SIGNATURE PAGE

Country: Philippines

UNDAF Outcome(s)/Indicator(s): By 2009, increased capacity of the stakeholders to protect/enhance the quality of the environment and sustainably manage natural resources

(CP outcomes): Key stakeholders are better able to manage environment and natural resources, develop and use sustainable energy sources, cope with the impacts of environmental emergencies and maintain sustainable development
Number of inconsistent environment and natural resources policies harmonized/ standardized

Expected Outcome(s)/Indicator(s): **Outcome 1**: PA system of the Philippines has been expanded under new and diverse management regimes (ancestral domain, local government and community managed areas) to cover an additional 400,000 hectares of Key Biodiversity Areas (KBAs) and with enhanced potential for further expansion ; **Outcome 2**: Improved conservation effectiveness through enhanced systemic, institutional and individual capacities ; **Outcome 3**: Enhanced sustainability of the terrestrial PA system.

Expected Output(s)/Indicator(s): Output 1.1 - Modified PA regulations to recognize new conservation areas as part of the national PA system; Output 1.2 Nine 'new-type' PAs covering 400,000 ha are established within KBAs; Output 1.3 Program for expansion of the national PA system Output 2.1 - Increased PAWB and DENR Regional Office capacities to provide technical assistance to PAMBs and other stakeholders in managing existing PAs and new conservation areas; Output 2.2 - Negotiated agreements with indigenous groups and other local stakeholders at 9 sites resulting in management plans that incorporate BD conservation goals and sustainable management of natural resources; Output 2.3 - Enhanced management capacities in nine 'new type' PAs covering 400,000 ha; Output 2.4 Revised operational manual for national PAs and new manuals for 'new-type' conservation areas; Output 2.5 Common protected area M&E frameworks and protocols; Output 2.6 Increased support from key stakeholders and decision-makers for the management and conservation of the national PA system, including new conservation areas Output 3.1 - Economic valuation studies of three new conservation areas; Output 3.2 – Improved national-level sustainable financing tools and capacities; Output 3.3 – Site-level tools for resource mobilization developed at new CAs; Output 3.4 – Site-level tools for business planning and cost-effective management developed at new CAs; Output 3.5 – Lesson learning and replication of sustainable finance tools among pilot sites

Implementing partner: Department of Environment and Natural Resources – Protected Areas and Wildlife Bureau (DENR-PAWB)

Other Partners: Natl Commission on Indigenous Peoples, Foundation for the Philippines Environment, Conservation International, Local Government Units, Haribon Foundation, IP Groups, Philippine Biodiversity Foundation, Inc.

Programme Period: 2009-2014
Programme Component: Biodiversity, SO1
Project Title: Expanding and Diversifying the National System of Protected Areas in the Philippines
Project ID: 00071662
Project Duration: 5 years
Management Arrangement: NIM

Total budget:	**US $ 9,992,478**
Allocated resources (cash)	
• GEF	US $ 3,500,000
• Government	US $ 1,233,354
• NGOs and communities	US $ 1,313,092
In kind contributions	US $ 3,946,032
▪ Government	US $ 1,507,433
▪ NGOs and Communities	US $ 2,438,599

		Signature	Date
Agreed by (Government-NEDA):	**Rolando G. Tungpalan** Deputy Director General		8 Feb 2010
Agreed by (Implementing partner/ DENR-PAWB):	**Eleazar P. Quinto** OIC, Secretary		
Agreed by (UNDP):	**Renaud Meyer** Country Director		08 Feb 2010

UNDP Project Document
Government of the Philippines
United Nations Development Programme

PIMS no. 3530
Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Brief description – The importance of the Philippines in the world terrestrial biodiversity map rests in it being one of the seventeen megadiverse countries which host 70-80% of the world's life forms. Because of its size, the country is regarded to harbor more diversity of life than any other country on earth on a per hectare basis[1]. It is one the only two countries in the world – Madagascar being the other, which are both a megadiversity country and a biodiversity hotspot. The country has more than 52,177 described species[1], of which more than half are found nowhere else on earth. Of these, 491 threatened species already are listed in the 2004 IUCN Red List[1]. Of more than 1,130 terrestrial wildlife species recorded for the Philippines, almost half (49%) are endemic; 157 are threatened, and 128 are threatened endemic species. The country is ranked as 5th in the world in terms of the number of plant species. The archipelago is also now recognized as one of the most important centers of amphibian and reptile diversity in Southeast Asia. An estimated total of 359 species of amphibians (101 species) and reptiles (258 species) are now known in the country. Of the 359 species, 246 (68%) are endemic – currently the highest known percentage endemism among vertebrates. The Philippines is home to 576 species of birds, of which 395 species are resident breeders. Of the resident breeders, 195 species are endemic, while 126 are restricted range species (range size estimated to be < 50,000 sq. km.). This record makes the Philippines the 4th country in the world terms of bird endemism.[1] About 45 species are either extinct in the wild, critical, or endangered. Forty of the 45 are endemic birds, making the Philippines the number one country in the world in terms of threatened endemic species of bird. The archipelago is also home to one of the greatest concentration of terrestrial mammalian diversity in the world and the greatest concentration of endemic mammals in the world on a per unit basis. The most recent inventory of land living mammals includes 174 indigenous species, 111 of which are endemic, or about 64%. Despite this, the mammal assemblage in the Philippines is the 8th most threatened in the world, with 50 threatened species. The diversity and endemism is believed to be much more than what is reported due to lack of information and knowledge on many of the country's KBAs. The country has one of the highest discoveries in the world, with 36 new species discovered in the last 10 years.

The major threats facing the Philippines' terrestrial areas include: habitat degradation and land coversion due to logging and increasing population; overharvesting of resources; minings threats and infrastructure development. The country's National Integrated Protected Areas System (NIPAS) has been the main government response to place importaant biodiversity areas under effective management. To date, a total of 2.6 million hectares representing some 117 PAs within the identified key biodiversity areas (KBAs) are under legal protection. However, the implementation of NIPASs has certain weaknesses,. Key capacity constraints include: (i) biogeographical representativeness; (ii) limited capacity for PA management; and (iii) limited financial sustainability.

The expansion of the national PA system to recognize new conservaation areas such as those managed by IPs, local communities and local government units is seen as an opportunity to accelerate the coverage of the existing system, before the important KBAs are overtaken by these threats. In partnership with key organizations, local communities and other stakeholders, the Project will directly address key barriers and establish solid foundations for accelerated expansion of the terrestrial system in the Philippines, supported by strong management capacitiees, and sustainable financing. Three major outcomes are envisaged out of these partnerships: **Outcome 1**: PA system of the Philippines has been expanded under new and diverse management regimes (ancestral domain, local government and community managed areas) to cover an additional 400,000 ha. of Key Biodiversity Areas (KBAs) and with enhanced potential for further expansion; **Outcome 2**: Improved conservation effectiveness through enhanced systemic, institutional and individual capacities; and **Outcome 3**: Enhanced financial sustainability of the terrestrial PA system.

Table of Contents

Section **Page**

List of Tables

List of Acronyms and Abbreviations

ADB	Asian Development Bank
ADSDPP	Ancestral domain sustainable development and protection plan
APR	Annual Project Review
ARMM	Autonomous Region of Muslim Mindanao
ASEAN	Association of Southeast Asian nations
AWP	Annual work plan
BBNP	Balbalasang Balbalan National Park
BD	Biodiversity
BMS	Biodiversity monitoring system
CAs	Conservation areas
CADT	Certificate of ancestral domain title
CAGG	Cordillera Alliance for Good Governance
CALT	Certificate of ancestral land title
CBD	Convention on Biodiversity
CBFMA	Community based forest management agreement
CCAs	Community conserved areas
CCBCFI	Central Cebu Biodiversity Foundation, Incorporated
CDR	Combined delivery report
CEO	Chief Executive Officer
CI	Conservation International
CO	Country office
DAO	Department Administrative Order
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
EBAs	Endemic bird areas
ECAN	Environmentally critical areas network
EDNSTPAP	Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines
ENR	Environment and natural resources
EU	European Union
FASPO	Foreign Assisted and Special Projects Office
FFI	Flora and Fauna International
FPE	Foundation for Philippine Environment
FPIC	Free and Prior Informed Consent
FTAAs	Financial and Technical Assistance Agreements
GAA	General Appropriations Act
GEF	Global Environmental Facility
GTZ	German Agency for Technical Cooperation
HQ	Headquarters
IBAs	Important bird areas
IC	International Consultants
IFMA	Industrial Forest Management Agreement
IPs	Indigenous peoples
IPAF	Integrated Protected Area Fund
IPRA	Indigenous Peoples Rights Act
IRR	Implementing Rules and Regulations
IUCN	International Union for the Conservation of Nature
IW	Inception Workshop
KBAs	Key biodiversity areas
LCAs	Local conservation areas

LGUs	Local government units
LIPs	Local implementing partners
LSCs	Local Site Committees
M and E	Monitoring and evaluation
MOAs	Memorandum of Agreements
MDG	Millennium development goals
METT	Management effectiveness tracking tool
MPSA	Mineral production sharing agreement
NC	National Consultants
NCIP	National Commission on Indigenous Peoples
NEDA	National Economic and Development Authority
NGOs	Non government organizations
NIPAS	National Integrated Protected Areas System
PA	Protected areas
PalCSD	Palawan Council for Sustainable Development
PAMB	Protected Area Management Board
PAWB	Protected Areas and Wildlife Bureau
PAWCZS	Protected Areas, Wildlife and Coastal Zone Sector
PB	Project Board
PBCFI	Philippine Biodiversity Conservation Foundation, Inc.
PBCPSP	Philippine Biodiversity Conservation Priority Setting Project
PIR	Project Implementation Review
PolBCFI	Polilio Biodiversity Conservation Foundation
PES	Payments for environmental services
PMU	Project Management Unit
POWPA	Program of Work on Protected Areas
PTFCFI	Philippine Tropical Forest Conservation Foundation, Inc.
RAF	Resource allocation framework
RCU	Regional Coordinating Unit
ROAR	Results Oriented Annual Report
RUPES	Rewarding Upland Farmers for Environmental Services
SAs	Secondary areas
SEP	Strategic Environmental Plan
SINP	Samar Island Natural Park
SRF	Strategic results framework
TPR	Tripartite review
TTR	Terminal tripartite review
IUCN	International Union for the Conservation of Nature
UNDP	United Nations Development Programme
WB	World Bank
WCSP	Wildlife Conservation Society of the Philippines
WWF	World Wildlife Fund
ZMR	Zambales Mountain Range

SECTION I: Elaboration of the Narrative

PART I: Situation Analysis

1.1 Context and Global Significance

1. The Philippines lies in the western Pacific Ocean and is geographically part of Southeast Asia. This region occupies a mere three percent of the earth's total surface, yet is home to 20 percent of all known species of plants and animals, making it critically important to global environmental sustainability. Southeast Asia is one of the biggest biodiversity pools in the world. It includes three megadiverse countries, several biogeographical units (e.g., Malesia, Wallacea, Sundaland, Indo-Burma, and the Central Indo-Pacific) and numerous centers of concentration of restricted range bird, plant and insect species.

2. The Philippines is the world's second largest archipelago, with 7,100 islands covering an estimated 30 million ha. It is bounded on the north by the Bashi Channel, on the east by the Pacific Ocean, on the south by the Celebes Sea, and on the west by the China Sea. The country's complex geological history and long periods of isolation from the rest of the world have produced varied landforms, water bodies, and climatic conditions. These in turn have contributed to the wide array of soil, temperature, moisture, and weather regimes; combined with formerly extensive areas of rainforest and an isotropical location, these factors have given rise to high species diversity and endemism.

3. The importance of the Philippines in the world terrestrial biodiversity map rests in it being one of seventeen megadiverse countries, which together host 70-80% of the world's life forms. The Philippines is believed to harbor more diversity of life than any other country on earth on a per hectare basis.[1] Its importance is also highlighted by the fact that it is one of two countries in the world – Madagascar being the other – which is both a megadiverse country and a biodiversity hotspot.[2]

4. The importance of the Philippines' biodiversity can be measured not only in terms of its economic value but also in terms of how it underpins the lives of forest and marine dependent households. Biodiversity provides vital ecological services such as water, flood control and climate regulation which are important in regulating the natural processes. Important sectors such as agriculture, industries, and fisheries depend on the integrity of key ecosystems harboring the country's rich biological resources. Valuation studies in Samar Island Natural Park estimate the value of biodiversity in the park at around $US43 billion over 25 years, which is more than double the estimated potential earnings for bauxite for the same period.[3] More importantly, about 17 million upland households, including indigenous communities, are dependent on the values of the country's terrestrial biodiversity for their existence. These include cultural, spiritual, economic, and social values associated with the resources and landscapes harboring these resources.

5. The country has more than 52,177 described species,[4] of which more than half are found nowhere else on earth. Of these, 491 threatened species are listed in the 2004 IUCN Red List.[5] Of more than 1,130 terrestrial wildlife species recorded for the Philippines, 555—or almost half—are endemic, 157 are threatened, and 128 are threatened endemic species.

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[1] Heaney, as cited in Ong. P.S., L. E. Afuang, and R. G. Rosell Ambal (eds.) 2002. *Philippine Biodiversity Conservation Priorities: A Second Iteration of the National Biodiversity Strategy and Action Plan.* Department of Environment and Natural Resources-Protected Areas and Wildlife Bureau, Conservation International Philippines, Biodiversity Conservation Program-University of the Philippines Center for Integrative and Development Studies, and Foundation for the Philippine Environment, Quezon City, Philippines.

[2] Ong. P.S., L. E. Afuang, and R. G. Rosell Ambal (eds.) 2002. *Philippine Biodiversity Conservation Priorities: A Second Iteration of the National Biodiversity Strategy and Action Plan.* Department of Environment and Natural Resources-Protected Areas and Wildlife Bureau, Conservation International Philippines, Biodiversity Conservation Program-University of the Philippines Center for Integrative and Development Studies, and Foundation for the Philippine Environment, Quezon City, Philippines.

[3] http://www.haribon.org.ph/index.php?smid=22

[4] DENR, 1997. *National Biodiversity Strategy and Action Plan/Philippine Biodiversity: An Assessment and Action Plan.* Bookmark, Inc. Makati, Philippines.

[5] Conservation International, Philippines. Department of Environment and Natural resources – Protected Areas and Wildlife Bureau and Haribon Foundation. 2006. Priority Sites for Conservation in the Philippines: Key Biodiversity Areas. Quezon City, Philippines, 24pp.

6. Floral diversity is just as extraordinary, with between 10,000 and 14,000 species of vascular and non-vascular plants, more than half of which are endemic to the Philippines.[6] Altogether, the country is host to some 5% of the world's species of flora and is ranked 5th in the world in terms of number of plant species.[7] Estimates of plant endemism in the Philippines range from 45% to 60%. Species endemism may be as high as 100% in families represented by a single or few genera, such as in Rafflesiaceae (10 species),[8] and Daphniphylaceae (3 species).[9] Among flowering plants, certain families and genes reach 70% to 80% endemism, especially those confined to primary forests.[10]

7. The Philippine archipelago is recognized as one of the most important centers of amphibian and reptile diversity in Southeast Asia. An estimated 359 species of amphibians (101 species) and reptiles (258 species) are now known in the country. Of the 359 species, 246 (68%) are endemic – currently the highest known percentage endemism among vertebrates in Southeast Asia. The 2004 IUCN Red List includes 32 threatened amphibians and reptiles in the Philippines, and another ten species that are under lower threat categories.

8. The rate of discovery of new species is likewise one of the highest in the world: a total of 36 new species (20 frogs, eight lizards, and eight snakes), or roughly 10% of the total herpetofauna, has been discovered in the last ten years.[11] This suggests that new species remain to be discovered as studies are undertaken at more sites. The general lack of data on the ecology, distribution, population trends, and abundance of more than 85% of the amphibian fauna and more than 90% of the reptilian fauna impedes a more accurate assessment of their conservation status. Large-scale destruction of the lowland forest, which is now almost completely gone in many parts of the Philippines, suggests that a significant part of the amphibian populations may have been lost before it could be described.

9. The Philippines is home to an astounding 576 species of birds, of which 395 species are resident breeders. Of the resident breeders, 195 species are endemic, while 126 are restricted range species (range size estimated to be <50,000 km^2). This makes the Philippines the 4th leading country in the world in terms of bird endemism.[12] About 45 species are either extinct in the wild, critical, or endangered. Forty of the 45 are endemic birds, making the Philippines the number one country in the world in terms of threatened endemic species of birds.[13]

10. Given its size, the country supports a remarkable number of globally threatened bird species, and virtually all of its territory is covered by either Endemic Bird areas (EBAs)[14] or Secondary Areas (SA).[15] The Philippines covers seven EBAs and three SAs,[16] with each EBA containing unique concentrations of restricted range bird species (many are globally threatened) and a number of more widely threatened bird species (many are endemics). Almost all Important Bird Areas (IBAs)[17] in the Philippines are believed to support populations of threatened species, and most of them also support the restricted range species that are characteristic of an EBA or SA. Of the 117 IBAs in the Philippines, only 34 are considered relatively well known ornithologically; 20 are poorly known and the information on the remainder is incomplete or lacking.

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[6] Merrill, 1923-26, as cited in Ong, et.al.
[7] DENR-PAWB, UNDP, ASEAN Center for Biodiversity and Ateneo School of Governance. March 2009. *Assessing Progress Towards the 2010 Biodiversity Target: The 4th National Report to the Convention on Biological Diversity.*
[8] Meijer, 1997, as cited in Ong, et.al. Recently, 10 species of Raflesia in the Philippines were described by Barcelona J., P. Pelser, D. Balete, and Leonardo Co. 2009. *Taxonomy, Ecology, and Conservation Status of Philippine Rafflesia*, (in press) in Blumea, 2009.
[9] Huang, 1997, as cited in Ong, et.al.
[10] Merrill, 1923-26, as cited in Ong, et.al.
[11] Ong, et. al.
[12] DENR-PAWB, UNDP, ASEAN Center for Biodiversity and Ateneo School of Governance. March 2009. Assessing Progress Towards the 2010 Biodiversity Target: The 4th National Report to the Convention on Biological Diversity. March 2009.
[13] Philippines, Department of Environment and Natural Resources. 1997. Philippine Biodiversity: An Assessment and Plan of Action. Makati City, Bookmark.
[14] EBAs are areas with two or more restricted range bird species which rely or are confined to them.
[15] SAs are areas which support one or more restricted range species but do not qualify as EBAs because less than two species are entirely confined to them.
[16] The terms EBAs and SAs were defined by Mallari, N. A. D., Tabaranza, B. R. Jr., and Crosby, M. J., 2001. Key Conservation Sites in the Philippines: A Haribon Foundation and Birdlife International Directory of Important Bird Areas. Department of Environment and Natural Resources and Bookmark, Inc. Makati City, Bookmark. As cited in Ong, et. al.
[17] IBAs are areas designated as globally important habitats for conservation of bird populations

11. About 70 percent of the Philippines' nearly 21,000 recorded insect species are found only in the country. About one-third of the 915 butterflies are endemic to the Philippines, and over 110 of the more than 130 species of tiger beetle are found nowhere else.[18]

12. The Philippine archipelago is also home to one of the greatest concentration of terrestrial mammalian diversity in the world and the greatest concentration of endemic mammals in the world on a per unit basis. The most recent inventory of land living mammals includes 174 indigenous species, 111 of which, or about 64%, are endemic.[19] In the last 15 years, field researchers, mostly at high elevation areas, have found new species, in particular of murid rodents, in Luzon, Mindanao, and Mindoro. Moreover, several new species have been discovered in small oceanic islands such as Sibuyan (five new species) and Camiguin (two new species), catapulting these islands to a new status as centers of mammal endemism.[20] These recent discoveries demonstrate why it cannot be assumed that all centers of endemism in the Philippines have been documented. Unfortunately, the mammal assemblage in the Philippines is the 8th most threatened in the world, with 50 threatened species.

13. The Philippines' archipelagic character, along with its Ice Age history, have had significant impacts on the distribution of animals in the country. The distribution of non-flying land mammals illustrates that each island that existed in the Philippines during the latest Ice Age period is a unique center of biodiversity. For example, Luzon has 22 species of unique mammals (71% of the total 31), while the medium-sized islands that remained isolated, such as Mindoro and Greater Panay-Negros, have 45-50% unique mammal assemblage. Smaller islands that remained isolated during the Ice Age, although small, are also considered unique centers of biodiversity. One example is Sibuyan Island (463 km^2), which hosts four species of endemic non-flying mammals (plus one bat), a total exceeding that of any country in Europe. Lastly, the varied habitat of the country, such as the lowland forest, montane forest, and mossy forests, which occurs along the elevation gradient of every large mountain has influenced the pattern of biodiversity. Localized sub centers of endemism associated with mountain ranges have developed; for example, the mountains of southern Luzon support mammal species that are similar but noticeably different (and recognized as different) species than those of the mountains of northern Luzon.[21]

14. The above facts highlight the global significance of conserving the Philippines' biodiversity. The abundance, distribution and degree of threat to which these resources are exposed calls for a rapid and effective response to accelerate the coverage of conservation efforts in the country.

1.2 Threats, Root Causes and Barriers

15. Major threats to globally significant biodiversity in the Philippines come from the following sources: habitat degradation, land conversion, overharvesting of resources, mining and infrastructure development.

16. Logging has historically been a source of both habitat degradation and land conversion, resulting in degradation of logged over areas which remain as forest and loss of forested areas. Although there has been a decline in logging activities–due to the combined effects of a ban on logging old growth stands, the diminished state of the forests overall and increasing levels of community awareness—illegal logging activities persist. The damage to the country's forest areas and the biodiversity therein is exemplified by a 2.1% annual loss in forest cover during the period 2000-2005, which is considered the second fastest in Southeast Asia (next to Myanmar) and the 7th fastest in the world.[22]

17. The country currently has 15 million hectares of land classified as forest. However, only about 7.2 million hectares (approximately 24% of its total land area) can actually be considered as forests, based on the

[18] http://www.biodiversityhotspots.org/xp/hotspots/philippines/Pages/default.aspx
[19] Heanney and Regalado, 1998; Tan, 1995; Aragones, as cited in Ong, et. al.
[20] Heaney and Mallari, 2001, as cited in Ong, et. al.
[21] Heaney, in Ong, et. al.
[22] DENR-PAWB et. al. 2009, op. cit.

FAO definition.[23] By the time the ban on logging of old growth forests was enforced in 1989, there were less than a million hectares of such forests left. The country has now shifted to sustainable forest management as a key strategy, relying on other forms of tenure rights such as Industrial Forest Management Agreements (IFMA) and community-based forest management agreements (CBFMA), in an effort to place all the remaining forest areas under some form of management. An inventory of these instruments places the area of secondary forests under some form of management at 7.7 million hectares as of 2005.[24]

18. In addition to commercial logging, illegal timber harvesting is rampant in secondary forests which have been the subject of logging, taking advantage of the logging roads that were previously established. Although happening on a small scale, the total impact when done by a multitude of forest-dependent families on a daily basis is significant considering the fact that about 30% of the country's population (estimated at about 88.57 Million as of 2007), including 12-15 million indigenous peoples, lives in the uplands. Important contributing factors are poverty, lack of alternative livelihoods and lack of secure property rights over occupied public lands. The granting of CBFM agreements to organized forest occupants of secondary forests has been one way of stabilizing the tenure of these families, while at the same time providing sources of income through sustainable forest management.

19. Another underlying cause of land conversion is the burgeoning population against a limited land base. The country's population is growing at the rate of 2.04%[25], one of the highest rates of increase in Southeast Asia. Poverty, landlessness and absence of secure tenure rights over secondary forest areas left by logging means that such areas have become attractive for conversion into agricultural cropland, thereby effectively permanently changing the land use. Satellite maps show the remaining forest habitats in key biodiversity areas (KBAs) slowly being threatened by the creeping incursion of perennial crops such as coconut, abaca, as well as annual crops such as corn. Different areas of the Philippines have been exposed to this threat to varying degrees. In Cebu, for example, very few lowland forest tracts remain due to land conversion, rapid urbanization and high population growth – remaining areas harbor important endemic species that require protection. Major factors that lead to the increasing practice of 'kaingin,' or conversion to agricultural use in the forests/uplands, are resettlement by communities marginalized by development projects, rapid urbanization and displacement due to natural events such as landslides and flooding. Unsustainable cutting and conversion to agriculture by the growing population's need to secure livelihoods adds to the loss and fragmentation of natural forest habitat; the resulting impacts on biodiversity can be severe, as forest species (e.g., insect pollinators, tree frogs, and primates) fail to disperse across land clearings and burned forest gaps. Forest fragmentation exposes forest-dependent species to decimating factors, alteration in the distribution pattern of plant and animal populations, pest infestation, and invasion of alien species.[26] While the main government response has been reforestation, the use of exotic species in the reforestation programs has further contributed to fragmentation by acting as barriers between patches of natural forest and has caused some concern because of their invasiveness.

20. Over-harvesting of resources such as medicinal and ornamental plants and animals for trade and domestic use has contributed to habitat degradation and dramatic reductions in species populations. Among the most highly prized ornamental plants are the jade vine (*Strongylodon macrobotrys),* giant staghorn fern (*Platycerium grande),* waling waling (*Euanthe sanderiana)* and many tree fern species. Tree fern trunks are used as a substitute for driftwood, and are overharvested due to the high demand for them in the orchid industry. A significant number of animals, such as the Palawan peacock pheasant (*Polyplectron emphanum),* Philippine cockatoo (*Cacatua haematuropygia),* talking mynah (*Gracula religiosa),* blue naped parrot *(Tanygnathus lucionensis),* and Asian small-clawed otter *(Amblonyx cinereus),* are also overharvested. Exploitation of some

[23] Based on FAO definition of forests as "an area of more than 0.5 hectares and tree crown cover (or equivalent stocking level) of more than 10% which includes natural and plantation and production forests".
[24] DENR-PAWB et. al. 2009, op. cit. Clearly, this total includes areas not considered 'forests' under the FAO definition.
[25] Based on census in August 2007
[26] DENR-PAWB et. al. 2009, op. cit.

by-products of wildlife species also endanger their survival, such as the nests produced by the edible-nest swiftlets *(Collocalia fuciphaga).*[27]

21. Mining is another serious threat: the Philippines is considered the fifth most highly mineralized country in the world. It is a significant producer of gold, copper, nickel and chromite and has in the recent past ranked among the world's top 10 producers. It is also abundant in non-metallic and industrial minerals such as marble, limestone, clay, feldspar and aggregates.[28] Since key provisions of the Mining Code were upheld by the Supreme Court in 2004, there has been a heavy influx of mining activity and investment; as of July 2007, some 322 Mineral Production Sharing Agreements (MPSA) and Financial and Technical Assistance Agreements (FTAAs) had been issued.[29] The threat is compounded by the fact that most of the country's priority conservation areas sit on top of huge mineral reserves. The National Integrated Protected Areas System (NIPAS) Act and the Acts establishing individual protected areas established under NIPAS recognize prior rights secured before the issuance of the law. Thus, some protected areas represent an overlay of tenure instruments with inconsistent land uses and management objectives. Community awareness and advocacy, with support from civil society groups, have been successful in halting the entry of mining activities into key areas. However, there is evidence that the opposition of local communities and other stakeholders have not been considered in decisions affecting mining. Empowerment of local stakeholders is necessary to safeguard their rights and participation in decision making.

22. Infrastructure development, such as major industries, road networks, irrigation, water resources, power and energy projects affect biodiversity directly and indirectly. Directly, their operations and possible expansion may disturb, pollute, or encroach upon biodiversity-rich ecosystems. Indirectly, they may attract satellite developments or settlements that can cause fragmentation of species-rich habitats, provide access thereto, and/or threaten the quality of surrounding water bodies. The threat posed by infrastructure development on biodiversity-rich areas was assessed in 1997 by delineating the influence areas or impact zones by the use of: (i) drainage patterns of downstream impact areas to plot water pollution impact areas; (ii) airshed and meteorological behavior to plot air pollutant impact areas; and (iii) nearest settlements and access roads location to plot settlement impact areas. The results revealed that about 1.6 million hectares of biodiversity-rich ecosystems were highly threatened by existing infrastructure.[30] Several biogeographic zones are registering large areas under threat; these include North/South Luzon, Mindanao, Palawan, Sierra Madre, Eastern Visayas and Cordillera.

23. Factors underlying these threats include: weak enforcement, unclear ownership or resource use rights, low risk of punishment in relation to potential benefits of illegal activities and under-valuation of non-monetary values of natural resources.

24. Weak enforcement is related to the historical state-led regulatory regimes over public lands. Indeed, during the 1960s and 70s when there was a very active logging industry, responsibility for enforcement and monitoring rested only with the Department of Environment and Natural resources (DENR). With vast areas and very limited staff, the system proved ineffective, resulting in utter disregard for rules by timber license holders. Together with very weak punishment, these factors have enabled unsustainable commercial logging practices, thereby resulting in severe degradation of important habitats. The absence of an active protected area management program also exposed important biodiversity-rich areas to timber harvesting and other resource use rights. Currently, logging operations are limited to a very few areas, and policies prohibiting logging in old growth forests and protected areas are in effect. However, there is a need to be vigilant to ensure that these policies are enforced.

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[27] Philippines. Department of Environment and Natural Resources. 1997. *Philippine Biodiversity: An Assessment and Plan of Action.* Makati City, Bookmark.

[28] http://www.haribon.org.ph/?q=node/view/719

[29] Ibid.

[30] Philippines. Department of Environment and Natural Resources. 1997. Philippine biodiversity: An Assessment and Plan of Action. Makati City, Bookmark.

25. The coverage of tenure rights is still limited, local resource managers still have weak capacities to manage resources, and enforce local rules and regulations. A preference for short term financial gains over long-term economic and environmental benefits is still driving many local communities, in particular, to engage in illegal and unsustainable harvesting of resources. There is still a need to improve awareness and demonstrate the long term benefits of conservation actions and sustainable management of natural resources. In protected areas, tenure rights called protected area community based resource management agreements (PACBARMA) have been negotiated with organized occupants in multiple use zones within PAs. However, there needs to be broader coverage and support to enable forest edge communities to engage in sustainable livelihoods.

26. The integration of biodiversity concerns in landscape planning and development remains weak, thereby resulting in land use plans which are not environmentally sensitive, uncontrolled land development and conversion of fragile uplands and important biodiversity-rich areas into agricultural zones. Local government units are gradually recognizing this weakness, and a number of efforts, including a GTZ-funded project in Leyte, are underway to address this. However, there is a need to promote more widely, the available tools and methods amongst other Local Government Units (LGUs) to broaden the impact of such programs.

27. Finally, the incentives behind the active promotion of mining and infrastructure development stem from the perceived inferior economic values of non-monetary benefits of biodiversity conservation. Decision making has largely taken into account the direct and immediate financial and economic benefits of extractive activities and unsustainable land use planning, while ignoring the longer term benefits of conservation programs.

28. The main governmental response to these threats and their underlying causes has been the establishment of a system of protected areas (PAs) in habitats known to harbour unique and important biological resources. Supported by a strong legal framework – the National Integrated Protected Areas System (NIPAS) Act of 1992 – the country's protected areas now number about 234, covering a total of 4.09 million hectares of terrestrial and 1.14 million hectares of marine areas. The terrestrial PAs cover 13.6% of the total land area of the Philippines, which is approximately 30 Million hectares.

29. The key features of the NIPAS Act are the following:

- All areas protected under earlier laws are automatically considered part of the new national PA system.[31] This affected 203 existing PAs covering 2,567,648 hectares and included watershed reserves, national parks, game refuge, bird and wildlife sanctuaries, wilderness area, strict nature reserves, mangrove reserve, fish sanctuary, natural and historical landmark, protected and managed seascape/landscape, as well as identified primary forests.
- Overall responsibility for the PA system rests with the Department of Environment and Natural Resources (DENR). However, the NIPAS Act recognizes the jurisdiction of other agencies empowered to manage protected areas, such as LGUs, or to local bodies created by indigenous peoples.
- A 13-stage process for assessing and formally establishing existing and new protected areas as NIPAS sites. This process has recently been streamlined under revised implementing rules issued in December 2008.
- A process for removing protected areas from the system if they do not meet NIPAS criteria, such as areas that have lost most or all of their original vegetation.
- A strategy to guide the formulation of management plans.
- Creation of local boards (Protected Area Management Boards –PAMBs) consisting of representatives from stakeholders to manage protected areas.
- Full recognition of ancestral lands and indigenous peoples' customary rights.
- Establishment of tenurial instrument under which qualified members of communities who reside in the protected areas can become stewards of land in the area's multiple use zones.

[31] Some initial components of the PA system were declared as early as 1920s.

- Creation of an Integrated Protected Area Fund (IPAF) to support NIPAS areas.

30. The task of managing the PA system remains primarily with the DENR, through its Protected Areas and Wildlife Bureau (PAWB) and DENR regional offices. The DENR's main mandate is to conserve the country's biological diversity through the establishment, management and development of the NIPAS, through conservation of wildlife resources within the broader landscape and through ex-situ conservation tools. The DENR manages the PA system in partnership with the PAMBs and through strong collaboration with conservation NGOs in the Philippines.

31. Given the widespread and abundant nature of biodiversity in the Philippines, the extent of threats and the shortage of resources, a critical challenge facing DENR has been to prioritize its efforts. The main intent of prioritization has been to identify global priorities for conservation. To this end, following the completion of the 1997 Philippine Biodiversity Strategy and Action Plan, key biogeographic regions were identified based on floristic, faunistic, and geological composition of geographic areas in the country. In 2002, these biogeographic regions were updated based on the distribution patterns of vascular plants, arthropods, amphibians, reptiles, birds, and mammals.[32] This information was used to identify 206 biodiversity conservation priority areas, including 170 terrestrial areas. This prioritization served as the framework for focusing conservation efforts and was used as a tool to assess the existing set of protected areas. By this time, DENR-PAWB had recognized 244 PAs as components of the NIPAS. Of these, five had congressional actions completed, 78 have received presidential proclamations, while the remaining 161 are under process. Of the 244 total recognized PAs, 132 were found to fall either partly or wholly within the identified priority areas for conservation.[33]

32. The prioritization process was further refined in 2006, with the identification of Key Biodiversity Areas (KBAs) based on criteria of vulnerability and irreplaceability.[34] As a result of this initiative, one hundred twenty-eight (128) KBAs were identified covering a total of 7,610,943 hectares, which is equivalent to approximately 25% of the total land area of the Philippines. Out of this number, 117 are terrestrial areas while 11 are marine areas. The 128 KBAs contain 209 globally threatened, and 419 endemic species of freshwater fishes, amphibians, reptiles, birds and mammals, as well as 62 species of congregatory birds. All species protected under the Philippines' Wildlife Act (Republic Act 9147) are represented within one or more KBAs.

33. The above prioritization exercises have helped establish a clear rationale for a more systematic and science-based approach to the potentially overwhelming task of establishing an expanded and more representative PA system in the Philippines.

34. The **long-term solution** for biodiversity conservation in the Philippines' terrestrial areas is accelerated expansion and improved representativeness of the terrestrial PA network designed to protect biodiversity in KBAs while optimizing their ecological service functions – under effective and sustainable adaptive management. This solution is seen to rest on three main pillars. First, the long-term solution requires comprehensive ecological coverage to ensure biogeographical representativeness and strengthened links to the surrounding landscape. The expanded system should be able to include new conservation areas that are otherwise not feasible within existing NIPAS regulations and procedures. Second, the solution depends on: (i) adequate capacities on the part of PAWB as the key management agency to manage the expanded national PA system, provide technical and policy support to the effective functioning of PAMBs and management bodies of new conservation areas; and (ii) improved management effectiveness of PAMBs and other site management bodies. Third, the solution requires a system of sustainable financing involving the integration of sustainable financing mechanisms and the application of economics into the planning and management of terrestrial PAs.

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[32] Ong, et. al.

[33] Some existing PAs overlap with one or two priority areas for conservation. Ong, et.al.

[34] Conservation International Philippines, Department of Environment and Natural Resources – Protected Areas and Wildlife Bureau, and Haribon Foundation, 2006. *Priority Sites for Conservation in the Philippines: Key Biodiversity Areas.* Quezon City, Philippines. Vulnerability was measured by the confirmed presence of one or more globally threatened species, while irreplaceability was determined through the presence of geographically concentrated species.

The key barriers to the long-term solution act by preventing the emergence and operation of the above three pillars. They are described below.

i. The existing PA system is not well prioritized or biogeographically representative

35. Given the enormous biological diversity of the Philippines, which is related to its tortuous topography and geological history, the ranges of endemic species are scattered throughout the archipelago, often in small patches corresponding with mountain peaks or mountain ranges. Further, because of the high biodiversity of the Philippines per unit area, the size of the system should reflect a higher proportion of the country's total area to ensure adequate coverage. This makes the task of designing a biogeographically representative PA system a particularly challenging one. This challenge is exacerbated by the fact that PA establishment prior to NIPAS was not rationalized in terms of representativeness.

36. As a result of the above, inevitable numerous ecological gaps exist in the current system. This can be seen most easily by comparing KBAs and PAs (see **Table 2** below). As previously noted, the 2006 prioritization exercise identified 117 terrestrial KBAs covering 7.317 million ha. An optimized PA system would have a near perfect overlap between PAs and KBAs. However, as of May 2009, only 59 of the 117 terrestrial KBAs, covering 2.6 million ha., were legally established as protected areas based on the NIPAS Act. This represents only about 35% of the total extent of terrestrial KBAs. The remaining 58 terrestrial KBAs, covering 4.71 million ha., lack formal Government protection. Conversely, the system includes 1.49 million ha. of terrestrial protected areas that are not considered as KBAs. The problem with representation is compounded by the fact that not all PA boundaries fall 100% within KBAs, which means that the 35% figure is still misleadingly high. There are no more precise estimates regarding actual overlap between PAs and KBAs.

Table 1. Distribution of Existing Terrestrial PAs in KBAs in the Philippines (May 2009)

Biogeographic Zone[35]	Number of KBAs	Area (in hectares)	Number of PAs Established	Area (in hectares)	Area of PAs within KBAs, as Proportion of KBA area (%)
Batanes	1	213,578	1	213,578	100
Babuyanes	1	809,504	-	-	-
Greater Luzon	34	1,943,693	24	925,732	48
Greater Mindoro	9	233,590	3	115,116	49
Greater Palawan	14	932,496	6	316,835	34
Burias[36]	-		-	-	-
Sibuyan	1	15,265	1	15,265	100
Romblon-Tablas	2	18,684	1	2,670	33
Greater Negros Panay	12	339,127	6	158,280	47
Greater Mindanao	35	2,657,872	17	847,161	32
Camotes	-		-		-
Siquijor	1	1,776	-	-	-
Camiguin	1	2,228	1	2,228	100

[35] The biogeographic zones were defined in 1997. However, the prioritization process undertaken in 2006 did not identify KBAs in some zones based on the criteria of irreplaceability and vulnerability.

[36] Babuyanes, Burias, Sibuyan, Camotes, Siquijor and Sibutu are very small islands. The absence of PA and/or KBAs in these islands could be due to the absence of data.Some biogeographic zones have no identified KBAs yet due to lack of available information on these areas.

Biogeographic Zone[35]	Number of KBAs	Area (in hectares)	Number of PAs Established	Area (in hectares)	Area of PAs within KBAs, as Proportion of KBA area (%)
Greater Sulu	4	33,054	2	9,421	29
Sibutu	1	116,763	-	-	-
Total	**117**	**7,317,630**	**59**	**2,606,285**	**35%**

37. The 2002 and 2006 prioritization exercise further illustrated problems with the existing PA system related to representativeness. These included the following:[37]

i. The distribution of PAs along an elevation gradient is skewed towards the least representative elevation gradient, i.e., towards higher elevation (in montane areas which have a limited area coverage and lower levels of biodiversity) rather than lower elevation (most common and largest in area with the highest levels of biodiversity). The higher elevation areas are less species rich than the lower elevation areas, yet high-elevation areas are disproportionately represented in the system. The existing PA system is thus biased towards the least bio-rich elevation gradient. This is best illustrated in the case of birds, which, despite extensive loss and degradation of lowland forests, continue to have the highest diversity in lowland areas, but are least protected there.

ii. When species richness of birds and mammals of the different geographic regions are compared, there is very little correlation between biodiversity and the level of protection. An analysis of the degree of protection of the different EBAs and the number of endangered and restricted species in each EBA shows that areas such as Palawan are highly protected while many other areas are significantly underprotected. Thus, Palawan is disproportionately protected in relation to the number of species that are threatened or restricted compared to other EBAs.

iii. Analysis by Conservation International (CI) reveals that the existing PAs in the Philippines represent only six percent of the biodiversity hotspot as defined by CI[38] when only protected areas in IUCN categories I to IV are included. Most of the PAs have very little natural vegetation left and a lot of the remaining natural vegetation is not under any form of protection. Using IUCN's categories I-IV, only 41% is of natural vegetation, 43% is degraded, and 17% is converted. For IUCN categories V-VI, the situation is even worse. Only 20% is of natural vegetation type, 59% is degraded, and 21% is converted.[39] These however, do not include areas which are effectively managed by local communities, indigenous groups and other organizations, which are currently considered outside the national PA system.

38. It is clear from the above that there are huge gaps in coverage and representativeness of the terrestrial PA system in the Philippines. However, filling these gaps only by expanding conventional protected areas is impractical given both the enormous areas to be covered (about 4 million hectares more) and issues of jurisdiction. Using the NIPAS approach, the legislation required to gazette a protected area takes years to complete, sometimes necessitating the refilling of draft Bills in at least two succeeding sessions of Congress.[40] Lawmaking is a highly political process, and legislative support for PA establishment is strongly influenced by the degree of awareness of lawmakers, and vested interests among some legislators. If the process of designating new areas is not accelerated, and effective management is not installed, it is likely that degradation will cause

[37] Ong, et. al.
[38] See http://www.biodiversityhotspots.org/xp/hotspots/philippines/Pages/default.aspx
[39] Ong, et. al,
[40] Each term of Congress is three years. For the 10 Bills establishing PAs so far issued, the average time it took for the laws to be approved was 3 years. Most of these were funded by foreign assisted projects. For example, the proposed Bill establishing the Samar Island Natural Park was filed during the 12th Congress, but as of the 14th Congress, has not been signed into law.

irreparable damage to important KBAs before these can be placed under effective protection. The national PA system urgently needs reforms to allow diversification and to hasten the recognition of new conservation areas under different forms of governance structures.

ii. Limited capacities of DENR-PAWB and PAMBs for PA management

39. A second significant barrier is the limited capacities for PA management. There are two dimensions to this issue. The first relates to the capacity of DENR to manage the national system. At the system level, while the NIPAS framework provides an effective structure for PA management, some elements still require strengthening. A capacity assessment for protected area management undertaken in 2003 identified systemic, institutional and individual weaknesses in capacity that must be overcome to improve PA system management effectiveness.[41] This includes a need to decentralize decision making to enable the full institutional development of, and provide sufficient authority to, the PAMBs and Protected Area Superintendents (PASus). Overall, the DENR is still seen as the main actor in the management of the PAs, despite the intent of the NIPAS to engage local stakeholders in the management of protected areas. Finally, PAWB and its regional offices lack the capacity to provide continuing policy support, document lessons and promote sharing among local PA managers and management bodies, establish an effective national monitoring system, and launch a strong awareness campaign to garner support for the national PA system.

40. In recent years, the DENR has issued policy amendments to the Implementing Rules and Regulations (IRR) of the NIPAS Act to strengthen its implementation. PAMBs have been encouraged to form Committees and Executive Committee, to enable them to manage their affairs more effectively. The GEF Management Effectiveness Tracking Tool (METT) has likewise been reviewed. It is being pilot tested with the intention of institutionalizing its use in protected areas. However, there is a continuing need to improve the capacity to provide sufficient support systems to the field management and implementing units so that they may have the tools, skills and competence to carry out their responsibilities in PA management.

