



## **Enhancing Biodiversity, Maintaining Ecosystem Flows, Enhancing Carbon Stocks through Sustainable Land Management and the Restoration of Degraded Forestlands**

### **Part I: Project Information**

#### **GEF ID**

9554

#### **Project Type**

FSP

#### **Type of Trust Fund**

GET

#### **Project Title**

Enhancing Biodiversity, Maintaining Ecosystem Flows, Enhancing Carbon Stocks through Sustainable Land Management and the Restoration of Degraded Forestlands

#### **Countries**

Philippines

#### **Agency(ies)**

FAO

#### **Other Executing Partner(s):**

Department of Environment and Natural Resources (DENR), Forest Management Bureau (FMB).

**Executing Partner Type**

Government

**GEF Focal Area**

Multi Focal Area

**Taxonomy**

Focal Areas, Forest, Forest and Landscape Restoration, Land Degradation, Sustainable Land Management, Biodiversity, Protected Areas and Landscapes, Biomes, Stakeholders, Restoration and Rehabilitation of Degraded Lands, Community-Based Natural Resource Management, Tropical Rain Forests, Productive Landscapes, Community Based Natural Resource Mngt, REDD - REDD+, Indigenous Peoples

**Rio Markers****Climate Change Mitigation**

Climate Change Mitigation 2

**Climate Change Adaptation**

Climate Change Adaptation 1

**Duration**

48In Months

**Agency Fee(\$)**

250,774

**A. Focal Area Strategy Framework and Program**

<b>Objectives/Programs</b>	<b>Focal Area Outcomes</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
BD-4_P9		GET	1,407,854	8,858,829
LD-2_P3		GET	351,963	2,524,798
SFM-3		GET	879,909	5,426,022
			<b>Total Project Cost(\$)</b>	<b>16,809,649</b>

## B. Project description summary

### Project Objective

To deliver multiple and integrated environmental, livelihood and development benefits through the promotion of the cost effective and sustainable restoration of the biological and productive capacities of degraded forest land ecosystems

1. Total project areas (PCWFR 84,500 ha + Simulao sub-watershed 43,351 ha) under long term restoration plans delivering multiple global environmental benefits
2. 2,821 ha restored delivering multiple environmental, social and economic benefits
3. 3,000 ha restored delivering multiple environmental, social and economic benefits with a focus on enhancing connectivity of selected key biodiversity areas, where innovative restoration alternatives/solutions to ensure long term commitment to restoration are tested and influencing restoration options at the landscape level
4. 45,000 (including at least 30% of women) people that have diversified sources of income from the project's restoration initiatives
5. 40 people's organizations (POs) that have diversified sources of income from the project's restoration initiatives
6. 1,187,102 tCO<sub>2</sub>eq emissions mitigated through project activities over a 20-year period

<b>Project Component</b>	<b>Financing Type</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>GEF Project Financing(\$)</b>	<b>Confirmed Co-Financing(\$)</b>
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Creating the enabling conditions for the improved implementation of Forest and Landscape Restoration	Technical Assistance	<p>Outcome 1: Environmental, livelihood and development initiatives are effectively mainstreamed into Government support for forest restoration</p> <p>1. 3 (ENGP, Forest Management Project (FMP), and the Community-Based Forest Management-Comprehensive Agrarian Reform Program (CBFM-CARP) government restoration programs that have formally adopted new technical guidelines on different restoration strategies</p> <p>2. 200 (100 women, 100 men) technical people members of national institutions and 100 (50 women, 50 men) members of civil society with increased knowledge gained from trainings on the technical guidelines for restoration strategies</p> <p>3. 2 draft policy recommendations/ briefs developed and under discussion on incentives</p>	<p>Output 1.1: Manuals and Technical guidelines on restoration strategies promoting diverse models of sustainable land management and ecosystem restoration and the generation of multiple environmental, social and economic benefits (target: one 1. Manual on best restoration techniques for the different forests types in the Philippines for multiple benefits; one guideline each on i) fire management particularly the development and implementation of community-monitoring system ii) establishment and management of High Conservation Value Forest Areas iii) Forest Restoration for Mine Rehabilitation)</p> <p>Output 1.2: Policy recommendations on integrating appropriate incentives for households and communities to undertake FLR , based on assessments of existing incentives and disincentives (including security of tenure) (note links to 2.5 for field applications and tenure issues under Output 1.4)</p> <p>Output 1.3: Inter-institutional cooperation mechanisms at national and local levels in support of the development and implementation of multi</p>	GET	444,602	332,897

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2: Implementation of restoration programs and complementary initiatives in forest landscape restoration, protected area management and biodiversity conservation	Technical Assistance	<p>Outcome 2: Diverse and sustainable restoration practices are effectively applied, contributing to the generation of multiple environmental and social benefits</p> <p>1. Two enhanced landscape level restoration management plans prioritising restoration initiatives and proposing diverse restoration approaches based on landscape-wide and site-specific considerations, harmonized with local and regional development and land use plans, forest management plans and PA management plans</p> <p>2. 40 Site specific restoration plans based, including a long-term financing plans, under implementation</p> <p>3. 40 communities or POs with enough technical and financial resources to implement the restoration plans</p>	<p>Output 2.1 Landscape Assessment Reports, with social (including gender, culture and tenure), economic (including valuation of key ecosystem services), institutional, biophysical aspects of target areas identified, priority locations and actions agreed, and sequence of activities for FLR (2 landscapes)</p> <p>Output 2.2: Community restoration plans including technical pathways as well short &amp; long term financial plans developed and implemented (40 plans through linkages with 2.3,2.4 &amp; 2.5)</p> <p>Output 2.3: Technical, organisational and marketing support to communities to enable them to implement restoration plans and to obtain livelihood and commercial benefits in a sustainable manner through restoration of degraded areas (8 value chain analysis &amp; 4 enterprises directly supported)</p> <p>Output 2.4: Simplified mechanisms to ensure stakeholders' rights to use and market trees and non-timber forest products that they have established and/or sustainably managed</p>	GET	1,602,014	15,254,952

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 3: Knowledge, Partnerships, Monitoring and Assessment	Technical Assistance	<p>Outcome 3: Knowledge of diverse approaches to restoration is effectively managed and applied, permitting sustainability and scaling up</p> <p>1. 75 % of key stakeholders from Government agencies, CSO and beneficiary communities with increased awareness of restoration options delivering multiple benefits</p> <p>2. 10 sites that show implementation of activities that they learnt from other sites</p> <p>3. Two forest restoration modules added to the Forest Farmer Field School Manual</p> <p>One national FLR M&amp;E system that incorporates lessons from project M&amp;E system</p>	<p>Output 3.1: A multi-level, multi-modal and multi-dimensional project KM developed, tested and rolled out</p> <p>Output 3.2: Forest restoration knowledge compiled, organized &amp; systematized</p> <p>Output 3.3: Knowledge products shared, and project results and lessons learned disseminated locally, nationally and internationally</p> <p>Output 3.4: National FLR M&amp;E framework supported and Project M&amp;E framework set up</p>	GET	467,409	432,897

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
				<b>Sub Total (\$)</b>	<b>2,514,025</b>	<b>16,020,746</b>
<b>Project Management Cost (PMC)</b>						
				GET	125,701	788,903
				<b>Sub Total(\$)</b>	<b>125,701</b>	<b>788,903</b>
				<b>Total Project Cost(\$)</b>	<b>2,639,726</b>	<b>16,809,649</b>

**C. Sources of Co-financing for the Project by name and by type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Amount(\$)</b>
GEF Agency	FAO	Grant	500,000
Government	Dept. of Environment and Natural Resources	Grant	14,989,158
Government	Department of Agriculture	Grant	435,902
Government	BWSM, Department of Agriculture	In-kind	95,686
Government	Department of Environment and Natural Resources	In-kind	788,903
<b>Total Co-Financing(\$)</b>			<b>16,809,649</b>

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

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>NGI</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>
FAO	GET	Philippines	Biodiversity		No	1,407,854	133,746
FAO	GET	Philippines	Land Degradation		No	351,963	33,437
FAO	GET	Philippines	Multi Focal Area	SFM	No	879,909	83,591
<b>Total Grant Resources(\$)</b>						<b>2,639,726</b>	<b>250,774</b>

**E. Non Grant Instrument**

**NON-GRANT INSTRUMENT at CEO Endorsement**

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Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

**F. Project Preparation Grant (PPG)**

PPG Required

**PPG Amount (\$)**

100,000

**PPG Agency Fee (\$)**

9,500

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>NGI</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>
FAO	GET	Philippines	Biodiversity		No	53,333	5,067
FAO	GET	Philippines	Land Degradation		No	13,333	1,266
FAO	GET	Philippines	Multi Focal Area	SFM	No	33,334	3,167
<b>Total Project Costs(\$)</b>						<b>100,000</b>	<b>9,500</b>

**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)
0.00	84,500.00	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

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)
Akula National Park	125689	Select				<input type="checkbox"/>

**Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	84,500.00	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)
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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)
Akula National Park PCWFR	125689	SelectProtected area with sustainable use of natural resources		84,500.00			51.00		

**Indicator 3 Area of land restored**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	5821.00	0.00	0.00

**Indicator 3.1 Area of degraded agricultural land restored**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	600.00		

**Indicator 3.2 Area of Forest and Forest Land restored**

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	5,221.00		

**Indicator 3.3 Area of natural grass and shrublands restored**

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

**Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored**

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

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

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
0.00	4300.00	0.00	0.00

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

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
	4,300.00		

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

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>

**Type/Name of Third Party Certification**

**Indicator 4.3 Area of landscapes under sustainable land management in production systems**

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>

**Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided**

<b>Ha (Expected at PIF)</b>	<b>Ha (Expected at CEO Endorsement)</b>	<b>Ha (Achieved at MTR)</b>	<b>Ha (Achieved at TE)</b>
	0.00		

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

<b>Title</b>	<b>Submitted</b>			
<b>Indicator 6 Greenhouse Gas Emissions Mitigated</b>				
<b>Total Target Benefit</b>	<b>(At PIF)</b>	<b>(At CEO Endorsement)</b>	<b>(Achieved at MTR)</b>	<b>(Achieved at TE)</b>
<b>Expected metric tons of CO<sub>2</sub>e (direct)</b>	0	6146968	0	0
<b>Expected metric tons of CO<sub>2</sub>e (indirect)</b>	0	0	0	0

**Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector**

<b>Total Target Benefit</b>	<b>(At PIF)</b>	<b>(At CEO Endorsement)</b>	<b>(Achieved at MTR)</b>	<b>(Achieved at TE)</b>
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Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)				
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)		6,146,968		
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting		2039		
Duration of accounting		20		

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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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		22,500		
Male		22,500		
Total	0	45000	0	0

## **PART II: Project JUSTIFICATION**

### **1. Project Description**

#### **1.1 OVERVIEW OF THE PROJECT CONTEXT**

##### 1.1.1 National Context

###### Biophysical context

The Philippines is composed of over 7,000 islands, of which approximately 2,000 are inhabited, which are located between 116° 40', and 126° 34' E longitude and 4° 40' and 21° 10' N latitude and is bordered by the **Philippine Sea** to the east, the **South China Sea** to the west, and the **Celebes Sea** to the south.

The country is an archipelago that is divided into 18 political regions, the three main island groupings are Luzon (including Manila) in the north, the Visayas in the centre and Mindanao in the south.

Most of the mountainous islands are covered in **tropical rainforests** and are volcanic in origin. The country's highest point is **Mount Apo**. It measures 2,954 meters (9,692 ft) above sea level and is located on Mindanao Island. The Galathea Depth in the **Philippine Trench** in the Philippine Sea is the deepest point in the country and the **third deepest in the world**.

The Philippines has a tropical maritime climate that is usually hot and humid. There are three seasons: tag-init or tag-araw, the hot dry season or summer from March to May; tag-ulan, the rainy season from June to November; and tag-lamig, the cool dry season from December to February.

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###### Biodiversity

The Philippines' rainforests and its extensive coastlines make it home to a diverse range of birds, plants, animals, and sea creatures. With more than 20,000 endemic species, the Philippines is recognized as a megadiverse country, one of 17 nations that, together, hold two-thirds of earth's biological diversity. It hosts at least 576 bird species (34% endemic),

258 reptile species (66% endemic), 204 mammal species (54% endemic) and 101 amphibian species (78% endemic). There are five major and at least five minor centres of endemism, ranging in size from Luzon, the largest island (103,000 km<sup>2</sup>), which has at least 31 endemic species of mammals, to Camiguin Island (265 km<sup>2</sup>) north of Mindanao, which has at least two species of endemic mammals.

The Philippines has among the highest rates of discovery in the world with sixteen new species of mammals discovered in the last ten years. Because of this, the rate of endemism for the Philippines has risen and likely will continue to rise. Native mammals include the palm civet cat, the dugong, the cloud rat and the Philippine tarsier associated with Bohol.

### Forest

At the beginning of the last century, 70 percent of the country was forested but this figure had declined rapidly to a low of about 18.3 percent in 1999. Discussions on the loss of forest in the Philippines always highlight the loss of the high-value dipterocarp forests which used to cover about 45 percent of the country's total land area, exploited to provide timber for industries (Revilla 1984). Today, the dipterocarps together with the other forest types – molave, pine, mangrove, beach and mossy – have become a scarce source of timber[1]<sup>1</sup>. Agriculture expansion also had a major tool on forest. The different threats to forest are explained in section 1.2.3.

The country's total forest cover in 2011 was 7.168 million ha, or 23.89 % of the national territory. Of the total forest estate, open forests constitute 4 million ha, closed forest 2.5 million ha, plantations 330,000 ha, and mangroves 250,000ha. In 2003, 49.2% of the country's land area (14.76 million ha) was officially classified as "forestland", on which around 91% of the country's total forests were located. Critical watersheds support various hydro and geothermal power facilities that supply at least 35% of the country's energy requirements. Philippine forests also provide timber and non-timber forest products totalling US\$100 million in net benefits yearly[2]<sup>2</sup>.

Based on the 2010 statistics of population and forest cover, the forest-population ratio in the Philippines is 0.08 ha/capita (one of the poorest in 89 countries in the tropics). To increase this ratio, directly or indirectly, protection and management of the remaining natural forests combined with forest restoration will have to improve. Forest restoration and forest management have to take shape based on the current governance configuration. This has been the emerging strategy in the country's efforts to arrest continuing forest degradation. It is evident that the focus of protection and restoration will be in areas that are under forest reservations, community forestry and ancestral domains. This means that these efforts have to be done with the DENR for the protection and management of protected areas and watersheds, Department of Energy (DOE) and Department of Agriculture (DA) for watersheds and reservations, and the National Commission on Indigenous Peoples (NCIP) for ancestral domains<sup>2</sup>.

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In more recent years, the Philippines has made significant advances towards stemming historical trends of net forest cover loss. This commitment is exemplified by embarking on a massive tree planting and reforestation program called the National Greening Program. In addition, two other programs, namely, the Integrated National Resources Management Program (INREMP) and the Forest Management Program (FMP). From a position as one of the top ten deforestation countries contributing to global greenhouse gas emissions of 17-20% from global forest loss in 2000 (FAO, 2006), the country has since recovered with modest forest cover increase of 55,000 hectares per year (FAO, 2010); the 2010 Global Forest Assessment Country Report for the Philippines reported an increase in forest cover from 6.57 million ha in 1990 to 7.665 million ha in 2010.

But these efforts need to be sustained on the long term as the sustainability of the re-greening program has been questioned as well as its ability to deliver multiple benefits. The government and the local communities engaged in this effort need support.

#### Socio-economic context

The Philippines is an island nation with a unique geography, and a very diverse culture, history and population that speaks more than 80 languages and dialects.

With a population of about 100 million people, the Philippines is the seventh-most populated country in Asia and the 12th most populated country in the world. Between 1990 and 2008, the national population increased by around 45% (28 million people), however annual population growth rates slowed from 3.21% between 1995 and 2000 to an estimated 1.95% between 2005 and 2010. In 2010, 54.7% of the total population lived in areas classified as rural, and in 2004, 22% of the country's rural population resided in areas officially classified as forestlands. With about 2 million Filipinos added to the population every year over the past years, the population of the Philippines is projected to increase to 142 million by 2045 (NEDA, 2017).

Based on the NCIP data in 2016, the Philippines has an estimated 14 million indigenous peoples (IP) belonging to 110 ethno-linguistic groups.<sup>[3]</sup><sup>3</sup> The highest concentration of indigenous peoples are in Mindanao (61%) and followed by the Cordilleras (33%)<sup>[4]</sup><sup>4</sup>. The indigenous population and distribution across the country is not completely known, this reported number is the same estimated population by ethnic group, by province released by NCIP in 2007 at 14,184,645<sup>[5]</sup><sup>5</sup>.

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The indigenous peoples, particularly those in rural areas remain largely poor, their geographically -isolated location makes government services and facilities such as health and education inaccessible, resulting to IPs' high illiteracy rate and high vulnerability to diseases. There is also serious lack of ethnography. The specific location, governance systems, indigenous knowledge, systems and practices are not completely documented and organized. Without specific data, policies and programs are not responsive and appropriate to the needs of the IPs, and has led their exclusion in national policies, plans and programs.

