International Climate Initiative

Final Report – Status Report

1   Project data

BMUB project number	11_IV+_009_PHL_G_Protected Area Management Enhancement
Project title	Protected Area Management Enhancement in the Philippines
Country/ countries of implementation	Philippines
Contractor/ grant recipient	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), GmbH
Duration of project	01.10.2012 to 31.12.2017
Reporting period	01.10.2012 to 31.12.2017
Date	26.01.2018

	Funding applied for, in EUR as in notice/contract/negotiation mandate	Funds disbursed, in EUR
Overall project duration	9.000.000	8,759,748.52 (closing of accounts is still on-going)

2   Project concept

2.1   Starting situation

The Philippines is one of 17 mega-diversity countries, with more than 52,000 described species, of which more than half are estimated to be endemic. It is located in the world's most biologically-diverse marine region, the Coral Triangle. However, it is also one of the most threatened biodiversity hotspots in the world facing rising threats to its forest and coastal ecosystems, with most already degraded. The country's original forest cover has declined to 6% and 704 species are listed in the IUCN Red List of Threatened Species.

Recognizing the primacy of *in-situ* conservation, from 2000 to 2009, DENR, civil society partners and scientists undertook a process of successively-refining available biological information to identify conservation priority areas. These Key Biodiversity Areas are sites that encompass habitat critical to the survival of globally-threatened and geographically-concentrated species with populations that require urgent conservation action. Results indicate that many of the key areas are not being protected effectively and investments channelled into sites that are not of high conservation priority.

At present 50 KBAs (both terrestrial and marine) are fully protected and a further 41 only partially protected out of 228 KBAs, while the remaining 137 KBAs are not protected at all (Ambal et al. 2012). Even within many of these legally-protected KBAs, management is weak and habitats therefore continue to degrade.

2.2   Project goals and target group

Overall Project Goal (Outcome):
Improved protection and management of Key Biodiversity Areas in the Philippines

Specific project goals (Outputs):
1. Improved management and technical capacities of relevant DENR BMB staff at all levels, including needs-based reorganisation of competencies.
2. Support to improve PA management in existing terrestrial and marine Protected Areas in defined key biodiversity areas (through introduction of improved plans, legal frameworks, financial and monitoring systems)
3. Support to the establishment of additional Protected Areas under innovative conservation management systems (e.g. involving local governments and communities).

4. Support the implementation of an improved knowledge management through DENR BMB and awareness raising for PA management and value of biodiversity conservation.

Target groups:

Forest and coastal communities (including indigenous people) in selected key biodiversity areas, local government staff at all levels (provinces, municipalities and cities) as well as DENR staff at national, regional and provincial levels.

2.3   Proposed measures and approach

The Project hypothesized that protection and management of KBAs could be improved by enhancing the management effectiveness of existing PAs, expanding the area/coverage of protected areas and increasing awareness on biodiversity conservation. The management effectiveness outcomes could be achieved by improving the technical and management capacity of DENR and key partners. Expanded protection of key biodiversity areas could be achieved through innovative management systems at the local level such as identification, delineation and legitimation of local conservation areas (LCAs), piloting of the Integrated Ecosystems Management (IEM) approach to spatial planning and partnership with indigenous peoples for identification, delineation and legitimation of indigenous community conservation areas (ICCAs).

To achieve the desired specific outcomes, the Project implemented work packages/components to deliver the outputs that would be used by various target groups. These include:

- **Component 1 - Improving management and technical capacity of DENR-BMB**: Assess and provide support for organizational development and training needs. Development of needs-based training modules, trainings and provision of expert support in conduct of site-based studies, and learning/experience-sharing workshops.
- **Component 2 – Improving management systems in existing PAs**. This package includes studies on global good practices in PA management, provision of on-site training support, financing for site-based activities, legal assistance in support of the ENIPAS Bill and purposive support on the use of Management Effectiveness Tracking Tool (METT).
- **Component 3 – Establishment of new protected areas**. PAME used two major approaches to establish 100 new PAs: 1). supporting local PA-specific legislation initiatives/ordinances and recognition of indigenous community conservation areas (ICCA) through the ancestral domain sustainable development and protection plans (ADSDPP) in KBAs, and 2). supporting formulation of municipal Comprehensive Land Use Plans using Integrated Ecosystem Management in 9 municipalities in Apayao and Cagayan provinces. Financial support contracts with local government units and with local NGOs supported the establishment of new protected areas (e.g. baseline studies, community consultations), as well as provision of on-site training support, financing for site-based activities, and purposive support on the use of management effectiveness tracking/assessment tools.
- **Component 4 – Improving knowledge management and awareness raising**. The Project's communication strategy was completed in September 2015 and the plan was rolled out beginning January 2016. The plan integrates the production of component-based IEC materials and knowledge products.

3   Results

3.1   Achievement of project goals

With a financial cost of EUR 10 million (including DENR counterpart of EUR 1 million) or at least PHP 500 million, the project boldly set out to improve management effectiveness of 60 national PAs and establish 100 new local PAs. In financial terms, the invested resources would amount to PHP 3.1 million per PA over a period of five years. Despite the dispersion of resources over a very wide area at a time when the implementing partner was undergoing organizational re-structuring, the Project has generally achieved its overall goal of improving the management and protection of key biodiversity areas (KBAs) through enhancement of the management and protection of sites proclaimed under the National Integrated Protected Areas System (NIPAS) and developing new management systems for terrestrial and marine protected areas.

- **Outcome indicator 1**, the inclusion of the designation of protected areas within the national regulation/guideline on land-use planning, has been **fully achieved (100%)**.
- **Outcome indicator 2** to increase management effectiveness of at least 60 protected areas that were existing at the start of the project by at least 30% has also been **fully achieved (100%)**.
- **Outcome indicator 3** to establish 100 new protected areas with at least management effectiveness score of 20 has been **partially achieved (78%)**. Legislative processes to secure legal status of the 45 remaining proposed conservation areas are beyond the control of the project but are underway.
- **Outcome indicator 4** has been **fully achieved (100%).** As of October 2017, 114 sites (42 of PAME 60 and 72 of PAME 100) have shown improvements in protection of species biodiversity in varying degrees such as increased patrols, reduced violations and improved biodiversity.
- The change in public awareness in **Outcome Indicator 5** is difficult to firmly establish as the monitoring was mainly on the supply side of public awareness materials (100% achieved) but there was limited data on the actual change in public awareness **(inadequate data to rate)**.