41. At the PAMB level, there are various constraints as well, including the following:

(i) The above-mentioned failure to decentralize adequately has stymied local initiatives towards effective management and enforcement by LGUs and/or by communities residing within and around the PAs. Most PAMBs do not yet resemble true multi-stakeholder entities, and are perceived as extensions of DENR rather than as joint enterprises of local stakeholders, each with an equal say in decision making. As a result, LGUs generally perceive the PAs as the responsibility of DENR rather than as their own responsibility, despite the fact that these areas fall within their political jurisdictions.[42]
(ii) PA management planning has not been effectively institutionalized, community participation in planning and implementation has been limited and the quality of plans has not been consistent across sites.
(iii) The structure of PAMBs is often unwieldy, with membership sometimes numbering more than a hundred, thereby hampering their efficiency and effective functioning. Due to the large areas covered by most PAs, government representatives, mainly from the LGUs with jurisdiction over the areas, outnumber the indigenous peoples and local community representatives.
(iv) Gender and youth concerns are not consciously addressed in the PAMB structure or in management planning.
(v) PAMB members lack orientation, training, and guidance on the overall conduct of their own affairs
(vi) There are no tools or indicators to measure the effectiveness of management in PAs, making it difficult to keep track of changes in the state of the protected areas. A Biodiversity Monitoring System (BMS), developed through the support of an earlier project, has not been adequately implemented, with the result that there is still no clear basis for measuring whether the PAs are achieving their objectives, including the goal of conserving important biodiversity resources.

[41] Department of Environment and Natural Resources. 2003. Capacity Assessment for Protected Area Management.
[42] World Bank, November 2003. Governance of Natural Resources in the Philippines. Lessons from the Past: Directions for the Future.

iii. Limited financial sustainability

42. Inadequate systems for financial planning, budgetary management and revenue generation represent a third major barrier to the long-term solution. The budget for PA system management, such as general planning, prioritization, national coordination, establishment of linkages, technical assistance, policy support, monitoring and evaluation, continuing development of tools and procedures, establishment and maintenance of a national database, advocacy, information and awareness campaigns, are all lodged with the PAWB, and funded through the regular budget cycle of government. For the period 2005 to 2009, the average annual operating budgets allocated to PAWB in support of these activities is about Php 900,000 or only about US$20,000. The regional offices have budgets to support local capacity building, and supporting the operations of the PAMBs. For the year 2008, the allocation for these minus the budget to support PA establishment was only Php 13,381,000 (US$ 280,000). This reflects the transfer of funds to the regional offices.

43. The sustainable financing problem has several components. First, while the Philippines NIPAS system provides for an effective structure to generate and allocate revenues through the Integrated Protected Area Fund (IPAF), its implementation has proven problematic. It should operate as a trust fund, and allow the PA generating the funds to allocate for itself, 75% of its earnings, while the remaining 25% is centrally managed and reallocated to other PAs. However, in practice, all the proceeds are deposited with the National Treasury, on the basis of which the Department of Budget and Management (DBM) makes annual allocations from the national budget. This budget is legislated annually as the General Appropriations Act (GAA), wherein DBM sets limits on how much can be used from this fund. For 2009 alone, the authorized spending from IPAF is set at a ceiling of P12 million. (US$250,000). Regional offices of DENR have to submit work and financial plans and have these approved before they are able to tap into this Fund. Because of these limitations, most donations are not processed through IPAF, but instead are given directly or in kind to the PA.

44. Second, the PA system has not maximized funding streams by capitalizing on the economic value of PAs. The IPAF draws its income from fines, entrance fees, donations, concessions and leases (in multiple use zones), and taxes on permitted sales and exports of flora and fauna. Since its implementation in 1996, total IPAF collection amounted to PhP 143,204,045 (approximately US$2,983,418), as of 2008. This was generated from a total of 100 protected areas, with the top 15 PAs contributing as much as 89% of this amount. Given the funding levels and the number of PAs requiring support, there is obviously a huge funding gap in supporting the management of PAs in the Philippines. This gap is expected to increase as more PAs are declared, while the financing streams take time to be developed in these areas.

45. Thus, most PAs are financed entirely out of government revenues, and systems to capitalize on alternative revenue streams (e.g. from ecotourism or ecosystem services) remain limited. Several studies have been undertaken to estimate economic values and determine user charges, but very few PAs have implemented these.[43] The use of payments for environmental services (PES) as a scheme of generating resources for PA management has been tested and implemented in a few sites.[44] Other examples include the experience in Bukidnon, wherein a scheme has been developed called Rewarding Upland Farmers for Environmental Services (RUPES). While there are a number of examples, there is no proper documentation of successful experiences or of the potential for these mechanisms to be used more widely as instruments to generate resources. In order to provide guidance to PA Managers and PAMBs, the DENR has issued DAO 05 in 1991 which prescribed the procedures for the determination of user charges on protected areas. However, PAMBs lack the capacity to generate sufficient information as basis for the setting of charges.

46. A third dimension of financing is related to the development of business plans. One of the deficiencies of management plans is the lack of cost assessments related to the programs and activities specified in the plans. Thus, many plans end up unfunded, or with huge funding gaps. Moreover, few PAs have clear plans for resource

[43] These PAs are El Ndo Protected Landscape and Seascape, Samar Island natural Park, and the Tubattaha Marine Protected Area.

[44] Penablanca, Cagayan, which is part of the Northern Sierra Madre Natural Park

generation to guide them in reducing the funding gap to finance implementation of their management plans. In 2009, Congress approved the allocation of some P119 Million to seven PAs from the government budget.[45] While this represented a step in supporting the financial requirements for more effective management of these PAs, it was unusual in that NIPAS is supposed to be self-financed through the IPAF. It is therefore highly unlikely to be repeated or sustained throughout the approximately 244 PAs across the Philippines.

47. One potential additional source of financing is LGUs. They are mandated under the Local Government Code to allocate some 20% of their internal revenue allotment for development, including environmental management. However, most of their budget for environment goes to clean and green programs and solid waste management. There is very little recognition of the importance of PAs by most LGUs, their roles in PA management; this influences how they allocate their resources. Another potential source of finance is the charter of local water utilities to allocate funds for watershed conservation. Many PAs located in major watersheds have yet to fully harness this potentially important source of financing. The private sector represents another innovative mechanism, as evidenced by the example of a group of private individuals who reside in Danyugan islands, off Negros, to generate donations to conserve their areas.

48. Finally, there is a need to set realistic estimates of the recurrent costs of PA management, as a basis for estimating the total requirements for all PAs, as new ones are added to the system. There are no standards yet developed on the costs to maintain a PA, once all the investment costs of establishment, demarcation, management planning, and strengthening of PA managers are undertaken. This information would be important not only to guide the development of realistic estimates of total funding gap, but more so, as basis for determining whether individual PAs have sufficient resources to manage their areas effectively.

49. Support to overcoming the above barriers and building on the potentials constitute the essential rationale for the proposed project and forms the basis for its three outcomes. In order to achieve these outcomes, PAWB has enlisted the support of GEF, in partnership with NCIP, national and local NGOs, indigenous communities, and LGUs in selected key biodiversity areas.

50. Opportunities exist to help fill bio-geographical gaps in the system by promoting the establishment of several potential new types of conservation areas. Of greatest potential value are "ancestral domain lands," which are associated with the traditional territories of upland culture peoples and which typically coincide with areas of greatest surviving endemism. The passage of the Indigenous Peoples Rights Act (IPRA) in 1997 established the basis for indigenous communities to start claiming ancestral domain rights over areas of land where they have traditionally lived. In general, the IPRA seeks to recognize, promote and protect the rights of indigenous peoples. These include the Right to Ancestral Domain and Lands; Right to Self-Governance and Empowerment; Social Justice and Human Rights; and the Right to Cultural Integrity. However, there is not yet a common understanding of basic concepts such as ancestral domain, nor is there harmonization between different laws on protected areas, ancestral domain, and resource use, which limits the potential for ancestral domain lands to contribute to biodiversity conservation effectively. Many ancestral domain lands are quite extensive in area, and frequently abut the boundaries of protected areas. A good example is the Balbalan Balabasang National Park, which is overlayed by a Certificate of Ancestral Domain held by the Kalingas, which is effectively protected and managed through their indigenous knowledge systems and culture. The case of the Aytas in Zambales Mountains is another good example, where traditional practices have proven effective in protecting the resources within the area of their ancestral domain; also an area identified in the KBA as one of the centers of endemism in Luzon. There is therefore substantial potential to establish conservation areas within these ancestral domain lands to complement the existing PA system.

51. Other types of new conservation areas are also possible, including community reserves, PAs established by LGUs and private reserves. A good example is the effort of the Philippine Biodiversity Conservation

[45] These PAs are: Ninoy Aquino Parks and Wildlife Nature Center; Hinulugang Taktak National Park; Mt. Apo, National Park; Tubbataha Reef, Apo Reef, Mts. Banahaw and San Cristobal; Mt. Kitanglad; and Central Cebu National Park.

Foundation in the Polilio groups of islands,[46] in which a network of local conservation areas (LCAs) has been successfully established, with financial support and harmonized local legislation by the relevant municipal governments. The Local Government Code explicitly recognizes the power of LGUs to proclaim protected areas within their jurisdiction. However, at present the institutional arrangements for such reserves have not been clearly established, nor have these types of reserves been systematically promoted as part of the national PA regime. An exception is the law adopting the Strategic Environmental Plan (SEP) of Palawan, which effectively recognized the establishment of the environmentally critical areas network (ECAN) in Palawan as the basis for planning and development. It also installed the Palawan Council for Sustainable Development (PalCSD) as the authority in enforcing the provisions of the law. However, this law is very specific to Palawan, and can hardly be considered as a model for establishing new conservation areas. A good example, however, of how the Local Government Code has helped strengthened protection of PAs is found in Samar, where a series of common LGU local legislations have helped blanket the Samar Island Natural Park (SINP) with effective protection, even though a national Proclamation and legislation are not yet in place.

1.3 Stakeholder Analysis

52. The PAWB will be the main agency responsible for developing and managing the implementation of the Project. At the national level, it will solidify its partnership with the National Commission on Indigenous Peoples (NCIP), Leagues of Provinces, Cities and Municipalities, Department of Tourism, and national based NGOs in negotiating agreements with and strengthening the capacity of local institutions and organizations (IPs, local community organizations, LGUs) in managing new conservation areas (CAs) in providing the necessary policy and technical support to their establishment under the national PA system. It will work in partnership with provincial and municipal governments, indigenous peoples, local NGOs, and local communities as they are identified to strengthen their capacity as effective local Managers of the selected PAs/CAs.

53. **Table 2** below describes the major categories of stakeholders, their roles and responsibilities and their involvement in the Project.

Table 2. Key Stakeholders, their Roles and Responsibilities and Involvement in the Project

Stakeholder	Roles and Responsibilities	Involvement in the Project
PAWB	The central agency responsible for biodiversity conservation and other key biodiversity areas. It is also in charge of coordinating the implementation of the NIPAS and establishment and management of PAs.	PAWB will be the implementing agency and will be mainly responsible for managing the Project. It will enter into MOAs with selected NGOs as implementing partners in the sites.
Protected Areas, Wildlife, and Coastal Zone Management Sector (PAWCZS) of DENR regional offices	The Regional Executive Director acts as the Chairman of PAMB in NIPAS sites. The Regional Technical Director and staff of the PAWCZS undertakes site assessment, assists the establishment of new PAs, and provides support to PAMBs.	Will act as extensions of PAWB in monitoring and coordinating implementation of the Project activities at the site level, and will report on progress of activities taking place at the PA sites.
DENR Foreign Assisted and Special Projects Office (FASPO)	The Assistant Secretary for FASPO is the National Focal Point for GEF, and monitors the allocation of GEF RAF resources. Within DENR, it also coordinates	The FASPO will be represented in the Project Board[47], and will provide direct oversight to implementation by PAWB.

[46] Gatumbato, Errol and William Oliver. 2008.Final Project Report. Darwin Initiative for the Survival of Species. Pioneering Community Based Conservation Sites in the Polilio Islands.

[47] Please refer to Part III-Management Arrangements for composition of Project Board and description of its roles and responsibilities.

Stakeholder	Roles and Responsibilities	Involvement in the Project
	resource mobilization for the Department's Projects, and monitors and evaluates the implementation of all foreign assisted projects.	
NCIP	NCIP is the government agency responsible for the protection of the welfare of IPs; and in the issuance of certificate of land and domain titles (CADTs/CALCs) to qualified groups.	The NCIP will be a major partner of the Project, and will be a member of the Project Board. It will facilitate linkages with the IP groups in the sites, support in the development of policies to support IP management of PAs. It will also facilitate the issuance of certificate of precondition for activities to be undertaken in ancestral domain lands.
National Economic and Development Authority (NEDA)	NEDA is the agency overseeing the planning and monitoring of the UNDP Country Programme.	NEDA will sit as member of the Project Board. It will monitor and evaluate the implementation of the Project, as part of its inherent role in the management of the ODA portfolio.
Department of Interior and Local Government (DILG)	DILG is the agency which has oversight with the LGUs, and in the implementation of the Local Government Code.	DILG will support the development of policies that will encourage LGUs to take a more active role in the management of PAs and new conservation areas. It will issue supporting policies to replicate the lessons from the Project; and facilitate resolution of any policy conflicts or issues relevant to LGU participation in PA management.
Department of Tourism (DOT)	DOT is the agency responsible for promoting tourism in the Philippines. It has an ecotourism program, jointly developed with DENR	DOT will assist in identifying opportunities for ecotourism and in promoting these as part of its on going program
League of Provinces, Cities and Municipalities	The Leagues ensure there is national level representation in the discussion of policies and programs that affect LGUs.	They will be an important partner in disseminating lessons, and advocacy in strengthening the role of LGUs in PA management; and in amending legislations to improve NIPAS implementation, and/or support establishment of new conservation areas.
National NGOs such as (Conservation International (CI), Haribon Foundation, Flora and Fauna International (FFI), Foundation for Philippine Environment (FPE), Philippine Biodiversity Conservation Foundation Incorporated (PBCFI); and World Wildlife Fund – Philippines (WWF)	These NGOs have ongoing activities in the project sites, and have active partnership with PAWB in advocacy, national PA system planning, monitoring and management. They undertake technical studies to provide scientific basis for strengthening the prioritization and management of the national PA system.	These NGOs will provide co financing for the Project. In partnership with local NGOs and other groups, they will become implementing partners of the Project in the sites where they are working on. PAWB will execute a MOA with these groups to assume responsibilities for the implementation of defined activities in each site. A representative of national NGOs will be selected to be

Stakeholder	Roles and Responsibilities	Involvement in the Project
		a member of the Project Board.
Other NGOs such as Philippine Tropical Forest Conservation Foundation, Inc. (PTFCFI)	They support initiatives of local communities in sustainable management of natural resources in KBAs	They will provide co financing to support activities of local communities and local NGOs.
Provincial, Municipal and City LGUs	They have political jurisdictions in areas where the PAs and new conservation areas are located. They have existing mandates to sustainably manage their resources and promote biodiversity conservation.	They will take an active role in the management of PAs under their jurisdiction, in partnership with IP communities, local communities, DENR field offices, and other local stakeholders.
IP groups within the selected sites	They are the direct and primary stakeholders in the Project. They stand to benefit from the Project, and suffer the consequences of inaction on biodiversity conservation. They have strong historical and cultural ties to their domains; which coincide with the boundaries of existing PAs. Their indigenous practices and knowledge systems are mainly consistent with conservation objectives.	They will take an active role in the management of PAs under their jurisdiction, in partnership with LGUs, local communities, DENR field offices, and other local stakeholders, as appropriate. They will also be responsible for issuing the Free and Prior Informed Consent (FPIC) for the Project in selected areas[48]
Local NGOs such as Polilio Islands Biodiversity Conservation Foundation, Inc. (PIBCFI), Central Cordillera Alliance for Good Governance (CCAGG), Central Cebu Biodiversity Foundation, Inc. (CCBFI)	They have on going advocacy and conservation efforts in the selected sites.	As lead and/or as partners of national NGOs, they will take an active role in the implementation of selected activities under the Project. They will share their information, and skills in improving the capacity of local stakeholders in PA management.
Local communities	They are the direct and primary stakeholders in the Project. They stand to benefit from the Project, and suffer the consequences of inaction on biodiversity conservation. Some communities are already undertaking conservation activities in certain tracts of land. Some would have secure tenure while others may have no secure tenure yet. Other communities would be living in the fringes of existing PAs	They will take an active role in the management of PAs under their jurisdiction, in partnership with LGUs, IP communities, DENR field offices, local NGOs, and other local stakeholders.
Women and youth	They are generally neglected group in the management structures and decision making at the community level. However, they have a lot of potential to contribute to improving management of PAs and new conservation areas if duly recognized, their capacities improved, and given space and	They will be given particular attention in the Project so that their potential can be harnessed; and their concerns considered in management planning

[48] The Indigenous Peoples Rights Act (IPRA) requires that all development projects undertaken in areas with IP communities should have the FPIC

Stakeholder	Roles and Responsibilities	Involvement in the Project
	opportunity to meaningfully participate	
Academic and Research Institutions	They undertake research and other advocacy activities in the regions/provinces where the Project sites are located	They will be involved in the conduct of research, other studies, and in sharing of scientific information on the sites. They will provide their expertise such as advisory support to selected Project activities.
Private sector	Most companies have policies on corporate social responsibilities which can potentially support directly conservation efforts. Their actions directly impact on use of biodiversity resources	The Project will engage actively with private sector to influence their actions, explore potential investment opportunities within the framework of site management plans, and seek their direct support to finance conservation efforts
UNDP Manila	UNDP will be the implementing agency of the GEF and facilitates the development, review and submission of projects for GEF financing. It also monitors the implementation of the UNDP Country Program in the Philippines. It also catalyzes the support of other donors in fulfilling the government responsibilities under the CBD and in implementation of GEF projects	The UNDP Country Office (through the RR or designated UNDP staff) is responsible for the successful management and delivery of programme outcomes and monitoring of interdependencies between projects and managing changes within and among projects.
Development partners (ADB, World Bank, GTZ, New Zealand, etc.)	They have ongoing and planned initiatives in the sector. They engage in active dialogue with PAWB and DENR in assessing overall sector performance, and in defining areas of future support	The Project will ensure that there is synergy with other Projects, and that all initiatives are consistent with the overall strategic directions and policy framework. The Project will maintain regular lessons sharing with relevant projects to continually sharpen approaches and improve development effectiveness

1.4 Baseline Analysis

54. The baseline situation can be better described following the three major outcomes of the Project.

55. The project addresses the main barriers that limit the effectiveness of the Philippine PA system in conserving globally significant biodiversity: (i) biogeographical representativeness and coverage; (ii) limited capacity for PA management; and (iii) inadequate systems for financial planning, budgetary management, and revenue generation.

56. Bio-geographic representativeness and coverage: The existing terrestrial PAs cover only 35% of the identified 117 terrestrial KBAs in the country, by area. The following shows the distribution of existing terrestrial PAs when matched against the biogeographic zones and KBAs in the Philippines.

Table 3 Distribution of Existing Terrestrial PAs in KBAs in the Philippines

Biogeographic Zone[49]	Number of KBAs	Area (in hectares)	Number of PAs Established	Area (in hectares)	Area of PAs as Proportion of KBAs (%)
Batanes	1	213,578	1	213,578	100
Babuyanes	1	809,504	-	-	-
Greater Luzon	34	1,943,693	24	925,732	48
Greater Mindoro	9	233,590	3	115,116	49
Greater Palawan	14	932,496	6	316,835	34
Burias[50]	-		-	-	-
Sibuyan	1	15,265	1	15,265	100
Romblon-Tablas	2	18,684	1	2,670	33
Greater Negros Panay	12	339,127	6	158,280	47
Greater Mindanao	35	2,657,872	17	847,161	32
Camotes	-		-		-
Siquijor	1	1,776	-	-	-
Camiguin	1	2,228	1	2,228	100
Greater Sulu	4	33,054	2	9,421	29
Sibutu	1	116,763	-	-	-
Total	**117**	**7,317,630**	**59**	**2,606,285**	**35%**

57. The above table shows that while there have been 234 PAs established in the Philippines, only 59 of these are terrestrial PAs located within KBAs. The total area covered by the terrestrial PAs within KBAs is only 2.6 million hectares, compared to the 4 million already established in the Philippines. The initial components of NIPAs which included sites already covered by previous legislations prior to the enactment of the law, partly explains the high number of PAs outside of the KBAs.

58. It is clear from the distribution of terrestrial PAs in the Philippines that among the large island groups; Mindoro, Greater Luzon, Greater Mindanao, Greater Negros Panay and Greater Sulu are underrepresented in the existing system. Palawan is also among those which is under represented in terms of total area, however, almost all its PAs are already receiving support from many donors and/or NGOs. In the baseline scenario, the process for establishing new sites will continue to be protracted, and initiatives of other stakeholders will not be recognized under the national PA system. Thus, in the next few years, it is expected that coverage will continue to be disproportionate to the extent of areas requiring conservation focus. Expansion if ever, will be a slow process, following the traditional NIPAS – PAMB model, involving 13 stages. There will be no acceleration to account for other institutional models, or to recognize the effectiveness of traditional norms and practices of IPs and local communities. There will be less incentives for LGUs to establish conservation areas, nor provide financing support to its implementation. As a result, all PAs will still be regarded as a highly centralized system,

[49] The biogeographic zones were defined in 1997. However, the prioritization process undertaken in 2006 did not identify KBAs in some zones based on the criteria of irreplaceability and vulnerability.

[50] Babuyanes, Burias, Sibuyan, Camotes, Siquijor and Sibutu are very small islands. The absence of PA and/or KBAs in these islands could be due to the absence of data. Some biogeographic zones have no identified KBAs yet due to lack of available information on these areas.

involving mainly DENR as the key actor. All new PAs will follow a unitary mode of establishment, through the NIPAS process. It is estimated that over the next five years (2014), there will be an additional of 215,000[51] hectares of terrestrial protected areas added into the system, if we consider that all pending requests currently in train for proclamations will be acted upon during the period by the Office of the President. This will bring to 2,821,285 hectares, or 9.4% of the total land area of the Philippines, and 38% of all KBAs identified, under some form of management.

59. The outcome is that there will be delayed response in conserving other priority habitats harboring important vulnerable species; resulting in their continued exposure to threats to degradation.

60. Management of existing and new PAs. Under the baseline scenario, only 71% (166 of the 234) of PAs have existing PAMBs; while only 14% (34 out of 234) have existing management plans that are being implemented. Some 59% (139 of 234) will have initial PA plans developed[52]. Existing PAMBs will continue to have varying levels of capacity, with many of its members not trained and do not have the skills to formulate policies, review proposed development projects; and enforce laws consistent with the conservation objectives of their PAs. The national level support to field actors will remain weak, due to low capacity, inadequate mechanisms, and general lack of skills to provide technical assistance on the part of PAWB and DENR regional offices. Current efforts will remain insufficient due to absence of tools and mechanisms for measuring management effectiveness, undertake monitoring and evaluation, and business protocols for PAMBs or other management bodies. The establishment of new PAs under the current system will not contribute to improving the likelihood of achieving conservation goals if these barriers are not addressed.

61. A capacity assessment was undertaken during preparation. The baseline analysis reveals that overall current capacity stands at only 43% at the systemic level, 73% at the institutional level; and 43% at the individual level. Areas where there is general weakness include: monitoring and evaluation; mobilizing information and knowledge at the systems and institutional levels; and capacity to implement policies at almost all levels.

62. The establishment of new PAs will continue to be a protracted process, taking years to complete, following the NIPAS provisions, and the subsequent complementary guidelines. The expansion therefore will take many years to complete, which will prolong the exposure of KBAs to threats to biodiversity conservation.

63. Procedures and guidelines to support the initiatives of other sectors in PA management will not be developed, in the absence of clear policies recognizing their inclusion in the national PA system. PA management plans will continue to be developed in isolation from ancestral domain sustainable development and protection plans (ADSDPP) and/or local government land use plans and development programs, thereby encouraging the profusion of inconsistent plans and policies overlayed in PAs. While there have been efforts to promote harmonization of these plans and processes through the issuance of a Joint Circular between NCIP and DENR, and the recent IRR of the NIPAS, there needs to be strengthening of implementation on the ground in order to demonstrate how these guidelines would actually redress the difficulties experienced so far.

64. Similarly, management of critical habitats will continue to be outside of the PA system, as efforts of LGUs to declare critical habitats require confirmation by the DENR, which acts as a disincentive to local initiatives. As a result, local stakeholders will not be fully supportive of PA objectives, contributing to low level of local funding and commitment to management plan implementation.

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[51] Areas where there are proposed Proclamations include : Mt. Tapulao in the Zambales Mountains – 5,000 hectares; Balbalan Balbalasang National Park – 20,000; Mts. Iglit Baco Mountains – 75,000; and Mt. Hilonh-Hilong – 115,000 hectares. However, these Presidential proclamations need to be further processed into legislations to complete the NIPAS process.

[52] Initial PA Plans (IPAP), as defined under the IRR od NIPAS, shall serve as the basis for planning and budgeting of the PA until established through Proclamation or by law and a management plan is approved by PAMB

65. Existing PA management plans will continue to focus only on the core zones; as management prescriptions for threatened and vulnerable species is lacking in most management plans. There will be weak community participation and local stakeholder ownership of management plans, as these are developed mainly and understood only by a limited range of stakeholders.

66. Financing for PAs. Under the baseline case, sources of financing for PA management will come mainly from the IPAF, and donor support in specific sites. Some LGUs are expected to contribute to implementation of selected activities, but these are sporadic and given on a year on year basis. In many PAs, activities funded by some actors will continue to be not based on a comprehensive and community accepted vision and management plan for the protected area. In most cases, budgeting will remain to be isolated from the IPAP; some IPAP will even have no budget estimates, and in worst cases, there will be no budgets for the preparation of management plans. Thus, there is a clear gap between available financing and demand.

67. Under the baseline scenario, access to the already limited IPAF will be limited and difficult, thereby serving as a disincentive for PAs to generate additional resources, and/or account new contributions from other parties.

68. Efforts to test innovative instruments to generate revenues mainly trough user charges, such as the one in the Samar Island Natural Park (SINP) will continue to be limited and remain in their early stages. This will not be sufficient to generate lessons for wide scale implementation or replication in other PAs and CAs. Similarly, the payment for environmental services (PES) will not be vigorously pursued, tested and implemented more widely by PAs and new CAs. This has been tested successfully in a watershed community in Cagayan, within the Sierra Madre terrestrial corridor. Other PAs who have generated relatively higher incomes are marine PAs, such as the Apo Reef and Tubattaha Reef through increased demand by visitors and the unique attraction of diving and coral reefs. Suitable mechanisms for terrestrial PAs will continue to be undeveloped to enable the identification of appropriate user groups, matching of their demand with services, and promoted actively.

69. The potential for capture of revenues by the IPs and LGUs in areas which are currently managed by these organizations will not be explored. There will be limited documentation and/or analysis of policy gaps and successful practices to enable continuing policy development and sharing with managers of PAs and new conservation areas.

70. At the national level, management of the national PA system will be constrained by limited capacity and lack of comprehensive strategy in PAWB to underwrite the financing gap. This will pose a serious barrier to any future plan to expand the coverage of the existing system, hence will not be sustainable.The results of the baseline financing scorecard prepared during the preparation stage indicate levels of capacity in the following areas: legal, regulatory and institutional frameworks – 33.3%; business planning and tools for cost effective management – 19.6%; and tools for revenue generation – 17.54%.

71. In the baseline scenario, the progress achieved through previous GEF-supported projects will not succeed in conserving globally significant biodiversity effectively due to ecosystem gaps in the current system. Systemic deficiencies in the management of PAs will remain. Inadequacies in financial management systems and gaps in the capacities and policies within the broader national system will gradually erode gains made in previous projects characterized by single-site interventions.

72. At the systems level, the baseline scenario indicates some further progress in operationalizing the NIPAS structure with existing Government resources and small-scale donor and NGO support. However identified gaps and deficiencies in the NIPAS system are unlikely to be addressed, and implementation of the system will be slow and sporadic.

Part II: Strategy

2.1 Project Rationale and Policy Conformity

Fit with the GEF Focal Area Strategy and Strategic Programme

73. The proposed project will significantly contribute to the achievement of Biodiversity Strategic Objective 1 on catalyzing sustainability of protected areas. The three characteristics of a sustainable PA system as defined by the GEF Focal Area Strategy[53] are: (a) sufficient and predictable revenue, (b) coverage of ecologically viable representative samples of ecosystems and (c) adequate individual, institutional and systemic capacity. The proposed project will address element (a) through Outcome 3, element (b) through Outcome 1, and element (c) through Outcome 2.

74. Within BD SO1, the project will respond to Strategic Program 3 on "*Strengthening Terrestrial Protected Area Networks,*" with a secondary focus on SP 1: Sustainable financing of the national PA system. SP3 will be addressed directly by Outcome 1 of the project, which will result in new protected areas and an expanded system. SP3 will be addressed within outcome 2, which will ensure that the overall system maintains adequate management capacity. SP1 will be addressed through Outcome 3.

Consistency of the Project with National Priorities/Plan

75. The country's main thrust based on the Medium Term Development plan (2004-2010) is to fight poverty by building prosperity for the greatest number of Filipino people. Underlying this objective is the recognition that mismanagement of the country's environment and natural resources is a major cause of poverty, particularly in the rural areas. Thus, a major pillar of the country's priorities for the medium term is "strengthening the protection of vulnerable and ecologically fragile areas, especially watersheds and areas where biodiversity is highly threatened". This strategy aims to "Develop Protected Areas into viable management areas".

76. The project also supports Millennium Development Goal (MDG) 7 – ensuring environmental sustainability, particularly Target 10: implement national strategies for sustainable development by 2005, to reverse loss of environmental resources by 2015. In the Philippine mid-term progress report on the MDG, the country reported an increase in the area covered by protected areas as one of the measures to implement the specific action agenda on biodiversity.

77. The project will also complement the Philippine Government's efforts to bring about effective legislative protection and sustainable management of its protected areas. Recent DENR initiatives which the project will build upon include the revised Implementing Rules and Regulations (IRR) of the NIPAS Law, and collaborative efforts to prioritize key biodiversity areas for inclusion in the expanded PA network. More specifically, the IRR now recognized as one of its basic strategies, the complementarity and consistency of NIPAS with the establishment, creation or designation of similar conservation areas under other relevant laws.[54] This provision was included after a comprehensive review of NIPAS implementation and almost a year of consultation with stakeholders wherein a consensus was reached on the importance of recognizing conservation areas as part of the PA system.

78. The project will develop and test the wider applicability of ideas (particularly those relating to financing and managing PAs) that could be implemented across the national PA network. The lessons learned from this test-replication process will be distilled to adapt the policy and legal framework of the NIPAS to accommodate the necessary changes to be applied across the entire NIPAS.

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[53] Focal Area Strategies and Strategic Programming for GEF-4, p.11

[54] DENR. Department Administrative Order No. 2008-26. December 24, 2008.

Coordination with Related Initiatives

79. The present project builds upon the lessons learned from completed GEF and other donor funded projects. These include:

- the WB/GEF supported Conservation of Priority Protected Areas in the Philippines (CPPAP) which was completed in 2002, which tested the co-management approach with a newly established NGO in providing livelihood support to local communities in the 10 priority sites.
- the EU supported National Integrated Protected Areas Project (NIPAP) which was completed in 2003, focused on strengthening management planning and monitoring tools in selected eight sites in the country and which produced technical guides for protected area management, built capacities of the PAMBs, and was the first project to fully implement the NIPAS.
- the ongoing UNDP/GEF Samar Island Biodiversity Project, provided much of the perspective on the effectiveness of local community and LGU involvement in protected area management, and the benefit of a fully aware and sensitized stakeholder community in warding off major threats to biodiversity.

80. All these projects proved the limitations of the NIPAS, and the potentials of local conservation efforts, which is the focus of the current project.

81. From a strategic perspective, the project is expected to strongly influence future approaches to biodiversity conservation through the designation of new conservation areas as part of the national PA system. Complementarity with related initiatives is expected to be achieved in terms of site-based activities of other development partners and NGOs. DENR related initiatives focus on the integrated ecosystem management (IEM) approach being promoted through WB and ADB support. An earlier UNDP supported project with the DENR helped galvanize, in partnership with other donors, the adoption of the IEM approach as a potentially promising alternative to resource management.

82. The WB is currently supporting the National Program Support to Environment and Natural Resources Management Program (NPS-ENRMP) with GEF support to develop three key priority watershed sites in the country. These are the Libmanan-Pulantuna Watershed in Bicol Region. Ligawasan Marsh in Mindanao, and the Southern Sierra Madre cluster. The project will complement this effort by expanding the coverage to include Mts. Irid Angelo and Binuang, to enable the adoption of a "blanket" approach to Sierra Madre, in cooperation with Conservation International and other local NGOs. During implementation, the current project will closely coordinate with the NPS-ENRMP to ensure synergy of approach, and that the resulting watershed management plan incorporates biodiversity conservation objectives in KBAs.

83. The ADB is supporting the final stages of designing an Integrated Natural Resources and Environmental Management (INREM) Project that will likewise promote the IEM approach in selected watersheds. PAWB is participating in its design, and efforts are being made to ensure there is no overlap in the selection of sites. A few protected areas are envisioned to be supported within the framework of the watershed management approach. The ADB project can potentially benefit from the innovations to be introduced in the current project, to recognize new conservation areas under different governance types. Discussions are underway to explore the possibility of the INREM to finance boundary delineation of BBNP as part of its investment plan, which is within the Chico River Basin, a priority site of the ADB funded project.

84. The current project will benefit from the lessons of the GTZ-funded project in Leyte in the areas of barangay based planning, which should reinforce the integration of BD objectives in local development planning, strengthening of communities in forest management, and in harmonizing conservation goals with disaster risk management schemes in the province. Collaboration with this GTZ initiative will be strengthened not only in terms of implementing site-based activities in Mt. Nacolod, but in distilling the results of these initiatives to influence national policies and management approaches.

85. The PAWB is designing, in collaboration with UNDP-GEF, a project entitled Philippine Biodiversity Partnership Programme (PBPP), which seeks to enhance conservation of biodiversity in sectoral and local decision-making frameworks in critical ecosystems in the Philippines. Due to begin implementation in 2010, this project is expected to build on the initial lessons and experiences of the current project in deepening the integration of BD into LGU development plans and programs through the development of tools and procedures for strategic environmental assessments.

86. Another UNDP/GEF supported project is the Strengthening Coordination for Effective Environmental Management (STREEM), which aims to establish/strengthen cross sectoral convention institutional and coordination structures and mechanisms at local and national levels to comply with the three multilateral environmental agreements (MEAs). The current project will complement this effort through outcome 2, strengthening of the PAWB, and local management bodies, in implementing key provisions of the CBD.

87. Finally, a related UNDP-supported project is the Strategic Framework to Strengthen Indigenous Peoples' Rights and Development, which seeks to strengthen the capacities of national authorities and institutions and indigenous peoples to implement participatory development that incorporates the indigenous perspective, while at the same time orienting this towards more inclusive governance mechanisms for national development outcomes. The current project will reinforce the proposed IP Framework Programme in the areas of capacity building for IP groups in conservation, strengthening property rights, and integrating IP concerns in conservation area planning and management.

88. The project will establish mechanisms to strengthen its complementarity with these ongoing and planned programmes, with a view to enhance its existing strategies, and develop integrated approaches or common solutions to shared issues. This will be achieved through the Project Board, and through the active work of the PMU in strengthening linkages with related initiatives.

Rationale and Summary of GEF Alternative

89. Support to overcoming the above barriers constitutes the essential rationale for the proposed project and forms the basis for its three outcomes. In order to achieve these outcomes, PAWB has enlisted the support of GEF, in partnership with NCIP, national and local NGOs, indigenous communities, and LGUs in selected key biodiversity areas.

2.2 Project Goal, Objectives, Outcomes and Outputs/Activities

90. The **project objective** is to expand and strengthen the terrestrial PA system in the Philippines by developing new PA models and building capacity for effective management of the system. This will be supported by improved systemic (especially funding) and institutional (especially management effectiveness) capacities. The expanded PA system will have comprehensive ecological coverage and strengthened links to local communities and indigenous lands in the surrounding landscape, through the integration of new conservation areas.

91. The project's outcomes and outputs are described below.

Outcome 1 - PA system of Philippines has been expanded under new and diverse management regimes (ancestral domain, local government and community managed areas) to cover an additional 400,000 ha. of Key Biodiversity Areas (KBAs) and with enhanced potential for further expansion

92. Under Outcome 1, a set of targeted interventions will be developed to ensure that an effective and expanded terrestrial PA system covers a broader range of ecosystems, through an enhanced array of conservation models including indigenous peoples' lands managed as ancestral domain, local community managed areas and LGU managed protected areas. A total of nine sites will be added to the system, thereby

increasing the representation of Greater Luzon, Mindoro, Greater Panay-Negros, Greater Mindanao and Sulu biogeographic zones under management and protection.[55] This will increase the total area covered to 3,006,285 hectares compared to the baseline level of 2,606,285 hectares and will bring to 40% (from 35% at present) the proportion of KBAs under the system, while increasing to 10% (from 8% at present) the proportion of the Philippines' land area that is under protection. Moreover, the development of a system for recognizing new conservation areas being piloted under the project is expected to lead, over the longer term, to accelerated expansion of the PA system as compared to the baseline scenario. The approach will build upon progress made and innovations introduced in previous GEF-supported projects, and other initiatives. The outputs necessary to achieve this outcome are described below.

93. Output 1.1 – Modified PA regulations and/or laws to recognize new conservation areas as part of the national PA system: This output will develop a legal and regulatory approach to facilitate recognition of individual "community conserved areas"[56] as examples of a new type of governance system for protected areas in the Philippines. While NIPAS, under its revised IRR, already recognizes as a matter of policy that new conservation areas can become part of the national PA system, there are no prescribed procedures on how this should be achieved. The revised IRR, along with other relevant laws and regulations, will be carefully examined to identify an efficient, streamlined approach to strengthening recognition of governance regimes that contribute to conservation of KBAs. The review will consider, *inter alia*, the experiences of Mount Apo Natural Park and Mt. Kitanglad in harmonizing its management plan with the Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) of the Manobo tribal community; the working of the interim PAMB in Balbalasang Balbalan National Park, as well as the practices of the Aeta communities in the Zambales Mountain range and the Tagbanwa in Coron islands. Other alternative governance regimes to be considered will include the network of local conservation areas established in the Polilio group of islands and other successful models of community managed conservation areas, such as those in Central Cebu and Ikalahan Mountain Range. The project will launch a consultation process with stakeholders to fully discuss the proposed amendments, seek consensus and support; and identify champions who will lead the advocacy. The output of these reviews will be supplemental IRRs, new administrative regulations and, if necessary, proposed amendments to NIPAS and other laws,[57] which will together enable a streamlined process for legal recognition of new conservation areas under alternative modes of management. These will include specific procedures for establishing each new type of conservation area – including ancestral domain lands, LGU-managed areas and local community managed PAs – and for incorporating them into the national PA system. Additional categories of conservation areas may be established, as new successful models are identified and experiences documented. This may include management of private reserves, or management by another agency, such as the National Power Corporation.

94. Output 1.2 – Nine 'new-type' PAs covering 400,000 ha are established within KBAs: Following the processes established under Output 1.1, the project will undertake the defined steps in order to legally designate nine selected sites as new conservation areas. **Table 3** below shows the pilot sites within KBAs that will be covered. The sites were selected on the basis of the following criteria: (i) potential to enhance biogeographical representativeness; (ii) potential to demonstrate a variety of governance regimes to be promoted under the project; (iii) strong local interest and commitment of stakeholders; (iv) on-the-ground presence of partners or potential partners, and; (v) availability of information. At least 12,000 hectares within the 40,000 hectares of ancestral domain lands will be managed by IPs as conservation areas (Zambales and BBNP); 140,000 hectares will be under LGU-led management regimes (Irid Angelo, Tawi tawi and Polilio islands); 10,000 hectares will be managed by organized local communities (Nug as Lantoy); 14,000 hectares will be under a DENR-LGU co management scheme (Mt. Nacolod); and at least 190,000 hectares will be managed under a combination of the above, including the NIPAS-PAMB model (Mts. Iglit Baco and Hilong hilong). In each of these sites, it is

[55] Palawan is also among those which is under represented in terms of total area, however, almost all its PAs are already receiving support from many donors and/or NGOs.

[56] Per definition, community conserved areas are natural and modified ecosystems with significant biodiversity, ecological and cultural values, voluntarily conserved by indigenous peoples and local communities through customary laws or other effective means. Kothari, Ashish, 2006. Community Conserved Areas: Towards Ecological and Livelihood Security. *Parks.* Vol. 16, No. 1. 2006.

[57] The process to be followed in gaining recognition of the nine new areas under 1.2 below would not be dependent on any legal changes, but regulatory changes only. Legal changes, if necessary, would be expected to benefit subsequent phases of the expansion process (see Output 1.3).

expected that there will be a mosaic of various governance types to account for the initiatives of different stakeholders in conservation. These will help to remove PA system gaps and promote inter-connectedness at the landscape level. **B**rief profiles of these sites are provided in **Annex D**.

Table 4. List of KBAs as Pilot Sites of EDNSTPAP

Biogeographic Zone	Location	No.	KBA Name	Potential Governance Type	Estimated Area[58] (hectares)
Greater Luzon	Cordillera Administrative Region Kalinga and Mountain Provinces	1	Balbalan-Balbalasang National Park	Ancestral domain	20,864
	Regions 1 and 3 Provinces of Zambales and Tarlac	2	Zambales Mountains	Ancestral domain	41,137
	Region 4A Provinces of Rizal, Bulacan, Quezon	3	Mts. Irid Angelo and Binuang	LGU and IP communities in ancestral domain	115,207
	Region 4A Province of Quezon	4	Polilio group of islands	LGU managed	20,276
Mindoro	Region 4B Provinces of Mindoro Oriental and Mindoro Occidental	5	Mts. Iglit Baco National Park	NIPAS, ancestral domain, ASEAN Heritage site	75,445
Greater Negros Panay	Region 7 Cebu province	6	Nug as Lantoy	Community managed	10,457
Greater Mindanao	Region 8 Southern Leyte province	7	Mt. Nacolod	LGU – DENR co management	14,000
	Region 13 Provinces of Agusan del Norte, Surigao del Norte, Surigao del Sur and Agusan del Sur	8	Mt. Hilong – hilong	Mix of governance types, under the Eastern Mindanao Biodiversity Council	115,000
Sulu	ARMM, Tawi tawi	9	Tawi tawi island	ARMM, LGU and local communities	5,851
Total					**418,237**

95. Output 1.3 – Programme for expansion of the national PA system: Under this output, taking the simplified PA establishment process and the experience of the nine PAs established under the project as a point of departure, a five-year program for establishing and incorporating new conservation areas will be prepared and adopted. The process will begin with an inventory of potential new sites to be designated as conservation areas. Regional offices of DENR, including national and local NGOs, will be encouraged to nominate these areas according to the procedures and detailed criteria to be developed under Output 1.1. Selection criteria will be adapted from those used to select the nine sites being designated during the present project, based on lessons learned during the process. A screening process will be launched to determine which of the sites have the greatest potential to be designated. Procedures for engagement with local management units will be developed, with the aim of securing commitments and broad agreement on management objectives for these sites. As a result of this programme, expansion of the PA system and filling of gaps in representation and coverage are expected to continue beyond the project completion, in an accelerated manner as compared with the baseline scenario.