Indigenous peoples are among the disadvantaged sectors identified under Republic Act 8425 because of their vulnerability to exploitation and discrimination. Extractive activities (i.e., mining and logging), "development work" (e.g., hydroelectric dams), in- migration, territorial control mechanisms (e.g., expropriation of land, imposition of territorial boundaries, and other policies), among others, lead to displacement and place great pressure on the preservation of their resources and way of life. (Philippine Development Plan, 2017-2022)

The country's gross domestic product (GDP) grew at an average of 6.1 percent during the period 2010-2016, the fastest 6-year average since 1978, although this was still below the target of 7-8 percent per year set in the PDP 2011-2016 (NEDA, 2017). Regions with established and large cities (regional centres) are growing the fastest. The Philippines' growth profile evidences stark inequality in development. As per 2015 data, the per capita Gross Regional Domestic Product (GRDP) in the National Capital Region is more than twice that in CALABARZON (Region 4A), the region with the second highest per capita GRDP, and more than twelve times that in the Autonomous Region in Muslim Mindanao (ARMM), which has the lowest per capita GRDP (NEDA, 2017).

The Philippines' poverty rate decreased from 25.2 percent in 2012 to 21.6 percent in 2015 (PSA, 2015). Despite the decline in these numbers, poverty continues to be concentrated in specific segments of the total population. Five of the nine basic sectors of the population determined by the Philippine Statistics Authority – farmers (34.3 percent), fishermen (34 percent), children belonging to families with income below the official poverty threshold (31.4 percent), self-employed and unpaid family workers<sup>[6]</sup> (25 percent) and women belonging to poor families (22.5) – have higher poverty rates than the general population (21.6 percent) for the year 2015 (PSA, 2015). Farmers and fishermen consistently registered as the two basic sectors with the highest poverty incidence in the general population since 2006.

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In January 2017, the national labour force<sup>[7]</sup> participation rate in the Philippines was 60.7 percent, equivalent to 42.12 million Filipinos aged 15 years old and older. Nationwide, the employment rate stood at 94.3 percent (39.3 million people) with 62.3 percent of men and 37.7 percent of women employed. The majority (57.1 percent) of the employed worked in the services sector, over a quarter (25.5 percent) worked in agriculture, and almost one-fifth (17.4 percent) worked in the industry sector (PSA, 2017b).

While agriculture continues to account for a significant share of employment in the Philippines, most jobs in the agricultural sector are classified as *vulnerable* employment, with almost half (48.8 percent) of those employed in agriculture belonging to the category of own-account workers and 18.9 percent belonging to the category of unpaid family workers in 2016 (PSA, 2017c). Moreover, ever since the 1960s, the direct share of agriculture in the GDP had fallen below one-third, and by 1981, the sector's share had decreased to only 23 percent. Growth from this level was rather anaemic, averaging 1.7 percent per annum during the period 1981-2003, compared to the average overall GDP growth of 2.6 percent over the same period.

According to the Country Gender Assessment (CGA) undertaken by FAO Philippines in 2017, despite women's key contribution to agriculture and fisheries, Filipino rural women are often described as "invisible". About three-quarters of employed persons in agriculture, hunting, forestry and fishing are men, while only one quarter are women. But these statistics do not take into account the various unpaid care work that rural women perform on a continuous basis. This results in an inaccurate measurement of rural women's contribution to the sector. Rural women are underutilized in productive work; very few of them own land, and lack access to credit, technology and other productive resources. Women are also less likely to be targeted for extension services, as many extension agents still do not recognize women as agricultural producers. These gender inequalities are mainly brought about by societal and cultural norms about the role of women and men, which are still very much prevalent in the agriculture and in the rural sector. It is assumed, for instance, that the husband as the traditional head of the family gets the first chance to apply for a land title. Women are often considered the "farmer" or "agricultural holder" only when there is no male adult in the family. The majority of care work such as cleaning, cooking and caring for children or elderly, is usually performed by women and girls and is usually unpaid. This undermines women and girls' rights and limits their opportunities. Men are often excluded from discussions and efforts that address food security and (mal) nutrition. This only perpetuates the supposed norm that the preparation of nutritious food for the family lays in the domain of women.

According to the PDP 2017-2022, fostering linkages with the industry and service sectors for more efficient value-adding processes and more effective commercialization will expand opportunities in agriculture. For this to happen, productivity in agriculture will need to be raised. In the medium-term, the agriculture, forestry and fisheries sector will seek to expand economic opportunities for those who are currently engaged in producing agricultural products and increase access to economic opportunities for small farmers and fisherfolk who are

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typically subsistence producers and have limited market participation. These will be beneficial to existing producers and marginalized farmers and fisherfolk, including women, elderly and indigenous peoples.

Institutional context for forest and landscape management

### *Institutional Setting*

The Government of the Philippines is the national government of the Philippines. It is governed as unitary state under a presidential representative and democratic and a constitutional republic where the President function as both the head of state and the head of government of the country within a pluriform multi-party system.

The government has three interdependent branches: the legislative branch, the executive branch, and the judicial branch. The powers of the branches are vested by the Constitution of the Philippines in the following: Legislative power is vested in the two-chamber Congress of the Philippines—the Senate is the upper chamber and the House of Representatives is the lower chamber.

Executive power is exercised by the government under the leadership of the President. Judicial power is vested in the courts with the Supreme Court of the Philippines as the highest judicial body.

Note: Barangays is the smallest administrative division in the Philippines and is the native Filipino term for a village, district or ward

In terms of executive administration, the country has three island groups: Luzon, Visayas, and Mindanao. There are three metropolitan centres in the country located in each island group, the National Capital Region (NCR) in Luzon, Metro Cebu in the Visayas and Metro Davao in Mindanao. NCR is the metropolitan centre of Luzon and the Philippines, and

where Metro Manila, seat of the national government, is further divided into 18 regions and Local Government Units (LGUs): 81 provinces, 145 cities, 1,489 municipalities and 42,036 barangays<sup>[8]</sup>. There are two autonomous regions- Cordillera Autonomous Region and the Autonomous Region of Muslim Mindanao.

The main national institutions involved in natural resources management, and especially forest management and forest and landscape restoration (FLR) are the following:

### **At the national level**

#### *National level institutions*

*The Department of Environment and Natural Resources (DENR)* is the primary agency responsible for the conservation, management, development, and proper use of the country's environment and natural resources, specifically forest and grazing lands, mineral resources, including those in reservation and watershed areas, and lands of the public domain, as well as the licensing and regulation of all natural resources as may be provided for by law in order to ensure equitable sharing of the benefits derived therefrom for the welfare of the present and future generations of Filipinos. It has been created through the Executive Order No. 192 issued under the administration of President Corazon C. Aquino. It is in charge of major reforestation programs such as the National Greening Program (NGP) and the Community Based Forest Management (CBFM).

To accomplish this mandate, the Department is guided by the following objectives:

1. Assure the availability and sustainability of the country's natural resources through judicious use and systematic restoration or replacement, whenever possible;
  2. Increase the productivity of natural resources in order to meet the demands for forest, mineral, and land resources if a growing population;
  3. Enhance the contribution of natural resources for achieving national economic and social development;
  4. Promote equitable access to natural resources by the different sectors of the population; and
  5. Conserve specific terrestrial and marine areas representative of the Philippine natural and cultural heritage for present and future generations.
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As part of DENR, the main actors of the project are:

- The Forest Management Bureau (FMB), formerly the Bureau of Forest Development is mandated to undertake sustainable forest management. Its primary function is to provide policy directions and technical support to the Department. It consists of 4 divisions (see below). It is the main partner of this project. It however maintains no operational control over the DENR Field units, from the Regional offices, Provincial Environment and Natural Resource Offices (PENROs) and Community Environment and Natural Resources Offices (CENROs).
- The Biodiversity Management Bureau mission is to conserve and sustainably manage the country's biodiversity through strengthening the implementation of NIPAS and fostering other effective area-based conservation measures, promoting biodiversity-friendly livelihoods; and mainstreaming biodiversity across all sectors of government and society. It is the main partner of the UNDP sister project.
- The Foreign-Assisted and Special Projects Service (FASPS) missions is supporting the development and implementation of projects such as this one.
- ***The Department of Agriculture (DA)*** is the executive department of the Philippine government responsible for the promotion of agricultural and fisheries development and growth. It focuses on crop commodities such as coconut, abaca, cacao, coffee.
- ***The Department of Agrarian Reform (DAR)*** is the executive department of the Philippine Government responsible for the redistribution of agrarian land in the Philippines. It works on improving the livelihood base of the agrarian communities.

Working in close collaboration with these structures are the Indigenous Peoples representation which are key players in the Philippines mainly the:

- ***The National Commission on Indigenous Peoples (NCIP)*** is the agency of the national government of the Philippines that is responsible for protecting the rights of the indigenous peoples of the Philippines. It is attached to the Office of the Cabinet Secretary. NCIP is led by a commission composed of 7 commissioners belonging to indigenous peoples representing the 7 ethnographic regions. At the national level, the Commission is supported by an Executive Director and 7 offices: Socio-Economic services and Special Concerns, Ancestral Domains Office, Policy Planning and Research, Empowerment and Human Rights, Education Culture and Health, Finance and Administration and the Legal Affairs Office.

NCIP has 12 Regional Offices overseeing 46 provincial offices and 108 Community Service Centres. It is a major institutional player in public forest lands, which are covered by ancestral domain claims or titles. The extent of the ancestral domains in forestlands is estimated to be 14 million out of the 15 million but so far 5.4 M is titled and 3 million is on-going the titling process.

***National Economic and Development Authority (NEDA)*** serves as National and Regional Development Plan and Program Coordinator (by issuing planning guidelines and conducting multisectoral/regional consultations). It also functions as Public Investment Evaluator and Programmer (by coordinating the Official Development Assistance and appraising programs and projects). It performs development planning, programming and project monitoring (by conducting program/project evaluation and on-site reviews and consultations). It also provides Technical Assistance. It serves as secretariat to Regional Development Councils, Philippine Council for Sustainable Development, National Land Use Committee, inter-agency bodies, and other clients, including local government units.

***The National Irrigation Administration (NIA)*** is a key water user and provider institution through irrigation systems. For national systems, an agreement has been drawn that NIA will have to include site enhancement and protection measures in consonance with DENR's priority flagship programs such as the NGP. NIA UPRIIS and (by extension, NIA-CMIPP) is responsible for the management, development and protection of 24,000 has of the PCWFR. It shares the burden of rehabilitation and protection with NPC and First Gen, respectively.

***The Philippine Department of the Interior and Local Government (DILG)*** abbreviated as, is the executive department of the Philippine government responsible for promoting peace and order, ensuring public safety and strengthening local government capability aimed towards the effective delivery of basic services to the citizenry

***The Climate Change Commission (CCC)*** is an independent and autonomous body that has the same status as that of a national government agency. The CCC is under the Office of the President and is the "sole policy-making body of the government which shall be tasked to coordinate, monitor and evaluate the programs and action plans of the government relating to climate change pursuant to the provisions of this Act.

***National level coordination mechanisms on natural resources***

***The National Convergence Initiative (NCI)*** was created in 1999, through the joint efforts of the DA, DAR and DENR to develop and operationalize a common framework for sustainable rural development (SRD) that will facilitate the convergence of the resources of the three agencies to maximize the impact on countryside development. Despite the efforts, the results weren't as expected. Therefore in 2010, as President Benigno Simeon C. Aquino III administration committed to ensure countryside development as strategy for poverty reduction, Secretaries of DAR, DA DENR launched the Enhanced the National Convergence Initiative for Sustainable Rural Development. The Enhanced NCI includes the NCIP and DILG promotes a framework of sustainable agriculture and rural development: (i) integrates the people, their economy and their environment, (ii) optimize resources, create substantial effect in the short-term and (iii) make possible model-building across ecosystems, production systems, and rural poverty sectors/small producers in the long-term. It:

- ü Aims to address the weaknesses and gaps that were experienced in convergence strategy in the past and take advantage of the agribusiness investment engagements that have been initiated which could engage the beneficiaries of the three departments and partake of the fruits from these investments.
- ü Defines clear mechanisms for harmonization and complementation among the three agencies to avoid conflicting and overlapping policies that slows the implementation of programs and projects on the ground
- ü Enhanced initiatives to make convergence work with the local government units are given a more pro-active role in identifying and implementing convergence initiatives at the local level.

***Indigenous Peoples' Consultative Assembly*** at the national, regional, provincial, municipal and barangay level is constituted by the NCIP to advise to them on matters relating to the problems, aspirations and interests of IPs. The body is composed of traditional leaders, elders and representatives from the women and youth sectors of the different ethnic groups.

***Philippine Commission on Women (PCW)*** oversees women's concerns, as a catalyst for gender mainstreaming and as a lead advocate of women's empowerment, gender equity and equality. The PCW mandate is to i) be the primary policy-making and coordinating body on women and gender equality concerns, ii) be the overall monitor and oversight on the Magna Carta of Women (MCW), and the subsequent effectivity of the Implementing Rules and Regulations (IRR) and iii) lead the capacity development of agencies to enable them to implement the MCW. Indigenous women's customary rights to the land, including access to and control of the fruits and benefits, their indigenous practices on seed storage and cultivation, as well their roles as knowledge holders are also protected under the MCW. The law further mandates government agencies to provide economic opportunities for indigenous women, particularly access to market for their produce.

The ***Philippine Council for Sustainable Development (PCSD)*** is a multi-stakeholder body composed of representatives from various government and non-government departments, groups, and organisations (e.g., civil society, labour group, and business sector) geared toward promoting Sustainable Development. Council representation should not be lower than a rank of Director or its equivalent in NGOs to facilitate decision-making and solicit concrete commitments during Council meetings. Participation of wider government and non-government representatives is allowed in Council meetings, depending on the agenda/issues.

It also liaises with the Civil Society Counterpart Council for Sustainable Development (CSCCSD) on PCSD endeavours. The CSCCSD is a body of representatives from civil society, acting as a major partner of the PCSD to coordinate civil society participation/engagement in Council business/es.

*At the Regional and Provincial and local levels*

*Regional and Provincial and local levels institutions*

DENR has field units, from the Regional offices, Provincial Environment and Natural Resource Offices (**PENROs**) and Community Environment and Natural Resources Offices (**CENROs**) in charge of implementing all DENR programs. CENRO and PENRO supervise activities of all holders of forestry lease, permits and agreements, amongst others. They also investigate, recommend appropriate actions to the Regional Office and National Office to resolve claims and conflicts involving land tenure issues.

Community Environment and Natural Resources Offices (CENRO) can be found in each municipality/city or cluster of Local Government Units.

**LGU: Local Government Units**<sup>[9]</sup> manage community forests or have a co-management agreement with the DEN. Such management is under their respective environment and natural resources offices (Municipal, City and Provincial ENRO).

**Indigenous political structures (IPS)** are the organizational and cultural leadership systems, institutions, relationships, patterns and processes for decision making and participation identified by the Indigenous Peoples such as Council of Elders, Council of Timuay, Bodong Holders, or any other tribunal or body of similar nature. Out of this socio-political scene, emerges the Indigenous Peoples' Mandatory Representative (IPMR), chosen by the community and qualifies under the NCIP and Department of Interior and Local Government (DILG) Guidelines, to sit in local legislative councils at the barangay, municipal and provincial level. The IPMR is accorded the same rights and privileges as elected members of the local legislative councils and gives support in sustaining the Indigenous Peoples' Consultative Assembly discussed above.

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The **Protected Areas Management Bureau (PAMB)**, essentially a parastatal body, occupies the lower tier in the hierarchy of institutions, with its cross sectoral constituency. It counts mainly on the participation of the local government units, particularly with the municipal and barangay LGUs that are included in the domain. Typically, the Governor sits as co-chair with the Regional Executive Director, or in some instances as Vice Chair.

**People's Organization (PO)** are independent, bona fide associations of citizens with demonstrated capacity to promote the public interest and with identifiable leadership, membership and structure, as stated in Section 15, Philippine Constitution of 1987. Members come from all sectors of society including the poor and the disadvantaged.

### *Regional and Provincial and local levels coordination mechanisms*

At the regional level, when existing, **River Basin Committees or Organizations** ensures that key institutional stakeholders are engaged in agenda setting and planning process as it is the case for the Agusan River Basin Organization and the Pampanga River Basin Committee. The basin organizations are linked to the Regional Development Councils, steered by NEDA. Thus, identification and prioritization of issues, programs and projects are harmonized, with the conjunction of platforms.

Legal and policy context

#### National policies and legislation

The 1987 Philippines Constitution includes at least two provisions that have direct bearing on natural resources management. The constitution

- (1) enunciates the concept of ownership of resources, including the power to classify lands and the power to alienate lands and other natural resources.
- (2) provides the rules of utilisation, exploitation and development of natural resources, including provisions that mandate the State to protect the environment and guarantees the equitable and sustainable use of natural resources by its citizens.

