceable trigger species are found or reside e.g., wetland habitats
4. A *protected area* under the NIPAS or a watershed reservation (based on the technical descriptions of the issuance or legislation)



5. An *ancestral domain with unique socio-ethno-ecosystem* characteristics that have evolved over time with the communities
6. An *island or group of islands* ecosystem with similar and unique ecological processes
7. *Mineral reservation*; and
8. *Other ecosystems* as maybe identified for management

The overall IEM approach and implementation have the following features:

1. *Inter-sectoral, multi-disciplinary, integrated or holistic* approach for managing and regulating land, water and living organisms in each site
2. *Programs and actions will consider the inter-connectedness and interdependence within* ecosystems because the impacts of interventions, land and resource uses, and development are inter-generational
3. *Determination, management and regulation of restricted development, land and resource use zones<sup>9</sup> in an ecosystem* (such as strict protection zone in PA, no build zones in highly hazardous areas, no resource use zones in protection forests and in all natural forests, no conversion of prime agricultural lands, no take zones in marine and bird sanctuaries, others) to ensure that:
  - the ecosystems goods and services are provided and sustained over time
  - the highly diverse ecosystem continues to serve as foundation of ecological, human, and food security
  - as a mitigation and adaptation approach, the ecosystems, communities and their livelihoods, enterprises and industries are climate-proofed and become resilient over time.
4. *Outside the “restrict land and resource use zones”, a deregulated environment with incentives are fostered* to prioritize investments that will enhance comparative advantages and improve the competitiveness of goods and services with adequate safeguards.

The DENR’s Rationalization Plan’s adoption of IEM will enable the regions with the support of the staff bureaus to provide functional and technical support especially those that are related to increasing and improving capacities and capabilities to formulate mitigation and adaptation strategies in protected areas. IEM as an approach and practice embodies both mitigation and adaptation measures.

These developments will positively impact on how DENR as a whole address the key

<sup>9</sup>In previous articles, these zones were categorized as “non-negotiables”.

issues and challenges constraining effective protected area management. Firstly, both the IEM and Rationalization Plan will encourage a more holistic approach and take away sector-based arrangements. Thus, there is an opportunity to re-orient current strategies to be more focused and rationalized. Hence, it enjoins the local stakeholders, DENR, and other related agencies to pursue individual and collective strategies and interventions in support of common goals and objectives. Secondly, it also underlines the importance of governance-based results-based monitoring and evaluation system that elicits performance of those entities or units that have responsibility, accountability, and authority to conserve biophysical diversity; plan and implement measures to reduce threats and improve resiliencies of ecosystems, communities, and livelihoods; generate sustainable financing for PA management; and support sustainable development efforts especially those that will enhance inclusive economic growth at the local level.

The ongoing implementation of DENR Rationalization Plan modifies the name of Protected Area and Wildlife Bureau (PAWB) into Biodiversity Management Bureau (BMB). There is not much change with respect to staffing between PAWB and the BMB. The RAT plan also ensures that at least 12 of the 13 protected areas with Republic Acts (RAs) will have permanent staffing.

With DBM's commitments to provide tenured position for PAs with legislation, there will be incentives for the PAs with PPs to move through towards legislation. In totality, the Rationalization Plan will result in a loss of DENR positions by more than 11% (from authorized number of 18,770 to 16,682 under the Rationalization Plan (Table 14) (DBM, Attachment A of DENR Rationalization Plan 2013). There will be a decrease in the regions because of the abolition of Regional Technical Directors (RTDs) and focusing research efforts in few research centers. There will only be one Assistant Regional Executive Director for Technical Management instead of 4 Regional Technical Directors.

The intensive staffing requirements of PAs as state-managed “set asides”, in theory, will benefit from the increased “functional instead of sectoral” working arrangement at DENR field units. There will still be sectoral focus through the divisional units, but the cohesion of functions is expected to result in synergy of outputs and outcomes.

The single position for an Assistant Regional Executive Director for Technical matters may help enforce the “ecosystems management approach” as basis in integrating ENR services in priority areas or sites. This, however, will largely depend on the sectoral bias of the RED and ARED, the issuance of the DAO on integrated ecosystems management (which will operationalize the IEM with guidelines and is now in the Office of the DENR Secretary for his signature), and the strict implementation of the DBM new directives on DENR's new MFOs as basis of their PPAs.

The consolidated findings from the MECA cluster reports highlighted major issues with respect to adequacy of funds for staffing, operations, and logistics; limited capacities of PAMBs, PAOs and LGU staff in planning and implementing PA activities; and need to link PA activities with improving biodiversity and contribution to achieving sustainable development.

In theory, the DENR's new MFOs and the approved Rationalization Plan may be able to address these concerns. These two initiatives which backs the IEM approach to offer opportunities to align PPAs in support of PAs, rally other sectors in furtherance of PA goals and objectives, engage more competent DENR field staff, facilitate cohesion between and among the different sectors; and access regional and central integrated assistance for mapping, training, database development, legal services, support studies, and logistics.

**Table 14.** DENR Staffing Plan under the Approved Rationalization Plan (DBM 2013)

Particulars (No. of organizational units)	Authorized (at the start of rationalization effort)	Proposed	Approved
<b>Central Office</b>			
Office of the Secretary	1	1	1
Offices handled by the Undersecretaries	3	5	-
Offices handled by the Assistant Secretaries	3	7	-
Office/Service-level Units	13	10	9
Division-level Units	31	33	30
<b>Other units</b>			
Pollution Adjudication Board	1	-	-
Medical and Dental Unit (Administrative Division)	1	1	-
<b>Staff Bureaus</b>			
Bureau-level units	4	4	4
Division-level units	19	20	20
Research Center (ERDB)	-	6	6
Research Stations	-	7	-
Los Baños (Makiling) Experiment Station (ERDB)	1	-	-
Ninoy Aquino Parks and Wildlife Nature Center (PAWB)	1	-	-

Regional Offices				
Offices of the Regional Director	16	16	16	
Offices of the Assistant Regional Director	-	32	-	
PENRO (Offices of the Provincial Environment and Natural Resources Officer)	15	75	75	
CENRO (Offices of the Community Environment and Natural Resources Officer)	16	140	140	
Regional Public Affairs Office (RO)	-	16	-	
Division-Level Units				
Office of the Regional Director	176	128	128	
PENRO (2 Divisions per PENRO)	-	150	150	
<b>Total No. of Organizational Units</b>	<b>301</b>	<b>651</b>	<b>579</b>	
Particulars	Authorized	Filled Pos. at the Start	Proposed	Approved
No. of Regular Positions	18,770	18,104	17,647	16,282



# 5 OVERALL FINDINGS, LESSONS LEARNED AND BEST PRACTICES, AND RECOMMENDATIONS



Photo by Jacqueline Hernandez

## Overall Findings

### 5.1

The consolidated findings of the MECA cluster reports when compared with the requirements and expectations of the *NIPAS Law* and its Revised IRR in 2008, show the overall management effectiveness in the 61 PAs, it indicates that current priorities, strategies, efforts, and support to PA management in the Philippines has fallen short of what the *NIPAS Law* and the Revised IRR require in terms of outputs and outcomes. The MECA findings are further validated by the decline in land and forest cover from 2003 to 2010 and overall

decline in marine and coastal resources. The overall findings of this study affirms the results of similar current studies and discussions in the sector such as those done by EEPSEA (Anda and Atienza, 2013), Philreefs (2008), World Bank (2003), NewCAPP (2013), and PAWB-ADMU (2012), among others.

The MECA studies have highlighted several areas of weaknesses in PA management and of actions that are within the mandate of DENR, PAWB and the regional offices such as priority in allocating funds and implementing resource management activities. These shortcomings, however, offer opportunities to re-think and evaluate current approaches and strategies and test innovative approaches.

The NMECA findings show that in many ways, PA management effectiveness cannot be solely attributed to the *NIPAS Law* and its implementation by DENR. There are other constraining variables that are totally outside the control of DENR such as the increasing demand for round wood and fuel wood in highly urbanizing areas, the worsening poverty in rural areas, the overlapping (and unclear) resource management responsibilities of DENR with ancestral domain holders, the marginalized role of LGUs as co-managers in PAs as “set asides” of the State. What can be done within the *NIPAS Law* to:

- Improve management effectiveness in each site
- Effectively co-manage PAs with LGUs, domain holders, tenured migrants, occupants
- Adequately capacitate and incentivize PA staff
- Leverage more funds and support PA management operations and regulatory activities
- Harmonize land and resource uses in the PAs
- Manage the PA as a “set aside” and a management unit
- Engage the private sector to achieve triple bottom lines – environment, poverty, and profit

The MECA results show that the bottom line appears that despite the *NIPAS Law*, the PAs have not been perceived as “land and resource management units” that were set aside by the State with DENR as the designated accountable, responsible, and authorized agency to manage biodiversity and conservation areas in collaboration with LGUs, communities, the private sector, and other partners.

The poor effectiveness show that the current arrangements with PAMB as a governance body, the DENR-driven planning process, and the DENR-dominated on-site management structure, support, system, and capacity appear to fall short of what the *NIPAS* require and, therefore, are not able to deal with outside forces and interests that continue to threaten biodiversity reserve. There exist conflicts with ancestral domains as indigenous resource management units in PAs. Domain holders also find it difficult to assert their own rights in PA because of DENR’s regulatory measures. Moreover, most LGUs are not “buying

in” to PA management as they are marginalized as “co-managers” and partners for managing a “national state resource” in their own backyards. Communities - legal and illegal occupants- and the private sector behave and maximize their benefits as “free riders” with their activities in the PAs. There are no current incentives for the LGUs, private sector, domain holders, migrants, and other groups to “stake out their necks” to protect, conserve, and manage a PA as a “state-managed set aside” for posterity values.

There is a need to reconfigure, adjust, prioritize or align programs to achieve the goals of NIPAS, comply with the country’s international commitments especially with CBD Aichi targets, and contribute to the overall sustainable development at the local, regional, and national levels. Opportunities for a change and moving forward are ripe especially with the ongoing DENR rationalization and the new MFOs, the need for climate change mitigation and adaptation, the increasing realization of the inter-connectedness and inter-dependence of ecosystems demanding collaborative and partnership arrangements among local stakeholders, and the relatively easy access to new knowledge and applications that could be useful in PA management.

The following key areas of concerns emerged from the consolidated findings, assessments, and reviews:

**Biophysical diversity in PAs and in KBAs continue to be threatened by:**

- increasing conversion of PAs for agriculture and other uses,
- encroachments, settlements and establishments,
- unregulated tourism,
- illegal extraction, and
- political intervention in PA land and resource uses due to lack of local buy-ins.

Current NIPAS strategies are not able to adequately respond to the increasing threats to biodiversity. Both legislated and administrative policies combined with effective programs are needed to reduce the threats to biodiversity reserves. Institutional capacities and capabilities must be able to respond and match the threats. LGUs must be given more space and authority as co-managers of “set asides” that are within their political jurisdictions. There must be agreement between the LGUs, domain holders, and DENR to conserve biodiversity in NIPAS areas. Incentives must be in place for the communities in and outside the PAs, LGUs, sub-management units (contracts, agreements, and tenured migrants) to actively participate in PA management.

**Extremely limited resources** (manpower, financial, and logistics) to plan, implement, monitor, and coordinate PA activities; and to manage PAs as state allocation for conserving biophysical assets.

The NMECA found that financial and human resources that were allocated to the 61 PAs were extremely low compared with national averages. **Table 15** further confirms this

observation. The total amount and trend of government support for PA management in the Philippines. From 2007-2011, the overall budget support for protected areas and wildlife management was only averaging 8% of the total DENR GAA allocation.

To a certain extent, the figures indicate the commitment and priority of the government with respect to conserving biodiversity resources in the Philippines. This is extremely low compared with the need of “on-site management of PAs” with DENR (representing the State) that has the overall management responsibility, accountability, and has authority over these “set asides”. PAs are management units. Under various agreements and contracts, portions of the PAs especially the multiple-use zones maybe managed by other parties under contracts, agreements, or under other forms of tenure arrangement.

**Table 15.** DENR Budget from the General Appropriations Act from 2007-2011 (Central, Bureaus, and Regions) (ENRMP 2012)

DENR GAA Allocations	Year				
	2007	2008	2009	2010	2011
Central Office	381,972,000	445,245,000	1,126,378,000	1,078,599,000	851,534,000
Forest Management	1,858,128,000	2,453,704,000	4,009,731,000	3,590,665,000	3,970,594,000
Protected Areas and Wildlife Management	240,523,000	274,046,000	516,813,000	519,173,000	431,379,000
Ecosystems Research and Development	239,980,000	244,715,000	310,622,000	309,737,000	384,191,000
<b>Total</b>	<b>2,720,603,000</b>	<b>3,417,710,000</b>	<b>5,963,544,000</b>	<b>5,498,174,000</b>	<b>5,637,698,000</b>
<b>% of Protected Areas and Wildlife Management</b>	<b>8.8</b>	<b>8.0</b>	<b>8.6</b>	<b>9.4</b>	<b>7.6</b>

**Weak technical capacities** of PASu, PAO staff, PAMB members, and LGU counterparts to jointly and individually plan and implement PA activities that are consistent with intent and purpose of PAs resulting to outdated management plans, lack of database, and limited initiatives. Presently, there is simply no clear trajectory for professional growth, advancement, and future for many of the PASus and PAO staff. This, however, may change with the DENR Rationalization Plan and with legislated PAs that ensure tenure and future of professionals in biodiversity conservation.

**Overlapping and weak institutional arrangements** for the collaborative governance and management of PAs as state set asides to conserve biophysical diversity. Overlaps with ancestral domains, CBFMAs, mining claims, LGU zoning regimes exist. Mechanisms for resolving overlaps are not effectively working. This results to impasse, dilemma, standoff, and inaction for biodiversity conservation on concerned parties. Responsibilities, accountabilities, and authorities (RAAs) could not also be easily pointed out. PAMBs have limited rule making authority and most are not fully equipped to deal with issues with respect to functional and area overlaps. As

a result, biodiversity suffers with unclear RAAs with respect to PAs as a management unit.

**Fragmented PA database system** as basis for establishing results-based monitoring and evaluation system (RBME) for short, medium, and long-term planning, complementation, investments, enforcement, and implementation of other related activities at the site, LGU, regional, sectoral, and national levels. Common PA output indicators that could be periodically measures, analysed, and reported over time are not in place. In the absence of an accurate and up to date PA database, PAMBs, PASus, DENR field units, LGUs, private sector, and the DENR senior management do not have sound basis in formulating strategic, timely and relevant strategies for effective on-site PA management.

**The overall PA management system is not fully anchored on “what are their reasons for being”.** A PA was declared or legislated with an intent and a purpose. This has to be adequately understood, packaged, made relevant, communicated and connected with the needs of local stakeholders, opportunities in the markets and with market players, and the larger context of socio-economic and biophysical development in a highly diverse island and ridge-to-reef dominated landscapes and seascapes. There remains a challenge on how to properly link the PA planning and management with the “clients” of the PAs in this generation. A quick look at **Table 16 (see page 111)**, shows that of the 202 PAs, 85 or 42% are categorized as “watersheds”, which means their major ecosystems goods and services are “water, recreation, fisheries, regulation of water flow, minimization of siltation in waterways, among others”.

Moreover, at least 238 of the PAs will become part of the 78 ecotourism sites that are being marketed by the Department of Tourism under its “It’s more fun in the Philippines” campaign. Fortunately, DENR and the DOT are currently targeting 83 PAs as convergence areas for increasing awareness on biodiversity conservation while opening up opportunities for ecotourism-related community livelihoods and business opportunities with the private sector.

The policy environment has to be supportive for the livelihoods and enterprises to flourish. There is also the need to put in place enough safeguards and measures in order for the government to invest in areas that will not compete with the private sector and that the private sector investments are fully consistent with environmental and natural resources rules and regulations, especially that of the *NIPAS Law*.

**Table 16** points to major “reason for being of each PA” based on their present individual category. Accordingly, the management plans of the PAs will have to be tailored with their individual “reason for being” – the starting point for planning and carrying out a communication and social marketing campaigns on PAs. For instance, the 66 national parks and 27 mangrove reserves could easily be packaged as “areas for nature-based and unique attractions for tourism”. The biodiversity and the ecosystems goods and services that these PAs provide are not well packaged, communicated and easily appreciated by different clients and end-users (Lim 2013).

Social marketing in the PAs is simply lacking as most of the PAs (except one in Cluster E) are focused on conserving biodiversity without clear links to what will benefit the local stakeholders. The PAs – which are set asides for the present and future generations for enjoyment – are not simply connected to the clients that they were supposed to be declared and established.