[58] The exact extent of area coverage will be confirmed during implementation, as the boundaries of existing KBAs are subjected to validation.

Outcome 2 - Improved conservation effectiveness through enhanced systemic, institutional and individual capacities

96. Under **Outcome 2**, the project will address systemic gaps and barriers in the management of the national PA system, in order to enable: (i) the main government agency – PAWB – and its regional offices to better support the management of PAs under the existing system and to configure itself to meet the challenges related to the management of an expanded system incorporating new conservation areas; (ii) local management bodies, including the PAMBs and IPs, LGUs and local communities in pilot sites to improve their capacity to manage protected areas and new conservation areas.

97. A program for capacity development of PAWB and regional offices will be developed and implemented, based on recent reviews, to specifically address the barriers that limit their capacity to effectively support the functioning of PAMBs, perform continuing policy review and development, carry out training and orientation programs, prepare and update guidelines, update standards and procedures and provide technical assistance to local partners. The capacity building program will also consider the requirements of an expanded system, and will support the conservation efforts of other organizations, such as local government units, indigenous peoples' groups, and local communities.

98. Baseline METT scores across pilot sites will be examined, and specific interventions developed and implemented, in order to address key weaknesses identified. By the end of the Project, the METT tracking tool will be modified to better apply to new conservation areas under various governance types.

99. The outputs necessary to deliver this outcome are described below:

100. Output 2.1 – Increased PAWB and DENR Regional Office capacities to provide technical assistance to PAMBs and other stakeholders in managing existing PAs and new conservation areas: The capacity assessment undertaken in 2003 and the results of the national capacity self assessment undertaken in 2006 will be important starting points for defining a capacity building program for PAWB and regional offices. GEF support will be provided to improve the skills and competence of a select cadre of senior technical staff in PAWB and regional offices to: (i) develop training materials; (ii) conduct capacity-building programs; (iii) launch effective communication, awareness and information programs; (iv) provide on site and specialized technical assistance; (v) formulate responsive policies; (vi) install a national monitoring and evaluation system; and (vii) develop the support systems and tools to improve overall management of the national PA system. In all of the above, efforts will be made to integrate gender and youth concerns into the management of protected areas and new conservation areas. In addition, an annual sharing of lessons and/or good practices in PA/CA management will be undertaken. This will facilitate exchange among practitioners and managers, and will serve as a basis for policy development, enrichment of procedures and effectiveness in reducing threats faced by each site.

101. Output 2.2 – Negotiated agreements with indigenous groups and other local stakeholders at nine sites resulting in management plans that incorporate BD conservation goals and sustainable management of natural resources: The GEF will support a review of existing plans of local stakeholders with the aim of determining the extent to which biodiversity conservation goals and sustainable management of natural resources have been considered. These would include the ADSDPP of indigenous communities, management plans of local communities, as well as barangay, municipal and provincial development and land use plans of LGUs within these territories. The reviews will offer an opportunity to design and test a process for seeking consensus with these groups on the management objectives of protected areas. Since there could be a mix of governance types in a designated conservation area, a management framework will be developed that is fully supported by all groups. The project will then facilitate the translation of these into the respective plans of the various stakeholders, ensuring consistency in the process. Support will be provided in the translation of agreed plans into local policies, ordinances, and/or protocols/rules of communities and IPs. In existing PAs such as Hilong hilong and in parts of the BBNP, this will involve a participatory process of updating of management plans and zoning, on site management, training and orientation for PAMB members. In the process, existing guidelines and

procedures for preparing management plans will be reviewed in order to improve the quality and the scientific basis upon which the plans were formed; as well as enhancing the quality of local community participation and ownership in the plan. The latter's involvement will be secured by developing procedures for harmonizing the PA management plan with the regional and provincial development and physical framework plans, as well as the sectoral development plans of other government agencies. To improve the review process, the PAWB will be supported in developing appropriate standards for review of the management plans

102. Output 2.3 – Enhanced management capacities in nine new-type PAs covering 400,000 ha.: GEF support for enhanced management capacities for existing PAs will focus on Hilong Hilong National Park, where a PAMB already exists in parts of the KBA, covering 115,000 hectares. Key cross cutting aspects of this support will include: reinforcing site level PASU staff presence, improving staff capacities, enhancing protection efforts, monitoring and evaluation, and awareness raising among local stakeholders and resource users. The project will also support the establishment of Local Biodiversity Alliances, geared towards generating support from stakeholders across the landscape of the pilot sites National Park and their its environs, through a common management framework. The objective is to ensure that decisions and practices of site resource users and managers are consistent with the agreed management objectives of the KBA. A similar approach will be adopted for Mt. Iglit Baco in Mindoro and Mt. Nacolod in Southern Leyte. In addition, the project will support the strengthening of capacities among IP organizations, LGUs, and local communities that will be managing the nine new conservation areas established under Output 1.2. These interventions will be based on the METT analysis (see **Annex A**) undertaken during preparation, which has helped to identify specific management actions needed at individual sites. These include: (i) technical and management orientation and training for local management bodies, (ii) strengthening enforcement, (iii) improving awareness and information among surrounding local communities, (iv) supporting advocacy to improve their representation in decision making in the use of resources, and (v) enactment of local policies, ordinances and rules supportive of the management objectives of the conservation areas. In KBAs covered by ancestral domain – namely BBNP, Zambales Mountains, and Mts. Iglit Baco – the project will document indigenous knowledge systems and practices, and reinforce these in the management of the new conservation areas. An important aspect of improving management capacity in the nine pilot sites is to harness the full potential of women and youth. Specific interventions will be designed and implemented, targeted at raising the management effectiveness of these conservation areas by 20% by the end of the project. In the process, the METT scorecards will be reviewed to make them more applicable to the requirements of new conservation areas.

103. Output 2.4 – Revised operational manual for national PAs and new manuals for 'new-type' conservation areas: To complement Output 2.1, GEF will support the preparation of a revised operational manual for national PAs, to supplement the revised IRR of the NIPAS. The overall aim is to provide a guide for strengthening on-the-ground management rather than just having a multi-stakeholder body which meets to discuss reports, plans and issues. Areas to be covered by the Manual would include, but not be limited to, the following: (i) the strengthened structure of the PAMB and related sub bodies to manage specific aspects of the PA; (ii) enhanced functions of the PAMB to enable it to perform management roles as prescribed in the NIPAS law; (iii) definition of specific roles of LGUs, and other stakeholders and strengthening their participation and representation in the PAMB; (iv) ways to strengthen the involvement of women and youth in PA/CA management and to promote gender equity, and; (v) specifying the role of the PASU as the technical arm of the PAMB and that of the DENR regional offices as the source of technical assistance. For new conservation areas, separate operational manuals will be prepared for each type of management arrangement, namely: ancestral domain; LGU-led or managed, and; local communities, and/or a network of local conservation areas. An interim manual for the setting up and functioning of these management structures in the nine pilot sites of the project will be prepared to guide implementation. A guiding principle will be to document existing or traditional conservation practices, and assist in enhancing them, rather than introducing new procedures and systems. Assistance will be provided in enabling wider understanding and support for these practices by other KBA stakeholders. Experiences and lessons from these will be documented and the Manual enhanced before it is replicated in other sites. The Technical Guides developed by a former EU assisted project[59] entitled "Essentials of PA Management" will be updated to

[59] DENR-EU. National Integrated Protected Areas Project.

supplement the PA and CA Manuals. If necessary, new guidelines will be developed to fill gaps and consider the requirements of new conservation areas (e.g., law enforcement, fundamentals of biodiversity and protected area management, and management prescriptions for different zones of the PA/CA). Other technical information, such as habitat range and conservation requirements of threatened and vulnerable species present in specific sites, as well as the characteristics and system boundaries of unique habitats and ecological sub systems for each PA, will be developed to enable PAMB members and other governance bodies in formulating appropriate management measures and in making sound decisions on proposed development undertakings that will affect the PA.

104. Output 2.5 - Common protected area M&E frameworks and protocols: The project will review prior and ongoing initiatives aimed at establishing M&E systems for protected areas and new conservation areas. These experiences will be synthesized into M&E frameworks and protocols for use by PAs and new conservation areas. The METT will also be widely promoted as a tool for measuring effectiveness and enable its comparison among different management regimes across all sites. Implementation will be supported at new and existing pilot PAs in order to establish the progress and impacts of supported activities on the achievement of the protected area/conservation area objectives. The framework will be translated into a manual and a training program will be developed to orient users. A pool of trainers from academia, PAWB and regional offices will be developed, so that they can be tapped to provide continuing support as new PAs and conservation areas are established. Key characteristics of the M&E system will include the following: (i) the system will be relatively simple to enable easy analysis of results by IPs, local communities and LGUs, which can then feed into decision making and adaptive management; (ii) it will be modifiable to harmonize with indigenous knowledge systems and practices of IPs in monitoring their ancestral domain; (iii) it will be suited to the knowledge levels of local communities, and will reflect the local practices that are already being undertaken in specific sites, and; (iv) it will give consideration to gender roles and equity, as well as the involvement of the youth. A program for orientation and training will be conducted to ensure sufficient understanding of the tools and to generate relevant information for analysis and keeping track of progress. Information generated by the M&E frameworks at site level will be linked with the indicators to be established under Output 2.1 in developing the national M&E system for the national PA and conservation area (CA) network. Protocols will be established with other organizations that are generating relevant indicators so that these can be captured in the national system.

105. Output 2.6 - Increased support from key stakeholders and decision-makers for the management and conservation of the national PA system, including new conservation areas: A communications, education and information program will be developed and launched in order to strengthen the commitment of stakeholders at all levels. This effort will be prepared in close partnership with national and local NGOs, and other agencies and will be harmonized with the information campaign on the CBD and other initiatives. Key audiences will be identified, and realistic targets in terms of changes in knowledge, attitudes, and practices will be established. To support the campaign, the project will prepare and publish an Annual Report on the State of National PA System in the Philippines, to sensitize stakeholders on the importance of, and gaps in, the current system. Conservation benefits will also be emphasized through wider dissemination of economic valuation studies of selected PAs. These will be used to mobilize additional support to finance the expansion of the PA system, and in raising the priority accorded to biodiversity conservation in national and local development planning and policy making. The project will also strengthen its partnership with the Department of Education, Culture and Sports (DECS) to enhance the integration of biodiversity conservation concepts and principles into the curriculum and education programs of students, thereby broadening the base of the campaign. Popular materials will also be developed to cater to different stakeholder groups.

Outcome 3 – Enhanced financial sustainability of the terrestrial PA system

106. Under this Outcome, the project will address the related systemic barrier of inadequate systems for financial management and resource mobilization that hinders the effective management of terrestrial PAs. This intervention will make use of the GEF PA Financing Scorecard (see **Annex B**) to assess the baseline financial system and measure progress in enhancing financial sustainability.

107. The following outputs are essential to achieve the above outcome.

108. Output 3.1 - Economic valuation studies of three new conservation areas: Economic valuation will be undertaken at three selected sites to highlight the cost to society of inaction (i.e., baseline scenario) and to generate values to inform conservation interventions in support of financial sustainability of the new conservation areas, e.g., setting of user fees, payment levels for PES, etc. The experience of the SINP in undertaking economic valuation of resources will be reviewed and a more focused approach developed to undertake similar studies in three sites. Sites will be selected to represent the following main management regimes in new conservation areas: IP managed, LGU managed and local community managed. The selection will also ensure balance in demonstrating the values of different resources represented in the PAs and CAs. Care will be taken in designing the studies such that they are action oriented and cost effective. To this end, the availability of sufficient technical and socio economic data will be an important criterion for selecting the sites.

109. Output 3.2 – Improved national-level sustainable financing tools and capacities: An important aspect of DENR and PAWB capacity strengthening involves the development of improved systems and procedures to manage the overall PA system and associated conservation areas (see Output 2.1). The present output will complement Output 2.1 by strengthening PAWB in the area of sustainable PA financing. A capacity development programme will target key DENR-PAWB and DENR-Regional managers and will establish a core team with the skills required to undertake comprehensive financial viability assessments and develop business plans. This core team will engage with relevant stakeholders – Department of Finance, multilateral and bilateral donors, conservation NGOs, as well as the ASEAN Center for Biodiversity based in Philippines – to develop a financial sustainability strategy for the overall system. Specific mechanisms required to enhance the financial sustainability of the national PA system, e.g. enhanced user fee systems, aid coordination mechanisms, tax breaks for conservation efforts, etc., will be developed and implemented. A system-level financial needs assessment will be undertaken, including basic and optimal financing scenarios. The assessment will consider, *inter alia*, the requirements of an expanded PA system, including new conservation areas. The Financial Scorecard will be an important tool in identifying the weaknesses and gaps in policies, use of tools, and development of business plans to support financing of the PA system. Sustainable finance related aspects of NIPAS will be reviewed, particularly the IPAF. Legal notes will be prepared, and formal proposals submitted to the Department of Budget and Management (DBM), to allow for automatic direct appropriations or internal re-allocation by the DENR of the IPAF to finance expenditures of existing PAs, new PAs and conservation areas and to support overhead requirements of managing the system. For new conservation areas, the feasibility of establishing a trust fund similar to the IPAF will be studied, and/or alternative mechanisms developed to set aside revenues from user charges for CA management and protection.

110. Output 3.3 – Site-level tools for resource mobilization developed at new CAs: The project will assist three of the pilot sites in developing tools for resource mobilization. In order to provide greater benefits for replication (see Output 3.5 below), the sites to be selected should represent three different forms of management arrangements, namely: IPs, LGUs and local communities. A first step will be to estimate budgetary requirements for effectively implementing the management plans developed under Output 2.2. Resource mobilization plans will then be prepared to narrow the funding gaps. Plans will consist of a combination of traditional funding sources such as contributions from LGUs, private sector organizations, budgetary allocations, and funds raised by NGOs working in the site, along with more innovative revenue generating mechanisms. In-kind contributions from other sources will also be harnessed, such as the services of volunteer patrols from LGUs and community members, and biophysical inventories and socio economic assessments by members of the academia. Finally, the project will support the sites in implementing the resource mobilization plans. This will include communicating the results of economic valuation studies (see Output 3.1) to key stakeholders and negotiating with affected user groups so that suitable levels of user charges are levied on important resources and the rates effectively implemented. For LGUs, there are relevant opportunities in the Local Government Code which determines their scope and authority in the collection of fees and their capture and/or reallocation for specific programs, as defined in their local investment plans. The feasibility of revenue capture by local communities will be carefully investigated, along with other forms of revenue generation. A payment for ecosystem services (PES) system will be put in place at one or more of the sites, based on a scoping process to determine the site with the most

potential for successful implementation of this mechanism. The scoping phase will help to determine clear boundaries of the ecosystem services, informed by technical data on the attribution of the service to the management of the providers, the presence of potential buyers and their willingness to pay for such services.

111. Output 3.4 – Site-level tools for business planning and cost-effective management developed at new CAs: A facilitated process will be undertaken to develop business plans for at least three sites. Potential partners will be identified, and processes initiated to forge partnerships with private sectors and other groups to finance other aspects of the plans. The Output will also support the installation of accounting and auditing systems for the IPAF of each PA and new conservation area, and associated training undertaken. To support the establishment of more transparent and accountable management of the site based IPAF, suitable reporting systems will be developed and implemented, to establish performance measures for fund management. These efforts are expected to upgrade the current level of fund management of site-based IPAF, to improve confidence among other donors and potential sources of funds and prepare the site Fund Managers to handle more complex financial arrangements, such as Trust Funds.

112. Output 3.5 – Lesson learning and replication of sustainable finance tools among pilot sites: Site-level experience related to sustainable finance will be documented and a learning manual developed to guide other CAs, particularly the remaining pilot sites, in developing and implementing their own financial sustainability plans. These lessons will feed into Output 3.1 by supporting the amendment of the existing DENR Department Order which sets the guidelines for the determination of user charges in PAs under the NIPAS, and will be rolled out as part of the enhanced system of financing for the national PAs and new CAs to be established.

2.3 Project Indicators, Risks and Assumptions

113. The project indicators are detailed in the Logical Framework – which is attached in Section II of this Project Document.

Table 5. Indicators

Objectives/Outcomes	Indicators	Targets
Objective – to expand and strengthen the terrestrial PA system in the Philippines by developing new PA models and building capacity for effective management of the system.	Expansion of the terrestrial PA estate: • increased areas of KBAs under legal protection; • new governance types in new conservation areas recognized as part of the national PA system; • program for accelerated expansion of PA system	Additional 9 terrestrial PAs covering 400,000 hectares, bringing the total area of KBA under protection to 3 million hectares At least three new governance types – IP, LGU and local community managed conservation areas recognized by Executive fiat as part of national PA system Program for accelerated expansion of terrestrial PA system to include new conservation areas within KBAs developed and ready for implementation
	Habitat range of 109 globally threatened species in 9 pilot sites protected	Increase by 200%
	Management Effectiveness in PAs and new conservation areas	Increase in METT scores in pilot sites by an average of at least 20% compared to baseline levels METT scorecard applied in all PAs and new CAs as basis for supporting capacity development and implementing adaptive management

Objectives/Outcomes	Indicators	Targets
	Financing of national PA system, including new conservation areas	Increase in financing scorecard results from 25% to 65% by end of Project
	Capacity to manage national PA system	Overall increase of scores by 20% as measured by capacity assessment tool
Outcome 1 – PA system of the Philippines has been expanded under new and diverse management regimes (ancestral domains, local government and community managed areas) to cover an additional 400,000 ha. of Key Biodiversity Areas (KBAs) with enhanced potential for further expansion	Coverage of the national PA system in terms of governance types	Coverage of national PA system is expanded to include new conservation areas under diverse governance types (IP, LGU and local community managed areas)
	Extent of the national terrestrial PA system in proportion to total area of the country	Increase to 10%
	Increased representation of KBAs in biogeographic zones and ecosystem types in the national PA system	Greater Luzon BZ – 48% to 56% Mindoro BZ – 49% to 81% Greater Negros Panay BZ – 47% to 50% Greater Mindanao BZ – 32% to 37% Sulu BZ – 29% to 46%
	Program for expansion and diversification of national PA system	Expansion and diversification of the national PA system is guided by a 5 year program
Outcome 2 – Improved conservation effectiveness through enhanced systemic, institutional and individual capacities	Capacity of PAWB and regional offices to manage national PA system	**Target Capacity Assessment Results:** <u>Formulate policies and plans</u> Systemic – 6 of 6 Institutional – 3 of 3 <u>Implement policies and plans</u> Systemic – 6 of 9 Institutional – 18 of 27 Individual – 8 of 12 <u>Engage and build consensus</u> Systemic – 5 of 6 Institutional – 6 of 6 Individual – 2 of 3 <u>Mobilize information and knowledge</u> Systemic – 2 of 3 Institutional – 2 of 3 Individual – 3 of 3 <u>Monitoring, evaluation, reporting and learning</u> Systemic – 4 of 6 Institutional – 4 of 6 Individual - 2 of 3
	Improved management capacities in 9 pilot sites as measured by METT scorecard Note : These target scores will be validated during inception	BBNP – 93 Zambales Mt. Range – 79 Mts Irid Angelo and Binuang – 76 Mt. Nacolod – 78 Polilio islands – 90 Mts. Iglit Baco – 87 Mt. Hilong hilong – 79 Nug as Lantoy – 74 Tawi tawi island - 74
	Local plans incorporating biodiversity conservation goals and sustainable management of natural resources	ADSDPP – 4 (BBNP, ZMR, Mts. Iglit – Baco, Mts. Irid Angelo and Binuang) Resource management plans of local communities - 2 (Nug as Lantoy, Hilong hilong) LGU land use and development plans – 3 (Tawi

Objectives/Outcomes	Indicators	Targets
		tawi, Mt. Nacolod, and Polilio islands)
	Operational Manual for local management bodies	Operational Manuals are implemented to strengthen capacities of local management bodies of existing PAs and new conservation areas
	Capacities for M and E	PAWB and local PA/CA Managers and staff have capacities to undertake M and E and use this information for adaptive management
	Awareness and support from stakeholders for national PA system	Increased awareness and support as evidenced by: (i) additional legislations passed to legalize establishment of more PAs and inclusion of CAs in the system; (ii) increased funding support from various sources; (iii) reduction in levels of destructive activities; and (iv) number of proposed development projects rejected for being incompatible with PA and CA management objectives
Outcome 3 – Enhanced financial sustainability of the PA system	National level capacity to manage financing of the PA system	PAWB has improved capacity to use new tools and mechanisms to sustainably manage financing of national terrestrial PA system to include new CAs
	Improved PA Financing as measured by Financing scorecard	Legal and regulatory framework – 79% (62/78) Business planning – 57% (35/61) Tools for revenue generation – 56% (32/57) Total – 65% (129/196) Note: These targets will be confirmed during Inception
	Number of sites with capacities for financing, business planning and cost effective management	At least 3 new PA/CAs have capacities for site level financing, business planning and cost effective management
	Number of PAs/CAs using new tools and mechanisms for sustainable financing	Additional PAs/CAs benefit from use of learning manual, revised policies, and replication of sustainable financing tools and mechanisms for PA/CA management
	Access to IPAF and levels of collection	100% of IPAF collections automatically appropriated for PA management Increase in IPAF collections by 25% or to a level of US $ 3.73 Million

Table 6. Risks Facing the Project and Risks Mitigation Strategy

Risk	Rate	Mitigation Strategy
Inclusion of ancestral domain lands into the national PA system or new conservation areas cannot be secured	L	The Ancestral Domain process allows indigenous groups to determine how their lands are to be managed. The underlying principle of Ancestral Domain is that they will be managed in ways consistent with historial land uses, which has largely ensured that AD lands are sustainably managed. Provided the NIPAS system has provisions for including Ancestral Domain, IP groups who wish to include their lands in NIPAS should not face any major obstacles. Even if unforeseen obstacles are encountered, the principle of sustainable development which underlies Ancestral Domain will ensure that these lands are sustainably managed, whether or not they are a formal part of NIPAS.
Pressure for natural resource extraction in PAs and prospective conservation areas continues	M	A common system-wide risk continues to be political pressure to allow mining, logging or other concessions within protected areas or in areas immediately adjacent, resulting in decreased habitat quality within the protected areas. During the proposed project, engagement with local communities particularly indigenous groups on Ancestral Domain lands will ensure that the link between local community development and sustainable management is maintained. Support will be provided to local stakeholder groups to strengthen their advocacy to ensure local conservation priorities are considered in decision making. The effectiveness of this approach has been demonstrated *inter alia* at the Samar Island National Park (SINP). At the national level, policy advice and advocacy will continue as part of the broader process of policy engagement for the national PA system.
Government budgetary constraints preclude adequate financing for the national PA estate, despite the improvements in PA financial management systems	M	Existing systems for revenue maximization which are underutilized (user fee systems, the integrated PA fund provision under NIPAS) will be leveraged to maximize the revenue stream for PA management under existing policy provisions and legal structures.
Long-term climate change leads to changes in the biodiversity composition of protected ecosystems, reducing the ecological significance of PA networks	M	Expansion of the PA network to encompass new Key Biodiversity Areas will account for potential climate change effects to the extent possible with existing knowledge. Strengthened systemic management capacity will increase the systems' ability to respond to future changes as they become clear.

2.4 Incremental Reasoning and Expected Global, National and Local Benefits

Incremental Reasoning

114. The project addresses the main barriers that limit the effectiveness of the Philippines PA system in conserving globally significant biodiversity: (i) bio geographical representativeness; (ii) limited capacity for PA

management; and (iii) inadequate systems for financial planning, budgetary management and revenue generation.

115. In the baseline scenario, the progress achieved through previous GEF-supported projects will not succeed in conserving globally significant biodiversity effectively due to ecosystem gaps in the current system. Systemic deficiencies in the management of PAs will remain. Inadequacies in financial management systems and gaps in the capacities and policies within the broader national system will gradually erode gains made in previous projects characterized by single-site interventions.

116. At the systems level, the baseline scenario indicates some further progress in operationalizing the NIPAS structure with existing Government resources and small-scale donor and NGO support. However identified gaps and deficiencies in the NIPAS system are unlikely to be addressed, and implementation of the system will be slow and sporadic.

117. The proposed alternative scenario will ensure that an expanded PA system, incorporating traditional models of governance in new conservation areas, will fill existing ecosystem gaps. The project will improve cost efficiencies by improving operational effectiveness within PA institutions.

118. At the national level, the alternative scenario will ensure that the terrestrial PA management system is better equipped to overcome critical barriers in capacities and financial resources. It will also enhance the integration of the PA estate into governance systems both at the local site level as well as within the broader national system.

119. Summary of costs: The total cost of the project, including co-funding and GEF funds, amounts to US$11,036,094. Of this total, co-funding constitutes 68% or US$7,536,094. GEF financing comprises the remaining 32 % of the total, or US$ 3,850,000. The incremental cost matrix below provides a summary breakdown of baseline costs and co-funded and GEF-funded alternative costs.

Expected global, national and local benefits

120. Under the alternative scenario, efforts to conserve terrestrial biodiversity in the Philippines will have been strengthened in a number of ways. First, new conservation areas will have been established, and processes initiated to incorporate these into the national PA system. The expansion will cover a total of 400,000 hectares, or an increase in coverage of KBAs by 5% compared with baseline levels. In addition, the establishment of new conservation areas will be the first initiative in the country to recognize the 'de facto' regime of indigenous peoples, LGUs, and local communities, in conserving KBAs. Once the enabling policy is issued, this will potentially hasten the coverage of the country's KBAs under protected status and effective management. Secondly, management capacities of existing PAMBs and new governing bodies in conservation areas will have been strengthened. This will bring about real on the ground protection and sustainable management of the surrounding landscape of PAs and CAs. The capacity of PAWB and its regional offices will have been enhanced to provide the needed support to local management bodies, thereby ensuring that there is a reliable facility which can provide continuing assistance to local site managers, and as new sites are added to the system. Finally, mechanisms for sustainable financing of the national PA system will have been strengthened, thereby improving the management of existing sites, and laying solid foundations for expansion. By focusing on systemic capacities of the national PA system, the expected benefits are expected to continue well beyond project completion.

121. Justification for the GEF grant is based on the clear and substantial global benefits arising directly from the project outcomes. These outcomes would either not occur, or would occur substantially more slowly, in the absence of the GEF grant. They include:

- Expansion of the national PA system: Nine additional terrestrial PAs will be established, covering 400,000 hectares of identified Key Biodiversity Areas (KBAs), with potential for

further expansion. This will raise the percentage coverage of KBAs within the national PA system to 10% of the country's territory. In biogeographic terms, the expansion process will increase representation within the national park system of KBAs covering five important biogeographical zones. It will include incorporation of at least three new PA governance types in the national system, leading to a larger and more representative PA system incorporating diverse governance types. Without the GEF support, expansion of the national PA system would be a slow process, each one taking years for the supportive legislation to be passed. As a result, there would continue to be uneven representation of biogeographic areas in the PA system, with huge gaps in protection of important habitats of globally threatened species. The opportunity for local resource managers to actively take part in conservation efforts would not be realized as the existing laws only provide for a DENR-led, multi-stakeholder protected area management body.

- Improved conservation effectiveness: The PAWB will have improved capacity to support the national PA system through up-to-date policies, technical assistance, procedures and tools for effective management; and effective monitoring and evaluation. At the same time, local management bodies will have developed sufficient capacity to ensure there is on the ground conservation of important habitats. PA management plans will be aligned with local government, community and indigenous people's management plans; thereby ensuring that stakeholder actions are consistent with the protected area conservation objectives. Without GEF support, management of the national PA system will remain inadequate to support the requirements of local PAMBs; PAMBs will continue to have weak capacity to effectively govern and manage the threats to biodiversity in protected areas. The outcome would be continued degradation of important habitats of globally threatened species.
- Enhanced financial sustainability: There will be improved capacity to manage financing of the national PA system; including the requirements of an expanded system which covers new conservation areas. This capacity will transcend to individual sites, as tools and methods are developed and promoted widely by PAWB, through lessons sharing, development of learning guides, and training. At least three sites would have demonstrated the use of these tools, including the development of business plans. The legal impediment to directly access the IPAF would be addressed, thereby resulting in improved levels of financing for PA management. Without GEF support, funding will continue to be a big constraint to the effective management of the PA system; and local conservation efforts.

122. Global benefits arising from the above outcomes will consist of the enhanced viability of globally threatened species and ecosystems found within the areas newly protected as a result of the GEF support and in several existing protected areas where management effectiveness is being increased. In species terms, this includes an estimated 109 globally threatened species[60], whose habitats are partly, and in some cases wholly, contained within the areas to be protected. Indeed, the narrow endemicity of many Philippines species means that *the expansion process engendered by the project will generate an increase of 200% or more in the range of protected habitat for most of the 109 species in question*, a benefit which is almost entirely absent under the baseline scenario.

123. The project outcomes will operate in synergy to achieve the desired global benefits. Thus, while necessary, gazettement of new PAs under Component 1 will not alone be sufficient to achieve the desired global benefits, i.e., to substantially raise the survival prospects of these 109 species and associated ecosystem types. This result can only be obtained by simultaneously and substantially

[60] Conservation International, Philippines. Department of Environment and Natural resources – Protected Areas and Wildlife Bureau and Haribon Foundation. 2006. Priority Sites for Conservation in the Philippines: Key Biodiversity Areas. Quezon City, Philippines, 24pp.

raising the management and conservation effectiveness of the areas in question. For this reason, outcomes obtained under Components 2 and 3, i.e., improved conservation effectiveness through enhanced systemic, institutional and individual capacities and enhanced financial sustainability of the terrestrial PA system, will be essential for achieving the desired benefits. The fact that these outcomes would either not occur, or would occur substantially more slowly, in the absence of the GEF grant, means that the global benefits described above would also not take place. Given the magnitude and pace of threats facing these areas, this would imply substantial, and in some cases irreversible, damage to the survival prospects of most of the 109 globally threatened species in question.

2.5 Country Ownership: Country Eligibility and Country Drivenness

124. The country ratified the CBD on December 1993, and is eligible to receive funding from UNDP. The national GEF Focal Point has endorsed the PIF on January 2, 2008.

125. The Project will directly support the Philippine commitments to the CBD, particularly, in meeting the following:

- Establish PAs to conserve biodiversity while promoting environmentally sound development around these areas;
- Respect, preserve and maintain traditional knowledge of the sustainable use of biodiversity with involvement of indigenous peoples and local communities.

126. Indirectly, the Project will contribute to the achievement of the following CBD commitments:

- Promote public participation particularly when it comes to assessing environmental impacts of development projects that threaten biodiversity; and
- Educate people and raise public awareness about the importance of biodiversity and the need to conserve it.

127. The project will also assist the Government of the Philippines in meeting its targets under the CBD Program of Work on Protected Areas (POWPA). Specific POWPA targets that will be addressed include:

- All protected areas to have effective management using participatory and science-based site planning processes;
- Effective mechanisms for identifying and preventing negative impacts of key threats to protected areas are in place;
- Establish capacity building programmes based on protected area capacity needs assessment;
- Develop sustainable financing for Philippine PA system;
- Establish standard monitoring protocols for Philippine protected area

128. The country's environmental and biodiversity related priorities are embodied in the Philippine Agenda 21 and the NBSAP. The Project is designed to support the implementation of these major programs. It focuses on the priority areas requiring conservation actions, as defined in the NBSAP, further refined in the Philippine Biodiversity Conservation Priorities, and in the recent list of KBAs in the country. There was consensus among the government and NGO's in the Philippines that these KBA sites should be the focus of attention in terms of protection. Thus, concerted action is being made to ensure that investments are directed at increasing the proportion of KBAs which are effectively managed. These areas harbor the highest concentration of endemic species in the country, particularly those which are under serious threat; and are therefore important for the preservation of the country's heritage.

129. The Project will directly support the achievement of the two major outcomes defined in the UNDP-Philippines Country Assistance Strategy. These are: (i) strengthened, rationalized and effectively implemented environment and natural resources policies, frameworks and plans; and (ii) streamlined ENR services and strengthened sustainable development planning and implementation capacity. The Project's area of focus is on enhancing management capacity within government, NGO partners, and local stakeholders namely: IPs, local

communities, LGUs; in the implementation of the NIPAS system; and in the expansion of protected coverage through the establishment of new conservation areas.

2.6 Sustainability

130. Social sustainability: Social sustainability will be achieved by actively involving the local communities, indigenous groups, LGUs and others who have a direct stake in the improved management of the PAs and new conservation areas. Careful consideration will be given to their local needs and priorities through harmonization of PA/CA management plans with their local development plans. Gender concerns will be carefully taken into account through the development of gender mainstreaming policies and procedures in PA management.

131. Environmental sustainability: Improved effectiveness in the management of existing PAs and new conservation areas will help ensure the environmental sustainability of the Philippine terrestrial system, and contribute to reducing the threats to the biodiversity resources therein. Management planning for these areas will consider the protection of biodiversity, and in the effective maintenance and protection of these ecosystems to fulfill their environmental functions.

132. Financial sustainability: A baseline level of sustainability for terrestrial PAs has been estimated during the preparation of this document using the financial sustainability scorecard. The highest score was achieved in the area of legal, regulatory and institutional frameworks – (33.3%), while low scores were achieved in the areas of business planning and tools for cost effective management (19.6%); and tools for revenue generation (17.54%). Outcome 3 has been designed to improve financial sustainability, and the outputs have been defined to improve on these elements requiring action. Under the GEF led alternative, the PAWB will be equipped with the necessary skills and capacities to undertake business planning and identify a range of sustainable financing options to support the requirements of managing the national PA system. In specific sites, PAMBs and local management bodies would have the capacity to generate their own revenues and allocate these for their own needs. Proposals to amend implementation of the IPAF will be developed, and discussed at high level with DBM to align with the original intents of the NIPAS law.

133. Institutional sustainability: The Project will focus on existing institutions as direct recipients of support. This way, these stakeholders will imbibe the incremental capacities introduced through the Project, and utilize these for the benefit of improved PA/CA management, and in improving their own quality of life.

2.7 Replicability

134. The alternative scenario will have strong elements of replication. The Project will build capacity for improved PA management in the Philippines, not only in specific sites, but at PAWB and partner organizations, so that appropriate tools, methods and management models can be developed for broader adoption in other PAs. These will eventually be replicated and/or applied by PAWB in managing other PAs in the Philippines, thereby enhancing overall PA system management in the country. More specifically, by working on the integration of new conservation areas and alternative modes of governance in the national PA system, it presupposes broader adoption once the revised implementing regulations and attendant procedures are in place. This could easily translate in more rapid establishment of new additional conservation areas, as there are a large proportion of KBAs which are within ancestral domains; occupied by local communities; and are directly within the jurisdiction of LGUs. Working models of alternative management regimes in new conservation areas will be used as platforms for widely promoting this approach, through cross visits and exchanges with other sites. The Operations Management Manual, M and E frameworks, and economic valuation and PES methods and tools will be carefully documented with the aim of translating these into national guidelines and training manuals for use by other sites. Other areas where Project has high potential for replication would be in the development of sustainable financing mechanisms that will be demonstrated in selected sites; and models for integrating PA plans in local government and ADSDPP planning and implementation.

Part III: Management Arrangements

135. The project will be implemented by the Protected Areas and Wildlife Bureau (PAWB) of the Department of Environment and Natural Resources, following the programming guidelines for national implementation of UNDP supported projects. PAWB, together with NEDA will sign the Project Document with UNDP and will be accountable to UNDP for the disbursement of funds and the achievement of the project objective and outcomes, according to the approved work plan. In particular, the Implementing Agency will be responsible for the following functions: (i) coordinating activities to ensure the delivery of agreed outcomes; (ii) certifying expenditures in line with approved budgets and work-plans; (iii) facilitating, monitoring and reporting on the procurement of inputs and delivery of outputs; (iv) coordinating interventions financed by GEF/UNDP with other parallel interventions; (v) preparation of Terms of Reference for consultants and approval of tender documents for sub-contracted inputs; and (vi) reporting to UNDP on project delivery and impact.

136. The PAWB, as the implementing agency on behalf of DENR, will manage the project and work in close cooperation with the National Commission for Indigenous peoples (NCIP), Leagues of Provinces, Cities and Municipalities, national NGOs – such as Haribon Foundation, Foundation for Philippine Environment (FPE), Conservation International (CI), Philippine Biodiversity Conservation Foundation (PBCFI), Flora and Fauna International (FFI), Philippine Tropical Forest Foundation (PTFF) – research and academic institutions, local NGOs, indigenous peoples organizations, local communities, and provincial Governors, Mayors and local legislative bodies.

137. At the central level, the project will establish a Project Board (PB), and a Project Management Unit (PMU) within PAWB. At the project pilot sites, the PAWB will enter into Memorandum of Agreements with selected NGOs and/or designate any of its regional offices, to implement selected activities, based on agreed work and financial plans. The selection of NGOs, and/or any appropriate organization or unit who will implement activities at the sites will be decided during the Inception Workshop. However, priority will be given to NGOs who are already engaged at the specific sites prior to this project. The PMU and the PB will be responsible for communicating the lessons/outcomes of actual site work to relevant central bodies and make use of them in developing new policies. The local implementing partner (NGOs/DENR regional office) will be based at the project site and directly responsible for implementing and/or monitoring the activities on the ground. Existing local coordinating bodies will be utilized, enhanced, and/or expanded to ensure there is coordination of activities at the site level, and the participation of important stakeholders are secured. This will be facilitated by the local responsible partner.

138. Project Board. It will be established at project inception. It shall be composed of the DENR, PAWB, NCIP, Leagues of Provinces, Cities and Municipalities, a representative from national NGOs chosen from among themselves, a representative from the IP community from the civil society organizations, NEDA and UNDP. The PB shall be chaired by the DENR Assistant Secretary for FASPO and meet at least quarterly. It will provide overall guidance for the project throughout implementation. Specifically, the PB will be responsible for: (i) making by consensus management decisions for the project when guidance is required by the Project Coordinator, ensuring coordination among agencies and key sectors; (ii) provide guidance to implementation to ensure consistency with national policies and strategies; (iii) complementation of the project with other initiatives of government and NGOs; (iv) provide oversight to the work of the implementing units and organizations, monitoring progress (v) review financial management and annual financial reports; (vi) monitor effectiveness of project implementation and structures; and (vii) provide guidance to major evaluations, review evaluation reports and ensure the recommendations are carried out to improve performance and likelihood of achieving outcomes and impacts.

139. Project Management Unit (PMU): Overall project administration and coordination with project sites and relevant organizations will be carried out by a PMU under the overall guidance of the PB. The Director of PAWB will serve as the overall Project Coordinator of the PMU. It shall be composed of the Project Adviser and key technical and administrative staff. The PMU shall be based at the PAWB. The PMU shall be staffed by

regular personnel of the PAWB, to be complemented by some outside staff to be contracted under the project. The responsibilities of the PMU are to: (i) ensure the overall project management and monitoring according to UNDP rules on managing UNDP/GEF projects; (ii) facilitate communication and networking among key stakeholders at the national level; (iii) organize the meetings of the PB; and (iv) monitor and support the activities of the site coordination units. The Coordinator will be responsible for the administrative and technical coordination of the project and report progress based on reports received from the regional DENR offices and local responsible partners.

140. The DENR regional offices, particularly the Protected Area and Coastal Zone Management Sector, shall be designated as Regional Coordinators and shall act as extensions of the PAWB in monitoring and evaluating site based activities. They shall, however, develop their own work and financial plans as targets of capacity building activities under the project. They shall work in close coordination with the local responsible partners (LRPs). In some sites, the DENR regional or provincial office may be designated as the LRP.

141. Local Responsible Partners (LRPs). The LRPs shall be selected prior to inception. Key criteria would include, ongoing and prior engagement with stakeholders at the project sties, capacity to provide co financing, and overall management and technical capacity. The selection of LRPs shall take advantage of the selected organization's familiarity with the sites, management and technical expertise in protected area management and extensive collaboration already established with local stakeholders. The project will build upon the conservation efforts already undertaken by the LRPs in order to leverage financing and ensure cost effectiveness. The main responsibilities of the LRPs include: (i) preparing detailed annual work programs for the sites, in coordination with local partners; (ii) facilitate linkages and secure support and participation of local stakeholders in the project; (iii) project administration of site based activities; (iv) preparation of reports on site based activities; and (v) strengthening of local bodies, organizations, such as Ips, local community organizations, LGUs in establishment and management of new conservation areas; (vii) syndicating the support of local organizations and stakeholders in developing and implementing the common management framework and plan for the PA and/or new conservation area.

142. Local Site Committees (LSC): Site level coordination shall be achieved through the LSC. The LSCs shall be composed of representatives from the LGU, local communities, IP organizations, regional and provincial NCIP representatives, as appropriate, local NGOs, DENR, regional NCIP representatives, representatives of relevant agencies, and academic and research organizations. The Chair of the LSCs shall be determined from among the members, and the exact composition will depend on the predominant governance regimes for each site. The LSC may either be the PAMB or eventually be the coordinating body for the new conservation area to be established under the project. Existing local coordinating bodies shall be enhanced and capacitated as LSCs. The organization and operations of the LSCs shall be supported by the LRPs. More specifically, the LSCs shall be responsible for: (i) seeking consensus on the management framework and plan for the PA/Cas; (ii) ensuring consistency and integration of PA/CA plans with local development plans; (iii) complementation with other planned and existing initiatives that affect or may affect implementation of PA/CA management plans; (iii) review of site reports and work programs.

143. UNDP: UNDP Manila will be responsible for technical and financial management of the project in close collaboration and consultation with the PAWB. Project components will be implemented through the PMU established through project funds. In addition to the results and the activities enumerated above, the UNDP will be responsible for: (i) ensuring professional and timely implementation of the activities and delivery of the reports and other outputs identified in the project document; (ii) coordination and supervision of the activities outlined in the project document; (iii) contracting of and contract administration for qualified local and international experts who meet the formal requirements of the UNDP/GEF; (iv) manage and be responsible of all financial administration to realize the targets envisioned in consultation with PAWB; (v) to mainstream project outcomes in its own national programme and consider funding opportunities from its own resources; (vi) to coordinate with UN Country Team in Manila with a view to mainstreaming in their interventions at the country level and funding as appropriate; (vii) establishing an effective networking between project stakeholders, specialized international organizations and the donor community; (viii) ensure networking among

the country-wide stakeholders; (ix) review and make recommendations for reports produced under the project; and (x) establish and endorse the thematic areas, with a view to ensuring linkage to national policy goals, relevance, effectiveness and impartiality of the decision making process.

Part IV: Monitoring and Evaluation Plan and Budget

144. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF Regional Coordination Unit in Bangkok. The Project Results Framework in Section II provides *performance* and *impact* indicators for project implementation along with their corresponding *means of verification*. The METT tool, Capacity Assessment Tool, and Financial Scorecard will be used as instruments to monitor progress in PA management effectiveness and capacity to manage and finance the national PA system. Baseline METT scores are attached in Annex E of the CEO Endorsement Document, while Annexes F and G provide the baseline financing and capacity score card results. These will form the basis on which the project's Monitoring and Evaluation system will be built.

145. The M&E plan includes: inception report, project implementation reviews, quarterly and annual review reports, a mid-term and final evaluation. The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized in the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

MONITORING AND REPORTING[61]

Project Inception Phase

146. A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP Country Office (CO) and representation from the UNDP-GEF Regional Coordinating Unit in Bangkok, as well as UNDP-GEF (HQs) as appropriate.

147. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project's logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

148. Additionally, the purpose and objective of the Inception Workshop (IW) will be to: (i) introduce project staff with the UNDP-GEF *expanded team* which will support the project during its implementation, namely the UNDP Manila and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP - CO and RCU staff vis à vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings.