The provisions articulating the concept of ownership of land and natural resources are premised on the Regalian Doctrine. This legal concept embedded in the Philippine Constitution, provides that all lands of the public domains, waters, minerals, coal, petroleum and other mineral oils, all sources of potential energy, fisheries, forests, timber, wildlife, flora and fauna and other natural resources are owned by the State and therefore title to them can only emanate from the State. Moreover, the exploration, development and utilisation of natural resources shall be under the full control and supervision of the State.

For purposes of administration and disposition of natural resources, the President of the Philippines is empowered “to reserve alienable public lands for specific purpose or service and under the Public Land Act<sup>[10]</sup>, to release those reserved to exercise exclusive prerogative to classify and declassify public forest lands; to lease or grant to qualified persons under specific conditions, permits for the use of forest lands or vacant lands; to exercise control over the survey, classification, lease , sale or any other form of public concession or disposition and management of lands of the public domains; and to enter into agreements with foreign corporations, as may be required.”

A key theme in the Constitution is social justice. It guarantees the right of direct users of natural resources, such as farmers, forest dwellers, indigenous peoples, gold panners and marginal fishermen. Based on its precepts, it limits the exercise of Government of its power of dominion over the natural resource base. This relies on the fundamental guarantees that no one shall be deprived of life, liberty and property without the due process of law. The use of property bears social functions (Art XII, Sec. 6) and all economic agents shall contribute to the common good.

A landmark provision of the 1987 constitution is the recognition of the existence of indigenous peoples and their right to their ancestral lands and domains. Thus, “the State subject to the provisions of this Constitution and national development policies and programs, shall protect the rights of indigenous cultural communities to their ancestral lands to ensure their economic, social and cultural wellbeing”. With the promulgation of the Indigenous Peoples Rights Act, (Republic Act 8371), Congress saw it fit to provide for the applicability of customary laws governing property rights or relations in determining the ownership and extent of ancestral domains.

The sustainable development model that assures the posterity of the nation is likewise anchored on the Constitutional provision, that “State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature (Art II, Sec. 15)”.

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The Philippines is committed to promote natural resources and land governance as a basis for sustainable development. It is an active Party to the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD) and has enacted a comprehensive policy framework on climate protection and biodiversity conservation, including the National Integrated Protected Areas Act (1992), National Biodiversity Strategy and Action Plan (1997, 2002), the Climate Change Act (2009), the National Framework Strategy on Climate Change (2010) as well as the Philippine National REDD-Plus Strategy (2010).

The country has an equally comprehensive policy regime on the allocation and management of land and resources, including the Indigenous Peoples Rights Acts (1997), the Local Government Code (1991), National Integrated Protected Areas Systems Act (RA 7586), Local Government Code (RA 7160) of 1992, Comprehensive Agrarian Reform Law (RA 6657, as amended), Philippine Mining Act (RA 7942) the Agriculture and Fisheries Modernization Act (RA 8435), the Water Code of the Philippines (PD 1067), Wildlife Resources Conservation Act (RA 9147), among others, provide further policy and legal articulation of the Constitutional provisions.

The key policy for sustainable forest management, biodiversity, climate change adaptation are the following ones:

- § **The Philippine Development Plan (2017-2022)** includes more aggressive strategies to rehabilitate and restore degraded natural resources and protect the fragile ecosystems while improving the welfare of resource dependent communities.
- § **National Climate Change Action Plan (2011-2027)** includes sustainable management of uplands and the implementation of the Philippine National REDD-Plus Strategy (PNRPS)
- § **The Local Government Code (R.A 7160)** of 1991 mandates local government units to protect their natural resources such as watersheds. Section 17 devolves management of small watersheds and community-based forest management (CBFM) programs to local government units.
- § **DENR-DILG Circular 98-01 Series of 1998**, mandates specific steps for local government units to exercise control of watersheds important to them.
- § **DENR-DILG Circular 2003-01** Series of 2003, institutionalizes partnership and lays down measures to institute co-management of forests and forestland areas between the LGU and DENR following an approved Forest Land Use Plan (FLUP)

The Department of Environment and Natural Resources (DENR), the primary agency responsible for the conservation, management, development, and proper use of the country's environment and natural resources, is anchored on the following pieces of legislation and administrative policies:

- § **EO No. 192 1987)** – Mandated the DENR to conserve, manage, develop, properly use, license and regulate the use of natural resources 1987 Constitution • Adopted the Regalian Doctrine • Mandated the State to undertake on its own the development and utilization of natural resources or enter into co-production, joint venture or production agreement • Enjoins the state to enter into co-production, joint venture or production agreements vis-a-vis natural resource management with empowered communities
- § **PD 705 (1975)** – provides for the adoption of the multiple-use and sustained yield concepts on forest management; defined critical watersheds in relation to downstream infrastructures and facilities; prohibits commercial logging and grazing operations within critical watersheds; and authorizes the President to proclaim portions of the public domain as forest and watershed reservation
- § **Executive Order 263**, which established Community-based Forest Management as a key national government program for forest management. It empowers upland/forest communities to manage forests in collaboration with local government unit
- § **DENR Department Administrative Order 96-29 (s.1996)** • Provides the Implementing Rules and Regulations of Executive Order 263; paved the way of granting of resource use rights to communities; and allows the transfer of tenure as well as their limited division through such mechanisms as joint venture and contracting
- § **Executive Order No. 23 (2011)** • Declares a moratorium on the cutting and harvesting of timber in the natural and residual forests • Provides for strict implementation compliance and adherence to forestry laws
- § **Executive Order 26 (2011), National Greening Program** • Declares an Interdepartmental Convergence Initiative for National Greening Program
- § **DENR ADMINISTRATIVE ORDER NO. 2016-20 IMPLEMENTING RULES AND REGULATION ON EXECUTIVE ORDER NO. 193 EXPANDING THE COVERAGE OF NATIONAL GREENING PROGRAM FROM YEAR 2016-2028**
- § **DENR Department Administrative Order 32, Series 2004** • Revised Guidelines on the Establishment and Management of Community-Based Program in Protected Areas
- § **DENR Department Administrative Order 96-29** • Provides the Implementing Rules and Regulations of Executive Order 263; paved the way of granting of resource use rights to communities; and allows the transfer of tenure as well as their limited division through such mechanisms as joint venture and contracting
- § **DENR Department Administrative Order 123** • Promotes community participation in the rehabilitation, protection, improvement and management of degraded and productive residual forests, brushlands, virgin forests and marginal lands
- § **DENR Administrative Order No.99 -01.** Adoption and implementation of Watershed and Ecosystems Planning Framework
- § **DENR Administrative Order No. 2005-23.** Adoption and Implementation of Collaborative Approach to Watershed Management
- § **Republic Act No. 7586 or the National Integrated Protected Areas System (NIPAS)** law, places certain nationally important watersheds covering several local government units under the management of Protected Area Management Boards or PAMBs, where local government units are expected to play a lead role.

- § **RA 9147. *Wildlife Resources Conservation and Protection Act.*** Section 25 of RA 7160 provides for the Establishment of Critical Habitats which specifies: Within two (2) years following the effectivity of this Act, the Secretary shall designate critical habitats outside protected areas under Republic Act No. 7586, where threatened species are found. Such designation shall be made on the basis of the best scientific data taking into consideration species endemicity and/or richness, presence of man-made pressures/ threats to the survival of wildlife living in the area, among others. All designated critical habitats shall be protected, in coordination with the local government units and other concerned groups, from any form of exploitation or destruction which may be detrimental to the survival of the threatened species dependent therein. For such purpose, the Secretary may acquire, by purchase, donation or expropriation, lands, or interests therein, including the acquisition of usufruct, establishment of easements or other undertakings appropriate in protecting the critical habitat.
- § **DENR Memorandum Circular No. 2007-02. *Guidelines on Establishment and Management of Critical Habitat.*** The Memorandum Circular provides for Critical Habitat establishment procedures both by the Department of Environment and Natural Resources and Local Government Unit initiative, pursuant to Sections 4 and 25 of Republic Act No. 9147, otherwise known as the “Wildlife Resources Conservation and Protection Act,” Rules 25.1 - 25.5 of Joint DENR-DA-PCSD Administrative Order No. 01, Series of 2004, and Executive Order No. 578 of 2006
- § **Expanded NIPAS ACT (RA 11038).** An act declaring protected areas and providing for their management, amending for this purpose, RA 7586, and for other purposes
- § **Presidential Decree No. 1586 (1981)** • Establishes the Environmental Impact Assessment (EIS) System. The law prohibits undertaking / operating an environmentally critical project or any project in an environmentally critical area, without undergoing environmental impact assessment and securing an environmental compliance certificate (ECC).
- § **The Philippine Environmental Code (PD 1152)**- prescribes management guidelines aimed to protect and improve the quality of Philippine water resources
- § **DENR Memorandum Circular No. 89-17.** Prioritizing the application of Assisted Natural Regeneration (ANR) Method in the Development of Watersheds, Protection and Production Forests. Mandates the application of the most economical method in accelerating the re-establishment of vegetative cover that approximates the natural forests, in terms of species diversity and composition.
- § **DENR Memorandum Circular No. 2004-06** “Guidelines in the integration of rainforestation farming[11]<sup>11</sup> strategy in the development of open and denuded areas within protected areas and other appropriate forest lands”–Provides for the employment of rainforestation farming as an approach in restoring the original vegetation stand in degraded and secondary forest in protected areas and other appropriate forest land, and at the same time promoting and conserving the biological diversity in the area by facilitating the natural process of succession.
- § **DENR Memorandum Dated October 8, 2009** “Suspension of the Implementation of Item 20.6.3 of DAO 93-60 and Item 14.6.3 of DAO 99-53 Re: Clearing of Natural Vegetation within the Degraded Residual Natural Forests
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To provide the administrative-operational link with LGUs, this is reinforced by co-management oriented measures, such as the canvass of other applicable national laws are intimately linked to the previously described national laws, which include:

- § **Republic Act 10121 or the Philippine Disaster Risk Reduction and Management Act** • Local government units are required to prepare Local Disaster Risk Reduction and Management Plan and define the hazard risk areas, these have to be considered in the Forest Land Use Plan
- § **Republic Act 9729, Section 13 or the Climate Change Act of 2009** • Mandating the formulation of the National Climate Change Action Plan. Included in the National Climate Change Action Plan is the Philippine National REDD Plus Strategy 2009 Philippine National REDD Plus Strategy • Advocates for proper land use planning, tenure security in the uplands, and empowerment of local communities towards conservation and sustainable management of forest resources.
- § **Philippine Mining Act of 1995 (RA No. 7942)** - Provides that proclaimed watershed reserves, old growth or virgin forests, wilderness areas, mossy forests and NIPAS areas among others are closed to mining applications. Mining contractors are also required to undertake environmental protection and enhancement programs to include among other things management of open access areas for forest development and water conservation.
- § **The Indigenous Peoples Rights Act. (RA 8371)** – Ascribes rights of the ICC/IPs sustainable use, manage, protect, conserve land, water and other areas of economic value; ascribes the right to formulate and pursue their own plans for sustainable management and development of land and natural resources, provides that government adopt effective measures to implement laws that will preserve the quality of surface and ground water that may affect ancestral domains. A
- § **PD 1067 (1976)**- The Water Code of the Philippines governs the ownership, appropriation, utilization, exploitation, development, conservation and protection of water resources,
- § **PD 1515 (1978)** – vests the jurisdiction and control over watershed reservations to the Dept of Energy.
- § **LOI No. 845 (1979)** – The Dept of Energy is given the jurisdiction over all watershed areas and reservations proclaimed by the President of the Philippines
- § **LOI No. 917 (1979)** – declares certain areas including critical watersheds and proclaimed watershed reservations as wilderness areas.
- § **Proclamation No. 2149 (1981)** – declares certain areas including watershed reserves as environmentally critical and within the scope of the EIA system.
- § **Republic Act No. 9513** An Act Promoting the development, utilization, and commercialization of renewable energy resources and for other purposes.
- § **EO No. 223 (1987)** – Vests in the PNOC jurisdiction of the management of certain areas supporting hydropower and geothermal projects.
- § **EO No. 224 (1987)** – Management of certain watershed area was transferred to the jurisdiction of the National Power Corporation pursuant to the energy-generation program of government.
- § **Letter of Instruction 1002.** The National Irrigation Administration shall have the authority to manage, protect, develop, and rehabilitate the watershed areas of the *Pantabangan* and Magat Multi-Purpose Dam Projects, in the development of erosion control and watershed development projects in said areas and in order to attain their objectives, the National

Irrigation Administration shall be allowed, as a highly exceptional case, to harvest forest products and other agro-forestry products therefrom except logs and timber from presently growing existing trees; *Provided, however*, that an industrial tree-farming as well as a dendro-thermal project of about 5,000 hectares in each big watershed can be included in the project in hill tops.

- § **EO NO. 374 (1996)** – Provides for the creation of the Presidential Task Force on Water Resource Development and Management, mandated to oversee and coordinate the adoption and implementation of water resources policies and programs.
- § **RA 8041 (Water Crisis Act of 1995)** – directs the government to adopt urgent and effective measures to address national water crisis; provides for the identification and designation of critical watersheds where development undertakings are to be suspended.
- § **The Agriculture and Fisheries Modernization Act of 1997 (RA 8435)** – prescribes that DA coordinate with DENR concerning preservation and rehabilitation of watersheds to support irrigation systems; promotes development that is compatible with the preservation of the ecosystem in areas where agriculture and fishery activities are carried out

The table below presents the national policies regulating the land uses in forestlands

	Policy	Stipulation
Two main categories of forestlands <b>PROTECTION</b> an <b>PRODUCTION</b>	EO 318 Section 2.1.1.	State forestlands shall be identified, classified and delineated/demarcated on the ground and shall constitute the permanent forest estate unless otherwise stipulated by Congress; the same shall be categorized and managed either as primarily for production or as primarily for protection purposes, and in both cases, placed under a formal management scheme.
Protection Area	Policy	Stipulation
Slopes steeper than 50%	DAO 24-1991	Prohibits logging
	PD 705	
	Section 15.	Cannot be used as grazing land

	DAO 1995-15 Section 3. Definition of terms	Protection Forest forestlands outside NIPAS obtained essentially for their beneficial influence on soil and water in particular and the environment in general. These are areas <b>above 50% in slope</b> and more than 1,000 meters in elevation. Includes the critical watersheds, mossy forest, strips of specified width bordering rivers, streams, shoreline and reservoir, and steep, rocky areas and other naturally unproductive lands.
Above 1,000m asl	DAO 24-1991	Prohibits logging
	DAO 1995-15 Section 3. Definition of terms	Protection Forest forestlands outside NIPAS obtained essentially for their beneficial influence on soil and water in particular and the environment in general. These are areas above 50% in slope and <b>more than 1,000 meters</b> in elevation. Includes the critical watersheds, mossy forest, strips of specified width bordering rivers, streams, shoreline and reservoir, and steep, rocky areas and other naturally unproductive lands.
Old growth forest	DAO 24-1991	Prohibits logging
Natural and residual forests, and naturally grown trees	EO 23	1.2 Natural and Residual Forests- are forests composed of indigenous trees, not planted by man.  Section 2. Moratorium on the Cutting and Harvesting of Timber in the National Forests – A moratorium on the cutting and harvesting of timber in the natural and residual forests of the entire country is hereby declared unless lifted after the effectivity of this Executive Order.
Mangrove	R.A. 7161 Section 4. Referring to Sec. 71. In PD 705	"Sec. 71. Charges on Firewood, Branches and Other Recoverable Wood Wastes of Timber. - <b>Except for all mangrove species whose cutting shall be banned</b> , there shall be collected forest charges on each cubic meter of firewood cut in forestland, branches and other recoverable wood wastes of timber, such as timber ends, tops and stumps, when used as raw materials for the manufacture of finished products, Ten pesos (P10.00).
River easement	PD 1067 1976	<b>Article 51.</b> The banks of rivers and streams and the shores of the seas and lakes throughout their entire length and within a zone of three (3) meters in urban areas, twenty (20) meters in agricultural areas and forty (40) meters in forest areas, along their margins are subject to the easement of public use in the interest of recreation, navigation, floatage, fishing and salvage. No person shall be allowed to stay in this zone longer than what is necessary for recreation, navigation, floatage, fishing or salvage or to build structures of any kind.

	CA 141 Public Land Act 1915	Section 90. (i) That the applicant agrees that a strip of forty meters wide starting from the bank on each side of any river or stream that may be found on the land applied for shall be demarcated and preserved as permanent timberland <b>to be planted exclusively to trees</b> of known economic value, and that he shall not make any clearing thereon <b>or utilize the same for ordinary farming purposes</b> even after patent shall have been issued to him or a contract lease shall have been executive in his favour.
Hazard and risk areas	RA 10121	LGUs are required to prepare LDRRMP and define the hazard and risk areas, these have to be considered in FLUP.  Can include water security concern
Water production	R.A. 8435 (AFMA (1997) SEC. 12.	Protection of Watershed Areas. - All watersheds that are sources of water for existing and potential irrigable areas and recharge areas of major aquifers identified by the Department of Agriculture and the Department of Environment and Natural resources shall be preserved as such at all times.