In 2012, PAWB initiated an annual Protected Area Awards and Recognition (PAR)

## 5.2

### Lessons Learned and Best Practices

process, by which stakeholders, management boards as well as concerned partners are evaluated to recognize outstanding achievements, innovative practices, and to thus identify and promote model protected areas for improved biodiversity in the country (DENR 2013). The process identified 7 areas in 2012, one World Heritage Site and an ASEAN Heritage Park, and is gradually expanded to include new areas.

Fortunately, the NIPAS implementation in the 61 PA sites and other sites have generated several best practices and innovations that could easily be replicated, refined, and scaled up with adequate support in a PA-friendly policy environment. The ongoing DENR Rationalization Plan implementation and the new DENR MFOs combined with the Revised NIPAS IRR in 2008 offer opportunities to build on the best practices, lessons learned, and innovations. There is also the opportunity for predictable and incentive-driven funding source from the newly approved legislation that allows 75% retention of IPAF on site.

The cluster reports highlighted a few best practices or lessons learned. These may be further refined for their effectiveness and efficiency and demonstrate models that will visualize how PA management may be further improved. Some of these best practices have also been observed in PAs that received awards in 2013.

- Increasing collaboration in PA management between the PAO, PAMB, LGUs, and NGOs resulting to increased level of environmental awareness, level of support, and buy-ins from the local stakeholders. These are especially true in areas where the cultural integrity of the communities are relatively intact and in areas where the stakeholders perceive common unifying interests – ecotourism, habitat, supply of water, new knowledge and technology, additional PA revenues that could be shared, linkages with civil society and the academe, among others
- Joint formulation of policies to facilitate the harmonization of claims, land uses, and strategies in protected areas especially between the DENR, LGUs, CADT holders, and NGOs. The increasing awareness for incorporating and/or harmonizing the PA zones with the LGU CLUPs and ancestral domains is an example of policy and program initiatives.
- Network with resource institutions especially those with interim external assistance and support from NGOs and academe in PAs have provided additional resources, knowledge, and new approaches to the PASus, PAOs, PAMBs, and the LGUs. The PAs with external support, for instance, have more updated plans and better database and information system on the biophysical assets in the PAs.
- The processes in setting up user's fee and other forms of Payment for Environmental Services (PES) schemes have started to emerge as a major focus of PA implementation in order to generate additional revenues for re-investments that may help the marginalized communities, enforcement, livelihoods, coordination, and other activities. In several sites, the PAs offer opportunities for various forms of “social enterprises” especially for tourism-related services, and collaborative research.
- Proper valuation combined with communication and social marketing campaigns

may offer windows for the PAs to be managed as “natural resource assets” generating benefits for on- and off-site communities and not simply “white elephants” that are perceived to be in “highly restricted areas”.

- Some PA sites that were able to “connect with PA clients and partners” have appeared to be more effective with their on-site management activities.

**Table 16.** Categories of Protected Areas in the Philippines

Category of Protected Areas	Initial Component	Additional PAs proposed (as of May 2008)	All PAs	Percent of Total
Marine Reserves	0	1	1	<1
National Parks	66	1	67	17
Natural Biotic Area	0	3	3	1
Natural Monument/Landmark	0	3	3	1
Natural Parks	0	10	10	3
Protected Landscapes or & Seascapes	0	52	52	14
Resource Reserve		1	1	<1
Watershed Forest Reserves/ Forest Reserve	85	40	125	33
Wildlife/Bird Sanctuary/ Game Refuge	8	10	18	5
Mangrove Swamp Forest Reserve	27	0	27	7
Managed Reserve	0	1	1	<1
Wilderness Areas	16	0	16	4
Others (caves, falls, wetland, rivers, reefs, bays, straits, mountains, island, islet)	0	59	59	15
<b>Total</b>	<b>202</b>	<b>181</b>	<b>383</b>	

- Cognizant of the fact that most of the areas being promoted by the Philippine Government for ecotourism are protected areas, DENR collaborate with the Departments of Tourism, and Trade and Industry, and the Local Governments. This collaboration will ensure that the enterprise developed and resulting activities are biodiversity-friendly and will still maintain the ecological integrity of the PA. An initial outcome is the development of a National Ecotourism Strategy and Action Plan which provides the necessary guidelines and safeguards for ecotourism development in protected areas.
- The DENR through the BMB is addressing the issue of differing management objectives such as CADT/ancestral domain areas that overlap with protected areas. With support from the GEF – UNDP, the New Conservation Areas of the Philippines (NewCAPP) Project, the establishment of a new management regime was piloted through the Indigenous Community Conservation Areas (ICCA), to promote the establishment of improved partnership among the DENR and the indigenous community. This will provide greater involvement of the latter in the management of protected areas.
- The Rationalization Plan of the DENR fully supports the need for strengthening and capacitating the manpower requirements at the field level. The approved structure would provide opportunity and promote greater collaboration within the DENR and partnership with other stakeholders. It will also ensure oversight and shared responsibility and accountability in the management of our protected areas.
- The BMB recently developed a mechanism for Sustainable Financing of Protected Areas through the World Bank assisted National Program Support for Environment and Natural Resources Management Project (NPS-ENRMP). This would address the limited financial resources allocated for the management of protected areas by helping them identify other activities and options for generating revenues. The DENR will be upscaling this initiative to other protected areas.
- Sustainable tourism in the Tubbataha Reefs Natural Park, a Wetland of International Importance (or Ramsar Site), was made an example in a Ramsar and UNWTO publication in 2012 and a case study for The Economics of Ecosystems and Biodiversity for Water and Wetlands. It highlighted the use of a portion of the conservation fees to fund the livelihood initiatives in the surrounding communities, including support for local efforts to generate revenues from tourism. In addition, the establishment of locally-managed marine reserves near the Park, and providing technical and other assistance to help improve the capacity of the concerned municipality to manage these reserves had led to improved marine productivity and fish catches, and hence, eased the fishing pressure on the protected wetland. Critical for the success of this case was the well-facilitated involvement of all stakeholders, the identification of significant income potential from visitors, and a short-term re-distribution of funds.

# Key Recommendations and their Implications

## 5.3

This section provides a synopsis of more detailed recommendations for improving policies, PA planning and management, and various PA processes. **Annex B** provides a summary matrix of policy concerns that need legislative actions and/or administrative issuances to improve the policy environment that may result to better PA governance. **Annex C** lists specific recommendations for strengthening the current PA planning and management processes, support system for PA planning and implementation including mobilizing inputs from both the public and private sectors and monitoring PA outputs and reporting PA outcomes. These recommendations are intended to overcome the barriers for effective PA management in the Philippines. Many of these recommendations simply echo those of earlier works (DA-DENR-DAR-Silliman University and GIZ 2011, USAID/DAI 2008, USAID/ADMU 2011, NewCAPP 2013, Molinyawe 2012, DENR-BFAR-DA-DENR 2010, among others). This section will simply highlight the major policy and implementation directions and key recommendations for improving the management effectiveness of PAs in the Philippines based on observations from the 61 sites and other areas.

### 5.3.1 Policy and Governance Improvement

For improving the policy and governance system for conserving biodiversity in PA, the following legislative and administrative policy actions are recommended.

#### Legislative Policy Actions

- With DENR and DILG initiative and in consultation with NCIP, a new legislation should be enacted to clarify the key provisions of NIPAS, IPRA, and LGC laws with respect to the roles, powers, limits, responsibility, accountability, and authority of domain holders, DENR, PAMB, and LGUs in PAs for conserving biodiversity to ensure ecological, human, and economic security of the present and future generations.
- Together with DENR, the LGUs must be empowered as co-managers of “set asides” as state-managed PAs with the participation of ancestral domain holders as “resource management units” and other stakeholders. This new legislation should address threats and issues that are constraining efforts of DENR, NCIP, and ancestral domain holders to resolve conflicts arising from overlapping mandate as resource management units, different management objectives, and accountability with respect to the country’s biodiversity conservation programs.
- The new legislation should also ensure that collaborative governance through an independent PAMB with rule making powers must be in place. Under the NIPAS law, DENR must retain its power and authority to ensure that the independent PAMB is still accountable to DENR as the State-appointed agency for managing PAs. This is to ensure the national objective to conserve biodiversity to increase the resiliencies of ecosystems adaptation of communities, livelihoods, enterprises, and industries that are largely dependent on the PA must be the dominant objective as a matter of national security.

- Both DENR and the DILG should take actions to amend the *LGC Law*, which is needed to currently address gaps, limitations, and weaknesses with respect to the LGUs participation as “co-managers” in PA management:
  - Additional IRA for LGUs as incentives to co-manage the PAs within their political jurisdictions and to support their constituents in and outside the PAs.
  - Provide complementary and supportive local legislations in support of DENR’s conservation and enforcement efforts in the PAs.
  - Incorporate the approved PA zones in their CLUPs and enforce them.
  - A percent share from the IPAF and other ENR-sourced revenues from PAs for re-investments and support to communities that are near or in the PAs.
  - Accountability of LGUs in conserving biodiversity in the PAs that are within their political jurisdiction.
  - Safeguard biodiversity from the potential negative impacts of LGU’s socioeconomic development including those of the private sector investments.
- The DENR Regions in collaboration with PAWB and the Congress should initiate actions to initiate stakeholders’-driven efforts to get into legislation the PAs with PPs. This will secure and affirm local buy-ins in the allocation and setting aside a protected area for the benefit of the present and future generations. This process, however, has to be consistent with the requirements and specifications of the NIPAS Revised IRR in 2008.

### Administrative Issuances

DENR with NCIP, DOT, HLURB, DILG and DA may consider crafting joint DAOs, Memorandum Circular, or Memorandum Orders to clearly define operational guidelines on the limits and boundaries of investments, zoning, land and resources uses in a PA consistent with the provisions of the *NIPAS Law*, *IPRA*, *Local Government Code*, *EIA Law* and other related ENR regulations. This whole process, however, has to be driven by the need to reduce the threats to the PAs, improve PA management, reduce negative externalities, and provide safeguards for marginalized or displaced communities in and outside the PAs. Moreover, this approach may serve as interim measure while the legislative actions are taking place.

The immediate areas of concerns for DENR or joint administrative issuances to improve, modify, add, replace guidelines are the following:

- Incorporating the approved PA zones in CLUPs consistent with the integrated ecosystem management approach in a watershed or ecosystem.
- Guidelines for co-investments between the government, private sector, and the

communities in the MUZs of PAs with adequate ENR safeguards and incentives for the private sector.

- Standard guidelines for establishing PES systems and mechanism for re-investments of revenues in the PAs.
- Harmonizing various ENR laws in a PA such as the *Clean Water Act*, *Environmental Impact Assessment (EIA) Law*, *Climate Change Act*, *Ecological Solid Waste Management Act*, and others; and
- IRR for retaining the 75% of IPAF at the local level with the PAMB based on the newly-signed *Republic Act 10629*. The role and accountability of the PAMB, sharing, and other operational details must be made clear in order for the PAMB as an administrative body composed of all the local government units and tribal communities in charge of regulating the protected area must be effective.

### 5.3.2 Strengthening the PA Management Planning Process

The greatest need in this area is the provision of adequate and accurate technical and socioeconomic database including clear understanding of institutional mandates and governance configuration. This is an area where DENR, NGOs, linkages with academic and resource institutions, support externally-funded projects may able to make a difference in improving local capacities, setting up database systems, and develop tools and practices that could sustain PA management in the long term.

With the increasing impacts of climate change, a more long-term research should be in place with academes, local and international research groups, and DENR research centers (under the ERDB) to determine how the ecosystems, communities and their livelihoods maybe better mitigated and be adaptive with changes in temperature, rainfall pattern and intensity, extreme weather conditions such as super typhoons, storm surges, landslides and flooding. Annex \_ contains specific recommendations for strengthening the PA management planning process.

### 5.3.3 Supporting or Improving Plan Implementation Processes

**Annex C** lists several specific recommendations on this concern. Setting up functional RBME systems in each PA that could serve as the “raw material” for aggregating PA data at the LGU, regional, sectoral and national levels will be crucial in linking public and private investments in support of overall PA management. The planning, implementation, capacity building, coordination, network building, enforcement, rehabilitation, others must be properly linked with the NIPAS outcomes and goals.

Currently, there is a need to strengthen current policies to close the “open access” areas in the MUZs with DENR guidelines that will empower the PAMB with the LGUs to properly delineate and demarcate (and eventually supported with PAMB resolutions and



LGU ordinances) “sustainable development sub-zones” for the issuance of appropriate tenure, contract, or agreement. With adequate economic incentives, the “sustainable development sub-zones” may be able to attract private sector investments and enjoin the “occupants” and tenured migrants to “invest” in protection, development, rehabilitation, and enforcement of PA rules and regulations.

#### **5.3.4 Intensifying or Mobilizing Inputs for PA management**

Inputs for carrying out PA activities to achieve the outputs that all contribute to meeting the outcomes and goals must be increased in all PA sites. Inputs must not only come from DENR PPAs, but it should be from multi-sources whether in kind or cash from the DENR, IPAF, LGUs, other national agencies, private sector, community counterparts, donors, and NGOs. This will make the annual work planning exercise as a business planning. This mechanism and process has to be further replicated and scaled up to gradually reduce the dependency of PA financing from GAA budget.

Many PAs offer opportunities for shifting strategies from “protect, prohibit, and punish” approach to “protect, participate, and profit” schemes. PAs have so much of “natural resource assets”. Converting or translating these “ENR assets” into “financial assets” remains to be a mystery in most PAs.

Biodiversity financing offers two broad pathways – “provider gets principle” and the “polluter pays principle”. Presently, most PESs are based on “user’s fee” systems which combine both pathways. Other forms of biodiversity financing schemes will require site-based analyses, valuation, determination, and negotiation before they could be tested and established as long-term and predictable source of financing.

#### **5.3.5 Measuring the Outputs and Reporting on the Outcome**

As earlier discussed, a functional RBME for PA in each site will facilitate progress monitoring of outputs based on the annual work plans/business plans and consolidate these to report on the outcomes. In similar vein, reports on the kinds of outputs and relating them with the expected outcomes will be indicative of how the annual work plans (AWPs) are adequately responding to increasing threats and achieving the outcomes of

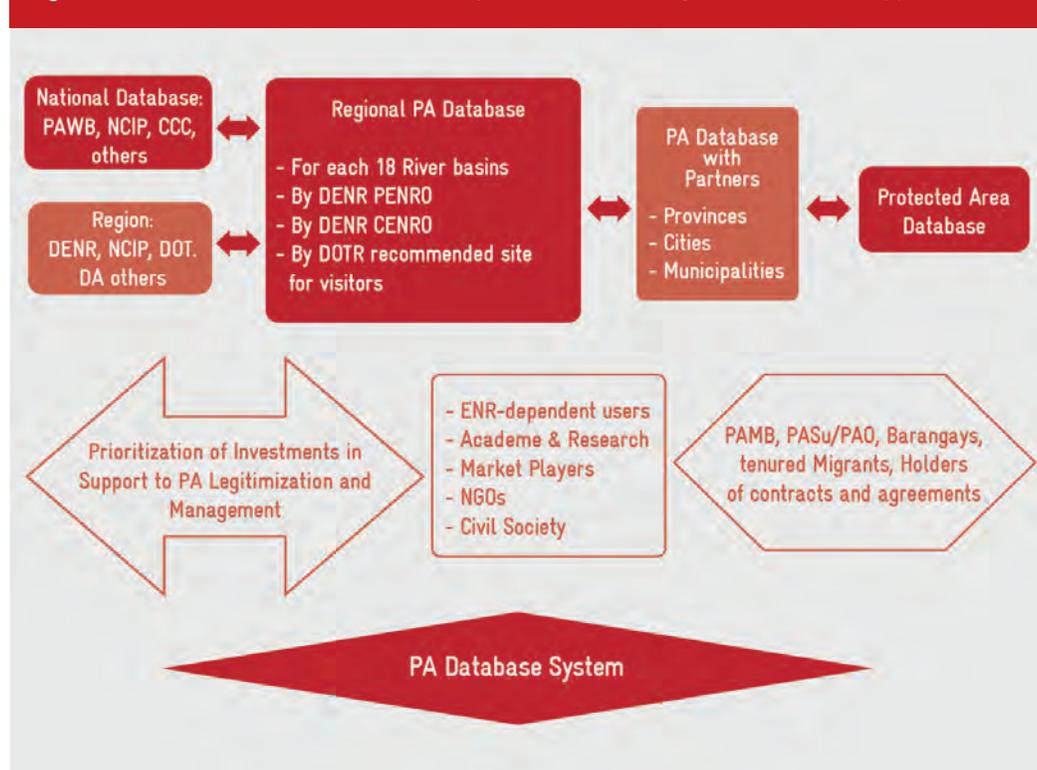
biodiversity conservation, improved governance and collaboration, and contribution of the PA to sustainable development. Evaluation results will help in re-configuring PA strategies, effectiveness of policies and guidelines, and levels of support.

