



United Nations Development Programme
Country: Philippines
PROJECT DOCUMENT

Project Title: Partnerships for Biodiversity Conservation: Mainstreaming in Local Agricultural Landscapes

UNDAF Outcome(s): By 2011, increased capacity of the stakeholders to protect/enhance the quality of the environment and sustainably manage natural resources

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome: Strengthened national capacities to mainstream environment and energy concerns into national development plans and implementation systems

Expected CP Outcome(s): 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

Expected CPAP Output (s) Institutionalized legal framework for stronger national response to environment and natural resources and sustainable energy issues; Enhanced capacities of broad constituency of government, civil society, the private sector (SMEs, including micro-enterprises), academic institutions and other key stakeholders for advocacy and implementation of ENR and sustainable energy development

Executing Entity/Implementing Partner: UNDP/Protected Areas and Wildlife Bureau, Department of Environment and Natural Resources

Implementing Entity/Responsible Partners: Department of Agriculture (DA), Department of Interior and Local Government (DILG), Conservation International –Philippines, Haribon Foundation, Philippine Biodiversity Conservation Foundation, Inc. (PBCFI), Lake Mainit Development Alliance (LMDA), Philippine Eagle Foundation (PEF), and Fauna and Flora International (FFI)

Brief Description

The Philippines is considered to be one of the world's most biologically rich countries. Its marine waters support the richest coral reef communities on the planet and its terrestrial ecosystems are similarly diverse, supporting a wealth of natural resources and a rich array of species diversity. It is one of the world's 17 megadiversity countries, which together host more than 70% of the world's species. Together with Madagascar, it is also one of the only two countries in the world which are both a megadiverse country and a global conservation hotspot. The entire country comprises a Conservation International Hotspot, and all remaining forest and coastal areas fall within one of four WWF Global 200 Ecoregions. This makes the Philippines one of the planet's highest conservation priorities. The country is home to a vast assemblage of species, many of them found nowhere else in the world. The Philippines has among the highest rates of species discovery in the world (sixteen new species of mammals have been discovered in the last ten years alone). New species are being discovered at a remarkable rate and this pattern shows no sign of slowing. Current taxonomic estimates show that the Philippines has the highest level of endemism in the Indo-Malayan Realm on a per unit-area basis and the highest concentration of biodiversity on earth¹.

The primary government response to protect this important biodiversity has been the establishment of a system of protected areas through the National Integrated Protected Areas System (NIPAS). However, the system currently excludes other areas of critical connective habitat and other sites which are globally significant for biodiversity conservation. These are the Key Biodiversity Areas (KBAs) and the surrounding production landscapes of PAs and KBAs which are important for connectivity of key biodiversity corridors. The result is a highly fragmented landscape, consisting of unsustainable agricultural and natural resources production systems and incompatible land uses which further expose the remaining natural habitats to threats. These are more evident at the level of local government units who are responsible for integrated management of lands under their jurisdiction, including PA/KBA territories, and the production landscape. To arrest fragmentation and ensure that activities in the surrounding landscape conserve species assemblages and maintain ecosystem functions, three major capacity constraints have been identified: (i) inadequate policies, systems, tools and capacities by government agencies at the national level to encourage local government unit (LGU) landscape level biodiversity conservation efforts; (ii) weak capacities and lack of tools by LGUs for mainstreaming biodiversity in landscape level and local development planning; and (iii) failure to integrate biodiversity concerns into local development planning, leading to unsustainable management of the surrounding landscape.

The proposed project will directly address these barriers through an integrated approach aimed at strengthening enabling policies at the national level; enhancing capacities of LGUs, and demonstration in selected pilot sites. These will be achieved through partnerships with key national government agencies, LGUs and national and local conservation NGOs, to muster their resources and expertise. Three major outcomes are envisaged from this approach:

Outcome 1: National-level systems, policies, tools and capacities are in place to support LGU level biodiversity conservation efforts.

Outcome 2: LGUs encompassing 1.6 Million hectares in five key biogeographic regions have the tools and capacities to integrate sustainable management into decentralized government structures.

Outcome 3: Systems, policies, tools and capacities for landscape level biodiversity conservation and sustainable development are applied at eight pilot sites covering 700,000 hectares across five critical biogeographic regions (Luzon, Palawan, Negros-Panay, Mindoro and Mindanao).

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Country: Philippines

UNDAF Outcome (s)/Indicator (s): By 2011, increased capacity of the stakeholders to protect/enhance the quality of the environment and sustainably manage natural resources

CPAP Outcome (s)/Indicator (s): Number of inconsistent environment and natural resources policies harmonized/standardized; Number of ENR issues resolved/addressed favorably with consensus in shortened period of time vs. baseline; Number of sectoral policy gaps addressed through legal issuances; Development plans at national and local levels with enhanced ENR/sustainable energy/sustainable development focus; Multilateral Environmental Agreements (MEA) commitments complied

CPAP Output (s)/Indicator (s): Planning guidelines produced and adopted; Number of ENR reports;

Executing Entity/Implementing Partner: Protected Areas and Wildlife Bureau-Department of Environment and Natural Resources

Implementing entity/Responsible Partners: Department of Agriculture (DA), Department of Interior and Local Government (DILG), Conservation International -Philippines, Haribon Foundation, Philippine Biodiversity Conservation Foundation, Inc. (PBCFI), Lake Mainit Development Alliance (LMDA), Philippine Eagle Foundation (PEF), and Fauna and Flora International (FFI)

Total resources required	US \$ 17,022,061
Total allocated resources:	
• Regular	---
• Other (UNDP)	301,404
GEF	4,500,000
Government (including in kind)	10,264,598
Other (NGOs and other partners)	1,956,059

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Agreed by (Department of Environment and Natural Resources, Implementing Partner):


 MR. RAMON J. PAJE, Secretary

Date/Month/Year

Agreed by (NEDA, Coordinating Agency):


 ROLANDO G. TUNGPALAN, Deputy Director-General

16 September 2010
 Date/Month/Year

Agreed by (UNDP):


 RENAUD MEYER, Country Director

20 September 2010
 Date/Month/Year

Department of Environment and Natural Resources
 Office of the Secretary
 Department of Environment and Natural Resources
 Office of the Secretary

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List of Acronyms and Abbreviations

ACB	ASEAN Centre for Biodiversity
ADB	Asian Development Bank
APR	Annual Project Report
AWP	Annual Work Plan
AZE	Alliance for Zero Extinction
BAFPS	Bureau of Agriculture and Fisheries Products Standards
BAR	Bureau of Agricultural Research
BINU	Biodiversity Indicators for National Use
BLGS	Bureau of Local Government Supervision
BLDP	Bureau of Local Development & Planning
BMP	Best Management Practices
BMS	Biodiversity Monitoring System
BMU	German Ministry of Environment
BPI	Bureau of Plant Industry
BPP	Biodiversity Partnership Program
BSWM	Bureau of Soils & Water Management
CAO	City Agriculture Office
CBD	Convention on Biological Diversity
CBRM	Community-Based Resource Management
CCBS	Climate, Community and Biodiversity Standards
CDP	Community Development Plan
CDR	Combined Delivery Report
CENRO	Community Environment & Natural Resources Office/r
CEPF	Critical Ecosystem Partnership Fund
CI	Conservation International
CITEM	Center for International Trade Expositions & Mission
CITES	Convention on International Trade on Endangered Species of Wild Flora & Fauna
CLUP	Comprehensive Land Use Plan
CPM	Central Panay Mountains
CPPAP	Conservation of Priority Protected Areas in the Philippines
CTI	Coral Triangle Initiative
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
DILG	Department of Interior & Local Government
DTI	Department of Trade & Industry
ENRMP	Environment and Natural Resources Management Program
EO	Executive Order
FFI	Fauna & Flora International
FLUP	Forest Land Use Plan
FPE	Foundation for the Philippine Environment
ICMP	Integrated Coastal Management Program
IEC	Information Education & Communication
INREM	Integrated Natural Resources and Environmental Management
IA	Implementing Agency
IP	Implementing Partner
IPAF	Integrated Protected Area Funds
IPM	Integrated Pest Management
IW	Inception Workshop
KBA	Key Biodiversity Area
KMS	Knowledge Management System
LGPMS	Local Governance Performance Management System

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LGU	Local Government Unit
LMDA	Lake Mainit Development Alliance
LPSC	Local Project Site Committee
MAO	Municipal Agricultural Officer
MBRLC	Mindanao Baptist Rural Life Center
MDG	Millennium Development Goals
MEA	Multilateral Environmental Agreement
MENRO	Municipal Environment & Natural Resources Officer
MOA	Memorandum of Agreement
MPDO	Municipal Planning & Development Officer
MRDP	Mindanao Rural Development Program
M & E	Monitoring and Evaluation
NAP	National Action Plan
NBSAP	National Biodiversity Strategy and Action Plan
NCIP	National Commission on Indigenous Peoples
NCRFW	National Commission on the Role of Filipino Women
NCW	National Commission on Women
NEDA	National Economic Development Authority
NGO	Non-Government Organization
NIPAP	National Integrated Protected Areas Project
NIPAS	National Integrated Protected Areas System
NNNP	Northern Negros Natural Park
NPAAD	National Plan for Agriculture & Agro-Industrial Development
NRM	Natural Resource Management
OBIS	Ocean Biogeographic Information System
OCCP	Organic Certification Center of the Philippines
PA	Protected Area
PAMB	Protected Area Management Board
PAO	Provincial Agricultural Officer
PAWB	Protected Areas and Wildlife Bureau
PAWCZMS	Protected Areas Wildlife and Coastal Zone Management Services
PASu	Protected Area Superintendent
PB	Project Board
PBCFI	Philippine Biodiversity Conservation Foundation, Inc.
PCAMRD	Philippine Council for Aquatic & Marine Research & Development
PCHM	Philippine Clearing House Mechanism
PCSD	Palawan Council for Sustainable Development
PEF	Philippine Eagle Foundation
PENRO	Provincial Environment and Natural Resources Officer
PES	Payment for Environmental Services
PGS	Participatory Guarantee System
PHILCCAP	Philippine Climate Change Adaptation Project
PIR	Project Implementation Review
PMU	Project Management Unit
PNPGR	Philippine Network of Plant Genetic Resources
PPLS	Penablanca Protected Landscape & Seascape
QCS	Quality Control System
QPL	Quirino Protected Landscape
RCU	Regional Coordinating Unit
RP	Responsible Partner
SAFDZ	Sustainable Agriculture and Fisheries Development Zone
SALT	Sloping Agricultural Land Technology

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SLM	Sustainable Land Management
SEA	Strategic Environmental Assessment
STREEM	Strengthening Coordination for Effective Environmental Management
SWAT	Soil & Water Access Teams
USAID	United States Agency for International Development
WB	World Bank
WEO	Wildlife Enforcement Officers

Part 1: Situation Analysis

1.1 Context and Global Significance

1. The Philippines is located in Southeast Asia, between the Philippine Sea and the South China Sea, east of Vietnam and north of Indonesia and Malaysia. It is the world's second largest archipelagic country next to Indonesia. It is comprised of more than 7,100 islands with a combined landmass of 300,000 sq. km. 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; which, combined with formerly extensive areas of rainforest and an isotropical location, have contributed to the exceptionally diverse biota in the country.

2. The Philippines is considered to be one of the world's most biologically rich countries. Its marine waters support the richest coral reef communities on the planet and its terrestrial ecosystems are similarly diverse, supporting a wealth of natural resources and a rich array of species diversity. It is one of the world's 17 megadiversity countries, which together host more than 70% of the world's species. Together with Madagascar, it is also one of the only two countries in the world which are both a megadiverse country and a global conservation hotspot. The entire country comprises a Conservation International Hotspot, and all remaining forest and coastal areas fall within one of four WWF Global 200 Ecoregions. This makes the Philippines one of the planet's highest conservation priorities.

3. The Philippines is home to an estimated 53,500+ species of plants and animals. Recent reviews have recognized 105 species of amphibians (79% endemic) and 264 reptiles (68% endemic), while recent summaries of birds have recognized 593 species (32% endemic). Mammal diversity is currently estimated at 175 native terrestrial mammals (65% endemic). Total country estimates include as many as 15,000+ plants (and their relatives) and 38,000+ animals (vertebrates and invertebrates). These numbers are considered conservative considering that recent studies have shown that terrestrial biodiversity of the Philippines is substantially under estimated. The Philippines has among the highest rates of species discovery in the world (sixteen new species of mammals have been discovered in the last ten years alone). New species are being discovered at a remarkable rate and this pattern shows no sign of slowing. Current taxonomic estimates show that the Philippines has the highest level of endemism in the Indo-Malayan Realm on a per unit-area basis and the highest concentration of biodiversity on earth¹.

4. The Philippines has five major, and at least five minor, centers of endemism, ranging in size from Luzon, the largest island (103,000 km²), which, for example, has at least 31 endemic species of mammals, to tiny Camiguin Island (265 km²), a speck of land north of Mindanao, which has at least two species of endemic mammals. The patterns of distribution of endemic species have resulted in the identification and division of the country into different biogeographic regions. Each of these regions corresponds to an island that existed during the last Ice Age (from about 20,000 to 10,000 years ago), when sea level was 120 meters lower than it is at present. Thus, the opportunity for separate evolution to take place occurred, resulting in each region becoming a major center of biodiversity and endemism, with distinctive flora and fauna.

5. The range and significance of Philippine biodiversity requires coordinated action and cost-effective approaches before irreparable damage is brought about by biodiversity loss. This requires addressing the major threats facing the country's biodiversity.

6. The primary government response to the above threats to the country's biodiversity resources has been the establishment of a network of Protected Areas (PA) under the National Integrated Protected Areas System (NIPAS). The existing network consists of 109 PAs covering a total of 2.13 M hectares of terrestrial area, which is only six percent of the total land area of the Philippines. In addition, there are also some 1.37 M hectares of protected marine area. Even these figures are somewhat overstated, however, in the sense that only 10 PAs have completed the full legislative process of establishment by enactment of site-specific law as strictly specified under the NIPAS Act.

¹ Brown, R.M. and A.C. Diesmos. 2009. Philippines, Biodiversity. Pp. 723-732. In: Gillespie, R. and D. Clague (eds.) Encyclopedia of Islands. University of California Press, Berkeley.

7. While the NIPAS can and will be expanded,² it is clear that, as currently constituted, it cannot by itself conserve an adequate portion of the country's biodiversity. Extensive areas of critical, connective habitat are likely to remain unprotected, even under an expanded NIPAS. An assessment conducted in 2006, with funding from the GEF-supported Critical Ecosystems Partnership Fund, gives some idea of just how much habitat is involved. The assessment identified 128 terrestrial Key Biodiversity Areas (KBAs). KBAs are sites that are globally significant for biodiversity conservation and are considered actually or potentially manageable for conservation; they are the areas of greatest value and highest conservation priority within the overall Philippines landscape which, in its entirety, is already a Global Conservation Hotspot. As shown in Table 2 below, terrestrial and marine KBAs encompass a total of 7,597,011 ha, with sizes ranging from 1,775 ha to 2.5 M ha. Of the 128 KBAs, only 60, covering 2,739,665 ha, and representing 36% of the total area covered by all KBAs, *partially* overlap with protected areas and are under some form of protection. At least 64% of KBAs by area, or some 4,857,346 ha, remain fully within the production landscape and lack even partial protection under NIPAS. This situation is compounded by the fact that not all PA boundaries fall 100% within KBAs, meaning that the fraction of KBA area protected under NIPAS probably represents well under 1/3 of the total.

8. Even for existing PAs, boundaries have not been well demarcated, and management and enforcement capacities are limited. Two-thirds of PAs have some human settlements, and one-quarter of their lands have already been disturbed or converted to agriculture. Both the PA estate and KBAs outside of PAs are highly fragmented. Satellite maps show the remaining forest habitats in PAs and KBAs slowly being threatened by the creeping incursion of perennial crops such as coconut, abaca, as well as annual crops such as corn and vegetables. In Central Cebu for example, very few lowland forest tracts remain due to land conversion, rapid urbanization, and high population growth; remaining areas harbor important species that require protection. Moreover, the natural boundaries of some PAs and KBAs have been altered to exclude large patches of important natural forests to give way to other development projects. For example, in Quirino Protected Landscape and Seascape, about 31,000 hectares were excluded from the original proclamation, dividing the protected area into three parcels, in order to give way to mining development. Another 25,000 hectares of primary lowland dipterocarp forest was excluded from the Mt. Hamiguitan protected area to allow mining exploration activities. In Mt. Siburan, about 7,868 hectares within the KBA were set aside for resettlement area for families displaced from the Mt. Pinatubo eruption.

Table 1: Terrestrial PAs and KBAs, by biogeographic region (March 2010)

Biogeographic Region	No. of KBAs	Area (in hectares)			No. of PAs	Area (in hectares)			Ratio of PA area to KBA area (%)
		Terrestrial	Marine	Total		Terrestrial	Marine	Total	
Batanes	1	20,343	190,344	210,687	1	20,323	193,255	213,578	101.37%
Babuyan	1	60,488	749,016	809,504	0	0.00	0.00	0.00	0.00%
Luzon	39	1,947,003	120,663	2,067,666	18	769,687	86,459	856,146	41.41%
Mindoro	9	236,347	83	236,431	1	18,016	0.00	18,016	7.62%
South China Sea	1	29	27,556	27,586	1	29	15,763	15,792	57.25%
Palawan	16	781,042	167,248	948,290	5	268,798	165,092	433,891	45.76%
Sulu Sea	1	2	39,615	39,617	1	0.00	96,828	96,828	244.41%
Sibuyan	1	15,343	0.00	15,343	1	15,265	0.00	15,265	99.49%
Romblon-Tablas	2	18,684	0.00	18,684		0.00	0.00	0.00	0.00%
Negros-Panay	14	518,074	8,536	526,611	5	153,929	0.00	153,929	29.23%
Siquijor	1	1,775	0.00	1,775		0.00	0.00	0.00	0.00%
Greater Mindanao	37	2,538,497	7,264	2,545,761	26	722,802	211,188	933,990	36.69%
Camiguin	1	3,730	0.00	3,730	1	2,227	0.00	2,227	59.71%
Greater Sulu	3	14,776	13,780	28,556		0.00	0.00	0.00	0.00%

² Including through the GEF-supported UNDP project *Expanding and diversifying the national system of terrestrial protected areas in the Philippines*

Biogeographic Region	No. of KBAs	Area (in hectares)			No. of PAs	Area (in hectares)			Ratio of PA area to KBA area (%)
		Terrestrial	Marine	Total		Terrestrial	Marine	Total	
Sibutu	1	13,014	103,749	116,763		0.00	0.00	0.00	0.00%
TOTAL	128	6,169,153	1,427,858	7,597,011	60	1,971,079	768,585	2,739,665	36.06%

9. In addition to other constraining factors, PA expansion is limited by the insufficiency of financial resources to acquire and effectively manage a larger PA estate. Records show that since the creation of the NIPAS, about 19 PAs have received large-scale support from donors and international NGOs, estimated at about US \$35 Million³. Only 15 PAs have Integrated Protected Area Funds (IPAFs) with more than one million pesos. Other PAs and KBAs are receiving some support from national and local NGOs and LGUs, in partnership with private sector and international NGOs and donors. The level of financing, however, is not considered adequate to address the patterns of resource use that threaten the biodiversity resources in these PAs/KBAs. This means that some 94 PAs and a large number of KBAs would require financing support to sufficiently cover the requirements for setting up, installation of management structures and implementation of management plans. Of the PAs which received financial support, there are concerns regarding sustainability of actions. Gaps persist in terms of providing continuing support to recurrent expenditures that are required to maintain adequate levels of enforcement, information dissemination, monitoring and development and implementation of adaptive management strategies.

1.2 Threats and Root Causes

10. The range and significance of Philippine biodiversity requires coordinated action and cost-effective approaches before irreparable damage is brought about by biodiversity loss. This requires addressing the major threats facing the country's biodiversity.

11. The Fourth National Report to the CBD identified fragmentation of natural forests as the major threat to the country's globally significant biodiversity resources. Fragmentation is seen in the continued loss of forest cover at the rate of 2.1% annually during the period 2000-2005, considered the second fastest in Southeast Asia (next to Myanmar) and the 7th fastest in the world⁴. Coupled with this is the increasing pressure from a rapidly growing population. The Philippines is home to 88.75 million people, with a population density of 273 persons/km² (the second-highest in South-East Asia after Singapore), growing at a rate of 2.04% per annum. About 30% of the population, including 12-15 million indigenous people, live in the uplands. Gross domestic product grew by 7.3% in 2007, primarily driven by growth in the agriculture, fisheries and forestry sectors.

12. It is estimated that from 1935 to 2003 more than 7.8 million hectares of dipterocarp forests were converted to other uses. Drivers of forest loss and fragmentation include: (i) agricultural expansion, coupled with unsustainable practices; (ii) forest sector related activities; (iii) mining, and; (iv) land conversion for expansion of human settlements, roads, etc. These drivers are discussed below.

13. Agricultural expansion is brought about by a combination of pressures to meet the increasing food demand from a growing population and a limited land base. In net terms, area devoted to agriculture is actually decreasing; between 1988 and 2007, total agricultural area declined from 13.1 to 12.4 million ha. The reduction in areas devoted to agriculture has been a result of unabated land conversion of prime agricultural areas into residential and commercial estates. However, a significant portion of the agricultural activity displaced in this way has moved into the fragile uplands, thereby contributing to further forest loss and fragmentation. In a country where agriculture is still seen as the main driver of economic growth, fragmentation and extensive agricultural production, particularly within and along the edges of priority conservation areas, are expected to continue.

14. The unfinished business of the agrarian reform program has also contributed to this phenomenon, due to the open access nature and lack of enforcement in the uplands, which have become attractive magnets for

³ These include the 10 sites funded by an earlier WB-GEF Conservation of Priority Protected Areas Project (CPPAP), the 12 sites supported by EU National Protected Areas Project (NIPAP), and the UNDP-GEF assisted Samar Island Biodiversity Project (SIBP).

⁴ DENR-PAWB, et. al. 2009. Ibid.

landless rural families. A classic case is Mount Data, a protected area and an identified key biodiversity area (KBA) in the Cordillera Administrative Region, which has essentially been converted into a vast agricultural area. Similar situations exist, although in varying degrees, in other Key Biodiversity Areas (KBAs). The challenge is to catch this process early enough so that these agricultural patches can be managed under sustainable practices, thereby supporting the conservation objectives of the KBAs, while also providing food security and income for farming communities.

15. Despite efforts to spur agricultural growth, poverty still persists in the rural areas, where about 70% of the poor population lives. Underemployment is also largely a rural phenomenon at 61.2%, due to the seasonal nature of farm employment, together with the highs and lows in agricultural sector's performance⁵. The interlinked phenomena of unregulated conversion of agricultural lands, poverty in the rural areas, and unsustainable agricultural practices in the production landscapes of KBAs, continue to pose a serious threat both to the economic security of rural communities and to important biodiversity resources.

16. Among forest sector related activities, *logging* is considered as the most serious threat. Active commercial logging operations cover approximately 500,000 hectares, with a combined annual allowable cut of 300,000 cubic meters. Although restricted to secondary forests, these open up the old growth forest edges making them easily accessible to migrants and create convenient targets for conversion to agriculture. In addition, there are about 292 industrial forest management agreements, industrial tree plantation lease agreements, and tree farm agro-forestry leases, covering a total of about 800,000 hectares. While these agreements and leases contribute to an increase in forest cover, they do not necessarily ensure increases in forest biodiversity.

17. The *use of exotic species in the reforestation programs* has contributed to habitat fragmentation by acting as barriers between patches of natural forest and has caused some concern because of their invasiveness. Natural forest habitats are also being fragmented by unsustainable cutting and conversion to agriculture related to the growing population's need to secure livelihoods. 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.

18. *Frequent burning and domestic animal grazing* likewise contribute to the disintegration of forests. The factors often associated with forest fires include deliberate burning during land clearing and increased human settlements in close proximity to forests. Temperature build-up at the forest fringe due to diminishing size of forest has been associated with forest fires. In 2006, forest fire disturbances damaged a total of 3,003 hectares. In previous years, more than 60% of these fires occurred in the central and northern parts of the country. The frequency and intensity of wildfires have also been linked to global warming and the El Nino phenomenon.

19. The government's thrust of searching and developing alternative (to fossil fuel) energy sources, poses a threat to forest biodiversity by *encouraging monoculture tree stands*. So called "jatropa estates," designed to meet fuel needs, have thus far been established on some 2,600 hectares of land.

20. Mining development contributes to deforestation, degradation and fragmentation, since most new mining applications are located in forest areas, threatening the integrity of biodiversity in this ecosystem. Twenty-three (23) flagship mining projects are located in biodiversity-rich areas and overlap with KBAs such as in the Sierra Madre, Palawan, Mindoro, and various parts of Mindanao. An assessment conducted in 2003 indicated that in the Philippines, more than half (56%) of all exploration areas and mining leases overlap with areas of high ecological vulnerability.⁶

21. Land conversion involves the creation of development sites and housing projects in urban and semi-urban areas, which pose major barriers to the movement of species between remaining forest patches.

⁵ National Economic Development Authority, 2004. Medium Term Philippine Development Plan.

⁶ Miranda, Marta; Philip Burris; Jessie Froy Bingcang; Phil Shearman; Jose Oliver Briones; Antonio La Vina; and Stephen Menard. *Mining and Critical Ecosystems: Mapping the Risks*. World Resources Institute. Washington DC. 2003.

Development projects such as roads, power lines, fences and irrigation canals likewise create physical barriers that obstruct or reduce the ability of some species to move and disperse.

22. Factors underlying the above threats include: disjointed policies at the national level, 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.

23. Disjointed national policies and programs. Agencies have focused too much in carrying their own mandates without due regard to their effects on important PAs/KBAs. This has resulted in the implementation of programs which, while meant to promote production from agriculture and natural resources, have had negative impacts on biodiversity.

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.

25. The coverage of tenure rights is still limited, particularly in the production zones surrounding important PAs and KBAs. The slow implementation of the agrarian reform program has driven many landless families to cultivate the fragile uplands, encroaching upon critical habitats. Within these areas, management of cultivated lands has not been given sufficient support, resulting in practices that continue to create patches of open areas. 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 are underway to address this. However, there is a need to develop capacities of LGUs and strengthen enabling policies at the national level, for these to support effective implementation on the ground.

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.

1.3 Long-term solution and barriers to its achievement

28. Given the enormous task of conserving these priority sites, it is important that cost-effective solutions and practical approaches be urgently implemented before the remaining important biodiversity areas and critical habitats are irreversibly degraded through continued exposure to threats. It is clear that the establishment of PAs, mainly through the actions of national government led by the DENR, will not be enough to provide effective management over these areas. Mainstreaming is one way of ensuring there is cost effective means to protect the remaining KBAs in a manner consistent with the sustainable management of the production systems in the surrounding landscape. In this way, the responsibility is shared with other important actors, while ensuring there are beneficial outcomes for doing so. This was one of the explicit

conclusions of the Fourth National Report to the CBD which recognized the need to strengthen capacities of local government units as key to protecting biodiversity, promoting sustainable use and ensuring equitable benefits since they are at the forefront of local action. There was also recognition that these tasks cannot be borne by a single agency and that the capacities of other key actors such as civil society organizations, the business sector and local communities should also be built to enable strong alliances and partnerships.⁷

29. With the pressures of a growing population dependent on agriculture, and the constraints facing the NIPAS system, it is evident that conserving the Philippines' valuable biodiversity wealth solely through an expanded system of protected areas is unrealistic. The long-term solution therefore is to ensure that fragmentation is arrested by making certain that activities in the production landscape conserve species assemblages and maintain ecosystem functions.

30. Achievement of the above goal is hindered by three broad barriers. These barriers, which can be broken down into individual elements, are discussed below, together with the baseline situation related to each barrier and element.

Barrier 1: At the national level, government agencies have inadequate policies, systems, tools and capacities to encourage and support LGU landscape-level biodiversity conservation effort

31. Existing enabling policies mandate government agencies other than DENR to support biodiversity conservation. Thus, Presidential Memorandum No. 289 was issued in 1995 mandating government agencies to integrate the National Biodiversity Strategy and Action Plan (NBSAP) strategies and programs into their sectoral plans and programs. In 2006, Executive Order No. 578 established the national policy on biodiversity and directed all concerned government agencies and offices and LGUs to integrate and mainstream the protection, conservation and sustainable use of biological diversity into their policies, rules and regulations, programs, projects and development planning process. A related policy, also issued in 2006, was EO 533, which mandates the adoption of integrated coastal management (ICM) and related models for the sustainable development of the country's coastal and marine resources and environment.

32. Despite such policies, there has been no active effort by national agencies to support LGUs in carrying out the above mandates at local and site levels. Altogether, there has been very limited national-level support to enable LGUs to contribute to biodiversity conservation efforts. Enabling policies are lacking in areas such as assessment of biodiversity impacts of policies and programs, and promotion of biodiversity-friendly agricultural practices and business opportunities. There are also weak capacities to effectively regulate and enforce policies on wildlife trade. Finally, there is no adequate system for knowledge management to support monitoring of impacts, and associated decision making at the national and LGU levels. Specific barriers related to inadequate national-government support and encouragement to LGUs for landscape-level biodiversity conservation are further described below.

ELEMENT 1.1: NO POLICY MANDATING THE BIODIVERSITY IMPACT ASSESSMENT OF NATIONAL-LEVEL POLICIES, PLANS AND PROGRAMMES

33. Recent national agricultural policy developments have raised concern over potential biodiversity impacts, particularly in the case of farm plots located in upland areas within the buffer zones of PAs and KBAs. For example, in order to spur agricultural production, in 2002 the Philippines enacted Republic Act 7900, also known as the High-Value Crops Development Act. The Act was designed to encourage agricultural intensification in response to declining agricultural output. To this end, the Act promotes the introduction of high-yielding varieties which are dependent on high levels of farm inputs such as fertilizers, chemical pesticides, improved infrastructure support and exotic crop varieties. In addition to the impacts of

⁷ Department of Environment and Natural Resources – Protected Areas and Wildlife Bureau, UNDP, ASEAN Center for Biodiversity and Ateneo School of Governance. Assessing Progress Towards the 2010 Biodiversity Target: The 4th National Report to the Convention on Biodiversity. March 2009.

agricultural pollution, the policy may endanger biodiversity by encouraging the replacement of traditional crop varieties with ones that are more popular for export.⁸ However, there was no *a priori* assessment of the policy, and its precise impacts remain unknown due to a lack of systematic monitoring.