The Government of the Philippines, at all levels, is dedicated to ensuring that gender and development (GAD) are fully incorporated in all projects design, implementation, monitoring, communication and evaluation. The passage of Republic Act 9710 or the Magna Carta of Women (MCW), and the subsequent effectivity of the Implementing Rules and Regulations (IRR) in 2010, provided the Philippine Commission on Women (PCW) with a fresh and expanded mandate to oversee women's concerns, as a catalyst for gender mainstreaming and as a lead advocate of women's empowerment, gender equity and equality.

Numerous enabling policies, guidelines and mechanisms to close the country's gender gap have been enacted and institutionalized such as the Magna Carta of Women, Philippine Plan for Gender-Responsive Development 1995–2025, Women in Development and Nation Building Act, to name a few.

While existing policies, guidelines and mechanisms have helped create an enabling environment and basic guidelines for women empowerment in the agriculture and rural sector, social and political institutional dynamics as well as cultural norms continue to exacerbate gender inequalities.

Land administration and tenure (specifically on forests) context

The Philippines has four land classification: agricultural, forest, national parks and mineral. The identification of each type of land (agricultural, mineral or forest) is done exclusively by the Executive Department through the Department of Environment and Natural resources (DENR). Forestlands is a legal classification and does not reflect actual use nor its actual state. Possession of these forestlands and other lands of the public domain, however long, cannot ripen into private ownership, however, the state recognizes the private and communal ownership rights of indigenous peoples to their ancestral domain by virtue of native title.

The DENR manages forestlands pursuant to the Revised Forestry Code of the Philippines, or Presidential Decree 705, which states that no person may utilize, exploit, occupy, possess or conduct any activity within any forestland unless that person has been authorized to do so under a license agreement, lease, license or permit. The DENR as the primary government agency responsible for the conservation, management, development and proper use of these lands, issues agreements, leases, licenses and permit on forestland to qualified Filipinos, individuals and corporation, with a maximum period of 25 years renewable for another 25 years.

Participating organized communities, or commonly referred to as Peoples' Organization, have access to the forestland resources under long-term land tenure agreements such as the Community Based Forest Management Agreement (CBFMA), provided, they employ environment-friendly, ecologically sustainable and labour-intensive harvesting methods. In protected areas, the tenure instrument issued to POs in multiple use and buffer zones, are called Protected Area-based Community Resource Management Agreement (PACBRMA). In both the CBFMA and the PACBRMA, indigenous peoples may participate as a member of the PO or may organize themselves as a People's Organization and apply for a CBFMA or PACBRMA. Note that being a holder of these agreements issued by DENR does not preclude the IPs from pursuing their ancestral domain titles with the National Commission of Indigenous Peoples (NCIP). Aside from community organizations, individuals and corporations can be tenure holders under the Integrated Forest Management Agreement (IFMA) and the Socialized Integrated Forest Management Agreement, and land use agreements such as Forest Land Grazing Management Agreement (FLGMA), Forest Land Use Agreement for Tourism (FLAGT) and Special Agreement for Protected Area (SAPA).

Forest landscape restoration in forestlands, technically involves restoration in lands of the public domain- in forest or timber lands (tenured or without), national parks and mineral lands under the responsibility of the DENR and tenure holders, forest lands under management by other government agencies (National defence, education institutions) and those co-managed with local government units. There are forested lands in the private domain owned by Filipinos individuals or corporation where restoration activities can also be undertaken.

#### *Institutions involved in the management of forestlands*

DENR does not have exclusive jurisdiction over forestlands, there is a National Commission of Indigenous Peoples (NCIP), National Power Corporation (NPC), National Irrigation Administration (NIA), and the Local Government Units, among other agencies, who can issue and hold management rights over forestlands. The DENR has sectoral bureaus in charge

of management, development and use of each land classification: forestlands with the Forest Management Bureau; national parks (also referred to as protected areas) under the Biodiversity Management Bureau (BMB) and mineral lands with the Mines and Geoscience Bureau (MGB)[12]<sup>12</sup>. The Land Management Bureau has the management and disposition of alienable and disposable lands of the public domain and other lands outside the responsibilities of other government agencies.

At the local level, the regional field offices of the DENR coordinate and oversee the implementation policies, regulations, programs and projects on environment and natural resources, including on land and forests while the provincial environment and natural resources office (PENRO) and community environment and natural resources office (CENRO) implement all DENR programs. CENRO and PENRO supervise activities of all holders of forestry lease, permits and agreements, amongst others. They also investigate, recommend appropriate actions to the Regional Office and National Office to resolve claims and conflicts involving land tenure issues. Community Environment and Natural Resources Offices (CENRO) can be found in each municipality/city or cluster of these LGUs. There are LGUs who manages community forests or has a co-management agreement with the DENR, and these forests are managed by its respective environment and natural resources offices (Municipal, City and Provincial ENRO).

#### *Management of forestlands inhabited by indigenous peoples*

Given the extent of the ancestral domains in forestlands (estimated to be 14 million out of the 15 million but so far only 5.4 million are titled and 3 million are on-going the titling process), indigenous peoples and their institutions are key stakeholders in forest landscape restoration activities. Institutions involved can be divided into two, the traditional governance structures referred to as the Indigenous Political System (IPS) in each tribe and ancestral domain and government institutions led by the NCIP. The IPS is the organizational and cultural leadership systems, institutions, relationships, patterns and processes for decision making and participation identified by the IPs such as Council of Elders, Council of Timuay, Bodong Holders, or any other tribunal or body of similar nature. An Indigenous Peoples' Consultative Assembly at the national, regional, provincial, municipal and barangay level is constituted by the NCIP to advise to them on matters relating to the problems, aspirations and interests of IPs, the body is composed of traditional leaders, elders and representatives from the women and youth sectors of the different ethnic groups.

NCIP is the primary government agency under the Office of the President responsible for the formulation and implementation of policies, plans and programs to promote and protect the rights and well-being of the indigenous peoples, including recognition of their right to ancestral domains.[13]<sup>13</sup> NCIP issues guidelines for delineation, recognition of ancestral lands/domains and issues the Certificate of ancestral Lands/Domain Titles (CALT/CADT). NCIP is led by a commission composed of 7 commissioners belonging to indigenous peoples representing the 7 ethnographic regions. At the national level, the Commission is supported by an Executive Director and 7 offices: Socio-Economic services and Special Concerns, Ancestral Domains Office, Policy Planning and Research, Empowerment and Human Rights, Education Culture and Health, Finance and Administration and the Legal Affairs Office. NCIP has 12 Regional Offices overseeing 46 provincial offices and 108 Community Service Centres. The NCIP is seriously under-resourced, in both human and

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financial capital, to carry out primary functions such as delineation and titling of ancestral domains. Until now, there are still on-going applications covering 3 million hectares, the bulk of which are forestlands.

At the landscape level, land and forest management of ancestral domains is intrinsically linked with the prevailing indigenous political structures (IPS). Actual forest managers are the ancestral domain holders, clans and indigenous people's organization. Under these regimes, forest lands are managed by organized community/clans through participatory approaches based on their customary governance systems with technical requirements (such as zoning, management plans which may include restoration). Tenure instruments such CBFMAs and IFMAs within ancestral domain continue to be in force and effect until they expire. DENR guidelines requires FPIC of the concerned IPs before these tenure instruments are renewed, hence providing security of tenure for non-IP forest dependent communities depends on results of FPIC process with ancestral domain holders. The FMB estimates that majority of the CBFM POs across the country are in this precarious situation.

Any forest land restoration activities within ancestral lands/domains by government and other entities should be pursued consistent with their management plans, customary governance systems and must have their free and prior informed consent. An evidence of FPIC is a Certification Pre-condition (CP) issued by the NCIP pursuant to a Memorandum of Agreement among the community, the project proponent and the NCIP.

#### *Management of protected areas*

Protected areas are managed by a Protected Area Management Board (PAMB), a multi-stakeholder body led by DENR Regional Director and composed of representative of the LGUs (barangay, municipal, city, province) Indigenous Peoples' representative, National Government Agencies involved in the PA (such as NCIP, DSWD), CSOs representative from NGOs, peoples' organizations and academe. The PAMB recommends issuance of Protected Area Based Resource Management Agreement (PACBRMA) to tenured migrants. If there are ancestral lands domain within protected areas, DENR in collaboration with the PAMB shall assist the NCIP in the identification, delineation and recognition of the claims of IPs. The ancestral domain area will be managed in accordance with the ancestral domain plan harmonized with the Protected Area Management Plan. Restoration activities within protected area are approved by the PAMB, and if such are within ancestral domains must have their free and prior informed consent.

Majority of ancestral domains falls under the legal classification of forestland under DENR management, harmonizing policies and regulations within the two contexts remains a challenge, in the meantime policies are formulated shying away from an explicit and operational language, thus making forest management, development and utilization complicated.

The reality is that classifications are not always clear-cut. The State upholds the policy of multiple land use, toward the end that the country's natural resources may be rationally explored, developed, utilized and conserved, which means that in actual use, forest rights (community forestry agreements such as CBFMA, CSCs, mining rights, rattan cutting permit) may overlap with ancestral domain claims; and ancestral domain claims may overlap with national parks. In many instances, the overlap leads to confusion on who is accountable for the management of the allocated forestlands and protected area. In this case, national and local convergence mechanisms have been in place to foster better coordination and synergy at the executive level such as the National Convergence Initiative and the Joint National Committee and Joint Regional/ Provincial Committee of the JAO 1, 2012. In addition, implementation of Executive Order 263 (1995) laid down an inter-agency CBFM Steering committee, to be led by DENR Secretary and composed of key national

government agencies who will be responsible for the formulation and development of policy guidelines to create incentives and conditions necessary to effectively carry out CBFM. However, several decades have passed this committee was not institutionalized. In November 2017, a National Working Group on CBFM, a voluntary multi-stakeholder group, was created by DENR to consolidate, assess and monitor CBFM initiatives, and work towards establishment of a functional Community of Practice, amongst other functions. The NWG-CBFM is chaired by the FMB Director and composed of the Directors DENR BMB, Ecosystems Research and Development Bureau, Policy and Planning Service, Foreign Assisted Special Project Services, CBFM stakeholders (CBFMA and PACBRMA POs, academe and research institution, NGOs, Development agencies, Private Sector, LGUs and Professional Organizations) while Government agencies such as NCIP will be invited as the need arises. The effectiveness of these convergence platforms is still evolving

### International commitments

The Philippines are very committed to sustainable development and are adhering to the 3 main UN conventions: Convention on Biological Diversity (UNCBD), Convention the Combat Desertification (UNCCD) and the Framework Convention on Climate Change (UNFCCC). For more details please refer to section 1.5.

#### 1.1.2 Context in intervention areas

As described in the Project Identification Form, the project will focus specifically on two critically important forest areas in the Philippines: The Cordillera/Caraballo Mountain Range and the Eastern Mindanao Biological Corridor:

1) **Cordillera/Caraballo Mountain Range:** the CAR has an area of 1,829,370ha, and is politically subdivided into six provinces and two cities, namely Abra, Apayao, Benguet, Ifugao, Kalinga, Mt. Province, and Baguio City. Its population in 2010 was 1,616,867, and its annual population growth rate was 1.82%. The predominant land use in the region is grassland and shrubs (45%, or 832,679ha) followed by forest (41%) and agriculture (11%)[1]. Data obtained from NMRIA on landcover for 2015, particularly for selected project areas are contained in Annex 7. 75% of the area is within the moist agro-climate zone (average annual rainfall of 500-2500 mm and growing period of 210-270 days) and 25% in the wet agro-climate zone. It constitutes part of the Luzon mountains Endemic Bird Area and coincides with areas proposed for management as the Cordillera and Caraballo priority areas for biological connectivity[2]; these include sites considered as being of “very high”, “extremely high critical” or “extremely high urgent” conservation priority[3]. Globally important species present in this area include but are not limited to the endemic Northern Luzon giant cloud rat (*Phloeomys pallidus*, LC), the endemic butterflies *Papilio benguetanus* (NT) and *P. chikae* (EN), the VU endemic Luzon narrow-mouthed frog *Kaloula rigida*, and the VU birds (classed as Important Bird Area trigger species) the Flame-breasted Fruit-dove (*Ramphiculus marchei*), the Spotted Imperial-pigeon (*Ducula carola*), the Philippine Eagle-owl (*Bubo philippensis*), the Luzon Water-redstart (*Rhyacornis bicolor*), the White-browed Jungle-flycatcher (*Rhinomyias insignis*), the Green-faced Parrotfinch (*Erythrura viridifacies*) and the Yellow Bunting (*Emberiza sulphurata*)[4].

2) **Eastern Mindanao Biological Corridor:** this priority area for biological connectivity includes sites considered as being of “extremely high critical” conservation priority and coincides with the Diwata Mountain Important Bird Area. This forms part of a chain of mountains running north-south, parallel to the coast, including the Diwata Range. This area has heavy precipitation year-round, with no pronounced dry season. The region contains one of the largest remaining blocks of tropical lowland rainforest in the Philippines, with at least 370 species of forest vertebrates (birds, mammals, amphibians and reptiles currently known of which *almost half are nationally endemic*; plant diversity is also very high, with more than 2,300 species known there (31% of the total species known for the Philippines)[5]. High priority species found here include the critically-endangered endemic Philippine eagle (*Pithecophaga jefferyi*) (Mindanao island is home to most of the population of the species); The area also includes the Agusan Marsh, which is *one of the country’s most ecologically significant wetland areas*, holding nearly 15% of the nation’s fresh water resources, and the last remaining example of the unique and intact peat swamp forest in the country.

Because of the large size of these mountain range and biological corridor, it is necessary to narrow the geographic extent of the project focus further into smaller Project Areas and Project Sites.

Project areas refer to the generally wider areas on which the project will have an influence or impact. These areas were identified and delineated through an iterative process that systematically narrowed down the geographic extent starting with the two broad initial target regions: Cordillera/Caraballo Mountain Range and the Eastern Mindanao Biological Corridor.

Project sites, on the other hand, refer to the smaller areas within identified project areas described above where on the ground intervention will be conducted during project implementation. These two areas are briefly described below.

#### Project Areas selection process

The selection of the project areas within the initial target regions was guided by the following principles/considerations:

- Need for restoration activities or follow up
- Proximity to critical ecosystems
- Proximity to key biodiversity areas, and possibility to create biodiversity corridors
- Potential for livelihood opportunities as a way to support restoration activities
- Location of current and proposed NGP and Forest Management Project (FMP) sites for the project to build on from current baseline conditions

The list above is consistent with the general vision and missions of GEF projects, which are: 1) rehabilitating or restoring critically degraded ecosystems, 2) protect key biodiversity and protected areas, particularly those that have high conservation values, 3) provide multiple benefits, including livelihood opportunities for local forest communities, and 4) provide ‘additionality’ or complementary interventions in support of current and proposed conservation efforts of the government.

Based on the factors listed above, a tiered approach based on GIS and socio-economic data, described in Annex 16, was adopted. The project areas described below were selected.

· **Pantabangan-Carranglan Watershed Forest Reserve** in the Cordillera/Caraballo Mountain Range

· **Simulao Watershed, within the Agusan River Basin** in the Eastern Mindanao Biological Corridor. For the Eastern Mindanao Biological Corridor, one of the key criteria was the linkages with the UNDP sister project. After extensive discussions between the design teams of the two sister projects, it was decided that this project will focus its activities in Cluster 4 (see Annex 8 linkages with sister project) as shown in Figure 7.2 maps (see Annex 7).

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#### Description of Project Areas

***(1) Pantabangan-Carranglan Watershed Forest Reserve (PCWFR) in the Cordillera/Caraballo Mountain Range***

The **Pantabangan–Carranglan Watershed Forest Reserve (PCWFR)** is a conservation area located in the upper reaches of the Pampanga River between the Sierra Madre and Caraballo Mountains. It was declared a Forest Reserve by Presidential Proclamation No. 561 dated May 21, 1969, reserving it mainly for watershed/forest purposes and prohibiting it from alienation and disposition. It covers about 84,500 hectares located mainly in the municipalities of Pantabangan and Carranglan and bounded by municipalities of Alfonso, Castaneda and Dupax del Sur, Nueva Vizcaya and Maria Aurora, Aurora. It is subdivided into four sub-watersheds: Barat, Diaman, Pinagloriahan and Seguim.

It serves as a source of water for agriculture/irrigation and for domestic uses. It encompasses the drainage basin surrounding the Pantabangan Lake created by the impoundment of the Pampanga River by the Pantabangan Dam.