The project has contributed to the Philippine Development Plan's (PDP) 2011-2016 specific target of increasing area of PAs under effective management, providing support to 1.3 million hectares for existing national terrestrial PAs (65% of PDP's 2-million-hectare target) and 0.3 million hectares for existing national marine PAs (9% of PDP's 3.4-million-hectare target). Meanwhile, the 55 local conservation areas established so far through project support or incentive spans 183,227 hectares, 61% of the PDP's critical habitats 300,000-hectare target in line with the Wildlife Act.

With respect to the UN Convention on Biological Diversity's Aichi Targets of effectively-managing 17% terrestrial/inland water and 10% coastal/marine areas through protected areas, the project has supported 4.6% (out of 17%) terrestrial/inland wetland area and 0.17% (out of 10%) coastal/marine areas through protected areas.

The higher-level impact of management effectiveness – conservation values and economic benefits – will still need time to develop and be observed.

3.2 Quantitative evidence of project achievements

Achievement of Outcome Indicators

Outcome Indicator	Quantitative Achievement
Outcome Indicator 1: By 2015, the experiences gained from the innovative designation and management of terrestrial and marine PAs are included in an overall framework for ecosystem-based spatial planning („ridge-to-reef"spatial planning) across all relevant departments. (Baseline: 0; Source: Comprehensive Land Use Plan (CLUP), national framework of the Housing and Land Use Regulatory Board (HLURB)).	Biodiversity and identification of PAs is in now included in the national regulation/guideline on ecosystem-based enhanced comprehensive land use (spatial) planning (CLUP) for municipalities and cities which was adopted and released by the Housing and Land Use Regulatory Board (HLURB) in 2014-2015. Pilot application of these guidelines in 9 municipalities in Cagayan and Apayo has resulted in the signed CLUP and zoning ordinance of Luna municipality (Apayao Province) which includes the establishment of 4 new protected areas. Several assisted municipalities in Cagayan are in the process of finalizing and legalizing their respective zoning ordinances.
Outcome Indicator 2: By mid 2017, the management effectiveness index of 60 supported existing protected areas in selected Key	Average METT score of 64 PA sites existing at the start of the project (covering approximately 1.3M hectares of terrestrial and 0.3M hectares of marine national PAs) has increased by 46% from 34 in 2013/2014 to 49 by

Outcome Indicator	Quantitative Achievement
Biodiversity Areas is improved by an average of at least 30% compared to the initial situation (Baseline: 34%; Source: Results of Management Effectiveness assessment of the Project).	2017.
Outcome Indicator 3: By mid 2017, at least 100 new Protected Areas have been established through project support while achieving on average a management effectiveness rating of at least 20%. (Baseline: 0; Source: Results of Management Effectiveness assessments).	PAME has provided support that has resulted in the legal establishment of approximately 55 PAs or 183,227 hectares of new conservation areas of various ecosystem types: 105,681 has. terrestrial, 643 has. wetland, 76,903 has. marine, and a handful of cave systems. These 55 new and 45 proposed PAs have on average achieved a management effectiveness score of 27. Since many more proposed PAs are already under municipal council deliberation or provincial land use committee review, it is expected that this Outcome will be fully met in 2018--that is the shortfall of the establishment of the remaining 45 PAs--even without project support.
Outcome Indicator 4: By mid-2017, 70% of the supported established 160 PAs demonstrate an improved protection of species diversity: 112 of the 160 established PAs (i) carry out regular patrols, and / or (ii) register a reduction of violations and / or iii) show increased or constant biodiversity, without any deterioration of the other parameter.	- 114/160 (PAME 60=42, PAME 100=72) demonstrate an improved protection of species biodiversity (any of the 3 sub-indicators without deterioration of the others), specifically: - 98 sites (PAME 60=41, PAME 100=57) have reported increased patrols - 69 sites (PAME 60=26, PAME 100=43) have reported reduced violations - 25 sites (PAME 60=15, PAME 100=10) have reported improved biodiversity status
Outcome Indicator 5. By mid-2017, at least 60% of the supported 160 PAs (i.e. 96 sites) display effective protective measures in a continuous manner and with publicly awareness in relation to the three foundations of sustainability (ecological, economic, and social). Baseline value (6/2016): number of PA in which through the project activities were measured with respect to the ecological pillar (106 PA), the economic pillar (56 PA) and the social pillar (55 PA). Overall 40 PA were active in all three pillars. (Source: Comparative survey of activities in the PAs in relation to the three pillars of sustainability)	- In 2016, 40 (25%) of 160 supported PAs had information, education, communication (IEC) materials exemplifying the three pillars of sustainability - In 2017, 104 (65 %) of 160 PAs have IEC materials exemplifying all three pillars of sustainability - Limited data to determine actual change in public awareness

Achievement of Output Indicators

Output Indicator	Quantitative Achievement
Indicator 1.1: By mid-2017, at least 95% of supported PA man-agement teams confirm having received a needs-based management effectiveness training, of which at least 70% confirm a resulting added value for their daily work (Baseline: 0%; Source: training records (evaluations).	Fully achieved as of October 2015. 108% of PA management teams (173 teams: 66 from PAME 60 and 107 from PAME 100) have participated in at least one training.
	On average, 94% of PA management teams confirmed added value of training to their regular work.
Indicator 1.2: By mid-2017, the clients of DENR BMB and their	On a scale of 1-4, 1 being poorest and 4 being excellent:

Output Indicator		Quantitative Achievement
subordinated agencies confirm receiving improved services for the management of their protected areas (Baseline: On a scale from 1 to 4, the mean initial value for the customer satisfaction for direct clients of the DENR-BMB = 3.4 and for indirect clients of the DENR-BMB like = 3.1).		Level of satisfaction of direct clients of DENR-BMB services (e.g. DENR field offices) increased from 3.45 in 2015 to 3.65 in 2017; Level of satisfaction of indirect clients (e.g. local government units and civil society partners of DENR in the field) increased from 2.91 in 2015 to 3.06 in 2017.
Indicator 2.1: By mid-2017, at least 60 of the existing PAs have set up adequate frameworks for an effective and sustainable PA management. These 4 frameworks include:	(i) planning; PAs have concrete management plan with indicators	58 PAs have adopted management plans and 43 are implementing those plans; however only 6 have adequate indicators.
	(ii) by law; PAs are at least declared as presidential proclamation (PP) or have local ordinances;	At the start of the project, 4 PAs have completed their legal process (i.e. covered by Republic Act) while the remaining 56 PAs were covered by Presidential Proclamations. There was no change in legal status during the duration of the project. The project provided legal support for the Expanded NIPAS Act to declare through Republic Act (finalize the national legislative process) the remaining protected areas. As of January 2018, Bills for the ENIPAS Act have separately passed in both houses of Congress and are awaiting joint (bi-cameral) deliberation and potentially adoption.
	(iii) financing: PAs have financial plan or other financing mechanism;	15 PAs have financial plans
	(iv) Monitoring: Monitoring system with budget as well as identified responsible unit.	10 PAs with monitoring plans
	While not all 60 individual PA management plans have met the standards for planning, financing and monitoring, the project was able to develop a framework (draft Technical Bulletin) on Results-Based Planning, Financing and Monitoring which if adopted and issued by DENR will actually operationalize the desired planning, financial and monitoring standards not just in the 60 PAs but for all 240 national (NIPAS) PAs.	
Indicator 3.1: By mid-2017, at least 100 new terrestrial and marine PA have been established through project support, either under the NIPAS Act or other innovative management systems (Baseline: 0; MOV: local declaration of PAs, ordinances).		55 new protected areas with local ordinances (15 barangay, 40 provincial/municipal/city ordinances) including 4 established through IEM-based municipal zoning ordinance. More than 45 proposed protected areas are being considered by local government (municipal) legislative councils
Indicator 4.1: By mid-2017, the tested project approaches, results and impacts are well documented and disseminated to the scientific world and the public at national, regional and international level following a communication strategy. (Baseline: 0; MOV: Plan of communication, publications, distribution list).		Various knowledge products in http://pame.denr.gov.ph/ National Management Effectiveness and Capacity of Protected Areas 2014 and 2017 editions; Manuals on biodiversity assessment and monitoring (terrestrial, marine, caves) and socio-economic assessment and monitoring; Landscape-based IEM approach for preparting conservation-oriented CLUPs; PAME success stories; Contribution to the 2nd National Report on the State of Protected Areas in the Philippines, proceedings of various Protected Area conferences, etc.; PAME featured/cited 119 times in national print and online media and publications of government agencies and other development organizations.

3.3   Project sustainability

The immediate sustainability of positive project results is good. At the site level, there is a strong commitment among stakeholders exemplified by voluntary compliance to rules and regulations and volunteerism in protection measures. There are also management plans informed by biodiversity and socioeconomic assessments. What sites lack are the human and financial resources to implement the plans.

At the level of the national PA system, there are PA management and biodiversity conservation structures within the DENR at the national and regional levels, clear policies and targets outlined in the subsector outcomes of the Philippine Development Plan (PDP) 2017-2022 and the National/Philippine Biodiversity Strategy and Action Plan (PBSAP) 2015-2028 and support from champions within the international community, national civil society and some progressive policy makers.

The project provided legal support for the Expanded NIPAS Act to declare through Republic Act (finalize the national legislative process) the remaining protected areas. As of January 2018, Bills for the ENIPAS Act have separately passed in both houses of Congress and are awaiting joint (bi-cameral) deliberation and potentially adoption. If passed, this may potentially provide a core staff of dedicated PA personnel per PA in contrast to the current practice of designating a DENR staff with many other tasks as PA Superintendent. Similarly, at the local level, designation of local protected areas through municipal ordinances would generally lead to designation of a management body as well as some annual financial allocation.

The project also put resources to strengthen management bodies of both national and local PAs as they would be decisive in bringing together human and financial resources and overseeing PA implementation, monitoring and evaluation.

The medium and longer term financial sustainability of PA management will depend on other factors beyond what has been established by the project. The estimate for a two-year start-up cost for building up the financial sustainability of PAs is PHP 18.7 million per year (REECS 2014). Subsidies from the national government alone will not be sufficient. PA management bodies will need to generate more revenue from user fees and payment for ecosystems services (PES).

3.4 Other relevant results

Four (4) Technical Bulletins issued by the DENR-BMB prescribing good practices for protected area management teams demonstrate the use of output from PAME support:
a. "Guidelines on Biodiversity Assessment and Monitoring System for Terrestrial Ecosystems" (TB 2016-05);
b. "Guidelines on the Assessment of Coastal and Marine Ecosystems" (TB 2017-05);
c. "Guidelines on Socio-Economic Assessment and Monitoring System in Protected Areas" (TB 2016-06);
d. "Clarifying the Protected Area Management Planning Process and Providing the Annotated Outline for Protected Area Management Plans" (TB 2016-08)
(http://bmb.gov.ph/index.php/mainmenu-policies/technical-bulletin/2016, http://bmb.gov.ph/index.php/mainmenu-policies/technical-bulletin/2017)

Moreover, the project has also provided major inputs and support to two (2) key proposed guidance documents:
e. Draft Technical Bulletin on "Adoption of a Results-Based Protected Area System Planning, Financing and Monitoring Framework for Effective and Efficient Management of Protected Areas".
f. National Protected Area System Master Plan

4 Comparison with Project Proposal

4.1 Timetable

The project started in October 2012 and was originally expected to run until March 2017. The Mid-Term Review (MTR) conducted in October-November 2015 highlighted delays in implementation of component activities to the desired output and outcome indicators. The same report recommended a cost-neutral extension of nine (9) months, among other recommendations. Acting on the recommendations, the National Project Management Committee (PMC) formulated a "Change Offer" that included a no-cost project extension and refinements of some project indicators. In December 2016, the BMUB approved the no-cost project extension until December 31, 2017. The extension was appropriate to meet almost all project targets.

4.2.   Project measures and outputs

The project measures outlined in the original offer and change offer remained unchanged except for major changes in delivery dates and further elaboration of some outcome indicators. In hindsight, given the large scope of the project, more preparation time (3 months more at project initiation phase) and field staff could have been allocated to work more closely with the implementation partner to better embed the project into mainstream DENR partner planning, and closely work with partners in implementation and monitoring.

4.3   Overall cost and financing

The overall cost of the project is 9 million Euros (roughly, PHP 450 million) plus DENR contribution of 1 million Euros. As planned, 2.8 million euros would be allocated to support organizations. This amount comprised the Partnership Fund allocated by the project through financing contracts. The project executed 92 financing contracts with a total project cost of PHP 169.49 million of which the GIZ contribution amounted to PHP 127.4 million.

As of January 2018, total expenditure from the BMUB contribution amounted to Euro 8,759,748.52 plus obligations which would lead to the entire commitment of 9,000,000 Euro. The following project components expended these corresponding percentages: Component 1 (19%), Component 2 (28%), Component 3 (28%), Component 4 (10%), while 15% was used for project management.

As observed during the mid-term review on the last quarter of 2015, most project activities from 2012 until 2015 were delayed due to a number of factors. The delays have influenced the budgeting and expenditure pattern of the project. The peak of spending for Output 1 occurred in 2015 while spending for Output 2 had two peaks, one in 2013 and the next was in 2016. Spending for Output 3 rose gradually and reached a peak in 2016. Spending for Output 4 was the lowest among all components and peaked in 2015. Project management cost fluctuated with a minor peak in 2013, and a major peak in 2016-2017.