34. The Philippines has also adopted biotechnology as a strategy for economic advancement and food security; it is one of the world's biotech mega-countries, growing more than 50,000 hectares of biotech crops⁹. As of September 2008, 28 genetically modified (GM) crops had been approved for import for direct use for food, feed, or processing; four of these are also approved for cultivation. Additional delayed ripening, vitamin-enriched, and virus-resistant GM crops are in the pipeline. While there are ample laws and regulations governing biotechnology in place, biotechnology continues to have the potential to negatively impact biodiversity, particularly if not carefully assessed through appropriate tools and methods.

35. Biodiversity impacts have largely been ignored with respect to the spatial aspects of promoting new variants of agricultural crops, mono-cropping systems, and agricultural intensification through the application of chemical inputs. Intensification has been pursued indiscriminately, regardless of proximity to KBAs or important biodiversity corridors. This has led to increased fragmentation within landscapes surrounding critical habitats and other areas with significant biodiversity resources.

36. The above problems have persisted in part due to the absence of national biodiversity impact assessment requirements related to policies, plans and programmes. As a result, the most that national and LGU agencies have been able to do is to try to limit encroachment upon established PAs. Beyond avoiding land use violations, government agencies have not been able to adequately assess the potential impacts of development policies and programs on biodiversity, or to balance economic gains from improved production against likely long-term effects of permanent loss of species and degradation of natural habitats. An example is the introduction of high-value, quick-growing exotic fish species in important aquatic KBAs such as Lake Mainit and Lake Lanao, which seriously threaten endemic species in these major inland bodies of water.

BARRIER 1.2: AN INADEQUATE ENABLING ENVIRONMENT, INCLUDING INCENTIVES, FOR BIODIVERSITY FRIENDLY AGRICULTURAL PRACTICES, PARTICULARLY IN AND AROUND KBAs/PAS

37. At the national government level, there is no explicit policy to promote the adoption of biodiversity-friendly agricultural production systems. This stems from too much focus on increasing production and limited recognition of the contribution of biodiversity-friendly practices to sustaining food security.

38. Recently, the DA Bureau of Agricultural Research (BAR) launched a program to promote traditional crops, including development, marketing and utilization. This is part of the overall approach to conserve the plant genetic resources of the Philippines to take advantage of the country's position as part of the center of diversity for rice, coconut, mungbean, taro and yam, spices, as well as the center of origin and diversity of bananas in Southeast Asia. However, this program is not part of the mainstream strategy, and is still in its infant stage. Other initiatives include: Biotech project, which promotes the cultivation of indigenous herbal species such as banaba; the Integrated Pest Management Project (IPM); organic farming; and vermin-composting.

39. The government also has a policy and program to promote organic agriculture. However, this does not cover certification schemes for biodiversity-friendly production systems. The National Organic Agriculture Program was established by the National Organic Agriculture Board through Executive Order (EO) No. 481. This was followed two years later by EO No. 29 or the DA-Sustainable Agriculture Development Program, which is implemented in partnership with the Catholic Bishops Conference of the Philippines-National Secretariat for Social Action-Justice and Peace. Moreover, provincial local government units are encouraged to pass local resolutions to further strengthen these national policies. The provinces of Bohol, Negros Oriental and Occidental, and Marinduque are some of the provinces that have resolutions to support organic

⁸ Altoveros and Borromeo, 2007; as cited in DENR-PAWB, et. al, Fourth National Report to the CBD.

⁹ James, 2008; as cited in DENR-PAWB, op.cit.

farming and sustainable agriculture and, in some cases, ban the entry of genetically modified crops into their areas.

40. The Organic Agriculture Program of DA is supported by a certification system. Although still with limited coverage and consumer patronage, the organic certification schemes in agriculture focus on production processes that entail organic methods as assurance from growers and to ensure prime price. The dominant organic certification is third party certification but it is expensive for a farm to get certified. The cost of yearly certification for a small farm is as high as Php 15,000 (US \$ 333). A cheaper mode is community-based certification, called participatory guarantee system (PGS). PGS is most appropriate for resource poor farmers living in biodiversity conservation areas because the cost of certification is less expensive. When applied more widely, the certification system has the potential to provide the needed incentives to positively influence agricultural practices in the surrounding landscapes of KBAs. Organically certified products command a higher price in the market – as much as 30% more.

41. While there are existing standards for agricultural production systems through the Bureau of Agriculture and Fisheries Products Standards (BAFPS), the current system has no standards covering biodiversity-friendly production systems. The Rainforest Alliance has a set of Climate, Community and Biodiversity Standards (CCBS), but these are focused on projects rather than products, with criteria such as carbon sequestration for purposes of funding from donors. Other certifications only involve Best Management Practices (BMP). Lack of expertise to develop the standards and a limited understanding of the benefits to both consumers and producers are the reasons why no certification system for biodiversity-friendly production systems has so far been put in place.

BARRIER 1.3: INADEQUATE NATIONAL SYSTEM AND CAPACITY FOR MONITORING AND ENFORCEMENT OF POLICIES RELATED TO COLLECTION AND TRADE OF PLANTS AND WILDLIFE HARVESTED ACROSS LANDSCAPE

42. Wildlife trade in the Philippines is regulated through a permitting system for the import, export and re-export of wildlife species which are allowed for trade. A local transport permit is also required for local trade of wildlife. The regulation of trade through a system of permitting requirements is in accordance with the rules under the Convention on International Trade on Endangered Species of Wild Flora and Fauna (CITES) and the Wildlife Resources Conservation and Protection Act (R.A. 9147). The Bureau of Customs, the National Police, Philippine Coast Guard, Department of Trade and Industry, Department of Agriculture, and LGUs are all involved in the implementation of laws regarding the illegal trade of wildlife, in cooperation with the DENR's Protected Areas and Wildlife Bureau (PAWB).

43. There are a number of problems concerning the implementation of these regulations. First, rampant poaching persists to feed a flourishing illegal trade in wildlife. There is currently no system in place for tagging of wildlife authorized for trade, and enforcement agents have weak capacities in the proper identification of species which are banned for trading. Illegal wildlife trade remains unabated largely due to the absence of mark/tags to identify legally acquired from illegally sourced specimens. There are 4,000 establishments nationwide keeping and propagating wildlife species, primarily for commercial purposes. These establishments are maintaining an aggregate total of about 200,000 animals per year. It is extremely difficult for regulatory and enforcement officers to monitor the movement and trade of these resources, and ensure that animals subject of trade are same individuals that are covered by permits in the absence of any indelible mark/tag. The Philippine government is losing at least Ph 9.0 M/year from illegal wildlife trade. DENR has developed a "Guidelines in establishing the wild fauna marking and identification system" (DAO 2009-01); however, these guidelines remain to be fully implemented pending the development of the marking system.

BARRIER 1.4: AN INADEQUATE ENABLING ENVIRONMENT AND INCENTIVES FOR PRIVATE SECTOR INVESTMENTS IN BIODIVERSITY-FRIENDLY BUSINESS OPPORTUNITIES

44. The country's incentive systems for industry are focused on encouraging clean technologies, including the installation of pollution control equipment, energy efficient production systems and wastewater treatment facilities. There are currently no incentives to promote investments in biodiversity friendly business opportunities. Constraints to the development of biodiversity business include lack of sufficient information on viable financing options; weak technical capacity in the business sector to identify ventures involving commodities and services from sustainable natural resources management and biodiversity resources; absence of standards and indicators for monitoring activities of businesses to determine if they are compliant with biodiversity; underdeveloped market for green commodities, among others. Investments in biodiversity business are likewise not recognized as an opportunity due to lack of sufficient demonstration examples in the Philippines.

45. Investments in biodiversity business should be able to create jobs and stimulate economic growth in the surrounding KBAs/PAs, thus providing alternative economic opportunities for those engaged in unsustainable resource extraction activities. Policies should show that there are economic benefits that can be derived from promoting the value of an area's biodiversity resources. Once in place, the LGUs can be properly guided in their investment programming, and the development of codes of conduct.

BARRIER 1.5: THE NATIONAL GOVERNMENT, PARTICULARLY PAWB, LACKS A STRUCTURED SYSTEM TO INFORM AND GET FEEDBACK FROM OTHER AGENCIES AND LGUS ON THEIR PROGRAMS, ACTIVITIES AND POLICES THAT MAY AFFECT BIODIVERSITY

46. A knowledge management system for collating, synthesizing and disseminating information and lessons learned on biodiversity is of paramount importance in enabling the proper functioning of environmental assessment system for agency policies, plans and programs. Evidence of the relationships between biodiversity and human and other activities need to be strengthened to serve as a basis for more informed assessments.

47. However, there is at present no national level system for monitoring and collating information on PAs and biodiversity. The PAWB simply collects monitoring reports from various sources such as conservation NGOs and field offices of DENR and compiles these manually for the updating of the status of biodiversity conservation efforts. More importantly, the interactions between development programs of agencies and practices of communities, private sector, LGUs and other important actors in the landscape are not fully documented and collated to guide future actions and policies. Hence, the DENR and PAWB do not have much local level information to share with the LGUs and other agencies to aid in their planning and decision making. The dissemination of information to LGUs is presently not nationwide but rather selective depending on available profiles and related information in the PAWB. This situation slows down advocacy for biodiversity conservation in government and non-government organizations. PAWB had serious difficulties in preparing its first three UNCBD reports because the data were scattered across many institutions and individuals and it took a tremendous effort and perseverance to access and retrieve data and information.

48. For its part, the Department of Interior and Local Government (DILG) has developed a performance monitoring system for LGUs which covers effectiveness of governance in such sectors as natural resources. Its Local Governance Performance Management System (LGPMS) is computer-based and covers many of the LGUs in the country; it represents a possible conduit for biodiversity monitoring at the local level. The LGPMS is used by the DILG as a diagnostic tool in determining the strengths and weaknesses of LGUs so that they can be assisted in planning and acting on their problem areas. The results of the LGPMS are also used in recognizing and giving performance awards to LGUs. Under its present configuration, the LGPMS has two components or subsystems that monitor environmental governance of LGUs and the status of environmental situation in their localities. Sets of indicators for assessing and reporting the state of environmental governance and environmental conditions have been developed and used since 2004. The ecosystems covered by indicators are forest, coastal and marine, freshwater and urban. The present sets of indicators, however, do not currently include biodiversity.

Barrier 2: At the local level, LGUs have weak capacities and lack the tools for mainstreaming biodiversity in landscape level management and local development planning

49. LGUs increasingly make decisions that affect natural resource management, whether in land-use planning and zonation, the issuance of mining permits or the promotion of sustainable vs. unsustainable development projects. However the primary mandate of LGUs is to maximise benefits for their local constituencies, and decisions that optimise benefits at the local level are often sub-optimal from a landscape, national or global perspective¹⁰, or when assessed over longer time-scales. LGUs lack the capacity to properly incorporate long-term cost-benefit and broader sustainability considerations into their development planning, or to recognize the benefits that can be derived from biodiversity-positive business and economic development models. Furthermore the rational developmental choices of individual LGUs made in isolation often do not add up to optimal outcomes at the landscape, watershed or seascape level. LGUs currently do not have the mandate, capacity or incentives to view their developmental choices from broader trans-boundary perspectives, even though such perspectives will often provide greater overall long-term benefits. Specific barriers related to this issue are outlined below.

BARRIER 2.1: LGUS LACK TOOLS AND GUIDELINES TO MAINSTREAM BIODIVERSITY INTO LOCAL LEVEL PLANNING, BUDGETING SYSTEMS, INVESTMENT PROGRAMMING AND POLICY MAKING

50. . While there were efforts in the past to integrate environmental considerations at the LGU level through the localization of Agenda 21, not much attention was given to the biodiversity conservation aspect, particularly for LGUs covering PAs and KBAs. A number of large, donor-funded projects have supported the development of LGU capacities related to natural resource management. These include the USAID-supported EcoGov Project and the WB-supported Community Based Resource Management Project (CBRM). However, less attention has been paid to the development of tools and systems, and associated capacity development support, to improve the mainstreaming of biodiversity within local development planning. As defined in the scope of devolved functions to LGUs (DENR Administrative Order No. 30 series of 1992), biodiversity and protected area management are not included as LGU responsibilities. Most of the devolved functions relate to forestry and small watersheds involving resource utilization and reforestation projects, with the condition that these projects should not be located in protected areas. Meanwhile, the NIPAS law, which placed responsibility for PA management within a PAMB chaired by the DENR, has provided limited opportunity for active leadership by LGUs in managing or benefiting from biodiversity resources.

51. In view of the above, biodiversity conservation is essentially regarded by the LGUs as a DENR mandate. While LGUs are members of the PAMB, implementation of the PA management plans has largely been seen as a responsibility of the DENR, and not as a mainstream program of the LGUs. Thus, planning for management of protected areas has largely been undertaken in isolation from local development planning of the LGUs. The result is that development strategies of LGUs do not consider the presence of unique habitats and species present in the PAs/KBAs under their jurisdiction. Conversely, LGUs unknowingly implement programs and projects that endanger the integrity of important habitats and biodiversity resources within PAs and KBAs.

52. An important opportunity for spatial integration is through the LGU land use planning process. Comprehensive land use plans (CLUPs) are prepared by the LGUs as the basis for the development of their zoning and management practices, and the formulation of their local development and investment plans. However, the CLUP preparation at the LGU level is likewise fragmented, focusing only on areas outside of the PAs and areas declared as forests. PA zoning management plans do not form part of the LGU CLUPs. Recently, a number of LGUs have prepared forest land use plans (FLUPs) through the support of some donors; but these remain detached from their CLUPs. The result is often lack of harmony in land use

¹⁰ Upstream vs. downstream watershed conflicts are a common example of such sub-optimal resource allocation, as is the over-harvesting of threatened species which may be locally abundant.

development and regulations between the forest and PA/KBA and the surrounding landscapes of LGU jurisdictions.

53. Other potential, yet under-utilized, avenues for integration of conservation objectives into LGU decision-making include investment programming, which defines the priorities to be funded under their local development funds; permitting systems, where local infrastructure and other development projects are assessed for potential impacts on biodiversity; and review of various LGU programs for their consistency with sustainable natural resources and biodiversity conservation goals of the PA/KBA. Finally, the development of local development strategies, particularly in defining the main drivers of economic growth at the LGU level, could be enhanced if the choices included careful consideration of biodiversity resources. In the same vein, the threats to sustaining economic growth can be better predicted, if the status of biodiversity and natural resources is a factor in the equation. The formulation of tools and guidelines, and associated capacity development of LGU staff – mainly the Municipal Development and Planning Officers (MPDO), Municipal Agricultural Officers (MAO), Municipal Environment and Natural Resources Officers (MENRO), will help address these constraints.

BARRIER 2.2: LGU LEVEL PLANNING IN LANDSCAPES AND SEASCAPES WITHIN PAs AND KBAs IS FRAGMENTED AND FAILS TO TAKE BIODIVERSITY INTO ACCOUNT.

54. At the LGU level, the scale of physical and economic development planning is mainly according to LGU boundaries, which means that it fails to take into account the broader landscape within which the LGU is situated. This results in inconsistencies in the plans and actions of LGUs within common ecosystems, particularly those covering PAs/KBAs, many of which span multiple LGUs.

55. The ecosystems approach adopted by DENR integrates the management of land, water and living resources within landscape and seascape units in order to promote conservation, sustainable use and equitable sharing of benefits. It also accounts for humans and their cultural diversity as important components in the ecosystem. The framework underscores the importance of the ecosystem in sustaining the production of goods and the provision of life support services. This framework veers away from the traditional sectoral approach to managing environment and natural resources.

56. Other variants of the ecosystem approach include integrated watershed management, river basin approach, and integrated coastal management. Integrated development plans have been prepared for major watersheds and lake and water systems covering one or more LGUs and involving the other sectors in Manila Bay, Laguna Lake, Cagayan River Basin, and Bicol River Basin. However, most of the existing models have focused on addressing issues related to sustainable environment and natural resources management, such as pollution, erosion, siltation and deforestation. Models which demonstrate successful mainstreaming of biodiversity in the production landscapes are not well developed, in view of the perceived dichotomy between conservation objectives and economic growth, as well as the scientific and attitudinal challenges of achieving a balance between these two aims.

57. The integrated landscape and seascape approach is best illustrated in LGUs which share common watershed, river basin and biodiversity corridors. While the template for LGU planning is traditionally along political jurisdictions, LGUs are beginning to acknowledge the importance of integrated resource management so that coordinated actions can be made to achieve common issues affecting several LGUs. A constraint in such inter-LGU coordination mechanisms is the lack of sufficient information to guide the development of a common management framework. Data that exist usually pertain only within the boundaries of PAs or KBAs, and do not usually consider the interactions with the activities in the surrounding landscape. LGUs need to recognize the extent to which these activities impact on, or are affected by, the resources within the PA and KBAs, particularly on the populations of threatened species, the degradation of critical habitats, and the reduced ability of the ecosystem to perform its vital functions to support the economy and livelihood of the lowland populations. Such understanding can be enhanced by science-based approaches to planning and a facilitated process of awareness and consensus building.

58. In a similar vein, proper assessment of environmental impacts of development plans, programs and projects of the LGUs would help in understanding such interactions, and guide the actions and decisions of local executives. However, there is a need to fully develop these tools, and assist LGUs in the application of these to suit their specific situations. The use of strategic environmental assessments and similar tools developed under Outcome 1 would be of great value in this respect.

59. Another constraint is the lack of information and analysis on the extent and nature of cross LGU border impacts of actions by individual LGUs located along the production landscape. This creates disincentives for LGUs who are making investments to sustain environmental services, if the benefits are not internalized, and instead accrue to downstream LGUs. Tools such as payments for environmental services (PES) have been developed, but these have not been tested in an LGU setting. It is essential that similar approaches be developed and a facilitated process be provided to ensure agreement among the parties to provide for more equitable sharing of benefits and costs in the maintenance of such vital environmental functions that well managed PAs/KBAs bring.

BARRIER 2.3: INADEQUATE LOCAL LEVEL POLICY FRAMEWORK AND CAPACITIES TO PROMOTE BIODIVERSITY-FRIENDLY AGRICULTURAL PRACTICES IN CRITICAL ECO-REGIONS

60. Under the Local Government Code, the MAOs and Provincial Agricultural Officers (PAOs) were devolved from the DA to the LGUs. While this is the case, the DA and the MAOs were able to maintain links through the leadership provided by DA in the formulation of agricultural development policies and programs, which are adopted by the LGUs. The primary extension service concern of MAOs is to improve production of crops and livestock in agricultural lands or farming areas. They are also responsible for developing local policies to support agricultural development in their municipalities, following the main programs of the DA. It is therefore important that significant policy shifts made by DA, such as promotion of biodiversity-friendly agricultural practices in areas surrounding PAs and KBAs, be effectively translated by the LGUs through their MAOs. Adequate support should be provided to ensure the LGUs have the capacity to implement such shifts.

61. The MAO is usually not involved in natural resources conservation because it considers this to be the mandate and responsibility of DENR field personnel such as the Community Environment and Natural Resources Offices (CENROs). Thus, farm areas or cultivated lands in the upland areas, particularly those inside forestlands, are left by many MAO for the CENRO to tend and provide extension services. The MAO has limited agricultural workers to cover the vast expanse of agricultural lands within its municipality and therefore does not cover upland farmers, especially those illegally occupying forestlands. Partnership between MAOs and CENROs in providing extension support to upland farmers occupying forest lands is weak and poorly coordinated.

62. Many of the MAO also lack knowledge and training on soil conservation and erosion control because in the past the training and support for these activities were undertaken by the BSWM, which then had Regional Extension Offices called Soil and Water Access Teams (SWAT). The SWATs now have limited operations in the field and are on-call basis. Most MAOs also do not have clear understanding and knowledge on biodiversity conservation.

63. The DENR CENRO, which is also understaffed, needs to partner with LGU MAO and MENRO to promote biodiversity-friendly farming practices in farm areas within PA buffer zone or KBAs. Moreover, the CENROs and MAOs lack training in the establishment of demonstration farms to showcase biodiversity-friendly farming practices and technology.

64. On the other hand, the promotion of high yielding crops by the DA greatly diminishes the cultivation of indigenous crops and has adverse effects on agricultural biodiversity, which is particularly critical in buffer zones. There is currently limited involvement of the LGUs in the identification and conservation of these indigenous species, and in the promotion of their utilization.

BARRIER 2.4: WEAK CAPACITY WITHIN LGUS FOR LOCAL REGULATION AND ENFORCEMENT OF TRADE IN WILD PLANT AND ANIMAL RESOURCES

65. Regulation of trade in wild plant and animal resources is mainly a national government function. However, there is an increasing role for LGUs to reinforce national efforts through localized policies aimed at curbing local poaching and illegal trade, particularly of threatened endemics. The LGUs are responsible for issuing business permits for local wildlife traders and permits to operate establishments engaged in wildlife breeding and propagation. It is therefore essential to establish close linkages between the local DENR and other enforcement agencies, to ensure proper monitoring and coordinated actions against illegal practices.

66. There are currently a number of shortcomings related to the participation of LGUs in regulation and enforcement of policies on trade in wild plant and animal resources. First, there is insufficient understanding by LGUs of the full scope of the Wildlife Act, and the scope of authorities available to them to strengthen its implementation. Second, there is limited information on species covered under the Act, and on the presence of such species in respective jurisdictions. There is likewise inadequate data on the population, distribution, habitats and status of these species, particularly the threatened endemics; such data are needed as the basis for formulating responsive local policies and programs. Third, LGU staff are not adequately trained to identify species subject to illegal trade. This is compounded by the absence of marking tags to properly identify specimens for which permits have been issued by the DENR. Fourth, there is insufficient sharing of information between the local DENR offices and the LGUs on the permits issued, the authorized local traders and wildlife breeders/propagators. Finally, there is no mechanism at the local level for coordination of actions by DENR, DA, Bureau of Customs, DTI and relevant agencies and the LGUs, in the enforcement and monitoring of wildlife trade.

67. A number of LGUs have effectively issued local ordinances through their Councils directed at penalizing violators of the Wildlife Act. Others have issued local policies to protect habitats of endangered species, while some actively participate in enforcement by deputizing Wildlife Enforcement Officers (WEOs). It is important that the implementing rules of the Wildlife Act recognize this opportunity for LGUs to strengthen regulation, enforcement and monitoring of harvesting and trade.

BARRIER 2.5: WEAK CAPACITY WITHIN LGUS TO DEVELOP REGULATORY STRUCTURES AND INCENTIVE SYSTEMS TO ENCOURAGE THE DEVELOPMENT OF BIODIVERSITY-FRIENDLY BUSINESSES

68. In the absence of national policy providing incentives for biodiversity-friendly business opportunities, there has been no active promotion of these ventures as having the potential to spur local economic growth. The options available to LGUs in investment promotion have not been widened to include low impact activities or those that take advantage of the biodiversity resources available in their PAs/KBAs. This is largely due to a lack of information on the potential of these businesses, and the limited technical and entrepreneurial skills to put in place appropriate regulatory structures to attract such investments.

69. The result is that the scope of private sector investments in local development has been limited to the traditional mix of enterprises, which are often resource extractive and/or promote unsustainable use of natural resources. These range from small ventures such as rattan and bamboo gathering and production of handicrafts and small furniture, to large enterprises such as resort and tourism development activities. There is clearly an opportunity for LGUs to establish appropriate local enabling environments to encourage investments in biodiversity friendly business opportunities through a mix of regulation, policies, investment promotion programs, and greater engagement with the national government and industry representatives.

BARRIER 2.6: THERE ARE NO MECHANISMS FOR INTRA-LGU KNOWLEDGE AND DATA SHARING ON BIODIVERSITY MONITORING AND MAINSTREAMING AT THE LOCAL LEVEL

70. Faster replication of good LGU practices in partnerships and biodiversity conservation and sustainable natural resources management is constrained by insufficient attention given to developing avenues for documentation and exchange of experiences. The Local Government Academy has an ongoing program on rewarding LGUs for their best practice across a wide array of local government functions, but there is limited support for performance in conservation initiatives. In the past, an eco-labeling program for LGUs was launched within DENR, but this was not continued since it was not instituted as a regular program of the Department. The absence of such initiatives has contributed to the dearth of information on best practices which other LGUs can emulate.

71. In terms of data sharing, the absence of a national system for knowledge management and information system which LGUs can easily access for their own use has contributed to the lack of information to feed into local policy making, development planning, budgeting, and investment programming. Further, there is no mechanism by which available data from LGUs who have established systems can be shared and accessed by others, including the national government agency and their local field offices. The absence of such a system has contributed to weak monitoring of the status of biodiversity, and an inability to determine the impacts of certain actions on biodiversity.

Barrier 3: Few if any well documented site-level examples of how a common vision, framework and national-local partnerships can address landscape-level threats, including habitat fragmentation, to biodiversity and sustainable use values.

72. This barrier stems from the lack of enabling policies and support at the national level, and absence of capacities at the local level to mainstream biodiversity into landscape level management. In the five critical biogeographic regions, this manifests in the slow transformation of the landscapes within PAs/KBAs into small habitat fragments surrounded by large and growing areas of man made habitat.

73. These are evident in the results of monitoring of change in fragmentation and change in habitat extent in KBAs in the three main corridors namely: Palawan, Sierra Madre and Eastern Mindanao. Within these corridors, and additional priority sites, CI and CEPF conducted monitoring for the period 1990-2000. Findings indicated that while the proportion of habitat cover within KBAs in Eastern Mindanao was lowest, the rate of decline was similar in all corridors. The rate of deforestation for sites called Alliance for Zero Extinction (AZE)¹¹ in Palawan and Sierra Madre corridors were higher. Edge fragmentation increased in Eastern Mindanao and Sierra Madre and decreased in Palawan despite a slight decline in habitat cover. The changes in fragmentation in these corridors are considered small since the natural habitats are in one large patch (CI and CEPF Brochure, undated). An illustration of the extent of these fragmentations is shown in Annex G.

74. Such fragmentation is a result partly of land use and development decisions that do not take into account the biodiversity significance of the PAs/KBAs. For example, in Quirino Protected Landscape and Seascape, about 31,000 hectares were excluded from the original proclamation, dividing the protected area into three parcels, to give way to mining development. Another 25,000 hectares of primary lowland dipterocarp forest was excluded from the Mt. Hamiguitan protected area to allow mining exploration activities. In Mt. Siburan, about 7,868 hectares within the KBA were set aside for resettlement area for families displaced from Mt. Pinatubo eruption. A more integrated planning approach would help ensure that PA/KBA management plans and the LGUs' CLUPs reinforce the sustainable development objectives across the landscape.

75. Such actions result from the absence of sufficient information on and understanding of the impacts of development decisions on biodiversity; the lack of common vision and framework for integrated management of the KBAs/PAs with the surrounding landscapes; and weak links between local actors who can both positively influence and negatively impact on the overall health of the landscape. Indeed, at the local level, the work and expertise of local and national conservation NGOs; the capacities and resources of

¹¹ AZE sites refer to those where species are in imminent danger of disappearing.

LGUs; the business acumen and resources of the private sector; and the resources of local communities have not been sufficiently harnessed towards commonly agreed sustainable development objectives for the PAs/KBAs and surrounding landscapes. National level policies, tools and capacities to make these happen also do not exist yet to enable sufficient application on the ground.

BARRIER 3.1: FAILURE TO INTEGRATE BIODIVERSITY CONCERNS INTO LOCAL DEVELOPMENT PLANNING, LEADING TO THE UNSUSTAINABLE MANAGEMENT OF THE SURROUNDING LANDSCAPE

76. Despite the issuance of Executive Order No. 578 in 2006, establishing the national policy on biodiversity and directing all concerned government agencies and offices and LGUs to integrate and mainstream the protection, conservation and sustainable use of biological diversity into their policies, rules and regulations, programs, projects and development planning, there is very little experience with implementation of these mechanisms, in a coordinated manner with multi-level partners, in any local development planning initiative. This is mainly due to the absence of tools, guidelines and technical assistance to LGUs to sufficiently address this mandate.

77. While several LGUs have prepared their forest land use plans (FLUPs), these too remain detached from their CLUPs. Zoning information (maps and reports) on protected areas and forestlands and their corresponding management plans are not properly communicated to LGUs for integration into CLUPs, which also have zoning restrictions. Failure to overlay the protected area and FLUP zones into CLUP zones results in incoherence and conflict in the use and allocation of land. The result is disharmony in land use and allocation decisions at the local level, further endangering the biodiversity resources therein. Numerous examples exist from project sites. Mining rights are issued over primary forests adjacent to PA boundaries in the case of Mt. Hamiguitan, which could severely affect the habitat of the Philippine eagle. In Lake Mainit, the LGU have allowed resort development along the lakeshore, thus threatening the lake with domestic pollution. In Mt. Siburan, forest patches which connect the KBA to the Tamaraw¹² gene pool in Mt. Iglit is largely unmanaged, thus further exposing this threatened mammal, as well as other important local endemics. In the Malampaya Sound, mangroves have been converted to fishponds and rice fields, thus contributing to the pollution load of this important fishing ground and habitat of the critically endangered population of Irrawady dolphin. In Northern Negros Natural Park, the extensive sugar farms along the lower slopes of the PA are threatening to encroach into the boundaries of the park.

BARRIER 3.2: UNCOORDINATED PLANNING AND DEVELOPMENT AMONG CLUSTERS OF LGUS COVERING PAS AND KBAS

78. More than half of the PAs and KBAs in the Philippines encompass more than one LGU; for example, Samar Island Natural Park, the biggest PA/KBA covering a total area of 333,000 hectares, encompasses 3 Provinces and a total of 37 Municipalities. In this context, there is a need to demonstrate how a common management framework within and among these clusters of LGUs can help address, in a more holistic way, the threats to biodiversity. The proper assessment of environmental impacts of development plans, programs and projects of the LGUs would help in understanding such interactions, and guide the actions and decisions of local executives in these transboundary PAs/KBAs.

79. A number of constraints have prevented LGUs from pursuing transboundary planning and management across ecosystem landscapes. The first relates to the absence of sufficient information which should provide evidence of the interconnectivity of the ecosystems across LGUs, thereby strengthen the rationale for joint action. Second, there are no institutional models which allow for integrated planning along PA/KBA, ecosystem or watershed boundaries. In many cases, river basin and watershed councils are created through administrative fiats such as Joint Memorandum of Agreements, facilitated by a third party such as NGOs, or national government agencies such as DENR. The NIPAS permits such joint planning, but only within the areas covered by the PAs, and does not cover KBAs, and the surrounding landscapes of PAs/KBAs. Third, there are no clear rules for sharing of benefits and costs, including compensation mechanisms, between LGUs producers and users of environmental services. This need to be demonstrated,

¹² A critically endangered species of buffalo that is endemic to the island of Mindoro (*Bubalus mindorensis*)

so that suitable models may be available to serve as incentives for LGUs to continue to engage in conservation measures to benefit other jurisdictions.