At present, PAWB does not have an organized and systematic data base system for PA management in the Philippines. Existing systems are fragmented with extreme variability in terms of quality and accuracy. Accordingly, a recommended PA database system is shown in **Figure 11**. Each DENR Regional Office should establish a PA database system in order for each PA to update and get analysis and feedback from DENR management. A PA-, province-, and region-based PA database system allows aggregation and feedback mechanism based on actual PA output indicators.

Over time and with updated data on key indicators, trends and patterns may be established for modifying or aligning strategies and actions. This database is periodically updated based on the periodic conduct of progress monitoring and evaluation of each site. It is a system that can effectively respond to the needs of the PA clients, users, decision makers and even funding agencies.

The RBME process will eventually reveal during evaluation which outcomes are adequately being responded to by the PAs. Moreover, RBME as a performance management tool will also help to evaluate the performance of the PAMB, PASu, PAO, each LGU, each tenured migrant holder and holders of contracts and agreements.

**Figure 11.** A Recommended Data Base System for PA Management in the Philippines





Proceedings of the  
National Conference on the  
**Management**  
**Effectiveness** and  
**Capacity**  
**Assessment**  
of Protected Areas  
in the Philippines

# 1.0

## Introduction

Registration of participants started at 8:00 am. A total of 215 people registered representing various organizations, agencies, and local government units actively involved in the various aspects of development and implementation of protected area management in the Philippines. (Annex A)

The Philippine national anthem was sung to formally start the consultation activities followed immediately by an invocation. After which, the event's masters of ceremonies, Jem and Joey, opened the occasion by briefly presenting the agenda of the national conference which is to establish a broader consensus and buy-in on the key threats and recommendations presented in the Protected Area Management Enhancement (PAME) project's National Management Effectiveness and Capacity Assessment (NMECA) Report. (Annex B)



## 1.1 KEYNOTE MESSAGE BY THE DENR SECRETARY



The Secretary of the Department of Environment and Natural Resources (DENR) Ramon J. P. Paje was the event's keynote speaker. He mentioned that the country's remaining natural resources is heavily under threat partly because of increasing population (now 100 million) and high incidence of poverty. Encroachments and illegal activities in the lands of the public domain especially in the remaining natural forests continue to degrade these resources, which partly contributes to low productivity resulting to worsening poverty. At least 25% of closed canopy forests in all types of forest lands including those that are under the protected areas (PAs) was lost from 2003-2010.

Accordingly, President Aquino took strategic steps to help address the continuing degradation. These are the issuance of *Executive Orders 23 and 26* (EO 23 and EO 26) in 2011. The former simply declares moratorium of logging in natural forests and strengthening enforcement and regulatory sanctions. With *EO 23*, all closed and open canopy forests outside "NIPAS-covered protected areas" are considered as "protection forests" and will thus, be covered by the provisions of *Presidential Decree No. 705 (PD 705)*.

*EO 16* has paved the way for the National Greening Program (NGP), which is a social mobilization program to reforest and rehabilitate at least 1.5 million hectares of denuded and degraded lands of the public domains by 2016.

Under the NGP, more than 50% of total cost goes to communities in support of seedlings labor cost, and other technical assistance support. This approach is akin to the government's Conditional Cash Transfer (CCT) program and is expected to contribute to the country's inclusive growth. He projected that with 1.5 million hectares of NGP by 2016 which has an estimated cost of around 30 billion pesos, there will be enough supply to meet demand for plantation wood, fuel wood, and charcoal.

Secretary Paje stressed the point that without NGP, the country will incur about 800 billion pesos of opportunity cost as a result of the negative environmental impacts of not "rehabilitating and managing the open access lands of the public domains". He also took note of the issuance of *EO 79*, which is another landmark decree to improve environment and natural resources management in the country. This policy will increase the "share of the government" from mining since the government's current share is only 2% of excise tax, an amount that is not enough to cover potential environmental damages.

In his speech, Sec. Paje also took note of the importance of the study which is not just confined to protected areas but is also a reflection of the broader natural resources management condition of the country. He noted that from 2003 to 2010, forest cover in the Philippines has substantially declined and most of these are occurring in closed canopy forests where critical habitat and biodiversity are present.

This reality is validated by the study results. Sec. Paje thus feels that much work needs to be done at the policy, program, and operational levels. He highlights that the DENR's budget has steadily increased and this has provided the organization with the needed resources to work harder, specifically, the increase of BMB's budget by about 300% will enable stronger and focused attention on on-site management and enforcement. The recent passage of RA 10629, which retains the 75% of the IPAF for improving PA management at the local level, is a big encouragement to the communities and LGUs.

## 1.2 WELCOME REMARKS BY THE BMB DIRECTOR

Biodiversity Management Bureau (BMB) Director Theresa Mundita S. Lim gave the welcome remarks. In her speech, she expressed appreciation for the efforts of the study teams and the support provided by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Dir. Lim welcomed the results of the study and is challenged by the need to improve protected area (PA) management in the context of sustainable national development. She recognizes the difficult task that is mandated to her office but stresses the significance of recent developments that will surely contribute to better PA management, such as the retention of the Integrated Protected Area Fund (IPAF) through *Republic Act 10629* and the increase of her office's 2014 budget by almost 300%. Also, Dir. Lim reiterated her commitment to further strengthen the gains achieved and is actually looking forward to enabling stronger working relations with partners in improving PA management in the Philippines.



BMB Director Theresa Mundita S. Lim

### 1.3 CEREMONIAL HAND OVER OF THE NMECA REPORT TO DENR

A brief ceremonial handover of the NMECA Report to DENR was held and was participated in by (from left:) Ernie Guiang, NMECA Study Team Leader; Berthold Schirm, GIZ-PAME Principal Advisor; Robert Kressirer, GIZ Regional Director; Ramon Paje, DENR Secretary; and Theresa Mundita Lim, DENR-BMB Director.



## 2.0

# NMECA Findings and Recommendations

The NMECA findings and recommendations were presented through an introductory video, presentation of the overall findings, assessment of the 61 Protected Areas, and conclusions and recommendations.

Mr. Gilbert Braganza and Dr. Ernesto Guiang, NMECA consultants, presented the overall findings and recommendations. **Annex D** has the complete copy of the NMECA presentation. The discussion below simply highlights what were given emphasis during the consultants' presentation and discussion.

## 2.1 VIDEO ON THE NMECA BACKGROUND AND CONTEXT

As an introduction to the NMECA study, a video presentation was shown. The video presentation provided the context and background of the study highlighting the importance of the Philippines as a mega-diverse country, but currently experiencing significant threats to biodiversity conservation and protection (“hotspot”). The presentation also showed the strategies and programs that the Philippine government has put in place to pursue protected area management and address the threats to biodiversity. Foremost of these strategies is the *National Integrated Protected Area System (NIPAS) Act of 1992*.

However, after 20 years of implementation, effective protected area management remains a serious challenge due to increasing threats. To fully understand the situation and find ways of moving forward, GIZ, together with the DENR, undertook a comprehensive and iterative research on determining the current management state of protected areas in 61 protected areas all over the country. The presentation covered the methodology and the various stages of the study, as well as the analytical framework (“lenses”) employed to identify recommendations for improving PA management.



## Reaction from Panelists

3.0

Five resource persons were invited to review and provide their reactions to the NMECA overall findings and recommendations. Each one received advance copies of the draft final NMECA report and the summary of recommendations.

Former **Senator Edgardo Angara** was invited to react to the NMECA report mainly because he was the main author of the *NIPAS Law in 1992*. He remains an ardent supporter and advocate of biodiversity conservation and protected area management in the Philippines.

### SENATOR EDGARDO J. ANGARA

#### Reactor Focus: Viewpoint of an Author/ Legislature/ Lawmaker

During the presentation of his reactions and suggestions, former Senator Angara highlighted the following major points:

#### Need to revisit the NIPAS Law

There is now a need to revisit the NIPAS as a whole and in a comprehensive manner. But the question is, how can we make NIPAS relevant to local stakeholders? How can we address the disconnect between needs of the people and the law? Or between policy and implementation?

The *NIPAS Law* was enacted in 1992. In more than 20 years, the external environment for implementing the NIPAS law has also changed. There were a number changes that have taken place in the environment, giving rise to emerging new problems such as technologies that are developing very fast. Indeed, now is the time to take a hard look at the *NIPAS Law*.

#### Need to make PA management meaningful

There is now also a need to make PA management more meaningful to poor communities in order for them to meaningfully participate in conservation and protection. *The NIPAS Law* should be revised to make it relevant to ordinary Filipinos especially in terms of livelihood. The current implementation practices are probably not connecting the NIPAS law with the communities, or that the implementation processes do not mean anything to ordinary people -- stimulating local economic activities in the communities like, for example, a PA management that can be linked with the diminishing supply of fish in a locality.

#### Major comments

The selection of PA sites also need to be identified more carefully. There is also a need to work together and link with the *National Heritage Act*. Areas to be placed under the PA system must have remarkable/unique features, valuable scientific value; habitat for endangered species; and an anthropological value, including those considered natural heritage. Selection is key because the pressure for land and space is now high given the current level of the Philippine population, which has since reached more than 100 million Filipinos.



The application of the selection criteria should be made stricter and be based on accurate data for identifying PAs. Some of these include the area of governance, with PAMBs becoming too large, unwieldy and generally ineffective. Their membership composition also needs to have a strong, firm and technical management orientation. The membership and their leaders need to be professionalized. There might also be a need to put in place a ‘strong ecology executive’ in each of the PAs. Right now, the existing PAMBs have taken on the role of an “advisory body” to the “ecology executive” and to the PA on-site management team.

Another major issue is conflict with IPRA -- there is currently no clear guidance and inter-agency consultations on identifying and managing ancestral domains. The conflict between public forest and ancestral domain, for instance, may be the result of a “guideless” declaration of ancestral domain.

The DENR has a “more superior” *NIPAS Law* for ensuring that PAs are managed as “national set asides” for biodiversity conservation. DENR is in a position to take the lead in harmonizing land and boundary conflicts with the CADT holders.

Funding and budget has also become an issue. As a social capital, our rich natural resources have not been utilized to the fullest. Thus, there is now a need to invent ways and means for incentives to be able to attract social entrepreneurs for the outstanding PAs. The success of PA management in the Philippines requires effective and sustainable funding management. The IPAF may be expanded as a major source of fund for PA and the LGUs. Again, there is a need to connect PA management with the needs of the local stakeholders. One solution is to provide more incentives to LGUs so they may actively participate as co-managers in PA management in their respective political jurisdictions.

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Former **DENR Secretary Victor O. Ramos** as a resource person embodies the early DENR efforts to organize support, analyses, and advocacy for the passage of the *NIPAS Law* including the initial planning and implementation of the *NIPAS Law* and crafting of the first IRR of NIPAS in 1992. He brings with him an institutional memory, experience and wisdom on how PA in the Philippines should move forward.

## **FORMER SECRETARY VICTOR O. RAMOS**

**Reactor Focus:** Viewpoint of a former Head of an Executive and Regulatory Agency charged with the enforcement of the NIPAS Law/ Management and Operations

Former Secretary Victor O. Ramos discussed several aspects and issues on the NIPAS Law and its implementation. He commended the study for its honest outlook at the PA – providing a good platform for reforms in conservation. His other comments are as follows:



### **Scientific studies and technical information**

A Science-based and accurate technical information can help provide the “reason for being” in PA management. It can also aid in identification of champions. Meanwhile, accurate technical information can provide the basis for developing sustainable mechanisms.

There is also the option to use current and practical technologies, such as the LIDAR, to provide up-to-date visual assessments of forest cover and land use. All data gathered per LGU can then be used for holding LGUs, concerned DENR field units and tenure holders accountable for the degradation of forest and other natural resources in any given area.

Mobilizing scientists to assess the state and condition of resources on the ground will contribute to better understanding of these realities. Moreover, using the media as well as other forms of communication to share data can also serve well in advocating protected area management.

### **Sustainable financing**

In the area of sustainable financing, there is now a need to seek mechanisms and strategies to develop a sense of self-sufficiency in the aspects of PA funding and getting financial resources. Water, for one, is a resource that the PAs can leverage on to develop a sustainable financing mechanism.

For instance, water can be used as a source of “endless” funds for PA management; a 2% levy charge on water can raise PhP 2B per year. Perhaps GIZ can help in lobbying or advocating for such a law.

### **On-site support to governance issues**

There is now also a need to develop simple and relevant on-site indicators that will reflect on how the ultimate goals of NIPAS are achieved – suitable development, resource governance, and biodiversity conservation. The use of advance and successful PAs as models and allow other PAs to adapt and innovate their own management strategies, supported by performance reviews, resource, and incentives

### **LGU Accountabilities**

Today, LGUs have enormous powers and authorities over their resources; Hence, if guided properly, they can leverage change. One of the most effective ways of encouraging LGUs to work towards sustainable and effective PA management is to employ the use of the “hiya” (shame) campaign – exposing poor LGU performers will stain their political legacy and expose themselves to peer pressure and public criticism.

After all, in most LGUs, nothing happens in any town without the knowledge of the mayor. One example is the “dirty dozen” approach used during my term. The approach simply advertised private firms considered to be the “dirty dozen” in environmental management at the nationwide level. The end result? Firms advertised to have cared less on environmental issues were forced to address environmental issues due to bad publicity which, in turn, could mean loss of goodwill and market acceptance.

### Institutional reforms

There is no further need to go through a legislation process to harmonize overlapping and conflicting laws, but there might be a need to maximize the use of administrative measures that can be allowed under the *NIPAS*, *IPRA* and *LGC Laws* to address issues that are constraining PA management. In the context of the *NIPAS*, what is simply needed is to strengthen the *IRR*. The options could be an Executive Order by the Office of the President, or an application of the *BOT* law with respect to incentives.

On the issue of the absence of inter-agency agreements, this will be very difficult to address given specific mandates and outcomes; hence there is no need to define roles in partnerships agreements once the *IRR* is strengthened

The *DENR* should also reflect on itself and move towards a management structure that is based more on function and accountabilities. Loss of positions of the Regional Technical Directors (of the various *ENR* services) under the *DENR* *RAT* Plan will weaken the ability of each region to address highly-technical sectoral issues. In addition, it would take years to develop sectoral expertise on environment, forestry, protected areas, land management services, research, and mining. Thus, resolving inter-sectoral issues will become much more difficult because of the loss of experts and advisory advice from these positions.

There should also be greater attention and advocacy to repeal the outdated *PD 705* in order to define clearly the roles and functions of forestry and protected area management under *DENR*.

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Honorable **Mayor Ferdinand Abesamis** is the Vice President of the League of Municipalities of the Philippines. He reviewed the *NMECA* report in the context of the needs and aspirations of the more than 1000 municipalities of the Philippines that are in the forefront in protecting and managing the protected areas.

### HONORABLE MAYOR FERDINAND ABESAMIS

**Reactor Focus:** LGU viewpoint as member of the *PAMB* which has the political and administrative jurisdiction over protected areas.

Honorable Mayor Abesamis highlighted several points with respect to the *NMECA* report and PA management. He said:

Given the ever-increasing role of the “church” in PA management, it was quite puzzling that the *NMECA* report made no reference at all to religion. The role of the church as the “conscience” in PA management is important as it puts a religious/spiritual dimension in natural resources and protected area management.

LGUs should also be at the forefront (the driver’s seat) of protected area management because it is the LGUs who are accountable to their constituents. Some LGUs can form clusters to help ensure the protection and management of large PAs. Local chief executives,



who are familiar with people and environment in their localities, should also be utilized. After all, there are also a lot of variations in approach of protection from one municipality to another. LGUs should not be made to play a mere supporting role but should instead be given the full authority or mandate to manage the PAs. I have reservations, however, on long-term impact of training and the need to ensure the continuity and sustainability of key resource personnel in PA management.

The LMP may, however, act as advocates for improving PA management in the Philippines.

Mayor Abesamis, in response to a question on the preparation of LGU CLUPs, lamented the high cost of engaging professionals and consultants in helping 4th and 3rd class municipalities prepare their CLUPs. In some cases, these professionals would charge up to 3 million pesos for an LGU CLUP.

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**Ms. Elvira Baladad** represents the communities and grassroots organizations that would either benefit or marginalized in the protection, management, and conservation of PAs as “national set asides” for biodiversity conservation.

