Mindoro Biodiversity Conservation Foundation, Inc. (MBCFI)

Mindoro Biodiversity Conservation Program Thrusts

2010 - 2020

Promoting Shared Responsibility toward the Conservation of Mindoro's Biological and Cultural Diversity

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LIST OF ACRONYMS

ARNP	Apo Reef Natural Park
BFAR	Bureau of Fisheries and Aquatic Resources
CAN	Conservation Needs Assessment
CADT	Certificate of Ancestral Domain Title
CBFMA	Community Based Forest Management Agreement
CBFMP	Community Based Forest Management Program
CENRO	Community Environment and Natural Resources Office
CI	Conservation International
CLUP	comprehensive land use plan
CPA	conservation priority area
Certificate of Stewardship Contract	Certificate of Stewardship Contract
DENR	Department of Environment and Natural Resources
EIA	environmental impact assessment
EIAS	environmental impact assessment system/statement
FLUP	forest land use plan
Haribon	Haribon Foundation for the Conservation of Natural Resources
IBA	important bird area
IFMA	Industrial Forest Management Agreement
IUCN	IUCN-World Conservation Union
IP	indigenous people
KBA	key biodiversity area
LGC	Local Government Code
LGU	Local Government Unit
LNNP	Lake Naujan National Park
MBCFI	Mindoro Biodiversity Conservation Foundation, Inc.
MBCP	Mindoro Biodiversity Conservation Program
MOA	memorandum of agreement
NCIP	National Council for Indigenous People
NGO	non-governmental organization
NIPAS	National Integrated Protected Areas System
PAMB	Protected Area Management Board
PASu	Protected Area Superintendent
PBCP	Philippines Biodiversity Conservation Programme
SIFMA	Socialized Industrial Forest Management Agreement
SPEX	Shell Philippines Exploration
UNDP-GEF	United Nations Development Programme – Global Environment Facility

PREFACE

The Mindoro Biodiversity Conservation Foundation, Inc. (MBCFI) was formed as a non-government organization purposely to implement conservation initiatives in Mindoro Island, which is recognized as one of the global biodiversity conservation priority areas, particularly in terms of the number of endemic species, diversity of habitats, and degrees of threats. MBCFI was organized through the efforts of the Philippines Biodiversity Conservation Program (PBCP), formerly administered by the Fauna and Flora International (FFI) and now by the Philippines Biodiversity Conservation Foundation, Inc. (PBCFI).[1]

The vision of MBCFI is "*the long-term conservation of Mindoro's native and endemic wildlife and their natural habitats for the benefit and wonder of future generations of all peoples who may inhabit and share the natural resources of this island*." On the other hand, the mission of MBCFI is "to enhance and enable the conservation of Mindoro's unique and threatened environment, biodiversity and natural resources into perpetuity through the establishment of integrated biodiversity conservation and development programs." "

This program document is designed to guide the MBCFI in delivering conservation outcomes and in achieving its vision, mission, goals, and objectives. This also serves as a management framework for MBCFI in developing and implementing site-focused conservation actions and strategies in some of the most biologically important areas in Mindoro. MBCFI has identified several priority project sites for its program in Mindoro in the next 10 years. However, it does not limit MBCFI to include additional areas when necessary and circumstances warrant, especially the availability of technical, logistical, and financial resources, and when the local situation and conditions are conducive to doing so.

As a matter of principle and approach, MBCFI shall promote broad-based participation of relevant stakeholders on its project development, implementation, monitoring, and evaluation. MBCFI shall likewise prepare specific project proposals and launch other marketing strategies to generate the required resources in implementing the different activities presented in this program document.

The development of this program document capitalizes on the results of prior activities, particularly the island-wide flora and fauna rapid assessments, carried out under the auspices of the Mindoro Biodiversity Conservation Program (MBCP), which was conceptualized and began implementation in the 90's through the initiative of the Philippines Biodiversity Conservation Programme. In addition, MBCFI conducted conservation needs assessment to determine the most feasible, practical and effective conservation approaches on its priority project sites in Mindoro. PBCFI extended technical assistance in the CNA and in developing the MBCFI program thrusts, while the Malampaya partners, through the Shell Philippines Exploration B. V. (SPEX), provided the necessary funding requirements.

1PBCFI assumed the administration of the Philippines Biodiversity Conservation Program in 2008 since FFI decided to downsize and focus its area of operations in the Philippines to the Polillo group of islands and Cebu.

INTRODUCTION

MINDORO AS A PRIORITY BIODIVERSITY CONSERVATION AREA

Mindoro is located in southern Luzon and the 7th largest island in the Philippines with a total land area of 1,003,854 hectares. It is comprised of the provinces of Oriental Mindoro and Occidental Mindoro within the administrative jurisdiction of Region IV-B or MIMAROPA Region (comprised of the island provinces of Mindoro, Marinduque, Romblon, and Palawan). Roughly 19.26 percent or 193,372 hectares of Mindoro's total land area is covered by different forest types, classified as broad-leaved closed forest (49,495 ha), broad-leaved forest plantation (38,441 ha), broad-leaved open forest (103,608 ha), coniferous open forest (695 ha), and mangrove forest (1,133 ha).

Other major land cover of Mindoro are wooded grassland (74,054 ha), shrub land (331,529 ha), and grassland (183,197 ha). Shrub lands dominate the entire landscape of Mindoro, estimated at 33.03 percent of its total land area, followed by grasslands at 18.25 percent. Areas devoted to various human activities, such as agriculture and settlement, make up 20.12 percent (201,998 ha) of the Mindoro's total land area Table 1 and Figure 1**)**.

The marine environment of Mindoro hugely contributes to overall national and global biological diversity. The Mindoro Strait is one of the most economically productive fishing grounds in the country and a migration route of commercially important fishes. It is part of the Verde Island Passage, which is known as the "center of the center" of marine shore fish diversity in the world (Carpenter 2008). The Apo Reef Natural Park (ARNP) in the municipality of Sablayan in Occidental Mindoro has a pristine marine environment and its coral reef, one of the most extensive in the Philippines, is in excellent condition. The municipality of Puerto Galera in Oriental Mindoro is also popular for its beaches and one of the favorite tourist destinations in the country.

Mindoro, being one of the major bio-geographic zones of the Philippines (Figure 2), is nationally and globally recognized as an important conservation area because it harbors numerous unique flora and fauna that inhabit a variety of natural habitats from terrestrial, freshwater, coastal, and marine ecosystems (DENR-PAWB, CI, and UP-CIDS 2002). Several species found in Mindoro are endemic only to the Philippines and to the island and cannot be found elsewhere in the world (Oliver and Heaney 1997).

Based on the compilation of Dr. Emelina Mandia, MBCFI Executive Director and at the same a professor at the De La Salle University (DLSU) in Taft, Manila, some 49 butterfly species are endemic to Mindoro. Similarly, at least 70 flowering plant species can only be found on this island, including the Philippine pine (*Pinus merkusii*) and the Philippine teak (*Tectona philippinensis*) that are both listed to occur in only two locations in the country. Ten of the 17 endemic Philippine mammals, such as the famous Tamaraw (*Bubalus mindorensis*), the Mindoro warty pig (*Sus philippensis oliveri*) and the Ilin Island bushy-tailed cloud rat (*Crateromys paulus*), are likewise confined to Mindoro as well as the eight species and 20 sub-species of birds classified as endemic to the country.

Endemic birds in Mindoro include the Mindoro bleeding-heart pigeon (*Gallicolumba platenae*), the Mindoro imperial pigeon (*Ducula mindorensis*), and the Mindoro scops owl (*Otus mindorensis*), to name a few. There are also endemic reptiles and amphibians, and fishes in Mindoro, like the

Philippine crocodile (*Crocodylus mindorensis*), the Mindoro frog (*Philautus schmakeri)* and the Mindoro barb (*Puntius hemictenus*).

In 2006, the Protected Areas and Wildlife Bureau (PAWB) of the Department of Environment and Natural Resources (DENR), along with several other national and international institutions, declared 10 sites in Mindoro as among the 128 key biodiversity areas (KBAs) of the Philippines. These 10 KBAs have an aggregate area of about 249,381 ha or approximately 24.84 percent of Mindoro's total area (Table 2 and Figure 3).

The 128 KBAs of the country were selected based on vulnerability and irreplaceability criteria. Vulnerability is "*measured by the confirmed presence of one or more globally threatened species.* On the other hand, "*irreplaceability is determined through the presence of geographically concentrated species.*" (CI-Philippines, DENR-PAWB, and Haribon 2006). Each KBA in Mindoro shelters at least 2 to as high as 16 endemic species, classified as critically endangered, endangered, and/or vulnerable to extinction in the wild based on the Red List of Threatened Species of the IUCN-World Conservation Union. Several restricted-range species are found in these sites too. Of the different KBAs in Mindoro, Mount Halcon in Oriental Mindoro had the most number of endemic threatened species (16 species), followed by Mount Siburan in Sablayan, Occidental Mindoro (11 species). Lake Naujan and Iglit-Baco Mountain each have 10 threatened endemic species.

The 10 KBAs of Mindoro were also selected in 2002 as conservation priority areas (CPAs) in a conservation priority setting facilitated by DENR-PAWB, Conservation International (CI), and University of the Philippines (UP) Diliman. The Haribon Foundation and Birdlife International similarly included these 10 sites in its directory of important bird areas (IBAs) and key conservation sites of the Philippines. Birdlife International further declared Mindoro as the world's 7th most critical endemic bird area.

Adding to the conservation significance of Mindoro is the inclusion of Mount Halcon as one of the 18 centers of plant diversity in the Philippines, identified by the Threatened Plants Unit at Kew (Cox 1988). Moreover, Mount Halcon and Lake Naujan are listed as priority areas for plant conservation in the country (DENR-PAWB, CI, and UP-CIDS 2002). Lake Naujan is also inscribed as the Ramsar Site of the Philippines.

MINDORO AS A CULTURAL HERITAGE SITE

Mindoro's amazing biological diversity is associated with significant cultural value due to the presence on the island of at least eight tribes of indigenous people (IP), collectively known as the Mangyans. These Mangyan Tribes are Alangan, Bangon, Buhid, Hanunuo, Iraya, Tadyawan, Tau-buid and Ratagnon. Seven of these tribes have already been organized as indigenous people's organizations (IPOs) (Table 3) through the assistance of Mangyan Mission and COMultidiversity, both Roman Catholic Church-based organizations that have also supported the Mangyans in publishing community organizing processes involving the indigenous people of Mindoro (Dinter, 2007).

With support from the Mangyan Mission and COMultidiversity, these seven indigenous people's organizations were organized as a federation, known as the Kapulungan para sa Lupang Ninuno (KPLN). The KPLN is working for the ancestral domain claims of the Mangyans and initiating activities for the unity of the different tribes, raising the consciousness of Mangyans to their dignity as

a people and the enhancement of their relationship with the different sectors of the society (Dinter 2007).

According to the National Council for Indigenous People (NCIP) (as cited by Narvadez 2009), the Mangyan population is composed of 193,482 individuals, which is 16.7 percent of the total population (1,157,721) of Mindoro based on the 2007 Population Census of the National Statistics Office (NSO). The Mangyans are the original inhabitants of Mindoro but the wave of civilization and the influx of migrants from other parts of the Philippines have pushed many of them toward the interior mountains (Dinter 2007), scattered throughout the different municipalities in the two provinces of the island.

The Iraya tribe settles in the northwestern part of Mindoro, particularly within and in the periphery of Mount Halcon, while the Alangan tribe occupies the northwest central part of the island. The Tadyawan tribe is on the northeastern part, specifically within the area of Lake Naujan; while the Batangan tribe stays at the central highlands of Mounts Iglit-Baco, Siburan, and Hinunduang. The Buhid tribe is occupying the central part, straddling the eastern and western portions of Mindoro, while the Ratagnon tribe is on the southernmost tip of the island. The Hanunuo tribe is settled in the mountainous areas of Mindoro, mainly within the municipalities of Mansalay and Bulalacao in Oriental Mindoro and a certain portion of San Jose in Occidental Mindoro (Figure 4).

The Mangyan tribes have preserved their original customs, beliefs, and practices through the years and maintained traditional ways of life that are deeply rooted in love, care, and enrichment of land and nature (Dinter 2007), despite the assimilation of a number of tribe members into non-IP culture. Some Mangyan tribes strongly refuse to embrace lowland culture and are living in primitive ways and wandering in the remaining forests, with male members of tribes still wear g-strings made of barks. There are Mangyans who evade interactions with non-IP communities and continue to rely on forests for food. However, the depletion of forest resources has led several Mangyan groups to adopt lowland agriculture and engage in farm labor with lowlanders (Sablayan Municipal Government 2005).

Vast areas in Mindoro, including those identified as biologically important, are being claimed as ancestral domains by the Mangyans. The NCIP, in consonance with the Indigenous People's Rights Act (IPRA) or Republic Act (RA) No. 8371, has awarded Certificate of Ancestral Domain Titles (CADTs) to some of these tribes (Table 4 and Figure 5). The CNA documented the ancestral domain claims of the Mangyans to cover about 296,663.94 ha or roughly 30 percent of Mindoro's total land area.

THREATENED BIOLOGICAL AND CULTURAL DIVERSITY[2]

The biological and cultural significance of Mindoro is now highly vulnerable to various issues, concerns, and challenges that if left unattended may result in the furthering erosion of the IP's culture, more losses of biologically important resources, and extreme deterioration of natural environment, among others. Most of Mindoro's natural habitats erode continuously because of logging and timber poaching, charcoal production, conversion of forestlands into other land uses, slash and burn farming, mining, pollution, and other destructive and unsustainable resource use practices (CI-Philippines, DENR-PAWB, and Haribon 2006). Mindoro's remaining natural forests are already fragmented, limited, and confined to much higher elevations (De Alban 2009).

2 Conservation issues and concerns presented in this section were identified during focus group discussions (FGDs) and key informant interviews (KIIs) during the MBCFI-initiated Conservation Needs Assessment in Mindoro; otherwise references are cited.

As a consequence of habitat destruction and excessive wildlife exploitation, several endemic species in Mindoro are extremely at high risks of extinction in the wild and already listed in the Red List of Threatened Species of the World Conservation Union and the Department of Environment and Natural Resources (IUCN 2008; DENR 2004a, 2007a). The absence of effective, appropriate, and sustainable institutional arrangements to manage biologically recognized sites in Mindoro immensely aggravated the threats to different ecosystems' ability to provide balanced and sustained ecological services.

The depletion and deterioration of natural resources have likewise reduced the food supply of the Mangyans, especially those who are still dependent on forest resources for food and livelihood. Some wild resources consumed for food by the Mangyans are now classified as threatened species, particularly the deer and wild pigs. There are Mangyans who collect forest resources for their own use but with rise in demand from the local market, they started to trade these products commercially to buy food (Sablayan Municipal Government 2005). The dependence of IP and non-IP communities on the remaining natural resources for subsistence and livelihood is an important conservation concern in Mindoro (Narvadez 2009).

The other critical issue in Mindoro is the government's priority agenda to subject a large area of the island to mining. Several vital biological and cultural areas are covered by at least 92 mining tenements, measuring about 554,676 ha or 55.25 percent of the land area of the entire island. These mining tenements are classified into exploratory permits, mineral production sharing agreements and financial and technical assistance agreements (DENR-MGB 2008 as cited by De Alban 2009).

The establishment of protected areas following the National Integrated Protected Areas System (NIPAS) framework espoused by RA No. 7586 or the NIPAS Act of 1992, received vehement opposition from several IP tribes and religious sectors because of the possibility that it will dislocate the Mangyan communities and that it is inappropriate to local conditions and needs. The Mangyans strongly believe that "nature has caretaker spirits who should be respected by everyone" and they adhere to *katutubong pangangalaga* or indigenous ways of taking care of nature (Dinter 2007).

Moreover, some proposed PAs and other biologically important sites in Mindoro are likewise claimed as ancestral domains of the Mangyans and at the same time covered by mining tenements. There are also private individuals and commercial ventures asserting claims over a number of biologically significant sites in Mindoro, while some non-IP communities are also occupying certain forestlands without proper land tenure security.

The awareness of the general public on the biodiversity relevance of Mindoro is relatively low and there is a need to enhance and strengthen the capacity of local stakeholders in biodiversity conservation. Full and meaningful participation of local stakeholders, particularly the local governments and IP and non-IP communities, have to be mainstreamed and enlisted in environment and natural resources governance in Mindoro. The enormous challenges in biodiversity conservation in Mindoro therefore necessitate the development and implementation of clear, integrated, and unified conservation agenda that take into account both the biological and cultural features of the island.