149. The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines,

[61] As per GEF guidelines, the project will also be using the BD 1 Management Effectiveness Tracking Tool (METT). New or additional GEF monitoring requirements will be accommodated and adhered to once they are officially launched.

and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

Monitoring responsibilities and events

150. A detailed schedule of project review meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Project Board Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.

151. *Day to day monitoring of implementation progress* will be the responsibility of the Project Coordinator, with assistance from the Project Adviser based on the project's Annual Work Plan and its indicators. The Project Team will inform the UNDP CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

152. The Project Coordinator and the Project GEF Technical Advisor will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP Manila and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. The local implementing agencies will also take part in the Inception Workshop in which a common vision of overall project goals will be established. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

153. Measurement of impact indicators related to global benefits will occur according to the schedules defined in the Inception Workshop and tentatively outlined in the indicative Impact Measurement Template shown in Annex C of this document. The measurement of these will be undertaken through subcontracts or retainers with relevant institutions (e.g. vegetation cover via analysis of satellite imagery, or habitat range of key species through surveys) or through specific studies that are to form part of the project's activities (e.g. through surveys for capacity building efforts, review of financing scorecard) or periodic sampling such as occurrences of timber poaching. METT scores will also be used to keep track of improvements in management effectiveness in Project sites.

154. *Periodic monitoring of implementation progress* will be undertaken by the UNDP-Manila through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

155. The UNDP CO and UNDP-GEF RCUs as appropriate, will conduct yearly visits to field sites, or more often based on an agreed upon schedule to be detailed in the project's Inception Report / Annual Work Plan to assess first hand project progress. Any other member of the Project Board can also accompany, as decided by the PB. A Field Visit Report will be prepared by UNDP Manila and circulated no less than one month after the visit to the project team, all PB members, and UNDP-GEF.

156. *Annual Monitoring* will occur through the Annual Project Review conducted jointly by the NEDA, UNDP and PAWB. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The first such meeting will be held within the first twelve months of the start of full implementation. The PAWB will prepare an Annual Project Report (APR) and submit it to UNDP-Manila and the UNDP-GEF regional office at least two weeks prior to the annual review for review and comments.

157. The APR will be used as one of the basic documents for discussions in the annual review meeting. The

PAWB will present the APR during the annual review, highlighting policy issues and recommendations for the decision of the participants. The PAWB will also inform the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary. These will be detailed during the IW.

158. The terminal review is held in the last month of project operations. The PAWB shall be responsible for preparing the Terminal Report and submitting it to UNDP-Manila and LAC-GEF's Regional Coordinating Unit. It shall be prepared in draft at least two months in advance of the terminal review in order to serve as the basis for discussions. The terminal review will consider the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It shall decide whether any actions are still necessary, particularly in relation to sustainability of project results, and shall act as a vehicle through which lessons learnt can be captured to feed into other projects under implementation or formulation.

159. The terminal review shall determine whether to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

Project Monitoring Reporting

160. The Project Coordinator in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. The first six reports are mandatory and strictly related to monitoring, while the last two reports have a broader function and the frequency and nature will be defined throughout implementation.

161. Inception Report (IR). A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the Project. This Work Plan would include the dates of specific field visits, support missions from the UNDP-Manila or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

162. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, the Report will include a section on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

163. When finalized the report will be circulated to project partners who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

164. Annual Project Report (APR). The APR shall be prepared by the Project Coordinator, with assistance from the Project Adviser. It is a self -assessment report by project management to the country office and provides input to the country office reporting process and the Results Oriented Annual Report (ROAR), as well as forming a key input to the Annual Review. An APR will be prepared on an annual basis prior to the Annual Review, to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work.

165. The APR shall include: (i) an analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome; (ii) the constraints experienced in the progress towards results and the reasons for these; (iii) the three (at most) major constraints to

achievement of results; (iv) AWP, and other expenditure reports; (v) lessons learned; and (vi) clear recommendations for future orientation in addressing key problems in lack of progress

166. Project Implementation Review (PIR). The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the CO together with the project. The PIR shall be prepared in August and prior to the Annual Review. The PIR should then be discussed in the Annual Review so that the result would be a PIR that has been agreed upon by the project, the implementing agency, UNDP CO and the concerned RC. The GEF M and E Unit shall, through the UNDP CO and UNDP-GEF Regional Headquarters in Bangkok, provide guidance on the scope and content of the PIR.

167. Quarterly Progress Reports. Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team. The standard format prepared by the UNDP-CO and the regional office shall be used.

168. Periodic Thematic Reports. As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered.

169. UNDP ATLAS Monitoring Reports: A Combined Delivery Report (CDR) summarizing all project expenditures, is mandatory and should be issued quarterly. The Project Coordinator shall send it to the Annual Review and the Implementing Partner should certify it.

170. The following logs should be prepared:

- The Issues Log is used to capture and track the status of all project issues throughout the implementation of the project. It will be the responsibility of the Project Coordinator to track, capture and assign issues, and to ensure that all project issues are appropriately addressed;
- The Risk Log is maintained throughout the project to capture potential risks to the project and associated measures to manage risks. It will be the responsibility of the Project Coordinator to maintain and update the Risk Log, using Atlas; and
- The Lessons Learned Log is maintained throughout the project to capture insights and lessons based on good and bad experiences and behaviours. It is the responsibility of the Project Coordinator to maintain and update the Lessons Learned Log.

171. Project Terminal Report. During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

172. Technical Reports. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's

substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

173. Project Publications. Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget. The IW will specify the target audience and the types of publications that will be produced under the Project. The publications will support the awareness and information campaign to be launched under Output 2.6

174. "In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The UNDP logo should be more prominent -- and separated from the GEF logo if possible, as UN visibility is important for security purposes."

INDEPENDENT EVALUATION

175. The project will be subjected to at least two independent external evaluations as follows:

176. Mid-term Evaluation. An independent Mid-Term Evaluation will be undertaken at the end of the second year of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

177. Final Evaluation. An independent Final Evaluation will take place three months prior to the terminal review meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

Audit Clause

178. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by UNDP.

LEARNING AND KNOWLEDGE SHARING

179. Results from the project will be disseminated within and beyond the Project sites through a number of existing information sharing networks and forums. In addition:

- The project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics.

- The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned.

- The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identify and analyzing lessons learned is an on- going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned. To this end a percentage of project resources will need to be allocated for these activities.

TABLE 7: Indicative Monitoring and Evaluation Work plan and Corresponding Budget

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team Staff time*	Time frame
Inception Workshop	▪ Project Coordinator ▪ UNDP CO ▪ UNDP GEF	10,000	Within first two months of project start up
Inception Report	▪ Project Team ▪ UNDP CO	None	Immediately following IW
Measurement of Means of Verification for Project Purpose Indicators	▪ Project Coordinator will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members	To be finalized in Inception Phase and Workshop. Indicative cost: 15,000	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	▪ Oversight by Project GEF Technical Advisor and Project Coordinator ▪ Measurements by regional field officers, and local IAs	To be determined as part of the Annual Work Plan's preparation. Indicative cost (8,000 per year) ; 32,000	Annually prior to APR/PIR and to the definition of annual work plans
APR and PIR	▪ Project Team ▪ UNDP-CO ▪ UNDP-GEF	None	Annually
Annual Reviews	▪ Government Counterparts ▪ UNDP CO ▪ Project team ▪ UNDP-GEF Regional Coordinating Unit	None	Every year, upon receipt of APR
Project Board Meetings	▪ Project Coordinator ▪ UNDP CO	None	Following Project IW and subsequently at least once a year
Periodic status reports	▪ Project team	5,000	To be determined by Project team and UNDP CO
Technical reports	▪ Project team ▪ Hired consultants as needed	15,000	To be determined by Project Team and UNDP-CO
Mid-term External Evaluation	▪ Project team ▪ UNDP- CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	60,000	At the mid-point of project implementation.

Type of M&E activity	Responsible Parties	Budget US$ *Excluding project team Staff time*	Time frame
Final External Evaluation	▪ Project team, ▪ UNDP-CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team)	60,000	At the end of project implementation
Terminal Report	▪ Project team ▪ UNDP-CO ▪ External Consultant	None	At least one month before the end of the project
Lessons learned	▪ Project team ▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc)	15,000 (average 3,000 per year)	Yearly
Audit	▪ UNDP-CO ▪ Project team	25,300 (average $6,325 per year)	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	▪ UNDP Country Office ▪ UNDP-GEF Regional Coordinating Unit (as appropriate) ▪ Government representatives	Paid from IA fees and operational budget	Yearly
TOTAL INDICATIVE COST *Excluding project team staff time and UNDP staff and travel expenses*		US$ 237,300	

Part V: Legal Context

180. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of the Philippines and the United Nations Development Programme, signed by the parties on July 21, 1977. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

181. The UNDP Resident Representative in the Philippines is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by the UNDP-GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

a) Revision of, or addition to, any of the annexes to the Project Document;
b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
d) Inclusion of additional annexes and attachments only as set out here in this Project Document

SECTION II: STRATEGIC RESULTS FRAMEWORK (SRF) AND GEF INCREMENT

Annex A: Project Logical Framework and Objectively Verifiable Impact Indicators

Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines

Project Strategy	Objectively verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
Objective: To expand and strengthen the terrestrial PA system in the Philippines by developing new PA models and building capacity for effective management of the system	Expansion of the terrestrial PA estate: • increased areas of KBAs under legal protection; • new governance types in new conservation areas recognized as part of the national PA system; • program for accelerated expansion of PA system	59 terrestrial PAs covering 2.6 million hectares New PAs are established only through the NIPAS process No program for accelerated expansion of terrestrial PAs to cover new conservation areas	Additional 9 terrestrial PAs covering 400,000 hectares, bringing the total area of KBA under protection to 3 million hectares At least three new governance types – IP, LGU and local community managed conservation areas recognized by Executive fiat as part of national PA system Program for accelerated expansion of terrestrial PA system to include new conservation areas within KBAs developed and ready for implementation	Modified regulations; amended IRR of the NIPAS; or revised NIPAS law Copies of enabling instruments which set aside new conservation areas as part of national terrestrial PA system Program for nationwide recognition of new conservation areas as part of national PA system	Concerned parties will agree to the recognition of new conservation areas as part of the national PA system
	Habitat range of 109 globally threatened species in 9 pilot sites protected	Expected to decrease by at least 10% per year	Increase by 200%	BMS reports Baseline and end of project surveys	
	Management Effectiveness in PAs and new conservation areas	Average of 35 in all nine sites	Increase in METT scores in pilot sites by an average of at least 20% compared to baseline levels METT scorecard applied in all PAs and	METT scorecard reports	

Project Strategy	Objectively verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
			new CAs as basis for supporting capacity development and implementing adaptive management		
	Financing of national PA system, including new conservation areas	Governance frameworks for sustainable PA financing – 33.3% Business planning and other tools – 19.6% Tools and systems for revenue generation and mobilization – 17.54% TOTAL - 24.48%	Governance frameworks – 79% Business planning and other tools – 57% Tools and systems for revenue generation and mobilization – 56% Total – 65%	Financing score card	
	Capacity to manage national PA system	Systemic – 43% Institutional – 47% Individual – 43%	Systemic – 82% Insitutional – 73% Individual – 71%	Capacity assessment tool	
Outcome 1: PA system of the Philippines has been expanded under new and diverse management regimes (ancestral domain, local government and community managed areas) to cover an additional 400,000 hectares of Key Biodiversity Areas (KBAs) and with enhanced potential for further expansion	Coverage of the national PA system in terms of governance types	Limited to PAs established through the NIPAS process, managed by PAMBs only	Coverage of national PA system is expanded to include new conservation areas under diverse governance types (IP, LGU and local community managed areas)	Draft legislative proposals or new administrative regulations to designate new conservation areas as part of the national PA system	There will be no legal impediment to the incorporation of new conservation areas in the national PA system
	Extent of the national terrestrial PA system in proportion to total area of the country	8%	10%	Project reports; enabling orders establishing additional conservation areas under legal protection status	
	Representation of KBAs in biogeographic zones and ecosystem types in the national PA system	Greater Luzon BZ – 48% Mindoro BZ – 49% Greater Negros Panay BZ – 47% Greater Mindanao BZ – 32%	Greater Luzon BZ – 56% Mindoro BZ – 81% Greater Negros Panay BZ – 50% Greater Mindanao BZ – 37%	Project reports; enabling orders establishing additional conservation areas under legal protection status	

Project Strategy	Objectively verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
		Sulu BZ – 29%	Sulu BZ – 46%		
	Program for expansion and diversification of national PA system	None	Expansion and diversification of the national PA system is guided by a 5 year program	National program approved by the DENR	
Outcome 2 : Improved conservation effectiveness through enhanced systemic, institutional and individual capacities	Capacity of PAWB and regional offices to manage national PA system	Capacity Assessment Results: Formulate policies and plans Systemic – 4 of 6 Institutional – 2 of 3 Implement policies and plans Systemic –3 of 9 Institutional – 12 of 27 Individual – 5 of 12 Engage and build consensus Systemic – 3 of 6 Institutional – 4 of 6 Individual – 1 of 3 Mobilize information and knowledge Systemic – 1 of 3 Institutional – 1 of 3 Individual – 2 of 3 Monitoring, evaluation, reporting and learning Systemic – 2 of 6 Institutional – 2 of 6 Individual - 1 of 3	Capacity Assessment Results: Formulate policies and plans Systemic – 6 of 6 Institutional – 3 of 3 Implement policies and plans Systemic – 6 of 9 Institutional – 18 of 27 Individual – 8 of 12 Engage and build consensus Systemic – 5 of 6 Institutional – 6 of 6 Individual – 2 of 3 Mobilize information and knowledge Systemic – 2 of 3 Institutional – 2 of 3 Individual – 3 of 3 Monitoring, evaluation, reporting and learning Systemic – 4 of 6 Institutional – 4 of 6 Individual - 2 of 3	Capacity Assessment tool	

Project Strategy	Objectively verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
	Management effectiveness at nine pilot sites	BBNP – 64 ZMR – 18 Mts. Iglit Baco – 60 Mt. Irid Angelo and Binuang – 21 Mt. Nug as Lantoy – 51 Mt. Hilong hilong – 15 Mt. Nacolod – 10 Tawi tawi – 27 Polilio islands – 47	BBNP – 93[62] ZMR – 79 Mts. Iglit Baco – 87 Mt. Irid Angelo and Binuang – 76 Mt. Nug as Lantoy – 95 Mt. Hilong hilong – 79 Mt. Nacolod – 78 Tawi tawi – 74 Polilio islands – 90	METT scorecard	
	Incorporation of BD conservation goals in local plans	Isolated efforts only by a few PAMBs and NGO partners	ADSDPP – 4 (BBNP, ZMR, Mts. Iglit – Baco, Mts. Irid Angelo and Binuang) Resource management plans of local communities - 2 (Nug as Lantoy, Hilong hilong) LGU land use and development plans – 3 (Tawi tawi, Mt. Nacolod, and Polilio islands)	Local development plans of LGUs ADSDPPs of IP groups Resource management plans of local communities	
	Operational Manual for local management bodies	Inadequate for use by existing PAMBs; no Manual yet for local management bodies of new conservation areas	Operational Manuals are implemented to strengthen capacities of local management bodies of existing PAs and new conservation areas	Regular project M and E reports	
	Capacities for M and E	Weak for existing PAs; no M and E protocols for new conservation areas	PAWB and local PA/CA Managers and staff have capacities to undertake M and E and use this information for adaptive management	Regular project M and E reports	

[62] These targets will be confirmed during Inception

Project Strategy	Objectively verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
	Awareness and support from stakeholders for national PA system	Limited awareness and support, as evidenced by: (i) only 10 legislations passed to date; (ii) limited amount of IPAF (US$ 2.98 Million); (iii) high degree of threat of KBAs; (iv) high degree of threat of major biogeographic zones from infrastructure development	Increased awareness and support as evidenced by: (i) additional legislations passed to legalize establishment of more PAs and inclusion of CAs in the system; (ii) increased funding support from various sources; (iii) reduction in levels of destructive activities; and (iv) number of proposed development projects rejected for being incompatible with PA and CA management objectives	Legislations passed to support establishment of new PAs and CAs IPAF Annual Reports Monitoring and evaluation reports on extent of destructive activities in PAs/CAs Reports on reviews of development project proposals submitted to National Economic and Development Authority and Local Development Councils of LGUs	
Outcome 3: Enhanced financial sustainability of the terrestrial PA system	National level capacity to manage financing of the PA system	Limited capacity by PAWB to manage financing for national PA system	PAWB has improved capacity to use new tools and mechanisms to sustainably manage financing of national terrestrial PA system to include new CAs	Learning guides, policies and procedures on the use of sustainable financing tools and mechanisms	
	PA Financial Sustainability, as measured by Financing scorecard	Legal and regulatory framework – 33.3% Business planning – 19.6% Tools for revenue generation – 17.54% Total – 24.48%	Legal and regulatory framework – 79%[63] Business planning – 57% Tools for revenue generation – 56% Total – 65%	Financing Scorecard	
	Number of sites with capacities for financing, business planning and cost effective management	Nil	At least 3 new PA/CAs have capacities for site level financing, business planning and cost effective management	Financial performance reports	

[63] These targets will be confirmed during Inception

Project Strategy	Objectively verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
	Number of PAs/CAs using new tools and mechanisms for sustainable financing	Nil	Additional PAs/CAs benefit from use of learning manual, revised policies, and replication of sustainable financing tools and mechanisms for PA/CA management	Sustainable financing plans of additional PAs/CAs	
	Access to IPAF and levels of collection	IPAF annual allocations legislated through General Appropriations Act US $ 2.98 Million	100% of IPAF collections automatically appropriated for PA management Increase in IPAF collections by 25% or to a level of US $ 3.73 Million	IPAF reports	
Outcome 1: PA system of the Philippines has been expanded under new and diverse management regimes (ancestral domain, local government and community managed areas) to cover an additional 400,000 hectares of Key Biodiversity Areas (KBAs) and with enhanced potential for further expansion 1.1 – Modified PA regulations and/or laws to recognize new conservation areas as part of the national PA system: 1.2 – Nine 'new-type' PAs covering 400,000 ha are established within KBAs 1.3 – Programme for expansion of the national PA system					
Outcome 2 : Improved conservation effectiveness through enhanced systemic, institutional and individual capacities 2.1 – Increased PAWB and DENR Regional Office capacities to provide technical assistance to PAMBs and other stakeholders in managing existing PAs and new conservation areas 2.2 – Negotiated agreements with indigenous groups and other local stakeholders at nine sites resulting in management plans that incorporate BD conservation goals and sustainable management of natural resources 2.3 – Enhanced management capacities in nine new-type PAs covering 400,000 ha 2.4 – Revised operational manual for national PAs and new manuals for 'new-type' conservation areas: 2.5 - Common protected area M&E frameworks and protocols 2.6 - Increased support from key stakeholders and decision-makers for the management and conservation of the national PA system, including new conservation areas					
Outcome 3: Enhanced financial sustainability of the terrestrial PA system 3.1 - Economic valuation studies of three new conservation areas 3.2 – Improved national-level sustainable financing tools and capacities 3.3 – Site-level tools for resource mobilization developed at new CAs 3.4 – Site-level tools for business planning and cost-effective management developed at new CAs 3.5 – Lesson learning and replication of sustainable finance tools among pilot sites					

Annex B: Incremental Cost Analysis

Baseline trend of development of the Philippines' terrestrial PA system and key baseline programs

182. Baseline programs may be divided into three main areas, corresponding with the three project outcomes. These are described below.

183. Bio-geographic representativeness and coverage: The existing terrestrial PAs cover only 35% of the identified 117 terrestrial KBAs in the country, by area. The following shows the distribution of existing terrestrial PAs when matched against the biogeographic zones and KBAs in the Philippines.

Table 8. Distribution of Existing Terrestrial PAs in KBAs in the Philippines

Biogeographic Zone[64]	Number of KBAs	Area (in hectares)	Number of PAs Established	Area (in hectares)	Area of PAs as Proportion of KBAs (%)
Batanes	1	213,578	1	213,578	100
Babuyanes	1	809,504	-	-	-
Greater Luzon	34	1,943,693	24	925,732	48
Greater Mindoro	9	233,590	3	115,116	49
Greater Palawan	14	932,496	6	316,835	34
Burias[65]	-		-	-	-
Sibuyan	1	15,265	1	15,265	100
Romblon-Tablas	2	18,684	1	2,670	33
Greater Negros Panay	12	339,127	6	158,280	47
Greater Mindanao	35	2,657,872	17	847,161	32
Camotes	-		-		-
Siquijor	1	1,776	-	-	-
Camiguin	1	2,228	1	2,228	100
Greater Sulu	4	33,054	2	9,421	29
Sibutu	1	116,763	-	-	-
Total	**117**	**7,317,630**	**59**	**2,606,285**	**35%**

184. The above table shows that while there have been 234 PAs established in the Philippines, only 59 of these are terrestrial PAs located within KBAs. The total area covered by the terrestrial PAs within KBAs is only 2.6 million hectares, compared to the 4 million already established in the Philippines. The initial components of

[64] The biogeographic zones were defined in 1997. However, the prioritization process undertaken in 2006 did not identify KBAs in some zones based on the criteria of irreplaceability and vulnerability.

[65] Babuyanes, Burias, Sibuyan, Camotes, Siquijor and Sibutu are very small islands. The absence of PA and/or KBAs in these islands could be due to the absence of data. Some biogeographic zones have no identified KBAs yet due to lack of available information on these areas.

NIPAs which included sites already covered by previous legislations prior to the enactment of the law, partly explains the high number of PAs outside of the KBAs.

185. It is clear from the distribution of terrestrial PAs in the Philippines that among the large island groups; Mindoro, Greater Luzon, Greater Mindanao, Greater Negros Panay and Greater Sulu are underrepresented in the existing system. Palawan is also among those which is under represented in terms of total area, however, almost all its PAs are already receiving support from many donors and/or NGOs. In the baseline scenario, the process for establishing new sites will continue to be protracted, and initiatives of other stakeholders will not be recognized under the national PA system. Thus, in the next few years, it is expected that coverage will continue to be disproportionate to the extent of areas requiring conservation focus. Expansion if ever, will be a slow process, following the traditional NIPAS – PAMB model, involving 13 stages. There will be no acceleration to account for other institutional models, or to recognize the effectiveness of traditional norms and practices of IPs and local communities. There will be less incentives for LGUs to establish conservation areas, nor provide financing support to its implementation. As a result, all PAs will still be regarded as a highly centralized system, involving mainly DENR as the key actor. All new PAs will follow a unitary mode of establishment, through the NIPAS process. It is estimated that over the next five years (2014), there will be an additional of 215,000[66] hectares of terrestrial protected areas added into the system, if we consider that all pending requests currently in train for proclamations will be acted upon during the period by the Office of the President. This will bring to 2,821,285 hectares, or 9.4% of the total land area of the Philippines, and 38% of all KBAs identified, under some form of management.

186. The outcome is that there will be delayed response in conserving other priority habitats harboring important vulnerable species; resulting in their continued exposure to threats to degradation.

187. Management of existing and new PAs. Under the baseline scenario, only 71% (166 of the 234) of PAs have existing PAMBs; while only 14% (34 out of 234) have existing management plans that are being implemented. Some 59% (139 of 234) will have initial PA plans developed[67]. Existing PAMBs will continue to have varying levels of capacity, with many of its members not trained and do not have the skills to formulate policies, review proposed development projects; and enforce laws consistent with the conservation objectives of their PAs. The national level support to field actors will remain weak, due to low capacity, inadequate mechanisms, and general lack of skills to provide technical assistance on the part of PAWB and DENR regional offices. Current efforts will remain insufficient due to absence of tools and mechanisms for measuring management effectiveness, undertake monitoring and evaluation, and business protocols for PAMBs or other management bodies. The establishment of new PAs under the current system will not contribute to improving the likelihood of achieving conservation goals if these barriers are not addressed.

188. A capacity assessment was undertaken during preparation. The baseline analysis reveals that overall current capacity stands at only 43% at the systemic level, 73% at the institutional level; and 43% at the individual level. Areas where there is general weakness include: monitoring and evaluation; mobilizing information and knowledge at the systems and institutional levels; and capacity to implement policies at almost all levels.

189. The establishment of new PAs will continue to be a protracted process, taking years to complete, following the NIPAS provisions, and the subsequent complementary guidelines. The expansion therefore will take many years to complete, which will prolong the exposure of KBAs to threats to biodiversity conservation.

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[66] Areas where there are proposed Proclamations include : Mt. Tapulao in the Zambales Mountains – 5,000 hectares; Balbalan Balbalasang National Park – 20,000; Mts. Iglit Baco Mountains – 75,000; and Mt. Hilonh-Hilong – 115,000 hectares. However, these Presidential proclamations need to be further processed into legislations to complete the NIPAS process.

[67] Initial PA Plans (IPAP), as defined under the IRR od NIPAS, shall serve as the basis for planning and budgeting of the PA until established through Proclamation or by law and a management plan is approved by PAMB

190. Procedures and guidelines to support the initiatives of other sectors in PA management will not be developed, in the absence of clear policies recognizing their inclusion in the national PA system. PA management plans will continue to be developed in isolation from ancestral domain sustainable development and protection plans (ADSDPP) and/or local government land use plans and development programs, thereby encouraging the profusion of inconsistent plans and policies overlayed in PAs. While there have been efforts to promote harmonization of these plans and processes through the issuance of a Joint Circular between NCIP and DENR, and the recent IRR of the NIPAS, there needs to be strengthening of implementation on the ground in order to demonstrate how these guidelines would actually redress the difficulties experienced so far.

191. Similarly, management of critical habitats will continue to be outside of the PA system, as efforts of LGUs to declare critical habitats require confirmation by the DENR, which acts as a disincentive to local initiatives. As a result, local stakeholders will not be fully supportive of PA objectives, contributing to low level of local funding and commitment to management plan implementation.

192. Existing PA management plans will continue to focus only on the core zones; as management prescriptions for threatened and vulnerable species is lacking in most management plans. There will be weak community participation and local stakeholder ownership of management plans, as these are developed mainly and understood only by a limited range of stakeholders.

193. Financing for PAs. Under the baseline case, sources of financing for PA management will come mainly from the IPAF, and donor support in specific sites. Some LGUs are expected to contribute to implementation of selected activities, but these are sporadic and given on a year on year basis. In many PAs, activities funded by some actors will continue to be not based on a comprehensive and community accepted vision and management plan for the protected area. In most cases, budgeting will remain to be isolated from the IPAP; some IPAP will even have no budget estimates, and in worst cases, there will be no budgets for the preparation of management plans. Thus, there is a clear gap between available financing and demand.

194. Under the baseline scenario, access to the already limited IPAF will be limited and difficult, thereby serving as a disincentive for PAs to generate additional resources, and/or account new contributions from other parties.

195. Efforts to test innovative instruments to generate revenues mainly trough user charges, such as the one in the Samar Island Natural Park (SINP) will continue to be limited and remain in their early stages. This will not be sufficient to generate lessons for wide scale implementation or replication in other PAs and CAs. Similarly, the payment for environmental services (PES) will not be vigorously pursued, tested and implemented more widely by PAs and new CAs. This has been tested successfully in a watershed community in Cagayan, within the Sierra Madre terrestrial corridor. Other PAs who have generated relatively higher incomes are marine PAs, such as the Apo Reef and Tubattaha Reef through increased demand by visitors and the unique attraction of diving and coral reefs. Suitable mechanisms for terrestrial PAs will continue to be undeveloped to enable the identification of appropriate user groups, matching of their demand with services, and promoted actively.

196. The potential for capture of revenues by the IPs and LGUs in areas which are currently managed by these organizations will not be explored. There will be limited documentation and/or analysis of policy gaps and successful practices to enable continuing policy development and sharing with managers of PAs and new conservation areas.

197. At the national level, management of the national PA system will be constrained by limited capacity and lack of comprehensive strategy in PAWB to underwrite the financing gap. This will pose a serious barrier to any future plan to expand the coverage of the existing system, hence will not be sustainable.The results of the baseline financing scorecard prepared during the preparation stage indicate levels of capacity in the following areas: legal, regulatory and institutional frameworks – 33.3%; business planning and tools for cost effective management – 19.6%; and tools for revenue generation – 17.54%.

198. In the baseline scenario, the progress achieved through previous GEF-supported projects will not succeed in conserving globally significant biodiversity effectively due to ecosystem gaps in the current system. Systemic deficiencies in the management of PAs will remain. Inadequacies in financial management systems and gaps in the capacities and policies within the broader national system will gradually erode gains made in previous projects characterized by single-site interventions.

199. At the systems level, the baseline scenario indicates some further progress in operationalizing the NIPAS structure with existing Government resources and small-scale donor and NGO support. However identified gaps and deficiencies in the NIPAS system are unlikely to be addressed, and implementation of the system will be slow and sporadic.

Global Environmental Objective

200. The global environmental objective of GEF support is conservation of biodiversity within the Philippines' terrestrial ecosystems.

Alternative

201. Under the alternative scenario, efforts to conserve terrestrial biodiversity in the Philippines will have been strengthened in a number of ways. First, new conservation areas will have been established, and processes initiated to incorporate these into the national PA system. The expansion will cover a total of 400,000 hectares, or an increase in coverage of KBAs by 5% compared with baseline levels. In addition, the establishment of new conservation areas will be the first initiative in the country to recognize the 'de facto' regime of indigenous peoples, LGUs, and local communities, in conserving KBAs. Once the enabling policy is issued, this will potentially hasten the coverage of the country's KBAs under protected status and effective management. Secondly, management capacities of existing PAMBs and new governing bodies in conservation areas will have been strengthened. This will bring about real on the ground protection and sustainable management of the surrounding landscape of PAs and CAs. The capacity of PAWB and its regional offices will have been enhanced to provide the needed support to local management bodies, thereby ensuring that there is a reliable facility which can provide continuing assistance to local site managers, and as new sites are added to the system. Finally, mechanisms for sustainable financing of the national PA system will have been strengthened, thereby improving the management of existing sites, and laying solid foundations for expansion. By focusing on systemic capacities of the national PA system, the expected benefits are expected to continue well beyond project completion.

202. Justification for the GEF grant is based on the clear and substantial global benefits arising directly from the project outcomes. These outcomes would either not occur, or would occur substantially more slowly, in the absence of the GEF grant. They include:

- Expansion of the national PA system: Nine additional terrestrial PAs will be established, covering 400,000 hectares of identified Key Biodiversity Areas (KBAs), with potential for further expansion. This will raise the percentage coverage of KBAs within the national PA system to 10% of the country's territory. In biogeographic terms, the expansion process will increase representation within the national park system of KBAs covering five important biogeographical zones. It will include incorporation of at least three new PA governance types in the national system, leading to a larger and more representative PA system incorporating diverse governance types. Without the GEF support, expansion of the national PA system would be a slow process, each one taking years for the supportive legislation to be passed. As a result, there would continue to be uneven representation of biogeographic areas in the PA system, with huge gaps in protection of important habitats of globally threatened species. The opportunity for local resource managers to actively take part in conservation efforts would not

be realized as the existing laws only provide for a DENR-led, multi-stakeholder protected area management body.

- Improved conservation effectiveness: The PAWB will have improved capacity to support the national PA system through up-to-date policies, technical assistance, procedures and tools for effective management; and effective monitoring and evaluation. At the same time, local management bodies will have developed sufficient capacity to ensure there is on the ground conservation of important habitats. PA management plans will be aligned with local government, community and indigenous people's management plans; thereby ensuring that stakeholder actions are consistent with the protected area conservation objectives. Without GEF support, management of the national PA system will remain inadequate to support the requirements of local PAMBs; PAMBs will continue to have weak capacity to effectively govern and manage the threats to biodiversity in protected areas. The outcome would be continued degradation of important habitats of globally threatened species.
- Enhanced financial sustainability: There will be improved capacity to manage financing of the national PA system; including the requirements of an expanded system which covers new conservation areas. This capacity will transcend to individual sites, as tools and methods are developed and promoted widely by PAWB, through lessons sharing, development of learning guides, and training. At least three sites would have demonstrated the use of these tools, including the development of business plans. The legal impediment to directly access the IPAF would be addressed, thereby resulting in improved levels of financing for PA management. Without GEF support, funding will continue to be a big constraint to the effective management of the PA system; and local conservation efforts.

203. Global benefits arising from the above outcomes will consist of the enhanced viability of globally threatened species and ecosystems found within the areas newly protected as a result of the GEF support and in several existing protected areas where management effectiveness is being increased. In species terms, this includes an estimated 109 globally threatened species[68], whose habitats are partly, and in some cases wholly, contained within the areas to be protected. Indeed, the narrow endemicity of many Philippines species means that *the expansion process engendered by the project will generate an increase of 200% or more in the range of protected habitat for most of the 109 species in question*, a benefit which is almost entirely absent under the baseline scenario.

204. The project outcomes will operate in synergy to achieve the desired global benefits. Thus, while necessary, gazettement of new PAs under Component 1 will not alone be sufficient to achieve the desired global benefits, i.e., to substantially raise the survival prospects of these 109 species and associated ecosystem types. This result can only be obtained by simultaneously and substantially raising the management and conservation effectiveness of the areas in question. For this reason, outcomes obtained under Components 2 and 3, i.e., improved conservation effectiveness through enhanced systemic, institutional and individual capacities and enhanced financial sustainability of the terrestrial PA system, will be essential for achieving the desired benefits. The fact that these outcomes would either not occur, or would occur substantially more slowly, in the absence of the GEF grant, means that the global benefits described above would also not take place. Given the magnitude and pace of threats facing these areas, this would imply substantial, and in some cases irreversible, damage to the survival prospects of most of the 109 globally threatened species in question.

Summary of costs

[68] Conservation International, Philippines. Department of Environment and Natural resources – Protected Areas and Wildlife Bureau and Haribon Foundation. 2006. Priority Sites for Conservation in the Philippines: Key Biodiversity Areas. Quezon City, Philippines, 24pp.

205. The total cost of the project, including co-funding and GEF funds, amounts to US$11,036,094. Of this total, co-funding constitutes 68% or US$7,536,094. GEF financing comprises the remaining 32 % of the total, or US$ 3,850,000. The incremental cost matrix below provides a summary breakdown of baseline costs and co-funded and GEF-funded alternative costs.

Table 1. Incremental Cost Matrix

Benefits and Costs	Baseline (US$)	Alternative	Increment (US$)
Global benefits	Continued reduction in populations of threatened, near threatened and vulnerable species. Degradation of key terrestrial ecosystems.	The alternative scenario will ensure improvement of local populations of all IUCN vulnerable, threatened and near threatened species supported by the Philippines' expanding and more effectively managed terrestrial PA system	Barriers to PA expansion, management capacity, and financial sustainability have been removed
National and local benefits	Reduced ecosystem services derived from terrestrial ecosystems due to habitat degradation and land conversion, infrastructure development; incompatible land uses such as mining development; and overharvesting of resources	Under the alternative scenario, the Philippines will benefit from medium-long term increases in ecosystem services and other economic benefits from terrestrial ecosystems due to expansion of conservation coverage, effective management, increased resiliency, improved protection of habitats, and integration of biodiversity conservation objectives in development and management planning of local resource users and stakeholders	Modified PA regulations to account for conservation benefits of sustainably managed ancestral domain lands; community conservation areas and other protected areas; expansion of the national PA system to cover important KBAs and increased biogeographic representation; program for incorporation of new conservation areas within KBAs in the national PA system; improved capacities of PAWB and DENR regional offices in providing technical assistance to stakeholders in managing existing PAs and new conservation areas; enhanced management capacity in nine PAs and new conservation areas; integration of BD conservation objectives in local plans of stakeholders; operational manual for national PA management; common protected M and E frameworks and protocols; increased support from stakeholders and decision makers for the management of the national PA system, including new conservation areas; improved PA financing in nine additional PAs and new conservation areas; economic valuation studies; PA business plans developed and piloting of revenue generation mechanisms under the IPAF; strengthened national level sustainable financing tools and

Benefits and Costs	Baseline (US$)	Alternative	Increment (US$)
			capacities; lessons sharing and replication of sustainable finance tools among pilot sites
Outcome 1 : PA system of the Philippines has been expanded under new and diverse management regimes (ancestral domain, local government and community managed areas) to cover an additional 400,000 hectares of Key Biodiversity Areas (KBAs) and with enhanced potential for further expansion	GoP: $ 254,671 (Estimated budgets of regional offices, in 9 pilot PAs/CAs for PA management and biodiversity conservation)	GoP: $ 3,027,301 GEF: $ 676,300	GoP: $ 2,772,630 GEF: $ 676,300
	Sub-total baseline: **$ 254,671**	**Sub-total alternative:** **$ 3,703,601**	**Sub-total increment:** **$ 3,448,930**
Outcome 2: Improved conservation effectiveness through enhanced systemic, institutional and individual capacities	GoP: $ 472,664 (Estimated budget of PAWB and regional offices in supporting PA management)	GoP: $ 3,407,486 GEF: $ 1,831,400	GoP: $ 2,934,822 GEF: $ 1,831,400
	Sub-total baseline: **$ 472,664**	**Sub-total alternative:** **$ 5,238,886**	**Sub-total increment:** **$ 4,766,222**
Outcome 3 : Enhanced financial sustainability of the terrestrial PA system	GoP: $ 87,197 (portion of PAWB operating budgets)	GoP: $ 1,163,127 GEF: $ 644,000	GoP: $ 1,075,931 GEF: $ 644,000
	Sub-total baseline: **$ 87,197**	**Sub-total alternative:** **$ 1,807,127**	**Sub-total increment:** **$ 1,719,931**

Benefits and Costs	Baseline (US$)	Alternative	Increment (US$)
Project management	NA	GoP - $ 752,711 GEF - $ 348,300	GoP - $ 752,711 GEF - $ 348,300
	Sub-total baseline: **$0**	**Sub-total alternative:** **$ 1,101,011**	**Sub-total increment:** **$ 1,101,011**
TOTAL	**TOTAL BASELINE:** **GoP: $ 814,532** **TOTAL: $ 814,532**	**TOTAL ALTERNATIVE:** **GoP: $ 8,350,626** **GEF: $ 3,500,000** **TOTAL: $ 11,850,626**	**TOTAL INCREMENT:** **GoP: $ 7,536,094** **GEF: $ 3,500,000** **TOTAL: $ 11,036,094**

SECTION III: Total Budget and Workplan

Part I: Total Budget and Workplan

Award ID:	**00057877**
Award Title:	**PIMS 3530 Philippines, Terrestrial Protected Areas**
Project ID:	**00071662**
Project Title:	**PIMS 3530 Philippines, Expanding and Diversifying the National System of Protected Areas**
Executing Agency:	**Protected Areas and Wildlife Bureau of the Department of Environment and Natural Resources, Government of the Philippines**

GEF Outcome/Atlas Activity	Resp Party (IA)	Source of Funds	Atlas Budget Account Code	Input	Amount (USD) Year 1 (2009)	Amount (USD) Year 2 (2010)	Amount (USD) Year 3 (2011)	Amount (USD) Year 4 (2012)	Amount (USD) Year 5 (2013)	Total (USD)	Budget Notes
OUTCOME 1:		**GEF**	**71200**	**International Consultants**	**16,000**	**0**	**0**	**0**	**0**	**16,000**	**1**
		GEF	**71300**	**Local Consultants**	**10,000**	**0**	**0**	**0**	**48,000**	**58,000**	**2**
		GEF	**72100**	**Contractual Services – Firms, NGOs, academe**	**45,000**	**45,000**	**45,000**	**0**	**4,000**	**139,000**	**3**
		GEF	**71400**	**Contractual Services- Individual**	**22,000**	**27,000**	**27,000**	**2,000**	**2,000**	**80,000**	**4**
		GEF	**71300**	**Contract Staff/Specialists**	**32,400**	**32,400**	**32,400**	**32,400**	**32,400**	**162,000**	**5**
		GEF	**71600**	**Local Travel**	**15,000**	**15,000**	**15,000**		**2,800**	**47,800**	**6**
		GEF	**72200**	**Equipment and furniture**	**12,500**	**12,500**	**0**	**0**	**0**	**25,000**	**7**
		GEF	**74200**	**Printing and Publications**	**7,500**	**7,500**	**7,500**	**0**	**0**	**22,500**	**8**
		GEF	**75700**	**Training Workshops**	**25,000**	**15,000**	**15,000**		**16,000**	**71,000**	**9**
		GEF	**74225**	**Awareness building campaign**	**15,000**	**15,000**	**15,000**			**45,000**	**10**
		GEF	**74500**	**Miscellaneous Expenses**	**2,000**	**2,000**	**2,000**	**2,000**	**2,000**	**10,000**	**11**

		GEF		**Total Outcome 1**	**202,400**	**171,400**	**158,900**	**36,400**	**107,200**	**676,300**	
OUTCOME 2:		**GEF**	**71200**	**International Consultants**							
		GEF	**71300**	**Local Consultants**	**108,000**	**112,000**	**60,000**	**60,000**	**60,000**	**400,000**	**12**
		GEF	**71400**	**Contractual Services – Individual**	**43,000**	**43,000**	**43,000**	**13,000**	**13,000**	**155,000**	**13**
		GEF	**72100**	**Contract Services – Firm, NGOs, or academe**	**20,000**	**8,000**	**8,000**	**8,000**	**28,000**	**72,000**	**14**
		GEF	**71300**	**Contract Staff-Specialists**	**21,600**	**21,600**	**21,600**	**21,600**	**21,600**	**108,000**	**15**
		GEF	**71610**	**Local Travel**	**23,000**	**17,400**	**17,400**	**8,400**	**7,200**	**73,400**	**16**
		GEF	**72200**	**Equipment and Furniture**	**55,000**	**30,000**	**30,000**	**0**	**0**	**115,000**	**17**
		GEF	**75700**	**Training and Advocacy Workshops**	**91,000**	**96,000**	**101,000**	**26,000**	**32,000**	**346,000**	**18**
		GEF	**75700**	**Local training**	**34,000**	**59,000**	**59,000**	**35,000**	**36,000**	**223,000**	**19**
		GEF	**74500**	**Miscellaneous**	**2,000**	**2,000**	**2,000**	**2,000**	**2,000**	**10,000**	**20**
		GEF	**72500**	**Supplies and Materials**	**60,000**	**60,000**	**60,000**	**0**	**0**	**180,000**	**21**
		GEF	**75700**	**International Training**	**25,000**	**0**	**0**	**50,000**	**25,000**	**100,000**	**22**
		GEF	**74200**	**Printing and publications**	**8,500**	**14,000**	**8,500**	**10,000**	**8,000**	**49,000**	**23**
		GEF		**Total Outcome 2**	**491,100**	**463,000**	**410,500**	**234,000**	**232,800**	**1,831,400**	
OUTCOME 3:		**GEF**	**71200**	**International Consultants**							
		GEF	**71300**	**Local Consultants**	**20,000**	**20,000**	**22,000**	**10,000**	**0**	**72,000**	**24**
		GEF	**72100**	**Contractual services**	**60,000**	**60,000**	**60,000**	**0**	**0**	**180,000**	**25**
		GEF	**71400**	**Contracts – Individual**	**13,800**	**13,800**	**13,800**	**10,800**	**10,800**	**63,000**	**26**

		GEF	71300	Contract Staff-Specialists	10,800	10,800	10,800	10,800	10,800	54,000	27
		GEF	75700	Training	5,000	5,000	5,000	20,000	30,000	65,000	28
		GEF	71610	Travel	8,800	8,800	8,800	5,300	5,300	37,000	29
		GEF	72200	Equipment & Furniture	10,000	11,000	0	0	0	21,000	30
		GEF	74200	Printing and publications	0	0	0	2,500	2,500	5,000	31
		GEF	75700	Training Workshops	32,000	32,000	32,000	24,000	22,000	142,000	32
		GEF	74500	Miscellaneous Expenses	1,000	1,000	1,000	1,000	1,000	5,000	33
		GEF		Total Outcome 3 (GEF)	161,400	162,400	153,400	84,400	82,400	644,000	
Project Management		GEF	71200	International Consultants		30,000			30,000	60,000	34
		GEF	71300	Local Consultants		30,000			30,000	60,000	35
		GEF	71300	Admin Staff-contracts	4,800	4,800	4,800	4,800	4,800	24,000	36
		GEF	71300	Contract Services - Individual	0	6,250	6,250	6,250	6,550	25,300	37
		GEEF	71610	Staff Travel	1,600	1,600	1,600	1,600	1,600	8,000	38
		GEF	72200	Equipment and Furniture	12,500	12,500	0	0	0	25,000	39
		GEF	72215	Vehicle	25,000	0	0	0	0	25,000	40
		GEF	72100	Contract Services - Firm	5,000	0	5,000	0	5,000	15,000	41
		GEF	74200	Printing and publications	1,000	1,000	6,000	6,000	6,000	20,000	42
		GEF	75700	Training Workshops	15,000	5,000	5,000	5,000	5,000	35,000	43
		GEF	75700	Meetings	600	600	600	600	600	3,000	44
		GEF	72400	Communications	2,400	2,400	2,400	2,400	2,400	12,000	45
		GEF	72500	Supplies and Materials	1,200	1,200	1,200	1,200	1,200	6,000	46

		GEF	**73400**	**Gasoline, Lubricants, Maintenance of Vehicles**	**6,000**	**6,000**	**6,000**	**6,000**	**6,000**	**30,000**	**47**
		GEF		**Total - Project Management**	**75,100**	**101,350**	**38,850**	**33,850**	**99,150**	**348,300**	
Summary by Outcome		**GEF**		**Outcome 1**	**202,400**	**171,400**	**158,900**	**36,400**	**107,200**	**676,300**	
		GEF		**Outcome 2**	**491,100**	**463,000**	**410,500**	**234,000**	**232,800**	**1,831,400**	
		GEF		**Outcome 3**	**161,400**	**162,400**	**153,400**	**84,400**	**82,400**	**644,000**	
		GEF		**Project Management**	**75,100**	**101,350**	**38,850**	**33,850**	**99,150**	**348,300**	
		GEF		**TOTAL**	**930,000**	**898,150**	**761,650**	**388,650**	**521,550**	**3,500,000**	

Part II: Budget Notes

General Cost Factors:

Short-term national consultants (NC) are budgeted at $1000 per week. Long-term national consultants are budgeted at $800 per week. This is based on UNDP standard costs, based on UNDP-Philippines National Implementation Guidelines.