## **MS. ELVIRA BALADAD**

### **Reactor Focus: CSO/Experiential viewpoint**

In her reaction, Ms. Baladad highlighted the following points:

The NMECA (report) came too late. Why only now, after 20 years? Have we realized that things were not working as expected? Extraction of minerals is an enemy of biodiversity.

As stated in the *NIPAS Law*, small-scale mining should be prohibited in PAs. Mining operations should be done outside PAs. Unfortunately, the NMECA report failed to capture the destructive and serious impact of small-scale mining in PA management.

Nonetheless, we should try to answer these question: What do we really want to do in our protected areas? The report only confirmed the reality on the ground, that there is rampant conversion of PA land into agricultural areas; that there is constant intrusion and encroachment of migrants into the PAs; that there are illegal establishments in the PAs; and that lowlanders migrate to uplands and cultivate the uplands because of poverty.

PAs and watersheds are important, but the government has continued to fail in addressing the needs of upland dwellers. There is, therefore, a need to clarify and strengthen the PACBRMA as a tenure instrument in the PA multiple-use zone. It is also important that before any inter-agency arrangements are pursued, the DENR must first look into its own offices (bureaus) and harmonize the various mandates, functions and strategies which have all but contributed to the confusion.



Lastly, **Dr. J. Prospero E. de Vera III**, Vice President of UP for Public Affairs and a well-known governance expert, was invited to react and provide advice on the major NMECA report recommendations.

### **Dr. JOSE PROSPERO DE VERA III** **Reactor Focus: Overall Governance viewpoint**

Dr. de Vera pointed out that the key challenges for improving PA management effectiveness from a policy standpoint are the following.

#### **The need to get a buy-in from Congress**

Legislators are specialists in agenda setting, especially if it is based on accurate and current technical data. Hence, getting buy-in from legislators would require relevant information and messages that are aligned with their political agenda and position.

In this light, a well-crafted advocacy plan based on analysis and accurate information can be very helpful and valuable. However, it takes time for the Congress to amend existing laws or legislate laws. This reality, therefore, has to be considered in the NMECA recommendations.

#### **Devolution and the Local Government Code**

Congress is usually unable to revise the Local Government Code because there are no current champions for Local Government Code amendments. One other point: LGUs are very diverse – some are imaginative in implementing national laws such as on the definition/operationalization of the policy on the use of the LGU's human and ecological security (HES) funds, some are not.

Today, the era of command and control no longer work for devolution -- but an advocacy may help facilitate LGU buy in. There is also a need to show something that works, especially those that can help generate additional resources, that is, combined with incentives for compliance.

But before we do this, we should first ask ourselves: Are the LGUs ready?

It is important to understand that legislative change cannot be effective with a “one-size-fits-all” (symmetrical) approach; this will only result in attribution impacts. It is important to understand that effective and sustainable PA management requires an asymmetrical approach to fully appreciate and address specific contexts, needs, and nuances.



There are issues that are site-specific; there are also those requiring inter-departmental actions at the national level. The key to understanding and promoting an “asymmetrical” approach is through an advocacy – by showing legislators and executives what works, promoting the factors that contribute to their success, and putting in place incentive mechanisms for implementation.

In PA management, it might be worthwhile to note that LGUs tend to copy the “success” of other LGUs. This has been the example in tax mapping. In PA management, the incentives must also be tailored for LGUs with an organized communication or social marketing campaigns so as to communicate the importance, value, and significance of PAs in their localities.

### **Rationalization Plan**

The DENR’s RAT Plan will not solve contradictions and conflicts within and among agencies. It suffers the fatal flaw of *EO 366*, which is currently carried out on an agency per agency basis. Thus, inter-agency overlaps have not been addressed. Inter-departmental issues and needs for complementation and integration of programs and plans are also hardly implemented.

Institutional overlaps cannot also be resolved easily. Overlaps in the DENR/NCIP/LGU will not and could not be addressed by the RAT Plan. Moreover, simply changing or modifying policies to resolve overlapping mandate and responsibilities by going to Congress is also difficult process, that is, unless there are strong buy-ins.

### **“Reason for Being”**

It is very disturbing to note that a key finding shows that many of the PAs are established and managed without a clear understanding of their “reason for being”. The government should do a better job in communicating the “PA’s reason for being” with the local stakeholders and the communities. This indicates the importance of effective communication and advocacy campaign in PA management. There should also be ways to develop the proper storyline, tools to employ and the strategies for effectively sharing the PA story.

Dr. de Vera re-iterated his point that policies and IRR in a PA should adopt an asymmetrical approach – not a one-size-fits-all strategy. Some policies may only affect several clusters of LGUs within or near a PA because of where they are located. A policy should be different for LGUs occupying the strict protection zone (SPZ) than those in the MUZ, or those LGUs downstream that great benefit from the PA-sourced ecosystems goods and services.

# 4.0

## Open Forum

**Dr. Enrique Tolentino**, Vice Chancellor of UPLB, was requested to facilitate the open forum after the presentations of the NMECA consultants and the panel resource persons.

During the open forum, several questions and issues were raised on the following:

- A question was raised regarding the recommendation on LGUs as co-managers in PAs. Aren't the PAMBs the mechanism for co-management in PAs?

It was discussed that the PAMBs as ad hoc governance bodies are currently organized and represented by the different stakeholders in and near the PA. These are from the local government units (municipalities, cities, and concerned barangay leaders; IPs; NGOs; DENR; and other stakeholders). The DENR Regional Executive Director is the Chairman of the PAMB. As ad hoc governance bodies, the PAMBs are only able to provide overall oversight, coordination, and with limited rule making authority. The members of the PAMBs are appointed by the DENR Secretary. The LGUs are not actively involved in the on-site co-management of PAs in their respective political jurisdictions whether these activities will be in the following: zoning, issuance of tenure rights legitimate occupants, enforcement, provision of livelihoods to their constituents, protection and rehabilitation. To enable the LGUs as co-managers, the PA zones must be incorporated in their CLUPs, joint enforcement of these zones in the PAs, protection and enforcement, supporting the constituents, and benefiting from the PA-generated ENR revenues. These activities can only happen with MOAs of the DENR RED with each of the LGUs in a PA.

- There was discussion on the migrants and occupants in the PA MUZ and sometimes the issuance of CLOAs inside the PAs. The issue on tenure rights and occupants in the PA MUZs will need further assessment and study for crafting appropriate policy response.



Photo shows Berthold Schirm, GIZ-PAME Program Director; and Mundita Lim, BMB Director

### 5.1 DENR SUPPORT FOR PA MANAGEMENT

There was an overall consensus that the NMECA findings and recommendations provided a sound basis for moving forward. The DENR Secretary informed the audience that the protected area sector through BMB will have a higher budgetary allocation in 2014 to as high as 300 percent. DENR senior management expressed their commitments to move forward with the suggested additional guidelines for improving PA management especially in formulating the IRR for the newly signed IPAF law that allows the retention of at least 75% of IPAF fund for local operations.

There are adequate buy-ins for improving the PA database for decision making, planning, advocacy and social marketing, and monitoring and evaluation. The need for capacity building to improve PA management was highlighted and, hopefully, be initially addressed by ongoing and proposed special projects such as the GIZ-PAME.

The implementation of the DENR RAT Plan and the adoption of the new MFOs may be re-configured to strengthen on-site support for PA management.

## 5.2 LEGISLATION AND/OR STRENGTHENING ADMINISTRATIVE MEASURES

There were mixed reactions on the recommendations for additional legislations especially in amending the *LGC*, *NIPAS Law* and the *IPRA* to resolve and clarify issues on incentives, overlapping functions and mandates, and improving on-site PA governance. There is also the need to continue advocating the revision of the PD 705 – *The Revised Forestry Code* which was issued in 1975.

The recommendations are still worth pursuing by developing strategic advocacy agenda and actions that target existing and potential champions in Congress. However, Dr. de Vera warned that with the current priorities of Congress, legislation may take some time. It was suggested that while legislations are being advocated and supported, administrative measures (joint department administrative orders and Presidential Executive Orders) with proper support and guidance be used to provide initial solutions for the current “impasse” in resolving issues in the management of PAs.

This means that the DENR should take the lead in facilitating actions to partner with LGUs, NCIP, and other departments if only to positively connect PA management with those that can improve and strengthen on-site PA management.

## 5.3 INCREASING REVENUES FROM PA-DEPENDENT ECOSYSTEMS SERVICES

There appear to be an increased realization and understanding that the PA sites are valuable natural assets that can be managed to achieve multiple objectives – improve biodiversity conservation, sustainable development, and positive net revenue generations for re-investment in PA management.

The recently signed RA on retaining 75% of the IPAF at the local level is a good start. However, the challenge remains as to what extent can each PA achieve multiple objectives and be able to use PA-sourced revenues to increasingly support PA management? To what extent and how long will each PA depend on national government and local government subsidy? And to what extent will incentivized communities contribute to PA management?

These are some issues that need to be resolved. Current PES approaches remain limited as to how each PA can fully tap the potential of the PA natural resources to yield financial benefits without sacrificing biodiversity conservation and sustainable development. This area of concern offers great opportunity for innovation and pilot testing various approaches.

## 5.4 INCREASING LGU'S ROLE IN PA MANAGEMENT

The need for LGU buy-ins in PA management was highlighted during the NMECA conference. Given the need to improve on-site PA management, PA zones must be properly incorporated in the LGU's CLUPs to ensure that local ordinances are in full support of PA management and attract local buy-ins. PAs must be perceived as “part of LGU assets within their political jurisdictions” and that these areas require joint or co-management with additional incentives.

Moreover, the LGUs must have a share from the PA-sourced revenues to enable them to support their constituents in and near the PAs. This approach will continue to need innovative approaches that are consistent with the *NIPAS, LGC, and IPRA laws*.

As such, there is a need to harmonize the PA general management plan with the LGU comprehensive development plan and zoning. Land and resource management plans of CADTs and tenured migrants and holders of contracts and agreements in the PA MUZs must also be aligned with the PA plan and those of the LGUs – province, cities, and municipalities. This approach will minimize overlaps interventions that have negative externalities, strengthen governance, and degradation of the PA strict protection zones.

## 5.5 PROTECTED AREAS' CONNECTION WITH STAKEHOLDERS AND CLIENTS

The NMECA findings and recommendations and the reactors confirmed the need to connect the reason for being of each PA with the local stakeholders and clients – communities in and near the PA, local government units, media, private sector, and PA/ENR-dependent facilities such as irrigation systems, local water districts, and resorts.

There is a need for a better job in communicating marketing the “values” of PA to achieve desired behaviors and policy actions in each PA. A support for improving the BMB and each on-site PA management team on social marketing and communication campaigns may help.

# Annex A. 2020 Aichi Biodiversity Targets under the Convention of Biological Diversity

**Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society**

## Target 1

By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

## Target 2

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

## Target 3

By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.

## Target 4

By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

**Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use**

## Target 5

By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

## Target 6

By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

## Target 7

By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

## Target 8

By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

## Target 9

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

#### **Target 10**

By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

### **Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity**

#### **Target 11**

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

#### **Target 12**

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

#### **Target 13**

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

### **Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services**

#### **Target 14**

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

#### **Target 15**

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

#### **Target 16**

By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

### **Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building**

#### **Target 17**

By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

**Target 18**

By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

**Target 19**

By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

**Target 20**

By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

**Source: CBD. 2013. <http://www.cbd.int/sp/targets/#GoalA>**

## Annex B. Matrix on Policy-Related Concerns between NIPAS Law and Other National Legislation in Relation with PA Management Improvement

Related National Legislation	Key Policy-Related Concerns with the NIPAS Law	Suggested Course of Actions for Policy Improvement (from National MECA Assessment Team)
<p>Indigenous Peoples Right Act of 1997 (IPRA – RA 8371)</p>	<ul style="list-style-type: none"> <li>- Ancestral domains in PAs put two “resource management units” with different objectives in the same place and maybe in the same local government units (LGUs). The PA may be larger in size compared with the ancestral domain or otherwise. The land and resource management objectives, practices, and uses of each are not always congruent. Ancestral domain and a PA are forms of “land and resource allocation” covered by different legislation. Each has different governance system – customary for domains and statutory for PA.</li> <li>- A domain is recognition of an IP claim irrespective whether or not this claim is in forest lands, protected areas, agricultural lands, or mineral lands. A domain’s objective is simply to “recognize, protect and promote the rights of indigenous cultural communities and indigenous people”. The IP holders are guaranteed possession and occupation of their lands. This IPRA provision could run in conflict with NIPAS goal of conserving biodiversity.</li> <li>- A PA is a “set aside” by the State to conserve biodiversity for public benefit and posterity. Thus, in areas where PA and ancestral domain overlap, the governance bodies of a domain holder (with NCIP) and a DENR-led PAMB (PAMB) are responsible for harmonizing issues and conflicts in land and resource management objectives and uses. In most cases, impasse results to degradation due to “open access” condition.</li> <li>- Ideally, when an ancestral domain is in PAs, its major dominant management objective should be in support of biodiversity conservation. The domain holder is a management unit in a PA and, therefore, accountable, responsible, and has authority to manage its ancestral area in a PA with the guidance of both the NIPAS and IPRA laws. The governance body is the PAMB; the domain holder sits in as a member, and a sub-management unit within a PA.</li> <li>- When a PA is only a small portion of an ancestral domain, the management of that portion of the PA should be incorporated in the ancestral domain’s management plan. A member of the PAMB or PASu should sit in as non-voting member of the domain holder’s governance body e.g. Council of Elders.</li> <li>- Presently, there is a need for clear legislative and administrative guidelines on how these two “land and resource allocation” can co-exist and be managed in support of the defined goals and objectives of NIPAS and IPRA.</li> </ul>	<ul style="list-style-type: none"> <li>- A new legislation be enacted to clarify the key provisions of NIPAS, IPRA, and LGC laws with respect to the roles, powers, limits, responsibility, accountability, and authority in a PA of domain holders, DENR, PAMB, and LGUs in conserving biodiversity for ecological, human, and economic security of the present and future generations.</li> <li>- This new legislation should address threats and issues that are constraining efforts to increase the resiliencies of ecosystems adaptation of communities, livelihoods, enterprises, and industries that are largely dependent on the PA.</li> <li>- This new legislation should also highlight the following different scenarios: <ul style="list-style-type: none"> <li>* When ancestral domains are management units in a protected area, the ADSDPPs should be prepared by the IPs but made consistent with the NIPAS outcomes, approved by the PAMB and endorsed by the IP Council of Elders, and used by each LGU for zoning regime in their CLUPs.</li> <li>* When a PA is a management unit in an ancestral domain and only covers small portion of the domain, the IP Council of Elders is the governance body with a PAMB member as a non-voting of the Council of Elders. The PA management plan should support ADSDPP consistent with the NIPAS law.</li> <li>* In both of the above cases, the approved PA management plan and the ADSDPP should be used by the LGUs in preparing their CLUPs with appropriate zoning regimes.</li> <li>* Sharing of ENR-sourced revenues from the PA and/or the ancestral domain should be fairly distributed or divided between the PA/IPAE, LGUs, and the domain holder</li> <li>* Enforcement of ENR rules and regulations are carried out by the concerned resource management units (PA or ancestral domain) with support from the LGUs and DENR</li> <li>* In the governance bodies (PAMB or Council of Elders), the LGUs should be represented to ensure that socio-economic development support are incorporated in their investment plans</li> <li>* Mechanisms for generating revenues and co-financing biodiversity conservation in a PA with ancestral domain as a sub-management unit or a PA as a sub-management unit in an ancestral domain with LGU support</li> </ul> </li> </ul>