CONSERVATION NEEDS ASSESSMENT

Under the auspices of the Philippines Biodiversity Conservation Programme (PBCP), a rapid island-wide survey of the terrestrial fauna and flora in Mindoro was conducted in 1999.[3] The final report of the survey validated the significance of Mindoro in terms of biological diversity and identified some priority biodiversity areas.

Based on the 1999 flora and fauna survey results and other available literature, MBCFI further selected 10 priority project sites (Figure 6 and Table 5) for its program in Mindoro Island in the next 10 years. The coverage of these 10 sites, as delineated during the CNA, is about 220,063 ha or 22 percent of Mindoros' total area. The main considerations for the selection of the MBCFI priority project sites include the following criteria:

- Presence of natural habitats and threatened endemic species;
- "Representativeness" of sites in terms of ecosystem and habitat diversity and ecological functions;
- Geographic condition with respect to location, accessibility, peace and order, etc;
- Levels of conservation threats and degree of current conservation initiatives; and
- Possibility and practicability of achieving conservation outcomes and/or degree of success.

PURPOSE AND SCOPE OF THE CNA

MBCFI engaged the services of several technical specialists to conduct conservation needs assessment (CNA) on its identified priority project sites in Mindoro. Although only representative sites were visited for the CNA (Mount Halcon, Mount Malasimbo, Lake Naujan, and Bulalacao-Mansalay in Oriental Mindoro; and Ilin Island and Abra de Ilog in Occidental Mindoro), literature review was done for the other sites.

The CNA was designed to determine the different situations and conditions affecting the biological and cultural diversity of Mindoro and the urgent conservation requirements of the identified priority project sites of MBCFI. In particular, the CNA included rapid inquiry and analysis of the social, economic, and cultural variables affecting biodiversity, as well as situational analysis of the existing institutional and management arrangements prevailing in the MBCFI priority project sites.[4] The CNA further included geo-political and physical profiling and mapping of the MBCFI priority project areas.[5]

The CNA was conducted through focus group discussions and key informant interviews with relevant stakeholders, particularly the different IP tribes, local governments, DENR and NCIP representatives, and some members of civil society. Detailed literature review and policy analysis were also used as tools in the CNA, in addition to mapping, site ocular visits, and direct field observations. Consultations with key stakeholders were also conducted to determine conservation initiatives needed to address pressing threats to the biological and cultural diversity of Mindoro, which this program document attempts to present and elaborate.

3 See full report *Rapid Island-Wide Survey of Terrestrial Fauna and Flora on Mindoro Island* by Gonzalez et al. (1999).
4 See full report prepared by Salve Narvadez, consultant for the socio-economic and cultural component of the Conservation Needs Assessment. 2009.
5 See full report prepared by Jose Don de Alban, Geomatics Specialist. 2009.

MBCFI PRIORITY PROJECT SITES

General Conservation Profile of 10 Sites

The 10 priority project sites of MBCFI are within the administrative jurisdictions of 10 municipalities in Oriental Mindoro and six municipalities in Occidental Mindoro. Seven of these sites were included as key biodiversity areas of the Philippines. Two of the priority project sites are landscape and seascape, in character, namely, Ilin Island and the Apo Reef Natural Park (ARNP). Both are located in the province of Occidental Mindoro, although the land area constituting the latter is relatively small. The Lake Naujan National Park (LNNP) in Oriental Mindoro is a combination of terrestrial and freshwater ecosystems; while all the other MBCFI priority project sites are terrestrial forest ecosystems.

There is no doubt that the MBCFI priority sites are biologically important with several habitat types and numerous threatened endemic flora and fauna (Table 6). These sites are among the most important conservation areas in Mindoro. Of the 10 priority project sites of MBCFI, Mount Malasimbo has the most extensive forest at 27,051 ha or 71 percent of its estimated area of coverage, followed by Mount Halcon at 21,420 ha with its forest cover at about 85 percent of its approximated total land area.

The MBCFI priority project site in the municipality of Abra de Ilog in Occidental Mindoro has an estimated forest of about 27 percent based on its designated land area; 57 percent is forested in Mount Siburan, 15 percent in Lake Naujan and 10 percent in Mount Calavite. Out of the total area of Apo Reef, 1 percent is a mangrove forest. On the other hand, Ilin Island has 3 percent and 2 percent terrestrial and mangrove forests, respectively, out of its total estimated coverage. Grasslands and brush lands dominate the landscape of Bulalaco-Mansalay and Mount Hinunduang project sites but nonetheless these areas harbor at least 12 and 6 threatened endemic species, respectively.

The estimated forest cover of the 10 priority project sites is about 71,752.77 ha, constituting 37 percent of Mindoro's total forest vegetation. Of these sites, Mount Halcon is noted to have the highest number of threatened endemic species, classified as critically endangered (3 species), endangered (4 species), and/or vulnerable to extinction in the wild (9 species).

Three of the MBCFI priority sites are components of NIPAS, namely, the Lake Naujan National Park, the Apo Reef Natural Park, and the Mount Calavite Wildlife Sanctuary (MCWS). The management of a NIPAS site is vested upon the multi-sectoral Protected Area Management Board (PAMB) under the control and supervision of the DENR. Detailed discussions of this institutional arrangement are presented in the succeeding sections of this document.

Other priority areas of MBCFI have no clear institutional arrangements for their management although certain sites are known as ancestral domains of the Mangyans, while some areas are covered by mining applications. Based on the IPRA, the IP is responsible for the management of the CADT areas. Some areas within the MBCFI priority project sites are also covered by DENR-issued land tenure instruments, such as the Certificate of Stewardship Agreement (CSC) and Community-Based Forest Management Agreement (CBFMA).

The awarding of CSC was under the Integrated Social Forestry Program, which was devolved by the DENR to local governments, relative to the enactment of the Local Government Code (LGC) of the

Philippines in 1991 or RA No. 7160. The CSC is a forestland tenure instrument issued individually, covering a period of 25 years and renewable for another 25 years.

The CBFMA is also a forestland tenure instrument issued by the DENR to qualified and organized communities, as provided for in Executive Order (EO) No. 263 dated 19 July 1995, which declared community based forest management as a national strategy for the sustainable development of the country's forest resources. The DENR Administrative Order No. 2004-29 served as the implementing rules and regulations of EO No. 263. The CBFMA has a timeframe of 25 years and likewise renewable for another 25 years. Each CBFMA holder is required to develop and implement a community based resource management framework (CBRMF).

Site Conservation Profile

Lake Naujan National Park

Lake Naujan, located in the 21 barangays bordering the municipalities of Socorro, Pola, Naujan, and Victoria in Oriental Mindoro, was declared as a national park by virtue of Proclamation No. 282 issued on 27 March 1956. It is the 5th largest lake in the Philippines and has a total area of 21,665 ha. Lake Naujan has been designated as a Wetland of International Importance by the Ramsar List on 12 November 1999 (Wetlands International 2003). It is the only area in the Philippines with reported presence of a critically endangered freshwater sawfish, otherwise known to occur only in Africa, Australia, and other Southeast Asian countries. This area is recognized as CPA, IBA, and KBA in various priority setting activities hosted by the DENR-PAWB, together with several other organizations.

The forest within the Lake Naujan National Park is more or less 15 percent of its total area and the lake itself dominates the entire protected area at 44 percent. Agricultural areas already account for about 40 percent of the LNNP, while brush land is only one percent. There are three species classified as critically endangered, one as endangered, six as vulnerable, and two others as restricted-range species.[6] Twelve species in LNNP are known as congregatory species (CI-Philippines, DENR-PAWB, and Haribon 2006*).*

The threatened Philippine crocodile (*C. mindorensis*), an endemic species to the Philippines, was formerly recorded in LNNP but may now be extinct in the area. However, the estuarine crocodile (*C. porosus*) still exists in the protected area. Large numbers of ducks and waterfowl occur in LNNP and the lake itself supports numerous fish fauna, including several protected species (Mallari, Tabaranza, and Crosby 2001).

Since Lake Naujan is a declared national park prior to the approval of RA No. 7586, it is considered as an initial component of the NIPAS. Initial components of the NIPAS include *"all areas or islands in the Philippines proclaimed, designated or set aside, pursuant to a law, presidential decree, presidential proclamation or executive order as national park, game refuge, bird and wildlife sanctuary, wilderness area, strict nature reserve, watershed, mangrove reserve, fish sanctuary, natural and historical landmark, protected and managed landscape/seascape as well as identified virgin forests before the effectivity of the NIPAS Act."* (RA 7586, Section 5, a)

6 For the list of some species found in Lake Naujan National Park, see Mallari, Tabaranza, and Crosby et al. (2001) and Heaney et al., 2002, Mammals of the Philippines, the Field Museum of Natural History in Chicago

As an initial component, LNNP shall be subjected to protected area suitability assessment (PASA) and initial protected area planning to determine whether it should become a full-fledged component of the NIPAS. Once validated and confirmed to have the necessary features of a protected area, a new presidential proclamation and a site-specific law by Congress shall be enacted for Lake Naujan, including the designation of a most appropriate PA management category.[7] There is also a need to prepare the general management plan (GMP) of the area in accordance with the guideline on general management planning strategy issued by the DENR.

Reportedly, there is a multiple-use forest research center at the south of the lake and the Bureau of Fisheries and Aquatic Resources (BFAR) has a limnological laboratory and experimental fish pond in the area. The DENR has organized the protected area management board (PAMB) of the LNNP but information gathered during the CNA claimed that the PAMB is not yet fully operational and functional.

The LNNP is not within the ancestral domain claims of the IP; except for the municipality of Pola, some areas of other municipalities with administrative coverage over the lake are subject of IP ancestral domain claims. Certain areas in Naujan and Victoria are also involved in mining claims, estimated at about 8,547.13 ha or almost 13.21 percent of the total land area of these two municipalities.

Apo Reef Natural Park

The Apo Reef Natural Park (ARNP) is located in the municipality of Sablayan, Occidental Mindoro. This natural park has a total area of 15,792 ha, encompassing both terrestrial and coastal/marine ecosystems. Apo Reef is a submerged platform of about 34 square kilometers of sub-triangular northern and southern atoll-like reefs, separated by a 30-meter deep channel that is open to the west. Apo Island is about 22 hectares in land area with fine sandy beaches that serve as nesting grounds for the threatened green and hawksbill sea turtles.

A dive to about 50 feet in the waters of Apo Reef guarantees sightings of turtles, sharks, and other big pelagic fish as well as colorful corals that cover the bottom and sides of the reef (Gatumbato 2004a). Apo Reef contains a wide mixture of habitat types, classified according to structure and vegetation, such as the sandy beach, beach forest, mangrove forest, coral reefs, and sea grass and algae flats. The 10-hectare mangrove forest surrounding the lagoon at Apo Island serves as bird sanctuary, especially for the threatened Nicobar pigeon.

The island is a resting ground for migratory birds. Studies by PA authorities claimed that the islands in Apo Reef serve as rookeries for about 27 species of migratory and resident breeder birds and other endemic species. Apo Reef has 190 recorded species of hard corals and seven species of soft corals, which represent about 38 percent of the 500 species recorded in the Philippines (ARNP Protected Area Management Board, DENR, and Conservation of Priority Protected Areas Project 2001).

About 385 species of marine fish, including sharks, stingrays, mantas, jacks and snappers, tropical aquarium fish, morays, blennies, and gobies thrive in the reef. The record of 148 species of visually conspicuous reef fishes from 24 families in Apo Reef may be considered as relatively good compared to other reef sites in the country (ARNP Protected Area Management Board, DENR, and

7 The designation of a particular PA category depends on the conservation and management objectives of an area. The NIPAS Act introduced several PA management categories.

Conservation of Priority Protected Areas Project 2001). Common invertebrates are noted in the area, including several ecologically and economically important species, such as the giant clam, lobster, cone shell, triton shell, and nautilus shell. Species of coconut crab dwell in the karst rock of Apo Island (Gatumbato 2004a).

The Apo Reef Natural Park was established as a protected area with the issuance of Presidential Proclamation No. 868 passed on 6 September 1996. It was one of the 10 project sites of the World Bank-Global Environment Facility-supported Conservation of Priority Protected Areas Project (CPPAP) implemented from 1995 to 2002. The ARNP was listed as an IBA and KBA at the same time.

The CPPAP facilitated the declaration of Apo Reef as a natural park and the formation of the PAMB. The ARNP general management plan is available but its final designation as a protected area still requires congressional approval. The World Wild Fund has implemented some conservation initiatives in the area and the LGU of Sablayan has an existing memorandum of agreement (MOA) with the PAMB of ARNP on ecotourism development.

Mount Calavite Wildlife Sanctuary

Mount Calavite, located in Barangay Harrison in the municipality of Paluan, Occidental Mindoro, was formerly declared as a game refuge and bird sanctuary by virtue of Executive Order No. 9 on 28 January 1920. At the time the national park system was not yet introduced by the American colonial regime. This declaration probably became the main basis of the DENR to facilitate the declaration of the area as a wildlife sanctuary under NIPAS even though only limited information is available on its flora and fauna.

Presidential Proclamation No. 292 issued on 23 April 2000 declared Mount Calavite Wildlife Sanctuary (MCWS) as a component of NIPAS, covering a total land area of about 18,016.19 ha. The Congress has still to enact a law that would finally establish MCWS as a final component of the NIPAS. The general management plan of the MCWS is not yet available. It is not known during the CNA if the PAMB for MCWS has already been formed.

The MCWS was also included in the lists of IBAs, CPAs, and KBAs of the Philippines. It has an estimated forest cover of about 10 percent of its total land area, while brush land and grassland dominate its land cover at 62 percent and 22 percent, respectively. About six percent of Mount Calavite's land area is devoted to agriculture.

Two species in MCWS have already been identified as critically endangered, three as endangered, and three as vulnerable, while 24 others are restricted-range species (CI-Philippines, DENR-PAWB, and Haribon 2006). This protected area is an important watershed of the municipality. Mount Calavite is not included in the list of ancestral domain titles and claims secured during the CNA. Similarly, it was spared from mining claims although a large area of Paluan municipality is the subject of mining applications.

Mount Malasimbo

Mount Malasimbo is part of the mountain range in the municipality of Puerto Galera, Oriental Mindoro, extending up to Abra de Ilog in Occidental Mindoro. The entire town of Puerto Galera was

designated as a Man and Biosphere Reserve by the United Nations Environmental, Scientific, Cultural Organization's (UNESCO) through Presidential Decree No. 354 issued on 26 December 1973. However, this declaration remains on paper as no concrete efforts have ever been done to ensure the implementation of the requirements of UNESCO. None of the mountain ranges enclosing Mount Malasimbo have ever been officially declared as protected areas, watersheds, and/or any other management category.

Based on the CNA, the total land area of Mount Malasimbo is estimated at 38,100 ha, constituting four barangays in Puerto Galera and another five in Abra de Ilog. This is the second largest area among the MBCFI priority project sites and has the most extensive forest, estimated at 27,051.00 ha or the equivalent of 71 percent of its delineated land area.

The grasslands and brush lands appear at one percent and five percent, respectively, out of the total delineated area of Mount Malasimbo, and roughly 23 percent of its coverage is devoted to agricultural development. Four species occurring in Mount Malasimbo are listed as critically endangered and four others are classified as endangered (CI-Philippines, DENR-PAWB, and Haribon 2006).

Mount Malasimbo is an open access area because no clear institutional mechanisms have been set up for its management. However, on 28 April 2004, the NCIP awarded a CADT to the Iraya Mangyan tribe covering a total land area of 5,700.83 ha. The NCIP is now assisting the Iraya in the preparation of an ancestral domain sustainable development and protection plan (ADSDPP), which is required under the IPRA.

Aside from the Mangyans, there are also private persons and business ventures asserting rights on some areas of Mount Malasimbo. The Ponderosa Golf and Country Club is situated at the foot slopes of Mount Malasimbo as well as part of the 50-hectare estate of Antonio Taylor, an American national who has been a resident of Puerto Galera for almost 50 years. Mario Lutz, a German national, is also maintaining a herpetology zoo in a 10-hectare lot in the foothills of Mount Malasimbo. Lutz's collections include a very good number of rare snakes collected from various countries. Surrounding Mount Malasimbo are several vacation estates owned by prominent clans in the Philippines, like the Ayalas.

The local government of Puerto Galera has no forest land use plan (FLUP) covering Mount Malasimbo and other forestlands but local officials expressed interest in developing the area for tourism purposes, owing to the nature of the municipality as one of the popular tourist destinations in the Philippines. In the same manner, the LGU of Abra de Ilog has no forestland use plan covering its area within Mount Malasimbo. A large area bordering Abra de Ilog and Puerto Galera is subject to mining applications, extending to certain areas of Mount Malasimbo.