Underlying the fluctuations in the spending pattern were some deviations from the planned budget. The actual cost of international and national personnel was 15% and 16% higher, respectively, from the planned budget. Travel cost of national personnel also rose 38% higher than the planned budget. On the other hand, the actual expenditure for financing of partner activities (Local Subsidies and Financial Agreements) was 12% lower than the original budget planned in 2012 due to delays in implementation and consequent inability to use funds by site-level partners.

Based on the Implementation Agreement (IA) signed on 02 August 2013, the DENR counterpart would be equivalent to Euro 1 million in non-cash contributions. This include estimated costs for the following:
- Manager or focal person at national level
- Staff, at least one for each project component
- Office space
- Travel and related expenses of DENR within the Philippines

In actual practice, the DENR provided a central office for the project management team and counterpart focal persons for the Project Management Committee, Technical Working Group and the various project components, office space within the DENR regional offices and corresponding regional staff involved in project management and monitoring including drivers for 9 of the project vehicles, some DENR provincial and community offices involved in field implementation, as well as time, effort and travel to and from project activities. The DENR contributions to the project are not documented and neither were they recorded in work and financial plans (WFPs) for the project. It is likely that the agency may have contributed more than the Euro 1 million committed in the implementation agreement.

LGU and CSO recipients of Local Subsidy (LS) contracts and Financing Agreements (FAs) contributed an estimated PHP 40 million. This amount is mainly based on the budget structure of approved project proposals. In some sites, local contributions would be higher than actually written in financing agreements. In the Negros Occidental coastal wetlands project, for example, German contribution amounted to PHP 4.1 million while local contributions (from the provincial government, municipal governments, academic institutions and other stakeholders) amounted to PHP 60 million.

Community contributions were also substantial if the imputed financial value of time and effort for participation in meetings and volunteering for protection (law enforcement) would be based on the value of daily foregone income multiplied by the number of days spent for project activities.

5   Necessity of the grant

The necessity of BMUB grant is due to the gap between the goals of the government and the financial as well as technical capacity to achieve the goals. The government's 2011-2016 plan to increase the area of terrestrial PAs that are effectively managed from 2.10% of land area to 8.85%, marine PAs from 0.09% of marine area to 0.62%, and critical habitats from 0.0006% to 1.01 percent required tremendous resources and organizational capacity. The resources needed were not mainly towards enhancing management effectiveness but also for transforming contextual conditions such as protection and conservation of biodiversity and ensuring economic benefit flows to affected communities.

The difference between the actual budget reality and the budget requirements was huge. In 2012, the total available financial resources for protected areas was PHP 792.5 million (BMB, 2014). Since the NIPAS Act was passed in 1992, 96% of the PA budget comes from the national government through the DENR budget passed by Congress annually (ibid.). The annual budget for PAs has been increasing – from PHP 513.9 million in 2009 to past the PHP 1 billion mark since 2013 and PHP 1.4 billion by 2014. However, within DENR the actual share of PA budget is no more than 5% of the total budget of the agency.

The other source of revenue for PA management is the Integrated Protected Areas Fund (IPAF). A new law, Republic Act 10629, allows PAMBs to retain 75% of IPAF revenues for its own use. The problem is that the IPAF itself is not generating funds effectively. From 1996 until 2013, the total IPAF revenues was PHP 282.2 million or an annual revenue of PHP 15.7 million which is equivalent to around PHP65,417 per PA (assuming 240 PAs) or only around 1% of DENR's national government allocation.

The problem goes back to management effectiveness and the lack of it. The main sources of IPAF revenues are user fees, fees from Special Use Agreement in Protected Areas (SAPA) and development fees from large resource users. As of 2014, only 44 PAs (18% of total) were collecting user fees, only 31 (13%) were collecting facilities user fees and only 17 PAs were collecting development fees from large users (BMB, 2014).

BMB and REECS, with support from the World Bank, calculated the requirements for sustainable financing of PAs based on the situation of 18 selected PAs which had an average annual budget of PHP 3.1 million. To enhance sustainability in financing, the BMB-REECS estimate was PHP 18.7 million annually for a two-year start-up cost. For each of the 18 PAs, this meant an average financing gap of PHP 15.6 million each year for start-up costs alone.

PAME came into the picture in 2012 with a Euro 9 million offer (roughly, PHP 450 million). On the same year, the national budget for PAs was PHP 792.5 million. The budget requirements for enhancing management effectiveness of 60 NIPAS PAs and establishing 100 new conservation areas would be beyond the capacity of DENR-BMB. The PAME offer would be spread over 160 sites and the rough allocation would be PHP 2.8 million per site. Financially, this was a modest financial offer compared to the PHP 18.5 million annual requirement estimated by BMB and REECS for ensuring sustainable financing of PAs.

6   Conclusions and recommendations

Conclusions

The project generally performed in line with expectations despite constraints in steering, field level planning, monitoring and dispersion of resources over a wide area. Based on the 2017 METT ratings, management effectiveness of supported PAs has significantly improved. The improvements are evidenced by the availability of management frameworks (such as management plans, financing plans and monitoring plans) and protective measures (such as patrols, reduction of violations and improvement and/or maintenance of biodiversity status). Sustaining the positive results and further raising the level of management effectiveness mean implementing the enhanced management plans and securing the necessary technical, financial and human resources for each management body. This would be facilitated by the project-supported PA System Master Plan and the Technical Bulletin on Plan-Finance-Monitoring if and when DENR finally adopts the plan and guidelines.

The expansion of locally-managed protected areas challenges local governments to establish and/or strengthen environment and natural resources management capacity and sharpen their demand for DENR technical support. Conversely, it challenges the DENR to expand its field level outreach. The science-based references to identification, delineation and zoning of conservation areas and critical habitats need to strengthen the specific connections between species and habitat conservation to local economies and livelihoods of communities.

The overall positive results have high chances of sustainability and can feed into the continuing support for the Philippines contributions to global goals on sustainable development and biodiversity conservation, the relevant subsector outcomes outlined in the Philippine Development Plan 2017-2022 and the Philippine Biodiversity Strategy and Action Plan (PBSAP) 2015-2028.

Recommendations

A brief concept note was discussed with BMB for a follow on project which could focus on the well performing PAs and applying and replicating good practices.