<p>Local Government Code of 1991 (RA 7160)</p>	<ul style="list-style-type: none"> <li>- As national set asides, PAs are state-managed areas but are within the political jurisdictions of local government units. The planning, management, control, development, and regulation of these areas are the responsibility of both DENR and the LGUs with the private sector (Section 2 of NIPAS). This implies that as set asides for biodiversity conservation, these areas are not “intended” to generate revenues but to be conserved for posterity. This means that both national and local interests must be in support of this overall objective. The management of these areas, however, requires funds, buy-ins and participation of local stakeholders and to a certain extent may be able to generate revenues. Since the PAs are in lands and resources that are owned by the State, these areas are not subject to real estate taxes. But the LGUs’ IRA include the area of PAs in calculating their share from the national inter-governmental transfer of funds to LGUs.</li> <li>- The areas of policy concerns are the participation of LGUs in the management of the PAs and share from revenues that are generated from the PAs. The roles of LGUs in PA management and share from generated revenues are marginal under the NIPAS Law</li> </ul>	<ul style="list-style-type: none"> <li>- As amendment to the LGC Law is needed with the following key provisions: <ul style="list-style-type: none"> <li>* Additional IRA for LGUs as incentives to co-manage the PAs within their political jurisdictions and to support their constituents in and outside the PAs</li> <li>* Complement DENR’s conservation and enforcement efforts in the PAs</li> <li>* Incorporate the approved PA zones in their CLUPs and enforce them</li> <li>* A percent share from the IPAF and other ENR-sourced revenues from PAs for re-investments and support to communities that are near or in the PAs</li> <li>* Accountability of LGUs in conserving biodiversity in the PAs</li> </ul> </li> <li>- An amendment to the NIPAS Law that will clearly define the role of LGUs as co-managers in PA management but with DENR as the lead agency. The co-management of PA between the national government through DENR and the concerned LGUs should not only in the PAMB as a governance and rule making body but also in the joint planning and implementation of the PA plans with concerned barangays, cities, municipalities, and provinces.</li> <li>- Depending on the coverage of a PA, the amendment should also require the active participation of a local chief executive officer at the province, city or municipality as either co-chair or member of the PAMB</li> </ul>
<p>Revised Forestry Code of the Philippines in 1975 (Presidential Decree 705)</p>	<ul style="list-style-type: none"> <li>- The area of forest lands has been gradually reduced because of the increasing allocation for “set asides” as PAs including watershed reservations, for ancestral domains, and other reservations that are now directly under the management of other national and local agencies.</li> <li>- There is a conflict between the forestry and protected area sectors when highly diverse “forest lands” that fall under KBA and currently under CBFMAs, IFMAs and other tenure instruments are considered or declared as a NIPAS site. The implication is that the reduction of forest lands that are intended for “production forestry” and “watershed reservation” may eventually result to the continuing decline of available area to supply increasing local demand for round wood and fuelwood and other forest products.</li> </ul>	<ul style="list-style-type: none"> <li>- Consistent with PD 705, NIPAS Law and other legislation, several Presidential Executive Orders (such as EO 318 – Sustainable Forest Management, EO 263 – Community Forestry, and EO 578 – Establishing the National Policy on Biological Diversity, Prescribing its Implementation throughout the Country), formulate an IRR on how to effectively place KBAs under effective management either under the NIPAS system or outside the NIPAS mode but with the management units of various tenured forest lands and ancestral domains.</li> <li>- KBAs that will be under the management of tenured forest land will be under the responsibility of the DENR forestry sector and those in the ancestral domain will be with NCIP and the forestry sector (for any resource use).</li> </ul>

<p>Mining Act of 1995 (RA 7942)</p>	<p>- When highly mineralized areas are located in forest lands while at the same time considered or categorized as a key biodiversity area (KBA), these areas may be issued with mining rights or permits. Declaring these highly diverse forest lands as additional component of the NIPAS system in the future will have problems.</p>	<p>- Based on current assessment of both mineral potential, biodiversity, and impacts of negative externalities that may results from mining, the DENR (through the PAWB, FMB, and MGB) should determine and clearly issue a national policy that highly mineralized areas cannot be issued with mining permits and immediately placed under "watershed/protection forest reservation" or declared as a PA under the NIPAS law</p>
<p>Wildlife Resource Conservation and Protection Act (RA 9147)</p>	<p>- The need to clarify and define the authority of PAMB in the issuance of "permits" for hunting, destroying, disturbing or mere possessions of plants or animals or products from the protected area (Section 20 of the Act). Only DENR or DA/BFAR issues the permit for the above activities in a PA subject to PAMB clearance or review.</p>	<p>- A joint DENR and DA/BFAR Memorandum-Circular issuance will clarify this possible area of conflict in the issuance of permits.</p> <p>- DENR/PAWB should take the lead for reviewing existing procedures and facilitating the process of joint crafting, review and issuance.</p>
<p>Fisheries Code of 1998 (RA 8550)</p>	<p>- Possible conflict in the institutional jurisdiction and management of locally-established marine protected areas (MPAs) or network of MPAs (within the 15-km radius of municipal waters) created by LGU ordinances and actions of Fisheries and Aquatic Resources Management Council/Bureau of Fisheries and Aquatic Resources (FARMC/BFAR) when these areas are declared or legislated as part of the NIPAS system which become under the overall management and responsibility of DENR through the PAMB system</p>	<p>- DENR, DA/BFAR, and DILG to formulate a joint DAO that will recognize these established MPAs or network of MPAs as part of the NIPAS system but are locally-managed by the LGUs with the guidance of the FARMC/BFAR.</p> <p>- It is highly recommended, however, that when established LGU-managed MPAs become part of the NIPAS system that the guidelines ensure that the DENR Regional Executive Director sits in as co-chair of the FARMC/BFAR.</p>
<p>Agriculture and Fisheries Modernization Act of 2004 (RA 8435)</p>	<p>- Conflict in the management objectives of NIPAS and AFMA if the marine and freshwater habitats become a PA and categorized as Strategic Agriculture and Fisheries Development Zones (SAFDZ). The latter is managed as "areas for production, agro-processing and marketing activities to help develop and modernize, with the support of government, the agriculture and fisheries sectors in an environmentally and socio-culturally sound manner." When these areas are part of the NIPAS system, the dominant management is conservation not production. Unless there is clear understanding of the seemingly conflicting management objectives, LGUs will be more in favour of the production objectives rather than conservation objectives that may limit or restrict production investments.</p>	<p>- DENR and DA should jointly develop guidelines for the development, biodiversity conservation, management, and regulation in SAFDZs where:</p> <ul style="list-style-type: none"> <li>* PAs under the NIPAS are located, and</li> <li>* KBAs are found but not currently under the NIPAS coverage</li> </ul>

Sources: GIZ and Silliman University 2011, La Vina and Kho 2010, and USAID/DAI 2008

## Annex C. Summary of Recommendations for Improving PA Management

Key Recommendations	Cluster A – Regions 1,2, and CAR	Cluster B – Region 3 and NCR	Cluster C – 4A & 5	Cluster D – 4B	Cluster E – 6, 7 & 8	Cluster F& G – Mindanao	RAA Center
<b>A. Improving PA Administrative Policies Based on the NIPAS Law and other Legislations</b>							
- Develop and issue standard IRR guidelines for establishing and operationalizing user fee systems and other alternative payment for environmental services (PES) mechanisms to generate additional revenues for PA management	X	X	X	X	X	X	PAWB, LGUs
- Develop conservation-oriented guidelines with adequate ENR and governance safeguards in promoting public and private sector investments in PA zones to improve the value chains of community livelihoods, enterprises, and ecotourism-related goods and services		X	X	X	X		PAWB, PAMB, LGUs
- Develop guidelines for harmonizing the implementation and enforcement of various ENR laws in a PA				X			PAWB, EMB, FMB, MGB, LGUs
- Develop guidelines for incorporating PAMB-approved PA management zones and MUZ sub-zones in the LGU CLUPs through the FLUP-Biodiversity processes	X	X	X	X	X	X	PAWB, PAWB, LGUs
- Develop guidelines for implementing RA 10629 for retaining 75% of income generated by protected areas (PAs) with the Protected Areas Management Board (PAMB), an administrative body composed of all the local government units and tribal communities in charge of regulating the protected area.							
<b>B. Improving the PA Management Planning Processes</b>							
- Establish and periodically update the PA data base with recent thematic maps, results of resource-based inventories, approved plans, M&E reports, research outputs, PAMB actions and recommendations, socio-economic surveys, and updates on enforcement of illegal activities	X	X	X	X	X	X	PAWB, PAMB, LGUs, PASus
- Improve PA management planning and annual work planning process with the participation of key stakeholders particularly the LGUs, tenured migrants, NGOs, private sector with contracts or agreements, ancestral domain holders, and "clients and customers" of the PA ecosystems goods and services such as the irrigator's association, mariculture/aquaculture operators, tourism services, others	X	X	X	X	X	X	PAWB, PAMB, PAO
- PAMB members, PAO and LGU staff should undergo orientation and training on governance-oriented PA planning and management to facilitate the process of determining the units or entities with mandated or assigned responsibility, accountability, and authority (RAA) in the conservation, protection, development, and regulation of the PA.	X	X	X	X	X	X	PAWB, PAMB, PAO, LGUs

<p>- Revise and update the PA management plans following participatory processes and based on agreed upon VMOs, designated land and resource allocations or uses that cannot be modified in the PA; strategies that will improve the resiliencies of the ecosystems, communities, and PA-dependent livelihoods and enterprises; strategies that will enhance the PA's biophysical diversity; and strategies that will result to minimal negative externalities on the marginalized communities and on- and off-site users of ecosystems goods and services</p>	X	X	X	X	X	X	PAMB, PAO
<p>- Prepare and get PAMB approval of the PA AWP that support the approved GMP with commitments to carry out their individual activities and support collective efforts from each of the governance-designated entities with RAAs (DENR, each LGU, holders of contracts or agreements in the PA, ongoing NGO and donor funded projects, tenured migrants, domain holders, and off-site users of PA ecosystems goods and service)</p>	X	X	X	X	X	X	PAO, PAMB
<p><b>C. Improving the Plan Implementation Processes</b></p>							
<p>- Facilitate and coordinate the individual and collective implementation of the AWP activities combined with monitoring and reporting how the outputs contribute to achieving the goals (outcomes) of the PA GMP</p>	X	X	X	X	X	X	PAO, PAWB, LGUs
<p>- Complete the map delineation of the boundaries and zones for PAs with PPs and demarcation and monumenting of the boundaries and zones for PAs with RAAs</p>	X	X	X	X	X	X	PAO, PAWB, LGUs
<p>- Establish and capacitate community- and barangay-level PA enforcement system for information dissemination and communication campaign, reporting illegal activities, means for selecting and issuing deputation orders to qualified persons, designing and delivering appropriate incentives, implement appropriate development interventions and providing support to marginalized groups.</p>	X	X	X		X		PAO, LGUs
<p>- Design and implement a PA social marketing campaign that will target behavior changes: (a) policy and decision makers at the local, regional, and national levels; and (b) the "users, beneficiaries, customers" of PA management</p>	X						PAMB, PAO, LGUs
<p>- Based on the approved PA GMP and initially-identified opportunities for public and private investments in partnership with LGUs and in support of the tenured migrants, IPs, and the large PA communities, promote, coordinate, and support appropriate public and private investments that will eventually redound to improved biodiversity conservation, generate more revenues for the IPAF, and contribute to the improvement of local economic opportunities.</p>							PAMB, LGUs, PAO, PAWB

- Establish and operationalize governance-oriented IPAF as a trust account with funds coming from the different revenue-generating centers of a PA.	X	X	X	X	X	X	PAMB , PAO, LGUs
- Develop and establish a PA-specific and RAA-defined outputs for the RBME using BMS, METT surveys, community mapping, digital analysis of land and cover maps, FGDs and other tools.	X	X	X	X	X	X	
- Develop and implement short, medium and long-term governance-based strategies for sustainably financing the AWP of PA GMP through various means - LGU contributions, IPAF share from user's fees and other mechanisms, partnerships, co-investments with the private sector groups (NGO and for profit organizations), DENR PAPs, grants, community contributions, and other sources.	X	X		X	X		PAMB, PAO PAO, LGUs
- Rehabilitate priority areas in the SPZ and MUZ areas with local stakeholders using endemic species, appropriate technologies and approaches, and economically-viable but environment-friendly development in the tenured and domain areas.							PAMB, LGUs, PAWB
- Improve the PA governance with the issuance of appropriate PAMB resolutions, individual LGU ordinances, and unified provincial ordinances with the endorsement of the PAMB and concerned LGUs, and DENR issuance of an administrative policy instrument.	X	X	X	X	X	X	PAWB, PAO, PAWB
- Strengthen property rights of those with conservation-oriented tenure instruments of the legitimate occupants, domain holders, and holders of agreements and contracts.							PAO, LGUs
- Implement livelihood and enterprise support assistance to marginalized tenured migrants, domain holders, and those poor occupants who will be resettled outside the PA							PAMB, PAO, PAWB
- Stock taking, Design and implement an initial comprehensive and continuing training modules for the PAMB members, PAO staff, LGU counterparts, community organizations, and the media for effective and efficient PA management	X	X	X	X	X	X	PAMB, LGUs, PAO, PAWB
<b>D. Intensifying Resource Mobilization to Increase Levels of Inputs</b>							
- Through the approved GMP and AWP supported with PA zones that are incorporated in the LGU CLUPs, leverage and institutionalize annual LGU contribution as part of their CDPs/CDIPs.	X	X	X	X	X	X	PAMB, PAWB, PAO
- With PAMB approval and LGU ordinances, increase IPAF contribution to the overall PA management cost by expanding and/or establishing various user fee systems and other alternative financing schemes	X	X	X	X	X	X	PAWB, RED, PAO, PAMB

- Based on the approved GMP, advocate for the increase and alignment of DENR budget for each PA from its PAP process.							PAWB, RED, PAO, PAMB
- Identify opportunities on how NGO grants could finance research, capacity building, piloting, and other interventions that are consistent with the need for improving biodiversity conservation							PAMB, PAO, LGUs
- Explore co-investments opportunities between the PAMB, interested LGUs, and the private sector to generate additional revenues for the IPAF from shares, profit sharing, and user's fee arrangements							PAMB, LGUs
- Link with local, regional, and national research and academic organizations and institutions for short, medium and long term capacity building of the PAMB and PAO staff to enable them to plan and carry out effective PA management, carry out periodic collection and analysis of key biophysical and socioeconomic indicators that will help in establishing PA baselines and basis for determining progress in PA management.							PAMB, PAWB, PAO
<b>E. Determining and Measuring the PA Outputs</b>							
- Determine and agree on the biophysical and socioeconomic outputs and output indicators per PA that will be measured and analysed to gauge their contributions towards the achievement of the NIPAS goals.	X	X	X	X	X	X	PAMB, PAO, PAWB
- Consistent with the RAA-based output for monitoring key indicators under the PA RBME and based on the approved GMP and AWP, determine the outputs that will have to be delivered or completed by each entity or unit with RAA. This will be the PAO, CENRO, PENRO, DENR region; PAMB; each concerned LGU; each holder of tenure instrument, ancestral domain, contracts or agreements.							PAMB, PAO, LGUs
- Monitor the outputs per RAA for reporting and updating during the PAMB meetings, PASu's reporting to RED and PAWB, and the LGU's representative report to their executive and legislative branches.	X	X	X	X	X	X	PAO, LGUs
<b>F. Reporting and Achieving the PA Outcomes</b>							
- Develop and implement a periodic assessment tool or instruments existing best practices or techniques to determine the impacts of PA management on the resiliency of the ecosystems, ecosystems goods and services, communities, and livelihoods. This may include measures on the benefits of the PA to the communities, LGUs, users of ecosystems goods and services, and measures of ecosystem or habitat ecological stability and improved resiliency e.g. non-conversion of closed and open natural forests, increased population of threatened or critical species, increased rehabilitated area in the SPZ, increased forest cover in MUZ, others.	X	X	X	X	X	X	PAWB, PAO

## Annex D. Management Effectiveness Tracking Tool (METT)

The Management Effectiveness Tracking Tool was developed to help track and monitor progress in the achievement of the World Bank/WWF Alliance worldwide protected area management effectiveness target. It is also hoped that the Tracking Tool will be used more generally where it can help monitor progress towards improving management effectiveness; for example it is now obligatory for all Global Environment Facility protected area projects to use the Tracking Tool three times during the projects lifespan and the tool has been modified for use in several national protected area systems. In addition, use of the Tracking Tool can help managers track progress in implementing protected areas commitments under the Convention on Biological Diversity and the Ramsar Convention on Wetlands.

The Tracking Tool aims to report progress on management effectiveness and should not replace more thorough methods of assessment for the purposes of adaptive management. The Tracking Tool has been developed to provide a quick overview of progress in improving the effectiveness of management in individual protected areas, to be filled in by the protected area manager or other relevant site staff. As such it is clear that there are limitations on what it can achieve: it should not for example be regarded as an independent assessment, or as the sole basis for adaptive management.

Because of the great differences between expectations, resources and needs around the world, the Tracking Tool also has strict limitations in terms of allowing comparison between sites: the scoring system, if applied at all, will be most useful for tracking progress over time in one site or a closely related group of sites. The Tracking Tool has however been used to identify trends and patterns in management of protected areas across a number of sites. Lastly, the Tracking Tool is too limited to allow a detailed evaluation of outcomes and is really aimed at providing a quick overview of the management steps identified in the WCPA Framework up to and including outputs. Clearly, however good management is, if biodiversity continues to decline, the protected area objectives are not being met. Therefore the questions on condition assessment have disproportionate importance in the overall Tracking Tool.