BARRIER 3.3: FARMERS IN CRITICAL BIOGEOGRAPHIC REGIONS LACK KNOWLEDGE OF BIODIVERSITY-FRIENDLY AGRICULTURAL PRACTICES

80. Communities located within, and in the surrounding landscapes of, PAs/KBAs lack understanding of the long-term benefits of biodiversity-friendly agricultural practices. Due to high poverty incidence in the rural areas, farming communities have adopted short-term solutions to increase incomes through improving agricultural productivity. These have been mainly through intensive agriculture, monoculture, introduction of high-yield varieties in plants, and genetic upgrading with exotic animal stocks. These developments have been exacerbated by the national government's policy of supporting these initiatives regardless of the ecological sensitivity of the areas where they were being implemented.

81. The above situation is evident in a number of PAs/KBAs within the main corridors and critical biogeographic -regions. In the Quirino Protected Landscape and Seascape, there is an increasing trend towards the use of chemical-based fertilizers and pesticides in the lower agricultural slopes of the PA. There are also reports of widespread use of high-yielding varieties and exotic crops in the adjacent agricultural production areas of the PA. In Malampaya Sound, eutrophication due to deposits of chemical run off from agricultural farms in surrounding areas is on the rise, resulting in more frequent fish kills and red tide occurrences. In Northern Negros Natural Park, some 8,000 households located in settlements within the park are engaged in heavy use of pesticides on their farms.

82. The key constraints to the adoption of biodiversity-friendly agricultural practices within and in the surrounding landscapes of PAs and KBAs are the following. First, there is weak capacity of the local MAO/PAO to impart such technologies to farmers. Associated with this is the absence of local policies and programs to encourage farmers to engage in such practices. Second, there are insufficient incentives to engage in biodiversity friendly agricultural practices since there is no developed demand and high price in the local market for such products. Related to this, existing third party certification systems are expensive, and the participatory guarantee system (PGS) is not fairly well developed for wider adoption by farmers located in PAs/KBAs. Third, the technologies for proper conservation and utilization of indigenous agricultural crops have not been widely disseminated, thus there is no proper understanding of the benefits of converting from cultivation of high-yielding exotic species. Documentation regarding the use and conservation of indigenous crops found in PAs and KBAs are limited to non-existent and poorly disseminated.

BARRIER 3.4: WEAK ENFORCEMENT AND MONITORING OF REGULATIONS CONCERNING THE COLLECTION, TRADE AND HARVESTING OF WILDLIFE RESOURCES

83. One of the most common threats facing biodiversity conservation is the unregulated harvesting of threatened wildlife plant and animal species. The motivations for this practice are weak local enforcement of existing laws on collection and trade combined with a flourishing illegal trade which stimulates demand and commands high prices in the market. The widespread practice has resulted in overharvesting of species, and the continued decimation of threatened species, particularly of many narrow endemics.

84. Weak enforcement is the result of lack of effective LGU and local community participation in the implementation of the Wildlife Act. The local DENR offices, which are short of staff, cannot possibly undertake this task alone, without the cooperation of the local governments, community leaders and volunteers. Second, there is weak capacity among Wildlife Enforcement Officers to properly identify the species which have been given permits against those which are illegally harvested. Finally, there is inadequate collaboration between the local DENR, conservation NGOs and LGUs in sharing of information and implementation of a monitoring system to effectively curb illegal trade.

BARRIER 3.5: LACK OF INCENTIVES FOR LOCAL COMMUNITIES AND PRIVATE BUSINESS TO ENGAGE IN CONSERVATION AND INVEST IN BIODIVERSITY-FRIENDLY ENTERPRISES

85. Local communities, particularly those who are dependent on the biodiversity resources within and surrounding PAs/KBAs, do not have adequate incentives to engage in conservation, due to the short range nature of their planning, and the lack of opportunities available to engage in alternative income enhancing activities that will not pose damage to the integrity of the ecosystem functions of these important PAs/KBAs. The benefits of community conservation agreements and other compensation mechanisms such as carbon offsets can help convince communities to engage in biodiversity-friendly livelihood activities. These need to be demonstrated to encourage a dramatic shift in values and practices among communities.

86. Similarly, local stakeholders need to be encouraged to think long-term and invest their own resources for biodiversity protection and conservation. These business opportunities will create jobs and open up other livelihood options within the local communities. These will also provide alternative economic opportunities for those engaged in unsustainable resource extraction activities. What is lacking is sufficient demonstration of the feasibility of such ventures and the implementation of appropriate incentives to reduce the investment risks and encourage new entrants to this infant industry.

87. The regulations of existing local industries should also be strengthened to ensure adequate attention is paid to their impacts on biodiversity. Business enterprises such as furniture making, eco tourism, harvesting of guano and almaciga resin, should be supported by investor codes of conduct to ensure their practices do not pose unnecessary damage to the environment. These could include: certification and labeling of wood furniture products, regulation of guano and almaciga resin harvesting; and eco tourism guides and ordinances.

BARRIER 3.6: LACK OF INCENTIVES AND INNOVATIVE FINANCING PROGRAMS FOR LOCAL COMMUNITIES

132. Local communities, particularly those who are dependent on the biodiversity resources within and surrounding PAs/KBAs, do not have adequate incentives to engage in conservation, due to the short range nature of their planning, and the lack of opportunities available to engage in alternative income enhancing activities that will not pose damage to the integrity of the ecosystem functions of these important PAs/KBAs. The benefits of community conservation agreements and other compensation mechanisms such as carbon offsets can help convince communities to engage in biodiversity-friendly livelihood activities. These need to be demonstrated to encourage a dramatic shift in values and practices among communities.

BARRIER 3.7: INADEQUATE DATA AND INFORMATION FOR INFORMED PLANNING, MONITORING AND ASSESSMENT OF IMPACTS ON BIODIVERSITY

89. Baseline biodiversity information is unavailable or incomplete in most PAs/KBAs. Baseline biodiversity studies and population studies of species are necessary for the planning and management of the natural habitats and resources within LGU, and in the PA/KBA landscapes. Availability of data and information also determines the type of information, education and communication (IEC) activities that can be undertaken. The more data available, the more options there are for undertaking different awareness programs. Possible impact of programs and activities can also be determined if information on the distribution of species, and the overall situation of PA/KBAs and their surrounding landscapes are available.

90. The absence of a national and local system for knowledge management and information system which LGUs can easily access for their own use has contributed to the lack of information to feed into local policy making, development planning, budgeting, and investment programming. There are currently no mechanisms by which available data from LGUs who have established systems can be shared and accessed by others, including the national government agency and their local field offices. The absence of such a system has contributed to weak monitoring of the status of biodiversity, and in determining the impacts of certain actions on biodiversity.

91. The absence of avenues for documentation and exchange of experiences have likewise constrained the faster replication of good LGU practices in partnerships and biodiversity conservation and sustainable natural resources management.

1.4 Stakeholder analysis

92. Partnerships will be a main strategy through which the Project will aim to achieve its objectives. The PAWB will be the main agency responsible for developing and managing the implementation of the Project, and ensure that the necessary partnerships are forged and maintained. At the national level, it will strengthen its partnerships with the Department of Agriculture (DA), Department of Interior and Local Government (DILG), Department of Trade and Industry (DTI), national NGOs, as well as the Leagues of Provinces, Cities and Municipalities. Other agencies and organizations will also be involved in the implementation of certain aspects of the Project. These include the Organic Certification Center of the Philippines (OCCP), and the Department of Tourism (DoT). These agencies will strengthen their support to LGUs to enhance LGU capacities to address the challenges of mainstreaming biodiversity in their production landscapes. At the local level, partnerships will be strengthened at the selected project sites to demonstrate and apply the capacities and tools that have been developed through the Project. These pilots will showcase the benefits of mainstreaming in various aspects as local development planning, local policy making, promotion of biodiversity friendly agriculture and business opportunities, regulation of trade in wildlife, and in the generation and management of data needed for decision making.

93. **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 national government agencies and NGOs as implementing partners in the sites.
DENR agencies	The central agency responsible for natural resources management and environmental management. It supervises the operations of the Forest Management Bureau (FMB), among others; and field offices in the regulation of natural resource use.	The DENR will be involved in the formulation of policy and tools to assess the impacts of its own policies, plans and programs on biodiversity. This will be undertaken mainly through the policy making and planning process at the main Department and the sectoral Bureaus. It will also strengthen its field offices to support the LGUs to develop their capacities in the use of these tools; and others to promote mainstreaming of biodiversity in the production landscape.
Department of Agriculture - DA	The central agency in charge of agricultural development to meet the country's requirements for food security, productivity and income. Its offices are involved in the development of standards (Bureau of Agricultural Fisheries and Products Standards – BFAPS), promotion of indigenous crops (Bureau of Agriculture Research – BAR), establishment of a network of protected areas in agriculture and agricultural development (Bureau of	The DA will be a key partner in the implementation of the Project. It will be involved in the development of policy and tools to assess the impacts of its own policies, plans and programs on biodiversity; in the development of a national program for promotion of indigenous crops and biodiversity friendly agricultural practices. It will work in partnership with LGUs and its field offices in the sites to develop capacities of LGUs and implement

Stakeholder	Roles and Responsibilities	Involvement in the Project
	Soils and Water Management –BSWM).	these tools in demonstration areas. The DA will be a member of the Project Board.
Department of Interior and Local Government (DILG)	The agency provides administrative supervision over all LGUs. It maintains a performance reporting and monitoring framework to keep track of LGU progress in meeting selected indicators of local governance. It also develops policies and guidelines for use of LGUs in the performance of their mandates.	The DILG will be a member of the Project Board. It will have a key role in the development of guidelines and tools for LGUs to enable them to effectively mainstream biodiversity in local governance. It will issue relevant policies for wider use of LGUs, one the tools and guidelines have been tested in the demonstration sites. It will also have a central role in promoting replication of good practices through mechanisms for lessons exchange. It will also facilitate resolution of any policy conflicts or issues relevant to LGU participation in PA management.
Department of Trade and Industry (DTI)	The agency is responsible for development of policies and programs to promote investments and in the development of business opportunities in the Philippines.	The agency will be involved in the development of policies to provide incentives to promote investments in biodiversity friendly business opportunities. It will also monitor the key barriers to entry by business and develop measures to overcome these. Once developed, the agency will be actively involved in its promotion of biodiversity business in its investment portfolio.
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
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 undertake 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. These offices will also support the strengthening of LGUs in the demonstration sites, in the use and application of tools and guidelines to be developed under the Project.
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 ¹³ , and will provide direct oversight to implementation by PAWB. It will also facilitate coordination with relevant projects, and in the generation of additional resources if required, to support replication of the Project in other areas.
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.
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 capacities of LGUs

¹³ 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
		in biodiversity mainstreaming. It will support lessons sharing through its existing mechanisms
National NGOs (Conservation International (CI), Haribon Foundation, Fauna and Flora International (FFI), Philippine Biodiversity Conservation Foundation Incorporated (PBCFI); Philippine Eagle Foundation (PEF), and Lake Mainit Development Alliance (LMDA).	These NGOs have ongoing activities in the project sites, and have active partnership with national government agencies, LGUs in the sites, and field offices of DENR and DA. They undertake technical studies to provide scientific basis for effective management of PAs/KBAs. They have strong links with international NGOs and other organizations for technical support, and in sourcing of funds to finance local conservation efforts.	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 local NGOs	They support initiatives of local governments and communities in sustainable management of natural resources in KBAs	They will become partners of LGUs and NGOs in the sites where they have operations to obtain synergy in local initiatives
Provincial, Municipal and City LGUs	They have political jurisdictions in areas where the PAs/KBAs are located. They are clothed with authorities to pass local Ordinances, develop and enforce regulations. They are responsible for comprehensive land use planning and in the formulation and implementation of local development plans.	LGUs will be the central target of capacity building activities in the Project. By enhancing their capacities, it is envisioned that they will be able to forge partnerships with local organizations to implement landscape level planning and management, thereby directly contributing to the objective of reducing fragmentation in biodiversity corridors, and promoting sustainable management within and surrounding PAs/KBAs.
IP groups within the selected sites	They are 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 implementation of local actions to support integrated local development plans, 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 ¹⁴
Local communities	They are 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. Others are engaged in unsustainable practices.	They will participate in the implementation of local development plans, in partnership with LGUs, IP organizations, DENR and agency field offices, and other stakeholders as appropriate. They will participate in sustainable agriculture activities, and shall be involved in activities to promote biodiversity friendly production practices.
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	They will be given particular attention in the Project so that their potential can be harnessed; and their concerns considered in management planning

¹⁴ 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
	contribute to improving sustainable management in the production landscape if duly recognized, their capacities improved, and given space and 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	They have financial resources to invest in business opportunities with clear returns. 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 on biodiversity business and other production systems. Their resources will be harnessed to promote investments in sustainable use, and provide alternative income generating opportunities to communities to veer them away from destructive practices.
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) will be 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

1.5 Baseline Analysis

94. The baseline scenario can best be described according to the three major outcomes of the project.

95. National level policies, systems and tools to support LGU landscape level biodiversity conservation efforts: In the baseline scenario, there will be slow progress in the implementation of policies mandating government agencies and LGUs in integrating biodiversity concerns into their work. Sectoral agencies, particularly DA and DENR, will continue to formulate policies, plans and programs without adequate assessment in terms of their impacts on biodiversity. Policy, plan and program development by key agencies such as DA and DENR will be mainly driven by production objectives without due regard to their locations and potential harmful effects on biodiversity. The result is uncoordinated policy and program implementation which impinges on PAs/KBAs.

96. Biodiversity-friendly practices will not be pursued more vigorously in the absence of a clear program promoting these practices in PA/KBAs and surrounding landscapes. The use of chemicals and exotic species

will continue even in biodiversity corridors, thus endangering the species in adjacent PAs and KBAs. Cultivation and utilization of indigenous crops will not be promoted widely, thus contributing to their continued decline. Biodiversity-friendly standards and certification systems will not be developed, thus farmers and other producers will not have the incentives to shift to these practices. Overall, the economic benefits of engaging in biodiversity-friendly agricultural practices will not be realized, thus resulting in continued reliance on other productivity enhancing measures, such as fertilizers and pesticides, which are harmful to the environment. Combined with agricultural expansion in the fringes of PAs and KBAs, unsustainable agricultural practices will transform the landscape, thereby leaving only fragments of open spaces which will be detrimental to maintaining viable populations of important species.

97. Policies regarding investments in biodiversity business will not be in place, thus this sector will continue to be seen as a cost center, rather than being able to generate jobs, employment and sustainable income. The potential of private sector, which can command significant resources, to contribute to sustainability will not be harnessed.

98. Enforcement of policies and rules on illegal trade of wild plant and animal resources will continue to be weak, in the absence of clear identification for specimens which are authorized for trade, and lack of capacities of enforcement officers to identify species. The result is weak implementation of regulations, thus contributing to further unabated wildlife poaching and illegal trade.

99. Finally, in the absence of a national system for data and knowledge management, policy formulation and monitoring of biodiversity impacts of national sectoral policies on key sectors and PAs/KBAs will not be informed with sufficient data. LGUs and other actors will not have access to up to date information on the status of biodiversity, which can guide their actions. Advocacy will be weak without sufficient data and information as evidence to back up the arguments for more biodiversity sensitive policies and programs.

100. LGU capacities and tools for mainstreaming biodiversity in landscape level management and local development planning: At the local level some gains will be made where local communities and LGUs are particularly receptive to sustainable approaches, but these gains risk being lost if and when local conditions change or political forces are realigned. In the absence of sufficient policies at the national level and support to building capacities, the efforts of LGUs in mainstreaming will be sporadic, and not linked to established systems by the national agencies. The scale of LGUs capacitated will not be enough to create a critical mass to sufficiently serve as models to other LGUs. Without the policy support of DILG, replication is expected to be slow, and will depend only on the personal agenda of local executives. Thus, the potential of LGUs, whose force number of some 2,000; and whose influence spans a range of permitting, regulatory, planning and investment functions, will not be tapped to support conservation objectives in important PAs/KBAs.

101. Without the policy support and technical expertise of national agencies, essential tools required for LGUs to integrate biodiversity in their own work will not be pursued, as their resource and capacities are limited in these fields.

102. Planning in PAs/KBAs will continue to be isolated from the broader landscape and territories of LGUs, thus resulting in serious potential land use conflicts. Between LGUs sharing PA/KBA boundaries, planning and development will continue to be uncoordinated in the absence of a common management framework and tools. LGU support to biodiversity friendly agricultural programs and investments will be weak, due to lack of technical expertise, and lack of support from the national agencies. The role of LGUs in regulation and enforcement of policies on wildlife trade will be less understood, and their participation will not be optimized. LGUs will not have access to data required to better plan and analyze the biodiversity impact of their local policies and plans. In the absence of support, dissemination and replication of best practices among LGUs will not be systematic, and will depend on the individual efforts of local officials.

103. Implementation, through partnerships, of effective solutions to mainstreaming biodiversity in KBAs/PAs and the surrounding landscapes: In the baseline case, local level initiatives through the work of various conservation NGOs, communities and some LGUs will continue. However, the national policies and technical support needed to ensure there is wider adoption and further development of mainstreaming approaches will be difficult to obtain, and will depend on the individual advocacies of organizations. Land

use conflicts in PAs/KBAs and surrounding landscapes would continue, if not escalate, in the absence of clear examples of how solutions can be achieved through the application of certain tools. There will be limited involvement of farmers, local communities, private sector in promoting biodiversity-friendly agricultural practices and business opportunities in PAs/KBAs, in an environment of limited support and incentives for these initiatives. Local communities engaged in destructive activities will not be encouraged to shift to sustainable forms of economic activities in the absence of alternative livelihoods and financing mechanisms to compensate their conservation efforts.

104. In summary, the baseline scenario suggests that progress achieved through previous projects will not succeed in conserving globally significant biodiversity effectively due to gaps and inadequacies in the existing governance system. The site-level gains that have been achieved through the efforts of numerous conservation actors will not be sustained, as pressure from population growth and economic development erodes the commitment to conservation of scarce biodiversity resources.

105. In the absence of key interventions, the scenario is for fragmentation to continue its course, particularly in main biodiversity corridors, thus threatening species assemblages in these landscapes. Given the above, the likely result is that globally significant biodiversity resources in the Philippines will continue to be exposed to the threats of fragmentation. The natural habitats within PAs and associated KBAs will be decimated to such levels that these will be unable to support minimum viable populations of important species, thereby eventually leading to their extinction. Combined with the effects of climate change, it is also likely that new species will disappear even before they are discovered. The result is permanent loss of the world's important natural heritage; and the values associated with their sustainable use.

Part II: Strategy

2.1 Project Rationale and Policy Conformity

Project Rationale

106. The rationale for this project stems from the growing awareness amongst local governments in the Philippines that the nature and pace of resource use is having a direct, tangible impact on the quality and sustainability of livelihoods and well-being in their respective communities. The rapid depletion of natural resources such as fisheries and forest products, plus the increasingly-evident impacts of natural disasters and extreme weather events, have highlighted the need for more effective and comprehensive approaches to conservation and natural resource management.

107. Local Government Units (LGUs) are responsible for the enforcement of environmental laws, and also have fiscal and regulatory power over resource exploitation activities within their jurisdictions. Under the decentralisation process that has been underway since 1986, LGUs have played an increasingly direct and influential role in determining the trajectory of resource use and conservation. Under the Local Government Code of 1991 (Republic Act 7160), LGUs are responsible for a broad range of services including agriculture and public works, community-based forestry, reclassification of agricultural land and enforcement of fisheries and environmental laws. LGUs also have the power to impose local taxes, fees and charges, in addition to receiving 40 percent of tax revenue from the national government as well as 40 percent of revenues from the exploitation of mineral, timber and fisheries resources within their jurisdictions. Many LGUs have demonstrated an active commitment to sustainability, particularly in issues such as deforestation and watershed management, conservation of fisheries and coastal marine resources, mining and pollution control.

108. Experience from within the Philippines and elsewhere in the region has shown that strengthening the capacities and willingness of LGUs to promote conservation and environmental sustainability has been an extremely effective means of reducing the loss and degradation of natural resources. In Samar Island, for instance, the largest remaining tracts of old-growth forest in the Philippines have been protected from logging and mining activities due to an active and extensive campaign by local communities. The network of LGUs on the island have passed local- and municipal-level ordinances forbidding exploitation of forest

resources in their respective jurisdictions, and this mosaic of interlocking local regulations has blanketed the Samar Island forests in an effective web of legal protection.

109. In recent years, there has been an expansion of LGU initiatives in biodiversity conservation. In fact, a number of working models already exist which demonstrate the success of alliances and partnerships between LGUs and NGOs in achieving a balance between conservation objectives and sustainable agricultural production, including profitable business ventures that do not pose negative impacts on biodiversity. In the three corridors and additional priority sites identified by CI and CEPF, these examples are as follows:

- In *Mt. Hamiguitan located in the Eastern Mindanao Corridor*, the municipal government designated the nesting sites of Philippine eagle, outside of the PA boundary, as a critical habitat, in order to provide sufficient legal basis for their protection against illegal hunting. The Foundation for Philippine Environment (FPE) and the Philippine Eagle Foundation (PEF), provide them the much needed information on the habitat range and populations of the Philippine eagle, as basis for this action, and to subsequently monitor the impact of the policy.
- In *Mt. Siburan, located in the Mindoro biodiversity corridor*, the Mayor has embarked on an ecotourism program; financed the development of model organic farms, which resulted in making the Sablayan the main source of organic vegetables in the island. In partnership with the Haribon Foundation, an ecotourism plan has been developed and forest land use plan (FLUP) completed. The provincial and municipal governments of Mindoro likewise declared a 25 year moratorium on mining in the island.
- In the *Malampaya Sound, situated in Palawan biodiversity corridor*, the LGU is financing law enforcement in the sound through an annual budget of Php 900,000.
- In *Negros Occidental*, the provincial governor was responsible for the advocacy to establish the *Northern Negros National Park (NNNP)* as a protected area; created the Provincial Environmental Management Office (PEMO), and provided annual funding of Php 18 Million for environmental programs.
- In *Central Panay Mountains*, the local NGO, with earlier support of the Frankfurt Zoological Society (FZS). have been successful in arresting the illegal gathering of the endangered Hornbill through payments for every nest protected.
- In the *Penablanca Protected Landscape and Seascape (PPLS) situated in the Sierra Madre biodiversity corridor*, the LGUs have issued municipal ordinances in support of the FLUP. In partnership with CI Philippines, the support of Toyota Motors Corporation was sought to finance reforestation activities, and promotion of stoves using rice hulls to reduce the pressure on fuelwood gathering. TMC provided US\$ 2.5 million for this initiative.
- In *Quirino Protected landscape and Seascape (QPLS), located in the Sierra Madre biodiversity corridor*, the provincial government has developed a Forestry Master Plan. Some local forest community groups have likewise been organized mainly through the completed Community Based Forest Management project funded by GTZ. Together with CI – Philippines, an Afforestation Reforestation /Clean Development Mechanism (AR/CDM) was implemented in 2007. This expanded in 2009 under the Voluntary Emission Reduction Scheme (VERS).
- In *Lake Mainit, situated in the Eastern Mindanao biodiversity corridor*, the LGUs surrounding the watershed formed a Lake Mainit Development Alliance to integrate development planning and conservation efforts in the KBA. It has since received funds from donors to support conservation and livelihood projects.

110. The proposed project has been designed to be consistent with Biodiversity Strategic Objective 2 on mainstreaming biodiversity conservation into production systems and sectors. Within BD SO2, the project will respond to Strategic Program 4 on “*Strengthening the policy and regulatory framework for mainstreaming biodiversity*”. The project will strengthen policy and regulatory frameworks at both the local level, as well as within a key sector at the national level, i.e., agriculture. Lessons learned from local-level demonstrations will also be used to improve policy and decision-making frameworks at the national level.

111. The design of the project has been informed by previous GEF mainstreaming work, including the principles and priorities identified in the STAP Mainstreaming Workshop in September 2004¹⁵, and lessons learned from previous GEF-supported mainstreaming interventions such as the C.A.P.E. Biodiversity Conservation and Sustainable Development Project in South Africa.

112. To some extent, the Project will likewise respond to Strategic Program 5 on “*Fostering markets for biodiversity goods and services*.” At the national level, it will work with partner agencies to strengthen the certification system for biodiversity friendly products. At the local level, it will support LGUs in promoting the integration of biodiversity and sustainable resource management businesses in their investor codes of conduct. It will also assist local communities and farmers to engage in production practices that are biodiversity friendly and environmentally sustainable, through demonstration models and establishment of sustainable training systems for farmers and certifiers. Working models of PES schemes will be pursued in KBAs, with the aim of upscaling and development of innovative approaches that are suited to specific situations.

113. The project also contributes to the GEF’s Coral Triangle Initiative. The project will strengthen biodiversity conservation and sustainable natural resource management in critical coastal ecosystems such as Malampaya Sound, as well as important watersheds in Central Panay, Northern Negros, Penablanca and Quirino in Northern Luzon, Mindoro, Lake Mainit and Mt. Hamiguitan in Eastern Mindanao. In addition, the tools and lessons being developed will be applicable to many other coastal regions in the Philippines archipelago, helping to reduce the degradation of coastal and marine resources as well as reducing pollution and sedimentation pressures from unsustainable inland development. In doing so, the project contributes to key elements of the CTI Programme, including:

- a Element 1: Strengthening the enabling legal, policy and planning environment for improved water, coastal and marine resources management in the participating countries.
- b Element 2: Improving the capacity of key government agencies and other participating stakeholders in civil society, academia, the private sector and at the community level.
- c Element 4: Managing environmental threats to international waters from both land and sea-based threats.

2.2 Country ownership: country eligibility and country drivenness

114. The project directly supports the government policy for empowering LGUs in local development, as enshrined in the Local Government Code. Through the project, LGU capacities will be enhanced to include mainstreaming of biodiversity in local development planning, thereby promoting sustainable development at the local level.

115. The project is consistent with the country’s priorities and policies on biodiversity conservation. It will specifically contribute to the Philippines’ Medium Term Development Plan 2004-2010, one aim of which is to strengthen the protection of vulnerable and ecologically fragile areas, especially watersheds and areas where biodiversity is highly threatened. The project also responds to the Philippine Agenda 21 (PA 21), which is the Philippines’ road map to achieving sustainable development. It serves as both guidelines for

¹⁵ “Mainstreaming Biodiversity in Production Landscapes and Sectors” Report of the Workshop of the Scientific and Technical Advisory Panel of the Global Environment Facility held in Cape Town, 20-24 September 2004.

pursuing development and standards against which all development programs and policies are evaluated for their consistency to bring about sustainable development for the country.

116. PA 21 sets two Action Agendas to move the Philippines toward sustainable development. The first is an Agenda Across Ecosystems. The second is an agenda for each major ecosystem in the country. The Action Agenda Across Ecosystems contain eighteen issues and concerns deemed relevant to achieving sustainable development in the Philippines. Of these, the project addresses the following: (1) Integrating sustainable development in governance; (2) Creating an enabling economic environment for sustainable development; (3) Employment, productivity, and income; (8) Land Use and (18) Biodiversity.

117. The Project also supports Millennium Development Goal (MDG 7) – ensuring sustainability, particularly Target 10: implement national strategies for sustainable development by 2005, to reverse loss of environmental resources by 2015. One of the strategies identified to meet the targets of MDG is to improve the capacity of local government units in all aspects of the MDG, including measures to improve environmental sustainability. Key thrusts for the medium term to achieve the targets under MDG 7 include sustainable utilization of natural resources and focus on and strengthening the protection of vulnerable and ecologically fragile areas.

118. The project will directly support the implementation of NBSAP, particularly Strategy 4 – Strengthening Capacities for Integrating and Institutionalizing Biodiversity Conservation and Management. The project will ensure there is the spread of such capacities to LGUs, principally in the five eco regions, and later, to the rest of some 1,700 LGUs in the country through replication, sharing of valuable lessons, and feeding local experiences into national policies.

119. Subsequent policies issued through Presidential Executive Orders and Memorandum Circulars to implement the NBSAP will be realized through specific sectoral policies, programs and plans by two major departments – DA and DENR – and through the development of capacities and tools to enable LGUs to comply with these mandates.

2.3 Design principles and strategic consideration

Design principles

120. The following principles were followed in the design:

121. Partnerships. Importance was placed on the partnerships already established at the local level between local NGOs, LGUs, and field offices of key agencies – DENR and DA in conservation initiatives. In this way, the Project is able to harness the resources and expertise available from the partners to develop a unified approach to create a significant impact.

122. Value adding. The catalytic support of the Project necessitates that cost effectiveness be achieved through value adding to existing initiatives. Indeed, care was taken to ensure that the sites have some baseline level of initiatives to promote sustainable management of the landscape. Thus, Project resources are directed at filling important capacity gaps to enable both local and national actors to carry out their commitments. This will ensure that activities in the selected sites demonstrate a high degree of success.

123. Replicability. The capacity building nature of the Project dictates that the design provides adequate attention to prospects of replication. This has led to the decision to demonstrate new policies, tools and capacities in selected sites, which can serve as platforms for learning and adaptation by other LGUs. Given the scale of potential downstream adaptors of the models to be developed under the Project, it is important that sufficient time, resources and expertise be provided to ensure the demonstration effect of the project is achieved.

124. Integration. The project addresses three primary layers of management: national, LGU and demonstration site. Each of these layers has been assigned its own outcome. In order to ensure effective

integration amongst these layers/outcomes, parallel outputs have been designed to address common themes. Thus, for example, integration of biodiversity impact assessment in policy, planning and program formulation is addressed at national level (Output 1.1), LGU level (Output 2.1) and demonstration site level (Output 3.1). Work under each theme typically thus combines capacity building (Outcomes 1 and 2) with site level demonstration (Outcome 3). Paragraphs 136-137 below provide additional details of this aspect of the project design.

Strategic considerations

The following strategic considerations were used to guide the design of this Project:

125. LGU focus. The choices were to direct support to (i) local communities in partnership with NGOs; (ii) national government agencies and their field offices; and (iii) LGUs. It was considered that by focusing on the LGUs and strengthening their capacities, the Project would have made a strategic decision to ensure there is high likelihood of success and sustainability. The barrier and capacity assessment point to the key role the LGUs play in addressing these issues from an integrated landscape management perspective, for which the LGUs have sufficient authority, and responsibilities.