The PBSAP 2015-2028 and Chapter 20 of the Philippine Development Plan 2017-2022 re-emphasize sub-sector strategies and outcomes to which PAME has provided significant contributions. In the context of DENR's mandate, medium term priorities in line with the PDP 2017-2022, available resources and potential donor resources, the following are recommended for advancing the gains achieved by the project, completing unfinished business and raising the bar of future achievements:

Type	Lessons Learned	Recommendation
Policy	Need to include: (a) all representative Philippine ecosystems (e.g. caves and wetlands), (b) ecosystem services, (c) local conservation areas, indigenous community conservation areas, and critical habitats.	1. Finalise National PA System Master Plan
Policy	The E-NIPAS was promoted in order to legislate a large number (as a bulk) of pending protected areas by Congress in a shorter time	2. Continue support for the passage of the E-NIPAS Bill
Organizational Development	Field planning and budget allocation are only weakly aligned with national targets and outcomes.	3. Finalize, approve and apply the draft DENR technical bulletin on plan-finance-monitoring
Organizational Development	The constant change of field personnel and partners (e.g. LGU officials) necessitates regular conduct of trainings in basic topics of PA management. Trainees need technical support even after the training to be able to produce quality outputs.	4. Continue implementation of programmatic hands-on capacity development including mentoring until delivery of outputs. Also, involve previous training participants in implementation
Organizational Development	Protected areas do not have enough staff allocated for effective management	5. Follow through on the recommendations of the Organizational Development and Training Needs Assessment Report authorized by the DENR Executive Committee in 2015
Organizational Development	PA records were lodged with individuals and there is no system-wide filing system for PA and LCA records (national and field offices).	6. Improve DENR and local partners reporting system building upon national PA information/database system with attachments (e.g. bio-physical monitoring, socio-economic assessments, management plans, IEC materials, patrol records, etc.) shared DENR-wide.
Organizational Development	All project files placed in BMB server for access by all BMB Divisions and all project products in http://pame.denr.gov.ph	7. Copy appropriate elements from PAME website to BMB website.
Organizational Development	DENR communications is inadequately integrated and harmonized from various national DENR units to the field sites.	8. Revive the use of common/ integrated communication channels (e.g. People's Hour) jointly with all the other DENR units in an integrated manner
Implementation	Pilot-tested the application of the Enhanced Comprehensive Land Use Planning Guidelines with local governments in the Apayao Lowland Forest KBA with 4 PAs established so far through Municipality of Luna's Zoning Ordinance	9. Use the existing training modules and documentation of experience for future Integrated Ecosystem Management/Enhanced Comprehensive Land Use Planning approaches
Implementation	Inter-agency collaboration is essential for effective management of PAs at national and local level	10. Strengthen partnership with various sectors at different levels (e.g. platform for national inter-agency PA System steering and exchange; regional steering structures e.g. Mindanao PAMB network; systematic planning, budgeting and monitoring of

		implementation by PAMB)
Implementation	KBAs are often within IP ancestral domains. Need to strengthen DENR and NCIP cooperation on biodiversity concerns.	11. More emphasis on partnerships with IP and follow-up of DENR-NCIP agreements especially on securing FPIC in all sites
Implementation	A competitive approach of using small grants was effective in identifying highly-committed partners, ownership and counterpart contributions	12. Use small grants competitive approaches in providing technical/financial support to KBAs coupled with the provision of close mentoring
Implementation	Field teams need more guidance in biodiversity and socio-economic assessment and monitoring and PA management planning	13. Apply the existing and mandated tools/good practices: TBs on bio-physical, socio-economic, PA management planning checklist and partner with local technical institutions (e.g. universities)
Implementation	Requiring evidence for METT scores reduced bias and variability in METT scores	14. Apply the existing and mandated tools/good practices: evidence-based METTs
Implementation	METTs were very useful in getting consensus on the situation and management issues needing work	15. Applying the METT will trigger regular completion/updating of PA management plans in order to attract resources
Implementation	Ecosystem services values of protected areas was poorly known and was not used as the basis for generating funds for management.	16. Improve financial sustainability through applying the Integrating Ecosystem Services into Development Planning (ValuES) approach (e.g. ecosystem services-based prioritization of sites)
Implementation	GIS/remote sensing, SMART/Cyber Tracker, and other new technologies are not being maximized to lower cost of management.	17. Improve financial sustainability through applying lower-cost methods (e.g. GIS/remote sensing-based bio-physical and socio-economic surveys, etc.)
Implementation	Resources are limited but there are many opportunities for common objectives.	18. Strengthen cooperation among projects to optimize opportunities for synergies through the assistance of DENR-BMB-FASPS platform, DENR-FASPS, GIZ Green Sector Forum, National Convergence Initiative, and the Philippine Development Forum.
Implementation	Awareness on biodiversity was increased through the Selfie for Biodiversity photo competition, Par El Mar (best MPA awards including MPA networks) and local initiatives using social marketing methods (SM Lite methods developed by Rare and GIZ in ACCCoast)	19. Continue awareness raising and behavior change using the systematic process of the Social Marketing Lite methodology and other successful initiatives
Implementation	The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) has identified the Philippines as a priority partner and has pledged regular support. Other development partners are also keen to support Philippine biodiversity.	20. Develop a PAME 2 proposal based on successful sites and ecosystem-services-based on sustainable livelihood and tourism

Appendix 1: Short Report

The Philippines is one of the 25 biodiversity hotspots worldwide with more than 700 species which the IUCN includes in their Red List of Endangered Species. However, of the 228 marine and terrestrial Key Biodiversity Areas (KBAs), only 50 are under protection and another 41 are only partially protected, while the remaining 137 KBAs have no protection at all. In addition, management needs to be strengthened in most protected KBAs, so the destruction of ecosystems continues unabated in these circumstances.

The aim of the project, Protected Area Management Enhancement in the Philippines (PAME), was to support the Philippine Government in its contribution to the Convention on Biodiversity (CBD) by helping to improve the management of KBAs. Specifically, the project aims to enhance the management of 60 existing protected areas and the establishment of at least 100 new terrestrial and marine protected areas in selected KBAs. The use of terrestrial and marine ecosystems contributes significantly to the income, food and climate security of the population. A reasonable balance between conservation of these resources and their sustainable use is therefore the aim of the project. This is achieved by involving various stakeholders in a joint management of these protected areas. Thus the project also focused on strengthening the technical, organizational and knowledge management capacities of the DENR (Department of Environment and Natural Resources) as well as increasing awareness of the value of biodiversity.