Mount Halcon

Mount Halcon, being the third highest peak in the country, is a popular mountaineering destination. Just like the other MBCFI priority project sites, Mount Halcon has remaining natural forests in varying elevation ranges. It borders 20 barangays in the municipalities of Naujan, Baco, and San Teodoro in Oriental Mindoro and the municipalities of Sablayan and Sta. Cruz in Occidental Mindoro.

The CNA has delineated a total of 25,200 hectares as part of Mount Halcon's land coverage of which 85 percent or roughly 21,420 ha is covered by various forest types. Of the total area of Mount Halcon,

10 percent and five percent are brush lands and grasslands, respectively. Surprisingly there is no available data indicating that its delineated area is already devoted to agricultural development, albeit the DENR has awarded two CBFMAs in San Teodoro, measured at 1,707 ha, that may possibly overlap with certain areas of Mount Halcon. The DENR has also awarded a rattan harvesting concession to a Mangyan tribe in the area.

The delineation of Mount Halcon as an IBA extends a much wider land area, estimated jointly by Haribon Foundation and Birdlife International at about 60,000 ha, whereas the KBA includes 48,660 ha as part of Mount Halcon's coverage. However, the CNA concentrated in delineating the land area of Mount Halcon where sizeable forests are still intact.

Of the different priority project sites of MBCFI, Mount Halcon has the most number of threatened endemic species, counted at 16 species of which three are classified as critically endangered, four as endangered, and nine others as vulnerable. It is the habitat of numerous endemic species known only to occur in this area and on Mindoro Island. Mandia (2001) has conducted a comprehensive botanical survey at the summit of Mount Halcon; the results of which claim that the area has high floral endemism and diversity.

Although Mount Halcon has long been recognized as a biologically important area of the Philippines, no formal institutional arrangement has ever been instituted for its management. The DENR has recommended the declaration of Mount Halcon as a protected area but no progress has ever been made. The municipal governments bordering Mount Halcon have no clear management objectives and plans but they recognize the potential of the area for ecotourism. The provincial government of Oriental Mindoro is now attempting to prepare a tourism management plan for Mount Halcon.

It should be noted that while no formal institutional mechanisms have been instituted in Mount Halcon, Barangay Lantuyan in Baco passed a resolution in 2006 for a moratorium on mountaineering-related activities because of the findings that certain areas are already degraded due to unregulated entry of mountaineers and damage created by uncaring visitors. This moratorium, which is still in effect to date, was recognized and respected by local governments and even some mountaineering groups.

Mount Halcon is covered by CADT applications of the Iraya and Alangan Mangyan tribes. The Samahan ng Nagkakaisang Mangyan Alangan (SANAMA) in Baco, San Teodoro, and Naujan has an application for CADT, covering more than 32,000 hectares. The Mal-anggatan Iraya Paranawan Kakuyayan, Inc. (MIPK), another organization of the Iraya Mangyan, has also a separate CADT application, estimated at about 38,082 hectares of Mount Halcon, extending up to Mount Malasimbo. Certain areas of Mount Halcon are also covered by mining claims.

Bulalacao-Mansalay

The Bulalacao-Mansalay project site is situated in five barangays in the municipality of Bulalacao and two barangays in the municipality of Mansalay, both in Oriental Mindoro. It has a total land area of 10,200 hectares basically dominated by brush land at 80 percent of its estimated land area. The remaining 20 percent of the Bulalacao-Mansalay project site is vegetated with grasses. In spite of this condition, this site is still being considered as a priority project area of MBCFI because it hosts at least nine threatened endemic species, four of which are declared as critically endangered.

This project site is located in the southernmost tip of Mindoro where the Malampaya pipelines of natural gas pass through from Palawan to Batangas in mainland Luzon. It has interesting natural landscapes and seascapes because of the presence of archeological sites, fine beaches, coves and peninsulas, and pristine coastal and marine environment.

The Bulalacao-Mansalay area is noted for its once abundant non-timber forest resources but these products are diminishing through the years, including a material used by the Mangyans for weaving. Despite the fact that the natural forest of this project site is probably gone, it is still a major source of charcoal. The local government of Bulalacao has adopted a scheme called "Ulingan Center" to designate certain areas for charcoal production on a rotation basis per site.

This project site has no clear institutional arrangement governing its forestland and other forest resources. LGUs with jurisdictions over this site have no forestland use plan. However, the DENR has issued CBFMAs covering a total land area of 7,983 hectares in Bulalacao to four different groups (Table 7). A large area of this MBCFI project site is claimed as the ancestral domain of the Hanunuo Mangyan tribe, represented by the Pinagkausahan Hanunuo sa Daga Ginurang, Inc. (PHADAG).

There is also a pending application for coal mining in the town of Bulalacao. The mayor is positive that the mining activity would not be environmentally destructive because the applicant will reportedly use a tunnel approach for its operation. The mayor further believes that mining will create jobs and bring more revenues to the LGU.

Abra de Ilog

Of the 10 priority project sites of MBCFI, Abra de Ilog has the largest land area, estimated at about 44,900 hectares, encompassing the six barangays of the municipality of Abra de Ilog in Occidental Mindoro. Twenty seven percent or 12,123 hectares of this area is covered by various forest types, while grasses and brushes dominate its vegetation at 40 percent and 32 percent, respectively. Only one percent of this site is devoted to agricultural development.

Abra de Ilog is equally biologically important because it is host to at least 10 threatened endemic species, six of which are classified as critically endangered, while two others are endangered and another two as vulnerable. However, the importance of this area in terms of biological diversity is left unattended because no clear institutional mechanisms have ever been in place governing the forestland and other forest resources in the area.

Currently, no available literature would attest that certain areas of Abra de Ilog are covered by declarations as protected areas, watersheds, and/or other management arrangements. Although local officials are inclined to develop and implement watershed protection and rehabilitation plans, the LGU is constrained from implementing forest conservation-related activities because of the notion that such is the primary responsibility of the national government through the DENR. However, the Mangyans are claiming rights over their ancestral domains in Abra de Ilog while a large tract of the municipality's land area by covered with various mining claims for various mineral resources.

Mount Hinunduang

This MBCFI project site is within the three barangays of Calintaan and one barangay in San Jose in Occidental Mindoro and six barangays in Mansalay, Oriental Mindoro. Its land area is estimated at

20,100 hectares, as delineated during the CNA. Even though 83 percent of its area is dominated by brush lands, Mount Hinunduang is also declared as CPA, IBA, and KBA since it serves as habitat to numerous endemic species, six of which are classified as threatened. The remaining 17 percent of Mount Hinunduang's land area is grassland.

Basically, the entire Mount Hinunduang is claimed as an ancestral domain of the Mangyans, which also overlaps with certain mining applications. Through the years, no clear and effective institutional mechanisms have been set up in managing this area although reportedly the DENR has established reforestation and timber stand improvement projects in Mount Hinunduang.

Mount Siburan

Mount Siburan is an important conservation area primarily because it is probably the remaining site in Mindoro where lowland forests have been left intact. It is located in Sablayan, Occidental Mindoro, flanked by three barangays. Mount Siburan's land area is estimated at 9,800 hectares of which 57 percent is forest and where at least 11 threatened endemic species are surviving. Three of these species are declared as critically endangered, three others as endangered, and the rest as vulnerable. It also hosts 22 other restricted-range species.

Interestingly, Mount Siburan is within the area of the Sablayan Prison and Penal Farm (SPPF), which to some extent provided a certain degree of protection to the remaining forest in the area. A portion of Mount Siburan is also included in the declaration of the 140,000-hectare FB Harrison Game Refuge and Bird Sanctuary passed on 20 January 1920, through Executive Order No. 9. The Mangyans are claiming an area within Mount Siburan as ancestral domain. Vast areas of Sablayan are covered by overlapping mining and ancestral domain claims.

Mount Siburan was the site of the European Commission-supported Integrating Forest Conservation with Local Governance Project (IFCLGP) of the Haribon Foundation and Birdlife International implemented from 2001 to 2005 (Plantilla, Ong, and Gatumbato 2005). The project facilitated the development of the Sablayan Forest Management Plan, which included Mount Siburan (Sablayan Municipal Government 2005[8]). This area is declared as CPA, IBA, and KBA in various conservation priority setting sponsored by the DENR-PAWB and other conservation organizations in the Philippines.

Ilin Island

Ilin Island is located in San Jose, Occidental Mindoro. It is comprised of 11 barangays with an estimated area of 7,300 hectares. Majority of the land area of Ilin is covered by brush land (53%), grassland (15%), and agricultural development (24%). The terrestrial forest of Ilin is roughly 3 percent of its land area and the mangrove forest is estimated at 2 percent.

Of the 10 MBCFI priority project sites, Ilin Island is the smallest but its conservation values could not be understated because it harbors numerous endemic species with certain species restricted only to this island, such as the Ilin Island bushy tailed cloud rat. At least eight endemic species recorded in Ilin are already threatened to extinction in the wild and four of these species are classified as critically

8 The author served as the consultant for the development of the Sablayan Forest Management Plan under the IFCLGP Project of the Haribon Foundation.

endangered. The island is host to the threatened Philippine teak (*T. philippinensis)*, which is known to occur only in Batangas (Lobo and San Juan) and Mindoro (Ilin and Ambulong Islands).

The Philippine Teak Conservation Project of MBCFI started in June 2006 when the Department of Environment, Food, and Rural Affairs of the United Kingdom, through the Fauna & Flora International Flagship Species Fund, provided funding for 15 months. After funding ended, MBCFI continued its efforts in the island through funding assistance from Malampaya Partners, through SPEX.

MBCFI's other conservation initiatives include establishment and maintenance of native tree nursery and teak forest restoration, which is being implemented in partnership with De La Salle University and the barangay councils of Ilin. MBCFI further facilitated the formation of Bukluran para sa Punong Malabayabas and has initiated several conservation awareness and education activities.

THE POLICY CONTEXT OF MBCFI PROJECT SITES: REVIEW AND ANALYSIS

This section presents the different policy environments governing the MBCFI priority project sites in Mindoro, in relation to environment and natural resources management. It is very necessary that MBCFI shall take note of applicable laws, rules, and regulations governing its priority project sites to ensure that its interventions are contextualized within an appropriate legal framework. It should be noted that environment and natural resources management in the Philippines is governed by numerous regulations. The execution of these policies is usually entrusted to the DENR but there are also some that fall under the authority of local and other national government agencies.

An examination of the different policies on resource management is crucial for MBCFI especially so that its priority project sites, which are located in Mindoro, where various resource uses and interests, such as mining and other resource exploitations, overlap with biologically and culturally important sites. Contextualizing conservation interventions in Mindoro with various regulations is no easy task. It involves painstaking and meticulous processes in understanding the complexity of the situation from the subsistence needs of the IP to their ancestral domains rights; the power of other resource users to influence decision-making; the vulnerability and fragility of ecosystems and habitats; the requirements of threatened species to survive; the awareness and competence of stakeholders on biodiversity conservation; conflicting government policies and priority agenda; to the capacity of natural and social systems to absorb conflicting interests and agenda, among others.

The analysis presented in this section is also used in designing the different program thrusts of MBCFI, including general and site-specific strategies, as elaborated in the succeeding sections of this document. The various activities prescribed in this program document are tailored in ways that would be appropriate to the institutional framework of a particular project site based on the policy review and analysis presented in this section. Some experiences and lessons learned in the implementation of certain policies from other areas of the Philippines were further considered in designing this program document.

The National Integrated Protected Areas System

The NIPAS Act of 1992 is the main policy framework for the establishment and management of protected areas in the Philippines. It provides standardized criteria and procedure for the selection and declaration of a particular site as a component of the NIPAS, including the kind of management arrangement to be introduced in the protected area.

The DENR administers the protected areas system of the Philippines. As defined by the NIPAS Act, protected area (PA) "*refers to identified portions of land and water, set aside by reason of their unique physical and biological significance, managed to enhance biological diversity and protected against destructive human exploitation.*"

Depending on management objectives, each declared PA should belong to a specific category enunciated in the NIPAS Act. The category would dictate the allowable and prohibited activities, which shall be prescribed in the management zoning scheme of the PA. If necessary, buffer zones shall be established, in the same manner that PAs are designated.

A buffer zone, as defined by the NIPAS Act, is "*an identified area outside the boundaries of and immediately adjacent to a designated protected area that needs special development control in order to avoid or minimize harm to the protected area.*" However, some PA buffer zones are declared solely for other particular purposes (Gatumbato 2003). The DENR has recently modified the Implementing Rules and Regulations (IRR) of the NIPAS Act, as contained in DENR Administrative Order No. 2008-26, otherwise known as the NIPAS Act Revised Implementing Rules and Regulations (Annex 1).

NIPAS Components and PA Establishment Processes

The three priority project sites of MBCFI, namely, the Apo Reef Natural Park, the Mount Calavite Wildlife Sanctuary, and the Lake Naujan National Park, are governed by the NIPAS Act of the Philippines or RA No. 7586. The LNNP automatically became an initial component of NIPAS since it was declared as a national park prior to the passage of RA No. 7586, whereas the two others are already new components because they were proclaimed as protected areas under NIPAS.

As discussed in earlier sections of this document, the LNNP, as an initial component, has to undergo protected area suitability assessment and initial protected area planning to determine whether it should become a full-fledged component of the NIPAS. Once Lake Naujan is evaluated as still having the necessary features of a PA, a new presidential proclamation shall be issued for the area, including the designation of a most appropriate protected area management category. Several processes, such as community consultations and regional and national review shall be undertaken prior to the issuance of a presidential proclamation (Figure 7).

The final designation of a protected area is through a law that shall be passed by Congress. As such, a site-specific law needs to be enacted separately for Apo Reef Natural Park and Mount Calavite Wildlife Sanctuary, and similarly for Lake Naujan, only after its proclamation as a PA by the President. To date, only 10 sites out of more than 200 candidate sites in the Philippines have been designated by the Congress as protected areas (DENR-PAWB 2008). Meanwhile, the management of initial and additional components of the NIPAS is governed by the different provisions of RA No. 7586 and its implementing rules and regulations until Congress provides otherwise.

PA Management Arrangements

Under NIPAS, each protected area shall be managed by the Protected Area Management Board (PAMB), which is under the control and supervision of the DENR. The DENR regional executive director (RED), with administrative authority over the PA, acts as the chairperson of the PAMB. The PAMB shall be composed of the following:

- The Provincial Planning and Development Officer of every province covering the protected area;
- One representative from the municipal/city government with administrative jurisdiction over the PA;
- One representative from each barangay covering the PA;
- One representative from each tribal community, if applicable;
- At least three to a maximum of five representatives from NGOs and/or other civil society groups;
- One representative from other national government agencies, if necessary.

The PAMB is clothed with the authority to decide the budget allocation; approve proposals for funding; and decide matters relating to planning, peripheral protection, and general administration of the PA in accordance with the general management planning strategy.[9] The final decision of the PAMB is approved by majority votes of its members. In particular, DENR Administrative Order No. 2008-26 enumerates the following authorities of the PAMB:

- Approves policies, guidelines, plans and programs, proposals, agreements, and other related documents, including the manual of operations for the management of the PA;
- Facilitates the ground delineation and demarcation of the boundaries of the PA and its buffer zones;
- Ensures that the management plan of the PA and the ADSDPP are harmonized;
- Ensures the implementation of programs prescribed in the management plan of the PA;
- Monitors and evaluates the progress in the implementation of the management plan, including the harmonized plan with ADSDPP;
- Monitors and assesses the performance of the protected area superintendent and other PA staff and the compliance of partners to the terms and conditions of any undertaking, contract, or agreement;
- Resolves conflicts or disputes among tenured migrant communities, between tenured migrant communities and IP, but excluding conflicts or disputes exclusively among the IP;
- Recommends fees and other charges to the DENR Secretary for the use of the PA.

It is the primary responsibility of the DENR through its regional offices to organize the PAMB following the designation of a particular site as a component of NIPAS. However, some PAMBs were organized with assistance from NGOs, particularly those areas supported by the Foundation for Philippine Environment (FPE) and the CPPAP, while in other areas LGUs took the lead in facilitating the formation of the PAMB, such as in North Negros Natural Park (NNNP) in the province of Negros Occidental.