### The WCPA Framework

To maximise the potential of protected areas, and to improve management processes, we need to understand the strengths and weaknesses of their management and the threats that they face. The World Commission on Protected Areas provides an overarching framework for assessing management effectiveness of both protected areas and protected area systems, to give guidance to managers and others and to help harmonise assessment around the world.

The table below contains a very brief summary of the elements of the WCPA Framework and the criteria that can be assessed. The World Bank/WWF Management Effectiveness Tracking Tool has been designed to fulfil the elements of evaluation included in the Framework. Questions in the Tracking Tool have been ordered to make completion as easy as possible; however the element(s) that each refers to are indicated in italics in the left hand column of the assessment form (**see page 12 onwards**) for reference.

Table of Management Parameters using the WCPA Framework

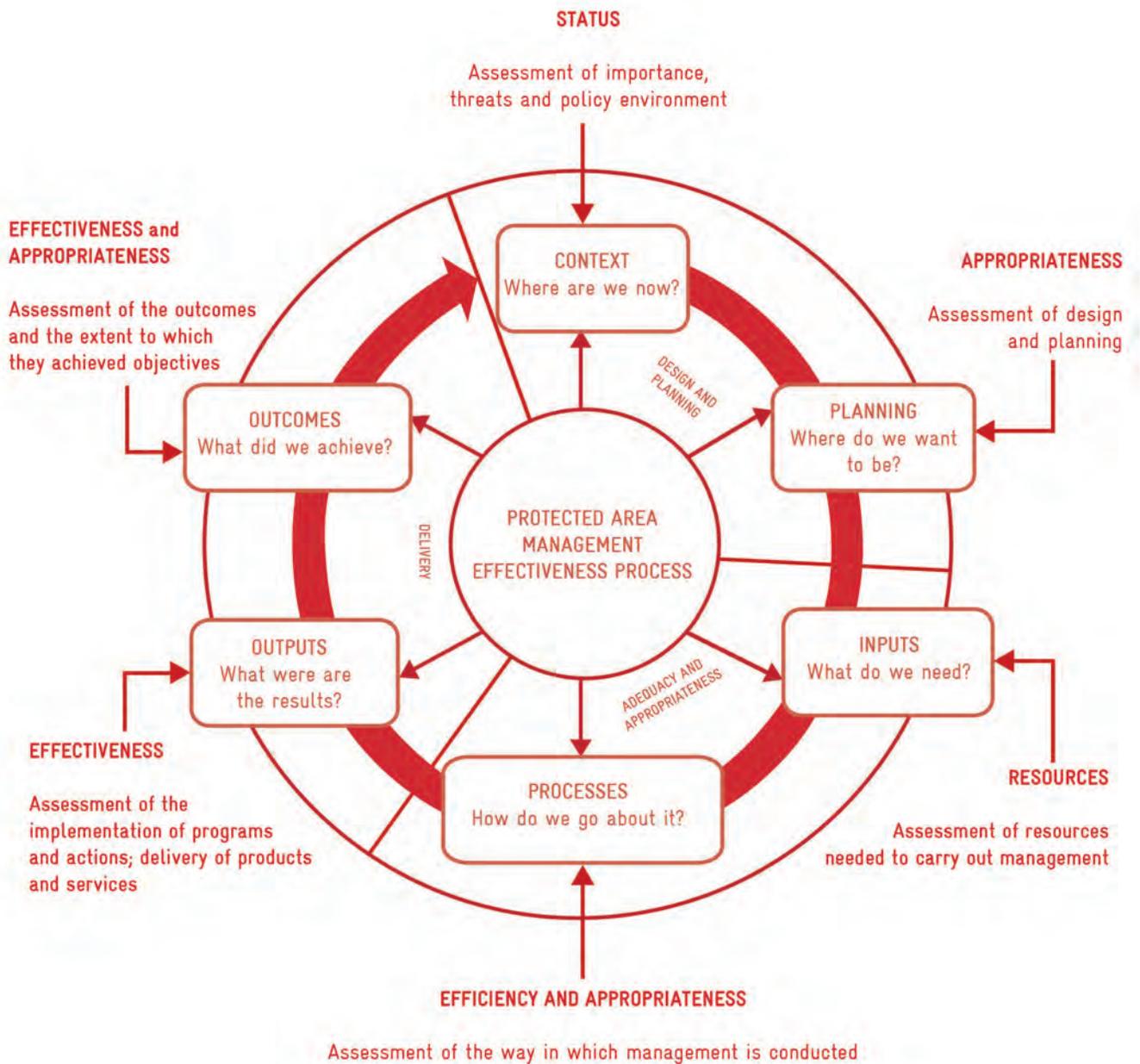
Elements of Evaluation	Explanation	Criteria	Focus of Evaluation
Context	<i>Where are we now?</i> Assessment of importance, threats and policy environment	<ul style="list-style-type: none"> <li>• <i>Significance</i></li> <li>• <i>Threats</i></li> <li>• <i>Vulnerability</i></li> <li>• <i>National context</i></li> <li>• <i>Partners</i></li> </ul>	Status
Planning	<i>Where do we want to be?</i> Assessment of protected area design and planning	<ul style="list-style-type: none"> <li>• <i>Protected area legislation and policy</i></li> <li>• <i>Protected area system design</i></li> <li>• <i>Reserve design</i></li> <li>• <i>Management planning</i></li> </ul>	Appropriateness
Inputs	<i>What do we need?</i> Assessment of resources needed to carry out management	<ul style="list-style-type: none"> <li>• <i>Resourcing of agency</i></li> <li>• <i>Resourcing of site</i></li> </ul>	Resources
Process	<i>How do we go about it?</i> Assessment of the way in which management is conducted	<ul style="list-style-type: none"> <li>• <i>Suitability of management processes</i></li> </ul>	Efficiency and Appropriateness
Outputs	<i>What were the results?</i> Assessment of the implementation of management programmes and actions; delivery of products and services	<ul style="list-style-type: none"> <li>• <i>Results of management actions</i></li> <li>• <i>Services and products</i></li> </ul>	Effectiveness
Outcomes	<i>What did we achieve?</i> Assessment of the outcomes and the extent to which they achieved objectives	<ul style="list-style-type: none"> <li>• <i>Impacts: effects of management in</i></li> <li>• <i>Relation to objectives</i></li> </ul>	Effectiveness and appropriateness

### Management Requirements in Drawing Results from METT

Management Element	Requirements
Context	Legal Status, Boundary Demarcation, Law Enforcement
Planning	Clear Management Objectives, Operational Plan, Monitoring Plan
Inputs	Operational Budget, Research
Process	IEC Program, Stakeholder Participation, Monitoring and Evaluation
Outputs	Products and Services, Context Indicators IEC, Management Activities
Outcomes	Condition of Values

The figure shows the key requirements to fully assess the management parameters.

The figure below shows the WCPA Framework’s management parameters in the context of a project cycle to better situate and appreciate the relevance of the METT.



The WCPA Framework is based on the idea that good protected area management follows a process that has six distinct elements.

## Annex E. LIST OF PARTICIPANTS

### National Conference to Present the Management Effectiveness and Capacity Assessment Report of the Protected Areas in the Philippines

Joy-Ballroom, Oakwood Premier Joy-Nostalg Center Manila, 17 ADB Avenue,  
Ortigas Center, Pasig City, Philippines  
January 15, 2014, 0800H – 1630H

	NAME	ORGANIZATION
1	Filiberto Pollisco Jr.	ACB
2	Norman Ramirez	ACB
3	Anneli Ehlers	ACB-BCCP GIZ
4	Clint Alviar	ACCCoast
5	Norberto de Liño	AECID/Spanish Embassy
6	Noel Godinez	Asian Journal
7	Mary Jean Caleda	Ateneo School of Govt.
8	Sterno Padilla	Ateneo School of Govt.
9	Bernadette Soliven	BFAR
10	J. M. Tuante	BFAR
11	Mackie Maquiraya	Business & Leisure
12	Norry Lacza	Business & Leisure
13	Raul Promeda	Business & Leisure
14	Nonoy Lacza	Business Mirror
15	Felix Gaschick	B+WISER
16	Ronet Santos	B+WISER
17	Amida Diwata Jasma	CFG-TGAM
18	Miguel Miranda	China Business Philippines
19	Evangeline Míclat	Conservation International
20	Lyndal Alvarado	Com. On Natural Resources
21	John Paul S. Quieta	CPBRD, House of Representatives
22	Novel Bangsal	CPBRD, House of Representatives
23	Prince Cal Mamhot	CPBRD, House of Representatives
24	Ali Hadjinasier	DENR
25	Angelita V.J.	DENR
26	AP Ramos	DENR
27	Edwin Domingo	DENR
28	Elizabeth Paorla	DENR
29	Imelda R. Dela Cruz	DENR
30	Ric Enriquez	DENR
31	Rosalinda Cortez	DENR
32	Yolanda Sa-Ong	DENR
33	Cesar Cabanig	DENR 1
34	Maricel Calpin	DENR 1
35	Ronnie Jacinto	DENR 1
36	Enrique Desim	DENR 2
37	Lea Daquisay	DENR 2
38	John Lee Holonbayan	DENR 3

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41	Vilma V. Garcia	DENR 3 CPMD
42	T. Guinam	DENR 4A
43	Ann Bella Posadas	DENR 4A
44	Mamerto Madriaga	DENR 4A
45	Reynulfo Juan	DENR 4A
46	Ronita Unlayao	DENR 4A
47	Joseph Luke Crisostomo	DENR 4B
48	Lino Dimapilis	DENR 4B
49	Edna Locsin	DENR 6
50	Emelyn S. Peñaranda	DENR 6
51	Carlo C. Custodio	DENR 6
52	Mayodine Aragon	DENR 7
53	Corazon H. Macabenta	DENR 8
54	Josephine B. Gurano	DENR 8
55	Cidur Julsaldjiri	DENR 9
56	Marilou M. Clarete	DENR 10
57	Mercedita G. Barbaran	DENR 10
58	Vicky Susan T. Pacara	DENR 10
59	Eduardo V. Ragaza	DENR 11
60	Myrna Erlinda Arbiol	DENR 11
61	Rita Fe Cordova	DENR 11
62	Jamime G. Ubanos	DENR 13
63	Rosalie Igot	DENR 13
64	Ayda Zoleta	DENR-B
65	Carmen Aquino	DENR-B
66	Jasper Lumagbas	DENR-B
67	Rhoderic La Baig	DENR-B
68	Angelita Mercado	DENR-BMB
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73	Joy Navarro	DENR-BMB
74	Juvy Ladisla	DENR-BMB
75	Lina Segunial	DENR-BMB
76	M. Caldon	DENR-BMB
77	Mary Ann Mendoza	DENR-BMB
78	Meriden Maranan	DENR-BMB
79	Mira Ocampo	DENR-BMB
80	Norma Molinyawe	DENR-BMB
81	Ruby Buen	DENR-BMB
82	Ryan Cuanan	DENR-BMB
83	Teresita Blastique	DENR-BMB
84	Theresa Mundita Lim	DENR-BMB
85	Francis G. Basali	DENR-CAR

	<b>NAME</b>	<b>ORGANIZATION</b>
86	Joel Behis	DENR-CAR
87	Marivic Yao	DENR-EMB
88	Arvin A. Dao	DENR-ERDB
89	Portia Lapitan	DENR-ERDB
90	Edna Nuestro	DENR-FMB
91	Annie Rabang	DENR-FMB
92	Bernice Ann Castillo	DENR-MGB
93	Nerissa Rapanlit	DENR-NCR
94	Edgar Pagalilawan	DENR-OSEC
95	Rene A. Rendon	DENR-OSEC
96	TSG Saplala	DENR-OSEC
97	Danilo S. Alvarez	DENR-PAO
98	Ma. Sabrina Cruz	DENR-PAO
99	Rhodelie M. Baiz	DENR-PAO
100	Yasmin Caparas	DENR-PAO
101	Ricardo Viccutuno	DENR-PAO
102	Mina Labuguen	DENR-ROZ
103	Edward Templonuevo	DILG-BLGD
104	Genaro Castro Jr.	FAO
105	Aldrin Mallari	FFI Phil
106	A. Modesto	GIZ
107	Bitea Sam	GIZ
108	Enrique C. Nera	GIZ
109	Agnes Pantastico	GIZ-BCCP
110	Edelberto Guasque	GIZ-BCCP
111	Dicky Simoransky	GIZ-BCCP
112	Ronnie G. Dalumpines	GIZ-BCCP
113	Recardo Estores	GIZ-BCCP
114	Anna Katharina Kramer	GIZ-COSERAM
115	Erlinda Dolatre	GIZ-ENRD
116	Gino Garcia	GIZ-ENRD
117	Jose J. Antonio	GIZ-ENRD
118	Opalyn Agulay	GIZ-ENRD
119	Walter Salzer	GIZ-ENRD
120	Yuji Enriquez	GIZ-ENRD
121	Robert Kressirer	GIZ-GOM
122	Andre John Uychiaoco	GIZ-PAME
123	Berthold Schirm	GIZ-PAME
124	Dorotea E. Ca-Ayao	GIZ-PAME
125	Florencia Morales	GIZ-PAME
126	Hannah Ebro	GIZ-PAME
127	Josephine Casem	GIZ-PAME
128	Ma. Shella Estecomín	GIZ-PAME
129	Moonyeen Alava	GIZ-PAME
130	Oliver Puginier	GIZ-PAME
131	Reyna Villanueva	GIZ-PAME
132	Terence Dacles	GIZ-PAME

	<b>NAME</b>	<b>ORGANIZATION</b>
133	Yana Balling	GIZ-PAME
134	Bernd-Markus Liss	GIZ-REDD
135	Bojan Auhuyen	GIZ-REDD
136	F. Mara Mendoza	GIZ-REDD
137	Brian Domingo	GNN
138	Willy Datul	GNN
139	Rouchelle Dinglasan	GMA News TV
140	Noel Resurreccion	Haribon Foundation
141	Emma Ulap	HLURB
142	Greg Gregorio	IBC 13
143	Dante Elano	IBC 13
144	Rogelio Godoy	IBC 13
145	Flery Chan	JICA
146	Kimberly Alvarez	KAISAHAN
147	Lualhati Felipe	LMB
148	Ralph Pablo	LMP
149	Angelica J. Sanchez	LPP
150	Jesus M. Diaz	LWUA
151	Philip Fullon	Malacañang
152	Rhoy Cobilla	Malaya
153	Ellayn de Vera	Manila Bulletin
154	Mark Balmores	Manila Bulletin
155	Miguel de Guzman	Manila Times
156	Elmer B. Billado	Mines and Geo Science Bureau
157	Beata Batadlan	NAMRIA
158	Rijaldia Santos	NAMRIA
159	Arvin Diesmo	National Museum
160	Holly Jonas	Natural Justice
161	Teresa Salanguip	NCR
162	Rey M. T. Aguinaldo	NCR
163	Ramon Mijer E. Agda	O/S Hiyas
164	Melissa Lavente	OPAEP
165	Jenica Dizon	OPAEP
166	Marita M. Cisneros	PAWB-NewCAPP
167	Errol Gatumbato	PBCFI
168	DJ Yap	Philippine Daily Inquirer
169	Deck Villanueva	Philippine Star
170	Lina Ferrer	Philippine Star
171	Ruel G. Concepcion	PKMM
172	Yasmin Caparas	PNA
173	Rafael E. Camat Jr.	Private
174	Isagani R. Serrano	PRRM
175	Pia Ranada	Rappler
176	Rina Maria Rosales	REECS
177	Amy Lecciones	SCPW
178	Evelyn M. Buenaventura	SEARCA
179	Nancy Landicho	SEARCA

	<b>NAME</b>	<b>ORGANIZATION</b>
180	Nelson JBV Querijero	SEARCA
181	Paulo N. Pasicolan	SEARCA
182	Sarah Quiñones	SEARCA
183	Teodoro Villanueva	SEARCA
184	Enrique Oracion	Silliman University
185	Jocelyn Elise P. Basa	Silliman University
186	Peter Adrian Canlas	Silliman University
187	Edward Ortiz	SOLAR News
188	Kim Go	SOLAR News
189	Seven Espiritu	SOLAR News
190	Ma. Nancy P. Ibuna	GIZ-SSME
191	Hilconida Calumpong	SU-IEMS
192	Clint Alviar	SU-PAME
193	Jhun Padaoan	TV 5
194	Maricel Halili	TV 5
195	Rod Valmez	TV 5
196	Prof. Prospero de Vera	University of the Philippines
197	Antonio Carandang	University of the Philippines Los Baños
198	Armando Palijon	University of the Philippines Los Baños
199	Diomedis Racelis	University of the Philippines Los Baños
200	Eleno O. Peralta	University of the Philippines Los Baños
201	Enrique L. Tolentino Jr.	University of the Philippines Los Baños
202	Jaine C. Reyes	University of the Philippines Los Baños
203	Manuel L. Castillo	University of the Philippines Los Baños
204	Marlo Mendoza	University of the Philippines Los Baños
205	Nelson Pampolina	University of the Philippines Los Baños
206	Ria Gonzales-Geronimo	University of the Philippines Los Baños
207	Roberto P. Cereno	University of the Philippines Los Baños
208	Michael P. Bohlen	University of the Philippines Los Baños
209	Porifirio Aliño	UPSMI
210	John Raymar Piscos	VICA
211	Carol V. Fiquerroa Geron	World Bank
212	Leonardo Batugal Paat Jr.	World Bank
213	Jose Angelito Palma	WWF