The most important results of the BMUB project, which ran from 2012 to 2017 and implemented by GIZ with DENR were:
(a) The increase in the average METT (Management Effectiveness Tracking Tool) scores of 64 existing protected areas (PA) (covering approximately 1.3M hectares of terrestrial and 0.3M hectares of marine national PAs) from 34 "weak" to 49 "moderate" (49 PA), or an increase of 46% compared to the baseline of 2013.
(b) legal establishment of 55 new PAs or 183,227 hectares of new conservation areas of various ecosystem types: 105,681 has. terrestrial, 643 has. wetland, 76,903 has. marine, and a handful of cave systems. These 55 new as well as 45 proposed PAs have on average achieved a management effectiveness score of 27.

The project has contributed to the Philippine Development Plan's (PDP) 2011-2016 specific target of increasing area of PAs under effective management, providing support to 1.3 million hectares for existing national terrestrial PAs (65% of PDP's 2-million-hectare target) and 0.3 million hectares for existing national marine PAs (9% of PDP's 3.4-million-hectare target). Meanwhile, the 55 local conservation areas established so far through project support or incentive spans 183,227 hectares, or 61% of the PDP's critical habitats 300,000-hectare target in line with the Wildlife Act.

With respect to the UN Convention on Biological Diversity's Aichi Targets of effectively-managing 17% terrestrial/inland water and 10% coastal/marine areas through protected areas, the project has supported 4.6% (out of 17%) terrestrial/inland wetland area and 0.17% (out of 10%) coastal/marine areas through protected areas.

At local level, there is strong stakeholder involvement in the individual protected areas, which is evident through improved compliance with rules and regulations and voluntary work on conservation measures through concrete management plans that address both biodiversity conservation and anticipating socio-economic benefits. More than 17,500 people have been trained to carry out these management plans. However, the financial resources for the implementation of the plans can still be described as incomplete.

At the national level, regulations were worked out in close cooperation with the DENR BMB, which support sustainability of the results achieved. This includes, in particular, the preparation of technical bulletins which enable the partner to use the experience and the developed and tested approaches and materials of the project also in future processes and projects (scaling-up of the identified best practice models).

Appendix 2: Results Monitoring Report

a)   **Project contribution to the International Climate Initiative's support objectives**

The International Climate Initiative (Internationale Klimaschutzinitiative/IKI) is the funding programme of the German government implemented by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) which supports partner countries in implementing climate and biodiversity projects, specifically in the areas of adaptation, mitigation, biodiversity, and REDD+.[1]

Under the biodiversity support area, IKI supports the implementation of Aichi Targets, taking into account conservation and sustainability issues, as well as adaptation and mitigation measures.
PAME contributes to the achievement of biodiversity support areas on the list of IKI targets. These include:

- Measures for the conservation, restoration and sustainable use of ecosystems and critical habitats. This falls within the overall goal of PAME.
- Building and consolidating the capacities of governments and civil society to implement the Aichi Targets.
- Policy advisory services, technology transfer and research partnerships. The PAME contributions include legal support for the passage of the ENIPAS Bill, technical support for the formulation of BMB technical bulletins on biodiversity assessments in terrestrial and marine areas and results-based planning, budgeting and monitoring and financing for site-based action researches such as biodiversity profiling and socioeconomic assessments.
- Developing and implementing national biodiversity strategies and action plans (NBSAPs), specifically, inputs to the formulation of PBSAP 2015-2028.
- Cooperation with local and indigenous communities in order to conserve and restore ecosystems, specifically through component 3 of the project which is the establishment of new conservation areas through innovative management systems that involve cooperation with local government units and indigenous peoples.

b)   **Major results of the Project (including ancillary results and lessons learned)**

Topping the hierarchy of project results are two key indicators around the overall goal of enhancing management effectiveness and expanding conservation areas under protection: (a) the increase in average METT score of existing PAs from poor (34) to moderate (49) or a 46% increase from the 2013 baseline; and, (b) the 183,227 hectares of additional conservation areas (55 sites) covered by barangay, municipal and city ordinances.

Corollary to these results are the following:
- Integration of a biodiversity section in Volume II of the Enhanced CLUP Guidelines of the HLURB.
- Perception (based on client satisfaction survey) that DENR-BMB services have improved. On a scale of 1-4, 1 being poorest and 4 being excellent, the level of satisfaction of direct clients has improved from 3.45 to 3.6 (very good) and that of indirect clients from 2.91 to 3.06 (or good).
- PA management teams have undertaken trainings and 173 (13 more than the 160 PAs covered by the project) have undertaken at least one training module.
- At least 50 (of 60 existing PAs supported by the project) have adopted their management plans with 43 already implementing the plan. There are significant shortfalls in the quality of the plans. Only 15 have financial plans and only 10 have monitoring plans.
- PAs are using public awareness materials that exemplify the ecological, social and economic pillars of sustainability. Based on a 2017 IEC assessment report of the project, the proportion of PAs with public awareness materials exemplifying all three pillars of sustainability increased from 40/160 (25%) in 2016 to 104/200 (57%) by 2017.
- Protection of species biodiversity has also improved. 96 sites (65.7%) have increased patrols, 79 sites (54.1%) have reported reduced violations and 28 sites (19%) have reported improved

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[1] https://www.international-climate-initiative.com/en/issues/biological-diversity/

biodiversity; and, 115 other sites (78.7%) have reported maintained biodiversity. Overall, 114 sites show at least 1 positive indicators of increased patrols, reduced violations or improved biodiversity without any deterioration in the other parameters.

Ancillary Results

At least ancillary results are most notable: **one**, media exposure as an outreach dimension of public communication; and, **two**, policy outputs.

As ancillary result of awareness raising, the IEC initiatives of the project reached out to various media platforms at least three platforms were monitored by the project, namely: (a) national print and online media; (b) publications of government agencies; and, (c) publications of other development organizations. Overall, PAME had 119 exposures (77 through national print and online media, 28 in news and features of government agencies and 14 news and features of other development organizations).

As ancillary result to improving the management ang technical capacity of DENR-BMB, the project – through the TWG – provided policy support to the BMB in the formulation of technical guidelines. The project footprint can be found in six (6) technical bulletins formulated in 2016 and 2017 (one of which is still for final approval).

Lessons Learned

The project selected around 15 success stories from field implementation that can add on to the knowledge base of biodiversity conservation and protection. With appropriate methodology for deriving lessons, answering the causal and influential factors of success and how they were derived could transform implicit knowledge to explicit knowledge.

The following have great potentials for learning:
- Catanduanes: the use of composite teams with clear allocation of tasks and the use of locally available materials for IEC production.
- Palaui: livelihood incentives and benefit sharing schemes between boat owners, tourist guides and handicraft producers; and, LGU-based collection of user fees that can be further developed into an efficient mechanism for IPAF generation; and,
- Cabusao Wetland: community management of land use conflicts within the identified critical habitat.