126. Landscape level management. The alternative would have been to focus on protecting the remaining natural habitat of critically endangered and endangered species in priority biodiversity corridors. While this may be the end goal, the analysis indicates that this will be less effective in the face of severe fragmentation and incompatible land development decisions in the surrounding landscape. By placing greater attention on sustainable landscape level management, there is high likelihood that the solutions will be long lasting, as the pressures from the production landscape will be reduced to allow protection of the core zones, and increase connectivity between the corridors. This approach is also given impetus by the fact that many species assemblages have the broader landscape as their main habitat.

127. Agriculture and natural resources sectors. Consistent with the above, it becomes necessary to focus on influencing the actions of national government, LGUs and local communities in the agriculture and natural resources sectors. The analysis of threats and barriers likewise point to these sectors as having the most significant contribution and potential to solving these issues. Thus, mainstreaming is to be achieved through its vertical integration in the bureaucracy – national agencies, LGUs, and local actors; and horizontally – across the landscapes where the interplay of various stakeholders – government, private sector, local communities are manifested.

2.4 Project objective, outcomes and outputs / activities

134. Given their critical role and influence in local-level productive activities, Local Government Units (LGUs) have been identified as the most effective entry-point for mainstreaming biodiversity conservation. However, there is a clear need to develop LGU capacities and tools to ensure that they can effectively perform this role. It is also essential to complement this by putting in place the necessary systems at national level, so that agencies are poised to support sustainable landscape management at the local level. Finally, there is a need to demonstrate concrete environmental and economic benefits associated with such actions at site level.

135. The immediate objective of this project is therefore to demonstrate how Local Government Units (LGUs), with enhanced capacities, and working together with local and national partners, can plan and manage economic activities and growth in ways that meet landscape-level biodiversity conservation and sustainable use objectives in critical eco-regions. In order to achieve this objective, the project proposes to accomplish three key outcomes:

- (i) National-level systems, policies, tools and capacities are in place to support LGU level biodiversity conservation efforts

- (ii) Local Government Units encompassing at least 1.6 Million ha in five key biogeographic regions have the tools and capacities to integrate sustainable management into decentralized government structures
- (iii) Systems, policies, tools and capacities for landscape-level biodiversity conservation and sustainable development are applied at eight pilot sites covering at least 700,000 hectares across five critical biogeographic regions (Luzon, Palawan, Negros-Panay, Mindoro and Mindanao)

136. The outcomes have been designed to reflect the three levels of action required to overcome the barriers described above, and to make a significant contribution towards addressing the major threats to fragmentation of habitats and effective conservation of species assemblages. Outputs have been configured in such a way that interventions at the national level are mirrored in parallel support to improving capacities at the LGUs, and then, by their effective demonstration on the ground. Thus, Outcome 1 sets the enabling national policy and programmatic environment and provides national-level technical support, Outcome 2 translates this into systems and tools to create capacities at the LGU level and Outcome 3 makes use of these policies, systems and capacities to demonstrate impacts on the ground.

137. The three Outcomes therefore share common themes selected to directly address the threats to biodiversity and their associated causes. These are:

- Integration of biodiversity impact assessment in policy, planning and program formulation, which includes integrated landscape management. This will ensure that no new policies, plans and programs of DA, DENR and LGUs will be implemented in PAs/KBAs and surrounding production landscape without proper screening for their biodiversity impacts. The spatial dimension of such integration is through the CLUPs of LGUs and transboundary landscape management plans that will ensure inconsistencies in land uses and development undertakings across the production landscapes are minimized, if not avoided.
- Program, capacities and incentives for biodiversity-friendly agricultural practices at the national and local levels. Corresponding support to farmers and producer organizations will ensure that agricultural activities within PAs/KBAs and surrounding landscapes will not further contribute to fragmentation and expansion of agricultural areas.
- Improved regulations and capacity at all levels to enforce policies on wildlife trade to arrest poaching and illegal harvesting of threatened endemics.
- Policies and programs to provide incentives to invest in biodiversity business, including financing schemes to discourage destructive practices by forest dependent communities. This will ensure that communities surrounding the PAs/KBAs will see the value in economic terms, of conservation efforts.
- System for data and knowledge management established at national level, with links to LGUs and other partners, to allow interchange and free access to more complete and updated information on status of biodiversity. This will provide evidences of the biodiversity impacts of development projects, and help boost advocacy initiatives at all levels.

138. Underlying these outcomes and outputs is a set of partnerships to be established among stakeholders at the various levels, to help coordinate and integrate efforts to effect significant change in the way biodiversity is mainstreamed within: (i) sectoral policies, plans and programs; (ii) local development planning at the LGU level; and (iii) across landscapes by influencing the actions of professionals, businessmen, local communities, and private individuals.

133. The partners include national government agencies, LGUs, local coordinating bodies, and national and local conservation NGOs who are active in the demonstration sites. These are as follows:

- Department of Agriculture (Outputs 1.1, 1.2, 2.2, 2.3, and 3.3)
- Department of Interior and Local Government (Outputs 1.1, 1.5, 2.1, and 2.6)
- Department of Trade and Industry (Output 1.3, 1.4, 2.4, 2.5, 3.4, and 3.5)
- Conservation International – Philippines (relevant outputs under Outcome 3)
- Haribon Foundation (relevant Outputs under Outcome 3)

- Fauna and Flora International (relevant outputs under Outcome 3)
- Philippine Eagle Foundation (relevant outputs under Outcome 3)
- Lake Mainit Development Alliance (relevant outputs under Outcome 3)
- Philippine Biodiversity Conservation Foundation, Incorporated (relevant outputs under Outcome 3)

134. Activities across the three outcomes will be oriented towards a set of demonstration sites. The five biogeographic regions to be covered consist of the three main biodiversity corridors, namely: Sierra Madre, Palawan and Eastern Mindanao, plus two regions identified as harboring species in danger of species extinction¹⁶. These are: Mindoro Island, and Negros Panay peninsula. Within these regions, eight sites were identified using a set of criteria, including: (i) representation of five biogeographic regions (Luzon, Mindoro, Palawan, Negros-Panay and Mindanao); (ii) on-the-ground presence of partners or potential partners; (iii) overlap with one or more Key Biodiversity Areas (KBAs); (iv) strong local government unit and other local stakeholder support, and; (v) not supported by any other major donor funding. Annex G presents profiles of these sites.

135. The range of activities to be undertaken in each of the sites was carefully selected to demonstrate the project themes. Thus, while there are six themes, each site will pilot only a suitable combination of these, working with LGUs, local NGOs, and other site partners. The mix of activities has been determined based on each site's potential to showcase particular themes, the baseline work that have been undertaken by the local NGO partners, the expertise of partner NGOs in each of the sites, and the interest and support of LGUs and site organizations to work with the BPP in these areas.

Table 3: List of BPP Demonstration Sites

Biogeographic Region	Site Name	Location (Province/Municipalities)	KBA Area (hectares)
Luzon	Penablanca Protected Landscape and Seascape	Cagayan Province Municipality of Penablanca	118,782
Luzon	Quirino Protected Landscape	Quirino Province Municipalities of Madella, Aglipay, Nagtipunan, Cabbaroguis, Diffun,	164,364
Mindoro	Mt. Siburan	Province of Mindoro Occidental, Municipality of Sablayan	11,569
Palawan	Malampaya Sound	Province of Palawan, Municipality of Taytay	200,115

¹⁶ The three main corridors were identified through the Critical Ecosystems Partnership Fund (CEPF) in partnership with Conservation International (CI) and GEF. Additional sites were identified to protect all species with the highest probability of extinction. These are landscapes that feature the largest tracts of remaining forest in the country and a diverse range of habitat types: West Visayas (Negros, Panay and Cebu), Lake Lanao in Central Mindanao, and the remaining lowland forest of Mindoro and Sulus.

Biogeographic Region	Site Name	Location (Province/Municipalities)	KBA Area (hectares)
Negros Panay	Central Panay Mountains	Province of Antique Municipalities of Sebaste, Culasi, Tibiao, Barbosa, Lauaan, Bugasong, Valderrama, and San Remigio Province of Iloilo Municipalities of Janiuay and Lambunao Province of Capiz Municipalities of Tapaz and Jamindan Province of Aklan Municipalities of Libacao, Madalag and Malinao	85,658
Negros Panay	Northern Negros Natural Park	Province of Negros Occidental Cities : Talisay, Silay, Victorias, Cadiz, Sagay, and San Carlos Municipalities of Magallona, Murcia, Calatrava, Toboso, and Don Salvador Benedicto	80,455
Mindanao	Lake Maitit	Province of Agusan del Norte Municipalities of Jabonga and Kitcharao Province of Surigao del Norte Municipalities of Alegria and Maitit	14,525
Mindanao	Mt. Hamiguitan	Davao Oriental Province Municipalities of San Isidro, Governor Generoso, and Mati	31, 879
TOTAL			707,347

136. The Project’s outcomes and outputs are described below;

Outcome 1 - National-level systems, policies, tools and capacities are in place to support LGU-level biodiversity conservation efforts

137. Under Outcome 1, the project will help to ensure that national policies and institutional systems are able to support the mainstreaming of conservation into local governance. This component will ensure that policies and tools are in place for biodiversity impact assessment of policies, plans and programs within the DA and DENR, through the development and use of such tools as Strategic Environmental Assessments (SEA). It will also ensure that necessary systems are established to support conservation planning at the landscape level through holistic planning processes such as ecosystem based planning and integrated coastal management. It will support the development of requisite policy within institutions such as DENR and the DILG to mandate the use of strategic, ecosystem-based planning approaches in the preparation and financing of local development plans. This component will also help the DA establish the national frameworks necessary to facilitate biodiversity-friendly agricultural practices on the ground, including the conservation and use of indigenous agricultural crops. Incentives such as standards and certification schemes will be enhanced in partnership with the DA Bureau of Fisheries and Agricultural Products Standards (BFAPS) and private-sector organizations such as the Organic Certification Centre of the Philippines. The existing system for regulation of trade in wildlife and plant resources will be enhanced to reduce poaching and over-

harvesting. Through the project, PAWB will work with the Department of Trade and Industry to formulate policies to encourage investments in biodiversity-friendly business opportunities. Finally, this component will help to establish mechanisms to allow knowledge and information on the status, pressures and trends in biodiversity to be collated, synthesized and disseminated amongst central and local government actors, to enable informed decision-making and prioritization of conservation efforts.

Output 1.1- Policy and tools for biodiversity impact assessments of national agricultural and natural resource policies, plans and programmes adopted by DA and DENR

138. The project will assist DA and DENR to develop a national policy and framework for assessing the impacts of national policies and programs on biodiversity conservation. The policy impact assessment framework will be piloted under Outcome 3 to assess the potential impacts of selected DA and DENR policies and programs on the integrity of biological diversity in pilot landscapes and seascapes. The framework, which will be piloted in cooperation with the DA, will later be adapted for application to other departments.

139. The policy framework will define: (i) issues and problems commonly arising in agricultural landscapes and coastal seascapes as a result of farming and fishing activities that threaten biodiversity, (ii) methods and models for impact assessment, and; (iii) strategies to mitigate negative impacts while at the same time promoting sustainable development. The framework will also provide indicators for monitoring the impacts of the policies and programs on biodiversity conservation.

140. In support of the above, tools will be developed for policy impact assessment and monitoring. These will include, but not be limited to, SEA, multi-criteria model for decision making and sustainable development criteria and indicators. Manuals will be prepared for use of the guidelines, along with computer-aided templates to facilitate data analysis, storage and retrieval.

141. The project will develop a program for training of users on the use of the tools. Target users will include: DENR's Policy and Planning Office, DA Planning, the Bureau of Soils and Water Management – (BSWM) and BAR and Department of Interior and Local Government (DILG - Bureau of Local Government Supervision – BLGS and Bureau of Local Development and Planning- BLDP).

142. The framework and indicators will be mainstreamed into the plans and programs of DENR and partner government agencies, including DA and DILG. Within DENR, the use of SEA tools and other applicable methodologies will be mainstreamed into the process of screening proposed policies, plans and programs, which is a responsibility of the Planning and Policy Studies Office (PPSO). Within DA, mainstreaming will take place through a number of entry points. SEA and related policy and planning impact assessment tools will be mainstreamed in the DA's Policy and Planning offices to screen the possible implications of their proposed or planned policies and programs on biodiversity. Biodiversity concerns will also be integrated into DA's Agriculture and Fisheries Modernization Development Plan, which is due for updating. Likewise, biodiversity conservation will be mainstreamed into the Bureau of Soils and Water Management's (BSWM's) National Action Plan (NAP) for Sustainable Land Management (SLM). In the case of BSWM's Sustainable Agriculture and Fisheries Development Zones (SAFDZ) and National Plan for Agriculture Development (NPAAD) plans and programs, data and information on PAs and KBAs will be incorporated into the updating of maps and zoning information. This integration will make these plans biodiversity-sensitive and responsive.

Output 1.2 - National-level policy, program and technical capacity to support biodiversity-friendly agricultural practices

143. The project will support the DA to develop a national policy to support biodiversity-friendly agricultural practices within and around PA/KBAs. Under the framework of the DA's Sustainable Agriculture and Fisheries Development Zones (SAFDZs) and Network of Protected Areas for Agriculture

and Agro-industrial Development (NPAAD), explicit policy statements will be developed to ensure that only biodiversity-friendly agricultural practices that do not contribute to further fragmentation of important wildlife corridors are implemented in PAs/KBAs.¹⁷ This policy will serve as guidance for LGU Provincial and Municipal Agricultural Offices (P/MAOs) in the formulation and implementation of local agricultural development plans and programs.

144. DA capacity to provide technical support to LGU MAOs in biodiversity-friendly farming techniques will be enhanced. Cooperating institutions will include the Mindanao Baptist Rural Life Center (MBRLC), which promotes the sloping agricultural land technology (SALT), and the Landcare program of International Center for Research in Agroforestry – World Agroforestry Center (ICRAF-WAC's)

145. Two existing certification schemes being supported by the DA's Bureau of Agricultural and Fisheries Products Standards (BFAPS) will be enhanced to include biodiversity-friendly agricultural production practices. The first relates to the inspection and certification of agricultural production under a third party certification scheme by accredited certifiers such as the Organic Certification Center of the Philippines (OCCP), which caters to bigger niche organic producers. The second relates to the Participatory Guarantee System (PGS), which is a first party certification system catering to the needs of small producers. To implement a PGS of inspection and certification system, a Quality Control System (QCS) will be developed. Training to be conducted will include, but not be limited to: the standards, inspectors' training, business planning, financial and enterprise management. These enhanced certification schemes will be piloted in selected sites under Outcome 3.

146. The project will also assist DA to strengthen its initiatives to promote the conservation and utilization of indigenous crop species through the development of national policy and its articulation into a national program. The existing Philippine Network of Plant Genetic Resources (PNPGR) will be supported to undertake an assessment of the distribution and utilization of indigenous crop species, particularly those which have been identified as requiring conservation and have the potential to promote food security and supplement the livelihoods of indigenous peoples and farmers. For priority crops, appropriate conservation practices, and extent of utilization, will be documented and market potential assessed. An information system will be established within Department of Agriculture – Bureau of Agricultural Research (DA-BAR), and shared with its partner academic/research institutions which house essential information on distribution, abundance, sources of gene pool, appropriate conservation practices, utilization, and market potential.

147. Based on this enhanced capacity, DA-BAR will be able to partner with LGUs, academic/research institutions and farmers to set up protocols for in-situ/on-farm crop conservation. Through its network of plant genetic resources for food and agriculture, it will develop a strategy and program for assisting LGUs to develop systems of in-situ conservation in farmers' fields and ensure sustainable operation of a community-based seed supply system. The promotion of indigenous crops will be supported by an information and advocacy campaign so that upland farmers will learn the importance of propagating indigenous crops and the benefits that they will derive from it. This program will be piloted under Outcome 3.

Output 1.3 - Enhanced national-level system for regulation of trade in wild plant and animal resources¹⁸

148. Under this output, existing information and data management systems at PAWB will be enhanced to develop a more complete data set on distribution of existing wild plant and animal resources that are prohibited from trade. A system will be established for surveillance, monitoring, and mapping the sources of illegally traded wild plants and animals in the market, through effective information exchange between national and LGU authorities. PAWB, in consultation with the wildlife business sector, will develop a faunal identification code system to ensure that only authorized plant and animal resources are harvested and traded. This will involve the provision of faunal marking gadgets and training of DENR field personnel on the application of these wildlife identification tags.

¹⁷ Agriculture is allowed within multiple use zones of PAs

¹⁸ Partner: Dept. of Trade & Industry, Bureau of Customs.

149. DENR field personnel, along with personnel from cooperating agencies such as the Bureau of Customs and the Coast Guard, will benefit from structured capacity building activities on wildlife law enforcement. PAWB will establish a system to provide continuing support to partner implementing agencies, particularly in the areas of information, education, monitoring and reporting. The scope of LGU participation in the implementation of this regulation will be clarified, so that they can translate these into local ordinances to strengthen protection of local endemics.

Output 1.4 - Policies to encourage investments in biodiversity-friendly business opportunities

150. In partnership with DTI and private sector representatives, business opportunities that are compatible with conservation of PAs and KBAs will be identified, and existing structures of incentives and regulations assessed to determine whether these are sufficient to attract investments. Examples of policies and practices in other countries, particularly in stimulating demand for low impact activities, such as community-based nature tourism, handicrafts production and food processing, will be identified and adapted. The potential for engaging forest-dependent communities and other resource users will likewise be encouraged, so that they will voluntarily shift away from unsustainable practices.

151. Priority will be given to the development of policies related to business ventures that appear to have potential in the Outcome 3 demonstration areas. If required, pre-feasibility studies will be undertaken to demonstrate the potential of identified business opportunities. In designing policies, the DTI will engage with appropriate industry representatives representing a range of small, medium and large enterprises. Policies to develop entrepreneurial skills among local community organizations will be instituted with the support of private business investments.

Output 1.5 – National-level systems for knowledge management¹⁹

152. Under this output, a knowledge management system (KMS) will be established at PAWB in collaboration with other DENR agencies and offices, conservation NGOs and academe. Cooperation with other organizations will be forged through the signing of MOA for networking or linking with their information systems and sharing of data and information. The project will identify, assess and link up with other related information systems found in DENR agencies and offices and other partner government agencies and conservation NGOs and selected academic institutions. The KMS will consolidate and synthesize information that can be analyzed for determining the biodiversity impacts of policies and programs implemented by different organizations in different parts of the country.

153. The KMS will develop a data base and information management system for policy and decision-making, planning and program and budgeting. It will also be linked with regional and international biodiversity information systems such as the ACB's Regional OBIS node. An M&E system for monitoring the actual impacts of biodiversity conservation policies implemented on the ground by partner government agencies will be part of the KMS, using the indicators and criteria developed under the framework established in Output 1.1. The M&E to be developed in PAWB will also be linked with regional PAWCZMS and LGUs with PAs and critical habitats. This will make it possible to link with LGUs for data exchange on biodiversity reporting. For this purpose, the indicators and methods/guidelines for data collection and processing and reporting will be developed prior to the installation of the M&E component of KMS. The experience of partner NGOs will be harnessed for this purpose, due to their extensive experience in on-the-ground biodiversity monitoring. Agreements will be forged with LGUs from the Outcome 3 sites (see Output 3.7), who are willing to be part of this network, which will form the core group. This will be expanded as more LGUs participate in the system. The results will be processed, analyzed and fed back to network members to serve as inputs to their planning and resource management activities. Support of the DILG and the League of Cities and Municipalities is expected for this purpose.

¹⁹ Partner: Department of Interior and Local Government (DILG)

154. The KMS will build on the lessons learned from previously established biodiversity information and indicator systems, such as the Biodiversity Information Sharing Network, Biodiversity Indicators for National Use (BINU) and the Biodiversity Monitoring System (BMS). It will provide the inputs for monitoring efforts at the national level on biodiversity conservation. It will also serve as an expansion of the Philippine Clearing House Mechanism (PCHM) at PAWB. The current PHCM only covers inputs from national government agencies and national based NGOs, and focuses on information on PAs and species.

155. The KMS will be linked to the information system of other government agencies such as the PhilBatis of PCAMRD, local government performance monitoring system (LGPMS) of DILG and the sustainable land management (SLM) of BWSM. Biodiversity indicators for inclusion in DILG's LGPMS will be identified and pilot tested in the project sites. Procedures on how to gather and analyze data and how to interpret the results will be developed and turned-over to DILG for inclusion in their LGPMS. The system design will allow data entry by DENR and LGUs from the field through a web-based input system. The data will be analyzed at PAWB by its Information System staff and project-hired system's specialists and programmers for biodiversity monitoring and management purposes using certain standards and thresholds. Links will also be established with the M & E system of the national PAs to be established in the UNDP-GEF Project "Expanding the Terrestrial Protected Areas in the Philippines".

156. Once the KMS is in place and operational, it will be able to generate data, update information and constitute a biodiversity information system that will guide and facilitate decision-making and program implementation. The KMS data base will include agricultural biodiversity and indigenous knowledge systems and practices for which data is presently limited. Thus, the system will be able to gather data from the LGUs and bring these back to them in processed form for their planning and program implementation. The system will be designed to be easy to use and maintain. It will enable LGUs to input their data and allow them to extract information for their own use. These attributes are expected to improve its long-term sustainability.

Outcome 2 - Local Government Units encompassing at least 1.6 Million ha in 5 key biogeographic regions have the tools and capacities to integrate sustainable management into decentralized government structures²⁰

157. Under Outcome 2, the project addresses the decentralised local governance system, which is administered and supervised by the DILG. It will ensure that decision-making processes at the local government (LGU) level are supported by suitable tools and capacities for conservation and natural resources management. This component will ensure that national-level systems, tools and capacities created under Component 1 will be localized and translated into guidelines, toolkits and decision-making frameworks that can be easily applied at the local level through facilitation mechanisms established by DILG and DENR partnership. These tools will address the barriers addressed above, by providing LGUs with the ability to assess their developmental choices more holistically (in terms of the actual cost and benefits from an ecosystem perspective), more sustainably (particularly when viewed on longer timescales) and more broadly (collaboratively across jurisdictional boundaries to obtain the greatest total benefit at the landscape or watershed level). The tools and capacities developed under this Outcome will be applied in selected demonstration sites under Outcome 3.

158. Specific tools and associated capacities will be developed by DENR and DILG for selected sites in five key biogeographic regions, to ensure that LGUs within these project areas are able to plan and monitor local development in an effective and coordinated manner. Such tools include biodiversity overlays for LGU Comprehensive Land Use Plans to delineate corridors and buffer zones, and fiscal and economic tools, (in collaboration with the Department of Trade and Industry and the Department of Agriculture), to promote biodiversity conservation, transfer payments for PES, local tax incentives for biodiversity-friendly business development, financing and market incentives.

²⁰ Partner: Dept. of Interior and Local Government.

159. As shown in Table 3 above, the project's eight demonstration sites are under the authority of 41 municipalities within 12 provinces. The territories of these LGUs encompass a total of 1.6 Million hectares. Under this Outcome, selected LGUs from among these sites will be identified to pilot test various applicable tools and methods that will be developed. After the project, these approaches will be replicated in LGUs throughout the eight sites, and later on promoted nation wide.

Output 2.1 - Tools, guidelines and methods developed to mainstream biodiversity in local development policy making, planning, budgeting, M and E²¹

160. To ensure the proper mainstreaming of tools developed under this project, a mainstreaming framework will be developed and institutionalized in the LGUs. The Project will assist the DILG to apply this framework more widely through the issuance of a Joint Circular between DENR and DILG, as additional guidelines to support implementation of LGU-devolved functions under the Local Government Code. In the context of this project, mainstreaming is operationally defined as making biodiversity conservation part of the LGUs': 1) policy making and planning process, 2) investment programming linking plans with budget allocation; 3) institutional capacity development program; 4) permitting, regulations and incentive system; 5) information and data base system; and 6) monitoring and evaluation system.

161. Procedural manuals will be developed following the mainstreaming framework developed under this project component. These manuals will be tested with at least 20 LGUs in eight project sites. These LGUs were selected based on their prior work on conservation issues, and the leadership they have demonstrated in supporting the relevant PAs/KBAs. Relevant LGU personnel will be trained on the application of the procedural manuals for mainstreaming. Under Outcome 3, agreements will be sought with selected LGUs on the scope of mainstreaming activities to be undertaken in their jurisdictions. Monitoring the implementation of the mainstreaming agreement with the LGUs of the project sites will be established under the project. Under Outcome 3, the actual integration of biodiversity conservation concerns will be undertaken by the trained LGUs in the project sites in partnership with NGOs.

162. The tools that will be developed and/or adopted for the mainstreaming process include multi-decision criteria method, vulnerability assessment and contingency action planning tools, planning, programming and budgeting tool, training modules, economic incentive instrument, data base development and M&E. Biodiversity monitoring and impact assessment tools developed by Flora and Fauna International (FFI) will be tested in selected project sites. Other tools previously developed and successfully applied by conservation NGOs will be reviewed and repackaged for application in the BPP project sites. Some of these tools include: biodiversity conservation monitoring, biodiversity impact assessment, species recovery planning, and PA management. These tools will be developed and applied in partnership with FFI in selected project sites.

163. Mainstreaming tools will be tested and applied in eight project PAs/KBAs with the end in view of using them later on nationwide through the assistance of DILG and the League of Provinces and Municipalities.

Output 2.2 - Toolkits and implementation capacity for application of SEAs, as well as landscape and seascape level natural resource management, across multiple LGUs

164. The tools developed under Outcome 1 to assess the biodiversity impacts of policies and plans will be simplified for use in at least 15 LGUs in five demonstration sites (Quirino Protected Landscape, Central Panay Mountains, Northern Negros Natural Park, Lake Mainit, and Mt. Hamiguitan). These PAs/KBAs are situated in more than one municipality/province, which renders the demonstration of these tools appropriate. The project will work with DA and DILG to train and pilot these tools in selected LGUs. The results will be used to enhance the tools, and replicate these for wider use for local policy and plan formulation by local governments. The project will support DILG to formulate a Memorandum Circular for adoption by LGUs.

²¹ Partner: DILG

165. The DENR will work with DILG to formulate a policy supporting the implementation of landscape and seascape resource management plans and programs by the LGUs. To operationalize the DILG mandate, cooperation among LGUs in the project sites in implementing landscape and seascape resource management plans and programs will be forged through MoAs and other binding instruments such as cooperation agreements. This project component will also pilot in one KBA an incentive system and economic instruments for the use of resources that cut across different LGU boundaries such as water, ecotourism amenities and others. The design of these instruments will ensure that both the upstream and downstream LGUs and their resource-dependent communities will benefit from the conservation of biodiversity resources. These benefits include more sustainable livelihoods through responsible, judicious and equitable use of environmental resources

166. Existing tools and methods for resource management planning across LGUs will be simplified to make them user-friendly to LGUs. Manuals with easy-to-follow procedures will be produced for this purpose. These planning tools include FLUP, ICRMP, and ecological zoning of terrestrial and coastal/marine environments. The resource management plans prepared at the local level will then be integrated into the CLUP and CDP. The methods and procedures for the integration are part of Output 2.1.

167. The application of planning tools and preparation of resource management plans across LGUs, the delineation and mapping of buffer zone and integration into the CLUP and the application of economic instruments for PES and related concerns will require hands-on training of the LGUs in the project sites. Hence, a capacity-building program will be undertaken under this project component for at least 15 LGUs involving the staff from Provincial Agriculture Office (PAO), Municipal or City Agriculture Office (MAO or CAO), Provincial ENROs, Provincial PDOs, City/Municipal ENROs, City/Municipal PDOs. This hands-on training will promote closer partnership and a venue for dialogue and agreement among stakeholders in the landscape or seascape areas. A harmonized plan and action programs will be produced through such working partnership among clusters of LGUs and DENR.

Output 2.3 – LGU-level policy framework and technical capacity to support biodiversity-friendly agricultural practices in critical eco-regions.

168. Initiatives under this output will be guided by the national programs to be developed by the DA under Output 1.2 to support biodiversity-friendly agricultural practices within and around PAs/KBAs. Technical assistance will be provided to at least 20 LGUs within the eight pilot sites to train the municipal agricultural officers and staff in the formulation and implementation of their local agricultural development plans and programs incorporating biodiversity-friendly farming technologies. These LGUs will be the same sites where capacities will be developed under Output 2.1; to reinforce their work in the production landscape of PAs/KBAs.

169. Local ordinances will be passed to support biodiversity-friendly agricultural technologies and farming practices. These regulatory instruments will mandate MAOs to provide extension services to upland farmers through their farmers' organizations. Support from the DENR's field technicians will also be sought in advocating and implementing agro-forestry schemes in critical slopes.

170. In partnership with DA and DENR field offices, the MAOs and PAOs of at least 20 LGUs in eight project sites will be supported in the packaging and dissemination of biodiversity-friendly farming practices involving soil conservation, mulching, crop rotation and multiple cropping, integrated pest management, organic farming and use of traditional crop varieties. These will be disseminated by the MAOs and PAOs to upland farmers cultivating open agricultural fragments within and along the buffer zones of PAs and KBAs. Demonstration plots will be established in Quirino Protected Landscape and Central Panay Mountains under Outcome 3 to showcase the biodiversity-friendly farming systems and technologies.

171. The DA's regional field units (RFUs) will assist the PAOs/MAOs in the identification of indigenous crops found within each pilot site in coordination with DA-BAR. The indigenous crops will be assessed

according to their potential to promote food security and supplement livelihoods of the local community members. Documentation of indigenous knowledge systems on the local distribution, uses, and management practices of these crops will be conducted and will include activities from production, processing, packaging, and marketing. Market assessment and promotion will be initiated to ensure consumer awareness and acceptability. LGUs will also be supported in developing incentives to promote *in situ* conservation and utilization of indigenous crops. These will include establishment of nurseries and provision of micro finance through credit cooperatives. Technical assistance will also be provided to ensure the MAOs are properly trained to support farmers on the proper timing of planting, using crop calendars provided by partner NGOs to avoid losses due to climate change affecting the pilot sites.

172. The LGUs' biodiversity friendly agricultural program will include the promotion of enhanced certification system for biodiversity friendly practices developed under Outcome 1. The DA and OCCP will partner with LGUs to support the implementation of standards and certification system through identification of potential famers and farmer groups. An information program will be launched to disseminate the benefits of certified farms and products in the market. The LGUs, through their MAOs, will also support in establishing marketing linkages for these products.