The DENR is also mandated to form the PAMB of the initial components of NIPAS on interim status. The interim nature of the PAMB is on the interpretation that it only assumes a delegated authority from the DENR Secretary since the area subject of its management is not yet proclaimed (initial component) under the NIPAS Act (Tanggol Kalikasan-Haribon: Primer on Protected Areas n.d.), such as the case of Lake Naujan National Park. But once the area is already declared as a PA under NIPAS

9 The General Management Planning Strategy shall provide basis on the development of a site-specific general management plan. However, this strategy still needs to be crafted by the PAWB. What is only available is the guideline on the procedures for site management planning.

(i.e., ANRP and MCWS), the PAMB assumes the full authority bestowed by RA No. 7586 and its associated implementing rules and regulations.

The DENR shall designate a protected area superintendent (PASu) to act as the chief DENR operating officer in the protected area. The PASu is responsible for the day-to-day management of the PA and to act as the secretariat for PAMB operations. At this point in time, however, the PASu position is only a designation because it is not yet a regular item in the official list of DENR regular staff. In most cases, a junior staff of the DENR is designated as a PASu of a particular PA. Only very limited number of DENR staff complements the PASu in many protected areas; in fact there are protected areas with no assigned DENR personnel at all. Though ARNP has a designated PASu and other staff it is not known if LNNP and MCWS do too.

Tenured migrant communities may also qualify for land tenure security over a certain portion of the multiple-use zone of the PA and in the buffer zones. Tenured migrant communities refer to "*communities within protected areas, which have actually and continuously occupied such areas for five years before the designation of the same as protected areas in accordance with the NIPAS Act and are solely dependent therein for subsistence.*"

The Protected Area Community Based Resource Management Agreement (PACBRMA), as prescribed in DENR Administrative Order No. 2004-32, shall be entered between tenured migrant communities and DENR over areas subject to land tenure claims. DENR Administrative Order No. 2008-26 details the procedures and requirements for the awarding of land tenure in the PAs. Holders of the PACBRMA are required to develop and implement community resource management plans that would include provisions on biodiversity protection and habitat restoration, among other conversation measures.

PA Management Planning and Financing

A general management plan (GMP) shall be prepared for each declared protected area, in accordance with the guidelines issued by the DENR (Figure 8). The GMP shall serve as basis for all management decisions and activities to be implemented in the PA. Proposed activities in the PA that are outside the scope of the GMP shall be subject to the Environmental Impact Assessment System (EIAS) of the Philippines.

Of the three PAs identified by MBCFI as priority project sites, only the Apo Reef Natural Park has an existing general management plan. In many instances, management plans were only prepared for protected areas that had international funding support (i.e., World Bank-GEF supported CPPAP, the European Commission-funded National Integrated Protected Areas Programme, and the United Nations Development Programme–GEF.

The NIPAS Act provides for the financing scheme of the PA through the establishment and maintenance of the Integrated Protected Area Fund. Through the years of NIPAS implementation, however, the strategy of generating funds from PA fees and charges and other finance generating activities was undeveloped, leaving many protected areas in the Philippines unfunded (UNDP-GEF and DENR 2007a). The concept of users' fee has never been fully maximized as a source of PA revenue and the annual appropriation from the national government for PA management is very minimal, if not negligible (UNDP and DENR 2006).

Ancestral Domain in Protected Area

The rights of the IP to their ancestral domain are recognized in protected areas. The awarding of CADTs to the IP in protected areas shall be in accordance with the IPRA. Although the three protected areas covered by the MBCFI priority project sites seem not within the ancestral domain claims of the IP, it is important to note that the DENR and the NCIP have jointly issued a memorandum circular on the management of areas that overlap between the PA and its buffer zones and ancestral domains of the IP.

The Joint DENR-NCIP Memorandum Circular No. 2007-01 requires that a harmonized management plan shall be prepared for areas in the PA and the ancestral domain of IP that overlap. The harmonized plan shall be based on a detailed resource assessment. With assistance from the DENR and the NCIP, the IP is tasked to prepare the harmonized management plan. The PA general management plan and the ADSDPP of the IP, if both are available, shall be inputted in the formulation of a harmonized management plan, which shall also adhere to the following existing policies:

- The use of natural resources like wildlife species based on existing policies, legislations, rules, and regulations;
- Access to natural resources for family use and sustenance based on established customs and traditional practices as reflected in the ADSDPP of IPs;
- The construction of infrastructure in accordance with the environmental impact assessment system;
- Management arrangements and commitments of stakeholders;
- Monitoring and evaluation;
- Recognition of existing property rights regime.

The Joint DENR-NCIP MC No. 2007-01 mandates the IP to have the primary responsibility in maintaining, developing, protecting, and conserving overlapping areas between the PA and the ancestral domain, which is also provided in the IPRA. Should the IP decide to transfer the responsibility over such areas to concerned government agencies, the decision must be written. The PAMB, on the other hand, shall manage portions of the PA and/or its buffer zone that are outside the ancestral domain. The harmonization processes of the PA management plan and the ADSDPPs of the IP were pioneered in Mount Apo Natural Park (MANP) in 2008.[10] (MANP Protected Area Management Board and Ecogov 2 Project 2009)

Opportunities, Constraints, and Challenges in PA Management

It should be noted that mineral locating or prospecting is a prohibited act in protected areas, as prescribed in the NIPAS Act. Similarly RA No. 7942 or the Philippine Mining Act of 1995 declared that protected areas under the NIPAS are closed to mining applications. This is probably the main factor and reason why the three protected areas identified by MBCFI as priority project sites in Mindoro are seemingly spared from any mining application.

10 The author was the consultant for the development of the Mount Apo Natural Park Harmonized Management Plan commissioned by the USAID supported ECOGOV 2 Project of the DENR, DILG and Development Alternatives, Inc. through the Ateneo de Davao University-Institute of Small Farmers and Industries.

Nevertheless, the enactment of a site-specific law by the Congress for a particular PA may provide an opportunity to slice its original coverage so as to accommodate other purposes and uses. Such circumstances occurred in Mount Kanla-on Natural Park (MKNP) on Negros Island and Mount Apo Natural Park in Mindanao where certain areas were excluded from their original boundaries to accommodate a geothermal energy development (Gatumbato,[11] 2003; MANP Protected Area Management Board and Ecogov 2 Project 2009), as declared by Congress. The Samar Island Natural Park (SINP) is an example where the declaration of the PA by Congress was stalled due to the aggressive lobbying of mining companies to exclude some areas of SINP for mining purposes (SINP-GMP[12] 2007).

But just the same, other innovative approaches in PA management that are most appropriate to local conditions and needs may be proposed to Congress in the legislation of a site-specific law for a particular protected area. It may include certain provisions that may amend the NIPAS Act when needed. For instance, if it is necessary that the management arrangement of a particular protected area shall make use of other institutional mechanisms other than the PAMB scheme or to designate the chairmanship of the PAMB to an institution other than the DENR, Congress may include such measure in declaring a PA.

One of the identified issues in PA management is the unavailability of the DENR Regional Executive Director to attend PAMB meetings. In most instances the RED only designates some of his or her subordinates to preside in PAMB meetings (UNDP and DENR-PAWB 2007). However, the responsibility of the PAMB chair is not only limited in presiding the meetings because he or she is similarly tasked to act as technical advisor and to ensure that the PAMB acts within the scope of its power and authority.

In Negros Occidental province, the mayor of Sagay City was designated as the chairperson of the PAMB when the Congress declared the Sagay Marine Reserve (SMR). The SMR management operation is directly under the control and supervision of the local government, instead of the DENR. The bill pending at the Congress for the declaration of the North Negros Natural Park also carries a provision that the governor of the province shall act as the chairperson of the PAMB. In order to do so, there should be a strong support from Congress, particularly those representing the congressional districts where the PA which is the subject of the legislation is located. There are also site-specific laws enacted for protected areas that have modified the composition of the PAMB, including the reduction of the number of members, due to the large number of PAMB members required under the NIPAS Act.

While protected areas system is globally recognized as an important modality in biological diversity conservation and environment and natural resources management, in general (Hamilton and McMillan 2004), its application and implementation in the Philippines are quite problematic due to a number of complicated factors. Mackinnon (2002) described the Philippines' PA system as follows:

- Weak in real protection and contains a high proportion of degraded and converted habitats;
- Poorly represented, biased to bio-poor highland areas and islands with very even habitat coverage;

11 Based on the actual experienced, being the Protected Area Superintendent of the Mount Kanla-on Natural Park from 1995 to 2002.
12 The author is likewise the consultant for the development of the Samar Island Natural Park General Management Plan under the Samar Island Biodiversity Project of the DENR with funding support from the UNDP-GEF. The SINP-GMP provided some measures from mining and logging activities, which are also being pushed inside the PA and its buffer zones.

- Not well related to the distribution of biodiversity;
- Boundaries often show little relation to forest boundaries on the ground; and
- There are still adequate natural lands in other areas and should be incorporated to make a truly representative Philippine PA system.

The assessment of capacity building needs for biodiversity conservation and management in the Philippines facilitated jointly by UNDP-GEF and DENR-PAWB (2007) have pointed out the following results:

- DENR centralized the PA management. Decision-making, especially on funding, was made at the central office. In effect, centralized PA management has hindered the full institutional development of PAMB and the PASu position;
- When foreign-assisted projects like CPPAP and NIPAP were finally concluded, site activities were not sustained because of unavailability of funds;
- Due to lack of funds, the PAMB operations were stalled and not sustained;
- Effective PA management planning has not been fully institutionalized nor established
- The PAMB needs to be further strengthened as an effective mechanism on PA management.

Under these circumstances, MBCFI should take note of various lessons in PA management not only in the Philippines context but also relevant experiences in other countries if it is interested in pursuing conservation initiatives using the protected area management framework. In spite of certain issues associated with the implementation of the NIPAS Act, it is still an important legislation that may bring some opportunities to advance the biodiversity conservation of the three protected areas identified by MBCFI as part of its 10 priority project sites in Mindoro.

It is also a challenge to MBCFI in showing that the PA management system is somehow applicable and may be implemented fully in Mindoro. This is to dismiss some misconceptions and speculations alleging that the PA concept is not appropriate in the locality. One of the most important contributions of the NIPAS Act was the recognition of ancestral domain rights of the IP because it hastened and strengthened the discourse on this particular concern until the IPRA was passed.

Ancestral Domain and IPRA

The Indigenous People's Rights Act of 1997 or RA No. 8371 is the main policy framework for the management of ancestral domains of the indigenous people. This policy is very relevant and necessary in the context of Mindoro since a large area of the island is claimed as the ancestral domain of various Mangyan tribes. The National Council for Indigenous People (NCIP) is the lead government agency mandated to implement the IPRA.

Six of the MBCFI priority projects overlap with the different ancestral domain claims of the Mangyans. These sites are Bulalacao-Mansalay, Mount Halcon, Mount Siburan, Mount Malasimbo, Mount Hinunduang, and Abra de Ilog. Essentially, almost all areas within Mounts Hinunduang, Halcon, and Malasimbo are covered by ancestral domain claims of the Mangyans.

The Indigenous People

As presented in Section 1.2 of this document, there are at least eight confirmed and certified IP tribes in Mindoro, spread all over the different municipalities of the island. These IP tribes are collectively

known as the Mangyans. The Indigenous People's Rights Act defines indigenous people as a group of people or homogenous societies who:

- are identified by self-ascription and ascription by others;
- have continuously lived as organized communities on communally bounded and defined territory;
- have, under claims of ownership since time immemorial, occupied, possessed customs, traditions, and other distinctive cultural traits;
- have, through resistance to political, social, and cultural inroads of colonization, non-indigenous religions, and culture, became historically differentiated from the majority of Filipinos.

The IP further includes people who are "*regarded as indigenous on account of their descent from the populations which inhabited the country, at the time of conquest or colonization, or at the time of inroads of non-indigenous religions and cultures, or the establishment of present state boundaries, who retain some or all of their own social, economic, cultural, and political institutions, but who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains*".

The Right of the IP to Ancestral Domain

The IPRA recognizes the rights of the IP to their ancestral domain. Ancestral domain refers to the following:

- Territory or the natural habitat of IP since time immemorial;
- It covers lands, waters, and natural resources found in the area, such as inland and marine waters, mangroves, forests, minerals, pasture lands, agricultural lands, residential areas, hunting grounds, burial and worship area, air space, among others;
- It also includes lands, which may no longer be exclusively occupied by the IP but from which they have had traditional access for their subsistence activities. This particularly refers to the home ranges of IP who are still nomadic and/or shifting cultivators;
- It is a private but community property that belongs to all generations.

The rights of the IP to their ancestral domain encompass various aspects of natural resources management, including the following:

- Right to manage and conserve natural resources;
- Right to benefit and share profits from allocation and utilization of natural resources;
- Right to negotiate the terms and conditions for the exploration of natural resources for the purpose of ensuring ecological and environmental protection, pursuant to national and customary laws;
- Right to an informed and intelligent participation in the formulation and implementation of any project, either by government or private, that will affect ancestral domains and to receive just and fair compensation for any damages resulting from the project; and
- Right to effective measures by the government to prevent any interference with, alienation, and encroachment upon these rights.

The IPRA further guarantees the following, as additional rights of the IP to their ancestral domains:

- The right to claim ownership over lands and bodies of water that are traditionally and actually occupied by IP, including sacred places, traditional hunting and fishing grounds, and all improvements made by the IP at any time within the domains;
- The right to stay in the territory and not be removed from the area. No IP will be relocated without their free and prior informed consent, nor through any means other than eminent domain;
- In case displacement occurs as a result of natural catastrophes, the state shall endeavor to resettle the displaced IP in suitable areas where they can have temporary life support system, provided, that the displaced IP shall have the right to return to their abandoned lands when the safety of such lands is guaranteed;
- Right to regulate the entry of migrant settlers and organizations into the domains;
- Right to safe and clean air and water through access to integrated systems for the management of inland waters and air space;
- Right to claim parts of the ancestral domains, which have been reserved for various purposes, except those reserved intended for common and public welfare and service; and
- Right to resolve land conflicts in accordance with customary laws of the area.

The rights of the IP to their ancestral domains carry certain responsibilities that are compatible with biological diversity conservation. These responsibilities include the following:

- To preserve, restore, and maintain a balanced ecology in the ancestral domain by protecting the flora and fauna, watershed areas, and other reserves;
- To actively initiate, undertake, and participate in the reforestation of denuded areas and other development programs and projects, subject to just and reasonable remuneration;
- To observe and comply with the provisions of the IPRA and the rules and regulations for its effective implementation.

From the above-mentioned provisions of the IPRA, it is very clear that the IP have the exclusive responsibility to manage their ancestral domain. It is therefore imperative to engage and mobilize the IP in pursuing biodiversity conservation initiatives, in accordance with their traditional and sustainable resource management system. However, the IP tribes may also allow exploitation of natural resources in ancestral domains, such as mining and logging, provided that free and prior informed consent (FPIC) is secured from them and they will negotiate on terms and conditions of benefits on the use of natural resources in their ancestral domains.

It should be noted that the IPRA's provision giving absolute right to the IP in negotiating the terms and conditions for the exploitation of natural resources in ancestral domain **pursuant to appropriate national** and customary laws, provides ambiguity as to who will finally issue the permit or license in resource extraction in ancestral domains. It may be interpreted that while the IP shall issue free and prior informed consent for resource extraction in the ancestral domain, it is still the concerned government agencies, like the DENR, who have the exclusive authority to issue resource utilization permits, which somehow downplays the rightful ownership of the IP to natural resources found in the ancestral domain. But just the same, this consideration is probably due to the fact that the natural resources ownership in the country is still anchored on the Regalian Doctrine, as enshrined in the 1987 Philippine Constitution. This doctrine adheres to the principle that all natural resources are owned by the state. As dictated in the current Constitution, except for agricultural lands, all other natural resources shall not be alienated. The exploration, development, and utilization of natural resources are under the full control and supervision of the state.

Delineation of Ancestral Domains and the CADT

Self-delineation shall be the guiding principle in the identification and delineation of ancestral domains. The IP concerned shall have a decisive role in all activities pertaining to the delineation of their ancestral domain. The sworn statement of the IP elders, as to the scope of the territories and agreements or pacts made with neighboring IP, if any, will be essential to the determination of these traditional territories.

The government shall also take necessary steps to identify lands, which the IP concerned traditionally occupy and guarantee effective protection of their rights of ownership and possession over these lands. Measures shall be taken in appropriate cases to safeguard the rights of the IP to land, which may no longer be exclusively occupied by them, but to which they have traditionally had access for their subsistence and traditional activities, particularly of IP who are still nomadic and are still engaged in shifting cultivation. This explains why the IP communities are claiming vast areas in Mindoro as ancestral domains.