As described above the area is of particular importance in terms of biodiversity. The forest reserve is dominated by secondary growth trees such as earleaf acacia, eucalyptus, yemane, ipil-ipil, mahogany and narra. On the ridges are areas occupied by Benguet pine forests mixed with montane Dipterocarp trees. The open grasslands occupying the flat areas near Pantabangan Lake primarily consist of cogon grass and talahib (*Saccharum spontaneum*). Alibangbang (*Bauhinia monandra*) trees also grow abundantly in the reserve. The reserve also provides an important refuge for wildlife such as the Philippine deer, crab-eating macaque, Philippine duck, Eastern grass owl, red junglefowl, and reticulated python. As presented in Annex 7, Figure 7.3 C, the watershed partially overlaps with the Casecnan Protected Landscape on its western boundary, and a small portion also overlaps with the Aurora Memorial Park in the southern part of the watershed. The PCWFR is perfectly located to be a biodiversity corridor between key habitats of globally important species.

Biophysical context

The geographic extent of PCWFR can be delineated based on the following geographic coordinates: 15° 50' 42" N, 121° 9' 53" E. Elevation ranges from 857 to 1,705 meters above sea level. Topography ranges from rolling to hilly to steep hills along the mountain ranges. The watershed supports hydro-power for the entire Luzon Region, provides irrigation for agriculture, and other livelihood alternatives such as fishing and ecotourism such as boating. The forest preserve contains commercial forests consisting of pines and dipterocarp forests, including forest plantations. It also supports a variety of habitat for wildlife species, both endemic and migratory, some of which are considered locally threatened, and is governed by the NIPAS Act of 1992. A Protected Area Management Board (PAMB), a multi-stakeholder body created in pursuant to the NIPAS Act and its implementing rules and regulations, currently manages the reserve.

The reserve is composed of 36,915 hectares of forest and reforestation areas, 35,665 hectares of open grasslands, 9,545 hectares of croplands, and 775 hectares of residential areas<sup>4</sup>. The forestland is an area of secondary growth trees, and open grasslands occupying the flat areas near Pantabangan Lake.

Between 2012-2016, 126 NGP sites covering a total of 3,046 ha of NGP areas were completed/planted within the PCWFR: 2,059 ha within the Municipality of Pantabangan and 987 ha within Carranglan. The size of the NGP sites range from the smallest (0.8 ha) and the largest (674 ha or average size of 35 has.). The most dominant commodity planted in these sites is timber. Other commodities are fruit trees, fuel wood, bamboo, and cacao. Some sites were purely for reforestation and were planted with fast-growing species.

Five municipalities were involved, but the NGP areas are mostly located within the municipality of Pantabangan, some in Carranglan (20), and the others are within the boundary municipalities of Alfonso Castaneda, Dupax del Sir and Maria Aurora. About 12 barangays (villages) were involved: most of the NGP areas are located in 6 barangays within the municipality of Pantabangan.

#### Socio-economic context

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The municipalities of Pantabangan and Carranglan are both first class municipalities with a population of approximately 30,000 and 41,000, respectively (2015 census). Most of the residents in the area are Ilocano, while others are Tagalog, Pangasinense and indigenous groups belong to the Ibaloi, Kankanaey, Kalanguya, and Bugkalot tribes.

As of the 2015 Poverty Census, poverty incidence in the Philippines stands at 21.6 percent. This means that nearly one out of five Filipinos lives below the poverty line and is considered poor. Region 3 (Central Luzon) has a very low poverty incidence at 11.2 percent (rank 15) overall but it presents wide contrasts. In terms of magnitude of poor population in Central Luzon, Nueva Ecija is the highest at 547,711, followed by Tarlac with 252,471, Bulacan with 151,491, Pampanga with 114,511, Zambales with 103,475, Aurora with 57,619, and Bataan with 14,793<sup>[6]</sup>. Magnitude of the poor refers to the number of families or the population whose annual per capita income falls below the poverty threshold.

The literacy rate in the Philippines is high. Indeed, the 2010 Census of Population and Housing uses only basic literacy<sup>[7]</sup> and states that 97.5 percent or 69.8 million of the total 71.5 million persons aged 10 and above were literate in 2010, which was 5.2 percent higher than the 92.3 percent in 2000. In Nueva Ecija, the literacy rate is lower than the national average at 93.5.

Annex 17 details the socio-economic and IP context of the area.

### *Livelihood from agribusiness and agroforestry*

Agribusiness like rice and vegetable farming and livestock (hog and cattle raising) production are the main sources of community livelihood. Others are engaged in gathering bamboo for *sawali* (interwoven splits of bamboo for walling) making, agroforestry farming, seedling production, and small businesses like sari-sari stores. Some are professionals employed in government service (e.g. teachers, agriculturist, engineers, medical practitioners), while others work as laborers in agriculture, construction and transportation (tricycle and public utility jeepney drivers/operations).

A significant number also depends on forest resources as their means of livelihood through illegal gathering of wood for charcoal making and timber poaching for firewood. With the price of firewood pegged at only Php 160 (US\$3) per 40-kilo sack, this type of livelihood is not only unsustainable but also inadequate to meet household basic needs. In addition, the cultural practices of indigenous groups include hunting of wildlife like wild pig, deer, monitor lizards, snakes and birds. They also practice slash and burn farming and planting along the contour lines agricultural crops like cassava, sweet potato, ginger and taro. All of these were also among the critical issues related to forest protection identified by community stakeholders engaged in the development of the PCWFR 2015-2025 sub-watershed management plans.

### *Potential for ecotourism*

A PCWFR ecotourism development and management plan has been drafted, but much work still needs to be done to assess the potential sites (waterfalls, hot springs, picnic areas, forest trek and bike trails, etc.) in terms of accessibility and the impact of tourism activities to biodiversity. And while there are no organized package tours being implemented at the moment, there are already free and independent tourists (FIT) frequenting the watershed area. Ecotourism within a protected area shall be explored by the project not only as a source of sustainable livelihood, but also how tour design and interpretation can help build a motivated constituency for environmental and social improvements.

### *Significance of Pantabangan Dam*

In May 1966, the Old Philippine Congress passed the Upper Pampanga River Project Act (Republic Act 5499) authorizing the construction of the Pantabangan Dam, which was completed in August 1974. The construction of the dam had great economic and social impact on the lives of community members. About 8,100 hectares of productive farmland and

the town centre (East and West Poblacion) along with seven outlying barangays (Villarica, Liberty, Cadaclan, San Juan, Napon-Napon, Marikit and Conversion) were submerged under the new lake. Residents were relocated to higher ground overlooking the vast reservoir, which became the new Pantabangan town centre.

The Pantabangan Dam is claimed to be the second largest dam in Asia and supplies the irrigation requirements for about 77,000 hectares of agricultural lands in Central Luzon. Its power station generates 112 megawatts of hydroelectric power. Presently, Pantabangan is comprised of 14 barangays spanning a total land area of 41,725 hectares and is the only town in the Philippines with three hydroelectric plants within its territorial jurisdiction.

The primary use of water within the watershed is for domestic and irrigation purposes. However, the expansion of agriculture and unregulated use of synthetic chemicals such as fertilizers, pesticides, and herbicides, as well increasing population and household requirements is affecting water supply and quality in the area. The watershed presently faces various problems such as decreasing stream drainage, flash floods in low-lying areas and/or near major river systems, deforestation/biodiversity loss, river siltation and water pollution.

Threats include small-scale mining, illegal entry occupation and kaingin encroachment, forest and/or grass fires and grazing.

## *(2) Simulao Watershed, Agusan River Basin in the Eastern Mindanao Biological Corridor*

The Agusan River Basin (ARB) is one of the eight major river basins in Mindanao. It covers a total land area of 11,932 square kilometres (or 1,193,200 ha) and encompasses the portions of Claveria and Bukidnon in Region X, Compostela Valley and Davao Oriental in Region XI, and Agusan del Sur, Agusan del Norte and Surigao del Sur in the Caraga Region.

The ARB is divided into three sub-basins on the basis of topographic features: the upper Agusan River basin, the middle Agusan River basin, and the lower Agusan River basin. The upper Agusan River basin is the section from its headwaters in the mountains of Compostela Valley province to Santa Josefa, Agusan del Sur to Veruela, Agusan del Sur, the middle Agusan River basin is the section of the river from Sta. Josefa to Amparo, Agusan del Sur while the lower Agusan River basin is from Amparo to its mouth at Butuan City, Agusan del Norte.

Cluster 4 and the Simulao watershed belongs to the middle basin, with the latter spanning a total drainage area of 97,800 hectares, of which 43,351 ha classified as 'critical watershed'.

#### Biophysical context

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The critical watershed of Simulao Sub-basin comprises the Municipalities of Bunawan, Trento, and Sta. Josefa, Agusan del Sur, the Municipality of Lingig and City of Bislig, Surigao del Sur, and portion of the Municipality of Boston, Davao Oriental and Monkayo, Compostela Valley. About 38% of the total land it is classified as alienable and disposable land while 62% is classified as timberlands. It is situated between 7° 56'18.50" to 8°18'35.21" North Latitude and 125° 53'23.34" to 126° 18'25" East Longitude. It is bordered on the North by the Municipality of Rosario, on the East by the municipalities of Tagbina, Bislig, and Lingig Surigao del Sur, on the West by the municipalities of Veruela, and Sta. Josefa, Agusan del Sur and on the South by the Province of Compostela Valley, Davao Oriental. The Simulao sub-basin has an area of about 97,838 ha. Forest Land covers 75%, Alienable and Disposable areas make 23% and 1.3% (1,236 ha. remain unclassified. The forest cover is 45%, shrublands and grasslands, 14% or about 13,422 ha, while cultivated land is about 35% or 33,744 ha. Tenured areas cover 22,334 ha or about 23% of the sub-basin.[8]

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There are 73 completed NGP sites in the Caraga Region of the sub-basin and cover a total of 2,146 hectares (average size is about 30 hectares). Most of the sites are located in the Municipality of Trento, Agusan del Sur and were planted during the period 2011-2017. The sites are mainly planted with indigenous species (lauan, molave and narra) as well timber (bagras, falcata), fruit trees and rubber. In the Davao Region of the sub-basin, all 28 NGP sites are located in the Municipality of Boston, Davao Oriental. These sites were planted in 2011-2013 for agroforestry (falcata) and reforestation purposes and cover about 288 hectares, the average size of which is about 10 hectares.

#### Socio-economic context

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The ARB is within two regions (Region XIII-Caraga Region and Region XI-Davao Region) where poverty is prevalent. Region 13 (Caraga) is the 2nd poorest region in the country with a high incidence of 39.1 percent. Agusan del Sur has the highest poverty incidence at 47.3 percent, followed by Surigao del Sur at 40.1 percent, Agusan del Norte at 34.9 percent, and Surigao del Sur at 34.7 percent.

The situation in Caraga where most of the target project sites will be located continues to remain a challenge. Though the region generally managed to reduce its poverty incidence from 41.7 in 2006 to 30.8% in 2015, the poverty incidence is still high among vulnerable groups, with children, farmers and fishermen among the top three. Such poverty affects the region's population of 2.6 million, about 380,000 (about 15%) of which are from the eight municipalities with areas inside the Simulao sub-basin namely: Trento, Bunawan, Rosario,

Sta. Josefa and Veruela in the Province of Agusan del Sur; and Bislig City, Lingig and Tagbina in the Province of Surigao del Sur. The poverty incidence in the Davao Region is significantly lower at 22%; the region remains to have the lowest poverty rate in Mindanao. The three municipalities in this region which form part of Simulao are Boston and Cateel in Davao Oriental and Monkayo in Compostella Valley, which have a combined population of about 150,000.

Nevertheless literacy rates in the area are high and aligned with national average (97.5 percent or 69.8 million of the total 71.5 million persons aged 10 and above were literate in 2010) Agusan del Sur: 97.2% and Surigao del Sur: 97.9%.

The sub-basin population is 76,898. This gives a population density of about 79 persons per sq. km, lower than that of the ARB. The household income in Trento is given as PhP 90,000 per year, which is lower than the annual HH expenditure of PhP 133,000 for Agusan del Sur. Hazard areas cover 70% of the sub-basin: 19% are high risk, 12% are moderate risk and 39% are low to moderate risk areas. These numbers are much lower than the other sub-basins in the ARB. Development opportunities in Simulao also abound: sustainable forest management, forest plantations, agro-forestry systems and biofuel plantations for the much needed power/energy in the area, among others. With 14% or 13,422 ha of shrublands and grasslands, biofuel plantation in 5,000 ha of these areas could supply the fuel requirements of power plants to generate 50 MW. The biofuel plantations could also benefit a good number of willing farmer families in the sub-basin.[9]

#### *Ancestral domains and land tenure*

It is important to note that Mindanao host the highest concentration of IP population (61%) in the country. These include Muslim groups often referred to as Moro peoples, and the non-Muslim and non-Christian groups generally referred to as Lumad. Most indigenous Lumad groups of Mindanao have traditionally earned their livelihood through swidden and wet rice cultivation, hunting and gathering, fishing, and trade of locally manufactured produce. The NCIP Regional Office in Caraga estimates that 60% of the IP population in the Caraga Region are from the Manobo tribes.

The Caraga Region has 21 approved CADTs covering 509,060 hectares with 74,009 IP rights holder belonging to the Manobo, Mandaya, Mamanwa, Banwa-on and Higaonon (as of April 30, 2018). But more recent information from NCIP Caraga (August 2018) reveals that there are now 23 approved CADT and 15 undergoing the titling process. The CADT delineation and titling process in the region is currently being spearheaded by the NCIP, the Pamana Project of the Office of the Presidential Adviser on the Peace Process (OPAPP), GIZ and some local government units.

It is important to note that most of the NGP sites in the Caraga Region are inside ancestral domains and did not undergo any FPIC process. These ancestral domains are also inhabited by non-IP forest dependent communities, who for the most part live harmoniously with indigenous peoples. There are also communities living in ancestral domains that have been awarded with CBFMAs; they will be renewing their agreements with the DENR and will need to secure the FPIC of IPs.

As per the ARB 2016 Master Plan, the government has issued 11 CADCs and CADTs in the ARB, which encompass areas occupied by about 26,500 IP households. These represent 9% of households found in its three (3) provinces. These IP groups are the Manobos, Mamanwa and Higaonon in the lower and middle section, and the Mandaya and Mansaka in the upper section. These areas cover about 296,157 ha or 23% of the combined area of the three (3) provinces within the Basin. About eight more CADT areas in the ARB are being processed by the NCIP. Conflicting land tenure instruments have also been identified as a key challenge in both the upper and middle basin. Legal land tenure instruments on forestlands issued by DENR and NCIP for the upland communities and IPs have overlapping in terms of boundaries. All CADTs/CADCs that have been issued by the NCIP have covered all land tenure instruments issued by the DENR, be it CSC, CBFM or other instruments resulting to confusion over the management of the areas.

The Agusan River Basin and Simulao sub-basin are inhabited by the Manobo or Manuvu tribes who are generally referred to as "river people". They have used the river and its surrounding mountains and forests for their sustenance and livelihood since time immemorial. They live in territorially defined domains and districts composed of several settlements and have their own indigenous governance systems and practices that have survived until today. Notable characteristics of their governance system are the four social classes<sup>[10]</sup>: the *bagani*, the *baylan*, commoner and slave. The *bagani* class defended the community and went to battle; the *baylan* is a female or male priest and healer. The commoners were farmers, and the slaves are those who have been seized in raids and belong to the ruler. As observed by researches, the Manobos adhere to a merit, selection process and reward leadership system; the opportunity to become the ruler is open to all, not just to the sons of the current leader. Moreover, there is strict adherence to customary rules and violations are considered taboo and subject to sanctions. Interestingly, women can participate in community activities, and there is a concept of the *bae* or woman leader. Finally, their concept of property rights is connected with the ownership of land (and its resources) by their ancestors. Most Manobos remain part of the poor and marginalized sector and are threatened by the continuous migration of lowlanders.

#### *Significance of mining in Eastern Mindanao*

Inside and around the ancestral domains of the Manobos and other lumads (IP tribes) in Eastern Mindanao are more than a hundred mining concessions, broken down as follows: 53 approved mineral production sharing agreement or MPSA covering 134,737.56 has; 25 MPSA applications covering 64,445.85 has; and 125 denied MPSAs covering 471,603.23 has.

There are five approved mining exploration permits covering 11,672.73 has and 70 more permits in various stages of processing covering 298,615.97 has. Minerals extracted are mainly gold, chromite and nickel.[11]

Mining operations are mostly inside ancestral domains and have to undergo the FPIC process. Evidence of a successful FPIC is a Memorandum of Agreement (MOA) between the IP community, the mining company and the NCIP; it should contain provisions on royalty payment (1% of the gross production/output), socio-economic support, and dispute resolution, among others. One of the biggest royalty paid by a mining company in the Philippines was in Caraga Region. A total of 72.5 million pesos was paid by Taganito Mining Corporation between 2006-2009 to the Mamanwa tribe of Claver, Surigao del Norte indigenous community. [12] Collection of royalty and monitoring the compliance of mining companies to other MOA provisions is a continuous challenge.