International consultants (IC) are budgeted at $2,000 per week.

Outcome 1:

1. International technical assistance inputs ($16,000, consisting of 8 person weeks, at the rate of US$2,000/week; for travel and per diem costs).

    - Preparation of framework for inclusion of new conservation areas in the national PA system; and provide international best practice perspective in the expansion of the terrestrial PA system in the Philippines (Output 1.1)

2. Local consultancy inputs ($58,000, consisting of 58 weeks of short-term consultant support at the rate of US$1000/week):

    - Review of NIPAS and relevant laws to recognize new conservation areas as part of the national PA system; to prepare revised administrative regulation (Output 1.1, 10 person weeks)
    - Documentation of best practices elsewhere and project experiences to input in the development of draft legislation or strengthening existing administrative policies (Output 1.3; 20 person weeks)
    - Preparation of draft legislation or amended administrative regulations to replicate project experiences, and provide enabling policy for national roll out of establishing new conservation areas (Output 1.3; 8 person weeks)
    - Preparation of 5 year PA expansion program to cover new conservation areas (Output 1.3; 20 person weeks)

3. Contractual services (firms, NGOs, academe) US$ 139,000 has been budgeted for contractual services, to be allocated as follows:

    - Mapping and surveys of nine "new type" PAs; at US$5,000 per site (Output 1.2; $45,000)
    - Biological surveys to prepare for establishment of nine pilot sites at US$10,000 per site (Output 1.2; $ 90,000)
    - Knowledge management to set up web site for Project; linked with PAWB web site (Output 1.5; $ 4,000)

4. Contractual services – Individual – US $ 80,000 has been budgeted, consisting of a total of 210 person weeks of services, to be allocated as follows:

    - Facilitators to assist in establishment of 9 new pilot PAs/CAs at US$500 per week (Output 1.2; 10 person weeks each for a total of 90 person weeks; US $ 45,000)
    - Technical support to provide on the ground assistance in establishment of 9 new pilot PAs/CAs at US $ 250 per person week (Output 1.2; estimated at 100 person weeks for all sites; US $ 25,000)

    - Facilitators to assist in the roll out of establishment of additional PAs/CAs outside of the pilot sites (Output 1.5; 20 person weeks; US $ 10,000)

5. Contract Staff/Specialists – to assist PAWB in coordination, technical support, management, and implementation (US $ 162,000)

- Protected Area Specialist to assist PAWB in technical planning and management of activities under Outcome 1 (Output 1.1; 60 person months; US $ 54,000)
- Environmental Legal Specialist to assist PAWB in legal reviews and coordination with Consultants, preparation of revised policies and regulations (Output 1.3; 60 person months; US $ 54,000)
- Planning Specialist to assist PAWB in the general areas of integrated project planning, updating of annual work plans, coordination with sites; and submission to UNDP (Output 1.3; 60 person months; US $ 54,000)

6. Local Travel: $47,800 has been budgeted for economy class travel under this outcome by national and international consultants, facilitators, and project staff to undertake the required reviews, stakeholder consultations, capacity assessments, and actual training and field-based work. Consultants will be selected on a competitive basis and may not necessarily be based at the project sites. Consultants would need to travel to Manila PAWB and other relevant Government agencies are located, as well as to the 9 field sites located in six different regions and islands.

7. Equipment: $25,000 has been budgeted for office equipment for site-based staff.

8. Printing and publications: $22,500 has been budgeted for costs of printing materials such as management plans, being produced under this outcome; documentation for the legal designation of new PAs/CAs; and information and educational materials to inform the public and stakeholders of the plans for the establishment of new PAs/CAs under the system.

9. Training workshops: A total of US $71,000 has been budgeted under this Outcome to support the following:

   - Consultations on the draft revised administrative regulations to include new CAs as part of the national PA system (Output 1.1)
   - Site level consultation and training workshops in 9 sites to support the establishment of new PAs/CAs as part of the national PA system (Output 1.3)
   - Regional consultations and orientations with DENR field offices outside the project sites to commence the establishment of new CAs following the development of a national program (Output 1.3)

10. Awareness building campaign: A total of US $ 45,000 has been budgeted to support local stakeholder awareness building programs in all the nine sites to generate support and understanding for the establishment of new PAs/CAs

11. Miscellaneous $ 10,000 has been budgeted under miscellaneous for Outcome 1. The precise costs of the site-based activities are difficult to anticipate. Travel and other costs are also likely to rise over the life of the project due to inflation and foreign currency fluctuations. The project will look for cost-savings wherever possible, particularly in relation to travel to the field sites, for example, where it makes sense to pool activities required to deliver outputs under different outcomes and where it is possible to identify locally qualified consultants capable of delivering these outputs to reduce the number of visits to a particular field site.

Outcome 2:

12. Local consultancy inputs ($ 400,000 consisting of 100 weeks of short-term consultant support at the rate of US$ 1000/week and 60 person months of long-term consultant support at US$ 5,000/month):

   - Development of capacity building program (Output 2.1; 8 person weeks)
   - Development of training modules (Output 2.1; 10 person weeks)
   - Development of national M and E system for PAs/CAs (output 2.1; 10 person weeks)
   - Preparation of Operational Manual for PA management (Output 2.4; 10 person weeks)

- Preparation of Operational manual for management of conservation areas – LGU managed; IP, and local community (Output 2.4; 18 person weeks)
- Updating of Technical guides for PA/CA management (Output 2.4; 10 person weeks)
- Preparation of M and E for PAs and new conservation areas (Output 2.5; 10 person weeks)
- Documentation of indigenous knowledge systems and practices (IKSP) in M and E (Output 2.5; 6 person weeks)
- Preparation of first report on State of the National PA System in the Philippines (Output 2.6; 10 person weeks)
- Preparation of National Information, Education and Awareness (IEC) Plan (Output 2.6; 8 person weeks)
- Project Adviser to provide ongoing technical support to PAWB in project planning, management, and technical coordination of inputs by Consultants and partners (Output 2.1; 60 person months)

13. Contractual services – Individual : US$ 155,000 has been budgeted for contractual services, to be allocated as follows:

    - Facilitators to provide ongoing support to enhance management capacity in 9 PAs/CAs (Output 2.3; 180 person weeks; US $ 90,000)
    - Facilitators to provide on site support to integrate BD conservation goals in local development plans (Output 2.2; 40 person weeks; US $ 20,000)
    - Technical Support to provide support to integrate BD conservation goals in local development plans (Output 2.2; 60 person weeks; US $ 75,000)

14. Contract Services – Firm, NGO or academe partner :

    - US $ 32,000 has been allocated to undertake annual measurement of monitoring indicators (Output 2.5)
    - US $ 40,000 has been budgeted to undertake baseline and end of project awareness surveys (Output 2.6)

15. Contract Staff – Specialists : US $ 108,000 has been allocated to provide ongoing support by Specialists in the following areas:

    - M and E Specialist to coordinate with Consultants and field staff and partners in the development and implementation of M and E protocols for selected sites. The task also includes support in the general areas of reporting, coordinating inputs to report on project indicators. (60 person months; US $ 54,000)
    - IEC Specialist to support PAWB in its IEC campaign tor raise awareness of stakeholders on importance of PAs and provide general support in informing the public and promoting the Project (60 person months; US $ 54,000)

16. Travel: $ 73,400 has been budgeted for economy class travel under this outcome by national consultants and project staff to undertake the required reviews, stakeholder consultations, capacity assessments, training material development and actual training and field-based work. Consultants will be selected on a competitive basis and may not necessarily be based at the project sites. Consultants would need to travel to Manila where PAWB and other relevant Government agencies are located, as well as to the nine project sites located in six regions and islands.
17. Equipment and Furniture: US $ 115,000 has been allocated to support management at 9 sites (US $ 90,000) and general support to the development and printing of simple information materials for public awareness and education (US $ 25,000)
18. Training and Advocacy Workshops: A total of US $ 346,000 has been budgeted under this Outcome to support stakeholder participation in the Project:

    - Training and consultation workshops with PAWB and regional offices in the development and dissemination of the capacity building program (Output 2.1; US $ 20,000)

- Management planning and training workshops to facilitate stakeholder involvement in the preparation of management plans for all the nine sites (Output 2.2; US $ 180,000)
- Training and consultation workshops with PAWB regional offices, national and local NGOs, and other site stakeholders in the development of Operational manual for PA/CA management and in updating of technical guides (Output 2.4; US $ 20,000)
- Training and consultation workshops with field staff and partners in the development of M and E frameworks/protocols and their field testing (Output 2.5; US $ 30,000)
- Site level consultations cum training in the preparation of conservation management plans (Output 2.2; US$ 20,000)
- Training and consultation workshops with stakeholders in the development of IEC Plan, and in orientation of PAWB regional offices and site partners (Output 2.6; US $ 16,000)
- Holding of 2 National PA/CA Lessons Sharing Summit (Output 2.6; US $ 20,000)
- Training and advocacy workshops with stakeholders (Output 2.6; US $ 40,000)

19. Local training: A total of US $ 223,000 has been budgeted to support different training activities in country:
    - Implementation of selected capacity building program for PAWB and regional staff (Output 2.1; US $ 100,000) On the job training and orientation for IP members, local community leaders, and LGU officials and staff in management planning for their sites (Output 2.2; US $ 72,000 Pilot testing of M and E system and training of users (Output 2.5; US $ 15,000)National training for PAWB and regional offices located in sites outside the Project on the M and E protocols for PAs and new CAs (Output 2.5; US $ 36,000)

20. Miscellaneous: A total of US $ 10,000 has been allocated to miscellaneous for Outcome 2. The precise costs of the site-based activities are difficult to anticipate. Travel and other costs are also likely to rise over the life of the project due to inflation and foreign currency fluctuations. The project will look for cost-savings wherever possible, particularly in relation to travel to the field sites, for example, where it makes sense to pool activities required to deliver outputs under different outcomes and where it is possible to identify qualified consultants capable of delivering these outputs to reduce the number of visits to a particular field site.

21. Supplies and Materials: A total of US $ 180,000 has been allocated to support the management planning and implementation of capacity building program for site offices, managers and local implementing partners in nine sites. These will include small equipment to be used for monitoring, enforcement, and other site based activities.

22. International training: A total of US $ 100,000 has been allocated to send key PAWB and regional staff, site managers, and representatives from partners to selected training opportunities overseas to enhance their skills and competencies in their work. The selection of trainees and courses will be based on the results of the capacity assessment of PAWB, regional offices, and key office/organizations.

23. Audiovisual, printing and publications: A total of $49,000 has been budgeted to cover the costs of the following:

    - Printing and publication of Operational Manual for PA/CA Management (Output 2.4; US $ 4,000)
    - Printing and publication of M and E handbook for PA/CAs (Output 2.5; US $ 10,000)
    - Design and production of IEC materials based on the IEC Plan (Output 2.6; US $ 35,000)

Outcome 3:

24. Local consultancy inputs ($72,000, consisting of 72 weeks of short-term consultant support at the rate of US$1000/week):

    - Piloting of new revenue generation mechanisms (Output 3.3; 24 person weeks; US $ 24,000)
    - Resource generation and coordination (Output 3.2; 32 person weeks; US $ 32,000)
    - Legal Study on IPAF (Output 3.2; 6 person weeks)
    - Preparation of Learning Manual on PA/CA financing (Output 3.5; 10 person weeks)

25. Contractual Services – Firm, NGO or academe : A total of US $ 180,000 has been budgeted under this Outcome to support the following:

- Economic valuation studies in 3 pilot sites (Output 3.1; US$ 150,000)
- Payments for environmental services study (PES) (Output 3.1; US $ 30,000)

26. Contractual Services – Individual: A total of US $ 63,000 has been allocated under this Outcome to provide the following support:

- Facilitators to provide on site support to nine sites to improve PA financing (Output 3.4; 108 person weeks; US $ 54,000
- Facilitators to provide on tie support to development of business plans (Output 3.4; 18 person weeks; US $ 9,000)

27. Contract Staff – Specialists: A total of US $ 54,000 has been budgeted under this Outcome to engage an Economist for 60 person months to provide overall to technical coordination of inputs of Consultants, contractors, to improve PA financing; assist in general planning under this Outcome; and support PAWB in coordinating with key agencies in improving access to IPAF.

28. Training: A total of US $ 65,000 has been budgeted under this Outcome to support the following:

- On the job training of counterparts in economic valuation and use of other non traditional financing instruments for PA/CAs (Output 3.1; US $ 15,000)
- Training and orientation for PAWB and regional office staff, including NGO and other local partners in the use of the Learning manual on PA/CA financing (Output 3.5; US $ 50,000)

29. Travel: $37,000 has been budgeted for economy class travel under this outcome by national and international consultants to undertake the required reviews, stakeholder consultations, capacity assessments, training material development and actual training and field-based work. Consultants will be selected on a competitive basis and may not necessarily be based at the project sites. Consultants would need to travel to Manila where PAWB and other relevant Government agencies are located, as well as to the field sites.

30. Equipment: $21,000 has been budgeted for equipment needed for enhanced inter-sectoral co-ordination, including computing and communications equipment

31. Printing and publications: $5,000 has been budgeted for costs of printing of technical reports and Learning Manuals produced under this Outcome.

32. Training Workshops: US $ 142,000 has been budgeted under this Outcome to support stakeholder participation, particularly in the following activities:

- A number of small local training workshops in nine sites in the process of developing financing options and improved capacity for PA/CA financing (Output 3.3; US $ 90,000)
- Training workshops in the course of development, implementation, and dissemination of the economic valuation study, including preparation of action plans in 3 pilot sites (Output 3.1; US $ 12,000)
- Small local training workshops in 3 pilot sites to negotiate agreements with buyers and sellers of environmental services in the course of the PES study development, implementation of agreements and development of business plans (Output 3.1; US $ 30,000)
- National and regional consultation and training workshops in the strengthening access to IPAF, development of the Learning manual on PA/CA financing; and development of resource generation plans for the national PA system (Output 3.2 and 3.5; US $ 10,000)

33. Miscellaneous $5,000 has been budgeted under miscellaneous for Outcome 3. The precise costs of the site-based activities are difficult to anticipate. Travel and other costs are also likely to rise over the life

of the project due to inflation and foreign currency fluctuations. The project will look for cost-savings wherever possible, particularly in relation to travel to the field sites, for example, where it makes sense to pool activities required to deliver outputs under different outcomes and where it is possible to identify locally qualified consultants capable of delivering these outputs to reduce the number of visits to a particular field site.

Project Management:

34. International Evaluation Experts : A total of US $ 60,000 has been budgeted for 30 person weeks of inputs for mid term and final evaluation of the Project

35. National Evaluation Experts: A total of US $ 60,000 has been budgeted for 60 person weeks of inputs for mid term and final evaluation of the Project

36. Administrative Staff – Contracts: A total of US $ 24,000 has been budgeted to engage a Finance Assistant to handle the books of account and general financial management of the Project, under the National Implementation Management Guidelines.

37. Contractual Services – Individual: A total of US $ 25,300 has been budgeted to undertake annual audits

38. Travel: A total of $8,000 has been budgeted for travel by staff of the PMU to allow for effective project coordination between the PMU and the different field sites.

39. Office supplies and equipment: A total of $25,000 has been budgeted for office supplies and equipment. To make the PMO operational, stationery, communication materials, telephone and internet connectivity, and office equipment is necessary.

40. Vehicle: US $ 25,000 has been budgeted to purchase one vehicle for the services of the PMU, to enable coordination and visits to project sites near Manila.

41. Contract Services – Firm: US $ 15,000 has been budgeted to undertake surveys and studies to measure indicators at the objective level, and provide information for annual monitoring of progress on selected indicators (M and E).

42. Printing and publications: US $ 20,000 has been budgeted under Project Management to publish and disseminate periodic progress reports and selected technical reports

43. Training Workshops: US $ 35,000 has been budgeted under Project Management to undertake the following activities:

    - Small training workshops with agencies, regional staff, NGO and academic partners to discuss management and implementation concerns over the life of the Project (US $ 10,000)
    - Inception workshop – US $ 10,000 (M and E activity)
    - Annual Lessons sharing forum – US $ 15,000 (M and E activity)

44. Meetings: Small project meetings to improve coordination and communication among Project actors have been budgeted a total of US $ 3,000.

45. Communications: A budget of US $ 12,000 has been provided to support internet subscription, telephones, and other communication expenses related to coordination with project sites, and exchange of information with national and local stakeholders.

46. Supplies and materials: A budget of US $ 6,000 has been provided to support the general operations of the PMU.

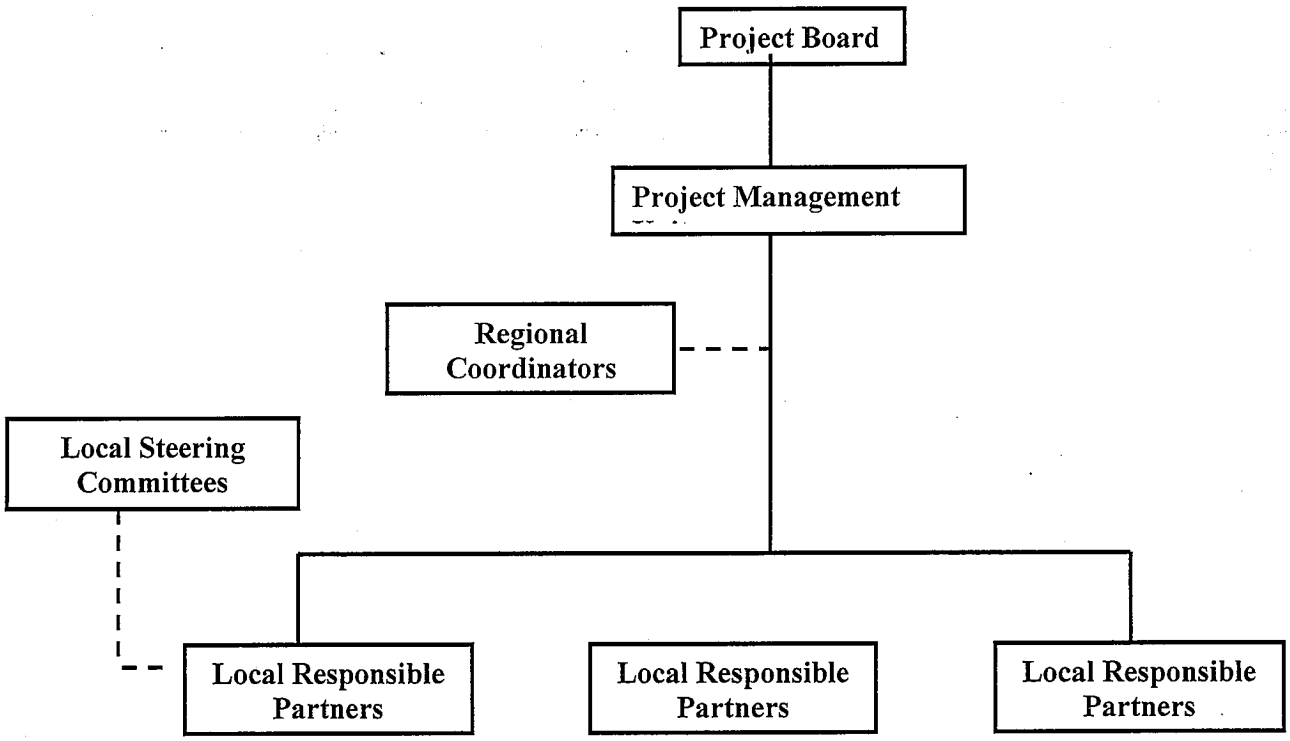
47. Gasoline, Lubricants, maintenance of vehicle: A budget of US $ 30,000 has been provided to support the general operations and maintenance of the Project vehicle.

SECTION IV: ADDITIONAL INFORMATION

Part I: Other agreements

These are in separate files.

Part II. Organigram of the Project



Part III: Terms of References for key project staff and main sub-contracts

Position Titles/Estimated Person weeks (for GEF finance) and US $/ person week	Tasks to be performed
Community Conservation Area Expert (International) 8 person weeks @ US$ 2,000 per person week	Outcome 1 – all outputs • Provide international best practice perspective on the inclusion of conservation areas into national PA system • Recommend approaches and/or options on how new conservation areas are integrated into national PA system • Develop framework for management planning and supporting new conservation areas • Provide guidelines on recognition of new conservation areas, criteria for selection, instruments used for designation, management regimes, role of government and local stakeholders, extent of regulation and administration, and required technical and policy support
Environmental Legal Expert (Local) 18 person weeks @ US $ 1000 per person week	Output 1.1 Year 1 • Review NIPAS and other relevant laws to determine adequacy of existing policies to recognize new conservation areas as part of the national PA system • Prepare draft administrative regulations to strengthen existing executive fiats to include new conservation areas into the national PA system • Conduct consultations with stakeholders to present results of review and proposed administrative regulations Year 5 • Review documentation of best practices of Project and other initiatives at new conservation areas • Conduct consultations and visits to sites with successful conservation initiatives • Prepare draft amendments to NIPAS and/or relevant laws to strengthen recognition of new conservation areas into national PA system, including those covered by other governance types, such as private reserves, together with attendant policies on financing, decentralization of management, and other appropriate Project initiatives • Support PAWB and other national stakeholders in consultation and advocacy on proposed policy/legislative proposals
Documentation Expert (local) 20 person weeks at US $ 1000 per person week	Output 1.3 • Review lessons and experiences of Project, particularly, evidences of benefits and weaknesses of conservation areas under different governance types in promoting conservation objectives and supporting expansion of national PA system • Review relevant lessons and experiences in other sites, particularly those under other governance types, to determine their potential to be included in the national PA system • Present results in a lessons sharing forum; identify model sites and/or champions who can articulate their experiences more widely with other audiences to improve learning and adaptation by other conservation area managers • Prepare report and short popular version of findings for wider sharing with policy makers, and PA/CA practitioners
Program Development Expert (local) 20 person weeks at US $1000 per person week	Output 1.3 • Review documentation of best practices and experiences in establishing new conservation areas • Detremine potential for establishment of new conservation areas under different governance types • Prepare a national program for expansion of the terrestrial PA system to include new conservation areas • Establish targets and determine phases of implementation

Position Titles/Estimated Person weeks (for GEF finance) and US $/ person week	Tasks to be performed
	considering capacity for replication, potential in other regions, technical and administrative requirements for establishment, institutional feasibility, and sufficiency of policy support • Prepare budget estimates and capacity building requirements to implement the expansion program • Conduct consultations with relevant stakeholders as required • Document the national expansion program into an administrative regulation for approval of DENR
Institutional/Capacity Building Expert (local) 8 person weeks at US$ 1,000 per person week	Output 2.1 • Assess capacity of PAWB and regional offices to support management of national PA system, including potential requirements of new conservation areas • Consider evolving role of PAWB and regional offices in management of national PA system brought about by potential expansion of national PA system to include new conservation areas; and the requirements of these areas given decentralized management • In consultation with PAWB and regional offices, review the proposed rationalization plan and determine how the emerging roles and proposals fit with these plans; recommend ways to update the rationalization plan based on new findings • Prepare a capacity building program for PAWB and regional offices, conduct consultations to engender participation and ownership • Prepare timetables and resource requirements to implement the plan, and monitoring and evaluation requirements to keep track of progress and evaluate outcomes
Human Resources/Training Experts (local) 10 person weeks @ US$ 1,000 per person week	Output 2.1 • Prepare competency based training materials based on capacity building plan developed • Review Project documentation, procedures, technical reports, in preparing training modules and learning guides • Pre test implementation of training modules and document results; revise as necessary • Conduct pilot runs of training courses and train potential Trainors
M and E Expert/National PA System (local) 10 person weeks @ US$ 1,000 per person week	Output 2.1 • Review existing system to monitor and evaluate national PA system • In consultation with PAWB, regional offices and partner NGOs, develop national M and E system to assist PAWB and relevant stakeholders, monitor and report on progress on the national PA system; share findings with policy makers; and evaluate overall outcome of all initiatives • Assist PAWB in organizing the preparation of a National Report on the State of the PA System in the Philippines
Project Technical Adviser 240 person weeks @ US $ 1,250 per person week	Outcomes 1 and 2 • Assist PAWB in improving its overall capacity in PA management, including Project implementation • Assist PAWB in setting general technical direction to Project and its activities • Prepare terms of reference of national and international Consultants and subcontractors • Coordinate inputs of various consultants and sub contractors to deliver desired results • Assist PAWB in overall project planning and reporting on results to stakeholders • Coordinate with stakeholders to secure their active participation in the Project • Ensure collection of relevant data and reporting on indicators in the Logframe
PA Management Expert/Preparation of PA	Output 2.4 • Review existing guidelines and reference materials related to

Position Titles/Estimated Person weeks (for GEF finance) and US $/ person week	Tasks to be performed
Operations Manual (local) 10 person weeks @ US$ 1,000 per person week	Operations Manual for PAs • Undertake field review to solicit feed back on relevance and adequacy of existing guidelines and/or systems for PA Operations • Prepare Operations Manual for PA Management based on findings from review • Conduct consultations and/or field tests of Operations Manual and develop system for tracking effectiveness/relevance to improve management of PAs • Develop implementing regulations to provide guidelines on use of Operations Manual • Coordinate with HR/Training Experts to develop training modules or learning guides on the use of Operations Manual
PA Management Expert/Manual for New Conservation Areas (local) 18 person weeks @ US$ 1000 per week	Output 2.4 • Review enabling policies and instruments and relevant to new conservation areas under three different governance types – community managed, IP managed and LGU managed • Conduct field visits and consultations to document working models of governance structures under each type of conservation area • In light of unique features of each governance type, document and/or prepare Operations Manual for each, specifying the roles and responsibilities of relevant local structures and governing bodies, as well as the relationships and role of PAWB and regional offices, including other agencies as relevant (e.g., NCIP, DILG) • Conduct field tests of proposed procedures and systems • Prepare implementing regulations to guide implementation
Biodiversity Conservation Experts/Updating of Technical Guides (local) 10 person weeks @ US$ 1,000 per person week	Output 2.4 • Review existing technical guides to determine adequacy, relevance to existing PAs and new conservation areas • Determine gaps and prepare/update technical guides as necessary • Conduct consultations and field tests, document findings and revise technical guides as necessary • Prepare simple documentation of technical guides for easy understanding by local PA/CA Managers and staff
Biodiversity Monitoring System Expert (local) 10 person weeks @ US $ 1,000 per person week	Output 2.5 • Review existing M and E protocols/systems for protected areas, such as the Biodiversity Monitoring System (BMS); BIOME of FPE; and outcomes monitoring protocol of CI • Determine adequacy and relevance, conduct consultations and field visits to solicit feedback on their use • Update/prepare M and E frameworks and protocols for existing PAs and new conservation areas • Prepare simple Manuals for pilot test in at least three sites; document findings and revise, as necessary • In coordination with IKSP Consultant, integrate IKSP and community knowledge and practices in Manual • Finalize M and E Manual(s) and assist PAWB in training of Trainors
Indigenous Knowledge Systems and Practices (IKSP) Documentation Expert (local) 6 person weeks @ US $1,000 per person week	Output 2.5 • Review existing documentation of IKSP of IPs and selected local communities in monitoring and evaluation of PAs/new conservation areas • Conduct field visits to document other relevant IKSPs of IPs and local communities • Document existing practices and provide relevant inputs into the development of M and E protocols/manuals for PAs and new CAs
Technical Experts Pool/Preparation of National Report on PA System (local) 10 person weeks @ US$ 1,000	Output 2.6 • Consider the indicators and guidelines prepared under the M and E of the national PA system • Evaluate availability of data to prepare the report as outlined in the M and E system of the national PA

Position Titles/Estimated Person weeks (for GEF finance) and US $/ person week	Tasks to be performed
per person week	• Prepare draft report and make presentations to relevant stakeholders for review and additional inputs • Finalize the report, and make recommendations on process and content of next national report
Information, Education and Communications (IEC) Expert (local) 8 person weeks @ US$ 1,000 per person week	Output 2.6 • Review findings from baseline awareness survey, and develop a national IEC plan for the national PA system and new conservation areas • Conduct consultations to engender participation and ownership, and validate the focus, objective, target audiences and key messages • Finalize the plan and prepare resource requirements, including capacity building needs • Provide inputs in the design of required information materials and other modes of communicating key messages to target audiences
PA Financing Expert (local) 24 person weeks @ US $ 1000 per person week	Output 3.3 • Design pilots of new revenue generation mechanisms in at least 3 sites based on results of economic valuation studies • Engage with local stakeholders in seeking agreement on fee systems and/or charges • Assist in monitoring implementation of revenue generation systems and document experiences and lessons
32 person weeks @ US $ 1,000 per person week	Output 3.2 – Resource generation and coordination • Assist PAWB in developing a national financing strategy to improve sustainable financing of managing the national PA system, to include new conservation areas • Review resource requirements of output 2.1, capacity to manage the national PA system • Develop skills in PAWB, regional offices, and select PA/CA managers to undertake comprehensive viability assessments and develop business plans
10 person weeks @ US $ 1000 per person week	Output 3.5 – Learning Manual on PA Financing • Review experiences of Project and other initiatives in improving PA/CA financing and prepare Learning Manual • Develop replication program for application of new revenue generation mechanisms in other PAs/CAs • Assist in training of Trainors and developing capacity within PAWB and select PA /CA Managers in the use of the manual
Legal Expert (local) 6 person weeks @ US $ 1000 per person week	Output 3.2 • Review relevant provisions of NIPAS and IPAF procedures and implementing regulations • Prepare legal notes on the implementation of the IPAF compared with the original intents of the law • Assist PAWB to engage in dialogues with DBM, DoF and other relevant stakeholders to seek consensus on amending the procedures for IPAF implementation • Prepare relevant Memorandum Circulars and/or other administrative regulations to enhance access to IPAF and improve its operations as a Trust Fund
National Evaluation expert (for mid-term and final) 60 person weeks at US$ 1,000 per person week	The role of the national project evaluation consultant(s) will be to participate, alongside with the international consultants, in the mid-term and final evaluation of the project, in order to assess the project progress, achievement of results and impacts. The project evaluation specialists will develop draft evaluation report, discuss it with the project team, government and UNDP, and as necessary participate in discussions to realign the project time-table/logframe at the mid-term stage. The

Position Titles/Estimated Person weeks (for GEF finance) and US $/ person week	Tasks to be performed
	standard UNDP/GEF project evaluation TOR will be used.
International Evaluation Expert 30 person weeks @ US $ 2,000 per person week	The international evaluation consultant will lead the mid-term and the final evaluations. He/she will work with the local evaluation consultant in order to assess the project progress, achievement of results and impacts. The project evaluation specialists will develop draft evaluation report, discuss it with the project team, government and UNDP, and as necessary participate in discussions to extract lessons for UNDP and GEF. The standard UNDP/GEF project evaluation TOR will be used.
Economic Valuation – subcontract US$ 50,000 per site for 3 sites	Output 3.1 • Undertake scoping study to determine best sites for undertaking economic valuation • Develop methodology and engage local PA/CA Managers in understanding of the scope and process of the study, including possible expectations on the results • Undertake economic valuation on important values of selected site • Communicate findings to local and national stakeholders • Prepare technical and popular reports on the results of the study
Payments for Environmental Services – sub contract US $ 10,000 per site for 3 sites	Output 3.1 • Review experiences of other Projects in implementation of PES and determine relevance/potential for PAs/new CAs • Review results of economic valuation studies and undertake scoping exercise to determine best sites to undertake PES • Summarize results of economic valuation studies and communicate to local stakeholders and potential organized buyers of environmental services • Facilitate negotiations between local stakeholders (providers of services) and potential buyers to seek agreement on level and type of compensation mechanism • Document agreements and establish monitoring system to review progress and compliance of both parties • Document experiences for replication

Part IV: Stakeholder Involvement Plan

Stakeholder Identification

The PAWB will be the main agency responsible for developing and managing the implementation of the Project. At the national level, it will solidify its partnership with the National Commission on Indigenous Peoples (NCIP), Leagues of Provinces, Cities and Municipalities, and national based NGOs in negotiating agreements with and strengthening the capacity of local institutions and organizations (IPs, local community organizations, LGUs) in managing new conservation areas (CAs) in providing the necessary policy and technical support to their establishment under the national PA system. It will work in partnership with provincial and municipal governments, indigenous peoples, local NGOs, and local communities as they are identified to strengthen their capacity as effective local Managers of the selected PAs/CAs.

53. **Table 1** below describes the major categories of stakeholders, their roles and responsibilities and their involvement in the Project.

Table 1. Key Stakeholders, their Roles and Responsibilities and Involvement in the Project

Stakeholder	Roles and Responsibilities	Involvement in the Project
PAWB	The central agency responsible for biodiversity conservation and other key biodiversity areas. It is also in charge of coordinating the implementation of the NIPAS and establishment and management of PAs.	PAWB will be the implementing agency and will be mainly responsible for managing the Project. It will enter into MOAs with selected NGOs as implementing partners in the sites.
Protected Areas, Wildlife, and Coastal Zone Management Sector (PAWCZS) of DENR regional offices	The Regional Executive Director acts as the Chairman of PAMB in NIPAS sites. The Regional Technical Director and staff of the PAWCZS undertakes site assessment, assists the establishment of new PAs, and provides support to PAMBs.	Will act as extensions of PAWB in monitoring and coordinating implementation of the Project activities at the site level, and will report on progress of activities taking place at the PA sites.
DENR Foreign Assisted and Special Projects Office (FASPO)	The Assistant Secretary for FASPO is the National Focal Point for GEF, and monitors the allocation of GEF RAF resources. Within DENR, it also coordinates resource mobilization for the Department's Projects, and monitors and evaluates the implementation of all foreign assisted projects.	The FASPO will be represented in the Project Board[69], and will provide direct oversight to implementation by PAWB.
NCIP	NCIP is the government agency responsible for the protection of the welfare of IPs; and in the issuance of certificate of land and domain titles (CADTs/CALCs) to qualified groups.	The NCIP will be a major partner of the Project, and will be a member of the Project Board. It will facilitate linkages with the IP groups in the sites, support in the development of policies to support IP management of PAs. It will also facilitate the issuance of certificate of precondition for activities to be undertaken in ancestral domain lands.
National Economic and Development Authority	NEDA is the agency overseeing the planning and monitoring of the	NEDA will sit as member of the Project Board. It will monitor and

[69] Please refer to Part III-Management Arrangements for composition of Project Board and description of its roles and responsibilities.

Stakeholder	Roles and Responsibilities	Involvement in the Project
(NEDA)	UNDP Country Programme.	evaluate the implementation of the Project, as part of its inherent role in the management of the ODA portfolio.
Department of Interior and Local Government (DILG)	DILG is the agency which has oversight with the LGUs, and in the implementation of the Local Government Code.	DILG will support the development of policies that will encourage LGUs to take a more active role in the management of PAs and new conservation areas. It will issue supporting policies to replicate the lessons from the Project; and facilitate resolution of any policy conflicts or issues relevant to LGU participation in PA management.
Department of Tourism (DOT)	DOT is the agency responsible for promoting tourism in the Philippines. It has an ecotourism program, jointly developed with DENR	DOT will assist in identifying opportunities for ecotourism and in promoting these as part of its on going program
League of Provinces, Cities and Municipalities	The Leagues ensure there is national level representation in the discussion of policies and programs that affect LGUs.	They will be an important partner in disseminating lessons, and advocacy in strengthening the role of LGUs in PA management; and in amending legislations to improve NIPAS implementation, and/or support establishment of new conservation areas.
National NGOs such as (Conservation International (CI), Haribon Foundation, Flora and Fauna International (FFI), Foundation for Philippine Environment (FPE), Philippine Biodiversity Conservation Foundation Incorporated (PBCFI); and World Wildlife Fund – Philippines (WWF)	These NGOs have ongoing activities in the project sites, and have active partnership with PAWB in advocacy, national PA system planning, monitoring and management. They undertake technical studies to provide scientific basis for strengthening the prioritization and management of the national PA system.	These NGOs will provide co financing for the Project. In partnership with local NGOs and other groups, they will become implementing partners of the Project in the sites where they are working on. PAWB will execute a MOA with these groups to assume responsibilities for the implementation of defined activities in each site. A representative of national NGOs will be selected to be a member of the Project Board.
Other NGOs such as Philippine Tropical Forest Conservation Foundation, Inc. (PTFCFI)	They support initiatives of local communities in sustainable management of natural resources in KBAs	They will provide co financing to support activities of local communities and local NGOs.
Provincial, Municipal and City LGUs	They have political jurisdictions in areas where the PAs and new conservation areas are located. They have existing mandates to sustainably manage their resources and promote biodiversity conservation.	They will take an active role in the management of PAs under their jurisdiction, in partnership with IP communities, local communities, DENR field offices, and other local stakeholders.
IP groups within the selected sites	They are the direct and primary stakeholders in the Project. They stand to benefit from the Project, and suffer the consequences of inaction on biodiversity conservation. They have strong historical and cultural ties to their domains; which coincide with the	They will take an active role in the management of PAs under their jurisdiction, in partnership with LGUs, local communities, DENR field offices, and other local stakeholders, as appropriate. They will also be responsible for issuing the Free and Prior Informed Consent

Stakeholder	Roles and Responsibilities	Involvement in the Project
	boundaries of existing PAs. Their indigenous practices and knowledge systems are mainly consistent with conservation objectives.	(FPIC) for the Project in selected areas[70]
Local NGOs such as Polilio Islands Biodiversity Conservation Foundation, Inc. (PIBCFI), Central Cordillera Alliance for Good Governance (CCAGG), Central Cebu Biodiversity Foundation, Inc. (CCBFI)	They have on going advocacy and conservation efforts in the selected sites.	As lead and/or as partners of national NGOs, they will take an active role in the implementation of selected activities under the Project. They will share their information, and skills in improving the capacity of local stakeholders in PA management.
Local communities	They are the direct and primary stakeholders in the Project. They stand to benefit from the Project, and suffer the consequences of inaction on biodiversity conservation. Some communities are already undertaking conservation activities in certain tracts of land. Some would have secure tenure while others may have no secure tenure yet. Other communities would be living in the fringes of existing PAs	They will take an active role in the management of PAs under their jurisdiction, in partnership with LGUs, IP communities, DENR field offices, local NGOs, and other local stakeholders.
Women and youth	They are generally neglected group in the management structures and decision making at the community level. However, they have a lot of potential to contribute to improving management of PAs and new conservation areas if duly recognized, their capacities improved, and given space and opportunity to meaningfully participate	They will be given particular attention in the Project so that their potential can be harnessed; and their concerns considered in management planning
Academic and Research Institutions	They undertake research and other advocacy activities in the regions/provinces where the Project sites are located	They will be involved in the conduct of research, other studies, and in sharing of scientific information on the sites. They will provide their expertise such as advisory support to selected Project activities.
Private sector	Most companies have policies on corporate social responsibilities which can potentially support directly conservation efforts. Their actions directly impact on use of biodiversity resources	The Project will engage actively with private sector to influence their actions, explore potential investment opportunities within the framework of site management plans, and seek their direct support to finance conservation efforts
UNDP Manila	UNDP will be the implementing agency of the GEF and facilitates the development, review and submission of projects for GEF financing. It also monitors the implementation of the UNDP Country Program in the Philippines. It also catalyzes the support of other donors in fulfilling the	The UNDP Country Office (through the RR or designated UNDP staff) is responsible for the successful management and delivery of programme outcomes and monitoring of interdependencies between projects and managing changes within and among projects.

[70] The Indigenous Peoples Rights Act (IPRA) requires that all development projects undertaken in areas with IP communities should have the FPIC

Stakeholder	Roles and Responsibilities	Involvement in the Project
	government responsibilities under the CBD and in implementation of GEF projects	
Development partners (ADB, World Bank, GTZ, New Zealand, etc.)	They have ongoing and planned initiatives in the sector. They engage in active dialogue with PAWB and DENR in assessing overall sector performance, and in defining areas of future support	The Project will ensure that there is synergy with other Projects, and that all initiatives are consistent with the overall strategic directions and policy framework. The Project will maintain regular lessons sharing with relevant projects to continually sharpen approaches and improve development effectiveness

Information dissemination, consultation, and similar activities that took place during the PPG

During the project preparation stage, several consultations were held with key stakeholders:

- Individual meetings with national NGOs who have ongoing and planned activities in the sites. The purpose of these meetings were to inform them about the Project, and get their views on how the Project will complement existing initiatives; assess other site related issues that need to be addressed, and identify other stakeholders who will benefit and/or may influence the Project. Commitments in principle were also sought on the co financing for implementation.
- Site visits to selected sites to touch base with local stakeholders, introduce the Project and validate the relevance of the project strategy, and examine how the Project will fit within existing local governance structures.
- First stakeholder workshop with national NGO representatives and officials of regional DENR offices, to present the Project, seek common understanding of the outcomes that it seeks to achieve, and validate the issues that need attention in Project design. The METT scorecards were prepared for the pilot sites, and inputs were secured on the implementation arrangements.
- Second stakeholder workshop with national NGO representatives to review the draft Project Document, seek additional inputs, define their roles in implementation, and develop consensus on the Project's management arrangements.
- A series of workshops with PAWB senior staff to review the subsequent drafts of the Project Document, and seek understanding on the outcomes and outputs of the Project, and the likely activities that need to be undertaken to achieve these.
- Individual consultation with NCIP to introduce the Project, discuss their roles in implementation, and how the IPs will benefit from and participate in the Project.