Output 2.4 – Strengthened local regulation of trade in wild plant and animal resources

173. Under this output, the project will assist at least 10 LGUs in Central Panay Mountains, Malamapaya Sound, and Mt. Hamiguitan to formulate local ordinances to complement the national regulations involving wild plant and animal resources. These sites have pronounced issues on illegal trade of threatened species, namely: Visayan hornbill; Philippine eagle; and a number of Palawan endemics. In partnership with local NGOs, data on the distribution, population and habitat of these threatened species will be available to concerned LGUs. Technical assistance will be provided to enable LGUs to formulate appropriate policies to adequately protect these species against illegal poaching, over harvesting, and illegal trade.

174. The ten LGUs will designate staff, who will be deputized by DENR and trained on existing laws, appropriate identification, and protocols for apprehension. The Project will also assist LGUs to participate in the system for surveillance, monitoring, and mapping the sources of illegally traded wild plants and animals in the market, to be developed under Outcome 1. In partnership with local organizations, a monitoring system shall be developed to enable the local LGU Councils to receive regular reports on the results of these efforts on the population and distribution of threatened species.

Output 2.5 - Regulatory structures and incentive systems to encourage the development of biodiversity-friendly businesses, including investor codes of conduct, established at the LGU level

175. Under the guidance of national policy formulated under Outcome 1, the project will assist ten LGUs to develop and implement regulatory structures and incentive systems to attract private business enterprises to invest in biodiversity-friendly services and products in Mt. Siburan, Central Panay Mountains, Northern Negros Natural Park, and Mt. Hamiguitan. LGUs in these sites have initiated some plans to attract private investments, and have expressed the need for technical assistance. The sites also offer potentials for biodiversity friendly productive enterprises, such as nature tourism; establishment of sustainable fuelwood plantations, and bird watching activities. These will be supported by education and public awareness campaigns to foster the value systems of local communities towards conservation, support biodiversity enhancement types of entrepreneurial ventures and encourage them away from destructive livelihoods.

176. Assistance will be provided to LGUs by DENR and partner NGOs in identifying viable business opportunities based on an assessment of the status and trends in biodiversity, the potential existing in the localities, existing and projected demands, and requirements for facilities, capacity, and promotion. These include: community-based ecotourism services; handicraft products using raw materials such as bamboos, grass, etc., food processing of fruit and indigenous root crops, gardening of local plants and flowers for ornamental uses and related livelihood that would improve the productivity and income of upland farmers.

177. Regulatory structures such as investor codes of conduct (e.g., Ecotourism code of conduct) will be promulgated by LGU policy-making councils to prevent over-extraction of natural resources used in business enterprises. These will include natural resource regeneration (e.g. finding buyers of indigenous plant species propagated by farmers and planted in the forest gaps), permit trading and ecotourism. Other examples include business undertakings that are exploitative and unfair to upland farmers such as contract growing that tends to promote monoculture will be prohibited. Alternative livelihood like handicrafts making from non-timber products and other non-destructive forest based livelihood will be promoted by the LGUs, including collection of almaciga and canarium resin, anahaw and buri leaves, decor making, butterfly culture, etc. The kind of livelihood activities in each project site will be determined by the kinds of natural resources present in the pilot LGUs.

178. To encourage the development of biodiversity-friendly businesses, the project will support LGUs in examining ways to create positive incentives through ordinances and programs. An example would be incentives to private investors which would provide micro-finance and markets for communities engaged in biodiversity-friendly entrepreneurial activities. Links will be established with industry organizations and business councils, and other appropriate sources, to support implementation. These will include, but not be limited to: training programs on sustainable and organic agriculture, soil conservation, marine-related business opportunities, food processing, packaging, and marketing. Skills training on other biodiversity-based production and livelihood strategies will be implemented by the LGUs in partnership with the industry, and if needed, in partnership with local NGOs, academe, DTI and local entrepreneurs.

179. LGUs will facilitate the organization of producer and marketing cooperatives in order to pool the small scale production of marginal farmers and market such products in volume. The producers will be linked with entrepreneurs for marketing and to the Center for International Trade Expositions and Mission (CITEM) of the DTI for promotions of local products in appropriate markets. The project will assist LGUs in organizing trade fairs to promote biodiversity-friendly products and create market.

Output 2.6 - Intra-LGU data and knowledge-sharing and advocacy network to synthesize and project lessons learned into national policy- and decision-making.

180. Biodiversity data and knowledge management systems for LGUs will be designed and installed in at least 20 LGUs located in the eight project sites. These will be linked with the system to be established at PAWB under Outcome 1. Staff of the identified LGUs will be trained to manage the system at their level, and to upload and access to data from the system to serve their own uses. Partnerships at the local level will be enhanced to make sure the LGU-level system is updated with information from other local organizations working on biodiversity issues.

181. The project will partner with the Leagues of Provinces, Cities and Municipalities to support ongoing efforts related to inter-LGU knowledge sharing on best practices in mainstreaming. The Leagues have established their own LGU Academy which is responsible for this regular exchange. The scope of the existing systems will be expanded to cover biodiversity mainstreaming as a key development area requiring active exchange of experiences and upwelling of lessons to better inform policy making and assist in national level advocacy. A program will be worked out, which will include cross visits, setting up model or pilot sites, and development of a pool of Speakers who will be nurtured as active advocates of mainstreaming. A network of LGUs promoting biodiversity mainstreaming will be established and their activities initially supported so that they can serve as model sites for showcasing such experiences with other LGUs. This output will assist in the documentation of LGU best practices in biodiversity mainstreaming. In cooperation with DILG, the LGU Eco-labeling program will be established within DENR as a regular program, to reward local governments with exemplary initiatives on mainstreaming biodiversity conservation.

Outcome 3: Systems, policies, tools and capacities for landscape-level biodiversity conservation and sustainable development are applied at eight pilot sites covering at least 700,000 hectares across five critical biogeographic regions (Luzon, Palawan, Negros-Panay, Mindoro, Mindanao)²²

182. Under Outcome 3, the project will demonstrate how the systems, policies, tools and capacities for landscape-level biodiversity conservation and sustainable development that are being developed under Outcome 1 and 2 can reduce threats to biodiversity in eight critical ecosystems. This component will ensure the integration into the LGU planning process of biodiversity-friendly projects and programs, policies, agricultural practices and investment programs. The capacities of community volunteers within the demonstration sites will be enhanced to enforce national and local regulations on trade, and harvesting of wild plant and animal resources, particularly the threatened local endemics. Biodiversity related data and information will be generated through the studies that will be conducted. These will be managed using the system developed under Outcome 2, and shall be linked with the national system developed under Outcome 1. In each demonstration site a suite of toolkits and decision-making frameworks will be applied depending on the specific mix of biodiversity threats, economic development patterns, socio-economic characteristics, etc. found at each site.

183. Taken together, participants in partnerships being formed at these eight demonstration sites will mainstream biodiversity conservation into multiple aspects of local governance systems covering at least 700,000 ha of priority conservation landscape and seascape within the overall 1.7 million ha covered by the target LGUs. About 105,000 ha. of this total consists of seascape and constitutes the major portion of the Malampaya Sound site. Within the approximately 595,000 ha of terrestrial area covered by the demonstration sites, several specific types of land use and designation/status combinations have been identified (see **Table 5** below). These will be approached by the project as follows:

- *PAs with remaining natural habitat (263,701 ha):* Nearly 55% of PAs within the demonstration sites have substantially remaining natural habitat. These areas will continue to be managed by PA management authorities. The project will support the integration of planning for these areas within broader LGU planning processes. In addition, enhanced conservation of these core areas will be a key target of threat reduction activities in the surrounding PA and KBA landscape, with associated indicators pertaining to these core areas.
- *PAs with heavily degraded and/or converted habitat (220,555 ha):* The remaining 45% of PA lands within the project demonstration sites are in practice part of the production landscape. Their forests have largely been removed and they are protected in name only. However, they remain important targets of project activities aimed at conserving their connective functions and extant biodiversity.
- *KBAs with natural habitat (45,523 ha):* These areas have important, unprotected and typically highly threatened, natural forest habitats. The project will aim to develop community-based approaches to their conservation outside of the formal PA system.
- *KBAs with converted habitats (66,229 ha):* These areas are both unprotected and largely converted, yet retain ecological importance, as indicated by their KBA status. The project will aim to conserve their connective functions and remaining biodiversity.

Table 5: Summary of Target Terrestrial Areas in BPP Demonstration Sites

Habitat type	Designation/ Status			Total
	PA	KBA (but not PA)	Neither PA nor KBA	
Natural	263,701	45,523	109,351	418,575
Converted	220,555	66,229	984,163	1,270,947
Total	484,256	111,752	1,093,514	1,689,522

²²Partners: FFI, Haribon Foundation, , CI Philippines, Philippine Eagle Foundation, Philippine Biodiversity Conservation Foundation, and Lake Mainit Development Alliance.

184. Overall, project demonstration activities will help to conserve nearly 310,000 (263,701 + 45,523) ha of remaining natural habitat from threats associated with habitat loss and fragmentation within the surrounding landscapes. This will be accomplished primarily through actions taking place on about 287,000 (220,555 + 66,229) hectares of converted PAs and unprotected KBAs, actions aimed at: (a) reducing the loss of biodiversity within those landscapes (e.g. by making agricultural production practices more biodiversity-friendly), and (b) reducing the pressures that those production practices exert on adjacent/ connected PAs as the primary 'reservoirs' of biodiversity within the landscapes. These targets will be achieved by working with selected LGUs in the project sites to demonstrate effective solutions to mainstreaming.

185. Each site-level initiative will be undertaken in partnership with one or more established conservation NGO or other local partners. Six leading conservation organizations have indicated their willingness to participate in the partnerships, including two national government organizations, the Department of Agriculture and the Palawan Council for Sustainable Development (PalCSD).²³ By combining the policy and institutional capacities of DENR with the resources, expertise and local knowledge of these local partners, these site-level investments will ensure that the mainstreaming of biodiversity conservation is effectively demonstrated in locally-appropriate and effective ways. The range of approaches that will be demonstrated will also provide a rich array of experiences from which lessons can be learned and systemic-level policy and institutional improvements can be developed.

186. The eight demonstration sites are spread across five biogeographic regions. Two sites each were selected from the Luzon, (Penablanca Protected Landscape and Seascape and Quirino Protected Landscape), Negros-Panay (Central Panay Mountains and Northern Negros Natural Park), and Mindanao, (Lake Mainit and Mt. Hamiguitan) biogeographic regions and one each from Mindoro (Mt. Siburan) and Palawan (Malampaya Sound).

Output 3.1. Biodiversity-friendly projects, programmes and policies achieved via impact assessments incorporated into LGU planning process.

187. The project will provide technical assistance and training to integrate biodiversity conservation objectives into the land use planning and development plans of approximately 20 LGUs within the eight pilot sites. This will involve updating of the protected area management plans of Quirino Protected Landscape and Seascape, and Malampaya Sound Protected Land and Seascape, and the updating or completion of forest land use plans (FLUPs) in Northern Negros Natural Park, Mt. Hamiguitan, Mt. Siburan, Central Panay Mts. and Lake Mainit, for integration into the comprehensive land use plans (CLUPs) of the concerned LGUs. The project will also provide assistance to at least 13 LGUs to develop buffer zone management plans with forest-edge communities²⁴ and establish conservation-enabling institutions within the communities located within the PA/KBA as well as the identification and establishment of critical habitats and local conservation areas in three pilot sites (Mt. Siburan, Central Panay Mts. and Lake Mainit). These areas have initiated their local processes towards the formal protection of these KBAs.

188. Under this output, approximately 20 LGUs within the eight demonstration sites will be assisted in the application of toolkits and modules developed under Output 2.1 and 2.2 on SEA, multi-decision criteria method, vulnerability assessment and contingency action planning, planning, programming and budgeting tool, economic incentive instrument, data base development and M&E. Indicators for monitoring the impacts of local policies and programs on biodiversity conservation will also be identified for all the pilot sites to facilitate screening of LGU programs' and plans' impacts on biodiversity.

²³ Fauna and Flora International, Conservation International – Philippines, the Haribon Foundation, Foundation for the Philippine Environment, Philippine Biodiversity Conservation Foundation and PhilConserve.

²⁴ These are the LGUs covered by Mt. Siburan, Central Panay (Antiques side only) and Lake Mainit

Output 3.2 - Transboundary integrated planning achieved via the implementation of toolkits

189. The project will provide assistance in the development of transboundary integrated plans in five pilot sites (Quirino PL, Central Panay, Northern Negros, Lake Mainit, Mt. Hamiguitan). This will involve the development of a common management framework for the PA/KBA to consider the interactions of activities in the surrounding landscape. Approximately 20 LGUs will be assisted in the application of toolkits and methods developed under Output 2.1 and 2.2 to identify the extent to which their local plans and programs impact on the populations of threatened species, degradation of critical habitats, and the ability of the ecosystem to perform its vital functions to support the economy and livelihood of the lowland populations. Understanding such interactions within the landscape will also guide the future actions and decisions of the local executives.

190. Studies on the cost and benefit sharing schemes across the LGUs within the identified PAs/KBAs will be initiated to facilitate agreements among LGUs on the sustainable landscape management practices to be undertaken and for joint monitoring of the state of the landscape environment.

Output 3.3 - Biodiversity-friendly agricultural practices (eg. use of indigenous crop varieties), achieved via enhanced and extended standards and associated certification processes

191. Initiatives under this output will be guided by the national programs to be developed by the DA under Output 1.2 and the local LGU policies and programs developed under Output 2.3 to support biodiversity friendly agricultural practices within and around PA/KBAs. Technical assistance will be provided to farmer organizations in the conservation, utilization, and marketing of indigenous crops. Indigenous crops with the highest potential in each of the sites will be selected, and demonstration plots established in partnership with local farmer organizations, including women groups. Linkages will be established with private sector and local research organizations to promote appropriate technologies in utilization, and packaging of products. Specific marketing plans and awareness programs will be developed to support producers and those involved in the processing chain to help promote the products. Other support will include setting up community seed banks, establishment of planting material nursery and seed supply facility, nursery management, seed handling, processing and storage.

192. Standards and certification schemes for biodiversity-friendly practices will be applied in each of the eight sites. The DA, in cooperation with the LGU MAO, will set up demonstration plots in two project sites – Quirino Protected Landscape and Central Panay Mountains, and provide technical assistance to farmer groups to bring their practices in accordance with standards. Farmers in the pilot sites will be organized and trained to implement a participatory guarantee system (PGS) and to disseminate the system in other participating farmer organizations. Training will be conducted in areas such as standards, inspectors' training, business planning, financial and enterprise management. At each demonstration site, selected farmer leaders will be identified and adequately trained. The support of the LGU Municipal Agriculture Office (MAO) in replication, training, and in the strengthening of support to farmer organizations in terms of establishing marketing linkages, and management will be necessary to ensure the institutionalization of certain activities for long-term and sustained implementation.

Output 3.4 - Improved regulations and enforcement of wild animal and plant gathering and trade, achieved via strengthening of permitting system and implementation of trade regulation

193. The project will implement the national faunal identification code system developed under Output 1.3 and 2.4 to ensure only authorized plant and animal resources are harvested and traded in the identified pilot sites. This will include the training of DENR field personnel and local enforcement officers designated by the LGUs on the use of wildlife marking gadgets as well as structured capacity building activities on wildlife law enforcement in Central Panay Mountains, Malampaya Sound, and Mt. Hamiguitan. A program of continued information and education on monitoring of sources of illegally traded wild plants and animals and information exchange between the LGUs and national authorities will be put in place.

194. Under this output, technical assistance will be provided to set up monitoring systems and implement information exchange systems between the LGUs, local DENR, local enforcement officers, and local conservation NGOs. Training for the local *bantay gubat/dagat* groups on apprehension and filling of complaints will be initiated including their deputation as Wildlife Enforcement Officers (WEOs) by the DENR.

Output 3.5 - Biodiversity-friendly investment programs promoted in selected sites.

195. Feasibility studies will be undertaken to determine the viability of potential biodiversity-friendly business opportunities in Mt. Siburan, Central Panay Mountains, Northern Negros Natural Park and Mt. Hamiguitan. Existing structure of incentives and regulations in the PAs/KBAs will be assessed to determine if they are sufficient to attract investments by the private sector. The Project will support the LGUs in promoting promising biodiversity business opportunities with the private sector through the development of suitable financing mechanisms, technical assistance, and linking with consumer groups to increase demand for green or certified commodities and services.

196. The Project will engage with organized producers' groups and/or existing local industries to devise ways to improve their practices to meet biodiversity standards. Assistance from experts and facilitators will be provided to ensure business enterprises such as furniture making, eco tourism, harvesting of guano and almaciga resin, follow investor codes of conduct promulgated by the LGUs and that their practices do not pose unnecessary damage to the environment. Such assistance could include: certification and labeling of wood furniture products, regulation of guano and almaciga resin harvesting; and eco tourism guides and ordinances. Trainings and other capability-building activities for forest dependent communities and other stakeholders will be initiated on identified business opportunities that will be compatible with the PAs/KBAs identified.

Output 3.6 - Incentive systems and innovative financing programs to reduce destructive activities by PA/KBA dependent communities

197. Under this output, development and implementation of suitable payments for ecosystem services (PES) mechanisms will be undertaken in Quirino Protected Landscape, and Northern Negros Natural Park with the LGUs to sustain watershed management, forest protection, and improve agricultural production within the two protected areas. The project will also pilot the implementation of five community conservation agreements²⁵ in Penablanca Protected Landscapes and Seascapes, Quirino Protected Landscape, Central Panay Mountains, and Northern Negros Natural Park, and Mt. Hamiguitan, to provide incentives for local communities to refrain from engaging in destructive forest resource extraction activities.

198. To reduce pressure on the critically endangered wildlife and forest resources, the project will explore the feasibility of different livelihood options in consultation with stakeholders.

Output 3.7 - Data and knowledge management to underpin preceding themes.

199. The project will support biological assessments in the eight demonstration sites to provide information on the conservation value of the PA/KBA and the identification of critical habitats for designation as local conservation areas. These will also be used to contribute to the process of land use zoning and management planning. Rapid resource assessments and threatened species population estimates will be initiated to increase the biodiversity knowledge base and to increase awareness and appreciation of the biodiversity

²⁵ Conservation agreements represent a novel approach that brings social benefits to local communities in return for an active role in conservation. Under a conservation agreement local resource users agree to protect biodiversity and natural ecosystems in exchange for a steady stream of structured compensation, usually in the form of in kind support to priority social programs of the community.

significance of the demonstration sites. These should aid in monitoring the progress and impacts of interventions and help guide future actions by the LGUs and local communities.

200. The Biodiversity monitoring and impact assessment tools developed by FFI under output 2.1 will be implemented in Malampaya Sound, Central Panay Mountains and Northern Negros Natural Park. A detailed biodiversity monitoring and evaluation plan will be developed and implemented in coordination with the LGUs. Representatives from the LGUs and local communities will be trained in biodiversity assessment and monitoring, record keeping, and interpretation.

201. Biodiversity monitoring tools will be implemented and training of the LGU staff and other local stakeholders in biodiversity assessment and monitoring, record keeping, and interpretation will be initiated. LGU staff will be trained on data analysis and management and will be responsible for compiling and disseminating biodiversity information for the increased awareness and appreciation of the local communities. A training needs assessment will also be initiated to identify other capacity building needs of the LGUs and other local stakeholders.

202. The project will also develop and execute a broad-based conservation awareness campaign, aimed at imparting conservation values to civil society, local leaders and stakeholders in the eight pilot sites. The target audience will include local communities, *barangay* leaders, provincial and municipal planners and decision-makers, church leaders, school teachers and other key actors. The campaign will be designed following an in-depth appraisal of awareness needs within different stakeholders constituencies. Awareness materials will be designed specifically for each different target groups, field tested, and then adapted based on audience response. Messages will be communicated through a variety of media including local radio and newspapers. Monitoring information will also be shared with the public, to encourage more positive response by local actors, and further boost conservation efforts.

203. Finally, the project will support ongoing efforts on inter-LGU knowledge sharing, so that a systematic exchange can take place among LGUs, and facilitate the spread of good practices on mainstreaming. This will include cross visits and conduct of seminars and workshops on sharing on best practices and lessons learned among LGUs regarding their initiatives with their partners.

2.5 Key Indicators, Risks and Assumptions

204. The full set of project indicators are detailed in the Logical Framework – which is attached in Section II of this Project Document. Key indicators at the objective level are listed in Table 5 below:

Table 5. Indicators

Objectives/Outcomes	Indicators	Targets
Objective: To demonstrate how Local Government Units (LGUs), with enhanced capacities, and working with local and national partners, can plan and manage economic activities and growth in ways that meet landscape level biodiversity conservation and sustainable use objectives in critical biogeographic regions	Populations of at least three critically endangered species in three demonstration sites	No decline in populations of tamaraw in Siburan forests; Visayas hornbill in Central Panay Mountains and Northern Negros Natural Park; and Philippine eagle in Mt, Hamiguitan.
	Number of critically endangered and endangered endemic species in eight demonstration sites	No increase in the number of critically endangered and endangered endemic species in the eight demonstration sites.
	Extent of fragmentation in unprotected PAs/KBAs in eight demonstration sites	No net increase in fragmentation in 287,000 hectares of unprotected PAs/KBAs in eight demonstration sites
	Extent of remaining natural habitats within eight KBAs/PAs in five biogeographic regions	No net loss of remaining natural habitat covering at least 310,000 hectares in PAs and KBAs project sites
	Number of hectares in production landscape/waterscapes under	At least 10,000 hectares under sustainable management but not yet certified

Objectives/Outcomes	Indicators	Targets
	sustainable management	At least additional 800 hectares and eight production systems under certified production practices that meet sustainability and biodiversity standards

Table 6. Risks Facing the Project and Risk Mitigation Strategy

Risk	Rate	Mitigation strategy
Pressure for natural resource extraction and land-use conversion increases beyond the background rate	M	A common system-wide risk continues to be political pressure to allow mining, logging or other concessions within critical biodiversity areas, or for conversion of these areas for other land uses. During the proposed project, engagement with local communities will ensure that the link between local community development and sustainable management is maintained. At the national level, policy advice and advocacy will continue as part of the broader process of policy engagement for incorporating conservation considerations into resource extraction decision-making. The adoption of policy impact assessment on biodiversity will enable DA and DENR, including LGUs to ensure that future policies, plans and programs are screened for their impacts on biodiversity.
Sectoral agencies and institutions outside the agricultural sector will be unable to adequately incorporate biodiversity considerations into their systems and processes	M	All major sectoral institutions in the Philippines have sustainable use of natural resources as a part of their mandate. The barrier preventing them from fully achieving this mandate has been a lack of capacity, and a lack of incentives to prioritise conservation. By demonstrating to these line agencies (through the agricultural sector) that mainstreaming biodiversity conservation into their policies and decision-making is both feasible and cost-effective, the project will help to ensure that all relevant line institutions better manage the impact of their activities on the natural resource base.
Long-term climate change leads to changes in the biodiversity composition and resource value of critical biodiversity areas, reducing the value of conservation vs. exploitation	L	By strengthening the capacities of sectoral and local governance systems to clearly understand and assess the trade-offs between conservation and resource extraction, the project will help ensure that any future evolution of the natural resource base is identified and accounted for in decision-making. Existing key biodiversity areas may eventually decline in conservation value and their use may have to be reconsidered. Equally, other areas may become critical to conservation, e.g. if they become final refugia for important ecosystem types. By strengthening assessment and decision-making capacities, the project will ensure that governance systems are able to adapt to such changes and continue to aim for optimal tradeoffs.

2.6 Financial modality

205. The project will address the identified constraints through delivery of technical assistance. This type of financing is considered appropriate to develop systemic capacities in the agriculture and natural resources sectors to mainstream biodiversity considerations in their policy formulation, planning and program development, while at the same time fulfilling the agency mandates of enhancing food production, developing the agriculture sector, and sustainable utilization of natural resources. The barriers identified concern weak capacities, lack of support systems, and mechanisms for mainstreaming conservation objectives. These can all be addressed through the development of appropriate tools, methodologies, and testing these in key policies and programs of these Departments. These would require a high degree of technical inputs, as well as training of staff in their use.

206. The type of support is likewise considered to fit well with the identified constraint at the LGU level in terms of limited capacities and incentive structures to adopt sustainable production systems in the surrounding landscapes of PAs/KBAs. These can be addressed through the development and application of appropriate methodologies, and facilitating integrated resource management planning processes with stakeholders to develop and implement a consistent set of action to address the main threats to conservation and sustainable natural resources management. The identification of biodiversity-friendly opportunities is at its infant stage, and would require technical expertise in the assessment of viable options, including the development of other incentive systems such as development and testing of suitable cross LGUs fiscal transfer mechanisms for shared resources.

207. Finally, while activities related to directly addressing the threats to conservation in key ecosystems would require adequate amounts of investments, the means to achieve these will be through the development and testing of innovative approaches, such as conservation agreements, landscape level planning, establishment of new conservation areas, and identification and development of sustainable livelihood options. Provisions have been made to leverage with LGUs and other donors in terms of financing the investment aspects of the other complementary interventions. These include the KFW Project in Panay islands which seeks offers a combination of loan and grants to LGUs to support natural resources management projects; the potential support from the German Ministry of Environment (BMU) in Central Panay Mountains to address species conservation efforts, provide alternative livelihoods, and establish the CPM as a critical habitat; and investments from the WB-GEF MRDP to assist LGUs in improving natural resources management. There is still a significant requirement to develop the capacities of local communities and other local stakeholders in planning, monitoring, enforcement, and implementation of selected local conservation initiatives. The demonstration nature of the activities likewise renders the use of technical assistance appropriate in this case.

2.7 Cost effectiveness

208. The cost-effectiveness of this investment has been assessed against the alternative of attempting to achieve the same impact through existing conservation-mandated institutions and agencies (i.e. by ‘not mainstreaming’). Ensuring comparable conservation outcomes across the range of landscapes covered by the project would require significant additional investment in monitoring and enforcement capacities, i.e. EIA systems and regulatory structures across a vast number of local government units and regions. To achieve comparable impact on issues such as the trade in, and sustainable use of, agricultural biodiversity and wild plants and animals, core conservation organisations would have to establish a parallel enforcement and surveillance structure, which would be both prohibitive in cost as well as unfeasible in practice.

209. Achieving comparable conservation impact through the expansion of protected area systems would require a significant enlargement of the terrestrial and marine PA estate in the country. Even if this were feasible, the long-term sustainability of such a vast PA estate in the face of significant population growth and demand for land would be highly questionable.

210. The catalytic nature of support under the GEF intervention strengthens the cost effectiveness of the project. By focusing on national policy support, improving capacities and demonstration of these in selected areas, the potential for replication is high. As the demonstration areas prove the benefits of the GEF approach, it is expected that more LGUs will be encouraged to adopt/adapt such approaches. The enabling policies and capacities to be established at the national level will facilitate accelerated replication.

211. The design of the GEF alternative ensured that cost effectiveness is achieved. The support from the project is expected to result in the ability to leverage additional funding from a variety of sources. PES mechanisms are expected to raise financing from the private sector to provide compensation for local communities engaged in conservation. Community conservation agreements are also alternative mechanisms by which other resources will be raised to directly support priority development projects of participating local communities in exchange for agreed actions to contribute to biodiversity conservation. Finally, investments in biodiversity friendly business enterprises by the private sector are expected to be leveraged through incentives and technical assistance.

212. The cost-effectiveness of the GEF intervention is further strengthened by the significant financial resources being leveraged from project partners. The Government of the Philippines expects to contribute at least US\$ 10.26 million in resources (approximately 60%), both in-cash and in-kind. These resources are being mobilized from the various central Government agencies involved in the project (DENR, DA, DILG, DTI, etc.) as well as through support from the Local Government Units participating in the initiative. Significant support is also being provided by the coalition of NGOs supporting this initiative. Organizations such as Haribon International, CI Philippines and PBCFI have committed to provide direct and indirect support through both on-going programmes as well as through new resource commitments leveraged for the pilot demonstrations at the eight proposed sites. Additional commitments from UNDP and the private sector are also being secured.

2.8 Sustainability

213. Social sustainability: The Project will ensure that sufficient measures will be in place for consultations in the development of policies, procedures and systems to ensure acceptability by the affected sectors. Social assessments and development of social safeguard mechanisms will be integral to the project procedures, to ensure broad based support for the new policies and systems to be established, well beyond the Project life. Social sustainability will likewise be enhanced by directly involving the local communities, particularly in the demonstration sites, in the crafting of solutions to issues impeding the achievement of balanced conservation and economic development objectives. Gender concerns will be carefully taken into account through the integration of gender concerns in the assessment of biodiversity impacts of national and local policies, plans and programs.

214. Environmental sustainability: The Project will directly contribute to environmental sustainability through the range of interventions that will make sure that the activities in the production landscape are consistent with conservation objectives of PAs/KBAs. These will directly contribute to strengthening the environmental connectivity of key corridors, thereby ensuring that the habitat range of globally important species, particularly the local endemics, is protected. Overall, these initiatives will improve the ability of PAs/KBAs and surrounding watersheds to perform their vital ecosystem functions.

215. Financial sustainability: Project interventions are built around policy barrier removal and targeted capacity-building activities. Policy interventions are designed as one-off interventions which are not expected to require further support post-project. Capacity-building support to LGUs are designed to be mainstreamed into the programs of DENR, DA and DILG, thus ensuring that continued support becomes part of on-going Government programmes. The pilot demonstrations at site level are integrated into the programmes of the partner organizations responsible, and these partner organizations will continue supporting site activities as required post-project. The longer-term financial sustainability of the approaches being developed here will be ensured by integrating biodiversity concerns in sectoral policy and planning of agriculture and natural resources sectors. By positively influencing the activities of other actors namely: farmers engaged in unsustainable agriculture; local development planners and professionals at the LGU level; and investors; a high degree of long term efficiency will be achieved in the implementation of conservation efforts. Additional resources that are expected to be leveraged from the private sector through investments in biodiversity friendly business and payments for communities producing environmental services are expected to reinforce the Project's financial sustainability. Finally, it is expected that LGUs will increase their budget allocations for conservation agenda as LGUs begin to realize the benefits of mainstreaming biodiversity in their local economic growth strategies, thereby ensuring there is a continued source of financing.