In a DENR Mining Audit undertaken in 2016-2107, mining companies in Surigao del Norte (Adnama Mining Resources, Inc) and Surigao Del Sur (Carrascal Nickel Corporation, CTP Construction and Mining Corporation, and Marc Ventures Mining Development (MVMD)) were found with environmental violations of siltation of coastal waters and mining in a watershed. The DENR report shows that the violations of MVMD have negatively affected 177 IPs and 2,745 farmers. In the municipality of Tagaanaan, Surigao Del Norte, almost an entire island was stripped of vegetation due to open pit mining operations of the Hinatuan Mining Corporation.

At present, a number of these mining companies are undertaking reforestation and rehabilitation efforts, and will have to do more as required by additional environmental measures for mining operations under DENR DAO 2018-10. For example, MVMD operations in Carrascal and Cantilan in Surigao Del Sur are now supporting sustainable livelihood development such as bamboo, cacao and coffee plantations and biochar production. In July 2018, they entered into a MOA with DENR Region 13 to “Adopt an NGP Site”. MMDC has committed to allot Php 6.3 million for the project, which will be managed by the DENR

### *Regional development thrusts and priorities*

As enshrined in its Regional Development Plan (RDP) 2017-2022, the Caraga Region strives to become the country’s Fishery, Agri-Forestry, Mining and Ecotourism (FAME) Center by 2022.

Endowed with enormous natural resources, the region’s major challenge is how to strike a balance between production and conservation as its economy is highly dependent on extractive industries, such as mining development, wood production and agri-fishery development. Competing use of the land and the resources therein has been apparent among the

priority sectors, which has been amplified by disjoint policies and processes as well as perceived weak vertical and horizontal coordination mechanisms between and among government instrumentalities.

Establishing a balance between production and conservation is important to ensure sustainability in the functioning of ecosystem services and availability of adequate natural resources for both the present and future generation and resiliency to disaster and climate change. This will be challenge given the current socio-economic challenges faced by communities in the ARB, as identified in their 2016 Master Plan, which are increasing population without complementary increase in livelihood opportunities; lower household income compared to the national average; increasing poverty incidence; overlapping land tenures; and stakeholder conflicts such as political boundary disputes, income-sharing from mining and water commercialization.

#### Project Sites selection process

In order to identify more specific project sites within these two project areas, the following features/criteria have to be considered:

- Existing institutional/governance capacities (CBFM, watershed, River Basin Councils or RBCs): Because of limited funding support, the project's strategy is to conduct intervention activities in areas where governance structures (or entities) are established and are already functioning under leadership of local stakeholders.
- Size of the area: Larger size area (above 50 ha if possible) will be considered in order to maximize the coverage and create meaningful biodiversity corridors.
- Areas with existing successful NGP investment, where value chain support activities can be led: This is consistent with the vision of the Enhanced NGP (ENGP) which is to provide 'value-adding' to existing and about to mature NGP areas, particularly those that have high value and marketable products.
- Areas with planned investments for NGP successor (based on degraded areas needing rehabilitation): This criterion is intended for those critical ecosystems that are degraded and in need of rehabilitation and are already included in government's investment plans such as for NGP or FMP.
- Presence of forestry-based enterprises, cooperatives, other value chain actors: This criterion puts premium on the choice of site selection to those potential areas that already have high potential for entrepreneurship by virtue of having forestry-based enterprises and other value chain actors.
- Less investment risk - Commitment from communities, POs (active stakeholders), reinforce champions: This criterion puts the project in a risk averse posture by focusing on those areas where the ingredients for successful implementation are in place, and barriers are also at a minimum

- Maximize investment coverage: This complements the principle of ‘incremental’ support, or additionality by focusing project investments on those that will complement government’s initiatives
- Optimization of linkages with BMB-UNDP sites in Eastern Mindanao (convergence area). This will ensure maximum complementarity between the two sister projects, particularly in the common site at Eastern Mindanao.

Specific project sites within each of the project areas will be identified during the implementation of the project. These sites were not selected during the project design phase in order to allow the project implementation team to conduct a more thorough assessment of the potential sites, including field visits and more in-depth consultations with the local communities through a participatory multi-stakeholder planning process (see Output 2.1). Such a process will lead to the selection of the most appropriate sites (see Activity 2.2.1), using a tier approach, with the consent and support of the stakeholders and local communities. The exact localization of the sites (GPS coordinates), including maps of these sites will be communicated to the GEF secretariat in due time.

While specific sites were not identified during the project design phase, initial assessment, including field visits, were conducted. Extensive data collection, field consultations, and spatial analysis were also done to generate baseline information about the project areas and potential project sites. Some of the data collected and analyzed will need to be updates and validated during implementation.

For the purpose of developing realistic targets during the project design phase, the following analyses was conducted:

- Spatial data (mainly shapefiles) of the following were obtained
  - o Different restoration projects, primarily NGP and FMP areas
  - o Project areas (e.g. PCWFR, Cluster 4 and Simulao Sub-Watershed in Eastern Mindanao)
    - Performed spatial analysis using GIS to identify project sites within the project areas
    - Generated a short list of pre-selected NGP sites within each project area
    - Selected from the short list of NGP sites (e.g. selected areas that were at least 50 hectares which was the average size of NGP areas after 2015)

- Examined and analyzed the attributes of the subjectively selected NGP areas
- Based on the analyses of the attribute, projections were made in terms of achievable values of indicators and reasonable estimates of targets

## 1.2 THE CURRENT SITUATION

### 1.2.1 Main environmental threats

#### Deforestation and forest degradation linked to agriculture expansion and logging

The Philippines Biodiversity Strategy and Action Plan (PBSAP) reported that between 1934 and 1990, the country lost 10.9 million ha of forest cover or an average annual loss of 194,000 ha. Of this area, 10.37 million ha or 95 percent was converted to other land uses while 0.52 million ha were damaged by logging (often poorly executed selective logging).

The country's total forest cover in 2011 was 7.168 million ha, or 23.89 % of the national territory (PFS, 2011). Of the total forest estate, open forests constitute 4 million ha, closed forest 2.5 million ha, plantations 330,000 ha, and mangroves 250,000ha. In 2003, 49.2% of the country's land area (14.76 million ha) was officially classified as "forestland", on which around 91% of the country's total forests were located. Critical watersheds support various hydro and geothermal power facilities that supply at least 35% of the country's energy requirements. Philippine forests also provide timber and non-timber forest products totalling US\$100 million in net benefits yearly[13].

The major drivers of deforestation and degradation can be generally grouped into the following categories: anthropogenic; natural causes; and other underlying causes.

Anthropogenic causes are human-caused primarily due, at least initially, to agriculture encroachment and logging activities by big companies. Historically, the process starts with commercial logging of primary forests, essentially converting these old growth forests to secondary forests, which in turn eventually become degraded and denuded, and converted to agricultural areas and other land uses by shifting cultivators and other forest dwellers for their livelihood. Agricultural expansion is the principal direct causes of forest loss: slash and burn ("kaingin") practices, which have historically been environmentally-friendly, have been significantly altered in recent years, with fallow periods being shortened due to increased population pressure and consequent land scarcity. Forest fires contribute to the further degradation of already cleared lands as well as causing damage and recession of existing forest remnants; they typically originate in already deforested lands and are mostly human-initiated as a tool for clearing fallow vegetation and rejuvenating pasture.

Natural causes also contribute to forest degradation such as fires, pests and diseases, and natural calamities especially typhoons, floods and landslides.

In addition to direct causes of deforestation and forest degradation other less obvious but equally adverse drivers are the indirect/underlying causes. These are broadly categorized by Rebugio et al (2007) as inappropriate policies, market failure, institutional weaknesses, and broad political and socioeconomic forces. Market failure stems primarily from the lack of adequate and more complete valuation of many of the services provided by the forests thereby providing very limited incentives to invest in forest protection and intensive management. Inappropriate policies that also had negative effects on forest rehabilitation include the lack of an appropriate incentive system for the private sector to invest in forest production and rehabilitation. Perhaps more importantly, inconsistency or general lack of policy stability in relation to timber utilization has also contributed to forest degradation. Rebugio et al (2007) also pointed out that DENR, which is the primary government agency responsible for the overall management of the country's forest resources, suffers from a number of institutional weaknesses which include: 1) unstable policies and weak policy implementation; 2) limited resources and institutional capacity; and 3) poor monitoring and evaluation. These factors collectively result in poor forest governance which in turn resulted in continuing degradation of the country's forestlands and resources. Finally, broader political and socioeconomic forces such as population increase, inequitable distribution of access and rights to exploit natural resources, limited economic opportunities for local communities conspired in putting severe pressure on forest lands thereby causing further forest degradation.

Concession logging was found to be one of the major drivers of forest loss in Mindanao (Surigao, Agusan, Bukidnon), usually followed by encroachment by shifting cultivators and small holder farming; however the model of "concession logging" no longer exists in the Philippines and all concessions have been cancelled or converted to other tenure instruments.

Deforestation and forest degradation to date have had major impacts on the globally important biodiversity of the target areas, through the reduction and fragmentation of available habitat. The Critically Endangered and endemic Philippine Eagle, for example, requires a home range of 100-130km<sup>2</sup> per pair in order to successfully reproduce[14]<sup>14</sup>, and so is extremely vulnerable to the effects of deforestation.

#### Repetitive burning, for farming or accidental, not allowing for natural regeneration

In addition to the forest remnants that are subject to continued deforestation and degradation due to the factors described above, large areas of the target landscapes are covered by degraded grasslands and scrublands: these are prevented from realising their biological and productive potential by factors that inhibit the natural processes of succession that would normally return them to their natural climax state. Most significant in this regard are grasslands dominated by the exotic *Imperata cylindrica*. Typically this vegetation has arisen from

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the initial opening up of natural forests on public land for logging, followed by clearance for slash and burn agriculture and conversion to pasture; occupiers may have been granted 25 year Pasture Lease Agreements (PLAs) and in many cases continue to occupy and claim lands (either informally or through formal arrangements such as Land Leases) after the PLAs have expired. If natural processes of succession were allowed to occur, these grasslands would progressively develop into natural forest: these processes are however typically inhibited by repeated burning, as a result of the escape of fires used for slash and burn agriculture and also due to deliberate burning to renew the grasslands for grazing (Imperata grass that re-sprouts after burning has a significantly higher protein content than older grass). Fire and clearance for agriculture also prevent other areas, currently dominated by low value scrublands, from developing into forest.

In many cases, these grasslands are being converted into upland crop farms planted to maize, upland rice and cassava, triggered by the interacting factors of rapidly increasing population, landholding systems, limited employment opportunities and declining areas of arable land per farmer in the lowlands. This conversion exposes the land to significantly increased rates of soil erosion: cumulative soil loss under maize cultivation has been predicted to be around 7 times greater over a modelled 25-year period than under grassland, with major reductions also in soil carbon stocks[15]<sup>15</sup>. It is therefore unsustainable and has major negative impacts on water supply and hydroelectric potential downstream.

The dominance of Imperata-dominated grasslands also has significant social and economic implications. The current productivity of these degraded “disclimax” areas is far below its potential, representing an opportunity cost for local communities and for the national economy: given that grasslands cover 6.5 million ha nationwide, or approximately 22% of the country's total land area, this is a highly significant consideration[16]<sup>16</sup>. Soils under this vegetation cover are typically degraded, acidic, with low organic matter content and susceptible to soil erosion.

### Climate change

The country is highly exposed to climate risks and variability in the form of floods, droughts (including those induced by El Niño) and severe tropical cyclones that damage crops, farms and related infrastructure. These extreme weather events in turn trigger secondary impacts in the form of landslides, forest-fires and crop, aquaculture and livestock disease outbreaks. The Philippines is ranked 5th on the Long-term Climate Risk Index (1997 – 2016), with 33% percent more climate-related disasters than the average of other, mostly smaller, countries in the top ten of the index. Most areas of the country, including over 70% of the population, are at risk to climate disasters (GFDRR, 2012). On average agriculture and fisheries sector absorbs 22% of the economic impacts caused by natural hazards and disasters (FAO, 2015). The Government estimates that between 2003-2013, disasters cumulatively damaged over 12.2 million ha of crops (DA, 2017), an area on average greater than 10% of arable land in the country, per year.

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Most of the country's regions and farming systems are exposed to multiple climate impacts.

Central and Northern Luzon, the eastern seaboard including the Visayan islands, and east Mindanao are all affected by many yearly tropical cyclones and related flooding from intense precipitation. These include some of the strongest ever cyclones to make landfall in the world. This affects a range of farming systems, including flooding of major lowland rice baskets, and wind-related loss and damage to horticulture, agroforestry (especially coconut, of which the Philippines is one of the world's largest producers) and related infrastructure. Droughts and El Niño affect North East Luzon and parts of the Visayas, central and western Mindanao, which impacts corn, rice and also horticulture. Between 2015-16, droughts associated with El Niño affected 16 of the country's 18 regions, threatening the livelihoods of more than 400,000 farming families (DA, 2016).

The Philippines has long been particularly vulnerable to extreme weather. But in recent years the nation has suffered from even more violent storms like Typhoon Haiyan or Magkhut (2018). On average, about 20 tropical cyclones enter Philippine waters each year, with eight or nine making landfall. And over the past decade, these tropical storms have struck the nation more often and more severely, scientists believe, because of climate change. In addition, two factors unique to the Philippines – its geography and development – have combined to exacerbate both this threat and its devastating consequences.

#### Vicious circle of land degradation and climate vulnerability

Land degradation is a serious problem in the Philippines with long term implications on the sustainability of agricultural production if not addressed. FAO defines land degradation as “the reduction of the capacity of the land to provide ecosystem goods and services and to assure its functions over a period of time for its beneficiaries”. An FAO project in the Philippines entitled, Land Degradation Assessment (LADA) categorized the forms of land degradation as: soil fertility decline, water induced soil erosion, and decline of water quality. LADA has also reported some alarming results particularly in the two regions where the project areas are located: soil erosion rates are 9.7 and 9.9 tons per hectare per year for Region 3 and 13, respectively; soil fertility decline is 317,611 and 26,255 hectares for Region 3 and 13 respectively.

LADA has also noted the strong link between forest and land degradation problems concluding that reduction of forest vegetation mainly due to conversion of forests to other land uses have been two of the driving forces in the loss of productivity, reduced water yield, and increased flooding in agricultural lands.

Land degradation is a serious problem in the Philippines with long term implications on the sustainability of agricultural production if not addressed. There is also a strong link between forest and land degradation problems concluding that reduction of forest vegetation mainly due to conversion of forests to other land uses have been one of the driving forces in the loss of productivity, reduced water yield, and increased flooding in agricultural lands.

Ecosystem degradation also has significant implications in terms of vulnerability to climate change and natural disasters. Deforestation of mountain watersheds undermines the roles of forests in buffering variations in hydrological regimes and river flows, which are likely to become increasingly pronounced under conditions of climate change and during extreme storm events and to pose increasing risks to populations living downstream. The degradation and loss of riparian, aquatic and coastal vegetation similarly increases the vulnerability of local populations to climate change and variability and to natural disasters, given the importance of these vegetation types for ecosystem-based adaptation (EBA).

Addressing the combined problem of degradation in agricultural and forest lands is one of the concerns of this project. As described in the succeeding sections, the project will adopt two related strategies, namely Sustainable Forest Management (SFM) and Sustainable Land Management (SLM) to help address these two degradation problems. The Bureau of Soil and Water Management implemented an SLM project with the general objective: to develop sustainable land management (SLM) decision support tools for combating land degradation, and the effects of climate change. On the other hand, the Forest Management Bureau has three SFM related programs all aimed at restoring open degraded forest, namely: National Greening Program (NGP), Forest Management Program (FMP) and Integrated Natural Resources Program (INREMP).

This project will pursue activities that will both address agricultural and forest degradation, and will implement both SFM and SLM approaches.

#### Mining and other activities with strong impact on the environment

Based on the analysis in the National Biodiversity Strategy and Action Plan (NBSAP), mining claims and rights overlap with defined areas for PAs, ancestral lands including those planned for conservation areas that threaten ecological sustainability. The Philippines is a significant producer of gold, copper, nickel and chromite and is also abundant in non-metallic and industrial minerals such as marble, limestone, clay, feldspar and aggregates. Since the Supreme Court upheld key provisions of the Mining Code in 2004, there has been a heavy influx of mining activity and investment. As of 2013, about 339 Mineral Production Sharing Agreements within 602,012 ha had been issued (DENR-MGB 2013). Since most of the country's priority conservation areas sit on top of huge mineral reserves, many significant biodiversity areas are in conflict with prescribed land uses and management objectives. Although mining is not allowed in existing NIPAS declared PAs, there is high likelihood that the remaining biodiversity rich KBAs which are not yet established as PAs will be allocated to mining in the absence of a national or corridor level land use allocation framework.