The official delineation of ancestral domain boundaries, including census of all IP members, shall be undertaken immediately by the NCIP upon the filing of the application of the IP for ancestral domain claim. The delineation of ancestral domains shall be done with genuine involvement and participation of the concerned IP applicant. Proof of ancestral domain claims shall include the testimony of elders and other documents directly or indirectly attesting to the possession or occupation of the area since time immemorial by the IP.

The IP whose ancestral domains have been officially delineated and determined by the NCIP shall be issued their CADT in the name of the concerned IP group, containing a list of all those identified in the survey as members of the tribe. The NCIP shall register issued certificates of ancestral domain titles and certificates of ancestral land titles before the Registry of Deeds in the place where they were issued.

Natural Resources within Ancestral Domains

The IPRA grants indigenous people prior rights to harvest, extract, develop, and utilize natural resources found within their ancestral domains. However, a non-IP member may be allowed to develop and utilize natural resources in the ancestral domain for a period not exceeding 25 years and renewable for not more than 25 years under the following conditions:

- A formal and written agreement is entered into with the concerned IP, pursuant to the IP's own decision making process;
- All extractions shall be used to facilitate the development and improvement of the ancestral domain.

The ancestral domain or any portion of it found necessary for critical watersheds, mangroves, wildlife sanctuaries, wilderness, protected areas, forest cover and/or reforestation site shall be maintained, managed, and developed for such purposes. These sites shall be determined by appropriate government agencies with full participation of the concerned IP community. The IP shall be given the responsibility to maintain, develop, protect, and conserve such areas with full and effective assistance from government agencies. The decision should be made in writing in the event that the IP decides to transfer the responsibility over such areas to concerned government agencies.

The Balbalasang-Balbalan National Park in the municipality of Balbalan in Kalinga province and the Buasao Watershed in the municipality of Tubo in Abra province exemplify a situation where the IP takes full control on the management of a protected area and a watershed, respectively (FPE, REECS, Gatumbato, et. al., 2008). Despite being an initial component of the NIPAS, its active management does not rely on the PAMB but ono the Banao Bodong Association of the IP, which provides effective and actual protection measures and even regulates the various uses of the PA. Similarly, the Maeng Tribe is took control over the management of Buasao Watershed.

With the passage of the IPRA, governmental agencies are restricted from issuing, renewing, and granting any concession, license, or lease, and entering into any production-sharing agreement, without prior certification from the NCIP. Moreover, the area affected should not overlap with any ancestral domain. Such certificate shall only be issued after a field-based investigation is conducted by the NCIP. No certificate shall be issued by the NCIP without the free and prior informed and written consent of the affected IP group.

Under the IPRA, government agencies and government-owned or controlled corporations may no longer issue a new concession, license, lease, and/or production-sharing agreement while there are pending CADT applications. The IP is given the right to stop or suspend, in accordance with the IPRA, any project that has not satisfied the requirements of consultation processes.

Right of the IP for Self-Governance

The IPRA recognizes the inherent right of the IP to self-governance and self-determination and respects the integrity of their values, practices, and institutions. It upholds the right of the IP to freely pursue their economic, social, and cultural development. Moreover, the IPRA guarantees the rights of the IP to use their own commonly accepted justice systems, conflict resolution institutions, peace building processes or mechanisms, and other customary laws and practices within their respective communities as may be compatible with the national legal system and with internationally recognized human rights.

The IP have the right to participate fully, if they so choose, at all levels of decision-making in matters which may affect their rights, lives, and destinies through procedures determined by them as well as to maintain and develop their own indigenous political structures. Consequently, the IP shall be given mandatory representation in policy-making bodies and other local legislative councils.

Moreover, the IP have been given the right to determine and decide their own priorities for development affecting their lives, beliefs, institutions, spiritual well-being, and the lands they own, occupy, or use. The IP shall participate in the formulation, implementation, and evaluation of policies, plans, and programs for national, regional, and local development, which may directly affect them.

The IP living in contiguous areas or communities where they form the predominant population but which are located in municipalities, provinces, or cities where they do not constitute the majority of the population, may form or constitute a separate barangay (tribal barangay), in accordance with the Local Government Code.

Indigenous Knowledge Systems and Practices

The IP is entitled to recognition of full ownership, control, and protection of their cultural and intellectual rights. They shall have the right to special measures to control, develop, and protect their sciences, technologies, and cultural manifestations. This would include human and other genetic resources, seeds (including derivatives of these resources), traditional medicines and health practices, vital medicinal plants, animals, and minerals. Indigenous knowledge systems and practices, knowledge on the properties of fauna and flora, oral traditions, literature, designs, and visual and performing arts are similarly protected as part of the IP intellectual property rights.

Access to biological and genetic resources and to indigenous knowledge related to the conservation, utilization, and enhancement of these resources shall be allowed within ancestral domains of the IP only with a free and prior informed consent of such communities, obtained in accordance with customary laws of the concerned community. This provision is particularly important for biological studies, research, and biological prospecting.

The Ancestral Domain Sustainable Development and Protection Plan

The preparation of an Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) is required under NCIP Administrative Order No. 01-Series of 2004. The IP is responsible for the development of the ADSDPP, in accordance with their traditional and customary laws and practices. The ADSDPP Primer prepared by NCIP and UNDP is presented as **Annex 2** of this document.

The NCIP and other concerned and interested institutions may also provide technical assistance to the IP in developing and implementing the ADSDPP, which MBCFI may explore as part of its program for indigenous people in Mindoro, especially so that six of its priority project areas are within the ancestral domain claims of the Mangyans. This can be made possible through execution of memoranda of partnership between the MBCFI and the concerned IP tribes with concurrence of NCIP as a third party to the agreement.

Each of the issued CADT shall be covered by a specific ADSDPP, which shall be formulated adhering to the following basic principles:

- Freedom of the IP to pursue economic, social, and cultural development;
- Fulfillment of responsibility to future generations;
- Interdependence of ancestral domain and the socio-economic systems;
- Just and equitable sharing of benefits;
- Comprehensive or all-inclusive development.

The ADSDPP shall specify the goals, objectives, policies, and strategies of the IP for the sustainable management and development of their ancestral domain and all resources found in the area, including human and cultural resources. It will serve as a tool for IP empowerment and blueprint for total development and protection of ancestral domains. The ADSDPP has three major components, namely, the ancestral domain and community situation, the development plans and programs, and the ADSDPP implementation policies and mechanisms.

The development and implementation of ADSDPPs are crucial to biodiversity conservation because these will document the policies and mechanisms for recognizing and promoting the rights of the IP

and their rights to ancestral domains. The ADSDPP shall also identify programs and projects in strengthening self-governance, alleviating poverty, protecting the environment and cultural integrity, and building lasting peace and genuine development among the IP communities. It is also viewed that the ADSDPP will bind the compliance of the IP with their responsibilities in maintaining ecological balance, restoring denuded areas, as well as observing the requirements of the IPRA.

The development of ADSDPP entails several stages from preliminary activities and social mobilization, data gathering and assessment, planning to plan promotion and marketing. The final ADSDPP of a particular IP group shall be inter-phased with development plans of other government agencies to ensure the integration of IP concerns and programs with local, regional, and national development frameworks. In particular, the ADSDPP shall be integrated in the barangay, municipal, provincial, regional, and in short/medium/long-term national development plans. Relative, however, to the intellectual property rights of the IP, only the following components of the ADSDPP shall be submitted for integration:

- Demographic data and general information on the natural resources;
- Development needs and problems;
- IP and ancestral domain development framework; and
- Programs and projects and investment plans.

Local Governance and the Local Government Code

The Local Government Code of 1991 or RA No. 7160 governs the transfer of authority from national government agencies to local government units, including functions on environment and natural resources management. This particular policy is very important because despite three of the MBCFI priority project sites being protected areas and six others covered by ancestral domains, the authority of the LGUs over these sites could not be understated. The authority of the LGUs, as accorded in the LGC, is still very relevant to these areas relative to the accountability and responsibility of local officials in ensuring the general welfare of their constituents and the delivery of basic services, which may include the IP and occupants of protected areas. The general principles of devolution, as presented in the LGC, include the following:

- Philosophy of decentralization and local autonomy;
- Operating mechanisms for LGUs to meet priority needs and service requirements of communities;
- Empowering LGUs to share with the national government the management and maintenance of ecological balance; and
- Promoting participation of the private sector in local governance.

Pertaining to environment and natural resources management as set forth in the LGC, the DENR issued Administrative Order No. 92-30, which provided the guidelines for the transfer and implementation of DENR functions devolved to LGUs. Such guideline was further supported by the joint DENR and DILG Memorandum Circular No 98-10, providing the manual of operations for DENR-DILG-LGU partnership on devolved and other forest management functions (Annex 3). Another joint DENR-DILG Memorandum Circular No 2003-01 (Annex 4) was issued to establish guidelines on strengthening and institutionalizing of the DENR-DILG-LGU partnership on devolved and other forest management functions.

Devolved ENR Authority and Functions to LGUs

The LGC devolved some of the DENR functions and responsibility on environment and natural resources management to LGUs. These include the following:

Forest Management

- Implementation of community based forest management projects, such as the ISF, reforestation projects, forestland management agreements, and community forestry projects;
- Management and control of communal forests not exceeding 5,000 hectares;
- Management, protection, rehabilitation, and maintenance of small watershed areas, which are sources of local water supply;
- Enforcement of forestry laws in community-based communal forests.

Protected Areas and Wildlife

- Establishment, protection, and maintenance of tree parks, greenbelts, and other tourist attractions in areas identified by the DENR, except those areas under the NIPAS;
- Except export and import, regulation of flora outside protected areas, including industries and business engaged in their propagation and development;
- Implementation of the Rehabilitation in Conservation Hotspots (RICH) and the Conservation of Rare and Threatened Species (CARE) activities in areas identified and delineated by the DENR.

Environmental Management

- Enforcement of pollution control and environmental protection, which include issuance of Environmental Compliance Certificate (ECC) for projects under the Kalakalan 20; adjudication of cases involving complaints against businesses under the Kalakalan 20; and apprehension and testing of smoke-belching vehicles and collection of appropriate fees and charges;
- Implementation of solid waste disposal and other environmental management systems and services related to general hygiene and sanitation, such as sewage and household waste disposal;
- Abatement of noise and other forms of nuisance as defined by law; and
- Implementation of the cease and desist orders issued by the Pollution Adjudication Board.

Mine and Geo-Sciences Development

- Enforcement of the small-scale mining law, subject to the policies, standards, and guidelines of the DENR;
- Issuance of permit for guano collection and to extract sand, gravel, and other quarry resources;
- Verification and adjudication of conflicts on and collection of fees and charges for guano collection and the extraction of sand, gravel, and other quarry resources.

Land Management

- Conduct of cadastral surveys;
- Conduct of lot surveys;
- Conduct of isolated and special surveys.

The Sangguniang Bayan is also vested with authority to pass resolutions and ordinances to protect the environment and impose appropriate penalties for acts which endanger the environment, such as dynamite fishing and other forms of destructive fishing, illegal logging, smuggling of natural resources products and of endangered species of flora and fauna, slash and burn farming, and such other activities, which result in pollution, acceleration of eutrophication of rivers and lakes or of ecological imbalance (LGC Section 447.1.vi). The authority of the LGU Chief Executives and the Sanggunians are listed in Tables 8 and 9.

Moreover, the Sangguniang Bayan may approve ordinances for the establishment, maintenance, and conservation of communal forests and watersheds, tree parks, greenbelts, mangroves, and other similar forest development projects. This particular provision of the LGC was used by the Polillo Islands Biodiversity Conservation Foundation, Inc. (PIBCFI) in developing and implementing local conservation areas (LCAs), which were enacted through local legislative processes and approval, covering the most important biological areas in the Polillo Group of Islands in Quezon province (Gatumbato, et al. 2008). This particular experience may apply to priority project sites of MBCFI that are not within protected areas and ancestral domains, particularly in Ilin Island. Getting the support of the LGUs is necessary if something substantial is done in terms of environmental management in the Philippines.

The Co-Management Approach

The co-management system between the national government and local government is one modality that is currently being considered in environment and natural resources management. This approach, although emanated from the Local Government Code, is viewed to address certain limitations in authority of the devolved functions from DENR to LGUs. The DENR retains its supervisory and control mechanism authority over the devolved functions to local governments, as provided for in the LGC.

The manual of procedures for DENR-DILG-LGU partnership on devolved and other forest management functions, contained in DENR-DILG Joint MC No 98-01, provides that the DENR in consultation with LGUs shall devolve additional functions and responsibilities to local governments or enter into agreements with them for enlarged forest management and other related functions. It is further supported by another DENR-DILG Joint MC No 2003-01, which similarly calls for the strengthening of partnership between the DENR and local governments on various forest management functions.

Under these regulations, the LGUs are required to formulate forestland use plan (FLUPs), which shall be integrated into their comprehensive land use plans (CLUPs). The FLUP becomes the basis of the LGU to enter into a co-management system with the DENR through execution of memorandum of agreement (MOA). The MOA shall outline and specify the authority, responsibility, and accountability of each of the involved parties.

The MOA shall further introduce a specific management arrangement covering the area subject of the co-management, which is usually in the form of a management council with the head of the LGU concerned and DENR representative sharing the chairmanship. The DENR can enter a co-management agreement with LGUs covering even up to more than 30,000 hectares of forestlands. Most of the areas covered by existing co-management systems are critical watersheds.

One of the most important provisions of the DENR-DILG Joint MC No 2003-01 is the right of LGUs to be consulted by the DENR when it comes to any tenure applications in forestlands under the jurisdiction of the affected LGUs, including resource extraction permits. The concerned LGUs are given 15 days to comment on tenure applications; otherwise it is presumed that they endorse the approval of such applications.

The co-management system may be appropriate in forestlands that are not within the scope of the ancestral domain of the Mangyans. The local governments of Puerto Galera and Abra de Ilog have expressed interest over this scheme, especially the preparation and implementation of watershed management and the development of forestland use plans.

LGU and Protected Area Management

Generally, protected areas are not devolved to LGUs based on the Local Government Code. But the roles of LGUs in PA management are equally important because of the membership of their representatives to the PAMB. Since barangay, municipal, city, and provincial governments that cover protected areas each have one official representative to the PAMB, they may constitute a majority of the PAMB members, especially in PAs that cover numerous barangays and municipalities or cities. In such a situation, representatives from LGUs are in the position to influence the decision-making of the. LGUs may also be able to take full control over a particular protected area if a specific law, which shall be passed by Congress, provides such a measure, like in the case of Sagay Marine Reserve.

But just the same, under the NIPAS, LGUs are also given more flexibility to participate in PA management through MOAs with the PAMB for a particular purpose and/or a specific area. Based on the revised implementing rules and regulations of the NIPAS Act, the PAMB is authorized to enter and approve agreements with interested parties to participate in the management of protected areas. This arrangement has already been implemented in Apo Reef Natural Park where the LGU of Sablayan has an existing MOA with the PAMB on ecotourism development of the PA. Similarly, MOAs on ecotourism development were instituted by the PAMB of the Mount Kanla-on Natural Park with two city LGUs and the provincial government of Negros Occidental (Gatumbato 2002).

The Puerto Princesa Underground River Natural Park in Palawan is a good example where the LGU is taking the lead in PA management when it was turned over by the DENR to the city government of Puerto Princesa in 1993. The mayor chairs the PAMB and the PASu and some PA staff are also employees of the LGU. This protected area demonstrates the effectiveness of LGU and epitomizes the need of local governance in PA management (Hagedorn and Dacquer 2005).

LGU and Ancestral Domain Management

Local governments may also participate in the management of ancestral domains by providing support mechanisms in the development and implementation of the ADSDPP of the IP. If the ancestral domain of the IP covers a large portion of the forestland of a particular LGU, the ADSDPP may be adopted by such LGU as part of its forestland and comprehensive land use plans. The ADSDPP guideline issued by the NCIP also allows the integration of the ADSDPP to local, regional, and national development frameworks, which the LGUs are in the position to provide as assistance to the different IP tribes.

One good example of the harmonization process between the affairs of the IP and the existing local governance system was in the municipality of Tubo in Abra where the LGU adopted the Lapat System of the IP as part of the municipal ordinance (Gattud 2005). Lapat is the indigenous system of preserving and protecting the environment. Every barangay where the IP communities are concentrated identified its own Lapat area through issuance of a barangay resolution.

Other Relevant Policies on Natural Resources Management

There are other environment and natural resources regulations that are equally relevant in the island of Mindoro. However, for purposes of developing specific conservation measures, this policy analysis focused on two other policies that provide certain level of institutional mechanisms in biodiversity conservation, particularly in forest and wildlife management.