216. Institutional sustainability: The Project will focus on established institutions as direct recipients of support. These include the planning departments of DA and DENR, and the LGUs. This way, these stakeholders will imbibe the incremental capacities introduced through the Project, and utilize these for the benefit of improved landscape management, and in promoting local economic growth.

2.9 Replicability

217. The GEF alternative has been designed to have strong elements of replication. The Project will target the policy, planning, and program development of agriculture and natural resources sectors which will have application not only in the demonstration sites but to the rest of the country as well, once proven successful through the pilots. By limiting the activities to selected demonstration sites, the Project is assured that adequate considerations are given to the time and resources required to complete the tests and document the processes and results. Through parallel support to building the capacities of LGUs in the demonstration sites, there is sufficient support to see through the successful implementation of the pilots. The design calls for the designation of these pilots as working models which can be used as platforms for widely promoting the approaches, through cross visits and exchanges with other sites. Integral to the design is a separate output which will manage such exchanges and promote replication to other LGUs. The support of DILG, the DA, DENR and DTI at the national level, will ensure that further improvements in enabling policies would be developed to strengthen the case for national adoption of the systems and tools for mainstreaming biodiversity at the LGU level. The development of guidelines and tool kits will reinforce this strategy, as these will make available, simple how to's and documentation of how the processes can be applied in similar situations.

2.10 Coordination with Relevant Programs

218. The present project builds upon the lessons learned from completed projects which were supported by GEF and other donors. These include:

- The WB/GEF supported Conservation of Priority Protected Areas in the Philippines (CPPAP) which was completed in 2002; which underscored the importance of incorporating the concerns of communities along the edges of KBAs to the success of conserving biodiversity;
- The EU supported National Integrated Protected Areas Project (NIPAP) which was completed in 2003, gave attention to the role played by LGUs in protected area planning and management; and
- The ongoing UNDP-GEF Samar Island Biodiversity Project continues to provide valuable lessons on the significance of mainstreaming biodiversity considerations in local development planning. The local policies adopted through the Local Legislative Councils (Sangguniang Bayan) effectively provided the mantle of protection to the entire PA and its surrounding landscape against incompatible economic activities such as logging and mining.

219. Experiences from the above projects underlie the importance of mainstreaming biodiversity in the economic activities of the surrounding production landscapes, the critical role the LGUs play in making this happen, and the need to have the necessary supporting policy frameworks and tools to enable the LGUs and local communities to achieve these objectives.

220. The Project will establish collaboration and coordination with other GEF projects to assimilate lessons learned and to develop synergies and complementarities. These include:

- The *Environment and Natural Resources Management Programme-Phase I*, the *Mindanao Rural Development Programme (Phase II – Coastal and Marine Ecosystem Conservation)* and the *Philippine Climate Change Adaptation Project (PHILCCAP)* implemented by the World Bank;
- The *Strengthening Coordination for Effective Environmental Management (STREEM)* and *Expanding and diversifying the national system of terrestrial Protected Areas* projects implemented by UNDP, and;
- The Asian Development Bank-supported *Integrated Natural Resources and Environmental Management Sector Development Program (INREM)*.

221. The World Bank-GEF supported ENRMP is an ongoing programme which seeks to develop key priority watershed sites in the Philippines using the ecosystem based management approach. These are the

Libmanan-Pulantuna Watershed in the Bicol region, Ligawasan Marsh in Mindanao, and the Southern Sierra Madre cluster. The project will complement this effort by expanding the coverage of the Sierra Madre corridor to include the Penablanca Protected Landscape and Seascapes and the Quirino Protected Landscape. The current project will closely coordinate with the NPS-ENRMP to ensure synergy of approach, and that the combined efforts will significantly contribute to the achievement of the objectives of the conservation of Sierra Madre Corridor; and the sustainable management of its surrounding production landscape.

222. Another WB-GEF Project, the Mindanao Rural Development Project, has related activities in natural resources management and biodiversity conservation. The main project is financed through US\$ 90 Million from the WB, with GEF financing of US \$ 6.5 Million. It operates in 225 municipalities in all of the 26 provinces in Mindanao and aims to institutionalize a decentralized system for agriculture and fisheries delivery that will promote participation, transparency, and accountability. The GEF will support participatory natural resources management planning and policy development; selective on the ground investments in coastal and marine sustainable land management practices; assistance in the development of sustainable income generating activities; strengthening community's environmental monitoring capabilities; and improving public awareness on biodiversity conservation. While there will be no overlap in the sites of GEF funded activities and the BPP, it is possible that the investment component may be undertaken in the BPP sites considering the demand driven nature of the LGU loan financing facility under the MRDP. During implementation, coordination will be established between the two projects to ensure there is regular exchange of experiences on successful approaches, and funding complementation is achieved. In light of the innovative nature of BPP and the active involvement of DA in its implementation; it is expected that the new tools that will be developed will find their way into other programs of the agency.

223. The WB-GEF project entitled Philippine Climate Change Adaptation Project (PHILCCAP), aims to demonstrate approaches that would enable targeted communities to adapt to the potential impacts of climate variability and change. This would be achieved by strengthening existing institutional frameworks for climate change adaptation, and by demonstrating cost-effective adaptation strategies in agriculture and natural resources management. The project is expected to increase communities' adaptive capacity²⁶ principally by improving: (a) farm management capability under conditions of climate risk; (b) access to information on weather forecasting and climate patterns; and (c) access to risk management options such as weather index insurance. Its primary beneficiaries include poor farmers whose livelihoods are often impacted by climate-related losses, and other vulnerable groups who depend on natural resources for their livelihoods. In Mindanao, its sites are Siargao islands, and Bukidnon. The BPP stands to benefit from the results of the PHILCCAP pilot so that cost effective approaches can be adapted to ensure appropriate mitigating measures are available to reduce the impacts of climate change and biodiversity. Coordination between the two projects will be strongly pursued during implementation.

224. The STREEM, another UNDP-GEF funded project, 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 outcomes 1 and 2 in strengthening national agencies and local governments in implementing key provisions of the CBD; and through outcome 3, in directly addressing the threats to biodiversity and sustainable management of agriculture and natural resources. Under the STREEM Project, the DA is also responsible for the focal area of land degradation. The BPP Project will add value to DA's efforts under the STREEM to update its NPAAD and develop its capacity to support LGUs in the identification of priority agricultural areas for development.

225. The newly approved UNDP-GEF Project – Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines, aims to recognize alternative governance types and establish new conservation areas managed by LGUs, IPs and local communities. The current project will benefit from the enabling policies and capacity building initiatives of the Expanding PAs project by providing the enabling policy for an expanded role of LGUs in the establishment of conservation areas, and in supporting mainstreaming efforts.

²⁶ Broadly defined, adaptive capacity is the ability to modify or change behavior so as to cope better with existing or anticipated external stresses (adapted from: W. Neil Adger, Nick Brroks, Graham Bentham, Maureen Agnew and Siri Eriksen: New Indicators of Vulnerability and Adaptive Capacity, Tyndall Centre for Climate Change Research, Technical Report 7, 2004). Footnote from PHILCCAP PID.

226. In addition, the project will support the flagship Coral Triangle Initiative, by strengthening the conservation of biodiversity within key landscapes and seascapes within the CTI. The project was originally designed to complement the Asian Development Bank's INREM, which is also a CTI program component. INREM will address other elements of sustainability in the productive landscape, including sustainable livelihoods and micro-enterprise development, infrastructure development, sustainable financing mechanisms and climate change adaptation and mitigation. Discussions held during preparation indicated that while it was not possible to operate on common sites, significant amount of complementation can be achieved. Specifically, both projects will:

- Strengthen the capacities of LGUs to undertake integrated river basin planning (in the case of INREM), and mainstream biodiversity in local development planning (in the case of BPP);
- Make use of the landscape/river basin approach to determine the sustainable land use and management regimes for the area, given the socio economic and biophysical conditions of the sites;
- Address the threats to biodiversity through: mainstreaming biodiversity in local development planning and investments by LGUs and determining sustainable agricultural practices (in the case of BPP); and development of appropriate management plans for protected areas within the identified URBs, and incorporating this in the broader plans and investment program for the URBs (in the case of INREM)

227. Areas where both BPP and INREM can work together during implementation include:

- Supporting the harmonization of national level policies aimed at strengthening the role of LGUs in mainstreaming biodiversity conservation and in providing greater responsibility over natural resources management
- Development of tools and capacities among LGUs and local partners to mainstream sustainable NRM and biodiversity in local development planning
- Formulation of appropriate LGU policies and local investment programs to support the objectives of biodiversity conservation and sustainable management of the surrounding landscape

Consultations were undertaken during the formulation of these two projects to ensure that there was no duplication of GEF-funded activities, particularly in regard to support provided to DENR.

228. Just as importantly, the project will leverage on-going collaborations between DENR and key conservation NGOs (Conservation International, Haribon Foundation, Foundation for the Philippine Environment, PhilConserve, FFI, etc.) on identifying and conserving key biodiversity areas in the Philippines. The collaboration between DENR, other involved Government agencies and this network of NGOs is the foundation for this project, and ensures that the diverse resources, experiences and networks of influence of each partner is harnessed for the common goal.

229. In recent months, UNDP secured grant approval in principle from the EU to develop financial incentives from commodity supply chains, to promote agricultural commodity production to support protected area systems, provide incentives for biodiversity compatible agricultural production, and influence bank policies to support biodiversity in their agricultural sector lending programmes. Envisaged to operate in three countries including the Philippines, the EU Project will work at the national level to influence policies, and provide specific support to demonstration sites. Close coordination will be made during the preparation of this proposed EU financed project, to achieve mutually beneficial outcomes.

230. At the site level, the project will collaborate with the ongoing KFW Project on Community Based Forestry and Mangrove Management in Central Panay, aimed at providing a mix of loans and grants to LGUs to support their local natural resources management initiatives. Discussions are also on going between PAWB and the GTZ to access the prospective support from the German Ministry of Environment (BMU) grant to protect critically endangered species in the Central Panay Mountain Range, and in efforts to declare

the site as critical habitat. Details of collaboration with DA on the MRDP on activities in Mindanao will also be developed during implementation.

231. 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.

2.11 Incremental Reasoning and Expected Global, National and Local Benefits

Incremental Reasoning

232. The project addresses three main barriers that constrain conservation of species assemblages and maintenance of ecosystem functions in production landscapes: (i) inadequate national level policies, systems and tools to encourage and support LGU landscape level biodiversity conservation efforts; (ii) weak LGU capacities and tools for mainstreaming biodiversity in landscape level management and local development planning; and (iii) failure to implement, through partnerships, effective solutions to mainstreaming biodiversity in KBAs/PAs and the surrounding landscapes. These three major barriers reinforce each other to block any progress at achieving adequate actions to arrest fragmentation, contributing to decline of globally important species through continued exposure to threats.

233. National level policies, systems and tools to support LGU landscape level biodiversity conservation efforts: In the baseline scenario, there will be slow progress in the implementation of policies mandating government agencies and LGUs in integrating biodiversity concerns into their work. Sectoral agencies, particularly DA and DENR, will continue to formulate policies, plans and programs without adequate assessment in terms of their impacts on biodiversity. Policy, plan and program development by key agencies such as DA and DENR will be mainly driven by production objectives without due regard to their locations and potential harmful effects on biodiversity. The result is uncoordinated policy and program implementation which impinges on PAs/KBAs.

234. Biodiversity-friendly practices will not be pursued more vigorously in the absence of a clear program promoting these practices in PA/KBAs and surrounding landscapes. The use of chemicals and exotic species will continue even in biodiversity corridors, thus endangering the species in adjacent PAs and KBAs. Cultivation and utilization of indigenous crops will not be promoted widely, thus contributing to their continued decline. Biodiversity-friendly standards and certification systems will not be developed, thus farmers and other producers will not have the incentives to shift to these practices. Overall, the economic benefits of engaging in biodiversity-friendly agricultural practices will not be realized, thus resulting in continued reliance on other productivity enhancing measures, such as fertilizers and pesticides, which are harmful to the environment. Combined with agricultural expansion in the fringes of PAs and KBAs, unsustainable agricultural practices will transform the landscape, thereby leaving only fragments of open spaces which will be detrimental to maintaining viable populations of important species.

235. Policies regarding investments in biodiversity business will not be in place, thus this sector will continue to be seen as a cost center, rather than being able to generate jobs, employment and sustainable income. The potential of private sector, which can command significant resources, to contribute to sustainability will not be harnessed.

236. Enforcement of policies and rules on illegal trade of wild plant and animal resources will continue to be weak, in the absence of clear identification for specimens which are authorized for trade, and lack of capacities of enforcement officers to identify species. The result is weak implementation of regulations, thus contributing to further unabated wildlife poaching and illegal trade.

237. Finally, in the absence of a national system for data and knowledge management, policy formulation and monitoring of biodiversity impacts of national sectoral policies on key sectors and PAs/KBAs will not be informed with sufficient data. LGUs and other actors will not have access to up to date information on the

status of biodiversity, which can guide their actions. Advocacy will be weak without sufficient data and information as evidence to back up the arguments for more biodiversity sensitive policies and programs.

238. LGU capacities and tools for mainstreaming biodiversity in landscape level management and local development planning: At the local level some gains will be made where local communities and LGUs are particularly receptive to sustainable approaches, but these gains risk being lost if and when local conditions change or political forces are realigned. In the absence of sufficient policies at the national level and support to building capacities, the efforts of LGUs in mainstreaming will be sporadic, and not linked to established systems by the national agencies. The scale of LGUs capacitated will not be enough to create a critical mass to sufficiently serve as models to other LGUs. Without the policy support of DILG, replication is expected to be slow, and will depend only on the personal agenda of local executives. Thus, the potential of LGUs, whose force number of some 2,000; and whose influence spans a range of permitting, regulatory, planning and investment functions, will not be tapped to support conservation objectives in important PAs/KBAs.

239. Without the policy support and technical expertise of national agencies, essential tools required for LGUs to integrate biodiversity in their own work will not be pursued, as their resource and capacities are limited in these fields.

240. Planning in PAs/KBAs will continue to be isolated from the broader landscape and territories of LGUs, thus resulting in serious potential land use conflicts. Between LGUs sharing PA/KBA boundaries, planning and development will continue to be uncoordinated in the absence of a common management framework and tools. LGU support to biodiversity friendly agricultural programs and investments will be weak, due to lack of technical expertise, and lack of support from the national agencies. The role of LGUs in regulation and enforcement of policies on wildlife trade will be less understood, and their participation will not be optimized. LGUs will not have access to data required to better plan and analyze the biodiversity impact of their local policies and plans. In the absence of support, dissemination and replication of best practices among LGUs will not be systematic, and will depend on the individual efforts of local officials.

241. Implementation, through partnerships, of effective solutions to mainstreaming biodiversity in KBAs/PAs and the surrounding landscapes: In the baseline case, local level initiatives through the work of various conservation NGOs, communities and some LGUs will continue. However, the national policies and technical support needed to ensure there is wider adoption and further development of mainstreaming approaches will be difficult to obtain, and will depend on the individual advocacies of organizations. Land use conflicts in PAs/KBAs and surrounding landscapes would continue, if not escalate, in the absence of clear examples of how solutions can be achieved through the application of certain tools. There will be limited involvement of farmers, local communities, private sector in promoting biodiversity-friendly agricultural practices and business opportunities in PAs/KBAs, in an environment of limited support and incentives for these initiatives. Local communities engaged in destructive activities will not be encouraged to shift to sustainable forms of economic activities in the absence of alternative livelihoods and financing mechanisms to compensate their conservation efforts.

242. In summary, the baseline scenario suggests that progress achieved through previous projects will not succeed in conserving globally significant biodiversity effectively due to gaps and inadequacies in the existing governance system. The site-level gains that have been achieved through the efforts of numerous conservation actors will not be sustained, as pressure from population growth and economic development erodes the commitment to conservation of scarce biodiversity resources.

243. In the absence of key interventions, the scenario is for fragmentation to continue its course, particularly in main biodiversity corridors, thus threatening species assemblages in these landscapes. Given the above, the likely result is that globally significant biodiversity resources in the Philippines will continue to be exposed to the threats of fragmentation. The natural habitats within PAs and associated KBAs will be decimated to such levels that these will be unable to support minimum viable populations of important species, thereby eventually leading to their extinction. Combined with the effects of climate change, it is also likely that new species will disappear even before they are discovered. The result is permanent loss of the world's important natural heritage; and the values associated with their sustainable use.

**Table 7. Comparison of Threatened Species in the IUCN List
2002 and 2009**

Taxonomic Group	2002				2009				Difference
	CR	EN	VU	Total	CR	EN	VU	Total	
Amphibians	7	6	10	23	1	15	32	48	25
Reptiles	3	4	1	8	5	14	16	35	27
Birds	12	13	42	67	13	12	42	67	0
Mammals	7	13	30	50	4	13	22	39	-11
TOTAL	29	36	83	148	23	54	112	189	41

244. The trends in question are shown in Table 7 in the increase in the number of threatened species over the period 2002-2009. The table shows that over a seven-year period, there was a total increase of species in the threatened list by 41 species. Threatened amphibians increased from 23 to 48 and reptiles from 8 to 35. Habitat loss and degradation, particularly due to deforestation and forest conversion to agriculture, are still seen as the primary threats to almost all species.

245. The effects of fragmentation on the ecosystem functions of PAs and KBAs are considered more severe in the face of extreme climate events. Serious degradation of forest cover has brought about heavy erosion, landslides and reduced ability to supply water for domestic, power and irrigation purposes. These changes have had direct effects on the lives of people situated in settlements surrounding these areas through effects on agricultural production, food security and the overall economy. If this situation continues, the result will be very high social and economic costs, which will prevent the Philippines from reaping continued benefits from its abundant natural resource base. These will affect more seriously highly vulnerable groups such as poor families situated within and the surrounding landscapes of these PAs and KBAs, in light of their dependence on the natural resource base for their well being and survival.

Expected global, national and local benefits

246. The global environmental objective of GEF support is to ensure that activities in the production landscape are consistent with the objective of conserving species assemblages and maintaining ecosystem functions. This will be achieved by demonstrating how Local Government Units (LGUs), with enhanced capacities, and working together with local and national partners, can plan and manage economic activities and growth in ways that meet landscape-level biodiversity conservation and sustainable use objectives in critical eco-regions.

247. The proposed alternative scenario will ensure that the numerous individual conservation efforts being made by the partners involved are integrated into a comprehensive strategy that addresses critical systemic barriers. By coordinating the efforts and resources of a coalition of partners and targeting these at specific systemic barriers, the alternative scenario will ensure that scarce resources available for biodiversity conservation are used most effectively. By removing barriers to sustainable use within local governance and demonstrating the integration of conservation and sustainable development on the ground, the alternative scenario unleashes the economic and political resources of key governance actors in favour of conservation, thereby significantly increasing the impact of the GEF investment.

248. By the end of the project, conservation efforts in the Philippines will have been strengthened through the development of systemic and institutional capacities in mainstreaming biodiversity considerations into the policies, plans and programs of key sectors, particularly, in agriculture and natural resources. At the LGU levels, sufficient capacities will likewise be strengthened through such entry points as integrated resource and spatial planning, evaluation of development projects, and in the development of investment plans which favour biodiversity friendly agricultural production systems. These capacities are expected to manifest, in

conjunction with other actions directed at addressing the threats; in reduced degradation and habitat fragmentation in at least 700,000 hectares of KBAs and their surrounding landscapes.

249. The development and application of tools which promote integration of biodiversity considerations in local development planning will help approximately 20 LGUs to assess their development plans and projects against their possible impacts on biodiversity and make decisions according to the results of these assessments. Assistance to LGUs is likewise expected to result in a 200% increase in LGU expenditures for biodiversity production and investments. Promotion of integrated landscape and seascape development planning is also expected to result in effective natural resource regulation in at least three jointly managed resources. While these numbers are modest, the replication effect of these models is expected to be high, particularly since parallel support will be provided to ensure the lessons learned by LGU partners feed back into the development of policies and systems at the national level.

250. The direct benefit of GEF will be reduction in threats to biodiversity across 10,000 sq km of landscapes in five biogeographic regions in the Philippines, harboring important KBAs. These regions are: Luzon, Mindoro, Negros Panay, Palawan, and Mindanao. Three sites are located in the three identified biodiversity corridors in the Philippines, namely: Sierra Madre, Palawan, and Eastern Mindanao. The impacts include: no net loss of natural habitats within the PAs and KBAs covering 310,000 hectares; no net increase in fragmentation in 287,000 hectares of unprotected PAs/KBAs in the production landscapes and the establishment of three new conservation areas in at least 15 LGUs and at least three transboundary conservation areas.

251. Global benefits from the above outcomes will translate into improved viability of species assemblages found in these landscapes. In species terms, this translates into the protection of 99 threatened species of amphibians, reptiles, birds and mammals (see Table 8). Of these, 93 species are endemic and 6 are non-endemic. This represents 52% of all the 189 threatened species listed for the Phils. (IUCN 2009).

Table 8: Threatened species to be protected in BPP sites

IUCN Category	Number	Total Listed for the Philippines	Percent of Total Philippines	Distribution
Critically endangered	10	23	43 %	Palawan endemic (1) Luzon endemic (1) Mindoro endemic (3) Negros Panay endemic (3) Philippine ²⁷ endemic (2)
Endangered	20	54	37%	Luzon endemic (1) Palawan (1) Mindoro endemic (3) Negros Panay endemic (4) Negros endemic (1) Panay endemic (4) Philippine endemic (4) Non endemics (2)
Vulnerable	69	112	62%	Luzon endemic (8) Palawan endemic (8) Mindoro endemic (10) Negros Panay endemic (2) Philippine endemics (34) Site endemic (3) – all lizards from Central Panay Mountains Non endemics (4)

²⁷ Can be found in more than one island

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252. Part of the global benefit includes the protection of some 195 endemic species that are not threatened. These include 37 near threatened species, and six single site endemics (2 species of fish from Lake Mainit; 1 gecko from Quirino; 1 bat from Mt. Siburan, and 2 small non Volant mammals from Mt. Hamiguitan).

Summary of costs

253. The total cost of the project, including co-funding and GEF funds, amounts to US\$ 16,964,461. Of this total, co-funding constitutes 73 % or US\$ 12,464,461. GEF financing comprises the remaining 27 % of the total, or US\$ 4,500,000.

3. Project results framework

This Project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: 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					
Country Programme Outcome Indicators: Number of inconsistent environment and natural resources policies harmonized/ standardized; Number of ENR issues resolved/addressed favorably with consensus in shortened period of time vs. baseline; Number of sectoral policy gaps addressed through legal issuances; Development plans at national and local levels with enhanced ENR/sustainable energy/sustainable development focus; Multilateral Environmental Agreements (MEA) commitments complied					
Primary applicable Key Environment and Sustainable Development Key Result Area : Mainstreaming environment and energy					
Applicable GEF Strategic Objective and Program: BD-SO2; SP4 To mainstream biodiversity conservation in production landscapes/seascapes and sectors Strategic Program under Strategic Objective Two: Strengthening the policy and regulatory framework for mainstreaming biodiversity					
Applicable GEF Expected Outcomes: Policy and regulatory frameworks governing sectors outside the environment sector incorporate measures to conserve and sustainably use biodiversity					
Applicable GEF Outcome Indicators: The degree to which policies and regulations governing sectoral activities include measures to conserve and sustainably use biodiversity as measured through the GEF tracking tool					
Project Strategy	Objectively verifiable Indicators	Baseline	Target	Sources of Verification	Risks and Assumptions
Objective: To demonstrate how Local Government Units (LGUs), with enhanced capacities, and working together with local and national partners, can plan and manage economic activities and growth in ways that meet landscape-level biodiversity conservation and sustainable use objectives in critical biogeographic regions	Populations of at least three critically endangered species in three demonstration sites	Expected to decrease by at least 10% by end-project	No decline in populations of tamaraw in Siburan forests; Visayan hornbill in Central Panay and NNNP; and Philippine eagle in Mt. Hamiguitan	Baseline and end of project population assessments by DENR.	Climate change will not cause drastic reductions in populations of critically endangered species
	Extent of habitat fragmentation in unprotected PAs/KBAs in eight demonstration sites	Expected to increase by at least 10% by end-project	No net increase in fragmentation in 287,000 hectares of unprotected PAs/KBAs in eight demonstration sites	Satellite imagery in year 1 and year 6 BMS Reports	No natural disasters will occur in project sites that will result in large scale fragmentation
	Extent of remaining natural habitat within PAs in five biogeographic regions	Expected to decrease by at least 10% in PAs in project sites by end-project.	No net loss of remaining natural habitat covering at least 310,000 hectares in PAs within project sites	Satellite imagery in year 1 and year 6 Spot checks of vulnerable areas	No major natural disasters will occur in Project sites that will severely damage natural habitats
	Number of hectares in production landscapes/ waterscapes under sustainable management	No increase during the period	At least additional 10,000 hectares under sustainable management but not yet certified At least additional 800 hectares and 8 production systems under certified	GEF Tracking Tool on mainstreaming in biodiversity in production landscapes and seascapes	There will be sufficient market demand for certified products to create parallel incentives to produce these goods

			production practices that meet sustainability and biodiversity standards		
Outcome 1: National-level systems, policies, tools and capacities are in place to support LGU-level biodiversity conservation efforts	Agencies with policies and associated capacity to conduct biodiversity impact assessment of sectoral policies and plans	None	DA and DENR are routinely conducting biodiversity impact assessments of sectoral policies and plans by year 4.	Policy issuances by DA and DENR (Department Administrative Orders) Biodiversity impact assessment tools and guidelines Biodiversity impact assessment reports of new policies and plans prepared by agency staff	There will be continuing commitment by agency partners to apply biodiversity impact assessment policies and tools in agency wide work
	Programmes and policies to support biodiversity friendly agricultural production in critical landscapes	No agrobiodiversity programs in AFMA plan National Action Plan for Sustainable Land management (NAP-SLM) do not include agrobiodiversity projects in buffer zones of PAs and KBAs Standards and certification schemes limited to organic agricultural production Activities to promote conservation and utilization of indigenous crops	Updated AFMA Plan incorporates agrobiodiversity programs. Revised NAP-SLM includes agrobiodiversity projects in buffer zones of PAs or KBAs. Standards and certification system for biodiversity friendly production systems in place Policy and program developed in DA to promote conservation and utilization of indigenous crops	Updated AFMA Plan Revised NAP-SLM Revised standards and certification system at BFAPS for biodiversity friendly agricultural production systems DA Department Order on conservation and utilization of indigenous crops	Implementation of the BPP project takes place before the updating of the development plans of target partner organizations.
	Systems and procedures for implementation of new regulations of trade in	Department Order issued	System established for surveillance, monitoring, and mapping the sources of illegally traded wild	Project reports	

	wild plant and animal resources		plants and animals		
	Policies to encourage investments in biodiversity friendly business	None	Policy in place at DTI Priority biodiversity business identified in DTI policy documents.	Department regulations on biodiversity friendly investments	
	National biodiversity information system	PAWB biodiversity information system has limited data and information that can be shared with LGUs, conservation NGOs and other development agencies.	A Knowledge Management System established at PAWB with computerized data storage and retrieval system that can be accessed on-line by LGUs, conservation NGOs and other development agencies.	Project reports on system development report and test runs. MOA on networking signed among cooperating organizations.	NGOs and other development agencies would be willing to share their data and information.
Outcome 2 : LGUs encompassing at least 1.6 Million hectares in five biogeographic regions have the tools and capacities to integrate sustainable management into decentralized government structures	LGUs with tools and capacities for mainstreaming biodiversity in local development policy making, planning, budgeting and M and E systems	Nil	A comprehensive suite of tools and associated capacity-building support for mainstreaming biodiversity available to LGUs in the target regions by year 3.	Project Reports	LGU Executives will have sufficient commitment to negate pressures from other interest groups to ignore implementation of local policies and tools
	LGUs with toolkits and implementation capacity for application of SEAs, as well as landscape level natural resource management, across multiple and individual LGUs	Nil	Tools developed and 20% of LGUs in project sites trained in SEAs and landscape level natural resources management User friendly manuals for transboundary resource management planning developed and and 20% of LGUs trained in their use DILG Memorandum Order prescribing planning guidelines and SEA approaches	Procedural Manuals Project Reports	The BPP will be implemented in time for updating of LGU CLUPs
	LGU development	Only LGUs in NNNP and	200% increase in overall	Project accomplishment and	LGUs will continue to make

	<p>expenditures for identifiably BD-friendly programmes and investments.</p>	<p>Malampaya have annual budget allocations for biodiversity friendly projects amounting to US \$ 55,562</p> <p>Other LGUs in the project sites do not have regular budget allotment to support biodiversity conservation</p> <p>Budget support to biodiversity related initiatives is negligible and sporadic.</p>	<p>LGU development expenditures for biodiversity friendly programmes and investments</p> <p>At least 3 LGUs in each biogeographic region have budget allocations for biodiversity conservation by end-project</p>	<p>M&E reports.</p> <p>Copy of annual budget and expenditure reports.</p>	<p>conservation programs a priority despite changes in local leadership following elections</p>
	<p>LGUs in critical biogeographic regions with policy framework and technical capacity to support biodiversity friendly agricultural practices</p>	<p>Nil</p>	<p>20% of LGUs with local ordinances and programs adopting biodiversity friendly agricultural practices</p> <p>20% of LGUs with staff trained in promoting BD friendly agricultural practices</p> <p>20% increase in LGU budgets for biodiversity friendly agricultural programs</p>	<p>Project reports</p> <p>Training reports</p> <p>M and E reports</p>	
	<p>LGUs in critical biogeographic regions with local regulations and capacity to implement policies on wildlife trade</p>	<p>Nil</p>	<p>10 LGUs with local Ordinances to support regulation of local endemics</p> <p>10 LGUs with staff trained on policies and procedures governing wildlife trade</p> <p>Local coordinating bodies established with DENR,</p>	<p>Local Ordinances passed by Municipal/Provincial Councils</p> <p>Training reports</p> <p>Memorandum of Agreements between LGUs, local DENR,</p>	

			wildlife enforcement agents and volunteers to strengthen regulation of wildlife trade	Bureau of Customs, and Volunteer Groups	
	LGUs with regulatory structures and incentive systems to encourage the development of biodiversity-friendly businesses, including investor codes of conduct	Nil	10 LGUs in project sites with regulatory structures, incentive systems, investor codes of conduct and programs and budgets promoting BD-friendly business.	Local Ordinance approved by Municipal/Provincial Councils Municipal/Provincial Investment Programs Published LGU investor codes of conduct	Budget increase will be supported by the LGU Councils.
	Mechanisms and capacities for intra LGU knowledge sharing on mainstreaming biodiversity	Mechanisms exist for intra LGU sharing on environment programs and performance but not on biodiversity	Mechanism and network established to regularly share lessons on mainstreaming biodiversity New national policy proposals formulated/approved based on lessons from LGUs/project sites Improved capacity by LGUs to advocate improved policies	Project reports Copies of proposals LGU resolutions supporting national policies to strengthen mainstreaming of biodiversity in other sectors	LGUs and other local partners are willing to share their data and information
Outcome 3: Systems, policies, tools and capacities for landscape-level biodiversity conservation and sustainable development are applied at eight pilot sites covering at least 700,000 hectares across five critical	LGU development plans at project sites complying with SEA approach, as well as landscape level natural resources management	LGUs do not apply SEAs in local development planning PA management plans and FLUPs not integrated in CLUPs	At least 20% of LGUs in the project sites apply SEA in their development planning. At least 20% of LGUs in the project sites integrate biodiversity conservation zoning (PA or KBA zoning) in their CLUP.	Project accomplishment reports. Copy of CLUPs integrating PA/KBA plans Number of planning staffs trained on SEA and integration of zoning. Copy of manuals on toolkits developed.	

biogeographic regions (Luzon, Palawan, Negros-Panay, Mindoro, Mindanao). ²⁸	Inter LGU cooperation in planning and regulation of natural resource use	<p>Municipal and City LGUs plan separately and do not coordinate and harmonize their plans.</p> <p>Provincial Land Use Committees oversee and approves municipal and city land use plans.</p> <p>LGUs within PAs or KBAs do not jointly adopt any economic PES instruments</p>	<p>At least two transboundary conservation areas established</p> <p>LGUs in the project sites (at least 3 jointly managed landscapes) harmonize their development plans for natural resource use in biodiversity landscapes that cut across their administrative boundaries.</p> <p>LGUs in the project sites sharing PA or KBA areas jointly adopt resource planning tools such as FLUP, ICRMP, ecological zoning.</p> <p>At least 3 Provincial CLUPs in the project sites adopt the planning tools for biodiversity conservation.</p> <p>PES instrument developed and tested in at least one biodiversity landscape.</p>	<p>LGU Resolutions declaring transboundary conservation areas</p> <p>PAWB records of new transboundary PAs/KBAs established</p> <p>Joint management plans for transboundary PAs/KBAs</p> <p>Project accomplishment report.</p> <p>Copy of the harmonized development plans.</p> <p>Training reports on the application of planning tools such as FLUP, ICRMP and ecological zoning for LGUs</p> <p>Copy of PES and MOA among LGUs sharing the PA or KBA landscape.</p>	<p>There will be agreements among LGU Executives and stakeholders of individual LGUs to establish transboundary PAs/KBAs</p> <p>Stakeholders will not oppose PES.</p>
	New conservation areas established	None	Three new conservation areas established covering 15 LGUs	<p>LGU Resolutions declaring new conservation areas</p> <p>PAWB records of new conservation areas established</p> <p>Management plans for new conservation areas</p>	LGU Councils will approve the establishment of new conservation areas

²⁸Partners: FFI, Haribon Foundation, , CI Philippines, Philippine Eagle Foundation, Philippine Biodiversity Conservation Foundation, and Lake Mainit Development Alliance.

