

Sustainable Management of Natural Resources towards Rehabilitation and Preservation of the Key Biodiversity Area along Bataan Province to Manila Bay

Other Executing Partner(s)	Executing Partner Type
Agency(ies) FAO	
Countries Philippines	
Project Title Sustainable Management of Natural Resources towards R	ehabilitation and Preservation of the Key Biodiversity Area along Bataan Province to Manila Bay
CBIT/NGI CBIT NGI	
Type of Trust Fund GET	
Project Type FSP	
GEF ID 10704	
Part I: Project Information	

Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) Department of Agriculture-Bureau of Soils and Water Management (DA-BSWM

Government

GEF Focal Area

Multi Focal Area

Taxonomy

Focal Areas, Stakeholders, Capacity, Knowledge and Research, Land Degradation, Ecosystem Approach, Sustainable Land Management, Community-Based Natural Resource Management, Restoration and Rehabilitation of Degraded Lands, Productive Landscapes, Protected Areas and Landscapes, Biodiversity, Mainstreaming, Coral Reefs, Biomes, Mangroves, Strengthen institutional capacity and decision-making, Influencing models, Convene multi-stakeholder alliances, Demonstrate innovative approache, Local Communities, Beneficiaries, Awareness Raising, Communications, Public Campaigns, Strategic Communications, Indigenous Peoples, Community Based Organization, Civil Society, Non-Governmental Organization, Partnership, Type of Engagement, Information Dissemination, Participation, Consultation, Individuals/Entrepreneurs, Private Sector, Access and control over natural resources, Gender results areas, Gender Equality, Knowledge Generation and Exchange, Participation and leadership, Capacity Development, Women groups, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Adaptive management, Learning, Theory of change, Training, Knowledge Generation, Workshop, Innovation, Conference, Knowledge Exchange, Field Visit

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 0

Climate Change Adaptation
Climate Change Adaptation 1

Duration

36 In Months

Agency Fee(\$) 259,450.00

Submission Date

9/28/2020

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-1-1	GET	2,642,952.00	15,000,000.00
LD-1-1	GET	88,098.00	500,000.00
	Total Project Cost (\$)	2,731,050.00	15,500,000.00

B. Indicative Project description summary

Project Objective

To mainstream biodiversity and sustainable land management in key biodiversity areas along Bataan province to Manila Bay.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)												
Component 1:Provincial level capacity to support mainstreaming biodiversity and sustainable land management (SLM) and development and implementation of provincial level	Technical Assistan ce	Outcome 1.1:: Cross-sectoral capacities strengthened and development and implementation of harmonised Province level land use plans, resource management frameworks and development investments in Bataan Province, in support of the Manila Bay Sustainable Development Master Plan (MBSDMP).	1.1.1. Strengthened capacities of key provincial institutions and all Local Government Units (LGUs) in Bataan Province to review, validate and implement Comprehensive Land Use Plans (CLUPs) and relevant sectoral	GET	650,250.00	3,690,476.00												
land use planning		Indicators:	plans and															
and development frameworks		i. No. of provincial institutions and LGUs trained in mainstreaming biodiversity in the existing Land Use Framework and	investments to support global environment benefits 1.1.2: Enhanced															
		other development plans resulting in following indicator.	capacity of Department of															
														ii. 12 revised land use plans that mainstream biodiversity (i.e., 4 CLUPs, 4 FLUPs, 4 ICMPs) 1 Provincial Ecotourism Investment Plan	Environment and Natural Resources (DENR) to catalyze GEB mainstreaming, especially in coordination with			
		iii. Common guidelines for harmonization of multiple land use plans incl, ADSDPP, ICMP, CRMP, PAGMPS, CLUP, FLUP, CBFMA[1], etc, of mandated agencies - DA,	Manila Bay Mandamus Agencies (MBMAs), in implementation of the Operational Plan															

DENR, LGUs, NCIP[2] resulting in 4 harmonized LGU plans; 1 Indigenous Peoples' Plan, 3 CRMFs; 3 Biodiversity conservation and sustainable use plans (i.e., 1 Bataan National Park GMPS, 1 Roosevelt PA GMPS) one MPA[3] GMPS;i

iii. No. of coordination meetings organized annually by DENR with MBMAs to monitor progress in meeting targets on Manila Bay clean-up.

iv. No. of existing community institutions, resource user groups, farmers, fisherfolk, etc trained in harmonised land use plans

[1] Ancestral Domain Sustainable
Development and Protection Plan,
Integrated Coastal Management
Plan, Coastal Resources
Management Plan, Protected Area
General Management Plans and
Strategy, Forest Land Use Plans,
Community-Based Forest
Management Agreement.

[2] Department of Agriculture, Department of Natural Resources, Local Government Units, National Commission on Indigenous Peoples

[3] There are seven MPAs in the project site. Based on detailed discussion, one MPA will be selected as demonstration pilot for the GMPS. These seven MPAs are Abucay Fish Sanctuary, Bagac MPA,

of the Manila Bay Coastal Strategy (OPMBCS) 2017-2022

1.1.3. A multisectoral platform, comprising MBMAs with clear mandate on ecosystems management established and operationalised to facilitate learning and sharing amongst LGUs provincial and national authorities.

1.1.4. Multistakeholder monitoring systems established for biodiversity mainstreaming to support decision making. Limay Fish Sanctuary, PNOC Fishery Reserve Area, Marine Turtle Conservation Centre, Orion Kent Fish Sanctuary, Balanga Wetland and National Park. The baseline for coastal resources is 514ha, target 565ha; marine turtle nesting and hatcheries. Base: 129 ha; target: fully protected.

Component
2:Capacity
building, natural
resource
management and
sustainable
livelihoods to
deliver global
environmental
benefits in key
biodiversity areas
(KBAs) at subprovincial level in
Bataan Province

Outcome 2.1. Strengthened capacities on natural resource management in priority KBAs (at sub provincial level in Bataan Province), interventions on environment friendly livelihoods and improved land and resource management

Indicators:

Investme

nt

Globally significant biodiversity under improved management in Bataan National Park (18,335 ha), Roosevelt PA (786.40 ha) 7 MPAs (592 ha), mangroves, wetlands, etc in Bataan municipal waters (176,408 ha)

Biodiversity-friendly agriculture and fisheries to reduce threats to: i)
Bataan National Park: 10,990 ha; ii)
Roosevelt PA: 102 ha[1]; iii) 1 MPA; iv) Potential areas for sustainable livelihood intervention: 6,500 ha.[2] iv) Protection and Production landscapes of key watersheds i)
CBFMAs within Talisay River

2.1.1. Enhanced capacity of extension agents, community institutions, farmers, fisherfolk, other resources user groups to implement the harmonised land use plans for sustainable natural resource management in KBA at sub-provincial levels.

GET

2.1.2. Communities practice sustainable natural resource management (agriculture, forestry, fisheries, agroforestry) with government and other partners, consistent with the land use plans under

1,300,500.00 7,380,953.00

Watershed:11,462 ha. and ii) CBFMAs within Almacen River Watershed: 4,912 ha.

No. of community institutions, extension agents resource user groups, farmers, fisherfolk, etc trained in harmonised land use plans

At least 70% (of which 50% are women) of the identified stakeholders practice biodiversity friendly agriculture and/or sustainable fisheries

No. of farmers and fisherfolks trained on best practices in biodiversity-friendly agriculture, aquaculture, fisheries, etc (organic or regenerative agriculture, CSA, fish processing, value addition, etc)

No. of diversified and sustainable livelihoods identified and promoted for market linkages

No. of joint initiatives, involving women and IPs, on biodiversity-friendly enterprises with the private sector

% increase in income from diversified sustainable livelihoods (to be identified during PPG)

No. of stakeholders trained in Sustainable Land Management and Natural Resource Management

At least 90 % farming households practice integrated SLM practices.

Outcome 1 through coordination with nearby communities

- 2.1.3. Local communities in KBAs, especially women and indigenous peoples, foster private sector partnerships for biodiversity-friendly enterprises in the multiple use zones of Bataan National Park and Roosevelt Protected Area.
- 2.1.4.Increased investment in sustainable and diversified livelihood opportunities for local communities in upland forests and riparian zones, in lieu of environmentally damaging activities, and socio-economic recovery from COVID-19 impacts and related shocks.
- 2.1.5. Two genderresponsive integrated landscape management plans for Alcamen and Talisay watersheds adopted and implemented through an inclusive and

	10000 persons participating disaggregated by gender (Male 5,000 and Female 5000). 130 of Indigenous Peoples participated and disaggregated by gender (Male 65, and Female 65).	participatory process by multi- stakeholders, including NGOs, CBOs, community resource user groups, private sector.			
	[1] These are the Strict Protection Zones of the 2 PAs where no extraction activities are allowed	2.1.6. Soil and water conservation plans co-developed			
	extraction activities are allowed [2] 6,500 hectares is the estimated area of the multiple-use and buffer zones of the 2 Terrestrial Protected Areas where sustainable livelihood activities are allowed	between local communities and authorities (DA-BSWM) and implemented in upland forest areas and in riparian zones.			
Technical Assistan ce	Outcome 3. Knowledge exchange for scale-up and replication of interventions that mainstream biodiversty conservation and sustainable land management	3.1.1.Knowledge management and communication plans that incorporate project lessons and related innovative practices for scale-up in Philippines	GET	650,250.00	3,690,476.00
	 a) Online portal on project learnings, exchange of good practices b) List of recommendations prepared and submitted to the MBMAs 	3.1.2. Recommendations on biodiversity mainstreaming and integrated landscape management for			

effective

Component 3:

Monitoring and

evaluation and

knowledge management implementation of the OPMBCS approved and implemented

3.1.3. Effective monitoring and evaluation framework, incorporating gender mainstreaming and safeguards, developed and implemented to strengthen project effectiveness

	Sub Total (\$)	2,601,000.00	14,761,905.00
Project Management Cost (PMC)			
	GET	130,050.00	738,095.00
	Sub Total(\$)	130,050.00	738,095.00
	Total Project Cost(\$)	2,731,050.00	15,500,000.00

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Department of Environment and Natural Resources (DENR	In-kind		15,000,000.00
Recipient Country Government	Department of Agriculture-Bureau of Soils and Water Management (DA-BSWM)	In-kind		500,000.00
			Total Project Cost(\$)	15,500,000.00

Describe how any "Investment Mobilized" was identified

Not Applicable

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
FAO	GET	Philippines	Biodiversity	BD STAR Allocation	2,642,952	251,080	2,894,032.00
FAO	GET	Philippines	Land Degradation	LD STAR Allocation	88,098	8,370	96,468.00
				Total GEF Resources(\$)	2,731,050.00	259,450.00	2,990,500.00

E. Project Preparation Grant (PPG)

PPG Required

PPG Amount (\$)

PPG Agency Fee (\$)

/

100,000

9,500

Agency	Trust Fund	Country	Focal Area	ea Programming of Funds		Fee(\$)	Total(\$)
FAO	GET	Philippines	Biodiversity	liversity BD STAR Allocation		9,194	105,968.00
FAO	GET	Philippines	Land Degradation	LD STAR Allocation	3,226	306	3,532.00
				Total Project Costs(\$)	100,000.00	9,500.00	109,500.00

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
19,211.00	0.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

				Total Ha (Expected		
Name of the			Total Ha	at CEO	Total Ha	Total Ha
Protected Area	WDPA ID	IUCN Category	(Expected at PIF)	Endorsement)	(Achieved at MTR)	(Achieved at TE)

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)			la (Expected at ndorsement)	CEO	Total Ha (Total Ha (Achieved at MTR)			Total Ha (Achieved at TE)		
19,211.00		0	.00		0.00		0.00)			
Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)		
Bataan National Park			19,211.00							Û	

Indicator 2 Marine protected areas created or under improved management for conservation and sustainable use

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
591.70	0.00	0.00	0.00

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

				Total Ha (Expected		
Name of the			Total Ha	at CEO	Total Ha	Total Ha
Protected Area	WDPA ID	IUCN Category	(Expected at PIF)	Endorsement)	(Achieved at MTR)	(Achieved at TE)

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Ex	pected at PIF)		Total Ha (Expect Endorsement)	ed at CEO	Total Ha (Achieved at M	TR) Tota	al Ha (Achieve	d at TE)	
591.70			0.00		0.00		0.00)		
Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)	
Abucay Fish Sanctuary			500.00							â

Balanga Wetland and Nature Park (BWNP)	34.20	
Limay Fish Sanctuary	7.50	ŵ
Orion Kent Fish Sanctuary	25.00	Û
PNOC Fishery Reserve Area	25.00	û

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
176408.00	0.00	0.00	0.00

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
Indicator 3.2 Area of Forest and Forest	st I and restored			
	st Edila 100torou			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
Indicator 3.3 Area of natural grass an	d shrublands restored			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
		((

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
176,408.00			

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
46218.00	0.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
46,218.00			

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	

Type/Name of Third Party Certification	on			
Indicator 4.3 Area of landscapes und	er sustainable land management in pro	oduction systems		
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
Indicator 4.4 Area of High Conservati	on Value Forest (HCVF) loss avoided			
Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	

Documents (Please upload document(s) that justifies the HCVF)

Title Submitted

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
Indicator 5.1 Number of fisheries that	t meet national or international third party	certification that incorporates biodiversity	considerations	
Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)	
Type/name of the third-party certifica	ition			
Indicator 5.2 Number of Large Marine Ecosystems (LMEs) with reduced pollutions and hypoxia				
Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (achieved at MTR)	Number (achieved at TE)	

0	0	0	0
			'

LME at PIF LME at CEO Endorsement LME at MTR LME at TE

Indicator 5.3 Amount of Marine Litter Avoided

Metric Tons (expected at PIF)	Metric Tons (expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	5,000			
Male	5,000			
Total	10000	0	0	0

Part II. Project Justification

1a. Project Description

- a. *Project Description*. Briefly describe briefly: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems scription); 2) the baseline scenario and any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and imponents of the project, 4) alignment with GEF focal area and/or Impact Program strategies; 5) incremental/additional cost reasoning and expected contributions om the baseline, the GEFTF, LDCF, SCCF, and co-financing; 6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 7) innovations, stainability and potential for scaling up.
 - The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

The Environmental Context

The Philippines is recognized as one of the most important biodiversity hotspots and it is also a global conservation priority area. Together with other megadiverse countries, it hosts over two-thirds (or about 67%) of the Earth's plant and animal species^[1]. At the same time, increasing human activity has pushed its wildlife to the edge of collapse. Of more than 52,100 species described in the Philippines, more than half (or more than 50%) are found nowhere else in the world. The Philippines is also a home to some of the highest concentrations of both the critically endangered and the endangered species on the planet^[1]. However, it is facing significant threats, along with the other megadiverse countries. At the same time, scientists recently warned that globally 24 billion tons of fertile soil was being lost per year, largely due to unsustainable agriculture practices. Land and forest degradation processes threaten the livelihoods, well-being, food, water and energy security and increase vulnerability of millions of people, and in many cases, cause migration and serious social unrest^[3]. The United Nations' Food and Agriculture Organization (FAO) estimated that about 13 million ha of lands in the country suffer from various forms of degradation, thereby, affecting about 33 million Filipinos (BSWM-LADA, 2013). Moreover, with reference to the BSWM's land capability categories that depends on soil type and slope gradient, problem soils, which require amelioration and management cover about 22.6 million ha or about 75% of the country's total land area. Soil erosion is the most serious form of land degradation in the country in which, about 45% of the arable lands were reported by the Bureau of Soils and Water Management (BSWM, 2012), as moderately to severely eroded. Particularly, the alarming land degradation problems affecting the country are soil nutrient depletion and widespread conversion of good agricultural lands to urban uses[3]. At the same time, land degradation is one (1) of the most important contributors to climate change globally, as well as in the Philippines. Climate change exacerbates variations in yields and income from agriculture, threatening the resilience of agro-ecosystems and stability of food production systems^[3]. Within Bataan province of region 3, the recent land degradation comparative assessment by the BSWM^[22] on the negative trends between two (2) temporal benchmarks (i.e., 2003-2010 and 2010-2015), shows that the largest area affected and showing negative trends, is the area under cropland which has increased by about 19,318 ha (i.e., from 11,641 ha to 30,960 ha). The relative increase in the land area under cropland means a corresponding reduction in the respective land areas of other land uses that were used in the study, which were showing negative trends (i.e., Forest, Shrubland, and Wetland). Particularly, about 4,504 ha of Shrubland were converted into cropland (i.e., from 11,379

ha to 6,875 ha) during the said temporal benchmarks^[22]. At the Bataan provincial level, the land area that has shown negative trends under the said four (4) land uses within the said (2) temporal benchmarks has increased by about 37% or about 12,053 ha, from 32,587 ha to 44,640 ha^[17]. The assessment also shows that land use change has been rampant within the province of Bataan, which is the proposed project site for this GEF-7 technical assistance.

Manila Bay Catchment Area

The province of Bataan is directly connected to the bigger natural system called the Manila Bay Catchment. As shown in the Manila Bay Sustainable Development Master Plan (December 2017), the Manila Bay is amongst the country's most significant areas – in terms of impact in relation to its size. The Manila Bay Catchment Area extends across three (3) regions and the National Capital Region (NCR), which encompasses the whole of Metropolitan Manila, a sizable portion of both Central and Southern Luzon (Region III and IV-A), and a few cities and municipalities in Region II. The whole area of more than 17,000 square kilometers is composed of 26 catchments areas, of which four (4) are considered as major river basins. The Bataan watershed is on the northwestern part of the bay coast. Major Basins Covered by the Manila Bay Catchment, are as follows: (a) Pampanga River Basin (1,099,034ha); (b) Cavite Watershed (114,250ha); (c) Pasig-Marikina-Laguna de Bay River Basin (428,150ha); (d) Bataan Watershed (123,769ha); and (e) Bay Area (210,169ha). Relative to the six (6) Clusters defined under the Manila Bay Mandamus Agencies Operational Plan for Manila Bay Coastal Strategy 2017–2022 (OPMBCS 2017-2022), three (3) are headed and coordinated by the DENR-BMB/DENR-EMB/DENR-MBCO, as follows; (a) Institutional Arrangement/Partnership and Governance, (b) Habitat and Resources Management, and (c) Liquid Waste Management. Correspondingly, the defined Outcomes are; (a) OPMBCS properly implemented (for Institutional Arrangement/Partnership and Governance), (b) Soil Loss in Manila Bay reduced, and Existing biodiversity areas within Manila Bay Region protected and conserved (for Habitat and Resources Management), and (c) Liquid Wastes discharging into Manila in compliance with effluent (General Effluent Standard) and/or ambient water quality with the water quality guidelines (for Liquid Waste Management).