Activities planned during implementation and evaluation

The stakeholder participation plan has been developed based on the principles outlined in **Table 2** below.

Table 2: Stakeholder participation principles

Principle	Stakeholder participation will:
Value Adding	be an essential means of adding value to the project
Inclusivity	include all relevant stakeholders
Gender responsiveness	Promote the equal rights and participation of men and women during planning and implementation, including enjoyment of benefits
Accessibility and Access	be accessible and promote access to the process
Transparency	be based on transparency and fair access to information; main provisions of the project's plans and results will be published in local mass-media
Fairness	ensure that all stakeholders are treated in a fair and unbiased way
Accountability	be based on a commitment to accountability by all stakeholders

Principle	Stakeholder participation will:
Constructive	Seek to manage conflict and promote the public interest
Redressing	Seek to redress inequity and injustice
Capacitating	Seek to develop the capacity of all stakeholders
Needs Based	be based on the needs of all stakeholders
Flexible	be flexibly designed and implemented
Rational and Coordinated	be rationally planned and coordinated, and not be ad hoc
Excellence	be subject to ongoing reflection and improvement

The project proposes a mechanism to achieve broad-based stakeholder involvement in the project preparation and implementation processes. Stakeholder participation will include the following three components:

- Project Board (PB): The SC will provide overall guidance for the execution of the project activities and will include representatives from the organizations listed in Table 1. In addition, the PB shall inspect and follow-up the implementation of the project and provide coordination among relevant ministries. The PB will be led by DENR and will meet every six months unless urgent decision-making is necessary.

- Project Management Unit (PMU): The project administration and coordination between sites and relevant organizations will be carried out by a PMU under the overall guidance of the PB. The PMU Coordinator shall be the Director of PAWB. The PMU Coordinator will be responsible for the administrative and technical coordination of the project and report progress upon feed-back received from the project partners.

- Local Committees (LC) at site level: Coordination among local stakeholders will be made possible through the LC. Participation of the relevant actors will be facilitated by the local implementing partner. The coordination among the LC will be provided by the PMU, and the members of all committees may get together at certain intervals, for instance during annual general assembly, where all the stakeholders meet regularly.

PB and PMU will be located in Manila to ensure coordination among stakeholder organizations at central level during the project period. The PMU and the PB will be instrumental in conveying the messages/outcomes of actual site work to relevant central bodies and make use of them in developing new policies (See Table 3). The LCs will be locally based at the project site and directly responsible for overseeing the activities on the ground.

Table 3: Members of PB, PMU and LC

Project Board (PB)	Project Management Unit (PMU)	Local Committees (LC) (based in selected pilot area)
DENR NCIP NEDA Dept of Tourism One representative from IP civil society organizations One representative from National NGOs UNDP Manila	PAWB (PMU Coordinator)	DENR Regional Offices (Regional Technical Director for PAWCZS) Regional/Provincial NCIP Office of Provincial Governor Municipal Mayor IP leaders Local community representatives Local NGOs Local academic institutions

Partnerships and value adding are proposed under this project. The management arrangements were designed in such a way that the project considers the efforts already underway and the confidence that have been established with local stakeholders in conservation efforts. These will be enhanced during the Project, and other relevant actors capacitated in the process. The structure likewise builds upon the existing institutions at PAWB and regional offices, including stakeholder coordination bodies at the field level, so that the project will be reinforcing rather than supplanting present arrangements. This way, the project also aids in the institutional development of key players in management of protected areas and new conservation areas.

The proposed approach will contribute to better coordination and collaboration between authorities and those who have vested rights for conservation and sustainable development. The approach is viewed to be more effective in resolving management problems, and avoiding duplication of efforts in and around protected areas and new conservation areas. The efforts of various stakeholders in areas such as conservation, development, education and awareness, research, etc., will be better coordinated and oriented towards common goals.

Long-term stakeholder participation

The project will provide the following opportunities for long-term participation of all stakeholders, with a special emphasis on the active participation of local communities:

Decision-making – through the establishment of the Project Board. The establishment of the structure will follow a participatory and transparent process involving the confirmation of all stakeholders; conducting one-to-one consultations with all stakeholders; development of Terms of Reference and ground-rules; inception meeting to agree on the constitution, ToR and ground-rules for the committees.

Capacity building – at systemic, institutional and individual level – is one of the key strategic interventions of the project and will target all stakeholders that have the potential to be involved in brokering, implementing and/or monitoring management agreements related to activities in and around the KBAs. The project will target especially organizations operating at the community level to enable them to actively participate in developing and implementing management agreements.

Communication - will include the participatory development of an integrated communication strategy.

The communication strategy will be based on the following key principles:

- providing information to all stakeholders;
- promoting dialogue between all stakeholders;
- promoting access to information.

Finally, the project will be launched by a well-publicized multi-stakeholder inception workshop. This workshop will provide an opportunity to provide all stakeholders with updated information on the project as well as a basis for further consultation during the project's implementation, and will refine and confirm the work plan.

Social Issues

There are no expected social issues associated with the implementation of the Project. The design provides for sufficient consideration of the needs and priorities of local stakeholders, and will in fact, build upon local knowledge, traditions customs and way of life that are consistent with conservation as basis for preparing management plans, and enhancing their capacities in the process. Potential negative social impacts will be fully explored during the Inception Workshop and adequate tools and methods developed to investigate these in the course of implementation.

Part V: Other Additional Information

Annex A – Baseline METT Scores of KBAs to be covered under the Project

Annex B – Baseline Capacity Assessment Scorecard

Annex C – Baseline Financing Scorecard

Annex D – Profiles of KBAs to be Covered under the Project

Annex A – Baseline METT Scores of KBAs to be covered under the Project

(see separate file for the detailed data sheets)

Section One: Project General Information

1. Project Name: Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines
2. Project Type (MSP or FSP): FSP
3. Project ID (GEF): ____
4. Project ID (IA): ____
5. Implementing Agency: UNDP
6. Country: Philippines

Name of reviewers completing tracking tool and completion dates:

	Name	Title	Agency
Work Program Inclusion	Norma Molinyawe	Chief, Biodiversity Management Division	PAWB-DENR
Project Mid-term			
Final Evaluation/project completion			

7. Project duration: ***Planned*** 5 years ***Actual*** _____ years

8. Lead Project Implementing Agency: Protected Areas and Wildlife Bureau of the Department of Environment and Natural Resources

9. GEF Strategic Program:
   Sustainable Financing of Protected Area Systems at the National Level (SP 1)
   Increasing Representation of Effectively Managed Marine PAs in PA Systems (SP 2)
   Strengthening Terrestrial PA Networks (SP 3)

10. Project coverage in hectares

Targets and Timeframe **Total Extent in hectares of protected areas targeted by the project by biome type**	**Foreseen at project start**	**Achievement at Mid-term Evaluation of Project**	**Achievement at Final Evaluation of Project**
Terrestrial ecosystems	400,000 ha.		

Please complete the table below for the protected areas that are the target of the GEF intervention. Use NA for not applicable.

Name of Protected Area	Is this a new protected area? Please answer yes or no.	Area in Hectares—please specify biome type	Global designation or priority lists (E.g., Biosphere Reserve, World Heritage site, Ramsar site, WWF Global 200, etc.)	Local Designation of Protected Area (E.g, indigenous reserve, private reserve, etc.)	IUCN Category for each Protected Area[71]					
					I	II	III	IV	V	VI
1. Balbalan Balbalasang National Park	NO	20,864 hectares		National Park		X				
2. Zambales Mountain Range	NO	41,137 hectares			NA					
3. Mts. Irid Angelo and Binuang	NO	115,207 hectares			NA					
4. Polilio group of islands	NO	20,276 hectares		Local Conservation Area by Local Government Unit	NA					
5. Mts. Iglit Baco National Park	NO	75,445 hectares	ASEAN Heritage Site	National Park		X				
6. Mt. Nug as Lantoy	NO	10,457 hectares			NA					
7. Mt. Nacolod	NO	14,000 hectares			NA					
8. Mt. Hilong hilong	NO	115,000 hectares		Watershed Forest Reserve						X
9. Tawi tawi island	NO	5,851 hectares			NA					

71

I. Strict Nature Reserve/Wilderness Area: managed mainly for science or wilderness protection
II. National Park: managed mainly for ecosystem protection and recreation
III. Natural Monument: managed mainly for conservation of specific natural features
IV. Habitat/Species Management Area: managed mainly for conservation through management intervention
V. Protected Landscape/Seascape: managed mainly for landscape/seascape protection and recreation
VI. Managed Resource Protected Area: managed mainly for the sustainable use of natural ecosystems

Annex B – Baseline Capacity Assessment Scorecard

Strategic Areas of Support	Total Possible Score (TPS)		
	Systemic	Institutional	Individual
1. Capacity to conceptualize and formulate policies, legislations, strategies and programme	6	3	-
2. Capacity to implement policies, legislation, strategies and programmes	9	27	12
3. Capacity to engage and build consensus among all stakeholders	6	6	3
4. Capacity to mobilize information and knowledge: Technical skills related specifically to the requirements of the SPs and associated Conventions	3	3	3
5. Capacity to monitor, evaluate and report and learn at the sector and project levels	6	6	3
Total	**30**	**45**	**21**

Strategic Areas of Support	Baseline Scores		
	Systemic	Institutional	Individual
1. Capacity to conceptualize and formulate policies, legislations, strategies and programme	4	2	-
2. Capacity to implement policies, legislation, strategies and programmes	3	12	5
3. Capacity to engage and build consensus among all stakeholders	3	4	1
4. Capacity to mobilize information and knowledge: Technical skills related specifically to the requirements of the SPs and associated Conventions	1	1	2
5. Capacity to monitor, evaluate and report and learn at the sector and project levels	2	2	1
Total	**13**	**21**	**9**

Strategic Areas of Support	Baseline score as % of TPS (Average)		
	Systemic	Institutional	Individual
1. Capacity to conceptualize and formulate policies, legislations, strategies and programme	67	67	-
2. Capacity to implement policies, legislation, strategies and programmes	33	44	42
3. Capacity to engage and build consensus among all stakeholders	50	67	33
4. Capacity to mobilize information and knowledge: Technical skills related specifically to the requirements of the SPs and associated Conventions	33	33	67
5. Capacity to monitor, evaluate and report and learn at the sector and project levels	33	33	33
Total	**43**	**73**	**43**

Strategic Areas of Support	Target score as % of TPS (Average)		
	Systemic	Institutional	Individual
1. Capacity to conceptualize and formulate policies, legislations, strategies and programme			
2. Capacity to implement policies, legislation, strategies and programmes			
3. Capacity to engage and build consensus among all stakeholders			
4. Capacity to mobilize information and knowledge: Technical skills related specifically to the requirements of the SPs and associated Conventions			
5. Capacity to monitor, evaluate and report and learn at the sector and project levels			
Total			

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
1. Capacity to conceptualize and formulate policies, legislations, strategies and programmes	Systemic	The protected area agenda is being effectively championed / driven forward	There is essentially no protected area agenda	There are some persons or institutions actively pursuing a protected area agenda but they have little effect or influence	There are a number of protected area champions that drive the protected area agenda, but more is needed	There are an adequate number of able "champions" and "leaders" effectively driving forwards a protected area agenda
1. Capacity to conceptualize and formulate policies, legislations, strategies and programmes	Systemic	There is a strong and clear legal mandate for the establishment and management of protected areas	There is no legal framework for protected areas	There is a partial legal framework for protected areasbut it has many inadequacies	There is a reasonable legal framework for protected areas but it has a few weaknesses and gaps	There is a strong and clear legal mandate for the establishment and management of protected areas
1. Capacity to conceptualize and formulate policies, legislations, strategies and programmes	Institutional	There is an institution responsible for protected areas able to strategize and plan	Protected area institutions have no plans or strategies	Protected area institutions do have strategies and plans, but these are old and no longer up to date or were prepared in a totally top-down fashion	Protected area institutions have some sort of mechanism to update their strategies and plans, but this is irregular or is done in a largely top-down fashion without proper consultation	Protected area institutions have relevant, participatorially prepared, regularly updated strategies and plans

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
2. Capacity to implement policies, legislation, strategies and programmes	Systemic	There are adequate skills for protected area planning and management	There is a general lack of planning and management skills	Some skills exist but in largely insufficient quantities to guarantee effective planning and management	Necessary skills for effective protected area management and planning do exist but are stretched and not easily available	Adequate quantities of the full range of skills necessary for effective protected area planning and management are easily available
2. Capacity to implement policies, legislation, strategies and programmes	Systemic	There are protected area systems	No or very few protected area exist and they cover only a small portion of the habitats and ecosystems	Protected area system is patchy both in number and geographical coverage and has many gaps in terms of representativeness	Protected area system is covering a reasonably representative sample of the major habitats and ecosystems, but still presents some gaps and not all elements are of viable size	The protected areas includes viable representative examples of all the major habitats and ecosystems of appropriate geographical scale
2. Capacity to implement policies, legislation, strategies and programmes	Systemic	There is a fully transparent oversight authority for the protected areas institutions	There is no oversight at all of protected area institutions	There is some oversight, but *lack resources to perform this role* ~~only indirectly and in an untransparent manner~~	There is a reasonable oversight mechanism in place providing for regular review but lacks in transparency (e.g. is not independent, or is internalized)	There is a fully transparent oversight authority for the protected areas institutions
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Protected area institutions are effectively led	Protected area institutions have a total lack of leadership	Protected area institutions exist but leadership is weak and provides little guidance	Some protected area institutions have reasonably strong leadership but there is still need for improvement	Protected area institutions are effectively led

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Protected areas have regularly updated, participatorially prepared, comprehensive management plans	Protected areas have no management plans	Some protected areas have up-to-date management plans but they are typically not comprehensive and were not participatorially prepared	Most Protected Areas have management plans though some are old, not participatorially prepared or are less than comprehensive	Every protected area has a regularly updated, participatorially prepared, comprehensive management plan
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Human resources are well qualified and motivated	Human resources are poorly qualified and unmotivated	Human resources qualification is spotty, with some well qualified, but many only poorly and in general unmotivated *due to lack of resources*	HR in general reasonably qualified, but many lack in motivation, or those that are motivated are not sufficiently qualified.	Human resources are well qualified and motivated
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Management plans ***if any***, are implemented in a timely manner effectively achieving their objectives	There is very little implementation of management plans *due to lack of resources and weak capacity*	Management plans are poorly implemented and their objectives are rarely met	Management plans are usually implemented in a timely manner, though delays typically occur and some objectives are not met	Management plans are implemented in a timely manner effectively achieving their objectives
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Protected area institutions are able to adequately mobilize sufficient quantity of funding, human and material resources to effectively implement their mandate	Protected area institutions typically are severely underfunded and have no capacity to mobilize sufficient resources	Protected area institutions have some funding and are able to mobilize some human and material resources but not enough to effectively implement their mandate	Protected area institutions have reasonable capacity to mobilize funding or other resources but not always in sufficient quantities for fully effective	Protected area institutions are able to adequately mobilize sufficient quantity of funding, human and material resources to effectively implement their mandate

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
					implementation of their mandate	
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Potected area institutions are effectively managed, efficiently deploying their human, financial and other resources to the best effect	While the protected area institution exists it has no management	Institutional management is somewhat ~~largely~~ ineffective and does not deploy efficiently the resources at its disposal	The institution is reasonably managed, but not always in a fully effective manner and at times does not deploy its resources in the most efficient way	The protected area institution is effectively managed, efficiently deploying its human, financial and other resources to the best effect
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Protected area institutions are highly transparent, fully audited, and publicly accountable	Protected area institutions totally un-transparent, not being held accountable and not audited	Protected area institutions are not transparent but are occasionally audited without being held publicly accountable	Protected area institutions are regularly audited and there is a fair degree of public accountability but the system is not fully transparent	The Protected area institutions are highly transparent, fully audited, and publicly accountable

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	There are legally designated protected area institutions with the authority to carry out their mandate	There is no lead institution or agency with a clear mandate or responsibility for protected areas	There are one or more institutions or agencies dealing with protected areas but roles and responsibilities are unclear and there are gaps and overlaps in the arrangements	There are one or more institutions or agencies dealing with protected areas, the responsibilities of each are fairly clearly defined, but there are still some gaps and overlaps	Protected Area institutions have clear legal and institutional mandates and the necessary authority to carry this out
2. Capacity to implement policies, legislation, strategies and programmes	Institutional	Protected areas are effectively protected	No enforcement of regulations is taking place	Some enforcement of regulations but largely ineffective and external threats remain active	Protected area regulations are regularly enforced but are not fully effective and external threats are reduced but not eliminated	Protected Area regulations are highly effectively enforced and all external threats are negated
2. Capacity to implement policies, legislation, strategies and programmes	Individual	Individuals are able to advance and develop professionally	No career tracks are developed and no training opportunities are provided	Career tracks are weak and training possibilities are few and not managed transparently	Clear career tracks developed and training available; HR management however has inadequate performance measurement system	Individuals are able to advance and develop professionally
2. Capacity to implement policies, legislation, strategies and programmes	Individual	Individuals are appropriately skilled for their jobs	Skills of individuals do not match job requirements	Individuals have some or poor skills for their jobs	Individuals are reasonably skilled but could further improve for optimum match with job **requirement**	Individuals are appropriately skilled for their jobs

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
2. Capacity to implement policies, legislation, strategies and programmes	Individual	Individuals are highly motivated	No motivation at all	Motivation uneven, some are but most are not	Many individuals are motivated but not all	Individuals are highly motivated
2. Capacity to implement policies, legislation, strategies and programmes	Individual	There are appropriate systems of training, mentoring, and learning in place to maintain a continuous flow of new staff	No mechanisms exist	Some mechanisms exist but unable to develop enough and unable to provide the full range of skills needed	Mechanisms generally exist to develop skilled professionals, but either not enough of them or unable to cover the full range of skills required	There are mechanisms for developing adequate numbers of the full range of highly skilled protected area professionals
3. Capacity to engage and build consensus among all stakeholders	Systemic	Protected areas have the political commitment they require	There is no political will at all, or worse, the prevailing political will runs counter to the interests of protected areas	Some political will exists, but is not strong enough to make a difference	Reasonable political will exists, but is not always strong enough to fully support protected areas	There are very high levels of political will to support protected areas
3. Capacity to engage and build consensus among all stakeholders	Systemic	Protected areas have the public support they require	The public has little interest in protected areas and there is no significant lobby for protected areas	There is limited support for protected areas	There is general public support for protected areas and there are various lobby groups such as environmental NGO's strongly pushing them	There is tremendous public support in the country for protected areas
3. Capacity to engage and build consensus among all stakeholders	Institutional	Protected area institutions are mission oriented	Institutional mission not defined	Institutional mission poorly defined and generally not known and internalized at all levels	Institutional mission well defined and internalized but not fully embraced	Institutional missions are fully internalized and embraced

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
3. Capacity to engage and build consensus among all stakeholders	Institutional	Protected area institutions can establish the partnerships needed to achieve their objectives	Protected area institutions operate in isolation	Some partnerships in place but significant gaps and existing partnerships achieve little	Many partnerships in place with a wide range of agencies, NGOs etc, but there are some gaps, partnerships are not always effective and do not always enable efficient achievement of objectives	Protected area institutions establish effective partnerships with other agencies and institutions, including provincial and local governments, NGO's and the private sector to enable achievement of objectives in an efficient and effective manner
3. Capacity to engage and build consensus among all stakeholders	Individual	Individuals carry appropriate values, integrity and attitudes	Individuals carry negative attitude	Some individuals have notion of appropriate attitudes and display integrity, but most don't	Many individuals carry appropriate values and integrity, but not all	Individuals carry appropriate values, integrity and attitudes
4. Capacity to mobilize information and knowledge	Systemic	Protected area institutions have the information they need to develop and monitor strategies and action plans for the management of the protected area system	Information is virtually lacking	Some information exists, but is of poor quality, is of limited usefulness, or is very difficult to access	Much information is easily available and mostly of good quality, but there remain some gaps in quality, coverage and availability	Protected area institutions have the information they need to develop and monitor strategies and action plans for the management of the protected area system
4. Capacity to mobilize information and knowledge	Institutional	Protected area institutions have the information needed to do their work	Information is virtually lacking	Some information exists, but is of poor quality and of limited usefulness and difficult to access	Much information is readily available, mostly of good quality, but there remain some gaps both in	Adequate quantities of high quality up to date information for protected area planning, management and

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
					quality and quantity	monitoring is widely and easily available
4. Capacity to mobilize information and knowledge	Individual	Individuals working with protected areas work effectively together as a team	Individuals work in isolation and don't interact	Individuals interact in limited way and sometimes in teams but this is rarely effective and functional	Individuals interact regularly and form teams, but this is not always fully effective or functional	Individuals interact effectively and form functional teams
5. Capacity to monitor, evaluate, report and learn	Systemic	Protected area policy is continually reviewed and updated	There is no policy or it is old and not reviewed regularly	Policy is only reviewed at irregular intervals	Policy is reviewed regularly but not annually	National protected areas policy is reviewed annually
5. Capacity to monitor, evaluate, report and learn	Systemic	Society monitors the state of protected areas	There is no dialogue at all	There is some dialogue going on, but not in the wider public and restricted to specialized circles	There is a reasonably open public dialogue going on but certain issues remain taboo.	There is an open and transparent public dialogue about the state of the protected areas
5. Capacity to monitor, evaluate, report and learn	Institutional	Institutions are highly adaptive, responding effectively and immediately to change	Institutions resist change	Institutions do change but only very slowly	Institutions tend to adapt in response to change but not always very effectively or with some delay	Institutions are highly adaptive, responding effectively and immediately to change
5. Capacity to monitor, evaluate, report and learn	Institutional	Institutions have effective internal mechanisms for monitoring, evaluation, reporting and learning	There are no mechanisms for monitoring, evaluation, reporting or learning	There are some mechanisms for monitoring, evaluation, reporting and learning but they are limited and	Reasonable mechanisms for monitoring, evaluation, reporting and learning are in place but are not	Institutions have effective internal mechanisms for monitoring, evaluation, reporting and learning

Strategic Area of Support	Capacity Level	Outcome	Outcome Indicators (Scorecard)			
			Worst State (Score 0)	Marginal State (Score 1)	Satisfactory State (Score 2)	Best State (Score 3)
				weak	as strong or comprehensive as they could be	
5. Capacity to monitor, evaluate, report and learn	Individual	Individuals are adaptive and continue to learn	There is no measurement of performance or adaptive feedback	Performance is irregularly and poorly measured and there is little use of feedback	There is significant measurement of performance and some feedback but this is not as thorough or comprehensive as it might be	Performance is effectively measured and adaptive feedback utilized

Annex C – Baseline Financing Scorecard

FINANCIAL SCORECARD – PART I – OVERALL FINANCIAL STATUS OF THE PROTECTED AREAS SYSTEM

Basic Protected Area System Information

Protected Areas in the Philippines include:

Category	No.	Area	Legislation
1. National Park *	35	195,523.77	NIPAS Act of 1992
2. Natural Park	26	1,171,200.70	NIPAS Act of 1992
3. Game Refuge and Bird Sanctuary*	6	894,032.16	NIPAS Act of 1992
4. Wilderness Area*	12	2,005.63	NIPAS Act of 1992
5. Mangrove Swamp Forest Reserve*	23	Undetermined	NIPAS Act of 1992
6. Natural Monument/Landmark	4	23,741.50	NIPAS Act of 1992
7. Wildlife Sanctuary	8	293,581.89	NIPAS Act of 1992
8. Watershed Forest Reserve*	55	793,979.96	NIPAS Act of 1992
9. Protected Landscape	28	421,550.43	NIPAS Act of 1992
10. Protected Landscape and Seascape	23	998,183.46	NIPAS Act of 1992
11. Protected Seascape	3	216,785.67	NIPAS Act of 1992
12. Resource Reserve	2	78,354.74	NIPAS Act of 1992
13. Managed Resource Protected Area	1	89,134.76	NIPAS Act of 1992
14. Natural Biotic Area	4	11,456.72	NIPAS Act of 1992
15. Marine Reserve	3	46,983.48	NIPAS Act of 1992
16. Other Category (Parks and Wildlife Center)	1	22.70	NIPAS Act of 1992
TOTAL	**234**	**5,236,537.56**	NIPAS Act of 1992

*Initial Components of the NIPAS

Also include any additional specific characteristics of the national PA system that might affect its financing.

Protected Areas System or sub-system	Number of sites	Total hectares	Comments
National protected areas	234	5.24 million hectares	Proclaimed protected areas under the NIPAS (with Presidential proclamation) and initial components of the NIPAS
Sub-national (state/regional/	No data available	No data available	

municipal) protected areas			
Co-managed protected areas	166 protected areas		Protected areas with organized Protected Area Management Board
Others (define)			

FINANCIAL SCORECARD – PART I – OVERALL FINANCIAL STATUS OF THE PROTECTED AREAS SYSTEM

Financial Analysis of the National Protected Area System	Baseline year1 (US$)2	Year X3 (US$)4	Comments
Available Finances*6*			
1. Total annual central government budget allocated to PA management (excluding donor funds and revenues generated for the PA system)			
- national protected areas	727,583.33		Personnel Services and Maintenance and operating Expenses
- sub-national (state/regional/municipal) protected areas	No data available		
- co-managed protected areas	-		Budget already incorporated in the national protected areas
- others			
2. Total annual government budget provided for PA management (including PA dedicated taxes[7], Trust Funds, donor funds, loans, donations, debt-for nature swaps and other financial mechanisms)			Specify sources of funds and US$ amounts for each
- national protected areas	4,273,544.58		
- sub-national (state/regional/municipal) protected areas	No available data		
- co-managed protected areas			
- others			
3. Total annual site based revenue generation across all PAs broken down by source[8]			Indicate total economic value of PAs (if studies available)[9]
A. Tourism entrance fees			Specify the number of visitors to the protected areas in year X - international: - national: Specify fee levels:
- national protected areas	120,561.22		Entrance fee, facilities user fee
- sub-national (state/regional/municipal) protected areas	No data available		

	None (0)	Some (1)	Quite a few (2)	Fully (3)	
(ii) Funds have been created to finance specific PAs			2		The 2009 GAA provides for appropriations for selected PAs
	No (0)	**Partially (1)**	**Quite well (2)**	**Fully (3)**	
(iii) Funds are integrated into the national PA financing systems		1			Part of the IPAF collections are used to share with other newly established PAs as a form of cross subsidization scheme
Element 4 - Legal, policy and regulatory support for alternative institutional arrangements for PA management to reduce cost burden to government	**None (0)**	**Under development (1)**	**Yes, but needs improvement (2)**	**Yes, Satisfactory (3)**	
(i) There are laws which allow and regulate delegation of PA management and associated financial management for concessions	0				
(ii) There are laws which allow and regulate delegation of PA management and associated financial management for co-management	0				
(ii) There are laws which allow and regulate delegation of PA management and associated financial management to local government	0				
(iv) There are laws which allow private reserves	0				
Element 5 - National PA financing strategies	**Not begun (0)**	**In progress (1)**	**Completed (3)**	**Under implementation (5)**	
(i) Degree of formulation, adoption and implementation of a national financing strategy	**0**				
(ii) The inclusion within the national PA financing strategy of key policies:	**No (0)**	**Yes (2)**			
- Revenue generation and fee levels across PAs		2			
- Criteria for allocation of PA budgets to PA sites (business plans, performance etc)	0				There is no criteria but PAs are allocated a fixed proportion of their earnings
- Safeguards to ensure that revenue generation does not adversely affect conservation objectives of PAs	0				
- Requirements for PA management plans to include financial sections or associated business plans		2			
Element 6 - Economic valuation of protected area systems (ecosystem services, tourism based employment etc)	**None (0)**	**Partial (1)**	**Satisfactory (2)**	**Full (3)**	
(i) Economic data on the contribution of protected areas to local and national development		1			There were studies done on selected protected areas
(ii) PA economic values are recognized across government		(eg within Ministry of Environment)	(eg within other sectoral Ministries) 2	(eg within Treasury)	

Element 7 - Improved government budgeting for PA systems	**No (0)**	**Yes (2)**			
(i) Policy of the Treasury towards budgeting for the PA system provides for increased medium to long term financial resources in accordance with demonstrated needs of the system.	0				
(ii) Policy promotes budgeting for PAs based on financial need as determined by PA management plans.	0				
(iii) There are policies that PA budgets should include funds for the livelihoods of communities living in and around the PA as part of threat reduction strategies	0				
Element 8 - Clearly defined institutional responsibilities for PA management and financing	**None (0)**	**Partial (1)**	**Improving (2)**	**Full (3)**	
(i) Mandates of institutions regarding PA finances are clear and agreed				3	
Element 9 - Well-defined staffing requirements, profiles and incentives at site and system level	**None (0)**	**Partial (1)**	**Almost there (2)**	**Full (3)**	
(i) There are sufficient number of positions for economists and financial planners and analysts in the PA authorities to properly manage the finances of the PA system	0				
(ii) Terms of Reference (TORs) for PA staff include responsibilities for revenue generation, financial management and cost-effectiveness		1			
(iii) Laws and regulations motivate PA managers to promote site level financial sustainability (eg a portion of site generated revenues are allowed to be maintained for on-site re-investment and that such finances are additional to government budgets and not substitutional)		1			
(iv) Performance assessment of PA site managers includes assessment of sound financial planning, revenue generation and cost-effective management		1			
(v) PA managers have the possibility to budget and plan for the long-term (eg over 5 years)	0				
Total Score for Component 1					**Actual score: 26** **Total possible score: 78** **33.3 %**

Component 2 – Business planning and tools for cost-effective management					Comment
Element 1 – PA site-level business planning	**Not begun (0)**	**Early stages (1)**	**Near complete (2)**	**Completed (3)**	
(i) PA management plans showing objectives, needs and costs are prepared across the PA system		1			
(ii) Business plans, based on standard formats and linked to PA management plans and conservation objectives, are developed for pilot sites	0				
(iii) Business plans are implemented at the pilot sites (degree of implementation measured by achievement of objectives)	0				
(iv) Business plans are developed for all appropriate PA sites (business plans will not be useful for PAs with no potential to generate revenues)	0				
(v) Financing gaps identified by business plans for PAs contribute to system level planning and budgeting	0				
(vi) Costs of implementing business plans are monitored and contributes to cost-effective guidance and financial performance reporting	0				
Element 2 - Operational, transparent and useful accounting and auditing systems	**None (0)**	**Partial (1)**	**Near complete (2)**	**Fully completed (3)**	
(i) Policy and regulations require comprehensive, coordinated cost accounting systems to be in place (for both input and activity based accounting)	0				
(ii) There is a transparent and coordinated cost and investment accounting system operational for the PA system	0				
(iii) Revenue tracking systems for each PA in place and operational	0				
(iv) There is a system so that the accounting data contributes to national reporting	0				
Element 3 - Systems for monitoring and reporting on financial management performance	**None (0)**	**Partial (1)**	**Near completed (2)**	**Complete and operational (3)**	
(i) All PA revenues and expenditures are fully and accurately reported by government and are made transparent				3	
(ii) Financial returns on investments from capital improvements measured and reported, where possible (eg track increase in visitor revenues before and after establishment of a visitor centre)	0				
(iii) A monitoring and reporting system in place to show how and why funds are allocated across PA sites and the central PA authority				3	
(iv) Financial performance of PAs is evaluated and reported (linked to cost-effectiveness)		1			

Element 4 - Methods for allocating funds across individual PA sites	**No (0)**	**Yes (2)**			
(i) National PA budget is appropriately allocated to sites based on criteria agreed in national financing strategy	0				
(ii) Policy and criteria for allocating funds to co-managed PAs complement site based fundraising efforts		2			
Element 5 - Training and support networks to enable PA managers to operate more cost-effectively	**Absent (0)**	**Partially done (1)**	**Almost done (2)**	**Fully (3)**	
(i) Guidance on cost-effective management developed and being used by PA managers	0				
(ii) Operational and investment cost comparisons between PA sites complete, available and being used to track PA manager performance	0				
(iii) Monitoring and learning systems of cost-effectiveness are in place and feed into management policy and planning		1			
(iv) PA site managers are trained in financial management and cost-effective management		1			
(v) PA site managers share costs of common practices with each other and with PA headquarters[73]	0				
Total Score for Component 2					**Actual score:12** **Total possible score: 61** **19.6%:**
Component 3 – Tools for revenue generation					Comment
Element 1 - Number and variety of revenue sources used across the PA system	**None (0)**	**Partially (1)**	**A fair amount (2)**	**Optimal (3)**	
(i) An up-to-date analysis of all revenue options for the country complete and available including feasibility studies;		1			
(ii) There is a diverse set of sources and mechanisms generating funds for the PA system		1			
(iii) PAs are operating revenue mechanisms that generate positive net revenues (greater than annual operating costs and over long-term payback initial investment cost)	0				
Element 2 - Setting and establishment of user fees across the PA system	**No (0)**	**Partially (1)**	**Satisfactory (2)**	**Fully (3)**	
(i) A system wide strategy and implementation plan for user fees is complete and adopted by government	0				
(ii) The national tourism industry and Ministry are supportive and are partners in the PA user fee system and programmes		1			

[73] This might include aerial surveys, marine pollution monitoring, economic valuations etc.

- co-managed protected areas			
- others			
B. Concessions			
- national protected areas	10,381.27		Kiosk, telecom facilities
- sub-national (state/regional/municipal) protected areas	No data available		
- co-managed protected areas			
- others			

FINANCIAL SCORECARD – PART I – OVERALL FINANCIAL STATUS OF THE PROTECTED AREAS SYSTEM

C. Payments for ecosystem services (PES)			Provide examples:
- national protected areas	37,708.60		Water uses,
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
D. Other (specify each type of revenue generation mechanism[10])			
- national protected areas	87,424.43		Contributions, Fines , penalties
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
4. Total annual revenues generated by PAs (total of (3))			
- national protected areas	282,579.29		
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
5. Percentage of PA generated revenues retained in the PA system for re-investment[11]			
	100%		Specify whether PA generated revenues are retained directly in the PA system or are sent to government and then returned back to the PA system
- national protected areas	No data available		Revenues are being used for management, operation, and maintenance

- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
6. Total finances available to the PA system [line item 2] + [line item 4 * line item 5]			
- national protected areas	4,556,123.87		
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			

FINANCIAL SCORECARD – PART I – OVERALL FINANCIAL STATUS OF THE PROTECTED AREAS SYSTEM

COST AND FINANCING NEEDS			
7. Total annual expenditure for PAs (all PA operating and investment costs and system level expenses)[12]			State any extraordinary levels of capital investment in a given year. State rate of disbursement - total annual expenditures as % of available finances (line item 6.) If this % is low, state reasons[13]:
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
8. Estimation of financing needs[14]			
A. Estimated financing needs for *basic* management costs (operational and investments) to be covered			
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
B. Estimated financing needs for optimal management costs (operational and investments) to be covered.[15]			
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
9. Annual financing gap (financial needs - available finances)[16]			

A. Net actual annual surplus/deficit*17*			
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			

FINANCIAL SCORECARD – PART I – OVERALL FINANCIAL STATUS OF THE PROTECTED AREAS SYSTEM

9. Annual financing gap (financial needs - available finances)[16]			
A. Net actual annual surplus/deficit[17]			
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
B. Annual financing gap for basic expenditure scenarios			
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
C. Annual financing gap for optimal expenditure scenarios			
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
D. Projected annual financing gap for basic expenditure scenario in year X+5[18, 19]			
- national protected areas			
- sub-national (state/regional/municipal) protected areas			
- co-managed protected areas			
- others			
10. Financial data collection needs			Specify main data gaps identified from this analysis: Specify actions to be taken to fill data gaps[20]:

FINANCIAL SCORECARD – PART II – ASSESSING ELEMENTS OF THE FINANCING SYSTEM

Component 1 – Legal, regulatory and institutional frameworks					**COMMENT**
Element 1 – Legal, policy and regulatory support for revenue generation by PAs	**None (0)**	**Some (1)**	**A few (2)**	**Fully (3)**	
(i) Laws are in place that facilitate PA revenue mechanisms				3	The NIPAS Law provides for the establishment of the Integrated Protected Area Fund (IPAF)
(ii) Fiscal instruments such as taxes on tourism and water or tax breaks exist to promote PA financing		1			
Element 2 - Legal, policy and regulatory support for revenue retention and sharing within the PA system	**No (0)**	**Under development (1)**	**Yes, but needs improvement (2)**	**Yes, satisfactory (3)**	
(i) Laws, policies and procedures are in place for PA revenues to be retained by the PA system			2		Earnings from IPAF needs to be appropriated annually through the budget process of the General Appropriations Act before they can be accessed for use by the PA system
(ii) Laws, policies and procedures are in place for PA revenues to be retained, in part, at the PA site level			2		There was a new Administrative Order which prescribes the retention of a fixed percent of the IPAF earnings by the site. Its implementation requires review
(iii) Laws, policies and procedures are in place for revenue sharing at the PA site level with local stakeholders	0				This is mainly done through expenditures of the PA to finance recurrent costs of management and/or implementation of selected aspects of the PA management plan; no policies yet to directly share the IPAF proceeds with local stakeholders
Element 3 - Legal and regulatory conditions for establishing Funds (trust funds, sinking funds or revolving funds)[72]					
	No (0)	**Established (1)**	**Established with limited capital (2)**	**Established with adequate capital (3)**	
(i) A Fund have been established and capitalized to finance the PA system			2		Through the IPAF, but its earnings are not enough

[72] Where a PA system does not require a Trust Fund due to robust financing within government, award full 9 points

(iii) Tourism related infrastructure investment is proposed and is made for PA sites across the network based on revenue potential, return on investment and level of entrance fees [74]		1			
(iv) Where tourism is promoted PA managers can demonstrate maximum revenue whilst still meeting PA conservation objectives		1			
(v) Non tourism user fees are applied and generate additional revenue		1			
Element 3 - Effective fee collection systems	**None (0)**	**Partially (1)**	**Completed (2)**	**Operational (3)**	
(i) A system wide strategy and implementation plan for fee collection is complete and adopted by PA authorities (including co-managers)		1	2		
Element 4 - Marketing and communication strategies for revenue generation mechanisms	**None (0)**	**Partially (1)**	**Satisfactory (2)**	**Fully (3)**	
(i) Communication campaigns and marketing for the public about the tourism fees, new conservation taxes etc are widespread and high profile		1			
Element 5 - Operational PES schemes for PAs[75]	**None (0)**	**Partially (1)**	**Progressing (2)**	**Fully (3)**	
(i) A system wide strategy and implementation plan for PES is complete and adopted by government	0				
(ii) Pilot PES schemes at select sites developed	0				
(iii) Operational performance of pilots is evaluated and reported	0				
(iv) Scale up of PES across the PA system is underway	0				
Element 6 - Operational concessions within PAs	**None (0)**	**Partially (1)**	**Progressing (2)**	**Fully (3)**	
(i) A system wide strategy and implementation plan complete and adopted by government for concessions	0				
(ii) Concession opportunities are identified at appropriate PA sites across the PA system		1			
(iii) Concession opportunities are operational at pilot sites	0				
(iv) Operational performance of pilots is evaluated, reported and acted upon	0				
Element 7 - PA training programmes on revenue generation mechanisms	**None (0)**	**Limited (1)**	**Satisfactory (2)**	**Extensive (3)**	
(i) Training courses run by the government and other competent organizations for PA managers on revenue mechanisms and financial administration		1			
Total Score for Component 3					**Actual score:10** **Total possible score: 57**

[74] As tourism infrastructure increases within PAs and in turn increases visitor numbers and PA revenues the score for this item should be increased in proportion to its importance to funding the PA system.

[75] Where PES is not appropriate or feasible for a PA system take 12 points off total possible score for the PA system

					17.54%:

FINANCIAL SCORECARD – PART III – SCORING AND MEASURING PROGRESS

Total Score for PA System	48
Total Possible Score	196
Actual score as a percentage of the total possible score	24.48 %
Percentage scored in previous year[76]	NA

[76] Insert NA if this is first year of completing scorecard.

Annex D - Profiles of KBAs to be Covered under the Project

The profiles are in separate files

1. Balbalasang-Balbalan National Park
2. Zambales Mountain Range
3. Mts. Irid Angelo and Binuang
4. Polilio group of islands
5. Mts. Iglit Baco National Park
6. Mts. Nug as Lantoy
7. Mt. Nacolod
8. Mt. Hilong – hilong
9. Tawi tawi island

Profile of Proposed Sites under the UNDP-GEF Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Balbalasang-Balbalan National Park

Area: The KBA has an estimated area of 20,864 hectares.

Status of the proposed PA: Balbalasang-Balbalan National Park was established under Republic Act No. 6463 dated June 17, 1972 but later amended through Proclamation No. 1357 issued on December 9, 1974. The amendment reduced the original land area from 20,000 hectares to 1,338 hectares. It is currently being proposed as National Biotic Area (NBA) under the National Integrated Protected Areas System (NIPAS) with land area of about 17,838 hectares.

Location: Northern Cordillera (17°27'N, 121°06'E)

Brief Description:
Balbalasang-Balbalan National Park (BBNP) is considered one of the more biologically interesting and important sites for biodiversity in Northern Luzon (Tabao et al., unpubl). The Philippine Biodiversity Conservation Priority Project (PBCPP) identified it as a high priority conservation area due to its biodiversity of flora and fauna. Recently, it was included as of one of the 128 Key Biodiversity Areas (KBAs) of the Philippines (REECS, 2008).

The park belongs to the Luzon Biogeographic Region and representative of the Cordillera Mountains, a unique center of endemism on Luzon. It is composed of two (2) mountain ranges with numerous creeks all draining towards the Saltan River, which divides the two ranges. The topography of BBNP is mainly mountainous. Mt. Sapocoy is the highest peak at 2,546m. It is located at the western boundary of the park overlooking the Ilocos and Cagayan Valley. The lowest point in the park, with an elevation of 700m, is at Balbalan in the eastern portion. The boundaries of BBNP fall within the territorial jurisdiction of the municipality of Balbalan, Kalinga Province.

BBNP is largely intact primary forest at elevations above 1,000m, consisting of montane and mossy forest. However, the lowland forest, particularly below 900m, is largely disturbed secondary. Agricultural areas and brushland are more dominant in the lower elevations. Patches of pine forest is distributed widely whenever disturbance and clearing of the original vegetation had occurred. Rivers and streams are its main aquatic habitats. Caves have also been reported in the lower areas of the park.

Biodiversity significance
Recent survey of BBNP, which covered only up to 1,800m, indicates the rich biological diversity of the area. A total of 89 species of birds, 23 species of mammals, 13 species of amphibians, and 13 species of reptiles were documented. There were also between 20 and 25 species of earthworms recorded. The majority of those documented is potentially new to science: (i) at least five species of amphibians; (ii) two of reptiles; and (iii) one species of mammals. The likelihood that these numbers will increase as more habitats and higher elevations are surveyed is high.

It was also observed that the endemism at BBNP is remarkably high. At least 44 species of birds are endemic (49%), as well as 15 species of mammals (65%), potentially 10 of the amphibians (77%) and no less than seven of the reptiles (54%).