	Farmers adopting biodiversity friendly practices	No increase over project period	At least 5,000 farmers adopting biodiversity friendly agricultural practices Additional 2,000 farmers and producers meeting certification standards	Provincial/Municipal Agricultural Office reports Project reports OCCP and third party certification system reports Provincial/Municipal Agricultural Office reports on Community Guarantee System	Exposure of farmers to climate change risks will not counterbalance the gains from adopting biodiversity friendly agricultural practices
	Pressures from overharvesting of wild resources	Expected to increase over total area of KBAs/PAs in project sites by 10% each year	Pressure reduced in PAs totaling at least 260,000 hectares No net reduction in population of key species in selected sites (e.g., hornbill, Philippine eagle, etc.)	Biodiversity monitoring reports Population studies of key species in selected sites	
	Private investments in biodiversity friendly business in selected project sites	Nil	At least four businesses engaged in biodiversity-friendly enterprises in project sites by year 5. At least four producer groups in PAs/KBAs adhere to LGU investor codes of conduct	LGU Annual Reports on investment flows LGU Monitoring reports on investments	There will be sufficient interest and financing from the private sector to invest, given the incentives
	Communities receiving incentives for shifting to sustainable practices	Nil	Conservation agreements in place with at least two community groups in CPM and NNNP PES schemes negotiated with two more community groups in other sites in PPLS and NNNP 10 communities engaged in sustainable livelihoods	Agreements between communities and financing organizations Monitoring reports by facilitating NGOs Regular project reports/LGU MENRO and DENR CENRO reports	

	<p>Data and knowledge management systems to support local initiatives</p>	<p>Some LGUs have isolated data and knowledge management systems but not linked to national system</p> <p>Insufficient data to adequately monitor status and trends in biodiversity and impacts of development programs</p>	<p>Rapid resource assessments completed/updated in eight project sites</p> <p>Population estimates of critically endangered species in eight sites determined</p> <p>Monitoring system in place to determine progress in meeting conservation plan objectives, linked to knowledge management system</p> <p>Increased public awareness and positive support to conservation efforts among local stakeholders</p> <p>LGU level data and knowledge management system enhanced LGU staff trained in use of data and knowledge management system</p> <p>LGUs able to access and share data and information in national system</p>	<p>Copies of assessment reports</p> <p>Reports on population estimates</p> <p>Monitoring reports</p> <p>IEC campaigns, statements of support from stakeholders, additional organizations supporting conservation efforts in PAs/KBA sites</p> <p>Training reports</p> <p>Project reports on use of national data and knowledge management system</p>	
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Total budget and workplan

Award ID: 00059793												
Award Title : Partnerships for Biodiversity Conservation												
Project ID : 00074945												
Project Title: Partnerships for Biodiversity Conservation: Mainstreaming in Local Agricultural Landscapes												
Executing Agency: UNDP												
GEF Outcome/Atlas Activity	Responsible Party (IA)	Source of Funds	Atlas Budget Account Code	Input	Amount (USD) Year 1	Amount (USD) Year 2	Amount (USD) Year 3	Amount (USD) Year 4	Amount (USD) Year 5	Amount (USD) Year 6	Total USD	Budget Notes
Outcome 1		GEF	71200	International Consultants	\$0	\$12,000	\$0	\$0	\$0	\$0	\$12,000	1
		GEF	71300	Local Consultants	\$26,688	\$21,684	\$16,680	\$16,680	\$10,008	\$5,004	\$96,744	2
		GEF	72100	Contractual Services	\$54,663	\$49,338	\$65,177	\$30,065	\$28,713	\$29,099	\$257,055	3
		GEF	72200	Equipment & Furniture	\$24,000	\$25,000	\$0	\$0	\$0	\$0	\$49,000	4
		GEF	71600	Travel	\$11,880	\$17,656	\$10,320	\$15,000	\$5,400	\$4,710	\$64,966	5
		GEF	72400	Communications & Audio Visual Equipment	\$360	\$720	\$720	\$720	\$720	\$360	\$3,600	6
		GEF	74200	Audio-Visual & Printing Production Costs	\$18,000	\$16,250	\$0	\$20,000	\$0	\$0	\$54,250	7
		GEF	75700	Training, Workshops and Conferences	\$43,440	\$41,480	\$31,080	\$23,880	\$480	\$240	\$140,600	8
		GEF	72500	Supplies	\$240	\$480	\$480	\$480	\$480	\$240	\$2,400	9
				Total Outcome 1	\$179,271	\$184,608	\$124,457	\$106,825	\$45,801	\$39,653	\$680,615	
Outcome 2		GEF	71200	International Consultants	\$0	\$12,000	\$0	\$0	\$0	\$0	\$12,000	10
		GEF	71300	Local Consultants	\$0	\$49,206	\$16,680	\$2,502	\$0	\$0	\$68,388	11
		GEF	72100	Contractual Services	\$6,728	\$82,464	\$12,464	\$12,464	\$12,464	\$6,728	\$133,312	12
		GEF	71600	Travel	\$1,080	\$10,148	\$18,308	\$10,148	\$10,148	\$3,480	\$53,312	13
		GEF	72400	Communications & Audio Visual Equipment	\$540	\$1,080	\$1,080	\$1,080	\$1,080	\$540	\$5,400	14

	GEF	74200	Audio-Visual & Printing Production Costs	\$12,700	\$5,000	\$6,000	\$5,000	\$5,000	\$5,000	\$38,700	15
	GEF	75700	Training, Workshops and Conferences	\$13,960	\$129,500	\$57,920	\$12,942	\$9,342	\$420	\$224,084	16
	GEF	72500	Supplies	\$360	\$720	\$720	\$720	\$720	\$360	\$3,600	17
			Total Outcome 2	\$35,368	\$290,118	\$113,172	\$44,856	\$38,754	\$16,528	\$538,796	
Outcome 3	GEF	72100	Contractual Services	\$541,143	\$679,892	\$682,410	\$230,688	\$273,800	\$419,592	\$2,827,525	18
	GEF	71600	Travel	\$1,260	\$2,520	\$2,520	\$2,520	\$2,520	\$1,260	\$12,600	19
	GEF	72400	Communications & Audio Visual Equipment	\$630	\$1,260	\$1,260	\$1,260	\$1,260	\$630	\$6,300	20
	GEF	75700	Training, Workshops and Conferences	\$420	\$780	\$780	\$780	\$780	\$458	\$3,998	21
	GEF	72500	Supplies	\$420	\$840	\$840	\$840	\$840	\$420	\$4,200	22
			Total Outcome 3	\$543,873	\$685,292	\$687,810	\$236,088	\$279,200	\$422,360	\$2,854,623	
Project Management	GEF	71200	International Consultants	\$0	\$0	\$30,000	\$0	\$0	\$30,000	\$60,000	23
	GEF	71300	Local Consultants	\$0	\$0	\$30,000	\$0	\$0	\$30,000	\$60,000	24
	GEF	72100	Contractual Services	\$30,732	\$30,732	\$30,732	\$30,732	\$30,732	\$30,732	\$184,392	25
	GEF	74100	Professional Services	\$0	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000	26
	GEF	72200	Equipment & Furniture	\$32,500	\$7,500	\$0	\$0	\$0	\$0	\$40,000	27
	GEF	74200	Audio-Visual & Printing Production Costs	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$6,000	28
	GEF	75700	Training, Workshops and Conferences	\$21,000	\$6,000	\$6,000	\$6,000	\$6,000	\$5,574	\$50,574	29
			Total Project Management	\$85,232	\$50,232	\$102,732	\$42,732	\$42,732	\$102,306	\$425,966	
Summary by Outcome			Outcome 1	\$179,271	\$184,608	\$124,457	\$106,825	\$45,801	\$39,653	\$680,615	
			Outcome 2	\$35,368	\$290,118	\$113,172	\$44,856	\$38,754	\$16,528	\$538,796	
			Outcome 3	\$543,873	\$685,292	\$687,810	\$236,088	\$279,200	\$422,360	\$2,854,623	
			Project Management	\$85,232	\$50,232	\$102,732	\$42,732	\$42,732	\$102,306	\$425,966	
			TOTAL	\$843,744	\$1,210,250	\$1,028,171	\$430,501	\$406,487	\$580,847	\$4,500,000	

Draft
April 25

Budget Notes:

Outcome 1:

1. International Consultancy inputs (\$12,000 consisting of 4 weeks at the rate of \$3,000 per week)

- Biodiversity Business Specialist to review existing policies on investments in environment; provide GoP with high level advise on international best practices in biodiversity business; in coordination with DTI and DENR, identify potential biodiversity business and incentives; examine potential of international best practice financing schemes to promote investments in biodiversity business; prepare draft policy paper for consideration by government; and prepare recommended actions to establish appropriate enabling environment for promoting biodiversity business in the Philippines

2. Local consultancy inputs (\$96,744 consisting of 116 weeks at the rate of \$834 per week)

- Senior Policy and Institutional Development Specialist to develop frameworks and indicators for assessing and monitoring the impacts of policies and programs of DA and DENR on biodiversity; review and evaluate existing SEA models and related; prepare guidelines and manuals on customized policy impact assessment tools such as modified SEAs; assist agency counterparts in preparing the implementation plan for the mainstreaming of policy impact assessment tools in the policies, plans and programs; assist agency counterparts in consultations with stakeholders on the adoption and application of framework, indicators and policy impact assessment tools; assist agencies in developing mechanisms for institutionalizing policy impact assessment tools; and serve as resource person in the training of representatives from national partner agencies (Output 1.1; 9 person weeks; \$7,506)
- Training Specialist to Conduct surveys and training needs assessment of target trainees from DENR and partner organizations; prepare reports on training surveys and assessment results; prepare training designs and programs in consultation with the other technical consultants; assist in the development of training materials based on the inputs of the other technical consultants; pre-test training materials and improve design and content; conduct and manage training sessions on the use of tools; develop tools for evaluating impacts of training programs and other capacity building programs of BPP, and train counterparts in the use of these tools; and assist PAWB in the conduct of biodiversity mainstreaming workshops together with other technical consultants. (Output 1.1; 9 person weeks; \$7,506)
- Environmental Planning Specialist to assist DENR agencies and national partner organizations in mainstreaming biodiversity conservation into their development plans and programs; assist partner organizations in the updating of their development plans and programs with biodiversity integrated therein; prepare training modules and serve as resource person in the training of DENR and partner organizations on the use of policy impact assessment tools; work with the Policy and Institutional Development Specialist on the preparation of the SEA guidelines and manual; coordinate with PAWB staff in the implementation of the mainstreaming activities with national partner agencies; prepare pre-test training modules and evaluate results; and conduct training on the use of SEA and related policy impact assessment tools. (Output 1.1; 4 person weeks; \$3,336)
- Environmental Legal Specialist to review the status of implementation of wildlife law enforcement initiatives in the country; identify the scope of LGU participation in the implementation and enforcement of wildlife regulations; prepare guidelines on the issuance of the DENR and LGUs of relevant administrative orders, circulars, and local ordinances; and assist DENR-PAWB in establishing a system to provide support to partner agencies on wildlife law enforcement particularly in the areas of information, education, monitoring and reporting (Outcome 1.3; 16 person weeks; \$13,344)
- Biodiversity Business Specialist to review opportunities for biodiversity business and analyze the constraints to investments; coordinate with DTI and assist in enhancement of policies to encourage investments in biodiversity business; assist in formulation of draft policies and assist DTI in consultations; and assist DTI in development of actions to communicate the policies and in linking with private sector. (Outcome 1.4; 4 person weeks; \$3,336)
- Knowledge Management Specialist to prepare the design and architecture of the KMS and its

subsystems; formulate the implementation plan for the KMS; review of existing information systems of the DENR and national partner agencies and LGUs such as PAWB's Philippine Clearing House Mechanism, DILG's LGPMS; study and identify potential linkages and sharing of information with partner organizations; conduct workshops and meeting with DENR and partner agencies on the initial design of the KMS; work with the System's Programmer in the development of the design of the KMS; conduct surveys and detailed studies on the networking of KMS with other existing information system of DENR and partner agencies and LGUs in the project sites; prepare operational guidelines in linking up biodiversity M&E with LGUs of project sites; pilot test the KMS and determine design improvements; conduct documentation of KMS with the System Analyst and Programmer; develop and pilot test biodiversity M&E system; and conduct training of users of KMS and biodiversity M&E from DENR and partner agencies. (Outcome 1.5; 26 weeks; \$21,684)

- System Analyst & Programmer to conduct configuration studies of the related existing information systems of DENR and partner national agencies and the LGUs; Provide specifications of hardware and software needed for the KMS; set-up the KMS system; Develop systems and procedures for the KMS; translate the design of the KMS into machine language (prepare programs); develop the data base structure and programs for the information system; prepare programs to link the KMS data base with the M&E system and data base; prepare systems and procedures manual; pilot test the systems and improve programs; populate the KMS with support from the BPP-hired support staff and the regular staff of PAWB; provide hands-on training to PAWB counterparts (data manager and systems analyst and programmer; conduct consultation and validation workshops with the KMS users and technical personnel of DENR and partner agencies; and prepare system and program documentation. (Outcome 1.5; 26 weeks; \$21,684)
- Monitoring & Evaluation Specialist to develop the indicator system for biodiversity monitoring and impact assessment; prepare system and procedural manual; develop the data base with the KMS and System Programmer; conduct detailed studies on the institutional capacity of partner agencies and LGUs on M&E; survey, assess and evaluate existing M&E system of partner agencies and LGUs in project sites; establish the physical set up and data base configuration of the M&E in consultation with the System Programmer and KMS; conduct consultation and validation workshops on the M&E design; conduct pilot testing of M&E system; analyze results of pilot testing and improve the system and procedures for data collection, analysis and reporting; and prepare documentation report on the M&E system and procedures. (Outcome 1.5; 22 weeks; \$18,348)

3. Contractual Services - \$257,055 has been budgeted to be allocated as follows:

- Copy Editor for the SEA manuals and frameworks (Output 1.1; \$3,336)
- Measurement of Indicators for Project Purpose and Objectives for Project Management (\$20,000)
- Contract of services with the Bureau of Agricultural Research of the Department of Agriculture to provide national-level policy, program and technical support to biodiversity-friendly agricultural practices (Outcome 1.2; \$170,351)
- Development of Wildlife Identification Code System (firm) (Output 1.3; \$5,000)
- Biologist to provide technical guidance in the enhancement of national-level system for the regulation of trade in wild plant and animal resource (Output 1.3; 48 weeks; \$16,032)
- Knowledge Management, M& E and database & information staff will be hired as project support staff (Outcome 1.5; 74 weeks; \$42,336)
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4. Equipment & Furniture - \$49,000 has been budgeted under this outcome for office equipment for the Implementing Partner (PAWB-DENR) and purchase of wildlife tagging equipment.

5. Travel - \$64,936 has been budgeted under this outcome for economy class travel of local consultants, facilitators and project staff, including participants in the trainings to be conducted on wildlife tagging & enforcement.

6. Communications & Audio Visual Equipment - \$3,600 has been budgeted under this outcome for mobile and data landline charges.
7. Audio Visual & Printing Production Costs – A total of \$54,250 has been budgeted to cover printing cost of the following:
 - Biodiversity Impact Assessment and Monitoring Framework Indicators(Output 1.1; \$2,500)
 - Institutionalization Strategies and Guidelines for Mainstreaming Biodiversity Conservation into DA & DILG Plans & Programs (Output 1.1; \$2,500)
 - Strategic Environmental Assessment (SEA Manual) (Output 1.1; \$1,250)
 - Wildlife Marking & Tagging Manual (Output 1.3; \$10,000)
 - Wildlife Law Enforcement Manual (Output 1.3; \$10,000)
 - Field Guide on the Identification of Wildlife Species (Output 1.3; \$10,000)
 - Wildlife Management System Manual (Output 1.5; \$6,000)
 - M & E Indicators System & Operations Manual (Output 1.5; \$6,000)
 - Networking System Guidelines & Procedures (Output 1.5; \$6,000)
8. Training, Workshops and Conferences – A total of \$140,600 has been budgeted for training and capacity-development activities, including the following:
 - Application of Framework and Indicators (Output 1.1; \$6,000)
 - SEA Application (Output 1.1; \$30,000)
 - Integration of biodiversity concerns in the AFMA (Output 1.1; \$4,800)
 - Integration of biodiversity concerns in the NAP-SLM, SAFDC/NPAAD and LGPMS (Output 1.1; \$2,400)
 - Wildlife tagging/marking (Output 1.3; \$16,200)
 - Wildlife law enforcement (Output 1.3; \$21,600)
 - Wildlife law enforcement summit (Output 1.3; \$12,000)
 - Community identification of biodiversity-friendly business opportunities (Outcome 1.4; \$8,000)
 - KMS development (Outcome 1.5; \$10,800)
 - M & E development (Outcome 1.5; \$14,400)
 - Networking and lessons learned (Outcome 1.5; \$10,800)
 - KMS training (Outcome 1.5; \$3,600)
9. Supplies - A total of US \$ 2,400 has been allocated for this outcome for the provision of supplies needed in the conduct of different activities identified in the different outputs.

Outcome 2:

10. International Consultancy inputs (\$12,000 consisting of 4 weeks at the rate of \$3,000 per week)

- PES Specialist to review existing practices in the Philippines on PES, and policies supporting PES implementation; provide GoP with high level advise on international best practice on PES; in coordination with DENR, LGUs and partner NGOs, identify potential PES schemes to be implemented in project sites; and develop recommended plan of action to implement PES in selected LGUs

11. Local consultancy inputs (consisting of \$68,388 consisting of 82 weeks at the rate of \$834 per week)

- Senior Policy and Institutional Development Specialist to assess the institutional capacity of partner LGUs to implement mainstreaming tools for resource planning and management; conduct surveys and training needs assessment (with the Environmental Planning Specialist) of partner LGUs to implement FLUP, ICRMP and ecological zoning tools; assist DILG in the issuance of a Memorandum Order to LGUs for the mainstreaming of Biodiversity conservation into their CLUPs

and CDPs (Output 2.1; 5 person weeks; \$4,170). In addition, the Consultant will also review results of resource assessments in transboundary PAs/KBAs and develop draft terms of agreements for joint landscape/seascape planning and implementation; formulate options for institutional arrangements for joint landscape/seascape management and conduct consultations to seek consensus on the most viable option; facilitate the process of forging of agreement on contracts or MOAs among LGUs in the landscape/seascape for the preparation and implementation of resource management plans; provide technical assistance in the conduct of consultation and validation workshops among LGUs and their local stakeholders; formulate system for monitoring and reporting on compliance with agreements; provide technical assistance in resolving policy and management conflicts among partner LGUs in a landscape or seascape; review and document implementation experiences, and make recommendations to improve inter LGU cooperation in joint management of landscapes/seascapes. (Output 2.2; 10 person weeks; \$8,340)

- Environmental Planning Specialist to prepare simplified version of FLUP, ICRMP, and ecological zoning guidelines and manual for use of partner LGUs; prepare localized version of SEA for use of DENR regional personnel and LGUs; provide hands-on training of partner LGUs on the preparation of FLUP, ICRMP and Ecological zoning in landscapes and seascapes including buffer zones and KBAs; prepare guidelines for the integration of CLUP, ICRMP and ecological zoning into the CLUP and CDP of partner agencies; Assist partner LGUs in the integration process for CLUP and edit/finalize updated CLUP; conduct consultation and validation workshops for the FLUPs, ICRMPs and ecological zoning of pilot landscape/seascape areas; assist LGUs in the finalization of FLUPs, ICRMPs and ecological zoning of partner LGUs (Output 2.1; 11 person weeks; \$9,174)
- Biodiversity Business Specialist to assist LGUs in the formulation of local policies and programs to promote investments in biodiversity business; assist LGUs in development of investor codes of conduct for selected production enterprises; assist in linkaging with private sector to encourage investments (Outcome 2.5)
- Sustainable Agriculture Specialist to assist LGUs develop local Ordinances and program to support implementation of sustainable agriculture and biodiversity friendly agricultural practices in surrounding landscapes of PAs/KBAs; train LGU staff in biodiversity friendly agricultural practices; assist in establishing linkages with local organizations providing support; assist LGUs in establishment of demonstration plots and in organizing cross visits. (Outcome 2.3; 12 person weeks; \$10,008)
- Environmental Legal Specialist to conduct training of the LGU staff on existing wildlife laws, appropriate identification, and protocols for apprehension; and assist LGUs in the implementation of surveillance system, monitoring and mapping of sources of illegally traded plants and animal (Outcome 2.4; 12 person weeks; \$10,008)
- Knowledge Management Specialist to assess existing databases of LGU pilots and determine suitability for linkaging with national system; recommend improvements in design and configuration of national and local systems to allow access and sharing by LGUs, and simple uploading of information; train LGU staff in the use of the system; and in coordination with System Analyst, recommend monitoring and develop system for upgrading (Outcome 2.6; 8 weeks; \$6,672)
- System Analyst & Programmer to coordinate with KMS in the review databases of pilot LGUs and develop system design to allow access and sharing between LGUs and national system; document procedures and systems in a Manual; train LGUs in the use of the system; and assist PAWB to monitor implementation and design systems improvements, if required (Outcome 2.6; 8 weeks; \$6,672)

12. Contractual Services - \$153,312 has been budgeted to be allocated as follows:

- Development and implementation of monitoring tools including site assessment and training on application of monitoring tools (3 sites) (Output 2.1; \$50,000)
- Measurement of indicators on progress and performance for project management (Output 2.1;

\$30,000)

- Payment for Ecosystem Services to be conducted in the Central Panay Mountains (CPM) & Northern Negros Natural Park (NNNP) (Output 2.2; \$20,000)
- Biologist as co-share cost to 1.3 in the provision of technical guidance in strengthening policies and programs on wildlife trade regulation. (Output 2.4; 48 weeks; \$16,032)
- Institutional and organizational development staff to provide support in the implementation of regulatory structures and incentive systems to encourage development of biodiversity-friendly businesses. (Output 2.5; 120 person weeks; \$17,280)
- Development and implementation of eco-labeling program to be conducted by DILG (Outcome 2.6; \$20,000)

13. Travel - \$57,342 has been budgeted under this outcome for economy class travel of local consultants, facilitators and project staff, including site visits to the Central Panay Mountains (CPM) & Northern Negros Natural Park (NNNP) where PES studies will be undertaken.

14. Communications & Audio Visual Equipment - \$5,400 has been budgeted under this outcome for mobile and data landline charges.

15. Audio Visual & Printing Production Costs – A total of \$38,700 has been budgeted to cover printing cost of the following:

- Project Reports (Output 2.1; \$1,500)
- FLUP Reports (Output 2.1; \$600)
- Technical Reports (Output 2.1; \$15,000)
- Zoning Report & Maps (Output 2.2; \$600)
- PES Manual (Output 2.2; \$5,000)
- IEC materials (Output 2.3; \$16,000)

16. Training, Workshops and Conferences – A total of \$224,084 has been budgeted for training and capacity-development activities including the following:

- Strategic Environment Assessments (Output 2.1; \$10,800)
- FLUP Development (Output 2.1; \$4,800)
- IEC Orientation (Output 2.1; \$4,000)
- Biodiversity Impact Assessment (Output 2.2; \$2,060)
- Payments for Ecosystem Services (Output 2.2; \$4,000)
- Biodiversity Zoning (Output 2.2; \$2,000)
- Landscape & Seascape Resource Management (Output 2.2; \$4,000)
- CLUP Development (Output 2.2; \$4,000)
- Development of biodiversity-friendly agricultural practices (Output 2.3; \$14,400)
- Sustainable agriculture and soil conservation (Output 2.3; \$28,800)
- Food processing & packaging (Output 2.3; \$24,000)
- Plant propagation and nursery management (Output 2.3; \$28,800)
- Handicrafts and livelihood development (Output 2.3; \$43,200)
- Participation in Trade Fairs (Output 2.3; \$4,444)
- LGU training on existing laws on wildlife trade (Output 2.4; \$10,000)
- Stakeholders' consultations to encourage & promote biodiversity-friendly businesses (Output 2.5; \$25,600)

- LGU training on Knowledge Management (Output 2.6; \$9,180)

17. Supplies - A total of US \$ 3,600 has been allocated for this outcome for the provision of supplies needed in the conduct of different activities identified in the different outputs.

Outcome 3:

18. Contractual Services – A total of \$2,827,525 will be allocated to Responsible Partners in the implementation of the different outputs in eight Key Biodiversity Areas (KBAs) throughout the country. This is broken down per output as follows:

a. Output 3.1 – \$ 614,563

- i. \$ 156,867 is allocated for individual contracted services (Biologists, Community Organizers, Policy and Institutional Specialist, and Environmental Planners) for 248 person months
- ii. \$ 40,800 of contract staff support consisting of \$ 850 per site per year for 8 sites
- iii. \$ 43,200 quarterly travels (2 persons per site at 3 days per travel); 1,400 per site per year for 8 sites
- iv. Equipment support - \$ 38,936 (digital camera, desktop computers, laptops, printers, and projectors)
- v. \$ 305,000 for training workshops (Impact Assessments, Planning, SEA, Updating of FLUP/CLUP, Establishment of critical habitat, and establishment of local conservation areas)

b. Output 3.2 – \$ 639,770

- i. \$ 4,002 for participatory resource assessment in 3 sites
- ii. \$386,928 for contractual services of individuals to provide specialist support to the sites (GIS Assistant, Biologist, Facilitators, Documentors, and Environmental Planners)
- iii. \$ 40,800 of contract staff support @ \$ 850 per site per year for 8 sites
- iv. \$ 43,200 Quarterly travels (2 persons per site at 3 days per travel); 1,400 per site per year for 8 sites)
- v. \$ 10,000 for printing of management plans in 8 sites
- vi. \$ 151,000 for training/workshops on PA and FLUP management; updating of CLUPs; and development of transboundary plans
- vii. \$ 3,840 for miscellaneous expenses such as management meetings, communication, and supplies

c. Output 3.3 – \$ 339,232

- i. \$ 24,000 to conduct feasibility studies on biodiversity friendly agricultural practices
- ii. \$ 28,000 for engagement of field Specialists (Facilitators and Agricultural Specialists)
- iii. \$ 40,800 of contract staff support @ \$850 per site per year for 8 sites
- iv. \$ 43,200 quarterly travels @ \$ 1,400 per site per year for 8 sites
- v. \$ 172,672 for training workshops on establishment of demonstration farms, product development and identification, promotion and utilization of indigenous crops, biodiversity friendly standards, and business planning, finance, and enterprise management)
- vi. \$ 3,840 for miscellaneous expenses to cover supplies, communications, and meetings.

d. Output 3.4 – \$ 259,360

- i. \$ 77,685 to engage individual contract/Specialists (Wildlife Biologist, Facilitators, Environmental Law)
 - ii. \$ 40,800 of contract staff support @ \$ 850 per site per year for 8 sites
 - iii. \$ 43,200 for quarterly travels @ \$ 1,400 per site for 8 sites
 - iv. \$ 20,515 for equipment (GPS, pumpboat, hand held radios, motorcycle and scuba diving equipment)
 - v. \$ 90,600 for training workshops (Deputation of WEOs, Law Enforcement, Policy Development, Development of IEC Campaigns, and Monitoring of Wildlife Trade)
 - vi. \$ 3,840 for miscellaneous expenses to cover supplies, communications, and meetings.
- e. Output 3.5 - \$120,680
- i. Feasibility studies on biodiversity-friendly investments in four project sites (\$20,000)
 - ii. Contractual services of Enterprise Development Specialist (\$4,200)
 - iii. Contract staff support @ \$ 850 per site per year for 8 sites (\$40,800)
 - iv. Travel of partners and project staff (\$34,560)
 - v. Capability-building activities for business opportunities (\$17,280)
 - vi. Miscellaneous expenses to cover supplies needed in the conduct of different activities (\$960); communications expenses; (\$960); and meetings (\$1,920)
- f. Output 3.6 - \$281,840
- i. Feasibility Studies for Conservation Agreements in four project sites (\$50,000)
 - ii. Biodiversity investment program start-up funds (\$125,000)
 - iii. Contractual services of Resource Economist - PES Specialist (\$8,400)
 - iv. Contract staff support (\$40,800)
 - v. Travel of partners and project staff (\$28,800)
 - vi. Community consultations during engagement phase in four project sites (\$25,000)
 - vii. Miscellaneous expenses to cover supplies needed in the conduct of different activities (\$960); communications expenses for the mobile and data landline charges (\$960); and meetings (\$1,920)
- g. Output 3.7 - \$572,080
- i. Contractual services of KMS Specialist (\$100,800)
 - ii. Contractual services of IEC Specialist (\$33,600)
 - iii. Staff time for finance and admin support for RPs (\$40,800)
 - iv. Travel of partners and project staff (\$23,040)
 - v. IEC Material for the different sites (\$40,000)
 - vi. Development and reproduction of project reports (\$80,000)
 - vii. Data base training workshops for LGUs and RPs (\$160,000)
 - viii. Biodiversity baseline survey for Lake Mainit (\$10,000)
 - ix. Biodiversity baseline survey for Central Panay Mts. (\$35,000)
 - x. Biodiversity baseline survey for Malamapaya Sound (\$45,000)
 - xi. Miscellaneous expenses to cover supplies needed in the conduct of different activities (\$960), communications expenses (\$960), and meetings (\$1,920)

- h. To support coordination and monitoring of field based activities, the following have been budgeted:
 - i. Travel - \$12,600 has been budgeted under this outcome for economy class travel of local consultants, facilitators and project staff.
 - ii. Communications & Audio Visual Equipment - \$6,300 has been budgeted under this outcome for mobile and data landline charges.
 - iii. Learning Costs - \$3,998 has been allocated for this outcome for project management meetings
 - iv. Supplies - A total of US \$ 4,200 has been allocated for this outcome for the provision of supplies needed in the conduct of different activities identified in the different outputs.
19. Travel - \$12,600 has been budgeted under this outcome for economy class travel of local consultants, facilitators and project staff.
20. Communications & Audio Visual Equipment - \$6,300 has been budgeted under this outcome for mobile and data landline charges.
21. Learning Costs - \$3,998 has been allocated for capacity development.
22. Supplies - A total of US \$ 4,200 has been allocated for this outcome for the provision of supplies needed in the conduct of different activities identified in the different outputs.