The Revised Forestry Code

The Revised Forestry Code of the Philippines or Presidential Decree (PD) 705 is still the major policy framework governing forestlands and other forest resources that are not subject to the protected areas system and other specific policy declarations. It could only be assumed that PD 705 may still apply in the utilization of forest resources within the ancestral domains in the event that the DENR shall issue resource extraction permits in these areas, after the issuance of the IP of the free and prior informed consent on such utilization. This particular assumption is being made because the DENR has in fact issued a rattan concession to the Mangyans covering its ancestral domain in Mount Halcon. Similarly, permits were issued to the Mangyans in utilizing trees for charcoal production in the municipality of Bulalacao.

PD 705 is seen as an antiquated policy because it was designed and enacted at the time when the logging industry was still thriving in the Philippines, which at this point may no longer apply because of the limited forest cover left. Efforts to amend PD 705 proved to be a long struggle because of two proposals: to impose either a total commercial logging ban and/or a selective logging ban in the Philippines. For the meantime, we have to contend with this policy in terms of forestland and other forest resources that are not subject to specific legislation.

One of the important institutional arrangements derived from PD 705 is the Community Based Forest Management Program (CBFMP), which was officially instituted through Executive Order No. 263 issued on 19 July 1995 that calls for the adoption of community-based forest management as the national strategy to ensure the sustainable development of the country's forestland resources. Consequently, the DENR issued Administrative Order No. 2004-29 to serve as implementing rules and regulations of EO No. 263. This particular policy is relevant in the Bulalacao-Mansalay project site because the DENR has issued CBFMAs to four different groups covering about 7,000 hectares.

The CBFMP offers land tenure security to qualified forest occupants to manage certain portions of forestlands where they can implement livelihood activities and generate income. The land tenure instrument that shall be issued by the DENR is the Community Based Forest Management Agreement, covering a 25-year period and renewal for another 25 years. The recipients of this form of land tenure should be organized as a people's organization (PO), who shall be responsible for the protection and development of areas covered by CBFMA.

To guide the CBFMA holders in the management of their claimed areas, they are required to formulate a community resource management framework that would provide basis for balancing

forest protection and sustainable use of forest resources. Beneficiaries of the CBFMA may be provided with resource use permits (RUPs) for the utilization of some allowable natural resources, such as rattan and other non-timber forest products. However, there was a time when this RUP provision was suspended because of the evaluation that this has been abused in some parts of the country (Gatumbato 2004b).

PD 705 offers numerous other allocations of forestland to various uses, such as the Industrial Forest Management Agreement (IFMA), Socialized Industrial Forest Management Agreement (SIFMA), and Forest Land Grazing Management Agreement, among others. There is also a provision in PD 705 that allows government use reservations, such as military and school reservations. The IFMA and SIFMA are intended for timber tree plantations with the end purpose of utilizing planted trees for timber purposes.

The Wildlife Conservation and Protection Act

The Wildlife Conservation and Protection Act (RA No. 9147) is another important legislation for Mindoro because of numerous endemic species and habitats found on the island, which this law governs. It provides a system of classification for threatened species and applies to all wildlife resources regardless of their locations.

One important provision of RA 9147 is the designation of critical wildlife habitats, which are further elaborated in DENR Memorandum Circular No. 2007-2 (Annex 5). Critical habitats refer to "*areas outside the protected areas under the NIPAS that are known habitats of threatened species and designated as such based on scientific data, taking into consideration species endemicity and/or richness and presence of man-made pressures/threats to the survival of wildlife living in the area, among others,*" which shall be declared through issuance of an administrative order by the DENR Secretary.

Local governments may also declare critical habitats through issuances of ordinances, provided that procedures for their establishment, as provided in DENR Memorandum Circular No. 2007-02, are followed. However, LGU-enacted ordinances declaring critical habitats need to be endorsed to the DENR Secretary for proper issuance of an administrative order.

The management of critical habitats may involve partnership between the DENR and NGOs, POs, IP, the private sector, and other interested entities through issuance of MOA between the involved parties. The MOA shall define the responsibility and accountability of each contracting party. A management plan for the declared critical habitats shall also be prepared.

Given the features of the different priority project sites of MBCFI, some probably may qualify for declaration as critical habitats but it should not be within the NIPAS sites. However, consent of the Mangyans shall be secured if the area subject to the declaration is located within the ancestral domain.

The Context of the Mining

Mining is an important conservation issue in Mindoro because essentially mining claims cover most of the biologically and culturally important sites in the island. However, the rationalization and development of the mining industry is being pushed by the national government considering that it is becoming a major source of the government's revenue.

The exploration, development, utilization, and conservation of the country's mineral resources are provided in RA No. 7942 or the Philippine Mining Act of 1995. It declares the state's ownership of all mineral resources in both public and private lands within the territory and exclusive economic zone of the country. It promotes government and private sector alliance in rationalizing the utilization of mineral resources, with safeguards on environment and protection of the rights of affected communities.

For purposes of biodiversity conservation, it should be highlighted that certain areas are declared closed to mining applications, and these include:

- Military and other government reservations, except upon prior written clearance of the government agency concerned;
- Near or under public or private buildings, cemeteries, archeological and historic sites, bridges, highways, waterways, railroads, reservoirs, dams or other infrastructure projects, public or private works, including plantations or valuable crops; except upon written consent of the government agency or private entity concerned;
- In areas covered by valid and existing mining rights;
- In areas expressly prohibited by law;
- In areas covered by small-scale miners, as defined by law, unless with prior consent of the small-scale miners, in which case a royalty payment upon the utilization of minerals shall be agreed upon by the parties;
- Old growth or virgin forests, proclaimed watershed forest reserves, wilderness areas, mangrove forests, mossy forests, national parks, provincial/municipal forests, parks, greenbelts, game refuge, and bird sanctuaries, as defined by law and in areas expressly prohibited under the NIPAS Act or RA 7586.

However, certain areas with ecological values, such as forestlands, may be subjected to mining, as the Mining Act provides that subject to any existing rights or reservations and prior agreements of all parties, all mineral resources in public or private lands, including timber or forestlands, as defined in existing laws, shall be open to mineral exploitation. The utilization of minerals is either through mineral production sharing agreements and/or financial and technical assistance agreements.

It should be noted that except during mineral exploration, environmental impact assessment (EIA) and issuance of environmental compliance certificate (ECC) are required prior to any actual mining operation. The EIA should include detailed consultation processes with local government units, NGOs, POs, and other sectors of the community. Free and prior informed consent of the IP is also required if the area subject to the mining application is within the ancestral domain. The check and balance procedures for the institutional arrangement of mining applications are quite dubious in as much that both the ECC and mining permits are to be issued by the DENR Secretary. Similarly the DENR shall issue permits for the cutting of trees, if necessary, since the Mining Act grants timber rights to mining permit holders.

Conservation Requirements of MBCFI Priority Project Sites in Terms of Institutional and Management Arrangements

This section attempts to enumerate possible needs in terms of institutional and management mechanisms of the MBCFI priority project sites in Mindoro. This is based on the conservation profile of the different priority project sites as well as the identified conservation issues, concerns, and challenges secured during the CNA and policy review and analysis. The identification of these conservation requirements gives due consideration to the land tenure rights of both the IP and non-IP communities. The institutional mechanisms presented in this section may vary across sites, depending on the most appropriate, feasible, and practical approaches and strategies. The different policies governing the MBCFI priority project sites were also considered in identifying the conservation requirements of these areas

Mainstreaming in the PA Management System

The opportunity to mainstream conservation interventions with the protected areas system is very evident and obvious with three of the 10 MBCFI priority project sites in Mindoro already components of the NIPAS. It is necessary to take this opportunity to advance the conservation agenda in Mindoro in as much that these three protected areas, namely, Lake Naujan National Park, Apo Reef Natural Park, and Mount Calavite Wildlife Sanctuary, are seemingly spared from large-scale resource use and exploitation, such as mining, and also free of ancestral domain claims.

The three protected areas offer a very promising model in terms of conservation approach because each is a distinct ecosystem: Lake Naujan is a freshwater ecosystem, Apo Reef is a coastal/marine ecosystem, and Mount Calavite is terrestrial forest ecosystem. In a way, this would provide mechanism to generate valuable insights across ecosystems that may be useful in enhancing biodiversity conservation initiatives in Mindoro.

As prelude to other interventions that may be facilitated, it is crucial that management effectiveness assessment on these three protected areas shall be implemented, using the framework on assessing the management of protected areas: evaluating effectiveness introduced by the IUCN-World Conservation Union (Hockings, Stolton, and Dudley 2000). The assessment may be supplemented with the methods and approaches used by Gatumbato (2003) in the protected area design and management capacity assessment in Sibalom Natural Park in Antique under Haribon's Integrating Forest Conservation with Local Governance Project. Results of this assessment shall form part of the basis in developing site-focused management interventions that may be extended by MBCFI to these three protected areas.

However, several strategies may already be explored for these three protected areas in Mindoro. These interventions may differ from one site to the other especially so that Apo Reef is relatively at an advanced stage in terms of management, being a project site of the CPPAP and the WWF, compared to the two other PAs. Some of these approaches and strategies, which require coordination and/or to be implemented jointly with the DENR, may include the following:

- Provision of technical assistance in the conduct of protected area suitability assessment (PASA) in Lake Naujan relative to the requirements and guidelines under NIPAS. If resources are available, a full-blown survey of Lake Naujan's physical, biological, flora, and fauna profiles, covering both the terrestrial and freshwater ecosystems, may be conducted to

generate the necessary baseline data for its management. In addition, the survey would also include socio-economic, cultural and institutional profiling, and situational analysis, using the tools and guidelines on the Survey and Registration of Protected Area Occupants (SRPAO).

- Based on the PASA, MBCFI may facilitate the initial protected area planning of LNNP, including the drafting of the initial protected area plan and proposed presidential proclamation, preparing required maps and public consultations, as well as securing endorsements from concerned LGUs and relevant stakeholders for the proclamation of the area under NIPAS.
- A systematic capacity building plan shall be formulated and implemented for PAMB members and DENR personnel assigned to Lake Naujan and similarly in Mount Calavite if the PAMB was already organized in the area. However, if the PAMB is not yet organized in Mount Calavite, then a support system may be extended by MBCFI in constituting the PAMB. The capacity building shall focus on enhancing the technical, managerial, and financial capacity of PAMB members to deliver conservation outcomes and to sustain management operations in these protected areas.
- There is also a need to determine the current management operation in Apo Reef so that MBCFI would be able to identify the kind and level of assistance it may extend over the area. Probably, the most important technical assistance that may be provided to this protected area is in designing and implementing management sustainability strategies, particularly on local resource generation and partnership development among local stakeholders.
- The technical assistance of MBCFI would deliver clear conservation outcomes if it would be able to facilitate in designing the most appropriate and effective management mechanism for the three PAs, which shall be proposed to Congress for the enactment of site-specific laws for each of these protected areas. This assistance would include drafting of the proposed bills and lobbying for their fast and speedy approval.
- The preparation of the GMP for Lake Naujan and Mount Calavite and the updating of the current GMP of Apo Reef are also necessary. A meaningful assistance to make the planning processes participatory with strong local ownership is crucial. Integration of these plans to local, provincial, and regional development plans is essential for sustainability purposes.
- On a macro-level, there is a need to elicit the support of various sectors for the conservation of these three protected areas through launching of conservation awareness and education activities and advocacy campaigns.
- Participation of communities in PA management is of equal importance. If POs are already available, there is a need to strengthen their capacities and to mainstream their participation in PA management through their membership to the PAMB. If there are no existing community organizations, then a site-specific community organizing framework and plan shall be developed and implemented. Community-related activities would further include designing, developing, and implementing most appropriate and sustainable livelihood measures, especially for resource dependent communities.

It is recommended that the seven other MBCFI priority project sites shall not be declared as protected areas under the NIPAS, although they may have the necessary features as PAs. This recommendation is primarily due to the fact that other MBCFI project sites are covered by other institutional arrangements, such as ancestral domain and local governance, which may be most appropriate and effective mechanisms for their management.

Maximizing Opportunities in the Context of Ancestral Domain

The feature of Mindoro as a cultural heritage site offers a promising prospect in delivering conservation outcomes in the context of the ancestral domain. It should be noted that the IPRA, as a governing policy on ancestral domain, carries numerous provisions that if only properly implemented may guarantee the long-term conservation of Mindoro's biological diversity. The Mangyans whose culture and traditions are deeply rooted to land and other natural resources is in the best position to become conservation agents in as much that they do not only rely on these natural resources for food and subsistence but more so, for their total well-being and dignity as a community.

Since most of the biodiversity relevant sites are covered by ancestral domain claims, including the six of the 10 MBCFI priority projects, it is necessary to maximize this opportunity in the best interest of conservation. Using the most culturally sensitive approaches and strategies and with free and prior informed consent from concerned Mangyan tribes, the assistance that shall be extended by MBCFI may include the following:

- Provision of technical assistance in developing and/or enhancing the ADSDPP of the Mangyans to ensure the integration of biodiversity conservation strategies that are scientifically defensible and culturally appropriate and acceptable. This would include designing effective forestland and other forest resource use guidelines that would address the subsistence and livelihood requirements of the Mangyans and the need for habitat and species protection.
- Support through advocacy campaigns the speedy awarding of the CADTs for Mangyan Tribes with pending applications and to assist in generating the necessary resources for the delineation of ancestral domains.
- Provision of technical assistance to further enhance, strengthen, and advance the individual and organizational capacities of the Mangyans to implement biodiversity conservation measures and in the management of their ancestral domains, without prejudice to existing cultural practices and traditional and sustainable resource uses.
- Assist the Mangyans in demonstrating, promoting, and scaling up good and traditional resource governance and sustainable resource use practices that would also advance biodiversity conservation.
- Provision of technical assistance to IP in integrating the Mangyans' ADSDPPs to local, provincial, regional, and national development framework plans in order to generate the necessary resources for their effective implementation. Mobilize support for the efficient and effective implementation of the ADSDPPs.
- Support the Mangyans in their quest in protecting their ancestral domains from inappropriate and destructive development activities.
- Document best practices on natural resource governance and sustainable resource use practices for purposes of sharing valuable lessons, as maybe used in appropriate situation and condition, giving due respect and recognition to the intellectual property rights of the IP.

Exploring Local Natural Resources Governance

The Ilin Island project site of MBCFI is the most ideal area in exploring the opportunity accorded by local resource governance relative to the Local Government Code of the Philippines and its various implementing rules and regulations. This is due to the fact that the island is not covered by any declaration as a protected area nor an ancestral domain claim of the Mangyans.

It should be noted that the LGC provides that the Sangguniang Bayan (local legislative branch of municipal governments) of a particular municipality may approve ordinances in providing measures for the establishment, maintenance, and conservation of communal forests and watersheds, tree parks, greenbelts, mangroves, and other similar forest development projects. In as much that Ilin Island is the habitat of Philippine teak, a particular ordinance may be issued declaring the teak forest in the island as the municipal forest reservation and/or a greenbelt area, especially so if the formation and structure of teak forest is closely associated to the feature of a greenbelt. Such declaration may include the kind of institutional mechanism that shall be introduced and implemented in the area.

Specifically, the technical assistance packaged may be provided by MBCFI to the LGU in developing the instrument for the declaration of a greenbelt or any other appropriate schemes, including the conduct of public consultations and conservation awareness activities. Once the ordinance will be approved establishing a greenbelt reservation, it is then important to prepare the management plan of the area using a highly participatory approach. The barangay councils and people's organizations in Ilin Island shall be provided with important roles in the management of greenbelt reservation and in the implementation of the management plan.

The other important aspects of local resource governance in relation to other MBCFI project sites may include the following:

- Capacity building and advocacy campaign to LGUs and other stakeholders to become actively involved in the management of protected areas through membership of their representatives to the PAMB. LGUs, as distinct entities, may also explore the possibility of entering into a co-management agreement with the PAMB relative to a particular area and/or specific purpose (e.g., ecotourism development, habitat restoration and protection, etc.)
- MBCFI may further provide technical assistance to LGUs in developing forestland use plans and in entering co-management agreements with the DENR for areas outside protected areas and ancestral domains. The assistance may also include processes that would integrate the FLUPs to the CLUPs of LGUs.
- Provision of technical assistance to LGUs in adopting the ADSDPPs of the Mangyans as FLUPs and integrating the same to the CLUPs;
- Provision of technical assistance to enhance the capacity of LGUs in developing and implementing policies, programs, and projects on environment and natural resources management.