#### **EVENT SPEAKERS**

Edgardo Angara	Former Senator
Elvira Baladad	PKKK National Council Member
Ferdinand Abesamis	Vice President, League of Municipalities of the Philippines
Prospero De Vera	Vice President, Public Affairs, UP
Victor Ramos	Former DENR Secretary

## Annex F. NMECA PROGRAM OF ACTIVITIES

### National Conference to Present the Management Effectiveness and Capacity Assessment Report of the Protected Areas in the Philippines

Joy-Ballroom, Oakwood Premier Joy-Nostalq Center Manila, 17 ADB Avenue,  
Ortigas Center, Pasig City, Philippines  
January 15, 2014, 0800H – 1630H

<b>TIME</b>	<b>ACTIVITY</b>	<b>RESPONSIBLE</b>
0800H	Registration	GIZ/Ardent Communications
0900H	Acknowledgement of Participants	Moderators
0910H	Welcome Remarks	PAWB Director Theresa Mundita S. Lim
0925H	Keynote Speech	DENR Secretary Ramon J.P. Paje
0940H	Ceremonial handover of the report to DENR	GIZ – Mr. Robert Kressirer, Mr. Berthold Schirm & Dr. Ernesto S. Guiang DENR – Sec. Ramon J.P. Paje, Dir. Theresa Mundita S. Lim
0950H	Presentation of the NMECA Report	Dr. Ernesto S. Guiang & Mr. Gilbert Magno C. Braganza
1105H	Coffee Break/ Physical Preparation	
1115H	Panel of Reactors – Reactor 1	Former Senator Edgardo J. Angara
1135H	Panel of Reactors – Reactor 2	Former DENR Sec. Victor O. Ramos
1155H	Reaction from the DENR	DENR Secretary Ramon J.P. Paje
1215H	Lunch break	
1350H	Panel of Reactors – Reactor 3	LMP Vice President Honourable Ferdinand Abesamis
1410H	Panel of Reactors – Reactor 4	PKKK National Council Member Ms. Elvira Baladad
1430H	Panel of Reactors – Reactor 5	UP Diliman Vice President for Public Affairs Dr. J. Prospero E. de Vera III
1450H	Open Forum	Moderators
1615H	Closing Remarks	Mr. Berthold Schirm and Dir. Theresa Mundita S. Lim

## Annex G. NMECA POWERPOINT PRESENTATION



Summary Presentation of  
Ernesto S. Guiang and Gilbert Magno C. Braganza  
NMECA National Consultants

PROTECTING OUR CHILDREN'S FUTURE  
Addressing Threats and Issues in Biodiversity Protection

### Story Line

- ▶ The Philippines as a mega diverse country
- ▶ The NIPAS Law
- ▶ Overall Results of Enhanced Management Effectiveness Tracking Tool (METT) in 61 Pas in all regions of the Philippines
- ▶ METT Results compared with forest cover, NIPAS law expectations, and opportunities with DENR Rationalization Plan
- ▶ METT results with changes in forest cover in Protected Areas (PAs) from 2003 to 2010
- ▶ METT results compared with the NIPAS Law Expectations
- ▶ Opportunities for improving PA management under the DENR Rationalization Plan (RAT Plan) and new Major Final Outputs (MFOs)
- ▶ Overall Conclusions
- ▶ Key Recommendations
- ▶ Summary

PROTECTING OUR CHILDREN'S FUTURE  
Addressing Threats and Issues in Biodiversity Protection

## The Philippines as a mega-diverse country

- ▶ A global landmark of unique source of life
- ▶ Rich habitats that support at least 70% of a wide variety and variability of flora and fauna
- ▶ High endemism of plants and animal species
- ▶ Diverse ecosystems of forests, landscapes, wetlands, coastal, and marine areas
- ▶ But, a “hotspot” - with threats of biodiversity extinction because of increasing population, resource exploitation, industrial advancement, and natural calamities - typhoons, storms, earthquake, others

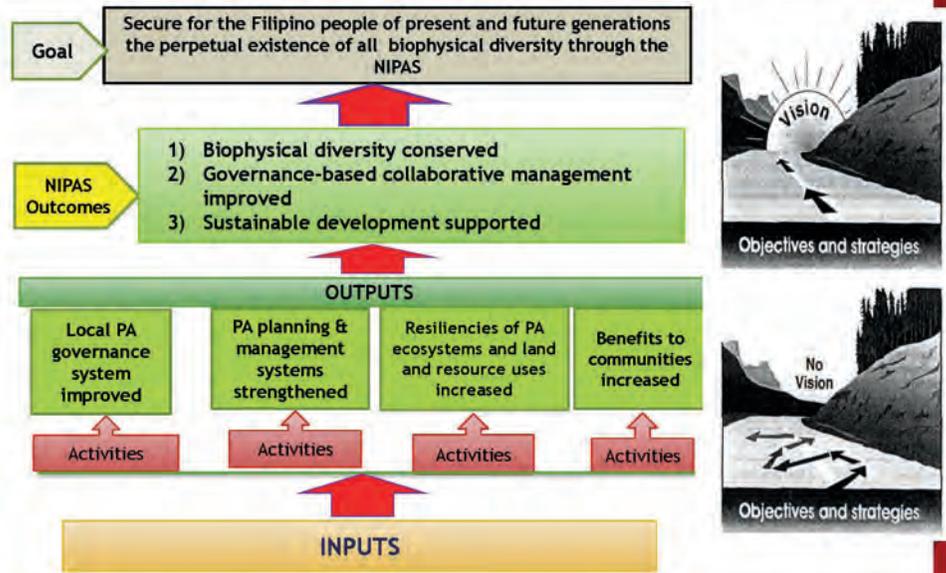


## The NIPAS Law

- ▶ Signed in 1992 as a landmark legislation
- ▶ Enables “allocation of the lands of the public domain” as “national set asides” for conserving biodiversity for present and future generations
- ▶ State-managed “national set asides” to be mainly under DENR in collaboration with local government units, communities including indigenous peoples, and the private sector



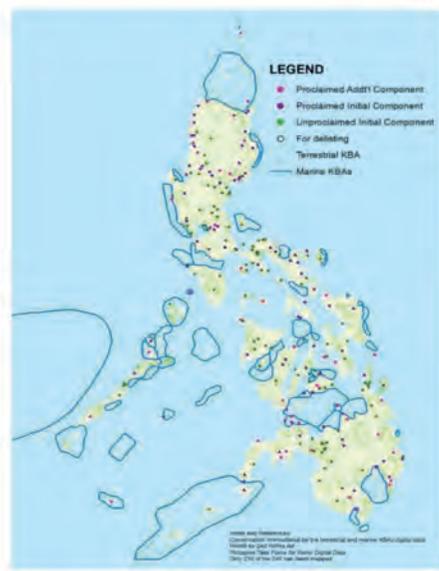
## The NIPAS Law Expectations from collaborative management of PAs as “national set asides” for conserving biodiversity



PROTECTING OUR CHILDREN'S FUTURE  
Addressing Threats and Issues in Biodiversity Protection

## The NIPAS Law

- ▶ More than 240 PAs as “national set asides”
- ▶ PAs cover almost 40% of key biodiversity areas (KBAs)
- ▶ KBAs - globally significant sites for biodiversity conservation and managed to prevent species extinction
- ▶ Building on the 20-year gains of NIPAS law implementation:
  - ❖ Legitimizing highly diverse areas via presidential proclamations and/or legislations
  - ❖ Setting up Protected Area Management Boards (PAMBs) that represent local stakeholders
  - ❖ Implementing PA management plans
  - ❖ Supporting development and poverty reduction programs
  - ❖ Biodiversity monitoring and evaluation system
  - ❖ Engaging the private sector
  - ❖ Providing incentives and awards
  - ❖ Generating PA-sourced revenues through the Initial Protected Area Fund (IPAF) Law to partly finance biodiversity conservation



PROTECTING OUR CHILDREN'S FUTURE  
Addressing Threats and Issues in Biodiversity Protection

## The METT Process-Enhanced with Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs)

METT aims to report progress on the management effectiveness in protected areas with the intent to improve or adapt future interventions. METT looks at the following components:

- **Context** - understanding PA values and threats
- **Planning** - Objectives, strategies, targets, funding
- **Allocation** - Inputs for governance and management
- **Processes** - what were carried out with inputs
- **Outputs** - completed products or services from processes
- **Outcomes** - impacts of the outputs

## Consolidated METT Results

### ▶ Threats and Issues

- ▶ Biological resource use - extraction of forest and fisheries resources
- ▶ Residential and commercial development - increasing settlements
- ▶ Agricultural activities - land conversion
- ▶ Human intrusions and disturbances - unregulated tourism



### ▶ Key Issues

- ▶ Overlapping policies
- ▶ Political intervention
- ▶ Limited operational resources
- ▶ Lack of technical data



► Context

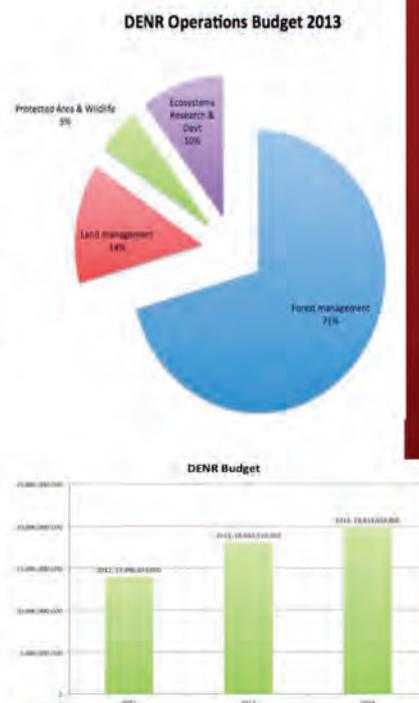
- 93% are established through Presidential Proclamations (PP);
- 7% are established through Republic Acts (RA)
- Overall preference for PAs to be proclaimed through an RA

► Planning

- 88% have either a General Management Plan (GMP) or an Initial Protected Area Plan (IPAP), with Annual Work and Financial Plans (AWFPs)
- Funding for implementation mainly relies on national government (DENR)
- Weak synergy with other local and related plans

► Input

- 5% of total DENR budget for protected areas and wildlife management
- Staffing
  - 1 person per 2,300 hectares
  - 15% are regular; 25% are detailed; the rest are contractuels and volunteers
- Budget
  - About PhP 39 per hectare (excluding personnel costs)
- Fees and Revenues
  - Some are accessing IPAF but mainly rely on either external support, user fees, and LGU contribution



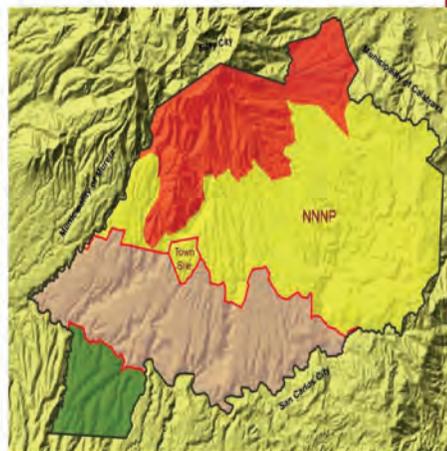
- Average Annual budget of 8.5% from Total DENR Budget Based on General Appropriations Act from 2007-2011.
- Affirms Low Allocation for PA Management (ENRMP 2012)

DENR GAA Allocations	Year				
	2007	2008	2009	2010	2011
Central Office	381,972,000	445,245,000	1,126,378,000	1,078,599,000	851,534,000
Forest Management	1,858,128,000	2,453,704,000	4,009,731,000	3,590,665,000	3,970,594,000
Protected Areas and Wildlife Management	240,523,000	274,046,000	516,813,000	519,173,000	431,379,000
Ecosystems Research and Development	239,980,000	244,715,000	310,622,000	309,737,000	384,191,000
<b>Total</b>	<b>2,720,603,000</b>	<b>3,417,710,000</b>	<b>5,963,544,000</b>	<b>5,498,174,000</b>	<b>5,637,698,000</b>
<b>% of Protected Areas and Wildlife Mgt</b>	<b>8.8</b>	<b>8.0</b>	<b>8.6</b>	<b>9.4</b>	<b>7.6</b>

- ▶ Process
  - ▶ PAs with Presidential Proclamations (PPs) are delineated but not demarcated
  - ▶ Budget management primarily done by the Protected Area Superintendent (PASu)
  - ▶ Strong stakeholder participation
  - ▶ Weak local partnerships

- ▶ Outputs
  - ▶ Limited visitors' and operations facilities

- ▶ Outcomes
  - ▶ Overall positive perception on economic benefits and biological values because of increasing local awareness and participation on enforcement



## Overall Assessment on PA Management Effectiveness

Overall stakeholders' value and appreciation on protected areas is high but management effectiveness in the 61 Protected Areas surveyed is poor to fair

## Key LESSONS from NIPAS Law Implementation (based on METT)

1. Partnerships leads to effective PA management
  - ❖ Resource institutions (PA links with NGOs, academe/training/research organizations, national and local agencies) have proven to be useful
  - ❖ LGUs participation and being partners resulted to improved PA management
2. PAs offer opportunities for "social enterprises" especially for tourism-related services, collaborative research.
3. With proper valuation and social marketing, PAs can be managed as "natural resource assets" and not as "white elephants"

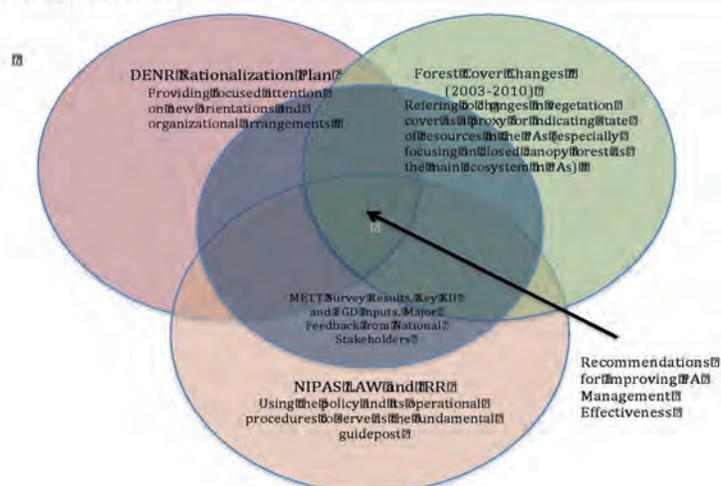


## Key LESSONS from NIPAS Law Implementation (Based on METT)

4. Adequate NIPAS-consistent support systems are needed for managing PAs as “national set asides” to conserve biodiversity
5. Lessons from some PAs are demonstrating how PAs can be managed by the State as distinct “land and resource management units” for conserving biodiversity
6. Measuring PA outputs that contribute to NIPAS outcomes can serve as models for managing biodiversity in Key Biodiversity Areas (KBAs) that are not currently covered by the NIPAS Law.