While none of the recorded species in BBNP is Critical or Endangered, four species of the birds are categorized Vulnerable of the 2002 IUCN Red List of Threatened Species, such as: Whiskerred Pitta (*Pitta kochi*); Luzon Water Redstart (*Ryacornis bicolor*) and Luzon Jungle Flycatcher (*Rhinomyas insignis*). Four species of mammals are also listed as Vulnerable, two of which are: Philippine warty pig (*Sus philippnesis*; and the Luzon montane striped shrew-rat (*Chrotomys whiteheadi*).

Birdlife International reported that some Luzon endemic mammals, including the northern Luzon giant cloud rat *Phloemys pallidus*, may be found on this IBA. The smooth-fingered narrow-mouthed frog *Kaloula kalingenis* and the poorly-known endemic Luzon narrow-mouthed frog *Kaloula rigida* have been recorded there, as have two globally threatened butterflies *Papilio bengueta* and *P. chikae*, both restricted on the Cordillera mountains.

In another survey conducted by the team of Lawrence Heaney in 2000, 2001, and 2003, they documented the presence of 31 species which include the following:

- 12 species of bats
- 1 insectivore
- 2 non-native pest rodents
- 12 native rodents
- 4 large mammals

In that same survey, it was found out that the bat species richness decreases slightly with increasing elevation, however, richness of native small mammals (shrews plus rodents) increases. Moreover, ten (10) non-flying small mammals were recorded at 1,950m and 2,150m, representing the highest species richness documented at a single location in the Philippines.

According to the recent rapid assessment of BBNP (___), there are about 83 bird species around Balbalasang community. It was also discovered that 34 (41%) of these are Philippine endemics. Two (2) of the endemics (Isabela Oriole *O. isabellae and* Flame-breasted fruit dove *P. marchei)* are restricted only to Luzon (Tabao et al., unpubl).

In the said rapid assessment, it cited the International Union for the Conservation of Nature (IUCN) which classify three (3) of the 83 bird species as Vulnerable (that is 10% chance of becoming extinct in 100 years), while two (2) are Critically Endangered (50% of becoming extinct in 10 years). The Vulnerable species are: Wandering Whistling Duck *Dendrocygna arcuata;* the Philippine Hawk-Eagle *Spizeatus philippensis;* and the Flame-breasted Fruit-Dove *Ptilinopus marchei.* The Critically Endangered species are the Tarictic Hornbill *Penelopides panini* and Isabela Oriole *Oriolus isabellae*.

Lastly, BBNP is known to harbor a threatened bird species found only in the region, the Chestnut-faced Babbler *Stachyris whiteheadi*, as such the BirdLife International and its Philippine partner Haribon Foundation, recognized it as one of the Important Bird Areas (IBA) in the Philippines.

Threats to conservation

Mining – there is a mining community at Sitio Gaang, Barangay Talalang, Balbalan. The mining operations are known to use mercury for processing the ore. This process, mercury amalgamation, has been banned in many countries because of its effects on health and environment (REECS, 2008).

Lack of information on the area – while recent surveys have been conducted to investigate on the biodiversity of the area, there is still a need for more scientific expedition/ survey to fully cover

the site. The areas covered by the surveys are too limited. Thus, it is required to investigate both the extent and quality of the remaining habitats, and whether it supports important populations of threatened and restricted-range birds and other biodiversity (IBA PH003)

Water Shortage – aside from the immediate impact of this concern to the communities, whose main livelihood is farming, it is a symptom of a deeper problem, which is deforestation. This is a critical threat on the conservation of the area. The forest is vital to the watershed, i.e., Chico Watershed Reserve, (Tabon, et al, unpubl). Among the areas deforested, Kalinga-Apayao was found to have had the least reduction of its growth stands of all the provinces in the Cordillera Administrative Region (CAR) during recent surveys of the forest cover. The forests there are believed to have been protected by their remoteness, and to some extent, the adverse peace and order situation in the province has helped to discourage the establishment of commercial timber harvesting operations.

Other threats are forest fire and extensive logging, swidden (kaingin) and chemical-based farming, domestic and municipal waste, sedimentation of rivers, destructive fishing methods, dead animals thrown in the rivers, and climate change effects (REECS, 2008).

Key stakeholders

Based on the 1994 National Statistic Office, Tabuk Kalinga-Apayao, BBNP has six (6) barangays with a total population of 5,127. Predominantly, the inhabitants belong to the Banao tribe occupying the barangays such as Balbalasang, Talalang, and Pantikian with an approximate population of 2,500. Other tribes occupying the area are Salegseg, and Gubang tribes.

The Banao tribe has organized an organization called "Banao Bodong Association (BBA)" composed of professional groups, religious sectors, farmers, etc. The main objectives of the association are to (i) maintain peace and order within their communities and (ii) manage the natural resources.

Another key actor in the management of BBNP is the Protected Area Management Board (PAMB) of BBNP, established on December 9, 1995. PAMB is the western concept of protected areas management, while BBA is the traditional one.

Completed and ongoing initiatives

Project Name	Objectives	Funding/ Implementing Agency/ies; Project Duration	Accomplishments
Capacity Assessment for the Preservation and Maintenance of Biodiversity-Related Knowledge of Indigenous and Local Communities	▪ Document biodiversity related knowledge of indigenous and local communities ▪ Assess capacity of communities to preserve, maintain and/or transfer knowledge so it can be made useful to	UNDP, PAWB-DENR, Private Enterprise Development Corporation of Asia (PEDCA) 2003 – 2005	▪ Capacity Development Strategy for the Preservation and Maintenance of Biodiversity-Related Knowledge of Indigenous and Local Communities ▪ Status report on state of biodiversity

Project Name	Objectives	Funding/ Implementing Agency/ies; Project Duration	Accomplishments
	future generations		in the Philippines ▪ Status report on state of IPs and local communities in the Philippines ▪ State of the art report on biodiversity related IKSP research ▪ Database of bibliographies, articles, references, etc. on IPs in the country ▪ Assessment of the FPIC process
Assessment of Protected Area Benefits and Costs: The Case of Balbalasang-Balbalan National Park	▪ Assess the distribution of social and economic costs and benefits associated with Pas ▪ Use of Rapid Social Impact Assessment and Economic Analysis to generate an information set to assess benefits and costs of PA conservation at the local level	Howard Buffett Foundation REECS CARE June 2006 - July 2007	▪ Information on local costs and local, national and global benefits of BBNP as a PA ▪ Assessment on the distribution of these benefits and costs among income groups, and across local, national and global levels
Campsite in Duclingan		PAMB, BBNP	Fee Schedule: PHP 60 per person per day for campers PhP 30 per person per day for visitors
Drafting of Ancestral Domain Management Plan		UNDP DENR LGU of Balbalan	Ancestral Domain Management Plan
Drafting of the Ecotourism Development Plan		NEDA DOT	Ecotourism Development Plan
Micro-hydro electric systems		SIBAT DOE	Micro-hydro power plant in Balbalasang
		DSWD Local residents	Micro-hydro power plant in Talalang

Profile of Proposed Sites under the Proposed UNDP-GEF Project on Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines

Site: Zambales Mountain Range

Area: the proposed KBA covers approximately 41,137 hectares. The KBA belongs to the Breater Luzon biogeographic zone.

Brief Description

This IBA includes the large mountain range that extends north to south from Southern-eastern Pangasinan Province southwards along the border between Zambales and Tarlac.The mountains reach a maximum altitude of 2,037 m at Mt. High Peak, and there are several peaks over 1,000 m, including Mt Dinampang and Mt. Iba. (Mallari *et. al.* 2001). A large block of old growth forest is shown in these mountains on recent forest cover maps, composed of closed canopy dipterocarp and mossy ranging in elevation from 990 m to the highest peaks. Ground based surveys in 1992 confirmed the presence of a large expanse of virtually untouched forests around Mt. High peak.

The extensive forests that are reported to remain in the Zambales Mountains are remarkably poorly known ornithologically, given their proximity to Manila. Several of the threatened and restricted-range species of the Luzon Endemic Bird Area were recorded there during a survey in 1992, including the threatened Flame-breasted Fruit dove, Spotted Imperial-pigeon and Green faced Parrotfinch, and the poorly known Furtive Flycatcher. Several of these are lowland birds, but most of the remaining forest in this IBA is likely to be montane, with limited areas of the lowland forest on the lower slopes. It is possible that many of the endemic montane birds of Luzon occur in the Zambales Mountains, and that the avifauna there will prove to be similar to that of the Cordillera Central of Luzon (e.g., Mt. Pulag National Park).

Zambales mountains supply and regulate the water for the Pampanga Water Basin. Its old growth forest is threatened by conversion, encroachment and forest fires. Forest related activities identified in the municipalities of Palauig, Masinloc and Candelaria, were quarrying of sand, gravel and boulders, small-scale mining, timber poaching, charcoal making and kaingin.

Recent surveys on forest cover reported that although there is little encroachment into the large block of forest that comprises this IBA, the rate of which it has been reduced is high. This is because the perimeter of this stand adjoins open grasslands, which are mostly used as pasture, and fires in these grasslands have steadily been eroding the forest line. There are few roads passing through this IBA, which has presumably limited encroachment into the forests. Its forests were presumably damaged by the ash fall from the Mt. Pinatubo eruption in 1992.

Biodiversity resources and significance

The Zambales Mt. Range is part of the Zamales – Bataan Biogeographic Zone and is considered as one of the centers endemism of flowering plants in the country. (Madulid, 1992).

The extensive faunal surveys in Zambales Mts., which started 1990s, proved that Zambales Mts. is a cradle of a wide array of species in the northwest portion of Luzon island. In 1992, a team of biologists headed by Kennedy and Ruedas surveyed Mt. High Peak, locally known as Mt. Tapulao, which is the highest point in Zambales Mts. The ornithology crew recorded 67 bird species belonging to 26 families.

At least 4 restricted-range and 3 threatened birds species were recorded in this IBA during the survey in 1992. At least 3 bat species including two threatened (Luzon Pygmy Fruit-bat *Otopteropus cartilagonodus* and Golden Crowned Flying Fox *Acerodon jubatus*) including two species of reptiles, of which one (*Lipinia sp.*) may represent a new species (Mallari *et. al.* 2001).

In 2005, Balete and his colleagues, who were primarily conducting a survey on mammals in Mt. Tapulao, recorded several bird species. These include the Philippine nightjar *Caprimulgus manillensis*, Island thrush *Turdus poliocephalus*, White-browed shortwing *Brachypterix montana*, and Red crossbill *Loxia curvivostra*. The Haribon team of biologists recorded 63 bird species belonging to 38 families, during the conducted bird survey in the forest of Mangatarem, Pangasinan (Tabaranza, in press). Similarly, from the consolidated report compiled for the biodiversity of Zambales mountains, a total of 104 species of birds, 58 herpetofauna and 29 mammals were listed (Aspe *et. al.* 2006).

Schneider (1916) recorded 124 tree species belonging to 33 families in Zambales Mts. Fox (1952) recorded 18 tree species belonging to four families when he visited the Negritos in Mt. Pinatubo to conduct ethnobotanical research. Similarly, Guzman et al (1986) recorded nine tree species belonging to four families. Recently, the team of biologists of Haribon conducted habitat assessment and bird survey in the forest of Mangatarem, Pangasinan, northeast side of Zambales Mts. A total of 53 tree species belonging to 22 families was recorded. A total of 133 tree species belonging to 39 families was recorded based on the consolidated data of the past and recent surveys (Aspe *et. al.* 2006).

According to Merrill (1923, 1926), there are 232 plant species belonging to 158 genera that are endemic to Zambales, with five families having the most number of endemic species: Orchidaceae (25 species); Rubiaceae (16 species), Euphorbiaceae (16 species) and Myrtaceae 14 species). Sixty – six of the endemic species are found only within the Zambales Mt. Range; and in the preliminary survey of only one site conducted by the National Museum in October 1999, the following were identified:

Acanthaceae	Hypoestes conteriflora Merr.
Anacardiaceae	Semecarpus thyrsoidea Elm.
Annonaceae	Artabotrys monogynus Merr.
Campanulaceae	Lobelia nicotianaefolia Elm. Var. mollis Elm.
Euphorbiaceae	Codiaeum trichocalyx Merr.
Euphorbiaceae	Phyllanthus cordatulus C.B. Rob.
Flacourtiaceae	Hypericum lackeyi Elm.
Gesneriaceae	Cytandra pinayubensis Elm.
Juglandaceae	Engelhardtia zambalensis Elm.
Leguminosae	Milletia canariifolia Merr.
Melastomataceae	Astronia zambalensis Elm.
Moracceae	Ficus zambalensis Merr.
Myrsinaceae	Ardisia zambalensis Merr.
Orchidaceae	Phaius ramosii Ames
Orchidaceae	Renanthera monachica Ames
Orchidaceae	Vanda boxalli Reichb.f.
Palmae	Calamus dimorphacanthus Becc. Var. zambalensis Becc.
Piperaceae	Piper ovartibacuum
Rubiaceae	Ophiorrhiza zambalensis Elm
Verbenaceae	Clerodendrum philippinense Elm.

The lowland evergreen rainforests harbor numerous timber and non – timber plants of economic and medicinal significance. There are ten (10) dipterocarp species, ten (10) rattan species and several orchids including Vanda boxalli, a narrow endemic and Renanthera monachica, found also in Rizal.

While no formal inventory was done for thee whole area, secondary sources in other parts of the biogeographic zone also show a diversity of faunal species (such as 13 anurans, 19 lizards, 19 snakes and one turtle (Brown et al, 1996)). The collection was made from ten localities of Zamabales Mt. Range north of the project site and includes rare Philippine amphibians and reptile species; an unidentified frog and rediscovered *Sphenemorphus beyeri.*

In 2004 and 2005[1], a survey was conducted (Balete et al) of the small mammals on Mt. Tapulao (¼ Mt. High Peak, 2037 m) in order to obtain first hand information on the mammals of this newly discovered center of endemism. The survey was conducted in five localities in Mt. Tapulao. The survey recorded 11 species, including 1 native shrew, 1 alien shrew, 8 native rodents, and 1 alien rodent. Two species of Apomys and one species of Rhynchomys are endemic to Zambales; this establishes the Zambales Mountains as a significant center of mammalian endemism.

Balete, et. al. (2007)[2] further studied two new species of Rhyconyms in Luzon – from Banahaw and from Zambales. Rhynchomys belongs to a unique assemblage of Philippine rodents that exhibit a combination of primitive features as well as unique morphological specializations. These nocturnal "shrew-rats," with highly specialized vermivorous and insectivorous food habits, are endemic to Luzon Island. All are restricted to high elevation habitats, about 1,100 m and above, in montane and mossy forest on northern, western, and southeastern Luzon. Habitat vicariance and subsequent divergence in isolation is the probable mode of diversification in Rhynchomys as well as in other murid clades whose members are restricted to high-elevation habitats. The discovery of locally endemic species of Rhynchomys both confirms the existence of multiple centers of endemism on Luzon and underscores the need to establish and maintain additional protected areas on the island.

Threats to conservation

The biggest threat within this IBA is the presence of the combined large and small scale mining applications and permits especially in the mountains of Mt. Tapulao. In spite of the logging ban in the area, lowland forests are selectively logged by illegal loggers. Road developments also threaten biodiversity, in particular, the one being initiated in Bgry Muellac going to Sta Cruz.

A recent survey of forest cover reported that although there is little encroachment into the large block of forest that comprises this IBA, the rate at which it has been reduced is high. This is because the perimeter of this stand adjoins open grasslands, which are mostly used as pasture, and fires in these grasslands have steadily been eroding the forest line. There are also a few inroads into the mountains into this IBA, which has presumably limited encroachment into the forests.

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[1] Balete, D.S., et al., Diversity patterns of small mammals in the Zambales Mts., Luzon, Philippines. Mamm. Biol. (2008), doi:10.1016/j.Mambio.2008.05.006

[2] Danilo S. Balete, Eric A. Rickart, Ruth Grace B. Rosell-Ambal, Sharon Jansa, and Lawrence R. Heaney. Descriptions of Two New Species of Rhychonyms Thomas (Rodenta Muridae) from Luzzon Island, Philippines. Journal of Mammalogy, 88(2):287–301, 2007

The forests there were presumably damaged by the ash fall from the Mt. Pinatubo eruption in 1992.

Wildlife hunting and illegal harvesting are also occurrences. At the lower elevations near the village of Coto, numerous hunters were encountered in the forest with fruit doves, wild pigs and monkeys.

Other threats include those coming from human pressures mainly because of poverty. Aytas (indigenous peoples of Zambales Mountains) have been forced to convert forests into swidden farms, to practice unsustainable harvesting of non- timber forest products and even to allow themselves - subject to immediate rewards – to be used by illegal loggers from outside of their ancestral domains.

Key stakeholders

The local communities have previously submitted a proposal for GEF Medium Sized Grants – Integrated Biodiversity and Sustainable Management of Ancestral Domains in the Zambales Mountain Range. Under this project, the proposed area consists of adjoining ancestral domains of about 41, 161 hectares, covered by 4 Certificates of Ancestral Domain (CADCs). The area falls within three municipalities: San Felipe, Cabangan and Botolan.

There are 9,453 individuals in 1,488 households in several settlements within the ancestral domains. There is no data on population growth. In the literature, and especially, in the aftermath of Mt. Pinatubo eruptions, there were fears by some observers that the Pinatubo Ayta would be decimated. But based on the surveys done by the Ayta themselves, it appears that the population has increased.

Other stakeholders include:

PASS – Pederasyon ng mga Aytang Samahan sa Zambales (Project proponent)

PASS is a duly organized group of Ayta organizations in Zambales, which is led by Mr. Andres Mengidorin, a literate Ayta village head with training and experience in village community organizing. The Federation represents the first history of indigenous peoples in the Philippines for different organizations and communities to consolidate themselves and jointly manage their ancestral domains.

PASS as the project proponent, works closely with network of partner NGOs, including the following: social Action Center (SAC) and Episcopal Commission on Indigenous Peoples (ECIP), Sentro para sa ganap na Pamayanan (SENTRO), Philippine Association for Intercultural Development (PAFID), Education for Life Foundation (ELF), national Conferederation of Indigenous Peoples of the Philippines (NCIPP), Katutubong samahan sa Pilipinas (KASAPI).

The major partner of PASS in the implementation of its programmes and projects particularly the proposed MSP are SENTRO, and PAFID. SENTRO or the Center for Holistic Community Development Inc., is an NGO which helps enhance the capability of partner groups and communities, especially indigenous peoples, to deal with their problems directly and achieve their goals through facilitative or brokerage functions by linking groups and communities. The PAFID on the other hand, aims primarily at assisting indigenous peoples' communities to regain and secure their ancestral domain.

Foundation for Philippine Environment (FPE)

FPE is a national based NGO which operates a trust fund to finance local conservation efforts. It has established partnership with PASS to develop its capacity to eventually manage and implement the proposed MSP. It has also undertaken a Project entitled Integrated Biodiversity Conservation and Sustainable management of Ancestral Domains in the Zambales Mountain Range (IBC – SUMAD – KAINUMAYAN) from 2000 to 2004 with the aim of developing integrated biodiversity management and monitoring plans by the IPs; implementation of protection and conservation plans, strengthening local capacities in biodiversity conservation and sustainable development, and development and implementation of sustainable livelihood programs.

Profile of Proposed Sites under the UNDP-GEF Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Mts. Irid Angelo

Estimated Area: 115,207 hectares. The KBA belongs to the Greater Luzon biogeographic zone.

Location and Brief Description

Mts. Irid Angelo mountain range is one of the 117 Important Bird Areas (IBAs) for conservation in the Philippines, which were identified following globally accepted standards. The IBA is located in the Sierra Madre mountain range within the boundaries of the provinces of Bulacan, Quezon, and Rizal; approximately 40 kilometers northeast of Metro Manila. Despite its close proximity to the premier city of the Philippines, very few roads (mostly dirt road) lead to this rugged mountain range, and the area is sparsely populated. An extensive stand of what is believed to be old growth dipterocarp forest was discovered above 400 meters on Mts. Irid-Angelo during a recent forest mapping survey. Mt. Irid, the taller of the two peaks, rises to 1,448 meters above sea level while Mt. Angelo is 1,315 meter high. This IBA is unknown ornithologically, except for an old record of the Philippine eagle near its western boundary.

The KBA used to be the site of a number of logging operations in the past: De Dios Timber Company; Pristine Timber; Davao Timber and Infanta Timber Company.

Biodiversity significance

The vegetative cover of Mts Irid Angelo is second growth lowland dipterocarp forest. The presence of species like Jade vine (*Stronglydon macrobotrys*) and Rafflesia (*Rafflesia manilana*) indicated that the overall state of the environment in the KBA is good.

The 2007 survey recorded a total of 172 species of plants that belong to 52 families. Of this total, 39 species are endemic, 12 species are indigenous, and 39 species are considered widespread. The Critically Endangered endemic species mostly belong to the family Dipterocarpaceae, which are the primary targets of poachers and commercial logging. These species are mayapis (*Shorea palosapis*), red lauan (*Shorea negrosensis*), white lauan (*Shorea contorta*), and thick leaf narig (*Dilenia philippinensis*), duguan (*Myristica philippinensis*), dalingdingan (*Hopea Foxworthyi*), hamindang (*Macaranga bicolor*), alamag (*Aglaia aherniana*), amau (*Dysoxylum pauciflorum*), tanglin (*Adenanthera intermedia*), and tapol (*Horsfieldia ardisifolia*).

The threatened indigenous or native species in the area include bagtikan (*Parashorea malaanan*), which is listed as Critically endangered, and tiaong (*Shorea ovata*) and dungon (*Heritiera sylavatica)*, which are in the Endangered list category.

A total of 17 mammals were recorded which consist of eight volant and nine non volant species. The Volant mammals belong to the fruit bat genera of *Ptenochirus, Macroglossus, Cynopterus, Otopteropus, and Haplonycteris* and insectivorous genera of *Hipposideros and Rhinolopus.* The murid rodents belong to the genera *Rattus, Mus and Apumys*. Other mammals recorded belong to the genera *Sus, Crateromys, Paradoxorus and Macaca.*

Eighty eight species of birds belonging to 71 genera and 37 families were recorded. The total includes the Philippine eagle. Fifty three (60%) species are endemic, many of which are restricted

to forested habitats. Among the endemic species, three are included in the list of globally threatened animals by IUCN. Both the Philippine eagle (*Pithecophaga jefferyi*) and the Crown-bellied Fruit Dove (*Ptilinopus merrilli)* are classified as Critically Endangered, while the Philippine Hawk Eagle (*Spizaetus phippensis*) has been classified as vulnerable. Three other species are classified as Near threatened and this includes the Luzon Bleeding heart (*Gallicolumbia luzonica*), the Rufous Hornbill (*Buceros hydrocorax*) and the Rufous Coucal (*Centropus unirufus*).

Of the birds observed in Mts. Irid Angelo, ten species are geographically restricted in distribution only to Luzon.

There were nine species belonging to six genera and two families of amphibians recorded for Mts. Irid Angelo. Five species are endemic, one rare and two uncommon. Eight of the species recorded belong to the family *Ranidae,* the largest of the amphibian families. One of the endemic species, the Corrugated Forest Frog (*Platymatis corrugatus*), is regarded as uncommon and is only found on forest grounds covered with a thick layer of moist litter, sometimes near small forest creeks.

The 2007 survey recorded 12 species of reptiles belonging to 10 genera and five families. The list consist of one gekkonid, two agamid and two scincid lizards, and five colubirds, one viperids and two species of unidentified snakes.

Threats to conservation

The extensive lowland and montane forests, which are important habitats for the Philippine eagle are under threat of being lost due to continuous logging activities, particularly from carabao logging and timber poaching (locally known as pagbubulaog), and potentially from prospectors who have been reported as applying for a timber license in thee area. These threats are supplemented by the more widespread kaingin farming, a common livelihood activity of the settlers at the site. Although the impact from kaingin is, at present, minimal since clearing of the forest is done only seasonally, any increase in population and migration, if not strictly regulated, will have drastic consequences to the forest ecosystem and biodiversity.

The issues confronting Mts. Irid Angelo is aggravated by the fact that no mammal and hepterofaunal surveys have yet been conducted in this important IBA. The recent biophysical survey coinducted by Haribon Foundation in 2007 is expected to add to the very little knowledge available on Mts. Irid-Angelo.

Key stakeholders

The site is known for the presence of indigenous peoples who are in the process of securing their certificate of ancestral domain title.

The Local Government Unit has an active environmental program, particularly in the municipality of General Nakar.

Haribon Foundation has conducted a survey in 2007 to document the important biodiversity in the KBA.

The Philippine Eagle Foundation has an awareness program in the municipalities of General Nakar and Infanta to raise the consciousness of the youth on the importance of biodiversity conservation in the area.

Source:

Urriza, Rolly C., Michael J. Edrial and Arnel Almazan. 2007. Preliminary survey of the biodiversity assemblage within a secondary growth medium altitude dipterocarp forest on Mts. Irid-Angelo, General Nakar, Quezon.

Profile of Proposed Sites under the UNDP-GEF Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Polillo Group of Islands/ Polillos/ Polillio Archipelago

Area: The KBA has an estimated area of 20,276 hectares.

Location: Quezon Province (Region IVa or CALABARZON)

Brief Description:

The Polillo Group of Islands is composed of 24 small islands and islets located on the eastern coast of Luzon. It is within Quezon province and is comprised of 5 municipalities namely: Polillo, Burdeos, Panukulan, Patnanungan and Jomalig. The first 3 municipalities are situated on the mainland (Polillo Island) while the remaining two are offshore island municipalities.

It is estimated that while 19% of the whole Polillo Islands remains forested, majority of the forests are fragmented and threatened. The forest fragments and blocks of its undergrowth are found on central, and southern sections of Polillo mainland, and the islands of Patnanungan and Jomalig.

Mangroves are found along the shores of all the five municipalities, with Burdeos having the widest cover attributed to a number of islands falling within its administrative jurisdiction. Jomalig Island has marshes, or wetlands covered with grassy vegetation.

There are one hundred forty five (145) watersheds in the Polillo archipelago (with areas ranging approximately between 1 to 10,700 hectares), ninety-six (96) of which are located in Polillo mainland. The largest watershed is Anibawan with an estimated area of 10,700 hectares and is situated in the three municipalities of Polillo and Panukulan and Burdeos. It is in Polillo mainland where the 10 largest watersheds (land area > 1,300 hectares) in the Polillo Group of Islands can be found.

Biodiversity and significance

The Polillo's remarkable rich biodiversity is refuge to a number of island endemic species such as Blue Naped Parrot (*Tanygnathus lucionensis hybridus*), Philippine Trogon (*Harpectes ardens minor*), Tarictic Hornbill (*Penelopides manillae subnigra*), Polillo forest frog (*Platymantis polilloensis*), and Polillo green-scaled gecko (*Pseudogecko smaragdinus*), Polillo White-browed Shama, Polillo Crested Goshawk.

Other endemic species that were noted in the area and endemic to the Philippines are Gray's monitor lizard (*Varanus olivaceus*), Philippine Cockatoo (*Cacatua haematuropygia*), Philippine crocodile (*Crocodylus mindoroensis*), Philippine pig (*Sus philippinensis*), and Philippine brown deer (*Cervus philippinensis*), among others.

The Polillo archipelago is an important biodiversity area of the Philippines. It exhibits high degrees of both terrestrial and marine species diversity and is home to globally important population of various threatened endemic species. However, the area's rich biodiversity is threatened by the loss and degradation of natural habitats.

As such, the Pollillo Islands earned the following: (i) identified as a global conservation hotspot (BP award); (ii) cited as one of the highest priority areas in the Philippines by Fauna and Flora International (FFI); (iii) recognized as marine priority area of Conservation International; (iv) designated as an Important Bird Area by Haribon-BirdLife; and (v) considered by IUCN-RDB to be a stronghold for endemic endangered species like Gray's Monitor, Philippine Cockatoo and the Polillo Forest Frog. There is also the recent discovery of new species such as Walter's Chorus Frog.

The Polillo archipelago was ranked 8th in the country for the fastest rate of deforestation. This underscores the need to institute conservation measures to prevent loss of habitats and important wildlife.

The succeeding sections provide information on significant biodiversity at the municipal level with emphasis on local conservation areas (LCAs) or designated municipal critical habitats.

Municipality of Polillo

Four LCAs have been designated in this municipality. Several biodiversity surveys have been undertaken on these areas.

1) Sibulan-Pinaglubayan LCA (Polillo Watershed Forest Reserve) – field studies were carried-out in Brgy. Sibulan and Brgy. Pinaglubayan from March 1996 to May 2006
2) Binibitinan-Taluong LCA (Aluyon watershed) – field studies were conducted in Brgys. Aluyon and Binibitinan from May until June 2005, and in November 2006 for Brgy. Taluong
3) Macnit-Lumpag LCA – field studies were conducted on Brgy. Languyin in April to May 2005
4) Mount Malulod LCA (eastern slope) - field studies were undertaken in Brgy. Tamulaya in April 2005, and Bulalon caves in Brgy. San Rafael in November 2004

Polillo Watershed Forest Reserve. Primary old growth lowland evergreen forest spread in a contiguous block in the villages of Brgys. Sibulan and Pinaglubayan comprise the Polillo Watershed Forest Reserve. Secondary forests and residuals abut the watershed.

Studies implemented in the area include those bird surveys undertaken by Gonzales (1996) in Sibulan NW of Polillo WFR; expedition survey by Oxford University-UPLB in SE of Pinaglubayan; and biodiversity surveys from 1998 to 2006 by UPLB Museum of National History, Benette, Brown, McGuirre, Bottrill, Castillo and PESP. A study by Alvarez in 2001 noted 232 plant species in the area such as *Dipterocarpus orbicularis, Palaquium elliptilimbum* and *Teijsmanniodendron ahernianum.*

The faunal inventory in Polillo WFR recorded a total of 176 species, 67 of which are Philippine endemic (12 amphibians, 23 reptiles, 26 birds, and 8 mammals).

The study also indicate several unidentified and possible new taxa of vertebrate fauna for Polillo Island namely: Arboreal Forest Frog *(Platymantis sp.), Small Forest Frog (Platymantis sp.),* Burrowing skink *(Brachymeles sp.),* Walter's Chorus Frog *(Kaloula walteri),* and Snakes *Lycodon sp. & Rhabdophis sp.*

Results of study also showed 16 new island record of the following species for Polillo: a) Forest skinks *Sphenomorphus steeri, Sphenomorphus decipeins* and *Dasia grisea; b)* Forest snakes

Boiga angulata, Haplonodon philippensis, Cyclocorus lineatus, Rhabdophis spilogaster and *Oxyrhabdium leporinum* (not recorded by Taylor 1922 on Polillo), and c) two other possible new island records of forest snakes *Boiga ocellata* and *Triemeresurus schultzei* (requires confirmation).

Moreover, a species named Polillo Common Trumpet-eared Bat *(Phoniscus jagori)* which is said be unknown in the Philippines have been noted in the area (Heaney et. al 2002). Seldom seen Philippine snakes and lizards like *Haplonodon philippensis, Bolga angulata* and *Pseudogekko compressicorpus* were recorded. Rare flora like Lanete (*Kibatalia gitingensis)*, Palosapis *(Anisoptera aurea),* Yakal-blanco *(Vatixa pachyphylla)* and Tapat-tapat *(Teijismanniodendron ahernianum)* were also observed.

Three species in the area are endangered, 9 are considered vulnerable, and 12 are near-threatened. Some of these threatened species are Warty Pig *(Sus philippensis)*, Brown Deer *(Cervus mariannus)* and Golden-crowned Flying Fox *(Acerodon jubatus).*

Aluyon Watershed. It is covered by secondary growth forests and residual lowland forests, with man-made vegetation and villages surrounding it. Though considered a part of Burdeos, more than half of the watershed stretches to Brgy. Binibitinan in Polillo.

Faunal survey by the Polilio Island Biodiversity Conservation Foundation Incorporated (PIBCFI) in 2005 recorded a total of 101 species with 45 species considered as endemic. Amphibians total 14 species, with 11 endemic; reptiles total 20 species, with 12 endemic species; birds total 52 species, with 18 endemic; and mammals total 15 species, with 4 endemic.

This watershed is regarded as one of the LCAs with the highest values of biodiversity due to high species richness and endemism that were noted in the residual forests. The faunal inventory also validates the existence of Dimunitive Forest Frog *(Platymantis mimulus)* and Philippine Scops-Owl *(Otus megalotis).*

Fifteen (15) threatened species and 10 near-threatened species have been noted in Aluyon site in Binibitinan. This is the watershed area where the critically endangered Polillo Forest Frog is found in modest quantity. This therefore requires safeguarding because it is a possible area for in-situ conservation.

Macnit-Lumpag LCA. This LCA forms the vast block forest block in the southern portion of Polillo Island. Residual lowland evergreen forests on steep ridge-tops cover this area. On its periphery are coconut plantations and scattered kaingin farms. Pioneer species and mixed residual hardwoods appear at forest edge.

Faunal survey of PIBCFI in 2005 showed a total of 90 species, 44 are endemics. The number of endemic species is broken down to as follows: 9 amphibians, 6 reptiles, 17 birds and 3 mammals.

Eleven (11) threatened and 8 near-threatened species of terrestrial fauna seek refuge in this area. The species include 5 threatened frogs, 1 reptile, 3 birds and 2 mammals. This area is considered a stronghold for island endemic taxa like Polillio blue-naped parrot and Tarictic hornbill.

Mount Malulod LCA. It is the highest peak on Polillo Island. Patches of secondary forests over limestone ridges cover the mountain. The peak however has been cleared and now bounded by secondary growth, farms and man-made vegetation. Secondary forests serve as corridors between remaining patches of residual forests around the slope and lower ridges of Mount Malulod

The faunal inventory of PIBCFI on 2005 recorded a total of 85 species with 37 considered as endemics. The endemic species are broken down to the following: 8 amphibians, 8 reptiles, 14 birds and 7 mammals. There are 11 threatened and 8-near threatened species in the area. This includes species like Philippine Forest Kingfisher, Gray's Monitor Lizard and Large Rous Horseshoe Bat.

Municipality of Burdeos

The Burdeos LCAs are a haven for all endemic species of Polillo Island. Discussion on this is itemized below.

Kalawakan Forest Block. The Anibawan-Bonbon-Matangkap-Pandan-Kinalagti-Lipata LCA or collectively identified as Kalawakan Forest Block has the most extensive residual lowland forest. Lowland forests in the area are the refuge of several globally endangered flora and fauna.

The faunal inventory in the area recorded a total of 153 species, 69 of which are considered endemic. The number of total endemic species is distributed to as follows: 11 amphibian, 19 reptiles, 28 birds, and 11 mammals.

The area has 32 species of significant conservation status, 17 of these are considered threatened. The two critically endangered species identified are the Philippine Cockatoo *(Cacatua haematuropygia),* and Polillo endemic Forest Frog *(Platymantis polilloensis).*

The biological surveys in the area also recorded 3 unidentified species and maybe a new taxa for Polillo Island. These are the Arboreal Forest Frog *(Platymantis sp.),* Burrowing skink *(Brachymeles sp.),* and Wolf snake *(Lycodon sp.).* The results also revealed 4 new island records for Polillo Island namely Cox's Forest Skink *(Sphenomorphus coxi),* Ruddy Kingfisher *(Halcyon coromanda),* Gray's Grasshoper Warlber *(Locustella fasciolata),* Lesser Coucal *(Centropus bengalensis),* Philippine Pygmy Fruit Bat *(Haplonycteris fischeri)*

Mount Lumipad. PIBCFI faunal survey in 2005 showed a total of 132 species, 40 of those are considered endemic. For amphibians, 5 are classified as endemic species, for reptiles 6, for birds 23, and for mammals 6. Studies in the area also revealed significant accounts like:

- Discovery of coastal population of Pygmy Gobies *(Pandaka sp.)* which has not been accounted in the Philippines in 30 years;
- Recovery of unidentified Crestern Tern *(Sterna sp.)* in Anibawan Bay;
- 5 threatened and 9 near-threatened species in Mount Lumipad LCA and coastal Carlagan;
- Existence of rare Bantigi *(Pemphis acidicula)* and Philippine Duck *(Anas luzonica;* and
- New island records for an epiphytic Wax Plant *(Hoya pubicalyx)* and a miniature Moth Orchid *(Phalaenopsis equestris)*

Mount Baliw LCA. Faunal survey of PIBCFI in 2006 (includes coastal fauna) identified 17 endemic species out of the total 64 recorded number of species. Three are endemic amphibians, 4 are endemic reptiles, 8 are endemic birds, and 2 are endemic mammals. Some of the species observed in the area are Common Forest Frog *(Platymantis dorsalis),*Mangrove cat-snake *(Boiga dendrophila),* White-collared Kingfisher *(Todiramphus chloris),* and Long-tailed Macaque *(Macaca fascicularis).* Other wildlife like coastal wetlands birds (waders and shorebirds), marine turtles and sea snakes are observed in the site.

Bulalon Caves (within Mount Malulod LCA). Outcome of faunal survey in 2005 by PIBCFI showed a total of 85 species, with 37 considered as endemic (8 amphibians; 8 reptiles; 14 birds; and 7 mammals).

Of the 19 species of terrestrial vertebrates in key conservation status, 13 are threatened and 6 are near-threatened species. These include the Philippine Forest Kingfisher (Ceyx melanurus), Gray's Monitor Lizard *(Varanus olivaceus),* Philippine Sailfin Lizard *(Hydrosaurus pustulatus),* Philippine Nectar Bat *(Eonycteris robusta),* and Luzon Fanged Frog *(Limnonectes macrocephalus).*

Aluyon-Burdeos Watershed LCA. As already mentioned, the faunal survey of PIBCFI in 2005 revealed that there are 45 recorded Philippine endemics out of the total of 101 terrestrial vertebrate species in the area.

Municipality of Panukalan

There are two proposed local conservation sites within the administrative jurisdiction of Panukalan. The first which has already been discussed earlier is the Anibawan-Bonbon-Matangkap-Pandan-Kinalagti-Lipata LCA or collectively identified as Kalawakan Forest Block, while the second is the Panukalan watershed (Bato Watershed).

The Panukalan watershed is located in Brgy. Bato and Brgy. Lipata. It is covered by secondary forests with a few emergent trees that are bounded by man-made vegetation, villages and mangroves. This watershed is one of the three protected areas established in Polillo Islands, with national proclamation. Students from UPLB and Oxford University comprised the Polillo Expedition Team who had undertaken initial biodiversity surveys in the area in1999.

Faunal Inventory of Bato watershed in 2007 showed that there are 58 Philippine endemic species in the area, out of the 89 total number of species. Six are endemic amphibian species; 8 are endemic reptiles; 39 are endemic birds; and 5 are endemic mammals.

There are 4 threatened and 7 near-threatened species identified in Bato watershed. The endemic species that were classified as threatened are: Philippine Cockatoo *(Cacatua haematurpygia),* Philippine Forest Kingfisher *(Ceyx melanurus),* Philippine Sailfin Lizard *(Hydrosaurus pustulatus),* Woodworth's frog *(Limnonectes woodworthi).*

It was observed that even with limited residual forest cover there is comparatively high species richness and endemism in the area. This then stresses the importance of protecting the area to protect the biodiversity.

Municipality of Jomalig

The Jomalig Island has a total of 51.7 hectares. Agro-ecosystems and patches of lowland scrub-forests cover the area. Faunal records in Jomalig LCA indicate that there 8 species of amphibians, 17 reptiles, 9 mammals and 88 birds.

Although there is an evident lack of Polillo endemic taxa, markedly few forest-dependent species and few Philippine and Luzon endemic taxa, previous studies and current survey recorded the existence of threatened wildlife within this LCA. These include Philippine Cockatoo (*Cacatua haematuropygia*), Green Sea Turtle (*Chelonia mydas*), Hawksbill Turtle (*Eretmochelys*

imbricata) and Humpback Whale (*Megaptera novaeangliae*), and the near threatened Malaysian Plover (*Charadrius peronii*). Important species of seabirds were noted in the area like the Roseate Tern (*Sterna dougallii*), Black-naped Tern (*S. sumatrana*), Greater Crested-tern (*S.bergii*) and Bridled Tern (*S. anaethetus*).

Other wildlife species observed in the site and are commonly sighted on agroecosystems, mangroves, grasslands and marshlands are Black-naped Oriole(*Oriolus chinensis*), Large-billed Crow (*Corvus macrorhynchus*), White-breasted Woodswallow (*Artamus leucorhynchus*), Asian Glossy Starling (*Aplonis panayensis*), Philippine Bulbul(*Hypsipetes philippinus*), etc.

The wetlands of Jomalig Island on the other hand provide refuge to Philippine Duck (*Anas luzonica*), a threatened endemic species, and Wandering Whistling-duck (*Dendrocygna arcuata*). Other wetland bird and wildlife species found in the area are Grey Heron (*Ardea cinerea*), Purple Heron (*A. purpurea*), Rufous Night-Heron (*Nycticoraxcaledonicus*), Cattle Egret (*Bubulcus ibis*), Reef Egret (*Egretta sacra*), Pacific Swallow (*Hirundo tahitica*), etc.

Municipality of Patnanungan

Patnanungan Island has a total of 89.2 hectares which are mostly covered by secondary forests spanning from northwest part of the island (near Inusukan) until southwest side near the town proper. There is watershed reserve on the hills around Patnanungan Sur; on its periphery are rice lands and other agricultural areas planted with cassava and bananas. A larger block of secondary forest is still present at the southern side of Patnanungan Sur poblacion.

The Patnanungan Island harbors almost all the important endemic taxa in Polillo including the island-endemic Polillo Taricitic Hornbill (*Penelopides manillae* subnigra) and Polillo White-browed Shama (*Copsychus luzoniensis parvimaculatus*).

Other key non-endemic bird species found to be in existence in the core sites are the Green Imperial-Pigeon (*Ducula aenea*), Pied Imperial-Pigeon (*D. bicolor*), Black-chinned Fruit-Dove (*Ptilinopus leclancheri*), Rufous Paradise-Flycathcer (*Terpsiphone cinnamomea*) and Blue-naped Monarch (*Hypothymis azurea*).

Important mammal species recorded on Patnanungan were the Island Flying Fox (*Pteropus hypomelanus*), Common Short-nosed Fruit-Bat (*Cynopterus brachyotis*), Dagger-toothed Flower Bat (*Macroglossus minimus*), Large Flying Fox (*P. vampyrus*), Philippine Brown Deer (*Cervus mariannus*), Common Palm Civet (*Paradoxurus hermaphroditus*), Asian Black Rat (*Rattus tanezumi*), Philippine Forest Rat (*Rattus everetti*) and Long-tailed Macaque (*Macaca fascicularis*).

Threatened wildlife that were observed in the site are Philippine Cockatoo (*Cacatua haematuropygia*), Philippine Duck(*Anas luzonica*), Chinese Egret (*Egretta eulophotes*), Luzon Forest Frog (*Platymantisluzonensis*), Philippine Sailfin Lizard (*Hydrosaurus pustulatus*), Hawksbill Turtle *Eretmochelys imbricata*), Dugong (*Dugong dugon*) and Golden-crowned Flying Fox (*Acerodon jubatus*).

The entire Patnanungan LCA harbors 161 species of terrestrial vertebrates; 11 amphibians, 28 reptiles and 21 mammals and 101 birds.

Protected Area Status

The Minasawa Island Game Refuge and Bird Sanctuary found in Patnanungan Island covers about 4.5 hectares. It is the only protected area designated in Polillo Group of Island. It was proclaimed as such on 15 September 1964 through PWAO No. 7.

There are two proposed additional protected areas in the Polillos under NIPAS, namely the Polillo Watershed Forest Reserve and Panukalan Watershed Forest Reserve. The Polillo WFR was proclaimed through Proclamation No. 72 in 9 August 1999 and covers 130 hectares.