The Challenge of Mining

One of the most critical issues in Mindoro is mining, which covers more than 50 percent of the island's total land area. It is imperative that MBCFI, as an important conservation agent, make a clear position on this issue in as much that most of the biodiversity important areas are subject to different mining claims. One possible impact that the mining operation may likely result in is the destruction of the remaining important and critical habitats and the further endangerment of the already threatened endemic species of Mindoro, not to mention the likely impact on other ecological services and functions.

Relative to this situation, it is recommended that a detailed technical study on possible negative impacts of mining on the biodiversity of Mindoro be conducted. The study would include determination of exact areas subject of mining claims and the ecological conditions of these sites,

particularly the status of forest cover, watersheds and habitats, species, soil stability, and other bio-physical attributes. Documentation of existing mining operations in Mindoro, shall be carried to determine the actual impacts of mining operations.

Results of the technical studies shall be used by the MBCFI in making a clear position on mining and if necessary to use these findings in advocacy and other public awareness campaigns. If possible, cost benefit analysis shall be done on mining in relation to biodiversity conservation and other ecological functions and services of areas covered by mining claims. Cultural and social impacts maybe included as part of the study, using available case studies on mining-related cases in the Philippines.

THE MBCFI 10-YEAR STRATEGIC PROGRAM

This program document of the Mindoro Biodiversity Conservation Foundation, Inc. covers a 10-year period commencing in January 2010. The development of this program is based on the results of the Conservation Needs Assessment and in consonance with the vision, mission, goals, and objectives of the MBCFI. This shall serve as a management framework for MBCFI in developing and implementing specific conservation measures on its identified priority project sites in Mindoro.

In particular, this program document shall serve as a blueprint on what MBCFI would like to achieve in the next 10 years in Mindoro. This will also serve as a guide for MBCFI in developing specific project proposals and other marketing strategies to generate the necessary resources in implementing the different strategies and activities presented in this program document. Furthermore, MBCFI shall translate the different components of this program document into annual, work, and financial plans.

MAIN PURPOSE AND OUTCOMES

The main purpose of the Mindoro Biodiversity Conservation Program (MBCP) is to institutionalize participatory, effective, sustainable, and culturally-appropriate management mechanisms and strategies that would ensure the long-term conservation of the MBCFI priority project sites in Mindoro. This purpose is achieved once the following outcomes are delivered:

Outcomes	Means of Verification
Each of the 10 priority project sites of MBCFI in Mindoro is declared and/or recognized as a conservation area, either through local or national legislative processes.	Local ordinances and/or national policy issuances declaring each MBCFI priority project site as a conservation area
Each MBCFI priority project site has in place a functional institutional arrangement for its effective management, involving relevant and concerned stakeholders with clear financial and sustainability strategies.	Approved partnership agreement forged between and among concerned and relevant stakeholders for the management of each MBCFI priority project site
Conservation management plan for each MBCFI priority project site is prepared, adopted, and integrated into municipal/city, provincial, and regional development plans and implemented by concerned and relevant stakeholders.	Conservation management plan for each of the MBCFI project sites with resolutions passed by concerned and relevant stakeholders for its adoption and integration to municipal, city, provincial, and regional development plans
Mindoro Island Conservation Strategy and Action Plan (MICSAP) is formulated and adopted by the different stakeholders	Mindoro Island Conservation Strategy and Action Plan formulated with endorsements for its adoption and implementation by relevant and concerned stakeholders

OBJECTIVES AND OUTPUTS

The main purpose of the MBCP is further specified into objectives with corresponding outputs. These objectives reflect the different milestones that MBCFI wants to achieve in the next 10 years.

Objectives	Outputs
To determine the status of the different habitats and endemic species; socio-economic and cultural variables affecting the biodiversity; and institutional profile of the 10 priority project sites of MBCFI through conducting baseline studies and other research	Secured updated physical, biological, socio-economic, cultural, and institutional profiles with corresponding situational analysis of each MBCFI priority project site and priority ecological research determined and implemented in the next 10 years.
To raise the conservation awareness and consciousness of local officials, IP and non-IP communities, and the general public on the biological and cultural importance of Mindoro.	Each project site availed funding assistance for the implementation of at least one core biodiversity project from the support extended by concerned stakeholders.
To enhance the technical and institutional capacity of local officials and employees, IP and non-IP communities, and other relevant stakeholders in biodiversity conservation	In the next 10 years, each group of stakeholder effectively implemented at least one core biodiversity conservation project in each priority project site.
To develop and implement effective and community-based biodiversity protection, recovery, and restoration/rehabilitation measures	Each priority project site has an organized and functional biodiversity protection system, involving local stakeholders with at least one demonstration area for habitat restoration established and maintained.
To design and implement culturally appropriate and sustainable livelihood that would mitigate threats to Mindoro's biodiversity	Each project site has at least one functional demonstration area for sustainable livelihood implemented by IP and non-IP communities with funding assistance provided by LGUs and other concerned institutions.
To develop effective forestland and other resource use plans that would harmonize biodiversity conservation and cultural needs of Mindoro	Each of the project sites has effective and functional management plan prepared in a participatory process and adopted and integrated into municipal/city, provincial, and regional development plans.
To establish and carry out effective coordination, partnership, and other management mechanisms between and among the relevant stakeholders that would advance the conservation and protection of the 10 priority project sites of MBCFI	Partnership agreement and/or conservation covenant forged by relevant stakeholders for the management of each of the 10 priority project sites

PROGRAM STRATEGIES

The different objectives are translated into strategies to ensure a more structured implementation of the Mindoro Biodiversity Conservation Program. The program strategies are general and specific activities that shall be implemented across the 10 priority project sites of MBCFI. However, activities may vary from one site to the other, depending on the actual needs and conditions.

Conservation Research and Monitoring

This particular strategy involves (1) project site profiling; (2) habitat and/or species-focused research; (3) studies on ecological services and functions; and (4) regular biodiversity monitoring. MBCFI shall explore the possibility of engaging partnership with research and academic institutions and/or other interested and competent organizations in the implementation of this program component. This also involves capacity building since local stakeholders shall be trained and involved in designing and implementing various researches and/or studies. Results of these studies shall be presented to stakeholders for information and appropriate actions and inputted in a systematic database. MBCFI shall secure the required permits before proceeding in actual studies and/or researches, especially if the survey involves specimen collection.

Project Sites Profiling

The profiling includes generation of relevant information on the physical environment, biological resources, socio-economic and cultural conditions, and institutional arrangement of every priority project site of MBCFI. Specific activities to be implemented may include the following:

- designing of tools and methodologies for the profiling of 10 project sites;
- developing work plans for the profiling;
- securing required permits (FPIC from concerned Mangyan tribes, endorsement from LGUs, and gratuitous permit from the DENR);
- forming at least one profiling team in every project site, involving representatives from concerned Mangyan tribes, LGUs, DENR, and other interested stakeholders;
- training and orientation of members of the different profiling teams on profiling tools and methodologies ;
- gathering secondary and primary data;
- data collation, analysis, and report preparation;
- scientific peer review of survey results;
- validation and presentation of survey results to relevant stakeholders;
- publication of survey results; and
- establishment and maintenance of a systematic data base.

Species and/or Habitat-Focused Research

MBCFI shall endeavor to conduct specific research focusing on a particular species and/or habitat type. These may include the following:

- survey on endemic species, especially those species that are consumed for food by the Mangyans;
- validation study on the reported extinction of the Philippine crocodile and the presence of freshwater sawfish in Lake Naujan Natural Park;
- inventory of non-timber forest products in Bulalacao-Mansalay project site;
- Dipterocarp species inventory in Mount Siburan; and
- ecological study of natural grassland ecosystem in Mount Hinunduang.

The following activities are suggested to be implemented for research on a particular species and/or habitat type:

- identification and prioritization of specific research on a particular habitat and/or endemic species of Mindoro;
- Development of specific research agenda, including tools, methodologies, and work plans;
- Securing required permits (FPIC from concerned Mangyan tribes, endorsement from LGUs, and gratuitous permit from the DENR);
- Formation of research teams, involving representatives from concerned Mangyan tribes, LGUs, DENR, and other interested stakeholders;
- Orientation and training members of research teams on research tools and methodologies;
- Secondary and primary data gathering;
- Data collation, analysis, and report preparation;
- Scientific peer review of research findings;
- Validation and presentation of results to relevant stakeholders; and
- Publication of final reports.

Studies on Ecological Services and Functions

Studies on ecological services and functions of the MBCFI priority project sites may further be undertaken. These studies may include the following:

- Watershed potential of Mount Malasimbo and Abra de Ilog project sites;
- Potential of Mount Halcon for ecotourism, including carrying capacity;
- Natural resources-based sustainable livelihood options and alternatives, especially for Bulalacao-Mansalay project site and Ilin Island;
- Carbon sequestration potential of Mindoro's forest and local effects of climate change.

Activities related to studies on ecological functions may include the following:

- Identifying and prioritizing specific studies on particular ecological services;
- Developing specific research agenda on ecological services, including tools, methodologies, and work plans;
- Securing required permits (FPIC from IP tribes, endorsement from LGUs, and gratuitous permit from the DENR);
- Forming study teams, involving representatives from concerned IP tribes, LGUs, the DENR, and other interested stakeholders;
- Training members of study teams on study tools and methodologies;
- Gathering secondary and primary data;
- Collating, analyzing data and report preparation;
- Scientific peer review of study results;
- Validating and presenting results to relevant stakeholders; and
- Publishing study results.

Regular Biodiversity Monitoring

To continuously update the biodiversity profile of the different project sites, MBCFI may explore the development of a site-specific biodiversity monitoring tool based on available baseline information. Results of this monitoring shall be presented to the different stakeholders for appropriate actions. Relative to this, the following activities are recommended:

- Designing of a site-specific biodiversity monitoring tool for each project site based on available baseline information;
- Scientific peer review of the biodiversity monitoring tool;
- Consultation with concerned LGUs and IP and non-IP communities for the implementation of regular biodiversity monitoring;
- Formation of biodiversity monitoring team in each project site, involving representatives from LGUs, IP and non-IP communities, and other interested stakeholders;
- Orientation and training on biodiversity monitoring tools of team members;
- Conduct of quarterly biodiversity monitoring in every project site;
- Preparation of annual biodiversity monitoring report; and
- Presentation of annual biodiversity monitoring report to relevant stakeholders.

Conservation Awareness and Education

The conservation awareness and education component of this program document is aimed to popularize the biodiversity and cultural significance of Mindoro to gain broader support for its protection and conservation from the general public. Various information, education, and communication strategies shall be developed and implemented to increase the conservation awareness of the Mangyans, non-IP communities, and other stakeholders, as well as to generate support for the implementation of the management plan of every site. The different strategies under this program component are the following:

Perception Survey

To determine the level of awareness and knowledge of communities and Mangyans on the biodiversity importance of Mindoro, MBCFI shall conduct perception surveys in the different project sites. A specific tool for the survey shall be prepared. Results of the survey shall be used in developing and implementing site-focused communication strategies. The perception survey is also intended to determine what kinds of IEC materials are most appropriate to the different stakeholders of the 10 project sites. The output of this particular strategy is a site-specific communication plan for every priority project site of MBCFI.

Communication Materials Development

MBCFI shall produce information, education, and communication (IEC) materials, which will highlight the biodiversity and cultural significance of Mindoro. These materials may include brochures, calendars, leaflets, primers, posters, comics, newsletters, slide shows, and documentaries, among others. Results of the different studies may be translated into popular forms of IEC materials. Various mass media establishments, such as print and broadcast media, shall also be tapped in delivering conservation messages to the general public. At least three different communication materials are expected to be produced and one-major media coverage should be facilitated annually in the next 10 years. A communication manual and/or a resource material for the biodiversity and cultural importance of Mindoro shall be produced and distributed.

Interpersonal Approach of Communication

This particular strategy includes barangay or community meetings and assemblies, dialogues, round table discussions, and conferences, among others. MBCFI shall present the biological and cultural

importance of Mindoro and its conservation initiatives in all barangays covering its priority project sites in the next 10 years. Interpersonal communication strategies are particularly important in biodiversity protection and law enforcement campaigns. Annual stakeholders' forum may be organized to serve as venue in discussing the findings and recommendations of various ecological studies and other issues affecting the different project sites.

Conservation Events

MBCFI shall maximize various environment celebrations, such as Earth Day, Environment Month, Biodiversity Day, Wildlife Month, and the like, to launch creative conservation events. A specific campaign plan shall be prepared and implemented during the commemoration of these environmental events. The implementation of this strategy shall be coordinated with relevant and concerned stakeholders in Mindoro. At least two major conservation events should be organized by MBCFI annually. During these events, MBCFI prepared communication materials shall be displayed and distributed.

Flagship Species Campaign

Advocacy campaigns among local governments shall be done to adopt conservation flagship species, through issuance of Sangguning Bayan resolutions. This is to highlight the conservation importance of endemic species found in Mindoro. LGUs shall be requested to implement specific measures to protect the species they have adopted. At the end of 10 years, each municipal and city government covering the MBCFI priority project sites should have adopted a flagship endemic species. To assist LGUs in identifying and selecting a flagship species, MBCFI shall prepare and provide fact sheets on Mindoro's endemic species to these local governments.

School-Based Education

MBCFI shall engage in partnerships with educational institutions, specifically elementary and secondary schools, to implement conservation awareness among the student population in the different schools within and around the MBCFI priority project sites. It may include execution of partnership agreement with the Department of Education for sponsoring teachers' training, with the end purpose of integrating biodiversity education to the academic curriculum of various schools. Moreover, school-based activities, such as youth camps, poster-making, essay writing contests, and other creative approaches, may be implemented to enhance the awareness and consciousness of both teachers and students on the biodiversity importance of Mindoro.

Capacity and Institutional Building

The capacity and institutional building strategy targets four major stakeholders in the different project sites, namely, the PAMB of the three protected areas; local government units; the different Mangyan tribes; and the non-IP communities. This particular strategy is aimed to enhance the individual and institutional capacities of the different stakeholders to develop and implement conservation strategies. In particular, the capacity building shall involve strengthening of the technical, managerial, and financial capability of stakeholders in biodiversity conservation and environment and natural resources management, in general.

Training needs assessments shall be conducted by MBCFI. This is to ensure that the capacity building exercises that shall be introduced by MBFCFI are appropriate to the training needs and requirements of the different stakeholders. Results of these assessments shall become the basis in developing site-specific capacity building plans for each group of stakeholders in the MBCFI priority project sites.

Particularly in the three protected areas, MBCFI may explore the following as part of its capacity building interventions:

- Management effectiveness assessments on three protected areas shall be implemented using the framework in assessing the management effectiveness of protected areas introduced by the IUCN-World Conservation Union and may be supplemented with the methods and approaches used by Gatumbato (2003) in protected area design and management capacity assessment in Sibalom Natural Park. Results of this assessment shall be used in enhancing the different strategies in capacity building, as prescribed in this program document.
- A systematic capacity building plan shall be formulated and implemented for PAMB members and DENR personnel assigned in Lake Naujan Natural Park and Mount Calavite Wildlife Sanctuary (MCWS). However, in the event that the PAMB at MCWS is not yet organized, MBCFI, working closely with local DENR offices, may provide assistance in constituting the PAMB for this protected area. The capacity building for PAMB members shall be designed to strengthen their knowledge and skills in various facets of protected area management, which may include the drafting of the PAMB manual of operation; program and policy development, implementation, monitoring, and evaluation; finance and other resource generation; and sustainability mechanisms, among others.
- Community participation is crucial in PA management. If there are organized POs in the three protected areas, they shall be provided with capacity building so as to enlist their active participation and cooperation in PA management. However, community organizing shall be undertaken if there are no existing community organizations in the three protected areas. MBCFI shall develop and implement site-specific community organizing framework and plan.
- Communities within the protected areas shall be assisted in availing land tenure security over areas they are actually occupying. The assistance may further involve capacity building for communities in developing, implementing, and monitoring community resource management plans that would include provisions on biodiversity protection and habitat restoration, among others.

On the other hand, MBCFI shall further maximize its technical assistance in enhancing, strengthening, and advancing the individual and organizational capacities of the Mangyans to develop and implement biodiversity conservation measures and in the management of their ancestral domains, without prejudice to their existing cultural practices and traditional and sustainable resource uses. This shall be implemented in MBCFI priority project sites that are covered by ancestral domain claims of the Mangyans. In particular, MBCFI may provide the following technical assistance to the Mangyans:

- Strengthening of self-governance system and internal affairs of the Mangyan tribes;
- Improving the institutional capacity of the Mangyans in promoting and implementing traditional forms of natural resources governance, including land and other natural resource allocations;

- Enhancing the capacity of the Mangyans in pursuing traditional and sustainable resource use practices that would likewise promote biodiversity conservation;
- Ensuring the proper observance of other forms of cultural beliefs, customs and traditions that are still appropriate and feasible at present times;
- Provision of capacity building to the Mangyans in developing, implementing and monitoring the ADSDPPs and in securing and mobilizing necessary resources.