Biodiversity: Manila Bay

Particularly within the Manila Bay area which is a KBA, and where the project site belongs, the recent study declares (i.e., the Manila Bay Sustainable Development Master Plan, 2018), that it is amongst the country's most significant areas (besides its cultural and historical value), where about a quarter of the Philippines population resides, and generates about 53% of the nation's Gross Domestic Product (GDP). Currently, several areas within the Manila Bay Basin have already been declared as protection zones under Republic Act 7586, otherwise known as the National Integrated Protected Areas System (NIPAS) of 1992). However, the terrestrial, marine, and coastal ecosystems, along with urban areas within the Manila Bay Area are exposed and vulnerable to climate change and other natural hazards (i.e., inducing sea level rise, associated with increased typhoon intensity and leading to altered temperature and precipitation). The said recent study also reports that "following the criteria used to consider site inclusion under the Ramsar Convention on Wetlands of International Importance, 70-85% or about 145,000 waterbirds of 16 species congregate in Manila Bay during mid-winter months in numbers of international importance. These internationally important congregations are concentrated in six geographical areas located north of Metro Manila, two areas in Metro Manila and one area in Cavite. Further, the Bay hosts 24 migratory waterbird species are listed under the Convention of Migratory Species as needing conservation and management through international agreements. Furthermore, 12 waterbird species are considered globally threatened or near threatened with possible extinction risks. All the species mentioned occur within proposed reclamation areas and a new airport area north of Manila. Some species occur in extraordinarily high percentages of the East Asian-Australasian Flyway waterbird population. Of the 16 waterbird species occurring with more than one percent of the flyway population, 12 species occur with mor

(46.3%). Compared to the known flyway populations Manila Bay host at least 53,000 Whiskered Terns (26.8%), 19,000 Pacific Golden Plovers (19.2%), 6,800 Black-winged Stilts (6.9%) and 5,200 Kentish Plovers (5.3%). These figures underscore the international importance of Manila Bay and highlight the extraordinary responsibilities of the Philippines to safeguard these critical populations and their habitats".

Biodiversity: The Project Site

The Bataan Province (being part of the Manila Bay area), as reported by Wetlands International and IUCN^[33], occupies a very critical role in the life and existence of Manila Bay, as it houses one of the **Internationally Important** Waterbird Sites in Manila Bay "that supports 20,000 or more waterbirds and/or a number of species congregating in numbers of **international importance**, and additional sites that support waterbirds in numbers of **international importance** based on presence of threatened species". Additionally, it has been reported by the Manila Bay Mandamus Agencies that the proposed project site has a High Biodiversity Importance value^[7], as exemplified by the presence of the following vital biodiversity and natural resources and other features, **found nowhere else in the Manila Bay region, and thus, needs to be carefully monitored and given special attention**, as follows;

- a) Two out of 10 Protected Areas (within Manila Bay region), containing about 13% of the Manila Bay region's closed forest or about 11,092 ha out of 86,128 ha): i) Bataan National Park (fully under the jurisdiction of DENR), which was established in 1945 and later modified in 1987, has a total area of 18,335 ha, about 10,990 ha (about 60%) of which, is Lowland Natural Forest, and about 5,623 ha (about 31%) is Grassland, and covers portions of Hermosa, Morong, Orani, Samal, Abucay, and small areas of Balanga City and Bagac, which recorded in 1998 BNP survey 211 species of wildlife (Bataan Sustainable Development Strategy), and 20 years later, as reported in 2018, a recent Rapid Biodiversity Assessment conducted (http://www.innspub.net) within the buffer zone of the Bataan National Park (BNP) has recorded a total of 34 species of fauna, including eight mammals, six reptiles, and 20 birds, where; seven avian species were classified as endemic, two in reptile, and one in mammal. At the same time, it has recorded 3,850 plant individuals, belonging to at least 118 species, five of which were classified as endemic. The top five plant species with the highest Important Value Index were *M. paradisiaca, M. indica, Cocos nucifer, Gliricidia sepium*, and *Anacardium occidentale.*; ii) Roosevelt National Park (fully under the jurisdiction of DENR), based on Proclamation No. 273 dated April 2000, the Roosevelt National Park (RNP) was declared to be under the National Integrated Protected Area System (NIPAS), and to be known as the Roosevelt Protected Landscape (RPL). It is within the territorial jurisdiction of the municipalities of Dinalupihan and Hermosa, having a total land area of 786.4 ha, where, about 684 ha (about 87%) is Grassland, and about 102 ha (about 13%) is Old Growth Natural Forest;
- b) <u>Feeding grounds of **Migratory Birds** and waterfowls</u>- The areas in Bgy. Puerto Rivas and Tortugas in Balanga City are noted for the migratory birds^[31] that visit these areas during the migratory season congregating in numbers of **international importance**;
- c) <u>Bataan Coastal Resources</u> i) Mangrove areas can be observed from Hermosa to Limay and Morong, ii) Seagrasses area and seagrass patches from portions of Morong, Bagac down to Mariveles, and iii) Coral Reef patches in Mariveles, Bagac to Morong;
- d) Marine Turtle Nesting Area i) Marine turtle [Olive Ridley (Lepidochelys olivacea)] nesting areas in the Province of Morong, Bagac, Mariveles and Limay, and
- ii) Several Marine Turtle hatcheries currently managed by POs and LGUs in coordination with DENR^[30];

Bataan Province: The Project Site

The Bataan Province has an area of about 137,296 ha, with about 65,430 ha or 48% of forestland/timberland (which is fully under the jurisdiction of DENR), and the remaining 52% or about 71,866 ha is Alienable and Disposable area (A&D area). It is home to at least 760,650 (as of 2015) people, with 10 coastal municipalities, one coastal city, and one land-locked municipality, with a coastline of 118 km, where six (6) MPAs^[26] are located covering at least 532 ha. It is located within the northwestern portion of the whole Manila Bay region and connects directly with the Metro Manila through the Manila Bay in its Provincial eastern boundary.

Bataan Province is heavily frequented by local and international tourists due to its historical significance and role during the WWII (such as, the military fortress at Corregidor, Mariveles, Bataan), and it acts as the gateway to the West Philippine Sea or South China Sea in its Provincial western boundary, and thus, its added vital role in national security. It is strategically situated beside the former US Naval Base at Subic, Zambales, within the western side of Region 3 in central Luzon, northwest of Metro Manila. Before 1570s, several villages in the coastal plains of Bataan were already thriving communities. The Aetas and Negritos are 2 Indigenous and Cultural groups living in the upland areas of Bataan and the natives who were predominantly fishermen, farmers, and craftsmen inhabited these coastal villages, while the Aeta tribe occupied most of the hillsides, and in 1991, they numbered about 18,423. After Mt. Pinatubo erupted in 1991, Aetas from nearby Provinces migrated to Bataan and most of them stayed in Dinalupihan, some in Morong, and few in Bagac, and they are known for their dependency on the environment for their subsistence but at present, they are learning Sustainable Agricultural Practices.

The Province is bounded in the northwest by the province of Zambales, in the northeast by the province of Pampanga, in the east and the south by the Manila Bay, in the west by the West Philippine Sea (also known as South China Sea), and has a coastal line of about 188 km, with about 155 ha of mangrove forest (DENR 2015), about 276 ha coral reefs and about 83 ha seagrasses (as of 2014), with six (6) MPAs^[26] containing at least 532 ha of documented Marine Protected Area (MPA). From the municipality of Bagac to Morong in the western side of Bataan, is mostly mountainous terrain inland, and along the West Philippine Sea Coastline, is interspersed with pristine beaches with rocky portions and fringes of coral reefs in good condition which is the haven for marine turtles and other marine animals, while the southern Bataan in the municipality of Mariveles and vicinities is mostly Brushland/Industrial area, and its coastal and marine area has coral reefs, and seagrasses.

Out of the eight known species of marine turtles in the world, five species have been recorded to be frequenting the coastal line of Bataan Province^[7] [29] [i. Green turtle (*Chelonia mydas*), ii) Hawksbill turtle (*Eretnochelys imbracata*), iii) Olive Ridley turtle (*Lepidochelys olivacea*), iv) Loggerhead turtle (*Caretta caretta*), and v) Leaderback turtle (*Dermochelys coriacea*). However, only three out of the five species (i.e. Green turtle, Hawksbill turtle, and Olive Ridley turtle) nest within the coastal line of Bataan Province and the rest only forage in Philippine waters. The municipality of Limay and northwards are mostly urban centers with large agricultural areas inland, and the coastal and marine area has large tracts of fishpond and mussel culture farms, mangroves and mudflats, which serve as natural spawning area.

Threats, Root causes and barriers that need to be addressed

Threats/Root Causes: The project site (i.e., Bataan Province to Manila Bay), houses two of the 10 protected areas within Manila Bay area, and which is also included under the Ramsar Convention on Wetlands of International Importance, is confronted with similar spatial pattern of threats to what was reported in the global "Assessment of threats to terrestrial protected areas"^[27], leading to biodiversity loss and land degradation, which include logging and wood harvesting, hunting and collecting terrestrial plants, storms and flooding, fire and fire suppression resulting to inappropriate land use, wildlife habitat destruction, high soil erosion rates, and pollution of waterbodies. Additionally, the current vital database management for the said protected areas and other biodiversity-rich areas outside the protected areas, including MPAs, is wanting.

Illegal and rampant logging Large-scale Government-approved logging operations within the natural forests of the Philippines has been stopped in early 1990s. However, there are still small-scale timber poaching happening in the untenured or open access forestlands, even within the project site, due to weak implementation forestry and environmental laws. It has been reported in one of the FGDs in Bagac, Bataan that, "when fish catch is inadequate, fisherfolks resort to farming, tricycle driving, or construction work for alternative livelihood. Meanwhile, some coastal dwellers resort to timber-poaching and logging when off-peak of fishing season. While they admitted wanting to stop from environmentally exploitive forms of alternative income generation, the coastal residents lamented the lack of opportunities and insufficient LGU support for alternative livelihood". Out of the total land area of Bataan Province, about 65,430 ha or 48% is forestland/timberland and the remaining 52% is A&D area under the management control of the LGU. The forestlands are under the jurisdiction of the DENR and DENR deploys forest guards to protect the natural forests from illegal harvesting or poaching of both the fauna and flora, but the agency is not able to protect effectively the natural forests due lack of resources and logistical support. In contrast to tenured forestlands, illegal land-based activities happening within the open access forestlands have nobody to be held responsible for. In almost all of the forestlands within the project site, there are already migrant upland farmers tilling the open areas without the necessary land tenure issued by the DENR or NCIP (for the case of Indigenous Peoples). Throughout the decades of DENR's existence, it has been formulating and implementing some kinds of strategies and tenure instruments for the illegal forest occupants, in order to engage them as partners in development. Currently, the government is using the Community-Based Forest Management Agreement (CBFMA) Strategy, which grants the qualified applicant-community of forestland (which are upland farmers), a 25-yr right to develop and manage their CBFMA area, in accordance with their approved Community Resources Management Framework (CRMF). For Protected Area, the government is using the Protected Area Community-Based Resource Management Agreement (PACBRMA). However, the procedure is not easy and too costly for the applicants, which are subsistence farmers, and heavily dependent upon the government for livelihood assistance. Besides, there are still difficult issues on the harvesting protocols of their planted trees due to financial limitations. Currently, there are about 11 existing CBFMAs within the province of Bataan along the foothills of Mt. Mariveles and Mt. Natib, but generally, there are only few upland communities that opted for CBFMA and have been successful in their application. This aggravates the problem on the continued cutting and harvesting within and along the fringes of the exiting natural forests, coupled with the continuing farming activities of untenured upland farmers within the open access forestlands of the project site. These 11 CBFMAs are potential sites for Sustainable Land Management (SLM) technology. In some areas within the project site, the DA-BSWM and the DENR-BMB have already implemented some demonstration areas for soil and water conservation measures demonstration areas with partner site-based upland farmers, which are ready for up-scaling under this project. Under the current situation, it is a DENR Policy that the renewal of the CBFMA and PACBRMA requires a Certification Precondition (CP) from the National Commission on Indigenous Peoples (NCIP), as per DENR Administrative Order No. 2004-29, in accordance with relevant provisions of Indigenous Peoples Rights Act (IPRA) or RA 8371. The CP is only issued to the non-IPs as an endorsement of their application or renewal of CBFMA or PACBRMA at the DENR, upon satisfying the required Free and Prior Informed Consent (FPIC) process from the IP community concerned, which is being facilitated by the NCIP. However, for the Indigenous Peoples (IPs), the NCIP issues to them the Certificate of Ancestral Domain Title (CADT). Currently, the implementation of forest and environmental laws and relevant local ordinances within the forestlands is very weak, and the same time, alternative livelihood support is inadequate. As one participant upland farmer decried during the FGD in Bagac, Bataan, "The local government has no (financial and other logistical) support. They have long been telling us that they will provide alternative livelihood opportunities, but there are none. If there is any, only those whom they know are benefitting from it surely". Another participant remarked, "We have no other choice. It is difficult to find other jobs especially when we did not finish school". These patches of open access forests are prevalent within the project site, despite the fact, that there are two (2) Protected Areas existing within the northern portion of Bataan Province (i.e., Bataan National Park and Roosevelt Protected Landscape), towards the former Subic Naval Base. These open access forests are already occupied by migrant upland farmers from southern Tagalog and other regions of the country, and are mostly without proper land tenure. In fact, part of the Roosevelt Protected Landscape is already occupied by a thriving community, along its Buffer Zone.

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<u>Unsustainable Farming Practices</u>. Relative to the presence of upland farms within forestlands, other than timber poaching, is the issue on uncontrolled fire and fire suppression, which happens annually generally during the dry months of late March, April, May, early June, and is generally blamed on upland farmers that settle in the forestlands and continually till the soil erosion-prone lands along steep slopes, doing slash-and-burn farming, for lack of alternative livelihoods, and which has been exacerbated by the extreme temperatures due to climate change. As soon as fire escapes from their upland farms, this immediately catches the vast open grasslands in the vicinity devouring everything along its path, including the emerging wildlings of various pioneer tree species, supposedly, in their path to natural ecological succession, while at the same time, leaving the loose top soil unprotected vulnerable to the damaging effects of heavy rainfall.

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Hunting and over-extraction of terrestrial plants Considering the proximity of the Protected Areas and other Biodiversity-rich areas to the urban population centers, these areas are, indeed, being used as convenient recreation and tourism sites, which are sensitive activities to the protected areas. These areas are regularly visited during the weekends mostly by the local populace. These PAs and Biodiversity-rich areas are already threatened by hunting and collection of terrestrial plants with the frequent visit of tourists in the area contributing to the destruction of wildlife habitat, and is often the source of uncollected solid wastes. Additionally, the presence of upland dwellers doing unsustainable upland farming systems along the Buffer Zone of the Roosevelt Protected area, as well as in the other Biodiversity-rich areas outside the PAs, contribute to habitat destruction, and once the habitats of important wildlife are destroyed, they may never recover. In effect, as soon as the important wildlife habitat are destroyed, apart from the direct reduction in the population of the affected wildlife, the other ecosystem services are impaired, such as the microclimate modification, sustained supply of high quality surface water, soil erosion control, groundwater recharge, food, medicines, protection from natural disasters, natural pollination, and protection from pests and diseases (among others).

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Storms and flooding. The recently recorded flood within Bataan was on 04 August 2019, which made the residents to use the boat as means of transportation in going out and back to Barangay Almacen in Hermosa, Bataan, due to the flashfloods that hit the seven (7), out of 11 towns, and one city of Bataan, which affected nearly 8,000 families [28]. With the advent of climate change, this scenario is likely to be a common sight within these affected localities, and in higher intensity, not to mention, the province of Bataan is frequently visited by a number of strong typhoons annually. All of the affected towns fall within the Almacen River Watershed (i.e., northern portion of the province) and the Talisay River Watershed (i.e., southern portion of the province). However, there are no existing Integrated Watershed Management Plan for the Almacen River Watershed and the Talisay River Watershed. Despite the presence of the LGUs' Comprehensive Land Use Plans (CLUPs) and Forest Land Use Plans (FLUPs), there is still widespread inappropriate land use, particularly, within the highly vulnerable and flood-prone areas. This is partly due to the violent volcanic eruption of Mt. Pinatubo on 15 June 1991 within the headwaters of Pampanga River, which is part of region 3, and it also affected the province of Bataan being part of region 3 due to the great volume to pyroclastic (lahar) materials and ash-fall delivered within both the lowlands and the uplands. The said volcanic eruption has changed the river and stream courses and covered land depressions during the first decade after the eruption. However, some of the land owners were able to relocate the concrete monuments of their titled properties but some farmers opted to move to other higher places and the next recourse was the nearby protected areas and open access forests, where implementation of forest laws has been inadequate. Rampant land use change through land conversion activities have been happening within the Bataan Province, and some wetlands are being converted into settlement areas, and some productive agricultural farms have been converted into housing areas, and portions of productive mangroves have been converted into fishponds. Additionally, the species of migratory birds earlier mentioned occur within proposed reclamation areas and a new airport area north of Manila.

erials are deposited in the riverbeds as sediments and lighter soil materials are flushed out into the mouth of the rivers, such as, silt and clay materials, and on to the sea and deposited over the seagrasses, and coral reefs that eventually render them useless for their natural functions badly affecting the livelihood of fisher folks, upland farmers, and Indigenous Peoples (IPs) which have been dependent on these resources. Talisay and Almasen are the two major rivers in Bataan. Along with the thousands of tons of soil materials eroded from the uplands and from the collapsed riverbanks, are the precious soil macro and micro elements leading to the continuing depletion of soil nutrients that are needed for plant growth and survival. Supported by the study on Land Degradation within region 3, by the DA-BSWM, the vital soil nutrients are mercilessly washed out and leached out from their locations in Bataan province resulting to negative trends and loss of soil nutrients from the natural system seriously affecting the farmers' crop yield and community food supply, while at the same time, polluting the river systems and eventually finding their way into the coastal zone, to the sea, and to the ocean. In terms of the regulation covering the water quality of fresh waterbodies, the is covered by the Clean Water Act or RA 9275, which is being implemented by the DENR-EMB, however, there has also been inadequate awareness campaign on the part of the LGUs on water pollution and on biodiversity and natural resource conservation, climate change impacts, including other environmental laws and the relevant ordinances, to their constituents within their jurisdiction.