On the other hand, there are experiences of shortfalls and failures that are also good materials for lesson learning. Among others, these include:
- Allah Valley Protected Landscape (AVPL): the non-involvement of the LGU in Lake Sebu and ancestral domain holders, who have legitimate possession of the headwaters of the AVPL, in the implementation of the FA contracted to the Tribal Leaders Development Foundation Inc. (TLDFI).
- Sarangani Bay Protected Seascape (SBPS): the value of examining why the FA signed by the Dean of the College of Fisheries of the Mindanao State University (MSU) – General Santos was not actually implemented by the College he represented and neither does he and the college have any memory of the project.
- Mt. Latian Complex. The LS granted to the Provincial Government of Sarangani had little chances of fruitful completion because the Mt. Latian Complex is shared with the province of Davao del Sur, which has, in fact, the largest portion of the complex. The development of the LCA should necessarily involve Davao del Sur.
- FA and LS contracts that could not be completed owing to varying procurement rules and procedures of GIZ and that of local governments and NGOs recipients. The challenge is how GIZ rules could be sensitized to the rules and procedures governing contracted parties.

c) Implementation: adherence to plan and budget

The original planned duration of the project was October 2012 until March 2017. The delay in the signing of the implementation agreement and other factors such as scarcity of staff (relative to the

scope of the project) and structural changes within the DENR impacted on planning and budgeting. As of mid-term (2015), most project components were still not positioned to deliver the expected targets. This led to an adjustment – a change offer and extension of the project duration until December 2017.

Planning

Project implementation is guided by Project Plan of Operations (POP). Data from the PAME monitoring database indicates availability of multi-year POPs updated annually. Owing to structural changes within DENR, attrition and movement of staff and absence of Special Orders the regional implementing structures could not be formally established, except in Region 2. Correspondingly, the POPs were not translated into regional plan of operations and neither did DENR formulated its own work and financial plans (WFPs) for PAME.

Other than activities planned and initiated by project management in coordination with BMB, most field activities were guided by agreed outputs outlined in FAs, LS and DS contracts. Activity plans at the regional level were largely contained in the financing agreements.

Budgeting and Spending

The overall cost of the project is 9 million Euros (roughly, PHP 450 million) plus DENR contribution of 1 million Euros. As planned, 2.8 million euros would be allocated to support organizations. This amount comprised the Partnership Fund allocated by the project through financing contracts. Data as of August 2017 indicates that GIZ had executed 92 financing contracts with a total project cost of PHP 169.49 million of which the GIZ contribution amounted to PHP 127.4 million.

As observed during the mid-term review on the last quarter of 2015, most project activities from 2012 until 2015 were delayed due to a number of factors. The delays have influenced the budgeting and expenditure pattern of the project. The peak of spending for Output 1 occurred in 2015 while spending for Output 2 had two peaks, one in 2013 and the next was in 2016. Spending for Output 3 rose gradually and reached a peak in 2016. Spending for Output 4 was low, in fact the lowest among all budget lines and took a peak in 2015. Project management cost fluctuated with a minor peak in 2013, and a major peak in 2016-2017.

Underlying the fluctuations in the spending pattern were some deviations from the planned budget. The actual expenditures international and national personnel were 15% and 16% higher, respectively, from the planned budget. Travel cost of national personnel also rose 38% higher than the planned budget. On the other hand, the actual expenditure for financing of partner activities (LS and FA) was 12% lower than the planned budget leaving an unused fund of Euro 137,730.

d) **Sustainability**

The project has a sustainability rating of 2.38. The immediate sustainability of positive project results is good. At the site level, there is a strong commitment among stakeholders exemplified by voluntary compliance to rules and regulations and volunteerism in protection measures. There are also management plans informed by biodiversity and socioeconomic assessments. What sites lack are the financial resources to implement the plans.

At the level of the national PA system, there are existing laws and policies. The project provided legal support for the Expanded NIPAS Act to declare through Republic Act (finalize the national legislative process) the remaining protected areas. As of January 2018, Bills for the ENIPAS Act have separately passed in both houses of Congress and are awaiting joint (bi-cameral) deliberation and potentially adoption. If passed, >90 PAs will have will have a more stable basis for their staffing and budgets. At the local level, the 55 LCAs covered with local ordinances will form part of annual investment plans (AIPs) of LGUs once the ordinances have been reviewed and finally passed.

There are also PA management and biodiversity conservation structures within the DENR at the national and regional levels, clear policies and guideposts outlined in the subsector outcomes of the PDP 2017-2022 and the Philippine Biodiversity Strategy and Action Plan (PBSAP) 2015-2028 and

support from champions within the international donor community, international and national civil society and some progressive policy makers.

The medium and longer term financial sustainability of PA management will depend on other factors beyond what has been established by the project. The BMB-REECS estimate for a two-year start-up cost for building up the financial sustainability of PAs is PHP 18.7 million per year (REECS 2014). Five-year PA management plans supported by the project, like the 2017-2022 budget plan of the Batanes Protected Landscape and Seascape (BPLS) requires an even larger amount of PHP 28.4 million per year or PHP 142 million for 5 years. Subsidies from the national government alone will not be sufficient. PA management bodies will be better off if management plans seriously address revenue generation from user fees and payment for ecosystems services (PES).

e) Replicability, visibility and multiplier effects

Replicating a project with such a wide scope might be difficult. One of the earliest PA and biodiversity projects implemented after the NIPAS Act was enacted was the 1994-2002 GEF-WB US $20 million Conservation of Protected Area Priority Project (CPAPP) implemented through the NGOs for Integrated Protected Areas Network Inc. (NIPAS Inc.) and DENR. Even with such a huge budget, the project covered only 10 priority sites at roughly PHP 100 million per site. At end of the project, the evaluation team concluded that the outcome was unsatisfactory, the institutional development impact modest and sustainability was unlikely.

While the PAME design (with wide coverage) might be difficult to replicate, most of its results are replicable. In fact, most of the tested technical inputs are ensured of sustainability because they already form part of the institutionalized tools and guidelines. These include:

- Integration of biodiversity in spatial planning. All municipal and city LGUs are mandated to formulate spatial plans according to the eCLUP.
- Guidelines for biodiversity assessments in terrestrial and marine areas, socioeconomic assessment and site planning are already institutionalized within BMB and potentially results-based planning, budgeting and monitoring as well as a National Protected Area System Master Plan will be as well.
- The use of the enhanced METT and the new baseline (in 2017) will remain in use.
- The training modules are easily replicable and contents transferrable by those who have graduated from the trainings.
- The legal approach to development of local conservation areas, combined with technical procedures, is highly replicable. LGUs have power to create local ordinances and indigenous peoples are mandated to formulate ADSDPPs for their ancestral domains.