Despite the national proclamations and/or recognition as DENR forest reserves there is no management system being implemented in these sites. Gonzales 1997 as cited in Gonzales 2007 stated that both watersheds are limited in area and inadequate to ensure survival of endemic wildlife. It underscored the necessity of declaring additional protected areas to keep the rich biodiversity of Pollilo Island.

The establishment of a network of LCAs or municipal reserves in the Polillos is the direction the LGUs have undertaken to protect the remaining habitats and wildlife. This has been implemented through the Project entitled, Pioneering Community-Based Conservation Sites in the Polillo Islands *(Darwin Initiative for the Survival of Species)*

Kindly refer to the subsequent sections for details on this localized resource management modality.

Threats to biodiversity

The massive commercial logging between 50's and 80's has substantially reduced the lowland forest cover of the Polillo archipelago. The remaining forestlands have been threatened by expansion of human settlements and agriculture, and unsustainable forest product extraction.

The PIBCFI in the course of its implementation of conservation activities in the area identified the following as threat to the island's biodiversity:

- Continued non-sustainable harvesting of mature residual hardwoods, that supposedly serve as future mother trees
- Seasonal poaching of wildlife for commercial sale as an alternative food source or as live animals for the pet trade
- Large scale clearing of lowland forests, unregulated harvest of secondary forest products and removal of microhabitats
- Severe fragmentation and isolation of viable populations leading to limited breeding opportunities and reduced genetic diversity
- Unregulated conversion of remaining forests for agricultural use

Other conservation issues are illegal fishing, small scale mining, small scale logging, etc.

Key stakeholders

- The community who rely on the environmental services provided by the protected areas and LCAs.
- People with land rights/tenurial instruments within the LCA or protected areas - ISF CSC Holders, private owners of A&D lands within LCA, indigenous peoples, etc.
- DENR

- DILG
- NCIP
- Concerned LGUs
- Polillo Water District
- Tourists
- Local and International NGOs and associations involved in the Pioneering Community-Based Conservation Sites in the Polillo Islands Project – (please refer to succeeding sections for details)

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Powerpoint presentation materials of Philippines Biodiversity Conservation Foundation Inc. (PBCFI) on Pioneering Community-Based Conservation Sites in the Polillo Islands Project *(Darwin Initiative for the Survival of Species).*

Profile of Proposed Sites under the UNDP-GEF Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Iglit-Baco Mountains

Area: the KBA covers approximately 75,445 hectares. The KBA belongs to the Mindoro biogeographic zone.

Location and Brief Description

Mount Iglit-Baco National Park covers large areas of the central part of the island of Mindoro in the Philippines. It is situated near Mt. Baco (2,488 m a.s.l.) and Mt. Iglit, the latter reaching 2,364 m a.s.l. The Mts. Iglit-Baco National Park (MIBNP) was proclaimed by virtue R.A. No. 6148 dated Nov. 11, 1970. As such, it is an initial component of National Integrated Protected Areas System under. Mts. Iglit-Baco NP encompasses at least eight (8) major river systems and has a rugged terrain composed of slopes, river gorgers and plateaus. Under the NIPAS, the area is proposed to be established as a Natural Biotic Area to preserve the cultural and natural resources found therein with the focus on the biodiversity conservation and sustainability of the park respecting the culture, traditions and rights of indigenous peoples in their ancestral domains.

The proposed Mts. Iglit Baco Natural Biotic Area covers a portion of the ancestral home of the Batangan or Tao Buhid, the most elusive of the seven Mangyan Tribes inhabiting Mindoro island. The very rugged terrain has made it an effective refuge for the Batangan tribe against the encroachment of Christian lowlanders. The interior of the protected area has sheltered some Batangan sub groups such that they have been able to maintain the wholeness of their culture for generations.

Mts Iglit Baco is the largest protected area in Mindoro. It is also one of two ASEAN Natural Heritage Sites in the Philippines (the other is Mount Apo National Park in Mindanao). The park covers the east-west divide and includes several physiographic regions and an important tamaraw population. Small patches of dipterocarp and mossy forest can be found in the park. Much of the reserve consists of fire-maintained grassland with *Imperata cylindrica* and *Sacchareum spontaneum.*

Portions of the Park are covered by upland hardwoods, such as *Anthocephalus chinensis, Artocarpus blancoi, Ficus nota,* Hawili, Alibangbang and Balinghasai. The larger plants indigenous to the site which are rarely seen in some other regions are Kalantas tree, Tindalo, Almaciga and Kamagong. The Park also harbors the endangered Jade vine.

Mount Iglit-Baco National Park covers large areas of the central part of the island of Mindoro on the Philippines. Unfortunately, the island is among the most deforested parts of the archipelago. Less than 3% of primary forests have been preserved there. Remnants of lowland rain, mountain and cloud forests with critically threatened endemic animal species are protected in the national park.

Iglit Baco National Park is mostly grassland, but there is one area of forest close to Mt. Iglit, a few other small patches, and an extensive block on steep slopes in the Mindoro sector of the park. These are mainly montane forests on very steep slopes, but there are some areas of lowland dipterocarp forest. There is a c.367 stand of *Samane saman* woodland at 50-100 m in the

southern part of the park close to Lamintao River, and an area of agoho *Casuarina equisetifolia* forest at the Tamaraw Gene Pool Area, along the Anahawin River. Most of the mountains and plateaus in the east of the park are covered in grassland or heavily degraded forest. The extensive areas of grassland in the west of the national park are not included in the IBA.

Mts Iglit Baco is considered part of the Mindoro ecoregion. Mindoro is located between the large islands of Luzon and the Sunda-affiliated Palawan, and it shares faunal attributes of both islands. However, Mindoro was isolated from Luzon and Palawan throughout the Pleistocene and retains its own unique character, including an endemic water buffalo species (Heaney 1986).

Mindoro (along with Palawan and the Calamianes) was rifted (below water) from the Asian mainland approximately 32 million years ago, transported through seafloor spreading across the growing South China Sea, added to the growing Philippine Archipelago approximately 17 million years ago, and uplifted above water approximately 5-10 million years ago (Hall and Holloway 1998; Dickinson, Kennedy, and Parkes 1991). Mindoro is separated from Palawan to the south and Luzon to the north by deepwater channels and has not been connected to those islands during the recent past (Pleistocene) (Heaney 1986).

Vegetation types on Mindoro include lowland evergreen rain forest to approximately 400 m or higher, open forest from about 650 to 1,000 m, and mossy forest above. Only small patches remain of the lowland evergreen dipterocarp rain forest that would have dominated the lowland eastern portions of the island. Semideciduous forest would have predominated on the western half of the island. Limited stands of Mindoro pine (*Pinus merkusii*) are found at elevations of 600 m or less in the northern portions of the island (Stattersfield et al. 1998; Development Alternatives 1992).

Biodiversity Significance

The Park is the habitat of the endemic Tamaraw (*Bubalus mindorensis),* which is one of the most seriously endangered large mammals. Because of the endangered Tamaraw, the Park was initially established as "game refuge and bird sanctuary". The tamaraw numbered approximately 10,000 animals at the turn of the century and approximately 1,000 by 1949, and today estimates range from 100 to 200 animals (Collins et al. 1991; Heaney and Regalado 1998). Only about 200 individuals exist, based on surveys in 2001.

Other forms of wildlife can also be found in the Park like the Phil. Deer, Wild Pig and Mindoro Cloud Rat as well as a number of bird species which are endemic to the island such as Mindoro Imperial Pigeon, Mindoro Scops Owl, Black-hooped Coucal, Scarlet-collared Flowerpecker and Heart Pigeon.

Of the forty-two indigenous mammal species found on Mindoro, close to 20 percent endemic or near endemic (table 1). The nonendemic mammals are also found on Luzon. An endemic rat (*Rattus mindorenis*) is closely related to *Rattus tiomanicus,* and the endemic genus *Anonomomys* is most closely related to the genus *Haeromys,* from Palawan and some of its satellite islands. Thus colonization of Mindoro has occurred from both Luzon and Palawan (Heaney 1986).

Table 1. **Endemic and Near-Endemic Mammal Species.**

Family	Species

Sorcidae	*Crocidura mindorus*
Bovidae	*Bubalus mindorensis**
Muridae	*Rattus mindorensis**
Muridae	*Anonymomys mindorensis**
Muridae	*Crateromys paulus**
Muridae	*Apomys gracilirostris**
Muridae	*Apomys sp. E**
Pteropodidae	*Pteropus sp. A**

An asterisk signifies that the species' range is limited to the Mindoro ecoregion.

Mindoro also supports a population of the Philippine warty pig (*Sus philippensis*), which the IUCN considers rare and declining (IUCN 2000). The Philippine warty pig is widely distributed in the still-forested areas of Luzon, Mindoro, Samar, Leyte, Mindanao, and some of the smaller satellite islands. Many of these forested areas are found in existing national parks. The Philippine warty pig is closely related to *Sus barbatus* of the Greater Sundas and was once thought to be a subspecies, analogous to the Palawan bearded pig (*Sus barbatus ahoenobarbus*). This species is still threatened by hunting and habitat loss (Oliver 1993).

An endemic subspecies of the Philippine deer (*Cervus mariannus barandanus*) is found on Mindoro. Although Philippine deer are native to Luzon, Mindoro, Samar, Leyte, Mindanao, and the Basilan Islands, *C. m. barandanus* is found only on Mindoro. The population of this subspecies is considered to be at risk over its limited range on the island (Wemmer 1998).

Greater Mindoro is home to the critically endangered Illin hairy-tailed cloud rat (*Crateromys paulus*), the endangered Mindoro shrew (*Crocidura mindorus*), and the more widespread (within the Philippines) but endangered golden-crowned fruit bat (*Acerodon jubatus*) (IUCN 2000).

As an endemic bird area (EBA), Mindoro contains ten restricted-range birds, six of which are threatened. It also contains eleven endemic or near-endemic bird species (Kennedy et al. 2000; table 2). Two bird species, the Mindoro bleeding-heart (*Gallicolumba platenae*) and the black-hooded coucal (*Centropus steerii*), are considered critically endangered, and four species are considered vulnerable: Mindoro imperial-pigeon (*Ducula mindorensis*), ashy thrush (*Zoothera cinerea*), Luzon water-redstart (*Rhyacornis albiventris*), and scarlet-collared flowerpecker (*Dicaeum retrocinctum*). Three of these species, the Mindoro bleeding-heart, the Mindoro imperial pigeon, and the black-hooded coucal, are strict island endemics (Collar et al. 1999; Stattersfield et al. 1998). Mindoro's endemic birds can be split into montane and lowland species. Although both are in urgent need of conservation, the situation for the lowland species is particularly dire because the lowland forests are almost entirely gone (Dutson et al. 1992). Mindoro is also an important wintering and staging area for ducks and other waterbirds (Bagarinao 1998).

Table 2. **Endemic and Near-Endemic Bird Species.**

Family	Common Name	Species
Columbidae	Mindoro bleeding-heart	*Gallicolumba platenae**
Columbidae	Mindoro imperial-pigeon	*Ducula mindorensis**
Cuculidae	Black-hooded coucal	*Centropus steerii**
Strigidae	Mindoro scops-owl	*Otus mindorensis**
Strigidae	Mantanani scops-owl	*Otus mantananensis*
Bucconidae	Mindoro hornbill	*Penelopides mindorensis**
Pachycephalida	Green-backed whistler	*Pachycephala albiventris*
Laniidae	Mountain shrike	*Lanius validrostris**
Turdidae	Ashy thrush	*Zoothera cinerea*
Muscicapidae	Luzon redstart	*Rhyacornis bicolor*
Dicaeidae	Scarlet-collared flowerpecker	*Dicaeum retrocinctum*

An asterisk signifies that the species' range is limited to this ecoregion.

The only remaining intact forests in Mindoro are found along the top of the mountain ridge that divides the island. On the eastern side of the ridge commercial logging ended long enough ago that the remaining intact forests are buffered by secondary forests that have reestablished a closed condition, yet these same forests are again under threat from poaching and *kaingin* (slash-and-burn) agriculture. On the western side of the ridges, however, perennial fires in adjacent grasslands used for pasture are eating into the forest (Development Alternatives 1992). Only 8.5 percent of Mindoro was forested in 1988 (SSC 1988).

Threats to conservation

Hunting and poaching of the resources of the national park were reported to be one of the main threats to the conservation of this KBA. Main hunting pressure is caused by trophy hunters from outside the park but it is also caused to some extent by the traditional hunting of the Mangyans, whose numbers have increased substantially. Hunting by local people is mainly directed at all large mammals in the Mindoro ecoregion, including the tamaraw, Philippine deer, and Philippine warty pig (Hedges, in press).

Although it is smaller and not as rich as some of the larger Philippine islands, Mindoro faces high levels of faunal endangerment because a larger proportion of its fauna is endangered; this level of endangerment is well-correlated with the degree of deforestation on the respective islands

(Heaney 1993). Forestry activities and *kaingin* (slash-and-burn) agriculture continue to fragment and destroy the remaining habitat.

Other threats to the area include cattle ranching, upland farming and firewood gathering, which have led to the rapid deforestation both inside and outside of the national park. The unpredictable law and order situation in the immediate vicinity of the park makes it difficult to prevent these disturbances. However, some of the remaining forests are very remote, and therefore, relatively safe. Most of the grasslands are being used as pasture and regular burning is the conventional practice used to encourage the growth of young grass shoots. In many cases, these are left to spread into the forest, which are slowly being eroded. The stand of acacia woodland near the Lamintao River is threatened by over harvesting for furniture manufacture. There are ecotourism activities in the lower parts of the park near the Anahawin River, the impacts of which still have to be determined.

Key stakeholders and Partners

A number of local NGOs are assisting the Mangyan communities in the management and sustainable development of their ancestral domains.

The Local Governments of Mindoro provinces and municipalities have partnerships with the IP communities and local NGOs in the island.

There is an interim multisectoral PAMB established to provide policy guidance in the management of the proposed Natural Biotic Area.

The PAWB has a Tamaraw Conservation Project which aims to help preserve the remaining populations of this large mammal which is endemic to the island.

Sources:

References for the Mindoro ecoregion are currently consolidated in one document for the entire Indo-Pacific realm. Indo-Pacific Reference List. **Prepared by:** John Morrison. This text was originally published in the book Terrestrial ecoregions of the Indo-Pacific: a conservation assessment from Island Press. This assessment offers an in-depth analysis of the biodiversity and conservation status of the Indo-Pacific's ecoregions.

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Mts. Iglit Baco Natural Biotic Area Initial Protected Area Plan (IPAP). DENR. (undated).

Profile of Proposed Sites under the UNDP-GEF Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Nug as Lantoy Key Biodiversity Area

Area: The KBA is approximately 10,457 hectares. The KBA belongs to the Greater Negros Panay biogeographic zone.

Location and Brief Description

The mountains of Nug as and Lantoy are located in the island of Cebu, Central Visayas. This island is considered as the most denuded island in the central Philippines. The watershed area of Mt. Lantoy totals to 72.5 square kilometers but less than 0.5 square kilometers is covered with natural vegetation. The forest of Mt. Lantoy is surrounded by cultivation, coconut plantations, plantations of non indigenous trees and scrubland, which is also used by local communities for grazing their livestock. Seasonal crops like cabbage, corn, onion and carrots are planted in agricultural farms surrounding the forests. Nug as forest is part of the natural limestone forest in Alcoy, Cebu which covers 12 square kilometers. It is located in the municipality of Alcoy and Boljo-on. The natural limestone forest is mostly composed of secondary forest dominated by *Syzygium* and *Ficus* spp., and is surrounded by tree plantations, scrubland and agriculture. *Casuarina rumphiana* and *Cinnamoum* sp. are distributed in clumps with *Melia dubia, Macaranga* sp. and *Melastoma* sp. forming a dense undergrowth. The forest is thick with climbing bamboo, rattan (*Camalus* sp.) and spiny vines. The substrate is basically limestone and closed canopy forest is only observed in gullies while ridge tops have smaller trees.

Status of the pilot site:

Mt. Lantoy is part of the Argao-Dalaguete Watershed Forest Reserve declared by a Presidential Proclamation (No. 414, 29 June 1994).

The remaining forests in Cebu, including Nug as Lantoy, fall within the Strict Protection Zone of the Central Cebu protected Landscape (CCPL).

Biodiversity significance

Despite its close proximity to Negros, Siquijor and Bohol, its avifauna is distinct from these islands. There are two bird species and twelve subspecies endemic to the island, making Cebu one the nine endemic bird areas in the country.

A survey undertaken in 2001-2004 confirmed a number of supposedly extinct bird taxa surviving in small, degraded forest patches.[1] Seven of the twelve endemic subspecies from Cebu were confirmed extant. Twenty forest birds presumed extinct in Cebu were rediscovered. The surviving populations of threatened and endemic birds of Cebu largely depend on the persistence of small forest patches; making the conditions of these populations precarious.

During the survey, the critically endangered Cebu flowerpecker (*Dicaeum quadricolor*); the endangered streak-breasted bulbul (*Ixos siquijorensis*); and the vulnerable green faced parrotfinch

[1] Paguntalan, Lisa Marie J. and Philip Godfrey Jakosalem. 2008. Significant records of birds in forests on Cebu island, central Philippines. *Forktail* 24(2008):48-56.

(*Erythrura viridifacies*) were observed. This last species has previously been recorded only from Negros and Panay and Luzon islands and this is the first record of the species in Cebu.

The species rediscovered during the 2001-2004 survey, are the following:

- Red junglefowl (*Gallus gallus*) – presumed extinct in 1995 but was reported by local communities in 1998; and likewise observed in 2004;
- Pink-necked green pigeon (*Treron vernanus*) – rediscovered in Alcoy, Tabunan and Argao in 1998
- Black-chinned fruit dove (*Philinopus occipitalis*) – feared extinct in Cebu in 1995 but observed in 1998, 2002, and 2004
- Pink-bellied imperial pigeon (*Ducula poliocephala*) – first reported by locals in 2003, then observed in 2004
- Metallic wood pigeon (*Columbus vitiensis*) – observed only in Alcoy forest
- Philippine hawk owl *(Ninox philippensis spilomota*) – feared extinct in Cebu in 1995, then observed several times in Nus as forest
- Northern boobook (*Ninox japonica*) - feared extinct in 1995, then rediscovered in 2003
- Variable kingfisher (*Ceyx lepidus*) – presumed extinct in 1995, then first seen and confirmed in Mt Lantoy in 2004
- White-throated kingfisher (*Halcyon smyrmensis*) – observed in Mt. Lantoy
- Philippine swiftlet (*Collocalia mearmi*) – presumed extinct in Cebu till found in 1998 in Alcoy and Mt. Lantoy areas
- Philippine needletail (*Mearnsia picina*) – presumed extinct in the island, until it was found in Nug as forest in 1998
- Dollarbird (*Eurystomus oriontalis*) – reported in 1998 in Alcoy forest and in Nug as forest in 2004
- Citrine canary flycatcher (*Culicicapa helianthea*) – thought extinct in 1959, but observed in 2002 in Alcoy forest and in 2003
- Lemon-throated warbler (*Phylloscopus cebuensis*) – observed in Alcoy forest in 2004
- Plain-throated sunbird (*Anthreptes malacensis*) – rare in Alcoy and not found in other areas in Cebu
- Philippine pygmy flowerpecker (Dicaeum pygmaeum) – observed in Nug as and Lantoy forests. It was presumed extinct in Cebu in 1996 until reported in Nug as forest in 1998

The areas also host several species new to Cebu:

- Chinese goshawk (*Accipiter soloensis*) – observed in the forest edge in Alcoy forest
- Yellow-browed warbler (*Phylloscopus inormatus*)

Among the findings from the survey, the presence of Black Shama on Nug as and Mt. lantoy forests and the Cebu Flowerpecker in Nug as forests were significant.

In addition to the important birds, the site is also host to a number of bats, whose number significantly increased over the last five years. Many species of bats previously not recorded in the island were added, including the re discovery of supposed extinct species in areas previously not known to hold populations of bats.

Threats to conservation

The most serious threats to conservation include the following:

- Expansion of agricultural farms and settlements
- Illegal cutting of trees for timber and fuelwood
- Hunting in Mt. Lantoy, mostly targeting larger species of pigeons and doves, orioles, Coleto and bats

Key stakeholders and potential partners

(i) Cebu Biodiversity Conservation Foundation (CBCF)
(ii) People's organizations
- Kapunungan sa mga Mag uugma sa Yutang Lasangnon sa Bulalacao (KMYLB)
- Bag-ong Alayon sa Kalambuan (BALAK)
- San Agustin Multipurpose Cooperative (SAMPC)

(iii) Department of Environment and Natural Resources
(iv) Flora and Fauna International
(v) Local government of Alcoy

Brief description of the proposed management model

The area is suited to a community managed conservation area, due to the improved level of awareness of local communities, particularly organized peoples' organizations involved in the community based forest management program.

Completed and ongoing initiatives
- Forest Protection program of Alcoy in 2000 (CBCF)
- Nug as Forest Wardening Project, with funding from Borth of England Zoological Society (NEZS) – Chester Zoo
- UNDP – GEF Small Grants Programme Rainforestation Project

Sources:

Paguntalan, Lisa Marie J. and Philip Godfrey Jakosalem. Significant records of birds in forests on Cebu island, central Philippines. Forktail. 24(2008):48-56.

Alcoy Forest Protection Programme. 2005 Annual Report.

Profile of Proposed Sites under the UNDP-GEF Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Mt. Nacolod

Area: the KBA covers approximately 14,000 hectares. The KBA belongs to the greater Mindanao biogeographic zone.

Location and Brief Description

Mt Nacolod is in the south-eastern Leyte, and rises to 1,007 m. There are two significant areas of forest on the mountain, Buac Watershed Forest Reserve and Hinabian-Lawigan Watershed Reservation. Buac Watershed Forest Reserve has a flat to severely sloping terrain. A major portion (74%) of the area is forested, and the rest are kaingin and cultivated land (13%) and brushland (13%). It is a municipal watershed and is the source of water for surrounding towns. The Hinabian-Lawigan Watershed Reservation has c.454 ha of old growth forest, c.1,134 ha of second growth forest, c.544 ha of mossy forest, c.227 ha of brushland and c.2,177 ha of cultivated land. It is bordered to the east by agricultural land and coconut, abaca and rubber plantations. To the north, south and west are unclassified forests.

A mini-hydroelectic plant has been put up in the area by the National Power Corporation (NAPOCOR) to provide electricity. An irrigation system by the NIA was also constructed to supply water to nearby farmlands.

The Mt Nacolod Forest Reserve was declared on 25 November 1966 by Proclamation No. 121, and originally covered 18,688 ha. The Hinabian-Lawigan Watershed Reservation (4,536 ha), which is part of the Nacolod Reserve, was declared on 23 November 1992 by Proclamation No. 107. The Buac Watershed Forest Reserve (5,934 ha) is proposed as a natural park under the NIPAS.

Biodiversity resources and significance

Several of the threatened and restricted-range species of the Mindanao and Eastern Visayas Endemic Bird Area have been recorded in southern Leyte, and are likely to occur in the remaining forests on Mt Nacolod. These include the critically endangered Philippine Eagle, which has been recorded from near to the mountain. There is clearly a need for survey work, in particular to determine the importance of the forests on Mt Nacolod as part of the network of sites required for the conservation of the eagle.

Important bird species earlier recorded include the following:
Threatened (T)
Restricted Range (R) birds

Philippine Eagle (*Pithecophaga jefferyi*)	T	Recorded at or near to Mt. Nacolod in the 1980s
Mindanao Bleeding-heart (*Gallicolumba crinigera*)	RT	Specimens were collected in this part of Leyte at Helosig in 1937
Philippine Eagle-owl (*Bubo philippensis)*	T	Specimens have been collected in this part of Leyte and Helosig and Tomas Oppus at Kalagagan and

		Anahawan, most recently in 1979
Philippine needle tail (*Mearnsia picina)*	R	Specimens were collected in this part of Leyte at Helosig in 1937, where it was not rare
Silvery Kingfisher (*Alcedo argentata*)	RT	Specimens were collected in this part of Leyte at Helosig in 1937
Philippine kingfisher (*Ceyx melanurus)*	T	Specimens were collected in this part of Leyte at Helosig in 1937
Samar hornbill (*Penelopides samarensis)*	R	Specimens were collected in this part of Leyte at Helosig in 1937, where it was common
Visayan Broadbill (*Eurylaimus samarensis*).	RT	Specimens were collected in this part of Leyte at Helosig in 1937
Yellowfish Bulbul (*Ixos everitti)*	R	Specimens were collected in this part of Leyte at Helosig in 1937, where it was common
Striated Wren-babbler (*Ptilocichla mindanensis)*	R	Specimens were collected in this part of Leyte at Helosig in 1937, where it was not rare
Pygmy Babbler (*Stachyris plateni)*	R	Specimens were collected near to this IBA in Tambis in 1964

Threats to conservation

Logging The Buac Watershed Forest Reserve and Hinabian-Lawigan Watershed Reservation lie within the license area of the Timber Producers Marketing Corporation, with Timber License Agreement (TLA) No. 375.

Land conversion and settlements. Illegal logging and kaingin are widespread in the area, and land-use conflicts exist there such as tenurial problems, illegal settlement, illegal clearing and conversion of land into agricultural lots by settlers. In addition to the indigenous community, people from other parts of the Visayas are settling in the area.

Soil erosion is a problem on denuded slopes. In 1995, a one year Soil Conservation and Watershed Management Project was implemented. This area lies on the Philippine Fault and is subject to numerous earthquakes, and the presence of forest is therefore important in protecting against potential mudslides.

Key stakeholders and Partners

The DENR Region 8 is recommending Hinabian-Lawigan Watershed Reservation under the NIPAS, and a Protected Area Survey Analysis (PASA) report has been completed and was submitted to the PAWB-DENRin 1994. A future development plan is being prepared by the DENR-EMPAS, Region 8, to prepare for the recommendation of Buac Watershed Forest Reserve as a natural park under the NIPAS.

GTZ has a long history of engagement with the LGUs of Southern Leyte, in the areas of community based forest management, rainforest development program, disaster management, and barangay based land use planning. It is expected that the partnership with the GTZ project will be forged during implementation.

The LGUs of Southern Leyte, including the Congress representative, have expressed strong interest in the establishment of protected areas in Mt. Nacolod and adjacent areas; as part of their disaster risk management program.

Local communities with CBFM agreements, including those which are not yet organized, have ongoing activities in the forest fringes which may complement the protected area objectives.

Source: BirdLife International (2009) Important Bird Area factsheet: Mount Nacolod, Philippines. Downloaded from the Data Zone at http://www.birdlife.org on 20/6/2009

Profile of Proposed Sites under the UNDP-GEF Project on Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Mt. Hilong-hilong, Caraga Region. The KBA covers an estimated area of ____ hectares.

Status – there is a proposal draft Proclamation covering the fringes of the core areas as National Park

Location and Brief Description:

Mt. HIlong-hilong Range contains one of the few remaining old growth or primary forest in the Philippines. It is considered as one of the priority conservation areas in the Philippines and a Key Biodiversity Area (KBA) in Eastern Mindanao Biodiversity Corridor (EMBC).

The range lies within the political boundaries of Agusan Norte, Agusan Del Sur and Surigao Del Sur provinces in CARAGA Region. It is located in the northern portion of the Diwata range of northeast Mindanao. Mt. Hilong hilong is th highest mountain in the range, but several of the other peaks also reach well over 1000m. The highest elevation is 2,062 meter above sea level (masl) with its peak located in Brgy. Mahaba, Cabadbaran, Agusan Del Norte. Other mountain peak is Mt. Mabaho in Santiago and Mt. Kabatuan in Kitcharao with an elevation of 1,823 masl and 918 masl, respectively. The forest cover of the range is approximately 800,000 hectares. Much of the portion of the forest is montane, other parts are lowland dipterocarp and residual forest. At least 120,000 hectares are regarded as critical watershed areas within the range. A total of 120,653 hectares are established as forest reserve. These areas are headwater of the major river systems that feed the potable and irrigation water needs of the region.

Mt Hilong-hilong Range represents the northern section of a long stretch of mountains from north to south of eastern Mindanao. Locally called Mt Diwata range, this highland is straddled from the north by the lowlands of Caraga Region and the provinces of Compostela Valley and Davao Oriental in the south. Located between 8° 46' to 9° 33' N Latitudes and 125 ° 37' – 126 ° 10' E Longitudes. Mt Hilong-hilong range is shared by four provinces namely Surigao del Norte, Surigao del Sur, Agusan del Norte and Agusan del Sur. This key biodiversity area (KBA) covers 240,239 hectares the biggest terrestrial KBA in Eastern Mindanao Biodiversity Corridor *(EMBC Conservation Framework, 2008).*

The Mt. Hilong-hilong KBA can be found in portions of 20 municipalities in four provinces of the Caraga Region. In Surigao Del Norte, the municipalities are Gigaquit, Claver and Alegria. In Surigao Del Sur, the nine municipalities forming part of the KBA are Cantilan, Carmen, Carrascal, Cortes, Lanuza, Madrid, San Miguel, Tago and Tandag, the provincial capital. In Agusan Del Norte, the six municipalities with portions in the KBA are Jabonga, Kitcharao, Remedios T. Romualdez, Santiago, Tubay and Cabadbaran, the provincial capital. In Agusan del Sur, two other municipalities form part of the KBA and these are Sibagat and Bayugan.

The area covered the two (2) of the proclaimed watersheds in Agusan del Norte. The first one is the Cabadbaran River Natural Forest Reserve by virtue of Presidential Proclamation No. 834, Series of 1991 with a total land area of 16,025 hectares. The other one is the Taguibo River Watershed under Presidential Proclamation No. 1526 dated September 4, 1997 with a total land area of 4,367 hectares, including the Mt. Hilong-hilong, highest peak in Cabadbaran with an elevation of 2,062 meters altitude. Based on the watershed continuum approach the Taguibo River Watershed extends towards the coastal areas and portion of Remedios T. Romualdez municipality that makes a total land area of 10,000 hectares.

Biodiversity Resources and Significance:

Mt Hilong-hilong is said to contain the largest block of the country's remaining dipterocarp forests. Based on the most recent vertebrate survey (EMBC Conservation Framework, 2008) Mt Hilong-hilong is an IBA and has at least 120 species of birds, and 59 of these (50 %) are confined to the Philippines. At least 33 species are restricted range and threatened (18 restricted range and 15 threatened) were recorded at Mt. Hilong hilong range from early 20th century to 1992 (Mallari, et.al, 2001). For frogs and reptiles, at least 41 species were recorded and 26 (63 %) of these are Philippine endemics. For mammals, at least 45 species were documented and 20 of these (44 %) are Philippine endemics. At least 31 globally threatened vertebrates were noted and previous records list 17 globally threatened plants. Some 226 floral species were recorded in a survey done in 2007. The globally threatened wildlife includes the Philippine Eagle, the country's national bird, and "Magkono" or the Philippine iron wood. CI Philippines recorded 23 restricted range species of vertebrates for this KBA.

Threats to conservation:

Loss of Habitat for Wildlife. In the high elevation areas of Cabadbaran and Santiago covering the forested areas of Agusan del Norte, most of the areas are now left with only residual forests. One major threat concerns the flora and fauna such as the purple heron, white breasted sea eagle, bearded bail, the Philippine mallard, and the whistling tree buck that are among the wildlife determined to be critical or in danger of extinction. Unfortunately, empirical data are sadly absent if these rare bird species still abound in the area.

Timber Extraction. The log production in the region comes from the different tree plantation and harvesting agreements under various tenurial instruments or permits given by the DENR. Further, all over this KBA, it is not unusual for people to engage in carabao logging or illegal logging. Considering that majority use fuel wood for cooking, this has implications to resource extraction.

Mining. It is important to note that about 0.32 km^2 are classified as degraded due to mining activities. There are at least 52 mining companies around Mt. Hilong-hilong. Key informants reveal that a number have abandoned their farmlands affecting agricultural productivity and joined the small-scale mining with the hope of providing a better level of living to their respective families.

The above bare the imminent threats in the use of natural resources in Mt. Hilong-hilong Range. Indeed, logging and timber extraction (remaining lowland dipterocarp forest of Mt. Hilong-hilong is within logging concessions) and mining activities proliferate throughout Caraga Region. Note that the province of Surigao del Norte is considered the mining industry center of the region as mentioned earlier. Small-scale mining reportedly continues to prevail in Cabadbaran and Remedios T. Romualdez of Agusan del Norte.

Road Expansion and Development. Road development across municipalities in this KBA also poses another threat to biodiversity. For instance, roads are under construction in Anticala, Butuan City traversing the forested areas up to Tandag, Surigao del Sur.

Other Threats. Slash-and-burn farming, timber poaching, and other forms of illegal logging are major threats to wildlife habitats. Indirectly, increasing population contributes to forest loss as more people in the uplands results to more forest clearing for agriculture. Irresponsible logging and mining practices are threats as well. Because the mountain range is full of minerals, mining must be carefully implemented and should be coupled with effective mitigation techniques especially in ecologically sensitive sites. Forms of sustainable logging such as the IFMA and CBFMA, based on recent experiences, can be a threat as well if current efforts on monitoring are not improved.

Key stakeholders:

- Department of Environment and Natural Resources (DENR)
- Provincial Government of Agusan del Norte
- Provincial Government of Surigao del Norte
- Provincial Government of Agusan del Sur
- Provincial Government of Surigao del Sur
- National Commission of Indigenous People (NCIP)
- Local Government of Butuan City
- Local Government of Cabadbaran City
- Surigao Economic Development Foundation (SEDF)
- Conservation International-Philippines
- Surigao Development Corporation (SUDECOR)
- Mines & Geosciences Bureau (MGB Caraga)

Important capacity constraints to effective management:

The stakeholders on protected area and biodiversity conservation program in Eastern Mindanao Biodiversity Corridor *(EMBC Training Needs Assessment, 2007)* are diverse in educational background and most are in the age range of 40-59 years old. This implies that while they maybe trainable, they have few remaining years of active service in their organizations and the communities. However, any capability building interventions (external or in-service) may do well in further improvement of their competences in performance of their respective jobs or tasks for protected area management or biodiversity conservation program. Most of the stakeholders hold managerial and/or supervisory work responsibilities. It also implies that any capability building should be geared towards enhancement of their technical knowledge for protected area management/biodiversity conservation. Interventions should also tap their potential to transfer and sustain this knowledge to the next generation of human resources in their workplaces.

In view of the profile, the capability building should focus more on younger groups (age group <30-<40 years old) of stakeholders, most especially at the community level. The age groupings, educational background and professional work must be considered as major critical factors in the development of any capability-building program for Mt. Hilong-hilong stakeholders. These factors will also help in establishing and implementing sustainability mechanisms in longer term. Among the actions identified to develop capacity are the following:

- Mainstreaming and institutionalizing actions to conserve biodiversity in local development plans and policies.
- Assist local government units and their development managers with incorporating biodiversity concerns into legislations and barangay, municipal, and provincial plans.
- Enhance more stakeholder participation in land use and management decisions.
- Establishment of a coordinated information education and communication (IEC) system for biodiversity conservation in Mt. Hilong-hilong KBA.
- Create a system of information sharing between political units and conservation practitioners to aid sound decisions on policies, institutional arrangements, investment choices, resource management, and the application of technologies that are environment-friendly.

Partners and their profile:

Conservation International (CI) is a U.S.-based, international organization, is a nonprofit, tax-exempt corporation under Section 501(c)(3) of the Internal Revenue Code.

CI applies innovations in science, economics, policy and community participation to protect the Earth's richest regions of plant and animal diversity in the biodiversity hotspots, high-biodiversity

wilderness areas as well as important marine regions around the globe. With headquarters in Arlington, U.S.A. CI works in more than 40 countries on four continents including Philippines.

Surigao Economic Development Foundation Inc. (SEDF) is a private, non-profit, non-stock and non-political service organization established by Surigaonons on January 12, 1985 and registered with the Securities and Exchange Commission on June 7, 1985. SEDF is a duly registered donee institution under provisions of BIR-NEDA Regulation No. 1-81.

SEDF is an NGO based in Surigao City that was formed as the private sector's response to the rehabilitation wrought about by the super typhoon Nitang in 1984. Its initial programs focused on distribution of vegetable seeds, construction of school buildings, water buffalo dispersals, and community organizing. In 2004, SEDF consolidated its services into sustainable development and grameen-based microfinance. SEDF is also registered as an accredited NGO working in the province of Surigao del Norte and in the City of Surigao. In partnership with Northeastern Mindanao NGO Alliance (NORMINGOAL) it implemented the CEPF funded Mt. Hilong-hilong Protected Area Expansion Project.

Profile of Proposed Sites under the UNDP-GEF Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (EDNSTPAP)

Site: Tawi tawi island

Area: the KBA covers approximately 5,851 hectares. The KBA belongs to the Sulu biogeographic zone.

Location and Brief Description

Located in the Sulu archipelago, Tawi tawi island is one of the less studied areas of the country, and an important biodiversity area. It has been identified as one of the 117 endemic bird areas (EBAs) in the Philippines. The island is the most important area for the conservation of the threatened and restricted range bird species of the Sulu archipelago EBA and retains one of the most extensive forests than anywhere else in the EBA. The island belongs to the Sulu biogeographic zone.

The largest remaining areas of forest on Tawi tawi are on the central ridge, which rises to just over 500m, and in the eastern half of the island. Forest has been estimated to cover 250-350 km2 of the island in total, but recent observations suggest that most of it has been selectively logged and that little primary forests remain. A large chunk of the forest can be found in the municipality of Languyan which is also the main source of timber that supply Bongao, Jolo, Zamboanga, Malaysia and Manila.

Biodiversity resources and significance

Tawi tawi island is the only place where the Sulu bleeding heart (*Gallicolumba menagei*) has definitely been recorded, although there is remarkably little recent information on the status of this elusive species. It is also the only IBA with a known population of the Tawi tawi Brown dove (*Phapteron cinerieceps*), Blue winged Raquet tail (*Prioniturus verticalis*) and Sulu Hornbill (*Arthracoceros montani)* have recently been recorded. The Sulu archipelago endemic Black billed Hanging parrot *(Loriculus (philippenensis) bonapartei),* which has recently been treated by some ornithologists as a full species, has its largest known population on Tawi tawi.

A small mammal that is endemic to Tawi tawi, *Rattus tawitawiensis,* is listed as vulnerable by IUCN. Dugong (*Dugong dugon)* are occasionally recorded on Tawi tawi, and is also a nesting area for Green Sea Turtle *(Chelonia mydas)* Hawksbill Turtle (*Eretmochelys imbricate)* and Leatherback Turtle (*Dermochelys coriacea).*

A preliminary survey conducted in October 2004 showed that there are 104 species of birds, 10 species of mammals, and a total of 15 species of reptiles and 11 amphibians recorded. A diverse array of plants including 12 true mangrove species and 9 associated mangrove species were identified within the mangrove ecosystems of the area.

Among the 104 species of birds, 5 are island endemic. In addition to the four species mentioned above, the other endemic bird species is Winchel's Rufous-lored Kingfisher (*Halcyon wincheli Alfred*). Eleven species are Philippine endemic including the Philippine cockatoo (*Cacatua haematurophygia)*, Blue napped parrot (*Tanygnathus luscionensis salvadori*), Black-billed Hanging Parrot (*Loriculus philippinensis bonapartei)*, and Philippine needle tail (*Mearnsia*

picina). One species, Coleto (*Sarcops calvus lowi)* is near endemic. Six species are threatened under the 2003 IUCN Red Data List.

The initial survey showed new records of volant mammals in the island. From previous expeditions conducted earlier, *Cynopterus brachyotis, Macroglossus minimus* were only recorded from Sanga sanga, a town situated near Bongao. The common rousette, *Rousettus amplexicaudatus* only recorded in Jolo province while *Pteropus pumilus and Hipposideros diadema* are new records for the tawi Tawi island groups. Two Pterropodid bat species, *P. speciosus* and *P. pumilus*, were found in the area are listed in the vulnerable category according to the IUCN and is under Appendix II of CITES.

A total 15 reptiles (8 lizards, 4 snakes and 2 turtles), and 11 amphibian species were recorded in the October 2004 survey.

Threats to conservation

Logging and habitat destruction. Deforestation has been a major threat to the biodiversity in the area since 1980s. A large part of the eastern area has undergone a series of logging (secondary forest with dominant size of less than 0.5 m dbh). Recently, logging activities of the different groups/families are concentrated in the north, in barangay Kuwalabaru, and in the southern part of the municipality of Languyan. The preliminary survey in October 2004 revealed traces and evidences of anthropogenic disturbances (kaingin clearings and clearings due to selective logging) are predominant. Logging is considered one of the main economic source of the forest edge residents.

Hunting and harvesting of resources. Hunting pressure is heavy in this IBA, and the hunting and collection of chicks of Sulu Hornbill for food is almost certainly threatening the survival of this species. Several species of parrots and other birds are captured for the cage trade, which is likely to be a significant threat to Philippine cockatoo and perhaps also Sulu hornbill.

Key stakeholders and Partners

LGU of Bonggao, and adjacent municipalities – the Mayor of Bonggao is an active advocate of conservation, who is well known for his involvement in the Turtle Island Marine Park.

WWF Philippines. The US based NGO is actively engaged in a number of marine conservation efforts, in the area.

Local communities. As primary users of the resource, local communities, particularly those who depend on logging and hunting for livelihood, are important stakeholders in the conservation of biodiversity resources in Tawi tawi island.

Mindanao State University (MSU). Based in Lanao del Sur, this academic institution has active partnership with the LGU and WWF in research and conservation efforts. In 1997, the MSU (Tawi tawi) and Haribon Foundation commenced collaboration on an awareness campaign focused on the conservation of terrestrial biodiversity of Tawi tawi.

Haribon Foundation. This national based NGO conducted a preliminary study in October 2004.

Autonomous Region for Muslim Mindanao (ARMM) – The ARMM has its own DENR, operating in the region. This office has administrative jurisdiction over the Tawi tawi islands, and

discharges its responsibilities in accordance with the ARMM charter. There is coordination though, between the mainstream DENR of the Philippine government, and that of the ARMM.

Sources:

Haribon Foundation. 2004. Biodiversity Survey in Tawi tawi Island, Philippines. (draft report).

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CERTIFICATION

This is to certify that the Department of Environment and Natural Resources-Protected Areas and Wildlife Bureau will provide co-financing through in kind contribution in the amount of One Million, Seven Hundred Ninety Five Thousand, Seven Hundred Eighty Seven US dollar and 50/100 (US$ 1,795,787.50) in the form of counterpart staff and involvement in the studies/activities necessary in the implementation of the UNDP-GEF Project entitled " Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines".

In addition to the support being provided by DENR, we have identified an additional Two Million, Four Hundred Forty One Thousand US dollar (US$ 2,441,000.00) in eligible co-financing support from Local Government Units, communities and local NGOs in the project sites.

THERESA MUNDITA S. LIM
Director

Protect & conserve our forest to save our wildlife

United Nations Development Programme

Philippines

03 July 2009

CERTIFICATION

UNDP's country programme is expected to provide parallel financing in the amount of ONE MILLION FORTY THREE THOUSAND SIX HUNDRED SIXTEEN DOLLARS (USD 1,043,616.00) to support the objective and outcomes of the Project entitled "Expanding and Diversifying the National System of Terrestrial Protected Area in the Philippines"

Yours sincerely,

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FOUNDATION FOR THE PHILIPPINE ENVIRONMENT
Fostering Partnerships for the Environment

CERTIFICATION

This is to certify that the **Foundation for the Philippine Environment (FPE)** will provide co-financing through in kind contribution in the amount of **US $ 25, 000** in the form of counterpart staff and involvement in the studies/activities necessary in the implementation of the UNDP-GEF Project " Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines".

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