Barrier Analysis: The main barriers to the sustainable management of Biodiversity and Natural Resources within the project site are:

Aside from the real financial and technical limitations of the mandated agencies in solving the problems of the natural system, there is weak involvement and commitment of local organizations and key stakeholders in environmental programs and endeavors, which can be attributed to the lack of a common appropriate ecosystems-based cross-sectoral framework for action.

As a result, there are long-running priority cross-cutting realities and concerns left unaddressed, as follows: a) fragmented sectoral plans and programs; b) lack of harmony (connectivity) of management/development frameworks from the mandated agencies with the LGU plans operating within the same natural system from the "ridge-to-reef"; c) biodiversity and land degradation have not been mainstreamed into the plans of various sectors, starting with the land use frameworks of the LGUs, Community Resources Management Frameworks (CRMFs) of the CBFMA holders (upland farmers, fisherfolks, and coastal farmers), including the Indigenous Peoples (IP) plans, the LGU Tourism Plan, and other investment plans of key stakeholders within the uplands, the lowlands, and the coastal ecological zones; d) weak political will in the implementation of forestry and related environmental legislations, especially in open access forestlands; e) existing protected areas' needs (i.e., BNP and RPL) from adjacent lands are not well considered in their management by local stakeholders; f) lack of appropriate livelihood programs for the forestland farmers both in the uplands and in the coastal areas; and g) on the part of the upland farmers, difficulty in getting a land tenure (i.e., CBFMA or PACBRMA) from DENR.

It is a reality within the project site that the DENR, the DA, the NCIP, and the LGU operate within the same natural system and are all under the same LGU Political Jurisdiction. However, these agencies have different mandates and thus, correspondingly have different sets of key results areas, which yield fragmented sectoral plans and programs that lack the harmony and connectivity from the ridges of Mt. Mariveles and Mt. Natib down to the flood plains, the coastal zone, and on to the sea and marine areas. Although they are all operating within the same LGU's Political Jurisdiction, the mandates of the LGU and the DA do not cover the forestland/timberland. The NCIP mandates cover both the A&D areas and the forestlands, but are limited to Indigenous Peoples Ancestral Domain, which will be covered by a separate plan called the Ancestral Domain Sustainable Development and Protection Plan (ADSDPP). About 71,866 ha or 52% of Bataan Province is Alienable and Disposable area (A&D area), which is mostly found within the lowlands (agricultural, commercial, industrial, and residential areas), and is basically under the management control of the LGU and is covered by their Provincial Development and Physical Framework Plan (PDPFP) at the provincial level, and CLUPs at the municipal and city levels, where the biodiversity and land degradation have not yet been

mainstreamed. Historically, the areas under the jurisdictional management of LGU are being prioritized for commercial, industrial, residential/housing, and infrastructure, including other investments that are ecologically sensitive, such as, mass tourism, involving Protected Areas that impact negatively on global environmental values.

The DENR, being a National Agency which has administrative management jurisdiction over the forestlands, including the Protected Areas and National Parks, has a different set of mandates from that of the LGUs, and it is understandable that the DENR operates in accordance with its set of mandates, as provided for in Presidential Decree 705 (PD 705) or Forestry Reform Code of the Philippines, and the National Integrated Protected Areas System (NIPAS) or RA 7586. Correspondingly, the key stakeholders involved in its programs may not necessarily be the same with those involved by LGUs in their programs within the downstream. In the case of the LGU, its mandates exclude land-based interventions and environmental policies within the forestlands and protected areas, in accordance with Local Government Code or RA 7160, such as, the agricultural production areas, the built-up areas or population centers and commercial areas, and the coastal areas. However, the riparian zones, serving as easements of the river systems that cut-across the forestlands and the Alienable and Disposable Areas (A and D Areas), as defined by the Water Code of the Philippines or PD 1067, are technically forestlands; therefore, they are also under the jurisdiction of the DENR. In the same manner, the Coastal zone is also forestland and the inland side of the coastline up to 20 meters from the established average tidal line is also forestland, as prescribed in DENR Department Administrative Order No. 99-21 (DAO 99-21). The land-based project interventions of the DENR are applicable in forestlands only, while the land-based project interventions of LGUs are only within areas outside the forestlands and protected area, despite the fact that both the forestlands and the A and D areas are within the same political jurisdiction of the LGU and operating within the same natural system. For the case of the Protected Areas within the project site, the Protected Area Management Board (PAMB) prepares the Protected Area General Management Plan and Strategy (GMPS) under the guidance of DENR, which is only applicable within the Protected Area or National Park. The riparian zone (Riverbanks) and the Coastal Zone are also forestlands and are under the administrative jurisdiction of the DENR. In an effort to stop the continuing forestland degradation and biodiversity loss, the DENR has implemented the Forestland Co-Management Agreement Program with a number of LGUs before the 2010s, where the DENR and Partner LGUs have Co-Managed certain patches of Forestlands up to 5,000 ha. However, this Co-Management Agreement program of the DENR with the LGUs has been suspended. For the case of the Department of Agriculture, their land-based agricultural interventions support the LGUs in their food production mandate and are only applicable within areas outside the forestlands and protected areas. However, within the project site, the DENR BMB and the DA BSWM have already been into some collaborative projects in addressing land degradation and biodiversity loss, in cooperation with the site-based upland farmers, which currently serves as a demonstration site for soil and water conservation.

The three (3) major mandated agencies operating within the project site are all involved in land-based interventions (i.e., DENR, DA, and LGU), having their respective mandates, also have the budgetary allocations to implement and carry-out their respective interventions, although not smoothly connected or supportive with each other. At the same time, the NCIP, which is the overseer of the Indigenous Peoples Rights Act (IPRA) implementation (i.e., to ensure that social safeguards for the IPs are instituted, among others), is also operating within the project site, considering that most of the headwaters of the river systems in the Philippines actually fall within the ancestral domains of the Indigenous Peoples (IPs), as prescribed under RA 8371 or IPRA. The NCIP issues the Certificate of Ancestral Domain Title (CADT) to the qualified tribe in recognition of their native title or ownership of the land since time in memorial. Ancestral Domains are private properties of the tribe but communal in nature, which is covered by an Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) that has been prepared under the guidance of the NCIP.

The LGUs also prepare their respective Integrated Coastal Management Plans (ICMPs) or Coastal Resources Management Plans (CRMPs), with technical support from the DENR, but lacks harmony with the CLUP and with the GMPS of the Protected Areas. Currently, it is a reality within the project site that the Protected Area GMPS, the CLUP, the FLUP, the CRMF of CBFMA holders, and the ICMP or CRMP are not connected with each other, and usually not supportive with each other. These sectoral plans do not have the same planning period, plan coverage, and effectivity. In contrast, the natural system functions differently from the manner the mandated government agencies function because it follows the laws of nature irrespective of political, technical, or administrative

jurisdictions. It is obvious that the river itself is the physical connection that stands between the ridges (tops of the mountains) and the agricultural areas, down to the population centers, and the coastal areas ecological zones, and on to the marine areas; and obviously, the polluted river systems directly affect the health of our coastal and marine ecosystems. According to the PEMSEA and Provincial Government of Bataan, Philippines (2017 State of the Coasts of Bataan Province), "Given the development direction of the province, it is imperative that a water conservation and management plan be developed for the long-term management of the water resources". Under the current situation, however, the main environmental agency has limited capacities and institutional mechanisms to engage with local stakeholders to mainstream biodiversity and land degradation into the various stakeholders' plans. Besides, there are limited capacities and incentives to the stakeholders to mainstream the said concerns.

2. The baseline scenario and any associated baseline projects

Legal and institutional baseline:

The three (3) major mandated government agencies operating within the project site are as follows;

- The Presidential Decree 705 (PD 705) is the Forestry Reform Code of the Philippines and Execute Order 192 (EO 192), mandates the Department of Environment and Natural Resources (DENR) to be the primary government agency responsible for the conservation, management, development, and proper use of the country's environment and natural resources, <u>specifically, of biodiversity (RA 7586)</u> including those in reservation and watersheds and lands of the public domain, as may be provided for by law in order to ensure equitable and improved sharing of benefits derived therefrom for the welfare of the present and future generations of Filipinos, the Sustainable Integrated Area Development (SIAD strategy is hereby adopted.
- The Wildlife Resources Conservation and Protection Act or RA 9147 of 30 July 2001, prohibits any person who willfully and knowingly exploits wildlife resources in their habitats.
- Local Government code of the Philippines, Republic Act 7160 (RA 7160), declares that it is the policy of the State that the territorial and political subdivisions of the State shall enjoy genuine and meaningful local autonomy to enable them to attain their fullest development as self-reliant communities and make them more effective partners in the attainment of national goals.
- · Indigenous Peoples Rights Act (IPRA) or Republic Act 8371 (RA 8371), Declares that the State shall recognize and promote all the rights of Indigenous Cultural Communities/Indigenous Peoples (ICCs/IPs) with the National Commission on Indigenous Peoples (NCIP) as the office to oversee the implementation of IPRA.
- The Department of Interior and Local Government (DILG) has issued DILG Memorandum Circular No. 2002-89 (MC No. 2002-89) for the strict implementation of IRPA, directing all Local Chief Executives (LCE)s, Sangguniang members, and other Local Officials to uphold and ensure the free exercise of the rights of ICCs/IPs in their respective jurisdictions as provided for in the IPRA (among others).
- The Department of Agriculture (DA), an agency responsible for the promotion of agricultural development by providing the policy framework, public investments, and support services needed for domestic and export-oriented business enterprises. The Department of Agriculture-Bureau of Soils and Water Management (DA-BSWM) has been involved in a number of notable studies and related initiatives on Soil and Water Conservation and Land Degradation, in partnership with the DENR-BMB, within the Province of Bataan, the Project Site over the years.

- DENR DILG Joint Memorandum Circular 2003-21 (JMC 2003-21), is for the strengthening and Institutionalization of the DENR-DILG-LGU partnership on devolved and other forest management functions.
- Executive Order 318 (EO 318) of June 9, 2004 Promotes Sustainable Forest Management in the Philippines.
- Executive Order 263 (EO 263) of July 19, 1995, is the adoption of Community Based Forest Management Agreement (CBFMA) as a national strategy to ensure the sustainable development of the country's forestland resources and providing mechanisms for its implementation, and DAO 2004-29 provides for the revised rules and regulations for the implementation of EO 263 as the Community Based Forest Management Strategy (CBFMS), and for the CBFMAs that are for renewal, DENR Administrative Order No. 2004-29 (August 25, 2004), the Revised Rules and Regulations for the Implementation of Executive Order 263, otherwise known as the Community-Based Forest Management Strategy, requires a Certification Precondition (CP) from the NCIP, which involves the satisfaction of the Free and Prior Informed Consent process (FPIC) from the concerned tribal group, facilitated by the NCIP.
- · Clean Water Act or RA 9275, which is being implemented by the DENR Environment Management Bureau for water quality monitoring of waterbodies.
- Presidential Decree 1067 (PD 1067) is the Water Code of the Philippines, specifying (among others), that the riparian zone of fresh waterbodies are set aside as easement, prohibiting any permanent structure therein (40m on both sides of the river for areas within the forestlands, 20m on both sides of the river for areas within the agricultural production areas, and 3m on both sides of the river for areas within the urban settlements).
- DENR Department Administrative Order 99-21 (DAO 99-21), mandates the DENR Regional Directors to recover currently occupied river easement, in coordination with the concerned LCE.

Government investments:

- The two (2) Protected Areas within the project site have their respective Protected Areas Supervisor (PASu) with minimum support staff, which are DENR Staff, and they act as the Secretariat to the PAMB. The PASu convenes the members of the PAMB in accordance with the set schedule, and the PASu facilitates the participatory review of the Protected Area General Plan and Strategy.
- The Presiding Officer of the Protected Area Management Board (PAMB) is the DENR Regional Director, which is usually delegated to the concerned Provincial Environment and Natural Resource Officer (PENRO).
- The members of the PAMB come from the various stakeholders of the concerned Protected Area identified/designated by the DENR.
 - A notable national strategy in dealing with the forestland tenure issues is the Community-Based Forest Management Agreement (CBFMA) program for qualified upland farmers, as per EO 263, DENR DAO 96-29 (CBFM Strategy). Currently, there are at least 11 CBFMAs situated within the Province of Bataan and, including the three (3) CBFM areas in the eastern side of the Bataan Province facing Manila Bay, particularly, along the municipalities of Limay, Orion, and Pilar which are being managed by the following People's Organizations (POs); a) Alangan Farmers Producers Association, Inc. (AFPAI), b) Bilolo Upland farmers Association, Inc. (BUFAI), and 3) Samahang Magsasaka sa Kagubatan ng Limay, Inc. (SAMASAKA).
- · Currently, the DENR is investing in its banner program, the enhanced National Greening Project (eNGP), and its priority activities are; 1) rehabilitation of 1.2 million hectares of denuded forestlands by 2022; and 2) maintenance and protection of existing forests, which is a convergence initiative of DA-DAR-DENR, with DENR as the lead agency, pursuant to EO 23 and 26, both series of 2011.

- The (National Greening Project) NGP at the provincial level. The following interventions are some of the management programs being implemented under the NGP within the proposed Project Area through the Peoples Organizations composed of upland farmers and fisherfolks (that include women) along the coastal and riparian zones: a) Watershed characterization; b) Mariveles watershed (reforestation and retrofitting of existing dam); c) Mt. Natib/Bataan National Park (reforestation); d) Establishment/enhancement of agro-forestry farms; e) Construction of small water impounding structure (SWIS); f) 300-h a Reforestation scheme for 6 municipalities (Pilar-50ha, Morong-50ha, Bagac-50ha, Balanga City-50ha, Dinalupihan-50ha, and Hermosa-50ha); and g) 300-ha Agroforestry Scheme for 6 municipalities (Mariveles-50ha, Limay-50ha, Orion-50ha, Orani-50ha, and Abucay-50ha).
- · Over the years of DENR-BMB, DA-BSWM, and Provincial Government of Bataan partnership, there are already a number of notable developments relative to the proposed project components, outcome, and output within the proposed project site.
- Through time, there have been several reported vital initiatives on biodiversity-friendly agricultural practices/enterprises of DENR BMB and DA-BSWM with its LGU partners ongoing within the Manila Bay region^[9] which are potential areas for up-scaling under this project, as follows:
 - a) Mangrove-based ecotourism sites in; i) Las Pinas-Paranaque Ecotourism and Critical Habitat, ii) Eco-Tourism Site in Bgy Wakas II, Kawit, Cavite, iii) Bangkung Mapalad, Las Pinas-Paranaque Ecotourism, and iv) Critical Habitat Sasmuan, Pampanga,
 - b) Non-Mangrove—based Ecotourism Sites within the Manila Bay region as follows; i) Pilis Falls within Bataan National Park, Morong, Bataan; and ii) Bataan national Park, Samal, Bataan; iii) Mt. Arayat National Park in Arayat, Pampanga, and the Nabao Lake in Nueva Ecija, Canarem Lake in Victoria, Tarlac, Upper Marikina River Basin Protected Landscape, Rizal, and Mt. Palay-palay Mataas na Gulod Protected Landscape, Cavite,
 - c) Knowledge Management of Manila Bay;
 - d) Resource assessment and test fishing, and
 - e) Identification of mangrove areas as Ecotourism Sites.
- At the same time, relative to soil and water conservation, the notable initiatives using the "Cocomat" (i.e., woven fiber out of desiccated coconut husk, which is organic and improves the soil texture and water holding capacity), along Manila Bay area are found in the following sites;
 - a) Patimbao Creek, Sta. Cruz, Laguna,
 - b) Ylang-Ylang River, Brgy. Batas, Silang, Cavite (2,690 sq.m.),
 - c) Patimbao Creek, Brgy. Patimbao, Sta Cruz, Laguna (2,500 sq.m.), and
 - d) Sitio San Ysiro, Brgy. San Jose, Atipolo, Rizal (2,560 sq.m.).
- Additionally, there are also Technological Demonstration Farms using appropriate soil and water conservation measures (such as, Sloping Agriculture Land Technology), found in the following areas;
 - a) Pilar, Liyang, Bataan (4.0 ha),
 - b) Digdig, Caranglan, Nueva Ecija (3.0 ha),
 - c) Cuyapo, Simimbaan, Nueva Ecija (3.0 ha),
 - d) Munoz, Mangadingay, Nueva Ecija (3.0 ha), and