### Biodiversity loss and lack of connectivity between islands of biodiversity

The main driver of biodiversity loss is habitat loss. As explained in the paragraph above, the Loss and degradation of natural habitat stem from deforestation due to conversion of forest areas to agriculture, poor agricultural practices, incoherent agricultural and natural resources policies, informal settlements, (illegal) logging, irresponsible mining, forest fire, and infrastructure development (roads, residential and commercial establishment). In the coastal and marine ecosystems, this is due to conversion of mangroves to fishponds and other coastal developments, damages to coral reefs and seagrasses, pollution from industrial sources, agricultural runoff, and siltation. Weak management of protected areas and other natural habitats are also contributory factors to loss of biologically important habitats of globally threatened species and unique ecosystems.

Degraded Imperata-dominated grasslands and the annual cropping systems that in some places have replaced them have very low levels of biodiversity, and crucially offer little in terms of habitat or connectivity potential for the globally important species that are found in the adjoining forest areas. As a result, even if those remaining forest areas were subject to effective protection, they would be left as disconnected “islands”: the ranges of their constituent species would continue to be limited to the forests themselves, and there would be limited opportunity for genetic flow between forest islands: both of these factors would seriously jeopardise the long term viability of the populations of these species (this is especially critical in the case of species that require large range areas, such as the Philippine Eagle described above). The proximity of the grasslands to natural forests also exposes the forests to the risk of damage from wildfire spreading in from the grasslands.

### 1.2.2 Baseline initiatives

Several projects and programmes linked to biodiversity conservation and climate change mitigation through forest and land restoration (either addressing the causes of degradation or setting up the basis for restoration) are being implemented in the country. The project will create synergies with the following projects and programs. The total co-financing volume from the project is USD 16,378,061 (USD 15,778,061 from DENR managed projects (NGP, FMP, CBFM-CARP & INREMP), USD 531,588 from the Bureau of Water and Soils Management (BSWM) of the Department of Agriculture (DA) and USD 500,000 from FAO Forest and Landscape Restoration Mechanism (cf below).

### Baseline projects providing co-financing

The **National Greening Program (NGP)** – (2011-2016) and its successor the **Expanding the coverage of the NGP (ENGP)** – (2017-2022) are government funded programs managed by the Forest Management Bureau of DENR. They have nationwide mandates.

*The National Greening Programme (NGP)*<sup>[17]</sup> is an ambitious forest rehabilitation programme funded through Government resources, which originally sought to grow 1.5 billion trees in 1.5 million hectares nationwide over a period of six years, from 2011 to 2016. By the end of 2016, the National Greening Program (NGP) had spent 612 M USD (32,213,952,000 PHP) and planted 1,662,229 ha.

Aside from being a reforestation initiative, the NGP is conceived as a strategy for climate change mitigation and for the reduction of poverty, providing alternative livelihood activities for marginalized upland and lowland households relating to seedling production and care and maintenance of newly-planted trees. As a Convergence Initiative among the Departments of Agriculture (DA), Agrarian Reform and DENR, half of the targeted trees to be planted under the program were proposed to consist of forest tree species intended for timber production and protection, and the other half of agroforestry species. Areas eligible for rehabilitation under the program include all lands of the public domain. Specifically, these include forestlands, mangrove and protected areas, ancestral domains, civil and military reservation, urban greening areas, inactive and abandoned mine sites and other suitable lands.

Through Executive Order 193 of 2015, the NGP has been extended from 2016-2028, and its coverage has been expanded to include all the remaining unproductive, denuded and degraded forestlands in the country. The order also encourages the participation of the private sector in the implementation of the extended NGP, with a view to achieving carbon neutrality.

Under *the Expanding the coverage of the NGP (ENGP)*, the government targets to reforest 1.2 million hectares between 2017 to 2022 in accordance with the updated 2016-2028 Master Plan for Forestry Development. The 2017-2019 budget is estimated at 329 MUSD (17,365,581,000 PHP).

Building on the gaps identified in the first NGO, one of the ENGP's objectives is to provide opportunities for communities to develop social enterprises to produce sustainable livelihood and optimize benefits, and encourage local government units, organized upland communities in the development of forest plantations including forest parks. The ENGP also seeks to attract private sector interest to invest in forestry-related undertakings like tree plantation development and forest protection projects as a measure to achieve carbon neutrality.

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In a report published by ERDB[18]<sup>18</sup>, the table below was reported as accomplishment report.

Table shows that as of 2018, out of the 1.766 Million hectares targeted, 1.874 Million hectares were planted for an accomplishment of 106%. A total of 1.588 Billion seedlings were planted, generating a total of 4.3 Million jobs and employing 614, 128 persons.

The **Forest Management Program (FMP)** – (2012-2022) is funded by Japan International Cooperation Agency (JICA) and the Government of Philippines and managed by the Forest Management Bureau of DENR. The total project investment cost is estimated at 111 million USD (Php 5,870.64 million). Total cost to be borne by Government of Philippines (GOP) is 22 million USD (Php 1,162.26 million) and total cost to be covered by the loan is 39 million USD (Php 4,708.38 million[19]<sup>19</sup>). It focuses on three critical river basins and 24 target sub-watershed areas.

The project aims to strengthen forestland management in critical river basins through the implementation of collaborative and comprehensive Community-Based Forest Management (CBFM) strategies.

The Project is expected to integrate conservation and development-oriented activities with full participation and capacitation of local communities. These include 147 People's Organizations (POs) within the identified 24 sub-watershed areas as well as the DENR and other stakeholders.

The specific objectives of FMP are:

1. Rehabilitate degraded forestlands in three (3) critical river basins (Upper Magat and Cagayan, Upper Pampanga, and Jalaur);
  2. Improve forest conservation and socio-economic conditions of affected communities;
-

3. Contribute to disaster risk mitigation efforts in vulnerable areas; and
4. Strengthen forestland management through community-based management strategies;

The **Integrated Natural Resources and Environmental Management Project**<sup>[20]</sup> – (2013-2020) is funded by a mix of grants (Asian Development Bank and GEF) and loans (Asian development Bank and IFAD) and executed by the DERN and the Department of Agriculture. Its total budget is 123.91 million USD. It focuses on key watersheds in Bohol, Cordillera Administrative Region, lake Lanao and the province of Bukidnon.

It aims at improving the condition of watersheds in four upper river basins (URBs): Chico River Basin, Wahig-Inabanga River Basin, Lake Lanao Basin, and Upper Bukidnon River Basin. The expressed goal of INREMP is “to manage the upper river basins and watersheds to support poverty reduction, watershed management, biodiversity conservation and climate change policy objectives with emphasis on developing the capacities of the local governments, institutions and upland communities as development partners”. There are four key project outputs:

1. River basin and watershed management plans established;
2. Smallholder and institutional investments for conservation increased and livelihoods improved in URBs;
3. River basin and watershed management capacity and related governance mechanisms strengthened;
4. Project management and support services delivered.

The **Community-Based Forest Management-Comprehensive Agrarian Reform Program** (CBFM-CARP) comes from the merging of CBFM and CARP. CARP is a poverty alleviation program of the government primarily for poor farmers and agricultural lands started over 30 years ago. When CBFM was launched in 1993, DENR -FMB committed resources to support community-based program in forestry (e.g. CBFM) that follows the guidelines of CBFM principles.

The **Bureau for Soils and Water Management (BSWM) of the Department of Agriculture** vision is to sustainably manage soil and water resources for agricultural production systems that are in harmony with nature where food is health-safe and food resource production is economically viable and socially acceptable. This project will build on (i) on-going

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programs involved in the identification of appropriate sustainable land management practices for some project sites, mostly in Luzon and (ii) PhilCat which is management by BSWM and is one of the main knowledge sharing tool the project would like to enhance with Forest and Landscape Restoration content.

The **FAO Forest and Landscape Restoration Mechanism** (FLR Mechanism) – (since 2014) is funded by several donors (including the Republic of Korea, the French GEF, the GEF and the German government) and is managed by FAO.

The FLRM is helping countries to achieve their commitments towards the Bonn Challenge, Aichi Targets and related goals by supporting the implementation as well as monitoring and reporting of FLR. The FLR Mechanism is providing specific country support in the Philippines since 2016 to: 1) facilitate multi-stakeholder processes to defining needs and opportunities for FLR resulting in a national FLR plan; and 2) establishing pilot projects that leverage new large-scale projects and programmes with national, bilateral and multilateral donors and the private sector.

Two projects of the FLR are of particular interest for this project: The Restoration Initiative (supported by the GEF see section 3.1.2) and The Paris Agreement in action: upscaling forest and landscape restoration to achieve nationally determined contributions supported by IKI and to be launched in early 2019.

Since 2016, the FLRM supported the following activities in the Philippines:

1. Enhanced capacity of government staff (FMB-DENR) on forest and landscape restoration through the conduct of the Restoration Opportunities Assessment Methodology (ROAM) training in collaboration with the International Union for Conservation of Nature (IUCN);
2. Established fire lines (61,000 square meters in total) in Carood Watershed to address the forests fire issue and to support the Forest and Landscape Restoration (FLR) activities in the area;
3. Supported the FLR activities with Assisted Natural Regeneration (ANR) method in Carood Watershed Model Forest (including grass pressing, planting of crops, and other supporting activities such as the establishment of small farm reservoirs (SFR) and the repair of access road going to the FLR sites)
4. Enhanced capacity of farmers in Carood Watershed Model Forest through trainings on FLR mechanism and concept;
5. Enhanced capacity of the Technical Working Group and the Council members of Carood Watershed Model Forest through educational tour on FLR.

In the coming years the FLRM will support the FLR in the Philippines through the IKI project mentioned above. As recognized in the Paris Agreement, forest-based options are key to achieve NDCs through joint mitigation and adaptation approaches providing both carbon benefits and non-carbon-benefits (REDD+).

The effective implementation of the Bonn Challenge, through several regional initiatives, represents an opportunity to scale up FLR efforts and contribute to several NDCs. Three regions with diverse landscapes and high potential for increasing both forest carbon stocks and the provision of non-carbon benefits through large scale FLR programmes are targeted: the Pacific Islands (Philippines + Fiji), the GGWSSI region (Ethiopia + Niger) and the Mediterranean (Lebanon and Morocco). To turn NDC and FLR pledges into action in the three targeted regions and building on the global movement led by the Global Partnership on Forest and Landscape Restoration (GPFLR), the project will support: (i) existing regional platforms for a better integration of FLR options in NDCs with a strong focus on knowledge sharing, capacity development, mobilization of innovative financing & investments options (including private sector investments and climate finance including the Green Climate Fund) and FLR monitoring guidance for an efficient reporting of FLR impacts to UNFCCC in the context of the Paris Agreement and (ii) implementation of existing national FLR action plans/programmes with a multidimensional approach

Within this framework, the Philippines are very committed to promote FLR. The project will support this effort and focus on 3 main pillars:

1. An enabling environment is created for the implementation of national FLR programs and scale up through inter sectoral coordination and relevant policy - Support the implementation of the national FLR action plan approved in Philippines in 2017 with a focus on its Knowledge Management and Dissemination component and the promotion of ANR best practices and management of native species
2. Restoration approaches are implemented in selected sites with a high potential for FLR providing both carbon and non-carbon benefits through participatory and gender-responsive planning, community driven FLR investments and sustainable economic alternatives provided at landscape level -Participatory planning and implementation at scale of Assisted Natural Regeneration in two selected sites of Philippines: Carood Watershed Model Forest on Bohol Island and Baatan watershed on Luzon Island.
3. The monitoring capacity is enhanced and both socio-economic and environmental benefits are monitored with a minimum set of indicators well adapted to both national and regional contexts - Build capacity on FLR monitoring in the Philippines by promoting guidance products developed by FAO and GPFLR members and use the tools in restored areas on Bohol and Luzon (e.g. FAO/WRI guidance report-Collect Earth Open Foris).

The Department of Environment and Natural Resources (DENR) - Forest Management Bureau (FMB) and the Carood Watershed Management Council on Bohol Island in the Philippines are the main partners of this project.

Although the Government, for example through the NGP, is increasingly recognising the importance of incorporating a wider range of environmental considerations into reforestation and restoration initiatives, under the baseline scenario the focus of such initiatives is likely still to focus principally on conventional approaches to reforestation. This would fail to adequately take into account their compatibility with diverse environmental and development goals; the benefits offered by or for restoration will remain inadequate to convince many land managers that it is an attractive alternative to current land uses such as extensive grazing; and producers will fail to realize the benefits achievable through sustainable tree-based production systems such as shade coffee, cocoa and NTFP collection.

### Sister project

**The UNDP/BMB sister project (2019-2023)** under the Biodiversity Management Bureau of DENR.

A sister project entitled “Integrated Approach in the Management of Major Biodiversity Corridors in the Philippines” with a budget proposal of USD12.6M was cleared by GEF CEO. The project aims to establish and operationalize a comprehensive planning and management framework to manage biological corridors in an integrated manner which will generate multiple benefits including effective conservation of globally significant biodiversity, reduced deforestation and degradation and enhanced livelihoods.

This project was purposely developed and proposed as a sister project of this current project. Annex 8 details the linkages between the 2 projects. Both projects share the same overall goal and objectives, i.e. establish and operationalize integrated planning and management framework to manage the forests for multiple benefits such as biodiversity, forest restoration, reduced deforestation and land degradation, and enhance livelihood of forest communities.

The project has three components, namely: Component 1: Effective coordination and governance framework for integrated biodiversity management of Philippines biodiversity corridors system; Component 2: Application of Integrated Biodiversity Management (IBM) and community sustainable use and management systems in the two pilot biological corridors; and Component 3: Knowledge management, gender mainstreaming and monitoring and evaluation.

The UNDP Project and this current FAO project share a common project area in Eastern Mindanao biological corridor. Having a common project area provides the opportunity for both projects to conduct a typology of interventions that are locally relevant and also complementary. For instance, in most instances, the UNDP project can focus on biodiversity conservation concerns while the FAO project may concentrate on restoration efforts that are complementary to biodiversity objectives of the UNDP project. With the common project area, the two projects can also co-locate project sites where the interventions are complementary to the biodiversity connectivity and conservation objectives of both projects. Annex 8 shows the synergy and complementarity of the two projects.

#### 1.2.3 Remaining barriers to address the environmental threats

### Policy and regulatory instruments, including tenure arrangements, are unfavourable for the support and national upscaling of effective, attractive and sustainable approaches to restoration

Several studies and reports have stated that DENR policies, regulations, and approaches are not always consistent, sometimes conflicting, and often lead to disjointed governance, planning, management, and financing of some initiatives and activities. For example, areas that are already under land tenure management control such as protected areas either proclaimed as such through Presidential Proclamations, or legislation through Republic Acts, have often been granted additional permits or land tenure arrangements such as Mining Production Sharing Agreements (MPSA), Pasture Leases, or other production-based activities or enterprises. The interplay of various policies and programs in the same landscape oftentimes result in unintended results due to the absence of a commonly agreed planning and management framework for all sectors to follow.

A range of legally-defined tenure instruments have been developed covering the management and use of forests, including Timber Licensing Agreements (TLAs), integrated forest management agreements (IFMAs), industrial tree plantation agreements (ITPLAs), socialized industrial forest management agreements (SIFMAs), and community-based forest management agreements (CBFMAs). Planned or government-sanctioned extraction of timber and NTFPs (rattan, bamboo, resin, and other products) has been allowed through the issuance of land tenure instruments and permits to ensure sustainability of the resources; however, logging in natural forests was banned in early 2011 under Executive Order 23. Currently and largely as a consequence of this move (aimed at countering the negative impacts of such logging), it is very difficult for farmers to cut and sell even planted trees that they have tended and managed. The restrictions on trees regenerated naturally (including through ANR) are very strong in most cases, as natural regeneration is associated with intact natural forests. In addition to preventing local communities from carrying out sustainable extraction of timber from their forests, restrictions on cutting and selling trees reduces the farmers' motivation to invest in their restoration and sound management. Furthermore, lack of clear tenure means that large areas of forestlands (forested or otherwise) are in effect "open access" – which also implies that individual land managers have limited motivation to invest significantly in restoration their forests.

### Habitat fragmentation due to the lack of landscape planning

Another barrier, which is corollary to inconsistent policies, is fragmented implementation of key programs that fails to effectively address threats to biodiversity and natural resources decline. The absence of coordination between key stakeholders and of an integrated planning framework within the landscape results in failure to consider connectivity within the corridor. It is manifested by programs being implemented with little or no consideration to addressing threats to habitat loss, maintaining ecosystem flows, fragmentation, and conversion of high conservation value forests to agriculture. Thus, current biological corridors remain a mosaic of disjointed land management units often with incompatible objectives.

### Low commitment from communities to restoration due to the absence of long-term incentives

The lack of long-term incentives has often led to weak community level mechanisms that promote sustainable natural resource utilization, conservation of biodiversity, including monitoring of compliance. A system of incentives is essential to encourage private or land tenure holders in critical areas within the landscape to pursue sustainable natural resource management within their land tenure areas and contribute to providing or expanding biological corridors as pathways of key species while ensuring improvement in ecosystem services and resilience.

Little attention has as yet been paid to identifying alternative, more sustainable, ways for ensuring genuine and long-term buy-in: the NGP does provide for the establishment of tree crops (such as fruit trees), but the range of restoration scenarios to which such options are suited is limited, and few sustainable options exist for rewarding investment more specifically focused on generating longer term or global benefits such as habitat protection, biological connectivity or watershed protection.