Project Management:

23. International Evaluation Experts : A total of US \$ 60,000 has been budgeted for 20 person weeks of inputs for project impact evaluation
24. National Evaluation Experts: A total of US \$ 60,000 has been budgeted for 60 person weeks of inputs for project impact evaluation.
25. Contractual Services: A total of US \$ 184,392 has been budgeted to engage a Finance Specialist, Technical Assistant & Finance Assistant to handle day-to-day technical and administrative needs of the project.
26. Professional Service: \$25,000 has been budgeted to engage external auditors for the projects annual audit requirements.
27. Equipment & Furniture: A total of \$40,000 has been allocated for the procurement of office equipment and a vehicle for the services of the PMU to enable coordination and visits to partners.
28. Audio Visual and Printing Production Costs: \$ 6,000 has been budgeted for publishing and disseminating the periodic progress reports.
29. Training, Workshops and Conferences: \$ 50,574 has been budgeted under Project Management to undertake activities including an inception workshop, annual lessons-sharing forum and small training workshops with agencies, regional staff, NGO and academic partners to discuss management and implementation concerns over the life of the Project.

4. Management Arrangements

254. The principles of partnerships will be adopted in the implementation of the project. The Protected Areas and Wildlife Bureau (PAWB) of the Department of Environment and Natural Resources (DENR) will be the main implementing partner. The DENR, upon the recommendation of PAWB, will enter into agreements with lead NGOs and national government agencies in the implementation of selected outputs and site based activities. . At the site level, these responsible partners are the Haribon Foundation, Conservation International (CI) – Philippines, Foundation for Philippine Environment (FPE), Philippine Biodiversity Conservation Foundation Incorporated (PBCFI), Lake Mainit Development Alliance, and the Philippine Eagle Foundation (PEF). The Palawan Council for Sustainable Development (PalCSD) will be a cooperating partner in the implementation of site based activities. At the national level, the responsible partners will be the Department of Agriculture – through its Bureau of Agricultural Research (DA-BAR), Bureau of Fisheries and Agricultural Products

Standards (BFAPS), Bureau of Soils and Water Management (BSWM), Bureau of Plant Industry (BPI), and other offices, as appropriate; Department of Interior and Local Government (DILG), and Fauna and Flora International (FFI). The Leagues of Provinces, Municipalities and Cities in the Philippines, the National Commission on Indigenous Peoples (NCIP), and the National Commission on Women (NCW) will be cooperating partners. At the local level, local alliances will be reinforced among LGUs, other local NGOs, academe and research organizations, peoples' organizations and farmer groups, indigenous peoples groups, and other local organizations. These will be catalyzed through the development of common vision and goals for conservation and sustainable development of surrounding production landscape in each site, and facilitating the convergence of stakeholder actions towards achievement of these objectives and outcomes.

255. Following the programming guidelines for national implementation of UNDP supported projects, DENR, 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 PAWB, as the Implementing Partner (IP), 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.

256. At the central level, the project will establish a Project Board (PB), and a Project Management Unit (PMU) within PAWB. 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 implementing partners (NGOs/partner organizations/agencies) will be responsible for implementing the activities in each site and relevant national level activities based on agreed strategies and work plan. 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.

257. Project Board. It will be responsible for making management decisions for a project in particular when guidance is required by the Project Manager. The Project Board plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. Based on the approved Annual WorkPlan, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans.

258. In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP Project Manager.

259. The Project Board shall be established at project inception. It shall be composed of the DENR, PAWB, DILG, DA, DTI, Leagues of Provinces, Cities and Municipalities, a representative from national NGOs chosen from among the NGO implementing partners, NCIP, NCW, NEDA and UNDP. The PB shall be chaired by the DENR Undersecretary for Planning and Project Management and Co Chaired by NEDA. It shall meet at least quarterly, and will provide overall guidance for the project throughout implementation.

260. 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 National Project Director of the PMU. She shall be assisted by a Project Coordinator, 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 staff to be contracted under the project. The PMU is

responsible for overall management, monitoring, and coordination of Project implementation according to UNDP rules on managing UNDP/GEF projects. Specifically, its responsibilities include: (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) management and responsibility of all financial administration to realize the targets envisioned ; (v) facilitating communication and networking among key stakeholders at the national level; (vi) organizing the meetings of the PB; (vii) review and approval of work and financial plans of implementing partners; (viii) monitor and support the activities of the implementing partners.

261. The Project Coordinator will be responsible for the administrative, financial and technical coordination of the project and report progress based on reports received from the regional DENR offices and local responsible partners. He/She will also participate in meetings of the UNDP Outcome Board. He/She shall have the authority to run the Project on a day to day basis on behalf of the PAWB within the constraints laid down by the Board. The Project Coordinator's prime responsibility is to ensure that the Project produces the results specified in the project document, to the required standard of quality and within the specified time and cost.

262. The DENR regional offices, led by the Regional Executive Directors, shall act as extensions of the PAWB in monitoring and evaluating site based activities. He/She shall designate either the Regional Technical Director of the Protected Area and Coastal Zone Management Sector, the Provincial Environment and Natural Resources Officer (PENRO) or the Protected Area Superintendent (PASu) as the Regional Coordinator, as appropriate. The Regional Coordinator, including other relevant field offices of DENR, shall, develop their own work and financial plans in support of project implementation. They shall work in close coordination with the responsible partners (RPs).

263. Responsible Partners (RPs). The main responsibilities of the RPs include: (i) preparing detailed annual and quarterly 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; (vii) syndicating the support of local organizations and stakeholders in developing and implementing the common management framework and plan for the KBA/PA and/or conservation area.

264. The RPs and their scope of responsibilities are the following:

- Conservation International Philippines – Penablanaca Protected Landscapes and Seascapes; and Quirino Protected Landscapes; both located in Sierra Madre Corridor in Greater Luzon biogeographic region
- Haribon Foundation – Mt. Siburan, Mindoro biogeographic region
- PBCFI – Northern Negros National Park, Negros Panay biogeographic region
- DENR Regional/Provincial Office – Central Panay Mountains in Negros Panay biogeographic region
- Lake Mainit Development Alliance – Lake Mainit KBA
- Philippine Eagle Foundation – Mt. Hamiguitan in Eastern Mindanao biogeographic region
- Fauna and Flora International – development of tools and systems to support selected IPOs in mainstreaming activities
- DENR PASu – Malampaya Sound, Palawan biogeographic region
- DA – BAR – promotion of indigenous agricultural crops and sustainable management practices
- DA – BFAPS – development of standards for biodiversity friendly products
- DILG – development of indicators for monitoring LGU performance in biodiversity

265. Local Project Site Committees (LPSCs): Site level coordination shall be achieved through the LPSCs. The LPSCs shall be composed of representatives from the LGU; local communities; IP organizations; regional and

provincial NCIP representatives as appropriate; local NGOs; DENR; head of the IPOs responsible for the site; representatives of relevant agencies; and academic and research organizations. The Chair of the LPSCs shall be the Provincial Governor or the Municipal Mayor. Its exact composition will vary, depending on the specific situations and issues in each site. In established protected areas, the PAMB will be the LPSC. Existing local coordinating bodies shall be enhanced and capacitated as LPSCs. The DENR, through its Regional Coordinators, shall serve as the Secretariat of the LPSCs and support its organization and operations. The IPOs shall provide regular reports to the LPSCs on the progress and performance of local activities. More specifically, the LPSCs shall be responsible for: (i) seeking consensus on the vision and objectives for conservation management and sustainable development of the production landscape for the site, (ii) facilitating the translation of these objectives into an integrated plan of action; (iii) ensuring consistency and convergence of stakeholder activities, plans and programs to support the achievement of the objectives and expected outcomes of plan; (iv) formulation of local enabling policies to support implementation of the plan; (iv) monitoring the extent, progress and outcomes of mainstreaming efforts; (v) reviewing the commitments of local partners in furthering the mainstreaming objectives, and implementation of their agreed actions; (vi) complementation with other planned and existing initiatives that affect or may affect mainstreaming efforts; and (iii) review of site progress and monitoring reports and work programs.

266. **UNDP:** UNDP Manila will be responsible for Project oversight, ensuring milestones are achieved. It will undertake financial and technical monitoring, as part of its oversight functions. In addition, the UNDP will be responsible for: (i) coordinating with UN Country Team in Manila with a view to mainstreaming in their interventions at the country level and funding as appropriate; (ii) establishing an effective networking between project stakeholders, specialized international organizations and the donor community; (iii) facilitating networking among the country-wide stakeholders; (iv) reviewing and making recommendations for reports produced under the project; and (v) establishing and endorsing the thematic areas, with a view to ensuring linkage to national policy goals, relevance, effectiveness and impartiality of the decision making process.

267. The organizational structure of the Project is shown in Annex 7.4.

5. Monitoring framework and evaluation

268. The project will be monitored through the following M& E activities. The M& E budget is provided in the table below.

Project start:

269. A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.

270. The Inception Workshop should address a number of key issues including:

- Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.
- Based on the project results framework and the relevant GEF Tracking Tool if appropriate, finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
- Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.
- Discuss financial reporting procedures and obligations, and arrangements for annual audit.

- Plan and schedule Project Board meetings. Roles and responsibilities of all project organisation structures should be clarified and meetings planned. The first Project Board meeting should be held within the first 12 months following the inception workshop.

271. An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

Quarterly:

- Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.
- Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).
- Based on the information recorded in Atlas, a Project Progress Reports (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc... The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annually:

- Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements.

272. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual).
- Lesson learned/good practice.
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS QPR
- Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.

Periodic Monitoring through site visits:

273. UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.

Mid-term of project cycle:

274. The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation (insert date). The Mid-Term Evaluation will determine progress being made toward 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. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).

275. The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

End of Project:

276. An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project’s results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. 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.

277. The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC).

278. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.

279. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. 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 results.

Learning and knowledge sharing:

280. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.

281. 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.

282. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

Table 9. M& E workplan and budget

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team Staff time</i>	Time frame
Inception Workshop	<ul style="list-style-type: none"> ▪ PMU ▪ UNDP CO ▪ UNDP GEF 	15,000	Within first two months of project start up
Inception Report	<ul style="list-style-type: none"> ▪ Project Team ▪ UNDP CO 	None	Immediately following IW
Measurement of Means of Verification for	<ul style="list-style-type: none"> ▪ PMU will oversee the hiring of specific studies 	To be finalized in Inception Phase and	Start, mid and end of project

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team Staff time</i>	Time frame
Project Purpose Indicators	and institutions, and delegate responsibilities to relevant team members	Workshop. Indicative cost: 20,000	
Measurement of Means of Verification for Project Progress and Performance (measured on years 1,3,5 and 6)	<ul style="list-style-type: none"> ▪ Oversight by Project GEF and PMU ▪ Measurements by regional field officers, and local IAs 	To be determined as part of the Annual Work Plan's preparation. Indicative cost (5,000 per year) ; 25,000	Annually prior to APR/PIR and to the definition of annual work plans
ARR and PIR	<ul style="list-style-type: none"> ▪ Project Manager and Team ▪ UNDP-CO ▪ UNDP RTA ▪ UNDP EEG ▪ UNDP-GEF 	None	Annually
Periodic status/progress reports	<ul style="list-style-type: none"> ▪ Project Manager and team 	6,000	Quarterly
Technical reports	<ul style="list-style-type: none"> ▪ Project team ▪ Hired consultants as needed 	15,000	To be determined by Project Team and UNDP-CO
Mid-term External Evaluation	<ul style="list-style-type: none"> ▪ Project Manager and team ▪ UNDP- CO ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team) 	60,000	At the mid-point of project implementation.
Final External Evaluation	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ Project Manager and team ▪ UNDP-CO ▪ External Consultant 	None	At least one month before the end of the project
Lessons Sharing Forum	<ul style="list-style-type: none"> ▪ Project team ▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc) 	18,000 (average 3,000 per year)	Yearly
Audit	<ul style="list-style-type: none"> ▪ UNDP-CO ▪ Project Manager and team 	25,000(average \$5,000 per year, beginning year 2)	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	<ul style="list-style-type: none"> ▪ UNDP Country Office ▪ UNDP-GEF Regional Coordinating Unit (as appropriate) ▪ Government representatives 	Paid from IA fees and operational budget	Yearly
TOTAL INDICATIVE COST <i>Excluding project team staff time and UNDP staff and travel expenses</i>		US\$ 244,000	

6. Legal Context

283. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA [or other appropriate governing agreement] and all CPAP provisions apply to this document.

284. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

285. The implementing partner shall:

- put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

286. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

287. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
					the proposed project, engagement with local communities will ensure that the link between local community development and sustainable management is maintained. At the national level, policy advice and advocacy will continue as part of the broader process of policy engagement for incorporating conservation considerations into resource extraction decision-making. The adoption of policy impact assessment on biodiversity will enable DA and DENR, including LGUs to ensure that future policies, plans and programs are screened for their impacts on biodiversity.				
2	Sectoral agencies and institutions outside the agricultural sector will be unable to adequately incorporate biodiversity considerations into their systems and processes	April 2010	Institutional	Probability = 2 Impact = 5	All major sectoral institutions in the Philippines have sustainable use of natural resources as a part of their mandate. The barrier preventing them from fully achieving this mandate has been a	Project Coordinator	Project Design team		

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
					lack of capacity, and a lack of incentives to prioritise conservation. By demonstrating to these line agencies (through the agricultural sector) that mainstreaming biodiversity conservation into their policies and decision-making is both feasible and cost-effective, the project will help to ensure that all relevant line institutions better manage the impact of their activities on the natural resource base.				
3	Long-term climate change leads to changes in the biodiversity composition and resource value of critical biodiversity areas, reducing the value of conservation vs. exploitation	April 2010	Environmental	Probability = 3 Impact = 5	By strengthening the capacities of sectoral and local governance systems to clearly understand and assess the trade-offs between conservation and resource extraction, the project will help ensure that any future evolution of the natural resource base is identified and accounted for in decision-making. Existing key biodiversity areas may eventually decline in conservation value	Project Coordinator	Project Design Team		

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
					and their use may have to be reconsidered. Equally, other areas may become critical to conservation, e.g. if they become final refugia for important ecosystem types. By strengthening assessment and decision-making capacities, the project will ensure that governance systems are able to adapt to such changes and continue to aim for optimal tradeoffs.				

7.2 Terms of References for key project staff

Position Titles/	Tasks to be performed
For Project Management	
Local Consultants	
Evaluation Experts US \$ 1000 per person week 60 person weeks	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 standard UNDP/GEF project evaluation TOR will be used.
International Consultants	
Evaluation Expert US \$ 3,000 per person week 20 person weeks	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.
For Technical Assistance	
Local Consultants	
Senior Policy and Institutional Specialist US \$ 834 per person week 24 person weeks	<p><u>Output 1.1 - Years 1 and 2</u></p> <ul style="list-style-type: none"> • Develop frameworks and indicators for assessing and monitoring the impacts of policies and programs of DA and DENR on biodiversity • Review and evaluate existing SEA models and related tools such as multi-criteria decision, sustainable development indicators and others for their applicability at the national level in assessing the impacts of development policies and programs on biodiversity • Prepare guidelines and manuals, in coordination with the Environmental Planning Specialist, on customized policy impact assessment tools such as modified SEA for the use of DA and DENR • Assist agency counterparts in preparing the implementation plan for the mainstreaming of policy impact assessment tools in the policies, plans and programs • Assist agency counterparts in consultations with stakeholders (NGAs, NGOs and League of Provinces, Cities and Municipalities) on the adoption and application of framework, indicators and policy impact assessment tools • Assist agencies in developing mechanisms for institutionalizing policy impact assessment tools (e.g., SEA) in DENR, DA, DILG and DTI. • Serve as resource person in the training of representatives from national partner agencies <p><u>Output 2.1 - Year 2</u></p> <ul style="list-style-type: none"> • Assess the institutional capacity of partner LGUs to implement mainstreaming tools for resource planning and management • Conduct surveys and training needs assessment (with the Environmental Planning Specialist) of partner LGUs to implement FLUP, ICRMP and ecological zoning tools. • Assist DILG in the issuance of a Memorandum Order to LGUs for the mainstreaming of Biodiversity conservation into their CLUPs and CDPs <p><u>Output 2.2 - Year 2</u></p> <ul style="list-style-type: none"> • Review results of resource assessments in transboundary PAs/KBAs

Position Titles/	Tasks to be performed
	<p>and develop draft terms of agreements for joint landscape/seascape planning and implementation</p> <ul style="list-style-type: none"> • Formulate options for institutional arrangements for joint landscape/seascape management and conduct consultations to seek consensus on the most viable option • Facilitate the process of forging of agreement on contracts or MOAs among LGUs in the landscape/seascape for the preparation and implementation of resource management plans (FLUP, ICRMP and ecological zoning) • Provide technical assistance in the conduct of consultation and validation workshops among LGUs and their local stakeholders • Formulate system for monitoring and reporting on compliance with agreements <p><u>Output 2.2</u> - Year 3</p> <ul style="list-style-type: none"> • Provide technical assistance in resolving policy and management conflicts among partner LGUs in a landscape or seascape. • Review and document implementation experiences, and make recommendations to improve inter LGU cooperation in joint management of landscapes/seascapes
<p>Training Specialist US \$ 834 per person week 9 person weeks</p>	<p><u>Output 1.1</u> - Years 1 and 2</p> <ul style="list-style-type: none"> • Conduct surveys and training needs assessment of target trainees from DENR and partner organizations • Prepare reports on training surveys and assessment results • Prepare training designs and programs in consultation with the other technical consultants (i.e., Policy and Institutional Specialist and Environmental Planning Specialist) • Assist in the development of training materials based on the inputs of the other technical consultants • Pre-test training materials and improve design and content • Conduct and manage training sessions on the use of tools • Develop tools for evaluating impacts of training programs and other capacity building programs of BPP, and train counterparts in the use of these tools • Assist PAWB in the conduct of biodiversity mainstreaming workshops together with other technical consultants
<p>Environmental Planning Specialist US \$ 834 per person week 15 person weeks</p>	<p><u>Output 1.1</u> - Year 1</p> <ul style="list-style-type: none"> • Assist DENR agencies and national partner organizations (DA planning and policy offices, BSWM, BAR, DILG – BLGS and BLDP) in mainstreaming biodiversity conservation into their development plans and programs • Assist partner organizations in the updating of their development plans and programs with biodiversity integrated therein • Prepare training modules and serve as resource person in the training of DENR and partner organizations on the use of policy impact assessment tools • Work with the Policy and Institutional Development Specialist on the preparation of the SEA guidelines and manual • Coordinate with PAWB staff in the implementation of the mainstreaming activities with national partner agencies • Pre-test training modules and evaluate results • Conduct training on the use of SEA and related policy impact assessment tools <p><u>Output 2.1</u> - Year 2</p>

Position Titles/	Tasks to be performed
	<ul style="list-style-type: none"> • Prepare simplified version of FLUP, ICRMP, and ecological zoning guidelines and manual for use of partner LGUs • Prepare localized version of SEA for use of DENR regional personnel and LGUs (PAOs, MAOs, CENROs, MENROs, CPDOs and MPDOs and PAMB members) <p><u>Output 2.1 - Year 3</u></p> <ul style="list-style-type: none"> • Provide hands-on training of partner LGUs on the preparation of FLUP, ICRMP and Ecological zoning in landscapes and seascapes including buffer zones and KBAs • Prepare guidelines for the integration of CLUP, ICRMP and ecological zoning into the CLUP and CDP of partner agencies <p><u>Output 2.1 - Year 4</u></p> <ul style="list-style-type: none"> • Assist partner LGUs in the integration process for CLUP and edit/finalize updated CLUP • Conduct consultation and validation workshops for the FLUPs, ICRMPs and ecological zoning of pilot landscape/seascape areas • Assist LGUs in the finalization of FLUPs, ICRMPs and ecological zoning of partner LGUs
<p>Sustainable Agriculture Specialist US \$ 834 per person week 12 person weeks</p>	<p><u>Output 1.2 – Year 1</u></p> <ul style="list-style-type: none"> • Review sustainable agriculture program of DA and assist in development of national policy and program for biodiversity friendly agriculture • Train DA staff in selected regional offices in providing technical assistance to MAOs <p><u>Output 2.3 – Year 2</u></p> <ul style="list-style-type: none"> • Assist LGUs develop local Ordinances and program to support implementation of sustainable agriculture and biodiversity friendly agricultural practices in surrounding landscapes of PAs/KBAs • Train LGU staff in biodiversity friendly agricultural practices • Assist in establishing linkages with local organizations providing support • Assist LGUs in establishment of demonstration plots and in organizing cross visits
<p>Biodiversity Business Investments Specialist US \$ 834 per person week 12 person weeks</p>	<p><u>Output 1.4 – Year 1</u></p> <ul style="list-style-type: none"> • Review opportunities for biodiversity business and analyze the constraints to investments • Coordinate with DTI and assist in enhancement of policies to encourage investments in biodiversity business • Assist in formulation of draft policies and assist DTI in consultations • Assist DTI in development of actions to communicate the policies and in linking with private sector <p><u>Output 2.5 – Year 2</u></p> <ul style="list-style-type: none"> • Assist LGUs in the formulation of local policies and programs to promote investments in biodiversity business • Assist LGUs in development of investor codes of conduct for selected production enterprises • Assist in linking with private sector to encourage investments
<p>Knowledge Management Specialist US \$ 834 per person week 34 person weeks</p>	<p><u>Output 1.5 - Year 1</u></p> <ul style="list-style-type: none"> • Prepare the design and architecture of the KMS and its subsystems • Formulate the implementation plan for the KMS • Review of existing information systems of the DENR and national

Position Titles/	Tasks to be performed
	<p>partner agencies and LGUs such as PAWB’s Philippine Clearing House Mechanism, DILG’s LGPMS, etc.</p> <ul style="list-style-type: none"> • Study and identify potential linkages and sharing of information with partner organizations • Conduct workshops and meeting with DENR and partner agencies on the initial design of the KMS • Work with the System’s Programmer in the development of the design of the KMS • Conduct surveys and detailed studies on the networking of KMS with other existing information system of DENR and partner agencies and LGUs in the project sites such as PAWB’s Philippine Clearing House Mechanism, DILG’s LGPMS, etc. • Prepare operational guidelines in linking up biodiversity M&E with LGUs of project sites • Pilot test the KMS and determine design improvements • Conduct documentation of KMS with the System Analyst and Programmer • Develop and pilot test biodiversity M&E system • Conduct training of users of KMS and biodiversity M&E from DENR and partner agencies <p><u>Output 1.5 - Year 2</u></p> <ul style="list-style-type: none"> • Prepare reports on the results of the pilot testing of the KMS • Conduct documentation of KMS with the System Analyst and Programmer • Conduct workshops and training of users of KMS <p><u>Output 1.5 -Year 4 to 6</u></p> <ul style="list-style-type: none"> • Continue the conduct of pilot testing and reporting of results • Refine together with the System Programmer the networking system with partners agencies • Assist PAWB in preparing UNCBD reports • Populate the KMS with data coming from partner agencies and LGUs in the project sites • Consolidate, review and evaluate the results of all pilot testing of KMS • Conduct consultation and validation workshops on the results of the pilot tests <p><u>Output 2.6 – Year 2 and 3</u></p> <ul style="list-style-type: none"> • Assess existing databases of LGU pilots and determine suitability for linking with national system • Recommend improvements in design and configuration of national and local systems to allow access and sharing by LGUs, and simple uploading of information • Train LGU staff in the use of the system • In coordination with System Analyst, recommend monitoring and develop system for upgrading
<p>System Analyst and Programmer US \$ 834 per person week 34 person weeks</p>	<p><u>Output 1.5 - Year 1 to 6</u></p> <ul style="list-style-type: none"> • Conduct configuration studies of the related existing information systems of DENR and partner national agencies and the LGUs (if any) • Provide specifications of hardware and software needed for the KMS • Set-up the KMS system • Develop systems and procedures for the KMS • Translate the design of the KMS into machine language (prepare programs)

Position Titles/	Tasks to be performed
	<ul style="list-style-type: none"> • Develop the data base structure and programs for the information system • Prepare programs to link the KMS data base with the M&E system and data base • Prepare systems and procedures manual • Pilot test the systems and improve programs • Populate the KMS with support from the BPP-hired support staff and the regular staff of PAWB • Provide hands-on training to PAWB counterparts (data manager and systems analyst and programmer (if any)). • Conduct consultation and validation workshops with the KMS users and technical personnel of DENR and partner agencies. • Prepare system and program documentation <p><u>Output 2.6 – Year 2 and 3</u></p> <ul style="list-style-type: none"> • In coordination with KMS, review databases of pilot LGUs and develop system design to allow access and sharing between LGUs and national system • Document procedures and systems in a Manual • Train LGUs in the use of the system • Assist PAWB to monitor implementation and design systems improvements, if required
<p>M&E System Specialist US \$ 834 per person week 22 person weeks</p> <p>Environmental legal Specialist US \$ 834 per week 28 weeks</p> <p>International Consultants</p>	<p><u>Output 1.5 - Year 1 to 6</u></p> <ul style="list-style-type: none"> • Develop the indicator system for biodiversity monitoring and impact assessment • Prepare system and procedural manual • Develop the data base with the KMS and System Programmer • Conduct detailed studies on the institutional capacity of partner agencies and LGUs on M&E • Survey, assess and evaluate existing M&E system of partner agencies and LGUs in project sites • Establish the physical set up and data base configuration of the M&E in consultation with the System Programmer and KMS • Conduct consultation and validation workshops on the M&E design • Conduct pilot testing of M&E system • Analyze results of pilot testing and improve the system and procedures for data collection, analysis and reporting. • Prepare documentation report on the M&E system and procedures <p><u>Output 1.3 – Year 3 & 4</u></p> <ul style="list-style-type: none"> • Review the status of implementation of wildlife law enforcement initiatives in the country • Identify the scope of LGU participation in the implementation and enforcement of wildlife regulations • Prepare guidelines on the issuance of the DENR and LGUs of relevant administrative orders, circulars, and local ordinances • Assist DENR-PAWB in establishing a system to provide support to partner agencies on wildlife law enforcement particularly in the areas of information, education, monitoring and reporting <p><u>Output 2.4 – Year 3</u></p> <ul style="list-style-type: none"> • Conduct training of the LGU staff on existing wildlife laws, appropriate identification, and protocols for apprehension. • Assist LGUs in the implementation of surveillance system, monitoring and mapping of sources of illegally traded plants and animal.

Position Titles/	Tasks to be performed
<p>PES Specialist US \$ 3,000 per week 4 weeks</p>	<p><u>Output 2.2</u></p> <ul style="list-style-type: none"> • Review existing practices in the Philippines on PES, and policies supporting PES implementation • Provide GoP with high level advise on international best practice on PES • In coordination with DENR, LGUs and partner NGOs, identify potential PES schemes to be implemented in project sites • Develop recommended plan of action to implement PES in selected LGUs
<p>Biodiversity Business Specialist US \$ 3,000 per week 4 weeks</p>	<p><u>Output 1.4</u></p> <ul style="list-style-type: none"> • Review existing policies on investments in environment • Provide GoP with high level advise on international best practices in biodiversity business • In coordination with DTI and DENR< identify potential biodiversity business and incentives • Examine potential of international best practice financing schemes to promote investments in biodiversity business • Prepare draft policy paper for consideration by government • Prepare recommended actions to establish appropriate enabling environment for promoting biodiversity business in the Philippines

7.3 Profiles of Project Sites

(refer to Annexes of the GEF CEO Endorsement Request)

7.4 BPP Organizational Structure