- e) Sibul, San Miguel, Bulacan (3.0 ha).
- In 2017, the DA-BSWM has worked on the mainstreaming of sustainable land management (SLM) into the CLUP, inasmuch as, the Local Government Units (LGUs) are strategically and well-situated agents on the ground for the adoption and implementation of SLM. Mainstreaming in Comprehensive Land Use Plan (CLUP), which is the first step in institutionalizing SLM into LGUs' governance system^[21].
- The other notable DA-BSWM and DENR-BMB initiatives towards Manila Bay clean-up, rehabilitation, and restoration, include biodiversity areas within the Bataan Province to Manila Bay area. In 2013-2015, the DA-BSWM and DENR-BMB have undertaken rehabilitation of micro-watersheds of existing small water impounding systems (SWIPs) in Nueva Ecija, Rizal, Bulacan, and Bataan provinces, including San Jose Del Monte. Particularly, within the proposed project site, the DA-BSWM has established a three (3)-ha demonstration area on the use of appropriate soil and water conservation measures within the micro-watersheds in the uplands of Bgy Payagan, Dinalupihan, Bataan. Within the said demonstration area, the resultant soil quality was monitored semi-annually, as well as, the resultant water quality monitored quarterly (DA-BSWM, 2015).
- The DA-BSWM was also involved in the recent FAO project on Local Land Degradation^[3] (LADA), allowing synergies among development issues and related programs at various scales; global, regional, national, sub-national, and local. The regional land degradation analyses includes region 3, where the proposed project site is located. The integrated approach at the local level follows the same assessment framework to enable the local assessment to be linked to the national and global land degradation scenario, and the project conducted additional pilot study sites corresponding to different landscape scenarios to come up with a more panoramic understanding of land degradation status, direct and indirect causes, impacts and responses. The wetlands were also included in the LADA project^[3], guided by the 2011-2016 National Wetlands Action Plan for the Philippines, which promotes and implements strategies and actions for the conservation and wise use of the country's wetlands. The document incorporates urgent concerns such as biodiversity conservation and climate change mitigation and adaptation, and it provides the framework of strategies and actions for all concerned sectors of the society including government agencies, non-government organizations, business sector, small communities, and indigenous people to manage wisely the wetlands as national patrimony that we can bequeath to the next generations. Some wetlands are also found within the proposed project site.
- On the initial establishment of the marine turtle conservation and management network within Manila Bay, the then DENR-Protected Area Wildlife Bureau (PAWB)-Pawikan Conservation Project (PCP), has gathered substantial data and information, in collaboration with DENR3 Regional Office, LGUs, non-government organizations (NGOs), and resort owners. They have noted that out of the eight (8) known species of marine turtle worldwide, only three (3) nest in the Philippines (i.e., the green, hawksbill, and olive ridley turtles), and the rest only forage in Philippine waters. The hawksbill and the green turtles nest throughout the Philippines year round, but the Olive Ridley turtles nest mostly in the provinces of Zambales, Bataan, and Batangas, during the months of August to September. During the project life, it was observed that there was an increase in the number of Olive Ridley complete nests and eggs produced in Morong and Bagac, Bataan and in San Antonio, Zambales from August 2004 to February 2009^[9].
- Related to the forest and biodiversity protection system, DENR BMB is currently implementing the Lawin Forest and Biodiversity Protection System as a National Strategy for Forest Biodiversity in the Country, for the strengthening of forest and Biodiversity Protection through the application of a science-based and technology-aided forest protection system that is relevant to forest and biodiversity management, which also ensures transparency, accountability, and efficiency in forest and biodiversity protection and conservation activities (DENR Administrative Order 2018-21): DAO 2018-21 states, "Adoption of the Lawin Forest and Biodiversity Protection System as a National Strategy for Forest and Biodiversity Protection in the Philippines^[11]".

For the other biodiversity areas within the forestlands outside the PAs, the project will also build on the gains from the experiences of GEF-UNDP NewCAPPs through ICCA's in promoting and protecting the rights of indigenous peoples, in empowering local indigenous communities through appropriate capacity building.

3. The proposed alternative scenario with a brief description of expected outcomes and components of the project

The GEF Alternative:

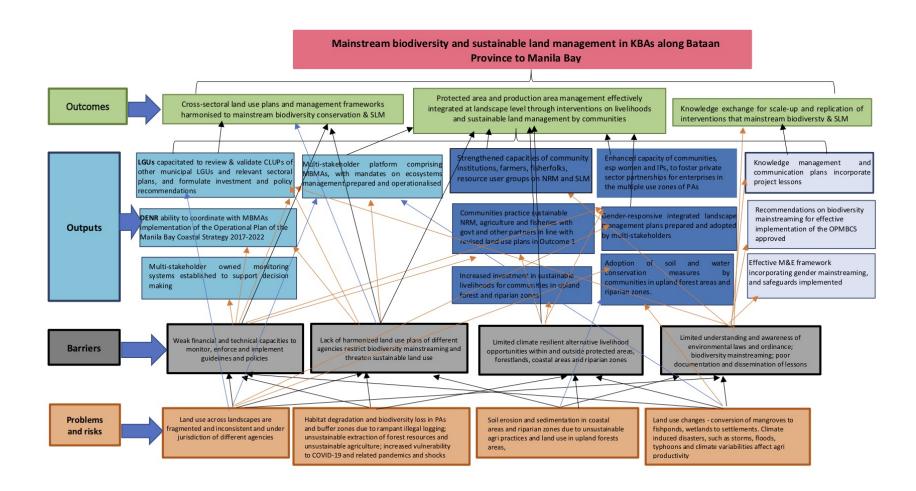
Through GEF-7 technical assistance, this project will be able to address existing barriers to the sustainable biodiversity and natural resources management within the Bataan Province to Manila Bay, but without the GEF-7 technical assistance the Project Partners will not be able to successfully address the barriers, inasmuch as it requires substantial mobilization of both technical and financial resources. Currently, these financial and technical resources are not available within the government, including the need to engage the key stakeholders throughout the whole spectrum of project life from planning to project implementation, to monitoring and evaluation, especially during the current and post pandemic periods. The government implementing agency, being the recognized leader in biodiversity and natural resources conservation and management, with additional technical inputs, will take the strong stand in moving forward this project with its partner mandated agencies (i.e., DA BSWM, which is the recognized leader in addressing land degradation and the use of land degradation neutrality tool, and the Provincial Government of Bataan, which has the jurisdiction over the Project site). With addition technical guidance, the government implementing agency, with its partner mandated agencies will be able to encourage strong participation and engagement of key stakeholders (i.e., Private and Business sector, Upland farmers occupying forestlands, Indigenous Peoples, Women, Educational Institutions/academe, Fisher folks currently involved in mangrove rehabilitation, members of PAMB for Roosevelt PA, members of the PAMB for BNP etc), in successfully addressing the barriers and smoothly implement the project. Thus, as soon as the partner agencies and key stakeholders are able to agree on the appropriate ecosystems-based management and cross-sectoral framework for actions, the way forward via the reviewed and validated existing Land Use plans and framework of the partner LGUs and other sectoral plans will be smoother and clearer towards improving and changing production practices within forestlands and the degraded agricultural production areas along the riparian zones, to be more biodiversity-positive. The lead agencies, which are the DENR-BMB, the DA-BSWM, and the Provincial Government of Bataan, will conduct extensive information, education, and communication campaigns about the project with the other key stakeholders. The stakeholders will be assured of their roles, rules and mechanisms of participation, and expected benefits, from the project. As an appropriate way forward in successfully addressing the major barriers in arresting ongoing land degradation, as well as ensuring the conservation of biodiversity and natural resources, the project will adopt the ecosystems-based integrated approach, particularly the landscape approach, using the watershed as the unit of planning and management through the three project components. The Integrated Watershed Management Plans (IWMPs) of key river watersheds will be formulated, as a way of capacitating the mandated agencies along the process, from which, the current Land Use Frameworks will be reviewed and validated upon, and other relevant sectoral plans of partner LGUs and mandated agencies, including the ICMPs/CRMPs, harmonized with.

In response to the country's socio-economic recovery efforts to COVID-19, the project will explore multiple measures to strengthen safety nets and promote a local green economy through improved natural resource governance and community stewardship. These include a) a resilient supply chain for biodiversity-friendly enterprises that generate income and empowerment, esp for women and indigenous peoples; b) responsible tourism that fosters inclusive green growth in and around the protected areas that are under threat from further exploitation due to loss of income; c) biodiversity friendly agricultural practices for subsistence farmers to address immediate challenges to food security; d) sustainable land management measures that improve productivity, address soil erosion and protect biodiversity and ecosystems in the upland and downstream riparian areas and coastal zones. Experiences from the demonstrations will

be integrated into relevant provincial and national plans and policies to strengthen the country's capacity to deal and recover from the COVID-19 pandemic and potential future shocks under increasing climate variabilities and risks to biodiversity and ecosystems. These measures will be implemented under the three components of the proposed project.

Under Component 1 (Enabling regulatory and institutional environments to strengthen sustainable biodiversity and natural resources conservation in protection and production landscapes and seascapes), the project will mainstream biodiversity across sectors as well as landscapes and seascapes, address direct drivers to protect habitats and species, and further develop biodiversity policy and institutional frameworks. These will be accomplished by strengthening and encouraging active participation of project Partners and key stakeholders in defining needed innovative policy instruments and programs, as well as strengthening the Institutional environment for the effective management of protection and production landscapes within and outside the two protected areas and seascapes. Under Component 2 (Scaling-up innovative management interventions ensuring natural resources conservation, sustainable biodiversity, and soil erosion mitigation), the project will encourage project partners and key stakeholders to fully participate in the related capacity building activities and scaling-up of potential Biodiversity-friendly agricultural practices/enterprises within the Protected Areas, and areas for rehabilitation and resiliency enhancing strategies within protection and production landscapes of key watersheds. In addition are the enhancement of the Protected Areas Conservation and Management, Tracking and Monitoring system, as well as, enhancement of the Management Strategies for participatory assessment and monitoring of Coastal and Marine areas including Wildlife Ecosystems. Under Component 3 (Designing Appropriate assessment and Monitoring system, and knowledge management), the project will mainstream biodiversity across sectors as well as landscapes and seascapes, address direct drivers to protect habitats and species, and further develop biodiversity policy and institutional frameworks, through the enhancement of knowledge, understanding, attitude, and practices of Targeted sectors and key stakeholders on Biodiversity Conservation and management, including Soil and Water Conservation Measures (among others), and sharing of good practices, via the national conference, generated by the project within the project site, with the other GEF supported projects and with the other river basins/watershed in the country.

Conceptual Framework



GOAL STATEMENT: : IF multiple land use plans of agencies with different jurisdictions are aligned, consistent and gender-responsive, and technical assistance on natural resource management, sustainable land use and alternative livelihood opportunities are provided to local communities, THEN ecosystems services

will be restored, global environment benefits delivered and land degradation addressed *BECAUSE* institutions in Bataan Province have the technical capacity to mainstream biodiversity, and communities in the key biodiversity areas have knowledge and skills on sustainable land use, livelihoods and enterprise development under harmonised landscape management plans.

Project Objective: To mainstream biodiversity and sustainable land management along Bataan province to Manila Bay through harmonised land use plans and frameworks.

Component 1: Provincial level capacity to support mainstreaming biodiversity and sustainable land management (SLM) and development and implementation of provincial level land use planning and development frameworks

Outcome 1.1: Cross-sectoral capacities strengthened and development and implementation of harmonised Province level land use plans, resource management frameworks and development investments in Bataan Province, in support of the Manila Bay Sustainable Development Master Plan (MBSDMP).

The MBSDMP, a key initiative of the Philippines government envisages a "Sustainable and Resilient Manila Bay" with a vision to protect the Bay's ecosystems and its services and improve the overall quality of life in the area. The Manila Bay Mandamus Agencies have been entrusted to prioritise the cleaning-up of the Manila Bay area. In line with the objectives and vision of the MBSDMP, the project will adopt a participatory process in planning and consensus building activities, starting with the capacity assessment and capacity development for plan implementation of the mandated agencies and the other key stakeholders to ensure the mainstreaming of biodiversity and land degradation into the existing land use frameworks and other sustainable use plans, and the subsequent harmonization of these plans. The project will consistently use the participatory process even in the adoption of the ecosystems-based planning and management framework appropriate for the project site, considering that there are two protected areas situated within the project site, and has a number of river systems that directly connect to the Manila bay. Under Component 1, the said river systems that connect to the Manila Bay will be identified and their corresponding watersheds delineated using the topographic map, which will also be validated on the ground. The topographic boundary of the watersheds will determine the corresponding key stakeholders that will be directly engaged in the succeeding activities for the said watershed. It is possible that the political jurisdiction of one LGU will be shared among two or more river watersheds. In order to address the issue on lack of connectivity of sectoral plans, these key watersheds will be the units of planning and management, and their corresponding Integrated Watershed Management Plan (IWMP) formulated using the participatory process, which means that such LGU whose political jurisdiction is shared among two or more river watersheds should be involved in the formulation of all of the IWMPs. To facilitate the planning and consensus building processes, under Component 1, the 3-dimensional Map (3-D Map) of the project area will be prepared using the appropriate planning scale (at least, 1:10,000 for the horizontal dimension, and 1:5,000 for the vertical dimension), showing clearly the river systems and current general land use or land cover. There will be appropriate technology transfer under Component 1. Among others, Partner Local Government Units (LGUs), mandated agencies, local communities, and key stakeholders will be active partners in defining innovative policy instruments and programs, as well as the institutional environment will be strengthened for the effective management of protection and production landscapes within and outside the two protected areas and seascapes using the appropriate ecosystems-based and cross sectoral framework for action.

1.1.1. Strengthened capacities of key provincial institutions and all Local Government Units (LGUs) to review, validate and implement Comprehensive Land Use Plans (CLUPs) and relevant sectoral plans and investments to support global environment benefits

This output will focus on capacity assessment and capacity development activities of the LGUs for effective implementation of land use plans of the mandated agencies as well as the partner agencies and the key stakeholders. Under this output, the project will support activities to develop plan implementation mechanisms on mainstreaming biodiversity and its sustainable use in the existing Land Use Framework and other relevant plans (including watershed

management plans) within priority LGUs, as well as facilitate sharing and learning across LGUs on practical approaches to biodiversity mainstreaming. Capacity assessment modules will be developed and capacity development workshops conducted for different LGUs on mainstreaming biodiversity conservation and sustainable use into different land use plans and related framework. Capacities of LGUs and other partners will be strengthened to leverage resources and a common budgetary allocation for cross-sectoral implementation of biodiversity-responsive landscape management plans will also be explored. The knowledge materials and other information generated from the capacity development exercise will be shared with the DENR BMB and DA BSWM for replicating in other LGUs in other landscapes. Although training and capacity building activities will be conducted for the Provinces and the 12 City/Municipalities, actual updating of plans will be limited to four pilot LGUs that have been identified as having significant forest and coastal areas that can be piloted in mainstreaming biodiversity in their CLUPs, FLUPs and ICMPs. Hence, the project will mainstream biodiversity into 4 CLUPs, 4 FLUPs, 4 ICMPs and one (1) Provincial Ecotourism Investment Plan

1.1.2: Enhanced capacity of Department of Environment and Natural Resources (DENR) to catalyze GEB mainstreaming, especially in coordination with Manila Bay Mandamus Agencies (MBMAs) on implementation of the Operational Plan of the Manila Bay Coastal Strategy (OPMBCS) 2017-2022

The DENR is one of the Manila Bay Mandamus Agencies (MBMAs) entrusted by the Supreme Court of Philippines for the cleaning up of the Manila Bay. The project will provide technical support to the DENR in coordinating with the MBMAs and other concerned agencies involved in management of Manila Bay on effective implementation of OPMBCS 2017-2022. These will include an integrated management and governance framework that address the fragmented institutional arrangements as well as land use in the region, the negative impacts of unplanned development in the Bay area, limited awareness and understanding of the socio-economic and ecological significance of the Manila Bay area. Where possible, the project will also support the MBMAs to build and strengthen new partnerships, including with the private sector, and leverage investments to improve the environmental infrastructure and restore ecosystem services in the biologically rich Bay area. Under this output, a multi-sectoral platform, comprising Manila Bay Mandamus Agencies (MBMAs), coordinated by DENR with clear mandate on ecosystems management will be established and operationalised to facilitate learning and sharing amongst LGUs and Provincial authorities

Output 1.1.3. A multi-sectoral platform, comprising Manila Bay Mandamus Agencies (MBMAs), coordinated by DENR with clear mandate on ecosystems management established and operationalised to facilitate learning and sharing amongst LGUs provincial and national authorities

This output will support the establishment of a multi-sectoral platform to support the MBMAs, along with the partner agencies and key including the private sector, to coordinate on their mandates to address ecosystem degradation and biodiversity loss in the Manila Bay region.

This coordination mechanism will also support the integration of biodiversity conservation into relevant policies and plans and harmonise the different and sometimes conflicting land use plans. DENR BMB and DA BSWM will identify officials of mandated agencies as key participants for formulation of biodiversity mainstreaming plan and implementation. Capacity building modules will be tailored to strengthen effective and harmonised cross sectoral land use management between the DENR and other agencies and sectors working within the same landscape, such as the LGUs, DA, NCIP, private sector, etc. This will include review and assessment of the different land use plans under these different mandated agencies, including the Integrated Coastal Management Plan, Coastal Resource Management Plan, Comprehensive Land Use Plan, Community Resource Management Framework, Tourism Plan, Protected Area General Management Plan and Strategy that are currently fragmented and not complementary. Production sectors that are active in the identified landscape will be supported to adopt resilient and sustainable business solutions that address biodiversity concerns. Under this output, harmonized plans will be prepared for the following: 1 IP Plan for the Bataan IP Community, 3 CRMFs for 3 Community-Based Managed Forest Areas, 3 Biodiversity Conservation and Sustainable Use Plans for the 2 Terrestrial Protected Areas and 1 Pilot MPA that will be identified amongst the 7 MPAs.

Output 1.1.4. Multi-stakeholder owned monitoring systems established for biodiversity mainstreaming to support decision making.