Visibility

The project has high visibility at the site level and in the offices of local governments and field offices of DENR. Communications innovations – such as the competitive 'Selfie for Biodiversity' – production and dissemination of IEC materials media projection enhanced the visibility of the project.

Multiplier Effects

The actual multiplier effects of the project have not been captured in monitoring data. Even the trainings outside those initiated by the project are not accounted for in the monitoring database. The wider multiplication of the results will emerge from the utilization of the BMB technical bulletins, use of the enhanced METT for assessing management effectiveness, implementation of the PA management plans and formulation of local land use plans according to the eCLUP guidelines.

f) Innovations

At least three clusters of innovations are notable:

- Establishment of new conservation areas through a competitive approach (via the Partnership Fund) and the legal approach such as invoking the power of LGUs to create local ordinances,

integration of biodiversity in the eCLUP and testing of integration of the IEM framework in actual formulation of a municipal land use plan;

- The 'Selfie for Biodiversity' technique in promoting biodiversity conservation and popularization of protected areas; and,
- Enhancement of the METT for better appreciation of how PA management effectiveness is measured, including cross-referencing with the MEAT ratings used in marine protected areas.

g) Integration into national strategies and international cooperation and synergies with other projects and sectors

Project implementation straddled two national medium-term development plans (PDP 2011-2016 and PDP 2017-2022). In both, project goals and results have been integrated into the sector outcomes on natural resource management and sub-sector outcomes and strategies on protected areas and biodiversity conservation. In the PDP 2011-2016, PAME results contributed to the subsector outcomes on improving PA management and expansion of protected areas. The results have been included in the 2015 and 2016 Official Development Assistance (ODA) report submitted to the National Economic Development Authority (NEDA). In the PDP 2017-2022, PAME outputs contribute to the targeted outcomes on ecological integrity and clean and healthy environment (Chapter 10, PDP 2017-2022). PAME footprints are also found in the 2016 technical bulletins of the BMB and the 2015-2028 Philippine Biodiversity Strategy and Action Plan (PBSAP).

The project established synergies with other international cooperation programs such as the USAID-B+WISER and GEF-UNDP NewCAPP. Within the German development cooperation programs in the Philippines, it established synergies with related projects through the Green Sector Forum (GSF). There are four GIZ GSF projects providing support to DENR in the fields of biodiversity, monitoring and PA management, namely: (a) PAME - focus on NIPAS sites and LCAs; (b) ForClim II Critical Habitat Areas (OECM: Other area-based Effective Conservation Measures); (c) IP4Biodiv module of COSERAM focused on Indigenous People/Community Conserved Areas; and, (d) REDD+ that ended in 2016. Most notable synergy actions include the following:

- in 2013, cooperation with Support to the Climate Change Commission in the Implementation of the National Framework Strategy on Climate Change and National Climate Change Action Plan (SupportCCC I) in the conduct of SIMPLE trainings in Samar (Puginier, 2013).
- In 2014, the collaboration with COSERAM, on shared learnings on FPIC and CADT processes vis-à-vis biodiversity conservation; with ENRD, on the complementation of SCORE with the Project's capacity building measures with Protected landscape and seascape partners, and trainings on the use of Provincial GIS in Samar; and with ProGED, on ecotourism and PA management in the Taklong Island Protected Area (GSF Coastal Development Working Group, 2014). A planned joint support on the Climate Change Commission's Ecotown was also planned between the Project and SupportCCC I (GSF Coastal Development Working Group, 2014).
- In 2015, cooperation with ForCLIM2, COSERAM IP4Biodiv, and REDD+ projects on the enhancement of biodiversity monitoring system (BMS) of the DENR BMB, where the Project contributed capacity development for biodiversity and monitoring to 50 teams (Schmitt, 2015).

The Project also collaborated with the German Development Institute and DENR BMB on the development of the research work on Cash for Mangrove Reforestation Program in Mindoro and Palawan and with USAID-ECOFISH on Cash for Work: Closed Season for Commercial Fisheries in Batangas (GSF Coastal Development Working Group, 2015).

h) Ecological impact and optimization, vulnerability of the target region (with reference to adaptation projects) and CO2 abatement potential for mitigation projects.

There is no sufficient data to assess the CO_2 abatement potential of the project sites. Most terrestrial PAs are in forestlands that have potential for CO_2 emissions reduction, but the potential could not be quantified. Another BUMB-funded GIZ project, the GIZ REDD+ projects implemented in Southern Leyte, Davao Oriental, Albay and Eastern Samar produced data that quantified net emissions reduction and available carbon stocks in the said provinces.

Most marine PAs on the western and eastern seaboards of the archipelago are exposed to typhoons, sea level rise and storm surges. Even interior islands, like Siquijor, are vulnerable to typhoons. The coral reefs of Siquijor had been damaged by Typhoon Sendong in 2010.

Other terrestrial PAs are vulnerable to other stresses like the presence of communist insurgents, Moro rebels and other armed groups. Land tenure insecurity and conflicts in around the PAs feed into the issues influencing rebellion and insurgency.

i) Equity contributions and third-party funding.

Based on the Implementation Agreement (IA) signed on 02 August 2013, the DENR counterpart would be equivalent to Euro 1 million in non-cash contributions. This include imputed costs for the following:

- Manager or focal person at national level.
- Staff, at least one for each project component.
- Office space
- Travel and related expenses within the Philippines.

The project monitoring system does not include accounting of DENR contributions. During implementation, the DENR provided a central office for the project management team and counterpart staff for the PMC and TWG, office space within the DENR regional offices and corresponding staff inclusive of time, effort and costs of participation in project activities. The DENR contributions to the project are not documented and neither were they recorded in work and financial plans (WFPs) for the project. It is likely that the agency may have contributed more than the Euro 1 million committed in the implementation agreement.

LGU and CSO recipients of Local Subsidy (LS) contracts and Financing Agreements (FAs) contributed a total of PHP 40 million. This amount is mainly based on the budget structure of approved project proposals. In some sites, local contributions would be higher than actually written in financing agreements. In NOCWAMA, for example, GIZ contribution amounted to PHP 4.1 million while local contributions (from the provincial government, municipal governments, academic institutions and other stakeholders) amounted to PHP 60 million.

Community contributions were also substantial if the imputed financial value of time and effort for participation in meetings and volunteering for protection (law enforcement) would be based on the value of daily foregone income multiplied by the number of days spent for project activities.

_____	_____
Place, Date	Legally binding signature and stamp
	[Name of authorised representative]