Similarly, MBCFI shall provide capacity building to the different local governments with administrative jurisdictions over its 10 priority project sites in Mindoro. This may include the following:

- Capacity building for LGUs in the management of protected areas, not only through membership of their representatives to the PAMB, but including the possibility of entering into a co-management agreement with the PAMB relative to a particular area and/or specific purpose (e.g., ecotourism development, habitat restoration and protection, etc. This is particularly important for LGUs with administrative jurisdictions within the three priority project sites of MBCFI that are components of the NIPAS.
- Technical assistance shall be provided to LGUs in developing forestland use plans and the development of co-management agreements with DENR on areas outside protected areas and ancestral domains, and integrating these FLUPs to CLUPs.
- Provision of technical assistance to LGUs in adopting and integrating the ADSDPPs of the Mangyan tribes to FLUP, CLUP, and other short-term and long-term development plans of local governments.
- Enhancing the capacity of LGUs in developing and implementing policies, programs, and projects on environment and natural resources management.

The capacity building activities to be implemented by MBCFI among the different stakeholders of its priority project sites may include orientations, trainings and seminars, workshops, on the job-training, coaching, and mentoring. Educational visits to relevant sites that showcase some good practices in resource management may also be explored. Among the subject matter that may be included in the capacity building are the following:

- Basic ecological concept and principles
- Environment and natural resources laws, rules, and regulations and governance of the Philippines
- Para-legal training on environment and natural resources management
- Protected area management course
- Development, implementation, monitoring, and evaluation of ADSDPP
- Local governance and forestland and other natural resource use planning
- Policy, program, and project development, implementation, monitoring, and evaluation
- Alternative dispute resolution and conflict resolution

Community-Based Biodiversity Protection and Habitat Restoration

The purpose of this program component is to facilitate the formation of community-based biodiversity protection groups who shall take the lead in protecting the different ecosystems, habitats, and threatened endemic species of the 10 priority project sites of MBCFI. This involves development and

implementation of intensive biodiversity protection and law enforcement to curtail illegal and destructive activities in the different project sites. This strategy is aimed to establish the presence of biodiversity protection mechanisms in all MBCFI project sites to discourage illegal activities.

The target areas for biodiversity protection are the remaining closed canopy and secondary forests, sites subject of restoration and other important terrestrial, coastal, and marine ecosystems and habitats in the 10 priority project sites of MBCFI. Specific strategies for this program component include the following:

- MBCFI shall facilitate the formation of at least one biodiversity protection team in every priority project site to coordinate and lead the different protection activities. This team shall be composed of representatives from barangay LGUs and IP and non-IP communities within the project sites. The concerned barangay council, in coordination with the DENR, shall supervise the operation of every team. A leader shall be designated by each team. MBCFI shall attempt to facilitate the formation of a province-wide and ultimately an island-wide federation of the different biodiversity protection teams.
- MBCFI shall advocate to municipal governments covering its priority project sites to activate the multi-sectoral environment and natural resources protection and law enforcement task force to enhance the implementation of biodiversity protection measures. The mayor of each municipal government in 10 priority project sites of MBCFI shall be requested to issue an executive order for the activation of the task force. Representatives of various law enforcement institutions, such as the Philippine National Police and other concerned stakeholders, shall be involved as members of the multi-sectoral forest protection task force. Local government units shall support the operation of the task force.
- All personnel who will be involved in biodiversity protection and law enforcement shall be provided with necessary orientation and appropriate training on basic ecological concepts, environment and natural resources laws, para-legal skills, basic communication skills, biodiversity monitoring system, and safety and first aid, among others. A simplified manual on biodiversity protection and law enforcement shall be prepared by MBCFI to guide the different teams in implementing protection activities.
- All members of the biodiversity protection and law enforcement teams shall be assisted in the preparation of requirements for deputation as deputized environment and natural resources officers (DENROs) or wildlife enforcement officers (WEOs), in accordance with the existing guidelines of the DENR. As provided for in DENR Administrative Order No. 2008 – 22, the DENROs shall have the following functions and duties:
    - Assist in the enforcement of laws, rules, and regulations governing the protected area.
    - Assist in the issuance of apprehension receipts, seizure orders, and notices of administrative hearings, including the proceedings necessary for the conduct of administrative adjudications of illegally procured, transported, owned/possessed and/or utilized forest products, wildlife, minerals, and other natural resources.
    - Arrest, even without warrant, any person who has committed or is committing in his/her presence any of the offenses provided in environmental and natural resources laws, rules, and regulations.
    - Deliver within the period prescribed by law from the time of arrest and seizure, the offender including the apprehended natural resources products,

tools/equipment, and conveyances and coordinate with the appropriate official designated by law to conduct preliminary investigation prior to the filing of information in court through the CENRO or PENRO or RED, where it is most expediently available.

- Assist in the conduct of environment and natural resources information campaign, such as meetings, public assembly, and other extension activities within their areas of jurisdiction in coordination with DENR officers and personnel of other government or private agencies involved in similar work.
- Submit monthly accomplishment reports to the CENRO or to the Field Operations Office.

- Each of the community-based biodiversity protection groups shall implement patrolling and monitoring operation at least once a month. The operational fund of these protection teams shall be sourced out from the Internal Revenue Allotment of barangay and municipal LGUs and other potential partners.
- When the situation warrants, all members of the protection groups shall effect apprehension of persons engaged in illegal activities and seizure of illegally-sourced natural resources, otherwise, they will just document the incidents and referred the matter to the DENR, barangay officials, and/or PNP. Proper documentation of all cases involving illegal and destructive activities shall be implemented and whenever possible, cases shall be filed in court.

On the other hand, demonstration area for habitat restoration shall be implemented in each MBCFI priority project site. The target areas for habitat restoration component are the denuded and open-areas, sparsely vegetated sites, critical watersheds, and important habitats identified through proper suitability assessments. The main purpose of this component is to showcase the viability of habitat restoration for biodiversity purposes, which means areas subject to rehabilitation shall not be used for production purposes. Local communities, Mangyan tribes, LGUs, and other interested stakeholders are the main partners for the implementation of habitat restoration. Specific activities to be implemented may include the following:

- conduct of site suitability assessment to identify areas where demonstration area for habitat restoration shall be implemented;
- preparation of site-specific habitat restoration strategy and action plan;
- preparation of project proposal for fund sourcing and generation;
- partnership and networking with LGUs, Mangyans, and other concerned groups for the establishment and maintenance of demonstration areas; and
- plantation establishment and maintenance.

Sustainable Livelihood Demonstration

The implementation of sustainable livelihood activities is crucial for the long-term conservation of the different priority project sites of MBCFI since this will address the dependency of the Mangyans and non-IP communities on the remaining natural resources for subsistence. MBCFI shall explore partnership with relevant institutions that have the necessary technical expertise and resources on this particular field for the implementation of livelihood activities. Specific strategies of this program component are the following:

- MBCFI shall conduct livelihood assessment to determine and develop appropriate and sustainable livelihood that is culturally acceptable to the Mangyans. The assessment shall include determination of existing livelihood practices and the impacts of these livelihoods on biodiversity. Natural resource extractive income generating activities shall likewise be surveyed and the kind of resources being gathered and/or collected. Income derived from resource extractive livelihoods shall also be determined. To determine the feasibility of livelihood projects to be implemented in the 10 priority project sites, it is also important that market and feasibility studies be included in the livelihood assessment. Results of feasibility studies shall determine what kind of livelihood options and technologies shall be implemented in each of the project sites.
- Based on the assessment, non-destructive and sustainable livelihood activities shall be identified and promoted, and a sustainable livelihood framework be developed and adopted. Based on the livelihood framework, IP and non-IP communities shall be provided with technical assistance in developing proposals and in generating necessary financial and other resources. As a strategy, the establishment of demonstration area for sustainable livelihood in every project site shall be implemented. The purpose of this demonstration is to provide a showcase of the feasibility of the sustainable livelihood using appropriate and non-destructive technologies.
- Some livelihood options that shall be demonstrated may include agro-forestry or sloping agricultural land technologies, bio-intensive gardening, and integrated farming system, among others. As a matter of policy, agricultural development shall make use of organic fertilizers and promote the indigenous species and diversification of crops. The other livelihood option that shall be encouraged is the establishment of commercial tree plantation to provide the timber requirements of local residents.
- Livelihood activities may also include the sustainable extraction of non-timber forest products, especially for the Mangyans. However, resource assessment of non-timber forest products shall be conducted first to determine the viability of extracting. The rate of extraction shall be governed by the natural capacity of non-timber forest products to regenerate. In addition, processing of raw non-timber forest products into viable commercial products is the other livelihood option that may be implemented in areas where NTFP are still available. Ecotourism as a form of livelihood may also be explored.
- Prior to the implementation of livelihood activities, target recipients shall be provided with necessary orientation and training. The other important component of this strategy is the market linkages for the products of the communities. Best practices and lessons learned in livelihood implementation shall be documented and shared to the general public.

Forestland and Other Resource Use Planning

In the next 10 years, each priority project site of MBCFI has functional conservation management plan prepared in highly participatory processes, adopted by concerned and relevant stakeholders and integrated into municipal, city, provincial and regional development plans. MBCFI shall take the lead in coordinating the different planning processes, which may use various management planning frameworks that are in accordance with appropriate policies governing a particular area subject of the planning.

Protected Area Management Planning

MBCFI would be able to provide meaningful assistance if it could facilitate the general management planning of Lake Naujan National Planning and Mount Calavite Wildlife Sanctuary and the updating of the current general management plan of the Apo Reef Natural Park. The procedures for the development and adoption of the protected area management plan are provided in the NIPAS Act Revised Implementing Rules and Regulations. The planning processes shall make use of participatory approaches involving concerned and relevant stakeholders of these three protected areas. The management plan of each protected area shall likewise be integrated to local, provincial and regional development plans.

ADSDPP Development and/or Enhancement

With free and prior informed consent from the Mangyans and concurrence of the NCIP, MBCFI may explore the possibility in providing technical assistance to the IP in developing the ADSDPPs if this is not yet available in six of its priority project sites that are covered with ancestral domain claims. However, if the ADSDPPS are already available, MBCFI shall assist in developing measures that would ensure the conservation of biodiversity in ancestral domains. In providing technical assistance in the development and/or enhancement of the ADSDPPs, MBCFI shall adhere to the guidelines issued by the NCIP for the purpose (NCIP Administrative Order No. 1, Series of 2004). Moreover, MBCFI shall make use of the ADSDPP Primer prepared jointly by UNDP and NCFI in providing assistance in the development and/or enhancement of the ADSDPPs of the Mangyans. MBCFI may further assist the Mangyans in lobbying for the adoption of ADSDPPs to local, provincial and regional development plans.

Forestland Use Planning

MBCFI shall facilitate the preparation of forestland use plans of the different local governments covering its priority project sites over areas outside the ancestral domains and protected areas. The protected area management plans and the ADSDPPs of the Mangyans are to be adopted in this planning process. The main policy framework that shall be used for this strategy is the Local Government Code and its associated implementing rules and regulations, specifically the Joint DENR-DILG Memorandum Circular Nos. 98-01 and 2003-01. The final forestland use plan of each LGU covering the MBCFI priority project sites shall be integrated to the CLUP of the concerned local government unit through issuance of a resolution by the Sangguniang Bayan. The forestland use plan shall designate land use categories, including allowable and prohibited activities in every designated category. Based on the FLUPs, LGUs shall be provided with technical assistance to forge co-management agreements with the DENR over areas subject of the planning processes.

Mindoro Island Conservation Strategy and Action Plan

The final output of the different planning processes is the development of the Mindoro Island Conservation Strategy and Action Plan or MICSAP. The MICSAP shall consolidate the different plans of the MBCFI priority project sites to come out with a unified plan of actions and strategies for the whole island of Mindoro. A covenant for the implementation of the MICSAP shall be signed by the different stakeholders.

Site Conservation Establishment and Partnership Building

Each MBCFI priority project site shall be established formally and legally as conservation area, either through local or national legislative processes and mechanisms. As such, the following shall be explored by MBCFI, as part of its assistance packaged to the different project sites, to wit:

- Facilitate the initial protected area planning of the Lake Naujan National Park to become a full-fledged component of the National Integrated Protected Areas System. The assistance may include the conduct of protected area suitability assessment; survey of protected area occupants; preparation of initial protected area plan and draft presidential proclamation; preparation of maps; and facilitation of public consultations. Detailed procedures for the initial protected area planning are presented in the NIPAS Act Revised Implementing Rules and Regulations. Following the declaration of the LNNP by the President, MBCFI may further explore in providing technical assistance in the drafting of the proposed bill that shall be submitted to the Congress for consideration and enactment.
- Similarly, MBCFI may engage its services in the drafting of the proposed bills for Apo Reef Natural Park and Mount Calavite Wildlife Sanctuary, which shall likewise be submitted to the Congress. In delivering this particular assistance, MBCFI shall make use of opportunities for the congressional declaration of protected areas by suggesting important provisions that are most appropriate to conditions and needs of these two protected areas.
- MBCFI shall support the quest of the Mangyans for the final awarding of CADTs on areas covered with their ancestral domain claims in six priority project sites. The awarding of CADTs would indicate formal recognition of ancestral domains as conservation areas, which shall be managed exclusive by the Mangyans but without prejudice in establishing partnership with concerned government and non-government institutions.
- MBCFI shall provide technical assistance to LGUs in declaring priority project sites that are outside protected areas and ancestral domains as conservation areas through issuances of local ordinances. The assistance may include drafting of an instrument for the declaration and management of these sites. To further strengthen the authority of LGUs, MBCFI shall assist for the establishment of co-management agreements between the DENR and concerned LGUs over the areas subject of local declarations as conservation areas.

To further strengthen partnership between the relevant and concerned stakeholders, whenever possible, a partnership agreement shall be forged between and among them for every priority project site of MBCFI. The partnership agreement shall defined specific responsibilities, authorities and accountabilities of the involved institutions.

IMPLEMENTATION MECHANISMS AND ARRANGEMENTS

The implementation of this program document carries numerous layers and processes since this involves various stakeholders, multiple sites and with different policy and institutional arrangements. As such, the following institutional mechanisms and arrangements need to be considered by MBCFI in implementing this program document:

- MBCFI needs to enter partnership or memorandum of agreement with the DENR, the different Mangyan Tribes, the NCIP and the LGUs for its program implementation. These agreements would define the extent of participation that maybe extended by MBCFI in the different sites. This is also ensure the legitimacy of MBCFI in implementing its program and projects in areas it identified as priority project sites.
- As required under the Local Government Code, MBCFI shall seek accreditation from local governments with jurisdictions over its priority project sites. The accreditation would provide recognition to MBCFI in implementing projects over these areas and may entitle for its membership to the Municipal Development Council.
- For biological surveys, MBCFI shall secure FPIC from the IPs and endorsements from LGUs for its application for gratuitous permit from the DENR, especially if the survey required specimen collection.
- Since MBCFI program thrusts cover a wide-range of concerns, it may further explore partnership with other government and non-government institutions in implementing conservation strategies in Mindoro. This particular implementation mechanism is necessary in as much that MBCFI may don't have the luxury of financial, logistical and technical resources to deliver fully some conservation outcomes. For instance, MBCFI may engage partnership with academic and research institutions in studies and researches and with other NGOs for the delivery of sustainable livelihood and other community development activities.
- MBCFI shall prepare project proposals and other resource generating activities to mobilize financial, logistical and technical resources for the implementation of its program thrusts. International and local funding institutions shall be mobilized for this particular purpose. Other important resource generation strategies that may be implemented by MBCFI are fund raising and maximizing the potentials of corporate entities. In the implementation of its projects, MBCFI shall also maximize the leverage fund of local and national governments.
- MBCFI shall further translate this program document into operational framework and action plan, with detailed work and financial plan and specific targets.
- In the implementation of this program, MBCFI shall review its current organizational structure to reflect the needed operational system, particularly on the staffing requirements. As minimum requirements, MBCFI needs to have a full-time Program Coordinator in each of the province of Mindoro Island (currently only one), an Administrative Assistant, Program Development Officer/Manager and Operations Officer/Manager to support its Executive Director in implementing its core program in Mindoro.

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