This ouput will require Participatory Planning Workshops, facilitated by DENR-BMB and DA-BSWM, resulting in the review and refinement of a multi-stakeholder owned monitoring system for biodiversity mainstreaming to support decision making. User-friendly monitoring tools and assessment methodology with indicators of progress will be set up to assess the impact of, and progress made, in implementation of the biodiversity responsive harmonised cross sectoral landscape management plans. All relevant stakeholders will be trained in using these tools, to be and owned and operated by them. Regular workshops will be conducted to share experiences and monitoring updates and initiating action to strengthen the monitoring tools, where gaps are identified.

Component 2: Capacity building, natural resource management and sustainable livelihoods to deliver global environment benefits in key biodiversity areas (KBAs) at sub-provincial level in Bataan Province

Outcome 2.1. Strengthened capacities on natural resource management in priority KBAs (at sub-provincial level in Bataan Province), interventions on environment friendly livelihoods and improved land and resource management

Through a landscape level approach, covering the identified protected areas and the contiguous production areas along the buffer zones and multiple use, the project will introduce land-use and resource management interventions in an integrated manner. On-ground interventions in key biodiversity areas through a ridge to reef approach will be carried under this outcome. The project will identify a suite of biodiversity friendly livelihood options, including tourism, handicrafts, etc., for uptake by the local communities, with priority given to the most vulnerable groups. Prescribing options on Biodiversity-friendly agricultural practices within the Protected Areas, and areas for rehabilitation and resiliency enhancing strategies within protection and production landscapes will also be watershed-based. Component 2 will cover both the terrestrial and the coastal and marine ecosystems, including wildlife ecosystems, forestlands vulnerable to soil erosion and flooding, and riparian zones at landscape level through the river systems of key watersheds.

The 3-dimensional map of the project area (for better appreciation of the natural landscape connectivity) which covers the protected areas and buffer zones within the landscape will be used as a tool to support effective management of the overall landscape within which the PA is located. Local communities will be involved in the participatory land use planning using the 3D map, an effective tool for planning and decision making at a decentralised level. This landscape based management approach helps to address threats to the PA and its rich buffer zones from the different landuses and to also strengthen the PA corridors. Participatory workshops will be conducted to review and assess the landuse practices within the two terrestrial PAs, MPAs and surrounding areas in the context of the PA General Management Plan Strategy and relevant land use plans of partner municipal LGUs within the project sites (highlighting issues on the wetlands and riparian zones, among others). This will result in a set of recommendations for effective management of the PAs within the wider landscape through better enforcement mechanisms.

Output 2.1.1. Enhanced capacity of community institutions, extension workers, farmers, fisherfolk, other resources user groups to implement the harmonised land use plans for sustainable natural resource management.

This outputs aims to increase the capacity of local community institutions, extension workers, individual farmers and fisherfolks as well as other resource user groups in sustainable management of natural resources. These community institutions will be trained in implementation of the harmonised land use plans developed in Outcome 1, for which knowledge materials and hands-on manuals will be prepared in the local language and disseminated. The Protected Area General Management Plan and Strategy (GMPS) for the Bataan National Park and the Roosevelt Protected Landscape and an MPA will be reviewed, including the current coastal zone and land use practices of the fisherfolks and farmers in the PA Multiple use zones and in the buffer zones. This will be done in a participatory manner with the direct beneficiaries of the three protected areas, including coastal zones, on watershed basis, and facilitated by DENR-BMB

and DA-BSWM, assisted by the corresponding Protected Area Superintendent (PASu). The project will focus on strengthening the capacities of existing local community institutions in implementing the GMPS for the PAs and on improved land management practices. Communities will also be trained to monitor the progress of the project interventions using relevant indicators developed for the project.

Output 2.1.2. Communities practice sustainable natural resource management (agriculture, forestry, fisheries, agroforestry) with government and other partners, consistent with the land use plans under Outcome 1 through coordination with nearby communities.

Under this output, planning modules on biodiversity friendly agriculture and sustainable fisheries in PA Multiple use zones and in biodiversity-rich buffer zones will be prepared. Zonation of different land-uses within the PAs will be undertaken and separate Participatory Planning Workshops conducted for BNP, RPL and select MPAs to validate and endorse the findings and recommendations. This will culminate in a hands-on manual for implementation of biodiversity-friendly agriculture within the Bataan National Park and the Roosevelt Protected Landscape and identified MPA and surrounding areas that is consistent with the GMPS and Protected Area Community-based Resource Management Agreement. Accordingly, farmers and fisherfolks will be trained on sustainable agriculture and fisheries, such as organic farming, integrated pest management, climate-resilient agricultural practices, regenerative agriculture, fish processing, aquaculture, growing edible seagrasses, and value addition, etc. to ensure least disturbance to the biodiversity of the wider landscape, covering the PAs. Necessary skill development activities will be provided for scaling up some of the identified livelihood activities, where at least 50% of the beneficiaries will be women.

Output 2.1.3: Local communities in KBAs, especially women and indigenous peoples, foster private sector partnership for biodiversity-friendly enterprises in the multiple use zones of Bataan National Park and Roosevelt Protected Area.

Recommendations on appropriate biodiversity-friendly agricultural practices and enterprises within the two terrestrial PAs and one MPA, by key watersheds, including other locally generated relevant experiences on soil and water conservation in other regions will be prepared. This output will also include participatory formulation of two project proposals for a BMB-Private sector partnership project on appropriate biodiversity-friendly enterprises within the Bataan National Park and the Roosevelt Protected Area that will be prepared through a consultative process. The project will support women beneficiaries to optimise their decision-making and leadership capacities, as well as build and enhance their entrepreneurial skills, through partnership with the private sector to generate and improve livelihoods, thus contributing to the overall socio-economic resilience of the community. Farmers' producers organisations will be established/strengthened in the project sites and women and youth will be encouraged to join or lead these FPOs. Women farmers will be integrated into the supply chain and trained in book-keeping and financial literacy, amongst others.

Output 2.1.4. Increased investment in sustainable and diversified livelihood opportunities for local communities in upland forests and riparian zones, in lieu of environmentally damaging activities, and socio-economic recovery from COVID-19 impacts and related shocks in KBAs.

This output involves the identification, and uptake, of gender-responsive sustainable livelihood options for communities in the upland areas and riparian zones based on consultations with the stakeholders and their preferred skillsets. This will also include a review of the LGU's existing Tourism Plan and the potential role of women in generating livelihoods from the tourism sector, eg entrepreneurship, catering, etc.Based on the identified diversified and sustainable livelihood options, local communities will be supported through training and appropriate skill development activities. Further, potential for scaling up of ongoing local initiatives, including tourism and related activities will be explored through new and strategic partnerships, including with the private sector

Output 2.1.5. Two gender-responsive integrated landscape management plans for Alcamen and Talisay watersheds adopted and implemented through an inclusive and participatory process by multi-stakeholders, including NGOs, CBOs, community resource user groups, private sector.

The DENR-BMB and DA-BSWM will facilitate the adoption of the gender-responsive IWMP and other sustainable land use plans through an inclusive and participatory consultation process with multiple stakeholders (i.e., including NGOs, CBOs, and private sector). Simultaneous the stakeholders will participate in the preparation of a 3-dimensional map of the project area. As women possess an intricate knowledge of the different land uses and terrains, they will have a key role in preparation of the 3D map. Major river systems as well as production sectors in the project area will be identified and delineated on the map, through a participatory process. The 3D map will be used as a planning tool to enhance and facilitate the learning process on natural systems-related discussions, applied into the gender-responsive IWMP formulation process. Two harmonised watershed plans – for Almacen River Watershed and Talisay River Watershed – that incorporate the land use plans of the LGUs will be prepared in a participatory manner, adopting a 'ridge to reef' approach. The land use plans, adopted through multi-stakeholder consultation process, will identify the role of different stakeholders, including that of the production sectors in supporting the multi-sectoral initiative to restore degraded ecosystems.

Output 2.1.6. Soil and water conservation plans co-developed between local communities and authorities (DA-BSWM) and implemented in upland forest areas and in riparian zones.

This output is designed to achieve sustainable land and ecosystem management for communities in upland and riparian zones engaged in unsustainable land use practices. The project aims to integrate SLM practices in at least 90 % of farming households and bring a large area of degraded land, esp in the upland areas, under SLM. The Current IWMPs, CLUPs, and Forest Land Use Plans of LGUs, including other locally generated relevant experiences on soil and water conservation will be reviewed and compiled. Orientation Modules on Appropriate Soil and Water Conservation Measures will be prepared and workshops conducted to share and tests these modules. Draft reommendations on incentive systems for individuals or entities involved in appropriate Soil and Water Conservation Measures prepared by DENR BMB and DA BSWM, validated by the key stakeholders and partners, finalized and submitted. Respective action plans for the identified upland farms and riparian zones needing rehabilitation, with corresponding partner farmer will be co-developed and implemented. There are ongoing initiatives between the DENR BMB and DA BSWM with the upland farmers in the project sites to address land degradation and biodiversity loss. This output will support the scaling up of this collaboration in the wider landscape.

Component 3: Monitoring and evaluation and knowledge management

Outcome 3.1. Knowledge exchange for scale-up and replication of interventions that mainstream biodiversty conservation and sustainable land management.

Under this component the project will define the strategies for effective monitoring and evaluation and Database Management System, for Biodiversity-rich areas within two Protected Areas, and outside the two Protected Areas in a participatory manner, as well as enhance the knowledge, understanding, attitude, and practices of on Biodiversity Conservation and management, and Soil and Water Conservation Measures (among others), of Targeted sectors and key stakeholders. Related best practices will be documented and shared to stakeholders and one national conference will be undertaken to interact with other related GEF projects, river basins, and watersheds in the country and share experiences generated under this project, with support and involvement of mainstream actors, LGU leagues, and business sector.

Output 3.1.1. Knowledge management and communication plans that incorporate and scale up project lessons in Philippines.

The participatory formulation of an appropriate project knowledge management and communication plan will be facilitated by the DENR-BMB and DA-BSWM to initially draft the working document covering lessons learned, biodiversity-friendly agricultual practices and enterprises, soil and water conservation, and IWMP, as well as facilitate participatory planning workshops involving key stakeholders and partners. One national conference will be conducted to share the

success stories and lessons learned from the project with other related GEF-supported environmental and biodiversity projects, such as the GEF-7 project ID 10532 "Securing Long-Term Sustainability of Multi-functional Landscapes in Critical River Basins of the Philippines" and the GEF- Implementation of the Sulu-Celebes Seas LME Regional and National Strategic Action Programs as well as with the other operational river basin organizations within the Philippines on sustainable fisheries and mainstreaming coastal and marine biodiversity. Knowledge management and communication plan, including strategies for scaling harmonised land use plans in the country, will be generated and shared with DENR BMB and DA BSWM. Under this output, survey on the level of knowledge, understanding, attitude, and practices on Biodiversity Conservation and management, and Soil and Water Conservation Measures (among others), of Targeted sectors and key stakeholders will be conducted.

Output 3.1.2. Recommendations on biodiversity mainstreaming and integrated landscape management for effective implementation of the OPMBCS approved and implemented.

Technical and coordination assistance will be provided to the DENR (the lead agency) and other MBMAs in implementation of the OPMBCS in the Manila Bay area. These include improved monitoring to strengthen compliance in land use and ecosystem management in key watersheds and shoreline protection in the project area. Support will also be provided in addressing multiple resource use conflicts in line with learnings under Outcome 1 that supports mandated agencies in strengthening their capacities to develop harmonised land use plans. In addition, results from on-the-ground implementation under Outcome 2 in promoting sustainable livelihoods and enterprises for local communities, including indigenous peoples, as well as sustainable and management through improved agricultural practices will be shared with the MBMAs for replication in the Manila Bay area.

Output 3.1.3. Effective monitoring and evaluation framework, incorporating gender mainstreaming and safeguards, developed and implemented to strengthen project effectiveness.

This output will require the key stakeholders' participation in the development and validation of a gender-responsive Project M&E strategy and Database Management System (DMS) with clearly defined expected results and timeframes for achieveing it, supported by objective indicators. This output will also include the development and implementation of the gender assessment and action plan to ensure gender mainsrteaming within the project.

4. Alignment with GEF focal area and/or Impact Program strategies

The project is aligned with GEF Biodiversity Focal Area, specifically with focal area programs BD 1-1 Biodiversity mainstreaming in priority sectors, and GEF Land Degradation Focal Area, specifically with focal area program LD 1-1 Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM). The project will mainstream Biodiversity and Natural Resources Management and Conservation into the various sectors of project area, including the Private/Business Sector, the Local Government Units (LGUs), the Local Communities, and other key stakeholders. The project will encourage strong participation and commitment of local organizations and the key stakeholders in the whole spectrum of project life, from planning to implementation, to monitoring and evaluation. The project has been designed to operate under an ecosystems-based and cross-sectoral framework for actions, such as the Integrated Landscape Management Systems, with strong participation of key stakeholders, within the province of Bataan to Manila Bay, where two greatly challenged Protected Areas (PAs) are located (i.e., the Bataan National Park, and the Roosevelt Protected Landscape),

and a vast forestland outside the said PAs (mostly with open access forests), and about 118 km of coastal line, and are partly under Marine Protected Area (MPA) status managed by the LGUs. The Project will prioritize the review and validation of the existing Land Use Frameworks of the LGUs and other relevant land-based sectoral plans and programs, including coastal and marine Programs of Partner agencies, against the Integrated Watershed Management Plan (IWMP) which the project will formulate, with the strong participation of all key stakeholders, which is expected to provide the needed connectivity of the plans and program interventions for various ecological zones of the natural system, from the ridge-to-reef through the harmonized sectoral programs and plans.

The project will work on the upscaling of existing models on soil and water conservation measures established through previous efforts within the production landscapes by the implementing agencies, in cooperation with the upland farmers and LGUs, such as the ones started with the upland farmers in Dinalupihan, Bataan and in Pilar, Liyang, Bataan. The said existing models on soil and water conservation measures are basically food production areas of the upland farmers and improving the capacities of these upland farms to control or minimize the soil loss as well as the nutrient loss due to constant excessive soil erosion, will benefit the ecological system resulting to improved delivery of expected ecological services. Additionally, with the appropriate mix of agroforestry crops within these upland farms will result to the better yield from the said upland farms ensuring food availability and additional income for the families of the upland farmers. Furthermore, appropriate mix of agroforestry crops within these upland farms will also result to the more carbon sequestration contributing to the GEBs. Likewise, the project will be able to contribute to the improvement of the PA Management system through the direct involvement of the members of the Protected Area Management Boards (PAMBs), which will be gauged through the improvement in the parameters of the PA METT for the two PAs; and for the other Biodiversity-rich landscapes outside the PAs within the Project site, the Project will also design a similar monitoring tool as that of the PA METT applicable to non-PAs. Any improvement in the PA METT parameters of the two PAs, in the Biodiversity-rich landscapes outside PAs means more trees saved from being cut and more biodiversity habitat spared. In the coastal and marine areas, the project will also continue to involve the key stakeholders in the monitoring and management of the mangroves, seagrasses, coral reefs, and the marine turtles.

The current marine turtle nesting sites which are being managed by the non-government organization (NGO) in partnership with the DENR BMB will be protected and corresponding management and protection plans will be formulated with appropriate implementation mechanism, in preparation for the coming-up of the marine turtle conservation network within the whole Manila Bay region, considering that, out of the 8 known species of marine turtles throughout the world, five species have been recorded to be frequenting the Bataan the coastal line of Bataan Province [i.e., i) Green turtle (*Chelonia mydas*), ii) Hawksbill turtle (*Eretnochelys imbracata*), iii) Olive Ridley turtle (*Lepidochelys olivacea*), iv) Loggerhead turtle (*Caretta caretta*), and v) Leatherback turtle (*Dermochelys coriacea*)]. However, only three actually nest (i.e., Green turtle, Hawksbill turtle, and Olive Ridley turtle), and the rest just forage within the Philippine Waters. With the harmonized sectoral plans for the Project site from ridge-to-reef, it is expected to have common programs and plans from the Partner Agencies and entities on the various cross-cutting concerns, such as on, information, education, and communication (IEC) for the whole project site involving all sectors of the society, as well as on the implementation of environmental laws, and programs on alternative livelihood for the partner upland farmers, women, indigenous peoples, coastal farmers involved in conservation works, fisherfolks involved in conservation works, and other key stakeholders. In addition, the project will make preparations with the involvement of key stakeholders for the implementation of private sector-led appropriate Biodiversity-friendly agricultural practices/enterprises within the two PAs. At all levels, there will be appropriate Capacity Building activities and transfer of technologies that will happen throughout the whole project life. Not to mention, the project will be able to contribute to the realization of the Aichi Biodiversity Targets under i

5. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Without the project

This is a much needed GEF Intervention. Without the GEF financing, the project will not be able to mainstream biodiversity across all sectors as well as landscapes and seascapes, and will not be able to address direct drivers to prevent habitats and species loss within the Bataan Province to Manila Bay area. The intervention through the GEF financing during this most difficult period is very much necessary in order to fully address the barriers that are hindering proper biodiversity and natural resources conservation and management, including proper land degradation neutrality efforts within the Bataan Province to Manila Bay area. Without the GEF intervention, the threats of further biodiversity loss and land degradation within the project site will continue to prevail, and will be aggravated by climate change impacts, impacting the most vulnerable (i.e., IPs, women, the upland farmers, fisherfolks involved in conservation efforts, and local communities), who are the beneficiaries and key stakeholders of this project, and are the key to sustainable management of watersheds. Under the unprecedented post pandemic scenario, stakeholders' interests in environmental efforts may rise. However, resources allocations from the various national government agencies and the local government units for this project, including other support activities will be drastically reduced, if not at all uncertain, due to financial limitations, resulting from the sudden surge of unexpected priority expenditures of these agencies during the continuing lockdowns and enhanced community quarantine periods, including the compulsory expenditures related to disaster risk reduction and management with the onset of typhoons, storms, and flooding.