## Enhanced METT Results Related with:

- Changes in Forest Cover,
- NIPAS Law Requirements, and
- Opportunities for Improvement under DENR's Rationalization Plan



## Forest Cover from 2003-2010 - Confirm POOR to FAIR PA Management

1. **25% and 3% decline of closed and open canopy forests in PAs in 8 regions** affirm the findings of METT in 61 PAs.
2. This **trend also reflects the decline** of closed canopy forest at the national level (25% decline) in all the lands of the public and ancestral domains
3. **PAs in Regions 2, 5, and 7** kept their closed canopy forests intact
4. **Mangroves** increased in PAs by 7%, reflecting increased understanding of their values and stakeholders' support
5. The forest cover decline exposes:
  - ❖ **Limited allocation of inputs for "on-site" PA management**
  - ❖ **Increasing constraints** to address threats in the remaining diverse biophysical assets

PAs with METT, KBAs and 2004 Natural Forest Cover

### LEGEND

- Protected Area
- PA with METT
- Natural Forest 2004
- Key Biodiversity Areas
- Marine KBAs



## Change in closed canopy forests in PAs by Region from 2003 to 2010

Region	CLASS	TOTAL PER CLASS 2003	TOTAL PER CLASS 2010	DIFFERENCE	%
<b>Cordillera Administrative Region</b>					
	Closed forest, broadleaved	11,576	7,066	(4,509)	-0.39
	Closed forest, coniferous	11,541	3,656	(7,886)	-0.68
	Closed forest, mixed	528	2,314	1,786	3.38
<b>Region 1</b>				-	
	Closed forest, broadleaved	3,847	5,556	1,709	0.44
<b>Region 2</b>				-	
	Closed forest, broadleaved	230,773	234,893	4,119	0.02
<b>Region 3</b>				-	
	Closed forest, broadleaved	124,606	89,136	(35,470)	-0.28
<b>Region 4A</b>				-	
	Closed forest, broadleaved	51,626	33,524	(18,102)	-0.35
<b>Region 4B</b>				-	
	Closed forest, broadleaved	109,149	33,407	(75,742)	-0.69
<b>Region 5</b>				-	
	Closed forest, broadleaved	12,197	26,492	14,295	1.17
<b>Region 6</b>				-	
	Closed forest, broadleaved	54,707	29,096	(25,611)	-0.47
	Closed forest, mixed	192	-	(192)	-1.00
<b>Region 7</b>				-	
	Closed forest, broadleaved	2,529	9,310	6,781	2.68
<b>Region 8</b>				-	
	Closed forest, broadleaved	47,113	21,661	(25,452)	-0.54
		<b>660,385</b>	<b>496,110</b>	<b>(164,275)</b>	<b>-0.25</b>

## Change in open canopy forests in PAs by Region from 2003 to 2010

Region	CLASS	TOTAL PER CLASS 2003	TOTAL PER CLASS 2010	DIFFERENCE	%
<b>Cordillera Administrative Region</b>					
	Open forest, broadleaved	10,442	19,024	8,582	0.82
	Open forest, coniferous	43,151	49,356	6,205	0.14
	Open forest, mixed	2,291	2,876	585	0.26
<b>Region 1</b>					
	Open forest, broadleaved	6,643	987	(5,656)	-0.85
	Open forests, mixed	-	308	308	
	Open forest, coniferous	811	5	(806)	-0.99
<b>Region 2</b>					
	Open forest, broadleaved	326,943	336,835	9,892	0.03
	Open forest, coniferous	-	190	190	
<b>Region 3</b>					
	Open forest, broadleaved	60,245	93,792	33,547	0.56
	Open forest, mixed	786	682	(104)	-0.13
<b>Region 4A</b>					
	Open forest, broadleaved	50,453	60,909	10,456	0.21
<b>Region 4B</b>					
	Open forest, broadleaved	98,899	184,491	85,592	0.87
<b>Region 5</b>					
	Open forest, broadleaved	25,546	39,842	14,296	0.56
<b>Region 6</b>					
	Open forest, broadleaved	23,501	45,163	21,662	0.92
	Open forest, mixed	3,058	-	(3,058)	-1.00
<b>Region 7</b>					
	Open forest, broadleaved	8,369	5,643	(2,726)	-0.33
<b>Region 8</b>					
	Open forest, broadleaved	233,296	24,815	(208,481)	-0.89
		<b>894,435</b>	<b>864,918</b>	<b>(29,517)</b>	<b>-0.03</b>

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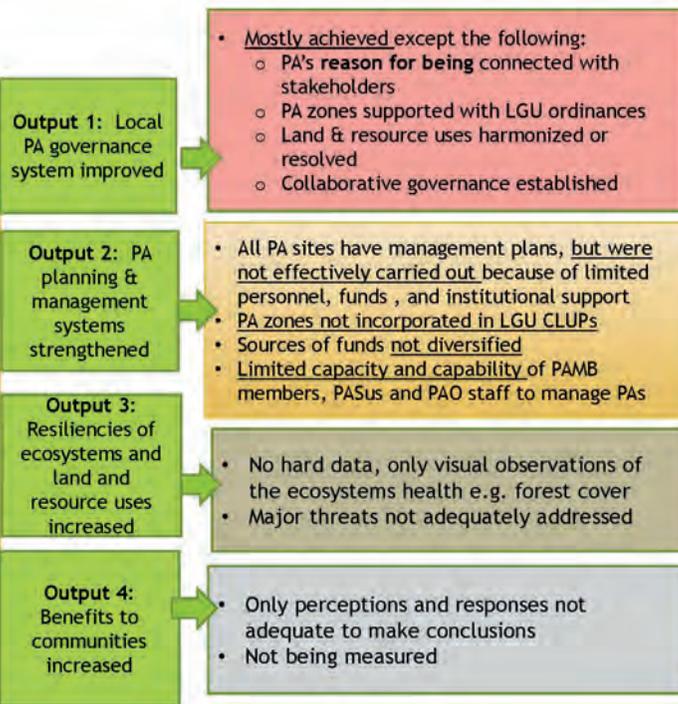
## Changes in Land and Forest Cover at the National Level between 2003-2010

REGION	Forest				Other Wooded Land			Other Land	
	TOTAL Forest	Closed Forest	Open Forest	Mangrove Forest	TOTAL Other Wooded Land	Shrub	Fallow	Wooded Grassland	TOTAL Other Lands
Philippines _2010	6,840,349	1,930,780	4,601,536	308,033	7,247,213	3,420,217	7,381	3,819,515	14,984,629
Philippines_2003	6,838,822	2,560,872	4,030,588	247,362					
<b>Net Increase or Decrease in Per Cent</b>	0	(25)	14	25					
<b>Difference between 2010 and 2003</b>	1,527	(630,092)	570,948	60,671					

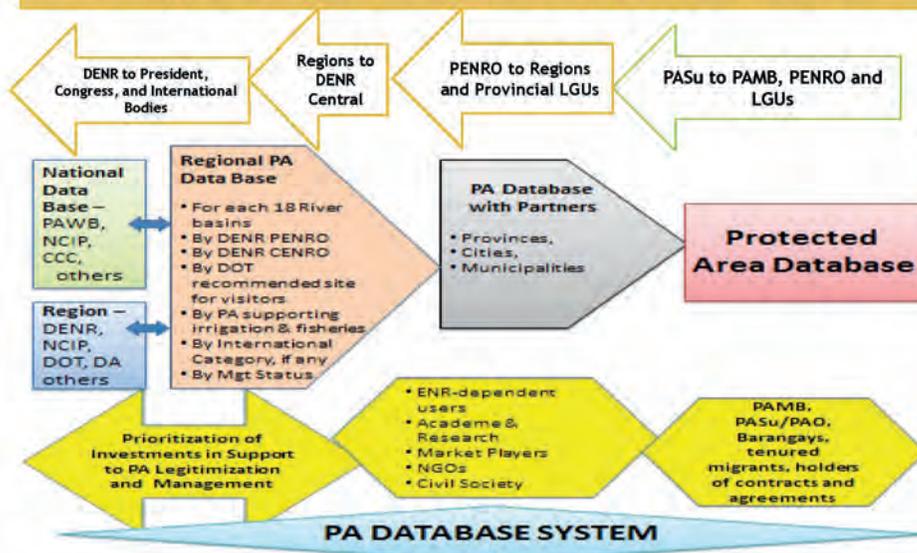
Source: Extrapolated from unofficial FMB data sourced from the NAMRIA land and forest cover data of 2003 and 2010

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## The METT Results Show that PA Management is meeting some NIPAS Expectations



## The METT Results Highlighted the NEED for Integrated NIPAS-Consistent PA Database



**METT Results Show WHERE and HOW Improvements in PA Management may be carried out under DENR RAT Plan and new DENR Major Final Outputs (MFOs)**

1. Positive impacts on PAs from DENR’s shift from sectoral to functional organizational structure via the Ecosystems Management approach;
2. 12 out of 13 PAs with Republic Acts (Ras) will have permanent staffs;
3. Overall loss of DENR positions by more than 11% of authorized staff BUT with more operational in focus in provincial and community environment offices
4. Better inter-sectoral coordination and collaboration between the sectors in priority ecosystems - forestry, protected area, land management, ecosystems research, environment, and mining
5. The “ecosystem’s approach” under responsive regional and provincial leadership and New MFOs may result to better PA connection with local stakeholders and other sectors

**The METT Results will help identify opportunities in prioritizing programs and funds under the NEW DENR Major Final Outputs (MFOs) (DENR 2013)**

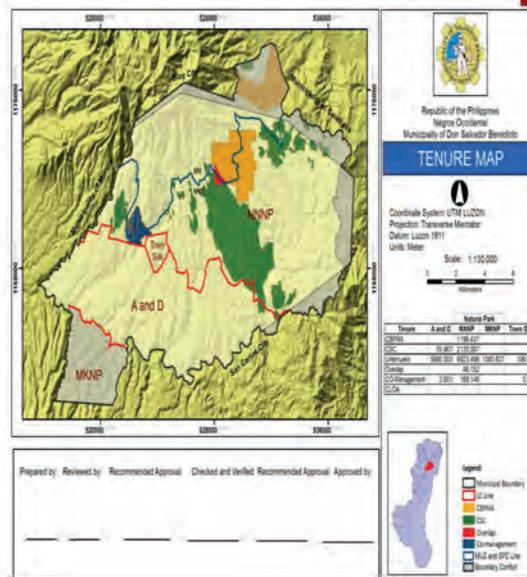
OLD MFOs	NEW MFOs
<b>MFO 1</b> – Plans, policies and standards developed, promoted, monitored and evaluated	<b>MFO 1</b> – Ecosystem policy services
<b>MFO 2</b> – Ecosystems and natural resources managed, protected, conserved, enhanced and degraded ones rehabilitated	<b>MFO 2</b> – Ecosystem management services
<b>MFO 3</b> – Appropriate regulations and standards enforced and monitored	<b>MFO 3</b> – Ecosystem regulation services

## Overall Conclusions

1. The METT Results affirmed the overall decline of closed and open canopy forests in PAs in several regions
2. RE-CONFIGURATION with LGUs, NCIPs and other sectors the current system in supporting DENR-led collaborative management of PAs as “national set asides”
3. Harmonizing different management objectives of a PA and a Certificate of Ancestral Domain Title (CADT), a “land and resource management unit” of an IP, remains to be constrained resulting to impasse in biodiversity conservation

## Overall Conclusions

4. A DENR-led, incentive-driven, and intentional PA management MUST be in collaboration with LGUs, tenured communities, holders of contracts and agreements (private sector and civil society)
5. PAMBs as governance bodies with responsibility, accountability, and authority (RAA) have limited power to formulate and enforce PA rules and regulations.



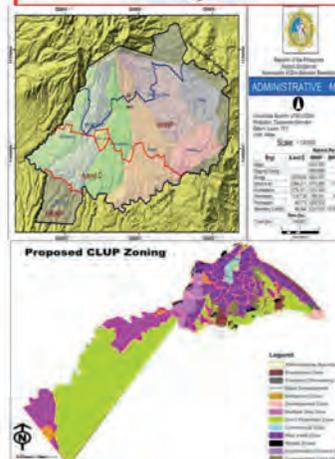
## Overall Conclusions

6. **Training, training, training - more capacity building- for PAMBs, PASus, PAO staff, LGUs staff, and community leaders to establish and sustain expertise on PA management**
7. The 240 PA sites have **valuable “biophysical and natural resources assets”** - Mechanisms to generate substantial **“revenues”** from these assets will help finance PA management



## Recommendations - Additional Implementing Rules and Regulations (IRRs)

1. **Develop NIPAS-based additional guidelines based on pilots and NIPAS implementation:**
  - ❖ For retaining the 75% of the Integrated Protected Area Fund (IPAF) at the local level combined with standards for environmental user fees or charges.
  - ❖ For integrating PA zones in Comprehensive Land Use Plans (CLUPs) through the Forest land use Planning (FLUP) and integrated coastal management (ICM) planning processes
  - ❖ For guiding PAMB's approval of PA sub-zones in Multiple-Use Zones (MUZ) to strengthen tenure rights and to contract and sign agreements to conserve portions of MUZs and Buffer Zone (BZs)
  - ❖ For attracting co-investments on social enterprise ventures in MUZ and BZ zones



## Recommendations - Additional Circulars

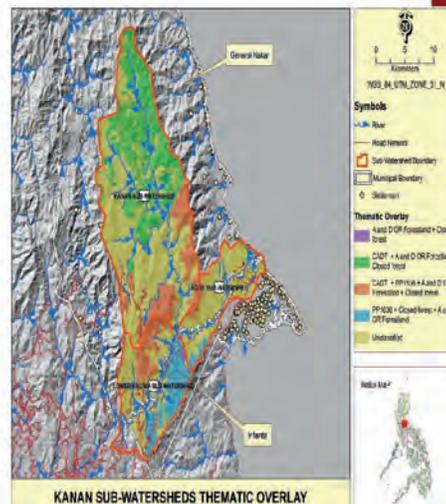
### 2. Issue DENR Memorandum Circulars to:

- ❖ Test innovative approaches -Reduced Emission from Deforestation and Degradation (REDD) +, biodiversity conservation in KBA-covered forest lands and mineral lands that are outside the PAs.
- ❖ Develop, replicate, and scale up site-based PA database system to establish Results-Based Monitoring and Evaluation (RBME)
- ❖ Adopt a “social marketing” approach to help each PA determine its “reason for being” and connect conservation efforts with communities, LGUs, private sector, national and international commitments
- ❖ Harmonize the implementation of various ENR laws in a PA such as the Clean Water Act, Environmental Impact Assessment (EIA) Law, Climate Change Act, Ecological Solid Waste Management act, and others



## Recommendations - Legislations

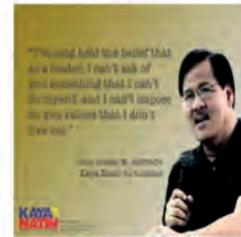
3. Support legislation of PAs with PPs that have the full support of local stakeholders - LGUs, communities, Indigenous Peoples (IPs), private sector, and NGOs
4. DENR with DILG initiative and NCIP, support a new legislation to clarify the key provisions of NIPAS, Indigenous Peoples Right Act (IPRA), and LGC laws with respect to the delineation of roles, powers, limits, responsibility, accountability, and authority of DENR, NCIP and LGUs in managing PAs as “national set asides”.



## Recommendations -Legislations

4. DENR and the DILG to initiate amendment of the Local Government Code (LGC) to address gaps, limitations, and weaknesses with respect to LGUs as “co-managers” in PA management:

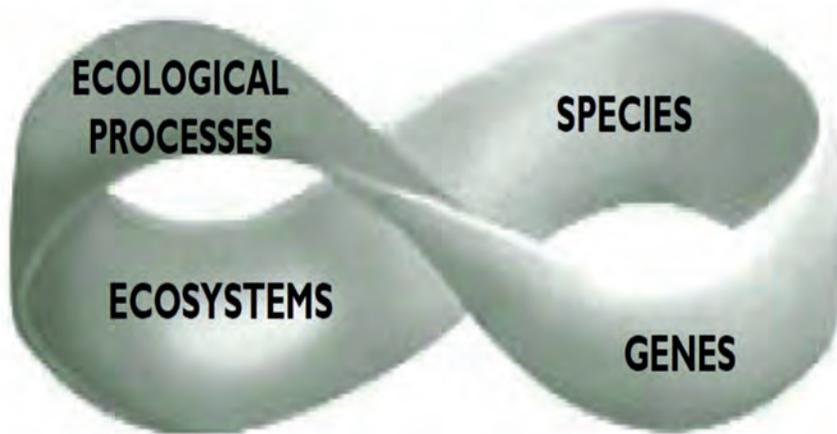
- ❖ Additional IRA for LGUs as incentives for co-managing PAs within their political jurisdictions,
- ❖ Provide complementary PA-consistent local legislations,
- ❖ Incorporate and enforce approved PA zones as part of CLUPs,
- ❖ Specify the percent share of LGUs from IPAF and other ENR-sourced revenues from PAs for re-investments and support to communities
- ❖ Safeguard biodiversity from potential negative impacts of LGU’s socioeconomic development



## Summary of Recommendations

1. DENR to maximize opportunities to strengthen on-site PA management PAs under the DENR Rationalization Plan, new MFOS, and shift towards ecosystems management
2. Formulate additional IRRs based on the NIPAS Law to “address” the gaps and limitations of the Revised NIPAS IRR
3. Legislate PAs that are only covered by PPs
4. Legislate additional laws or amend the NIPAS Law, Local Government Code and IPRA to “reduce the constraints” for improving “on-site management of PAs”

THANK YOU!



USAID, 2005

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