The GEF alternative

GEF financing for measurable global environmental benefits. The project objective is directly aligned with the mandate of GEF in contributing measurable global environmental benefits through the following:

Measurable Global Environmental Benefits	На
1. Terrestrial protected areas created or under improved management for conservati on and sustainable use (Million Hectares), particularly, through "Terrestrial protected ar eas under improved management effectiveness:	19,211
2. Marine protected areas created or under improved management for conservation and sustainable use (Million Hectares), particularly, through "Marine protected areas un der improved management effectiveness".	592
3. Area of landscapes under improved practices (excluding protected areas) (Million Hectares); through, "Area of landscapes under improved management to benefit biodiv ersity; (qualitative assessment, non-certified)".	46,218
4. Area of land restored – "Area of wetlands (incl. estuaries, mangroves) restored"	176,408
5. Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	Male 5000; Female 5 000.

GEF Financing Incremental Cost. With the GEF financing incremental cost, the government will be able to continue addressing the long-existing gaps on biodiversity conservation and management, including land degradation, building on the gains and lessons learned from previous related GEF-assisted projects. With GEF financing, the project will be able to mainstream biodiversity across sectors as well as landscapes and seascapes, and will be able to address direct drivers to protect habitats and species within the Bataan Province to Manila Bay area, inasmuch as it will be able to strengthen, encourage, and sustain the participation and active engagement of key stakeholders, project partners, and private/business sector throughout the whole spectrum of project life, from project planning to project implementation, to monitoring and evaluation, all the way down to the value chain of project initiatives. With GEF financing incremental cost, the project will be able come-up with an agreed-upon appropriate ecosystems-based and cross-sectoral framework to guide key actions of implementers, partners, and key stakeholders, and will be able to review and validate the existing land use frameworks and other related sectoral programs of the partner LGUs and other project partners. Working on natural systems require clear connectivity of all plans, programs, and corresponding interventions, from the headwaters to the coastal and marine areas, which this project will be able to accomplish through the GEF incremental financing, with its partners and key stakeholders. This project, with GEF's incremental cost financing, will be able to enhance partnerships and networks with the local, national, and international organizations, in addressing the barriers to proper and effective biodiversity conservation and management, as well as, land degradation within the Bataan province to Manila bay area.

6. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The project is expected to contribute to the GEB in following indicators: 1) 19,211 hectares of Terrestrial protected areas under improved management effectiveness, 2) 592 hectares of Marine protected areas under improved management effectiveness, 3) 46,218 hectares of landscapes under improved management to benefit biodiversity (qualitative assessment, non-certified), and 4) 176,408 ha of municipal waters, including wetlands, restored.

The project area, being part of the Manila Bay region, is also expected to contribute to the conservation of globally important fauna, particularly, following the criteria used to consider site inclusion under the Ramsar Convention on Wetlands of International Importance, 70-85% or about 145,000 waterbirds of 16 species congregate in Manila Bay during mid-winter months in numbers of international importance. These internationally important congregations are concentrated in six geographical areas located north of Metro Manila, two areas in Metro Manila and one area in Cavite. Further, the Bay hosts 24 migratory waterbird species are listed under the Convention of Migratory Species as needing conservation and management through international agreements. Furthermore, 12 waterbird species are considered globally threatened or near threatened with possible extinction risks.

The global environmental benefits resulting from this project include:

GEF financing will contribute measurable global environmental benefits by: a) sustainable use and conservation of biodiversity; b) increasing land area under sustainable practices without increasing the total land area used; c) increasing carbon sequestration as co-benefit of ecosystem restoration and sustainable land management.

This proposed project will directly contribute to the attainment of the mission of the Strategic Plan for Biodiversity 2011-2022, which states, "Take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication."

The project will be able to contribute to the realization of the Aichi Biodiversity Targets under its five (5) Strategic Goals, in at least 10 of its Targets [i.e., Strategic Goal A- Target 1; Strategic Goal B- Targets 5, 7, 8, 10; Strategic Goal C- Target 11; Strategic Goal D- Targets 14, 15; and Strategic Goal E- Target 19]. More particularly, the project will be able to contribute in the attainment of the said Aichi Biodiversity Targets, as follows:

1) Strategic Goal A: "Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society", Target 1- "By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably". The project includes awareness-raising for its partners and key stakeholders, including the indigenous peoples, the women, and the local communities, about the multiple values of biodiversity and needed steps to be undertaken in order to conserve and sustainably use these resources;

- 2) Strategic Goal B: "Reduce the direct pressures on biodiversity and promote sustainable use", Target 5- "By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced". In partnership with the LGU's multi-sectoral groups, farmers, fisherfolks, the civil society, the indigenous peoples, and local communities, the project will undertake rehabilitation of degraded mangroves, seagrasses, and coral reefs in the coastal and marine areas ecological zones; at the same time, the project will also implement some soil and water conservation measures in the degraded upland agricultural areas and forestlands, including the rehabilitation of degraded riparian zones. These project activities will also contribute to the achievement of Target 7- "By 2020 areas under agriculture, aquaculture, and forestry are managed sustainably, ensuring conservation of biodiversity", as well as Target 10- "By 2020, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning". Relative to Target 8- 'By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity", the project will be conducting water quality monitoring studies within the Manila Bay;
- 3) Strategic Goal C: "To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity", Target 11- "By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes". The project will be able to contribute to the attainment of this Target 11 of Strategic Goal C, inasmuch as the project will be using the integrated planning and management framework, such as the landscape approach using the watershed as the planning and management unit. Guided by this framework, it will ensure the connectivity of the plans and the corresponding interventions from "ridge-to-reef", for greater environmental and biodiversity benefits;
- 4) Strategic Goal D: "Enhance the benefits to all from biodiversity and ecosystem services", Target 14-"By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable", Target 15- "By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification". The project will be able to contribute to the achievement of Target 15 of Strategic Goal D, inasmuch as, the project will be implementing some non-structural soil and water conservation measures, biodiversity-friendly enterprises, and sustainable land management (SLM), along with appropriate grass and forest vegetation within the degraded uplands, the forestlands, the riparian zone, the mangroves, including the degraded seagrasses and coral reefs, involving the IPs/ICCs, women, and other key stakeholders; and
- 5) Strategic Goal E: "Enhance implementation through participatory planning, knowledge management and capacity building", Target 19-"By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied". The project will be able to contribute in the achievement of Strategic Goal E, Target 19 inasmuch as the project will be employing the participatory planning approaches in the conduct of landscape approach using the watershed as the unit of planning and management, involving its partners and key stakeholders, including the Indigenous Peoples, the women, the business sector, and civil society.

7. Innovation, sustainability and potential for scaling up

Innovation

This project is innovative inasmuch as, the project design has never been used within the project site, involving the key stakeholders and the project partners in the planning and implementation of a "ridge-to-reef" type of a project, highlighting the connectivity of plans and programs from the various ecological zones; headwaters, to the floodplains, to the coastal area, and on to the marine area. The project will use the ecosystems-based and cross-sectoral framework that will provide connectivity from "ridge-to-reef". During the planning phase, the whole project area will be stratified according to the river watershed where the LGUs belong. The sum of all the areas of all the delineated river watersheds within the project area equals to the whole area of the project site. This means that a certain municipal or city LGU may actually belong to one (1) or more river watersheds. Depending upon the size of the river watershed, a cluster of LGUs usually makes-up one (1) river watershed. The unit of planning and management is the watershed, where the physical connection of the ridge-to-reef is the river or waterbody. During the participatory planning workshops for the formulation of the IWMP, the CLUPs and ICMPs or CMPs of coastal LGUs will be among the major documents and references, and subsequently be harmonized. For upland LGUs which do not have coastal zone, the CLUP will be used. The DENR, DA, the business/private sector, and other key stakeholders are part of the LGU-based planning team or technical working group (TWG). The resulting IWMP belongs to a cluster of LGUs that will jointly adopt the IWMP through their respective legislative body, and further submit to the provincial legislative body for adoption. As soon as the IWMP has been adopted by the corresponding LGU, this will now be qualified for budgetary allocation and eventual implementation. This participatory approach was pioneered by the Governance of Local Democracy Project (GOLD) in few LGUs nationwide in the late 90s under USAID assistance. Among the current showcases is the LGU practice in Bukidnon Province of Mindanao, where they have already applied the technology since 2002 in all of the 22 LGUs of the province of Bukidnon, and the latest record of combined budgetary allocations for watershed management from the said 22 LGUs is remarkably, about P100M. The other provincial LGUs that have been doing this technology are; the province of Iloilo, Province of Nueva Viscaya, City of Davao, and the Naga City in the Bicol region. Project implementation at each municipal and city LGU is led by the LGU Environment and Natural Resources Office (ENRO), and is being coordinated and guided by the Provincial LGU ENRO. The Local Government Code of the Philippines or RA 7160 mandates the LGUs to implement watershed management activities within their respective political jurisdiction, among others, with due observance to the social safeguards defined in IPRA or RA 8371.

The Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB), has been supporting investments on 'biodiversity-friendly' agricultural practices, with the support from the United Nations Development Programme (UNDP)^[16], in collaboration with other government agencies, private sector, and civil society to scale-up biodiversity-friendly enterprises for poverty-alleviation. Some of the examples of the biodiversity-friendly enterprises recorded since 2015 include: a) community-based coffee enterprises, and furniture and handicraft production in Mt. Kalatungan, a (NewCAPP site in Bukidnon Province); b) community-based coffee enterprises and processed food in the Quirino Protected Landscape in Quirino province; c) an ecotourism project and furniture and handicraft production within the 200,155-hectare Malampaya Sound Protected Landscape and Seascape Area in Taytay, Palawan; d) an eco-park project integrating a lemongrass and citronella plantation and essential oils extraction facility, and production of gifts and houseware products using tiger grass, nito, bamboo and abaca in Northern Negros Natural Park in Negros Occidental; e) houseware products from abaca, bamboo and nito in Central Panay Mountains in the island of Panay;) handicraft production and handloom weaving using the "bakong" plant, and a wine, vinegar, jam factory using a local fruit called "Lubeg" inside the Northeastern Cagayan KBA in Cagayan Valley; and f) almaciga resin production in Mt. Hamiguitan Wildlife Reserve Sanctuary in Davao Oriental.

Sustainability

The innovative approaches that this project will employ will be the key to the project sustainability that will bridge the project implementation to the next phase beyond this highly expected GEF-7 assistance, guided by the partnership and engagement protocols with the private/business sector and the mandated agencies, such as, the LGUs/DILG, the DENR, the DA, and the NCIP, to fully support the implementation of this project, even beyond the GEF-7 assistance period. Each LGU should have its person in-charge for project implementation, which is usually the LGU ENRO, and the overseer will be the Provincial ENRO, acting as the secretariat for the Bataan Provincial Watershed Management Council (BPWMC). Each IWMP has a corresponding River Watershed Management Council, where the secretariat is the Municipal or City ENRO. The Watershed Management Council will define the roles, consistent with the developed partnership and engagement protocols, with due observance with the social safeguards defined in IPRA or RA 8371. The key elements for sustainability found in this project are; a) the strong support, participation, and commitment of the key stakeholders, b) the presence of an integrated management Plan (ridge-toreef) and implementation mechanisms, b) the existence of organizations with relevant mandates at various levels, c) the improved technical capacity of the provincial LGU, being the site-based lead implementing organization, with support from DENR-BMB and DA-BSWM, and d) the availability of financial resources and technical support from partner Agencies, and from the concerned LGUs themselves. The issuance of a DENR Administrative Order (DAO) by the DENR Secretary in this respect will institutionalize the adoption of the capacity building works supported by this project, which will be carried-out nationally through the various regional offices of the DENR. In the same manner, the issuance of a DILG Memorandum Circular by the DILG Secretary, which has the supervisory role over the LGUs, will institutionalize the capacity building works supported by this project within the LGU level. Related to funding limitations, both the DENR BMB and the DA BSWM, which are the implementing agencies for this project, have current major roles in the implementation of the existing "2017-2022" Operational Plan for the Manila Bay Coastal Strategy (OPMBPCS)", and funding for project-related programs of the OPMBPCS is highly possible to sustain some of the activities of this project.

Potential for scaling up

The project will work on the upscaling of existing models on soil and water conservation measures established through previous efforts within the production landscapes by the implementing agencies, in cooperation with the upland farmers and LGUs, such as the ones started with the upland farmers in Dinalupihan, Bataan and in Pilar, Liyang, Bataan. The said existing models on soil and water conservation measures are basically food production areas of the upland farmers and improving the capacities of these upland farmers to control or minimize the soil loss as well as the nutrient loss due to constant excessive soil erosion, will benefit the ecological system resulting to improved delivery of expected ecological services. Additionally, with the appropriate mix of agroforestry crops within these upland farms will result to the better yield from the said upland farms ensuring food availability and additional income for the families of the upland farmers. Furthermore, appropriate mix of agroforestry crops within these upland farms will also result to the more carbon sequestration contributing to the GEBs. Likewise, the project will be able to contribute to the improvement of the PA Management system through the direct involvement of the members of the Protected Area Management Boards (PAMBs), which will be gauged through the improvement in the parameters of the PA METT for the two PAs; and for the other Biodiversity-rich landscapes outside the PAs within the Project site. The Project will also design a similar monitoring tool as the PA METT applicable to non-PAs. In the coastal and marine areas, the project will also continue to involve the key stakeholders in the monitoring and management of the mangroves, seagrasses, coral reefs, and the marine turtles.

The current marine turtle nesting sites which are being managed by the non-government organization in partnership with the DENR BMB will be protected and corresponding management and protection plans will be formulated with appropriate implementation mechanism, in preparation for the coming-up of the marine turtle conservation network within the whole Manila Bay region. With the harmonized sectoral plans for the Project site from ridge-to-reef, it is expected to have common programs and plans from the Partner Agencies and entities on the various cross-cutting concerns, such as on, information, education, and communication (IEC) for the whole project site involving all sectors of the society, as well as on the implementation of environmental laws, and programs on alternative livelihood for the partner upland farmers, women, indigenous peoples, coastal farmers involved in conservation works, fisherfolks involved in conservation works, and other key stakeholders. In addition, the project will make preparations with the involvement of key stakeholders for the implementation of private sector-led appropriate Biodiversity-friendly agricultural practices/enterprises within the two PAs. At all levels, there will be appropriate Capacity Building activities and transfer of technologies that will happen throughout the whole project life. Not to mention, the project will be able to contribute to the realization of the Aichi Biodiversity Targets under its five (5) Strategic Goals, in at least 10 of its Targets [i.e., Strategic Goal A- Target 1; Strategic Goal B- Targets 5, 7, 8, 10; Strategic Goal C- Target 11; Strategic Goal D- Targets 14, 15; and Strategic Goal E- Target 19].

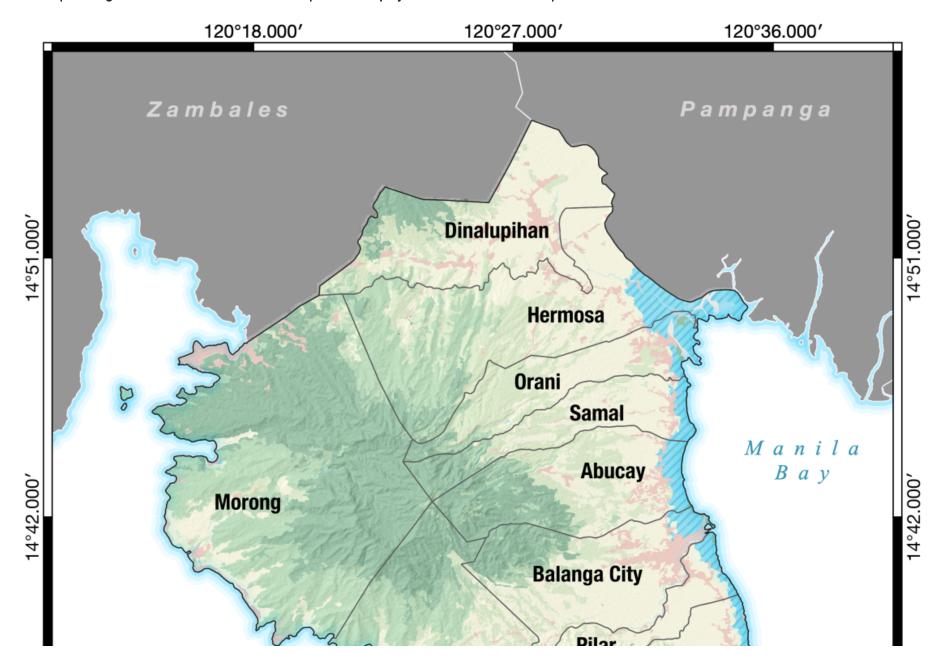
The experience of this project in using the ecosystems-based and cross-sectoral Framework, where the LGU takes a major role in project implementation, providing connectivity of the plans from the ridge-to-the-reef, and the DENR and DA providing the much needed technical and financial support, is among the potentials for scaling up of this project within the Manila Bay region both within and outside this project site.

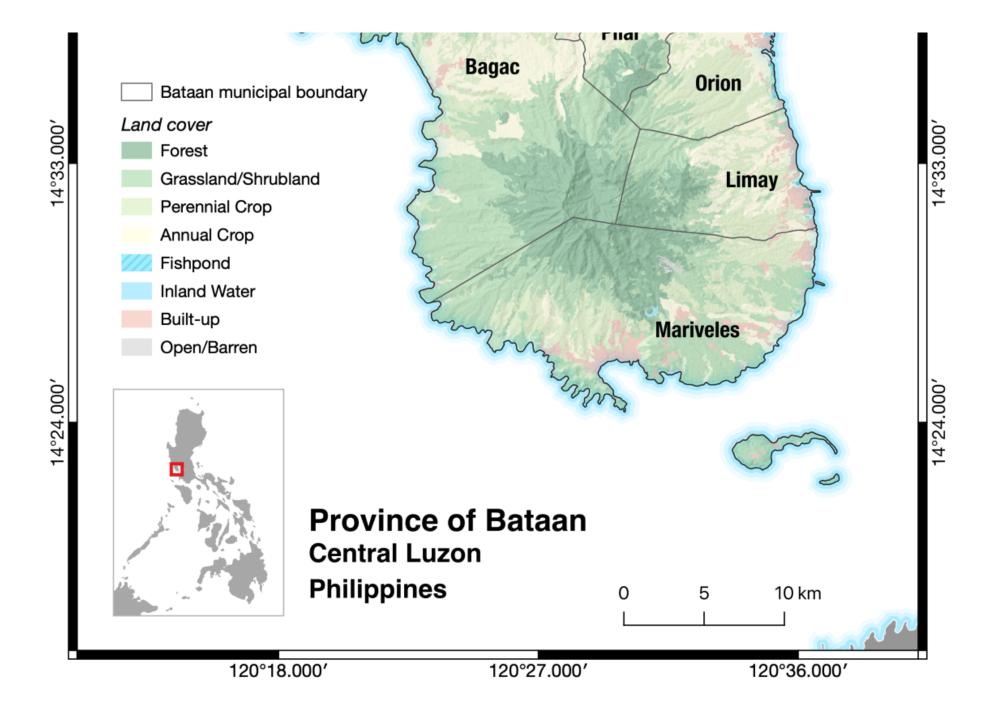
The other specific technologies that are among the potentials for scaling up are; a) participatory monitoring and assessment tools for the various important biodiversity and natural resources within both the landscapes (within and outside the Protected Areas) and the seascapes within and outside MPAs, b) the soil and water conservation measures through the site-based upland and coastal farmers as partners, CSO, IPs/ICCs, and local communities, c) the documentation of good practices on biodiversity conservation and natural resources management with strong support from key stakeholders within the project site, d) the biodiversity-friendly agricultural practices and enterprises and value chain, e) marine turtles program, and f) the participatory biodiversity and environment-related planning processes involving the project partners and key stakeholders, including the IPs, and the women.

Considering that the Project Area is within the Manila Bay region, the current "2017-2022 Operational Plan for the Manila Bay Coastal Strategy (OPMBPCS)" has a very high potential as the vehicle for scaling up the gains from this project within its regional coverage (i.e., regions 3 and 4), as well as nationally, through the capacity building of the mandated government agencies. Additionally the League of LGUs (i.e., League of Cities, League of Municipalities, and League of Provinces) can also be used as vehicle to share the gains, lessons, and good practices by project supported LGUs.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.





2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

A series of consultations were made with the Biodiversity Management Bureau of the Department of Environment and Natural Resources (BMB-DENR) and the Bureau of Soils and Water Management of the Department of Agriculture (BSWM-DA), who are also both part of the technical working group in the implementation of the Operational Plan for the Manila Bay Coastal Strategy (OPMBCS) 2017-2022. Such consultations ensure that planned interventions in the proposal are aligned and complementary to the OPMBCS. At the local level, online consultations were also held with DENR field offices as well as with representatives both from the provincial and local governments of Bataan. The identification of stakeholders at the local level were initially done in consultation with BMB and BSWM. The contents of the PIF was also presented and validated through an online consultation with representatives from the national agencies and the local government of Bataan. All consultations were also participated by representatives from the Foreign-Assisted and Special Project Service of the DENR/ Philippines GEF Operational Focal Point. Due to the COVID-19 related restrictions, most of these consultations were held online. In total, 10 online consultations were undertaken during the PIF development.

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

Detailed stakeholder consultations will be held during the PPG phase and a stakeholder engagement plan will be developed that identifies the roles and responsibilities of the stakeholders in project implementation. The stakeholders include the DENR-BMB, DA-BSWM, NEDA, DILG, HLURB, and NCIP, civil society organizations (CSOs), environmental NGOs operating within the proposed project site, women organizations, private sector, academe, the chamber of commerce of Bataan, upland farmers, coastal farmers and fisherfolks, the ICCA Consortium Partners, Indigenous Peoples (IPs)/Indigenous Cultural Communities (ICCs).

ring the discussions and briefing about the implementation of this project, the conduct of various planning workshops, ground-level project implementation, pacity building activities, conferences, and development of IEC materials and knowledge products, the affected IPs will be represented by the members of the puncil of Elders (COEs) of their respective ancestral domains (ADs). The project will make sure that the social safeguards protocol, as defined in the Indigenous exples Rights Act (IPRA) or Republic Act 8371 (RA 8371), will be satisfied and the National Commission on Indigenous Peoples (NCIP) will be directly involved in eas where the IPs/ICCs are present. Likewise, the women's groups, CSOs and environmental NGOs, business sector, academe, along with the mandated agencies, rerating within the project site will be involved.

re site-based upland farmers, especially women, the fisher folks, and those directly involved in the growing of edible seagrasses, those farmers directly involved in ing soil and water conservation, agroforestry, and other biodiversity-friendly agricultural practices and enterprises within the project site, will be involved in this oject. The BMB and BSWM, in coordination with the Provincial Government of Bataan, will develop a system or mechanism for fair and legitimate participation of the

rtners and key stakeholders for this project.

iring the documentation of good practices and lessons learned, appropriate individuals or groups of farmers and key stakeholders will be directly engaged by the oject, as well as, during the development of IEC materials and knowledge products and in the conduct of national conferences.

re Indigenous Community Conserved Areas (ICCAs) Consortium Partners, will also be involved where the Indigenous Cultural Communities (ICCs) have the key role strengthening the biodiversity conservation and sustainable natural resources conservation and resource use in conserved areas. BMB and BSWM will be the plementing agencies for this project and LGUs will be the key partners both in the development and on the ground implementation of the proposal together with the pencies.

Key Stakeholders, Responsibilities, and Roles Matrix

Stakeholder	Responsibility	Project Role
Upland Farmers, Coastal Farmers, Fisher folks, IPs/Indigenous Cultural Communities (Council of Elders)	They will be involved in planning and imple mentation of the interventions and activitie s appropriate to achieve the targets in the Work Plan, including the design and develo pment of strategies and approaches for so il and water conservation measures for the erosion-prone and highly susceptible areas (such as, Agroforestry and Peri-Urban Agri culture), including wetland management, a nd establishment of other biodiversity-frien dly enterprises.	They are partners and benefici aries of this project, and are the primary stakeholders and key partners.
Civil Society Organizations (CSOs)	Potential partners for different project activities	Involved in the conduct of dev elopment-related support activities in the area.
Department of Environment and Natural Resources (DEN R) – Biodiversity Manageme nt Bureau (BMB) and DENR 3; 2a. Environment Manage ment Bureau (EMB); 2b. Reg ional Office	Facilitate the all project activities. DENR-B MB is the national government agency for biodiversity conservation and managemen t, and it coordinates the implementation of GEF projects on biodiversity, and ensures t he implementation of the Wildlife Act, including the obligations under the CBD.	DENR-BMB will be the lead ag ency responsible for the imple mentation and oversight of thi s project. Has the mission to p rotect, enhance, and restore th e environmental quality towar ds good public health, environ mental integrity, and economi c viability.

	I	1
Department of Agriculture – Bureau of Soils and Water M anagement (DA-BSWM) and their regional offices	Co-facilitator with DENR BMB in the project implementation. DA BSWM is the agency mandated to identify Strategic Agriculture and Fisheries Development Zones (SAFD Z), and to look into the productivity and utili zation of soil and water.	BSWM will be responsible part ner implementing agency for t his project.
Provincial, City and Municip al LGUs	They will be involved in planning and imple mentation of the interventions and activitie s. The LGUs will provide co-financing and t hey issue and enforce local ordinances an d resolutions supportive of biodiversity-frie ndly practices. They are also important channels for replicating best practices.	The LGUs are key partners in the development of the tools and strategies for biodiversity conservation, including Wetlands Management, and other biodiversity-friendly enterprises.
Water sector	They will be involved in planning and imple mentation of the interventions and activitie s.	Water Sector – Municipal and City Water Districts within the Project Site.
Tourism Sector – Departme nt of Tourism and respective Tourism Councils of LGUs	They will be involved in the planning and i mplementation of project activities.	Oversee and ensure that envir onmentally sustainable and re sponsible tourism is practiced in Bataan.
National Economic and Dev elopment Authority (NEDA)	Implementation of the Philippine Developm ent Plan 2017-2022 and the <i>Ambisyon</i> 203 0 and mainstreaming of the DRRM.	The National Agency that over sees implementation of all nat ional developmental and econ omic projects of the Government.
Department of Interior and L ocal Government (DILG)	Provide assistance towards legislation reg arding local governments and law enforce ment, and monitors their performance usin g indicators for good local governance and is able to issue policies related to agrobiod iversity conservation in local plans.	Has the general supervision o ver local governments.
Housing and Land Use Regulatory Board (HLURB)	Assist LGUs in the preparation of Comprehensive Land Use Plan (CLUP) of the LGUs.	The lead agency in the provisi on of technical assistance to l

		ocal government units in the Comprehensive Land Use Plan (CLUP) of the LGUs.
Chamber of Commerce and Industry	As Business Sector partner, they will be involved in planning and implementation of the interventions and activities.	Project Partner
National Commission on Ind igenous Peoples (NCIP)	Assist Indigenous Peoples for their appropriate participation in the Project.	Mandated to implement the In digenous Peoples Rights Act (RA 8371).
Council of Elders of Ancestr al Domain Owners	Participate in all project activities, where a ppropriate.	They are the overseer of the A ncestral Domain and acts as t he governing body.
Private Sector through Philip pine Business for Social Pro gress (PBSP)	Potentially partners/supporters of the Project efforts on biodiversity conservation and biodiversity-friendly enterprises establishment.	Private corporations can be ta pped for their Corporate Social Responsibility (CSR) initiatives
Bataan Coastal Care Founda tion, Inc. (BCCFI)	Project partners (Key Stakeholders). They will be involved in planning and implement ation of the interventions and activities.	An organization of Businesse s/Private Sector within Bataa n. Heavily involved in the form ulation of the Bataan Integrate d Coastal Management Progra m during the GEF/UNIDO/IMO Regional Programme on Partn erships in Environmental Man agement for the Seas of East Asia (PEMSEA) ^[29]
Academe (Educational Instit utions)	This group can also help disseminate the value of products and services from PAs and watersheds.	Involved in the Educational Sy stems (promotions of literac y).
Indigenous Community Con servation Areas (ICCA) Cons ortium Partners	They have the key role in strengthening the biodiversity conservation and sustainable natural resources conservation and resource use in conserved areas.	The ICCAs Consortium Partne rs, where the Indigenous Cultu ral Communities (ICCs)
ICOMOS Philippines	Project Partner. Provide technical support t	The ICOMOS Philippines is am

	o the UNESCO National Committee in the d ocumentation of natural landscapes.	ong the Heritage NGOs
Heritage Conservation Socie ty of the Philippines	Help in the publicity of the project on cons ervation sites.	The Heritage Conservation So ciety of the Philippines (HCP)

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

The following Gender Indicators will be considered in this project: a) Gender analysis will be conducted during project preparation; b) Both women and men are direct beneficiaries of the project; c) Gender equality and women's empowerment will be promoted by this project; and d) The project will use gender-sensitive indicators and sex-disaggregated data.

The Council of Elders (COEs) of the ancestral domains (ADs) includes the IP women leaders, and they have an important role in speaking for and on behalf of the other IP women within their AD. As far as decision making is concerned, the voices of the IP women leaders are well respected by the other members of the COE. Even in project implementation, IP women are involved, such as, in various agroforestry and reforestation projects within ADs and in many other parts of the country. Women organizations will be represented in this project and will be potential partner project implementers on the ground, both for the coastal and the upland interventions. The legitimate access of women group to the natural resources within the project will be promoted by the project, such as, application for a 25-yr Community-Based Forest Management Agreement (CBFMA). In the Philippines, most, if not all, of the CBFMAs are managed by a good mix of leaders (or Board Members); usually 50% of Board Members are women, depending upon the location of the area applied for. Women sitting as members of the Board of Directors (BOD) for a certain CBFMA means power, not only for their family or clan, but for the women in general.

As a general observation within the uplands and the forestlands in the Philippines, including the project sites in Bataan Province, women are always considered as active and empowered partners in development, both for on-farm and off-farm projects. However, due to limited financial and technical capacities, adopting biodiversity-friendly and gender-responsive livelihood activities as well as sustainable land and ecosystems management remain a challenge. The project will support women beneficiaries to optimise their decision-making and leadership capacities, as well as build and enhance their entrepreneurial skills to generate and improve livelihoods, thus contributing to the overall socio-economic resilience of the community, which is critical in addressing the impacts of the COVID-19 pandemic and enhancing resilience to potential future shocks and outbreaks. The project will adopt a participatory and consultative approach and ensure equal gender participation, wherever possible, during implementation. The project design will take into account gender-responsive activities in all phases of the project, from planning to implementation, including the following:

- The capacity building initiatives on integrated landscape and seascape level planning and management at the provincial level and the project sites with the relevant agencies and the local communities and authorities, will ensure equal gender participation as will be reflected in the gender-sensitive indicators.
- A Gender Assessment and Action Plan will be developed during the PPG phase to identify the sex-differentiated activities in the project that will contribute to gender equality and women's empowerment. This will also include actions and strategies to mainstream gender in the COVID-19 pandemic response.
- A number of smallholder farmers in the project sites comprise of women and indigenous communities who will be trained in biodiversity-friendly agricultural activities, such as organic farming, integrated pest management, climate-resilient agricultural practices, regenerative agriculture, fish processing and value addition, etc.
- Establish/strengthen existing farmers' producers organisations in the project sites and women and youth will be encouraged to join or lead these FPOs. Women farmers will be integrated into the supply chain and trained in book-keeping and financial literacy, amongst others. The project will also learn from the Farmer Business School, an initiative by DA and FAO in the Philippines that aims to increase the socio-economic benefits associated with participation in

agricultural and market activities

- · As women and indigenous people have intricate knowledge and wisdom of local-level land use practices, their contributions will be crucial in development of practical and implementable land use plans. They will participate in the development of 3D models used for participatory land use planning and in preparation of the landscape management plans for different watersheds.
- · Women farmers will be trained in best practices on soil and water conservation to address the heavy soil erosion and sedimentation as well as other unsustainable land use practices.
- Key stakeholders involved in project preparation, including the Government, CSOs, community groups, etc will ensure equal participation of men and women in project activities with equal access to opportunities, benefits and services that the project generates.
- During the PPG phase, a range of livelihood options, including ecotourism, handicraft, fish processing, aquaculture, etc will be identified in consultation with the local communities, esp women, to suit different locations in the project area. Necessary skill development activities will be provided for scaling up some of the identified livelihood activities, where at least 50% of the beneficiaries will be women.
- Good practices on gender mainstreaming under the project will documented and widely disseminated for replication across the country
- Monitor and evaluate gender impacts and take corrective actions, where needed.

Through these interventions, women farmers will have equal access to services (currently skewed in favour of their male counterparts) leading to increased food production by women, contributing to an increase in national food production. Further, implementation of harmonized land use plans that mainstream biodiversity will result in improved resilience to diseases and tolerance to environmental stresses, contributing to the country's effort on COVID-19 response and recovery.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources; Yes

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

There are a number of private sector corporations in the Philippines engaged in biodiversity conservation and climate change adaptation efforts, including establishment of biodiversity-friendly enterprises. One example is the Philippines Business for Social Progress (PBSP), the largest corporate-led social development foundation in the Philippines and the first in Asia to lead the promotion and practice of corporate social responsibility (CSR). Comprising more than 260 businesses, PBSP operates nationwide programs in education, health, livelihood, and the environment^[17]. Amongst PBSP's environmental programs are the plantation activities with Peoples' Organisation in the Buhisan River Watershed Reforestation in Cebu City, region 7, and in Marikina River Watershed in region 4, adjacent to the Pampanga River Basin, with the support of at least 25 companies. In Bataan province, the private sector has a strong presence and engaged in a range of commercial activities across sectors such as agriculture, mining and quarrying, forestry, ports and shipping, aquaculture, etc. The Bataan Coastal Care Foundation, Inc. (BCCFI), a consortium of several corporations and organisations has been working with the provincial government of Bataan in connection with the implementation of the Bataan Sustainable Development Strategy.

The project will support the DENR and the MBMAs in meeting the objectives of the Manila Bay Operational Strategy by forging joint partnerships with the private sector and facilitating the implementation of the landscape level management plans that addresses different, and sometimes conflicting land uses. This will involve a series of discussions with the private sector stakeholders to identify (and act upon) their specific roles in reducing their environmental footprints to mainstream biodiversity and promote sustainability into their business practices through relevant sectoral plans that will be prepared and implemented under the project.

At the local level, there is limited engagement by the local communities with the private sector on nature-based enterprises. The proposed project will also contribute to the creation of an enabling environment for investment in biodiversity friendly businesses by strengthening the market linkages for sustainable enterprises. Value chain analysis will be conducted for the development of the targeted gender-responsive livelihood options to be identified in the project, esp in the multiple use zones of the protected areas. Potential private sector partners will be identified and partnerships pursued. Accordingly, the local communities, esp women, indigenous peoples and youth, will be trained to operate nature-based businesses and manage supply chains for processing, packaging, storage, transport and market access. As the project progresses, investment networking sessions will be facilitated with the participation of related stakeholders, such as financial institutions, to promote the expansion of value chains and leverage additional investment across other municipalities.

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Risk	Rating	Mitigation Strategy
Post COVID-19 g uidelines and reg ulations on stake holder engageme nt and participato ry processes	M	In order to meet the required participatory and consensus building processes under the p ost COVID-19 scenario, the design of the planning workshops will be modified, in coordin ation with the partners and key stakeholders, including the mechanisms of delivering the messages, and consensus building. Community-level consultations, including focused gr oup discussions, will be held in more groups with smaller number of participants. Attenti on will be given to the more vulnerable people, including women, people with disabilities, i ndigenous peoples, etc. These discussions will be held in strategic locations, if possible, i n close proximity to where the most vulnerable communities reside, to address the impact of restrictions on movement and transportation. Wherever possible, consultations and p lanning workshops with implementing partners and other agencies will be conducted via telecommunication. The project will develop a standard operating procedure for stakehol der consultations and participatory processes in dealing with COVID-19 pandemic and rel ated future risks and shocks.
Limited capacity and lack of experi ence of governm ent partners and agencies to imple ment project und er COVID-19 and related global sh ocks	М	COVID-19 has posed significant unprecedented risks in project implementation for gover nment partner agencies as they have limited, or no, related experiences. During the project development phase, the project will develop metrics on COVID-19 response in the context of green recovery and ancillary benefits that help mitigate the COVID-19 impacts. The information and data generated from the project will be shared with the government to enrich its database and understanding of the pandemic and help in dealing with, as well as recovering with similar future shocks. Further, the project under its knowledge management platform (outcome 3), will collate best practices on COVID-9 response and recovery, within the country and other FAO projects globally, to support the government is dealing more effectively with similar crises. Where possible, the project team will also facilitate capacity building trainings and workshops for partner agencies to effectively deal with such crises.
Complacency an d low interest fro m the stakeholde rs	L	In order to minimize the risk of a low turn-out during the planning workshop, the project w ill establish a Project Coordinating Office (PCO) which shall be located at the Provincial C apital of Bataan. Project partners and key stakeholders shall designate their respective o fficial representatives for the project. The primary function of the PCO will be to coordinat e the project activities with the partners and key stakeholders through their respective official representative. It will also take the lead in the information drive about the project approach and concept at all levels and conduct small group discussions in order to increase understanding and interest about the project and formulate action plans, thereby, generate support, cooperation, and commitment from the stakeholders.
Lack of technical capabilities of th e project agencie s to implement th e project according to the design.	L	The project will promote the good governance indicators, such as, transparency, account ability, and participatory processes. Planning workshops/activities and decision-making will promote consensus building through the participatory process, in close coordination with the project in-charge from the Country Office of FAO. The project will take into consid eration, during the negotiation and finalization of this project, where the movements and access of the FAO Technical Experts to and from the project site, will be affected.

Combined impact of climate chang e and COVID-19 o n local communit ies, indigenous p eoples, especially women	M	The risks of losing livelihood and being affected by the pandemic and climate change co mbined impacts are real concerns for the local communities and Indigenous Peoples due to their limited movements from their ancestral domains into the barangays. Under the "n ew normal" scenario, the products generated (goods and services) by the IP communities will have less buyers, with less tourists visiting their areas, where they act as tourist guide s, while the cost of living escalates. This scenario may perpetuate poverty, food insecurit y, health problems, etc., with a decline in number of IP children going to school. In order t o minimize these risks, the project will support and train the local communities and IPs, e specially the women, in appropriate income generating livelihood activities, both off-farm (such as responsible tourism under the new normal) and on-farm, simple marketing tech nologies, financial literacy, health care and sanitation, etc, in combination with appropriat e climate change adaptation measures such as adoption of community agro-forestry in u pland areas, biodiversity friendly agriculture that promotes stress and pest/disease tolera nt crops, and soil and water conservation measures.
Budgetary constr aints from the pa rtner LGUs and c ounterparts due t o government pri oritization of fund s for COVID-19 re covery.	М	The implementing agencies and key partners (DENR, BSWM, and Partner LGUs), are likely to face real financial constraints due to the unexpected occurrence of the pandemic and the diversion of government budget to COVID-19 response. In order to minimize the risks related to these realities, the commitments on co-financing and other needed support for the project will have to be formalized, taking into consideration the said realities faced by all parties involved in project finalization, approval and implementation, with an understanding that this is a near to long term investment that will reduce the impact of COVID-19 on vulnerable communities, with the re/generation of ecosystem services. Other sources of co-financing for the project will also be sought, including from the private sector.
Limited availabilit y of technical exp ertise due to COV ID-19	L	If the ongoing travel restrictions are extended due to COVID19 pandemic, no international or national expertise will be available to travel to the country and project sites to conduct face to face consultations. Virtual meetings and consultations will be conducted with all the listed stakeholders. Measures will be taken to ensure that there are no compromises in the number and range of stakeholders consulted in the virtual meetings.
Socio-economic i mpacts of COVID -19	М	The global socio-economic impacts of COVID19 underscore the risks associated with ecosystems degradation and habitat loss. The project will be designed to support recovery from COVID-19 and create opportunities to build back better. This will include prioritizing the most vulnerable communities as key stakeholders of the project that will benefit from investments in future shock-proof interventions such as biodiversity friendly enterprises, regenerative agriculture, resilient coastal resources, sustainable fisheries, responsible tour ism, etc. to strengthen their resilience to the current and possible future outbreaks.
Climate change i mpacts on ecos ystems and biod iversity of the Ba taan Province to the Manila Bay r egion	М	Due to extreme temperature, occurrence of fire in the uplands (grasslands and shrubland s) and drought is common during dry months, and occurrence of flashfloods and typhoon s during rainy months, are also common incidents, affecting the most vulnerable sectors, such as; the Indigenous Peoples, upland farmers, the fisherfolks, and other poverty-strick en sectors of the society. In order to minimize the impacts of drought and flooding on live lihood of the most vulnerable sectors, the project, in coordination with the LGUs concerne d and other partner agencies, will provide support to alternative livelihood systems (inclu

ding value chain and enterprises), and capacity building initiatives, from planning to imple mentation, to evaluation and monitoring to enhance resilience of the affected community. The project will promote climate resilient agriculture via technical assistance to farmers in selecting stress tolerant crop varieties and those resistant to pest and diseases. IPs will be supported in conserving native varieties that are proven to be resilient to climate change impacts. Where possible, agroforestry measures will be implemented in the degraded forestlands and uplands areas.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

The DENR-BMB will be the executing agency, in partnership with the DA-BSWM. The LGUs in Bataan Province, particularly those in the key biodiversity areas, will be critical partners in ensuring effective implementation of the project.

Since the DENR-BMB and the DA-BSWM are the nodal agencies for implementation of the GEF-7 project ID 10532 "Securing Long-Term Sustainability of Multifunctional Landscapes in Critical River Basins of the Philippines, the project will ensure coordination and complementarity with the said project. The same applies for the Sulu-Celebes Large Marine Ecosystems project in which the BMB-DENR is one of the executing agencies for the Philippines component. A coordination mechanism, with a project board and a technical working group, with representatives/ membership from these agencies will be established in order to facilitate the following: (i) close coordination and linkages between the project activities and the relevant interventions of its agencies (including the two above GEF projects); (ii) exchange of information and knowledge between the project and the agency activities; (iii) sustainability of key project outcomes, including scaling up and replication of innovative practices; and (iv) provide oversight and assurance of the quality of project outputs and complementation to existing agency initiatives.

This project will complement the gains from the earlier DENR-BMB project under the GEF-UNDP project, "Partnerships for Biodiversity Conservation: Mainstreaming in Local Agricultural Landscapes", which demonstrates how capacitated LGUs, in cooperation with their local and national partners and local communities can support biodiversity conservation and eco-friendly management practices, improve the livelihood opportunities of local farming communities, and sustain agriculture plant genetic resources.

The project will also contribute to GEF-UNDP NewCAPP's efforts in promoting and protecting the rights of indigenous peoples as it will work in empowering local indigenous communities through capacity building.

The project will also complement, as well as build on the good practices and lessons from another DENR-BMB project under the GEF-FAO, the "Conservation and Adaptive management of Globally Important Agricultural Heritage Systems (GIAHS) in selected pilot countries including the Philippines, to scale-up the positive results and broaden the benefits derived from biodiversity conservation at a landscape level for local communities, by targeting additional project sites located in Conservation Priority Areas.

The project will also build on the gains of the GEF-5 NDP-GEF (November 2009-November 2014), "Expanding and Diversifying the National System of Terrestrial Protected Areas in the Philippines (NewCAPP)", worked with LGUs, NGOs, Local Communities, and IPs/ICCs within the Protected Areas, in addressing key barriers/threats in biodiversity conservation, to expand and strengthen the terrestrial PA system in the country by developing new PA models and building capacity for effective management of the system.

Similarly, the proposed project will also build on the gains of USAID/JICA/DOF (2006-2013), "Volunteers in Environmental Governance (VEG)-II", which worked with the PCVs, LGUs, and General public in Coastal and Marine areas on building the capacity of local governments and their communities in enhancing coastal environment protection and food security through the development and implementation of integrated coastal management (ICM) plans, and environmental education.

The proposed project will also build on the gains of Japan-ODA (2011-ongoing), "Region III-Pampanga Project for Improvement of Flood Forecasting and Warning System in the Pampanga and Agno River Basins (Phase III)", which also includes Wetlands, working on the improvement of the existing gauging stations and telecommunication facilities for fast data transmission of observed data to ensure the issuance of timely and reliable warnings to flood-threatened communities.

The proposed project will also build on the gains of the Haribon/BirdLife International – Asia Division (January –March 2011), "Chinese Crested (Sterna bernsteini) Tern Wintering Survey Chinese Crested Tern", which worked on Biodiversity, particularly, on the purposive search for the Chinese Crested Tern at key areas in Manila Bay, and the assessment of the current status of wetlands within Manila Bay, and the review of Philippine Important Bird Areas for other possible wintering sites.

The proposed project will also build on the gains from the GEF-5 UNDP/PEMSEA (2014-2019); "Sustainable Development Strategy for the Seas of East Asia", which was been implemented in various regions of the country, including region 3 and NCR, on catalyzing actions and investments at the regional, national, and local levels to rehabilitate and sustain coastal and marine ecosystem services and build a sustainable coastal and ocean-based economy in the East Asian region, in accordance with the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA).

The proposed project will also complement with the outcomes of the GEF-6 UNDP/NWRB, "Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management in ASEAN Countries", which covers Regions 3 and 4 of the Manila Bay region, working the improvement of integrated water resources management (IWRM), reduction of pollution loads from nutrients and other land-based activities, and strengthening of integrated river basin management (among others), in selected countries in East Asian Seas.

The proposed project will also complement with the ongoing project under USAID, "Philippines—Protect Wildlife (Protect)¹⁵", in conserving biodiversity, protecting wildlife, and sustaining ecosystem services in ways that also improve the local population's livelihoods and long-term well-being..., taking into account which species are threatened, how populations are affected, and the capacity of local police and governments—to provide sustainable livelihood alternatives and promote lasting behavior change.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The proposed project supports the Philippine Development Plan (PDP) 2017-2022 Legislative Agenda, that states, "Ensure Ecological Integrity, Clean, and Healthy Environment", under three (3) Subsector Outcomes, as follows; a) Biodiversity and functioning of ecosystem services sustained, b) Adaptive capacity and resilience of ecosystems increased (Further strengthening the Philippine DRRM system and institutionalizing the Framework Plan), and c) Cross-cutting [i) National Land Use Act Address the urgency to provide rationalized land use planning in the country, consolidate national laws on land use, and address longstanding land use conflicts, and ii) Philippine Environmental Assessment System Ensure that possible environmental consequences of policies, plans and programs are considered at the earliest stage of decision making, consistent with economic and social considerations]. This will also strengthen the use of the environmental impact statement (EIS) system as a planning and monitoring tool (PDP 2017-2022, Table 20.2.)^[15].

The proposed project supports the NBSAP, particularly, under strategies III, IV, and V, which are anchored on the framework, that man is at the center of ecosystems and resources interaction, and there is a need to balance the utilization-driven policy which entails modification of Biodiversity for human needs, consistent with the conservation-driven policy for mainstreaming natural resources and biodiversity. More particularly, strategy III states, "Formulating an integrated policy and legislative Framework for the conservation, sustainable use, and equitable sharing of the benefits of Biodiversity" [where, the project-relevant activities are; a) Policy Advocacy, b) formulation of Guidelines on Land Use Planning and Biodiversity Conservation and Integration thereof in the plans of concerned agencies, and c) assessment of Protected Area under the Initial Components of NIPAS]. Further, strategy IV states, "Strengthening capacities for integrating and institutionalizing Biodiversity and Management" [where, the project-relevant activities are; 1) Integrating the planning, implementation, evaluation and monitoring of Biodiversity conservation and management in government and non-government sectors, and 2) Strengthening human resource capability in Biodiversity conservation and management]. At the same time, strategy V states, "Encouraging and sustaining advocacy for Biodiversity conservation], and strategy V states, "Mobilizing an integrated information, education and communication (IEC) system for Biodiversity", [where, the project-relevant activity is; a) Encouraging and sustaining advocacy for Biodiversity conservation].

The proposed project is consistent with the Philippine Development Plan 2017-2022 (PDP 2017-2022) chapter 20: "Ensuring ecological integrity, clean and healthy environment", subsector outcome 1: "Biodiversity and ecosystems services sustained".

Likewise, the proposed project is consistent with the Philippine Biodiversity Strategic Action Plan^[18] 2017-2022 (PBSAP 2017-2022), which is also anchored in the Philippine Development Plan (PDP). The PBSAP emphasizes that people are at the core of conservation, protection, rehabilitation, and developmental initiatives, and it also conforms to the global Aichi Biodiversity Targets^[6] agreed by the 193 Parties to the CBD in Nagoya, Japan, in October 2010, that will contribute to reducing, and eventually halting, the loss of biodiversity at a global level by the middle of the twenty first century.

The proposed project is also consistent with Sustainable Development Goals^[13] (SDG), particularly, Goal 14 - Life below water, and Goal 15 - Life on land, inasmuch as, the project will be implementing activities on land for its soil and water conservation measures and at the coastal and marine areas for its monitoring and assessment activities.

The proposed project is consistent with the Cancun Declaration^[23] on Mainstreaming the Conservation and Sustainable use of Biodiversity for Well-being, that ensures (among others) that sectoral and cross-sectoral policies, plans and programs, as well as legal and administrative measures and budgets established by our Governments, integrate in a structured and coherent manner actions for the conservation, sustainable use, management, and restoration of biological diversity and ecosystems.

This proposed project is consistent with the UNFCCC, the GEF's climate change adaptation strategy, which aims at supporting developing countries to move to a climate resilient development pathway while reducing exposure to the immediate risks posed by climate change.

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The Project Knowledge Management will specifically deliver the following outputs and activities:

- a) The project will develop an appropriate Knowledge Management system, and Assessment and monitoring tools for both non-PAs and PAs/National Parks and both non-MPAs and MPAs/Seascapes along Bataan Province to Manila Bay area will be developed and established during the first year of the project, in close coordination with the project partners and key stakeholders, and this will use various user-friendly media outlets, including social media,
- b) Strategic project messages will be developed in close coordination with the project partners and key stakeholders, and embedded in sustainable learning platforms of key targets (i.e., LGU leagues; Provincial ENROs regional chapter, league of planners), during the second year,
- c) Good practices and learnings from the project including Biodiversity-friendly Agricultural Practices, Mangrove rehabilitation, seagrasses and coral reefs monitoring, and IWM, will be developed in close coordination with the project partners and key stakeholders during the third year,
- d) The partner agencies, policy makers, partner organizations, and other key stakeholders will be capacitated continuously on the various assessment and monitoring tools developed on the established Knowledge Management System through various means, including participatory planning workshops, forums, dialogues, and other appropriate means, right from the start of the project up to the third year,
- e) The project will collate best practices on COVID-9 response and recovery, within the country and other FAO projects globally, to support the government is dealing more effectively with similar crises. Where possible, the project team will also facilitate capacity building trainings and workshops for partner agencies to effectively deal with such crises, and
- f) There will be one (1) annual national conference to be undertaken in order to share knowledge and experiences/learning generated by the Project, with other GEF-supported Projects, and major river basins/watersheds in the Philippines, which will be co-sponsored by mainstream actors (i.e., LGU league, Industry players, etc.).

All stakeholders listed above will be involved and consulted at different stages of the project, including in development of the knowledge management and communication plans and in the monitoring and evaluation framework. Innovative learnings from the project will be shared with stakeholders through the following: (i) establishment of an online portal on project learnings and exchange of good practices (ii); conduct of national conference to showcase best practices to share and also learn from other related projects and initiatives; (iii) provision of technical, coordination assistance, and capacity building activities; and (iv) presentation/updating (inception, midterm, and final) and reporting to the stakeholders on the progress of the project. In addition to the above, the project will also share lessons and experiences with other GEF supported projects to be implemented in Philippines, including GEF 7 project *ID 10532 "Securing Long-Term Sustainability of Multi-functional Landscapes in Critical River Basins of the Philippines"* and the GEF-Sulu Sulawesi LME as well as ongoing and past GEF supported projects through the technical working group that will be established under the project. With DENR being the key partner for these projects, a common platform for cross-fertilisation of ideas and experiences will be set up and coordinated by the DENR to ensure possible complementarity for more effective results.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

The project risks primarily relate to:

- 1. Presence of protected areas and their buffer zones: the project aims to support wider landscape management to reduce threats to protected areas. Therefore, the project will itself be mitigating risks to protected areas. The specific activities for this will be detailed during PPG phase.
- 2. Presence of indigenous communities and their cultural heritage sites: the project will ensure FPIC and culturally sensitive project planning so that culture, and rights of indigenous communities are protected. This is also a strong legal requirement in the Philippines.

The project will develop risk mitigation measures, which will be validated with stakeholders and disseminated. The project will also ensure strong grievance recording and addressing mechanism.

Upload available ESS supporting documents.

Title Submitted

Risk Certification 689681 (1)

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Analiza Rebuelta-Teh	Undersecretary for Climate Change/ OFP	Department of Environment and Natural Resources	9/14/2020

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place