#### Low consideration for the possible multi-benefits coming from biodiversity and ecosystem sensitive restoration

The National Greening Programme (NGP) has resulted in significant increases in tree and forest cover and has also generated significant levels of employment for local communities. The NGP design allows for a range of different modalities of ecosystem restoration which include river bank rehabilitation, mangrove rehabilitation, urban forestry, multi-cropping or agroforestry and enrichment planting. Relatively little emphasis has been placed, however, on diversifying the objectives of this “greening initiative” to optimize benefits for biodiversity, watershed protection and livelihood sustainability, or to tailor greening initiatives to reflect local variations in biophysical, socioeconomic and productive conditions as well as landscape-level dynamics.

The Enhanced NGP, approved in 2015 will continue to emphasise the diversification of the aims and benefits of restoration, including considerations such as watershed protection and climate change resilience. To put this into practice, however, it will be necessary to overcome the current compartmentalization (and in some cases mistrust) that separates actors traditionally involved in the forestry sector and its productive aspects, and those normally involved in issues of environmental and biodiversity conservation. Currently there is limited understanding among many actors of the potential that exists for the simultaneous and integrated generation of environmental and development benefits through innovative approaches to restoration.

The emphasis to date on conventional approaches to reforestation has been at the expense of alternative approaches such as assisted natural regeneration (ANR), which offer significant potential benefits in terms of reduced requirements for labour and material inputs, and therefore greater cost-effectiveness. A negative side to the potentially greater cost-effectiveness of alternative approaches such as ANR is that it reduces the opportunity to generate short-term employment benefits for local communities, which currently constitutes one of the major reasons for their acceptance of the NGP.

#### Inadequate knowledge and capacity at ground level for the formulation and implementation of effective, attractive and sustainable approaches to restoration

In the target areas, as in other areas throughout the country, the status quo in which land managers and settlers keep lands under degraded fire-climax vegetation is maintained due to their limited awareness of and access to attractive alternatives that would recognize their livelihood and development needs, the time horizons of their decision-making, and their access to technical, financial and human resources.

Land managers and settlers perceive that allowing grasslands to revert to forest would generate limited benefits for them beyond the short-term opportunities for paid employment offered by reforestation initiatives such as the National Greening Programme. In fact, they perceive that this transition would limit their options for generating income (currently based on cattle ranching), despite the low levels of productivity and profitability of ranching under current conditions. This perception is lent further validity by the fact that national policy commitments that guarantee local stakeholders ownership and use rights over trees that they have established, are often not respected at field level by local authorities. Stakeholder face tedious bureaucratic and financial obstacles to obtaining permits to cut and sell their trees to gain returns from their investments in tree establishment.

A wide range of alternative restoration options exists, apart from restoration to forest, that have potential to generate livelihood and development benefits, as well as favouring biodiversity conservation and sustainable land management. These are in the form of species-rich, multi-layer agroecosystems in which crops of both subsistence and commercial potential are integrated with trees, under a plethora of potential alternative configurations (ranging from intensified no-burn “agrosilvopastoral” cattle raising systems with the inclusion of fodder and shade trees, through to the harvesting of non-timber forest products from virtually intact forest ecosystems). Land managers are hindered from converting degraded grasslands to such land uses by: i) their limited technical knowledge on how to do so; ii) their limited access to sustainable sources of the physical and financial resources required to undertake the transition and to maintain and manage the production systems once established; and iii) non-existent and/or limited integration into the marketing and value chains for the products of such agroecosystems.

The current lack of nurseries with multiple species and the distance between the nursery and the planting area are contributing to some of the low planting success rates. Some good examples of community or privately-owned nursery exist and should be further developed.

#### Inadequate follow up and monitoring of existing restoration activities hinder their long-term success

The monitoring of restoration activities within the NGP is currently restricted to survival rate of plant, which doesn't give any indication on the success of restoration more globally as growth rate, species diversity, fruits yields, etc. aren't considered. This sole indicator can also have perverse effects as some stakeholders have develop strategies to make believe high survival rate (planting last minute seedling or even using branches) while the reality is different. This greatly limits the success of the restoration efforts.

At the same time, multiple initiatives developed indicators and monitoring tools, which could be used for the NGP/ENGP.

#### Low involvement of private sector in restoration limiting its reach

A study conducted by FMB-DENR in 2012 revealed that, from 2000-2010, out of 306,958 reforested hectares, 21%, or 57,224 ha, was attributable to the private sector. The Government accounted for 79%, or 212,857 ha, of this reforestation effort. The private sector thus plays a significant role, both in shaping and realizing reforestation of the country. If restoration is to happen at a large scale, mechanism should be set up to ensure that the private sector is an integral part of the effort.

### 1.3. THE GEF ALTERNATIVE

#### 1.3.1. Theory of change & Incrementality

Under the baseline scenario, the Government will continue to make major investments in forest restoration through the Enhanced National Greening Programme (successor of the NGP) and other initiatives supported by donors such as the Forest Management Program (FMP), and the Integrated Natural Resources Management Program (INRMP). These programs focus on reforestation, restoration, protected area management and environmentally-sustainable production practices.

Reforestation investments under this baseline scenario will mostly use conventional reforestation techniques and a limited range of species, which is likely to result in plantations with limited structural or compositional diversity. While these efforts will result in some environmental benefits, these will largely be limited to increases in carbon stocks mainly due to increases in tree cover and forest biomass. Benefits for biodiversity, habitat and connectivity will be limited as they are not directly the target primary goals of these investments. To achieve such targets, restoration should be considered at landscape level. Indeed, the application of site-specific perspectives in determining species choice and management practices in reforested areas will mean that conditions in these areas are likely to have little in common with any adjacent areas of high conservation value forests. As a result, the boundaries between natural ecosystems and reforested/restored areas are likely to constitute barriers to the gene flow on which the viability of populations of many endangered species present in the natural ecosystems, depends. The generation of other environmental services, of local and national importance, will similarly be hindered by inadequate matching of species and management practices to site conditions and objectives, with the risk for example of species with high water demand or with canopy configurations that promote erosion even in areas of importance for watershed recharge. Existing approaches may also fail to take adequately into account the potential for synergies between conservation and development or livelihood support goals, resulting in missed opportunities for local communities to continue using restored areas for livelihood support in ways that are compatible with conservation and sustainability.

Furthermore, under the baseline scenario land managers, particularly local forest communities, are likely to have limited motivation to carry out restoration of degraded areas and to maintain the areas in their restored state, due to the previous emphasis on the use of short-term incentives such as payments for daily labour with inadequate attention paid to developing alternatives including more sustainable forms of incentives, or to ensuring that the biodiversity-friendly production systems that result from restoration obtain the kinds of support required to make them inherently sustainable. The E-NGP, FMP and INREMP are trying to close this gap but more support is needed to develop and implement sustainable livelihood systems linked to restoration.

Finally, beyond the technical aspects of restoration activities, under the baseline scenario for issues are hindering the long-term success of restoration activities: i) unclear land tenure, ii) lack of local seeds/seedlings nurseries to diversify the planting mix, iii) lack of long term incentives for restoration, and iv) monitoring systems not adapted to restoration.

To lift the barriers mentioned above, GEF resources will be used in a highly incremental and cost-effective manner to mainstream the generation of multiple environmental and social benefits into the Government's large investments in reforestation and forest restoration. Consistent with the landscape-wide perspective and planning frameworks to be developed in collaboration with, and complementary to, the UNDP/BMB sister project, and combined with site-specific assessments of conditions and needs, the project will help to ensure that the species and management practices used in restoration initiatives are selected and applied in such a way as to optimize the delivery of global environmental benefits, balanced and integrated with objectives of livelihood support and national development. Net biodiversity benefits will be generated by promoting forms of vegetation with species compositions and structural configurations that are favourable for habitat and for connectivity (considering conditions in adjacent land units with which connectivity is required). The threats posed by wildfires to the biodiversity in high conservation value forests will be reduced by restoring adjacent areas of degraded grasslands to less fire-prone conditions. Net carbon benefits will be generated by investing in ensuring that land managers find it economically attractive to restore their lands to higher-carbon tree-rich conditions than under the baseline, and to maintain them in this condition. And the restored ecosystems will have greater ability than under the baseline scenario to generate diverse other goods and services, including the provision of timber and non-timber products, stabilization of hydrological flows and improvement of local micro-climate.

The nature of GEF support will be highly targeted, cost-effective and incremental, focusing strongly on a number of fronts/avenues, namely: 1) developing national and local capacities, 2) enhancing planning instruments and processes consistent with the integrated management framework developed with the sister UNDP project, 3) developing knowledge resources and products, and 4) developing and setting up incentive systems required to deliver these environmental benefits and to ensure their sustainability.

The table below presents the incremental cost reasoning for each project outcome:

Outcome	Baseline Scenario	GEF Alternative Scenario
<p>Outcome 1: Environmental, livelihood and development benefits are effectively mainstreamed into Government support to restoration.</p>	<p>Major investments in forest restoration through the Expanding the coverage of the National Greening Program (successor of the National Greening Programme) and other programs such as the Forest Management Project (FMP), and the Integrated Natural Resources Management Project (INREMP) are happening. Benefits for biodiversity, habitat connectivity and livelihoods will be limited because of the predominant use of conventional reforestation techniques and a limited range of species, which will result in plantations with limited structural or compositional diversity.</p> <p>The current project works at the site level but the benefits of the NGP are hindered by: (i) land tenure issues especially those NGP areas currently outside of any land tenure instrument; without resolution of these issues the restoration activities are threatened, and (ii) sustainability options without benefits or incentives generated from restoration will most likely create issues on long term engagement.</p>	<p>The proposed project will support gender-responsive restoration activities delivering multiple benefits through:</p> <ul style="list-style-type: none"> <li>Enhanced capacity building (guidelines and training) on the type of restoration bringing multiple benefits</li> <li>Support coordination mechanisms to discuss and plan for forest restoration options delivering multiple benefits</li> </ul> <p>The proposed project will work on supporting the restoration efforts on the long term by:</p> <ul style="list-style-type: none"> <li>Looking into long term incentives for restoration</li> <li>Promoting land manager security of tenure</li> </ul>

Outcome 2:

Diverse, gender-responsive, and sustainable restoration practices effectively applied, contributing to the generation of multiple environmental and social benefits.

Restoration planning happens at the site level hindering a larger ecosystem and landscape vision that allows for connectivity and multiple benefits to be generated.

The NGP provides a system to support communities/farmers for the first 3 years of the plantation only. This often results in loss of interest after this period. To overcome this gap, the enhanced NGP does have alternative livelihoods activity support as part of the plan; however, support for implementation is still needed. A larger and more comprehensive approach to support communities/farmers involved in restoration is needed to ensure they fully benefit from their involvement in restoration.

The project will support improved planning and implementation to achieve multiple benefits. These can be done by adopting approaches to restoration that supports:

- information gathering and improved planning at the landscape level where restoration will be conducted

- developing participatory multi-stakeholder restoration plans at landscape level encouraging diverse approaches to restoration that are expected to deliver multiple benefits

To incentivize communities/farmers, the project will work on:

- Supporting the development of restoration plans including a short and long-term financial plan to support restoration efforts

- Developing Community Development funds linked to restoration to increase the communities' ownership of restoration activities

- Supporting farmers (with a special focus on women and youth) to enable them to obtain livelihood and economic benefits in a sustainable manner from restoration of degraded areas through the provision of technical, organisational, value chain analysis and marketing support

- Insuring stakeholders who are engaged in restoration activities will have right to trees

- Promoting Payment for Ecosystem Services so that farmers/communities can be rewarded for their restoration activities in the long term

<p>Outcome 3: Knowledge of diverse approaches to restoration is effectively managed and applied, permitting sustainability and scaling up.</p>	<p>Substantial amount of experience now exists on restoration approaches that lead to multiple benefits; however, they are often neither well documented nor easily accessible.</p> <p>Monitoring of restoration activities within the NGP is currently restricted to survival rates after planting, which doesn't give any indication on the success of restoration more broadly as growth rate, species diversity, fruit yields, and others are not considered.</p>	<p>The project will work on systematization, review and improved dissemination of knowledge on multiple benefit-based approaches to restoration.</p> <p>It will use innovative techniques (such as Community of Practices, farm field technical days, etc..) to make multi-benefit-based restoration techniques more known and accessible</p> <p>The project will develop a monitoring system for restoration that: i) is easy to implement, and ii) looks at the success of restoration more broadly beyond survival rates which has not proven to be an efficient indicator. The system will build on existing monitoring tools in the Philippines as well as the work done by the FLRM/IKI project on Monitoring.</p>
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### 1.3.2 Development objective, project objective, outcomes and outputs

The **development objective** of the project is to address the negative impacts of unsustainable management of forests and land driven by economic development as well as poverty and livelihood demands of local communities. The project aims to achieve this by establishing and pursuing a landscape-based approach to comprehensive planning and management that reconciles socio-economic development, sustainable management of natural resources and conservation biodiversity. The project's interventions will ensure that an enabling environment such as appropriate policies, capacitated communities, and proper restoration strategies are put in place so that degraded forests and lands are rehabilitated, and existing protected areas and high conservation value forests are protected.

The **project objective** is to deliver multiple and integrated environmental, livelihood and development benefits through the promotion of the cost-effective and sustainable restoration of the biological and productive capacities of degraded forests and landscapes.

Through the achievement of these objectives, this project will contribute to the Goal (shared with the UNDP/BMB sister project) of “delivering multiple and integrated environmental, livelihood, social and development benefits through entrepreneurial support and integrated management of landscapes and ecosystems”.

While the project proposed here will focus principally on the issue of ecosystem restoration, it will also complement the UNDP/BMB sister project in addressing the other remaining barriers to the achievement of this overall goal, by:

- Supporting the development of landscape-wide planning frameworks that incorporate considerations of biological connectivity, and the mainstreaming of these considerations into existing planning frameworks, thereby addressing the current barrier of piecemeal, sector- and issue-specific approaches to planning.
- Supporting science-based approaches to restoration addressing, in particular, the current tendency to manage areas on a site-specific basis without taking adequately into account the landscape-wide scale of ecological processes, flows of environmental services, and corresponding threats affecting these ecological services and environmental services.
- Strengthening capacities among stakeholders for analysis and understanding of the implications of development initiatives for biological values and the sustainability of the natural resources on which these initiatives depend, as a basis for informed and objective multi-stakeholder decision-making;
- Creating conditions to ensure the long-term viability and sustainability (in productive, economic and social terms) of environmentally-friendly resource management systems in the landscape, including those that result from restoration;
- Supporting improved monitoring of forest and landscape restoration activities.

The ultimate objectives of this project are: 1) having 127,851 hectares of land under restoration plans generating multiple benefits with a clear path to achieve restoration at the landscape/watershed scale, and 2) 5,821 ha of land where innovative restoration alternatives/solutions to ensure long term commitment to restoration are tested and influencing restoration options at the landscape level. These objectives are intimately linked to livelihood improvement of local communities involved in restoration, the project aiming at directly benefiting 45,000 people (and potentially 320,000 indirectly).

It is estimated (subject to confirmation at the implementation phase) that the project will work on:

- 2,500 ha: improving the Forest state from *Moderate* degradation to *Low* degradation (while without the project, it is expected that degradation in the forest would be *Large*). These areas will most likely be within existing NGP sites which still need support to ensure long term results or new sites where the baseline is not too degraded (i.e. current sites are *Moderately* degraded)
- 2,321 ha: improving the Forest state from *Large* degradation to *Moderate* degradation (while without the project, it is expected that the degradation in the forest would be *Extreme*) – these will most likely be new sites which need support
- 500 ha: preventing deforestation, or conversion of the forest for annual crop production – these will most likely be existing NGP sites where the project will prevent deforestation, including patches of forest in new sites which need to be preserved, mainly through forest protection activities.

· 500 ha: preventing deforestation, or conversion of the forest for grasslands – these will most likely be existing NGP sites where the project will prevent deforestation, including patches of forest in new sites which need to be preserved, mainly through forest protection activities.

· 84,500 ha: landscape level restoration management plans and enhanced: prioritising restoration initiatives and proposing diverse restoration approaches based on landscape-wide and site-specific considerations, harmonized with local and regional development and land use plans, forest management plans and PA management plans

· 4,300 ha: site specific restoration/regeneration plans, including a long-term financing plans, are developed and implemented for biodiversity conservation

· 39,051 ha: site specific restoration/regeneration plans are developed and implemented for High Conservation Value Forest (HCVF)

The direct lifetime GHG emission mitigation potential from the project is estimated as 6,146,968tCO<sub>2</sub>eq (see Annex 11).

The direct lifetime GHG emission mitigation potential from the project is estimated as 6,146,968tCO<sub>2</sub>eq (see Annex 11 of the full project document).

The project will work to address gender related issues, as well as harness the positive results in advancing Gender And development (GAD) in the Philippines, across all its three components. The work will include the collection of sex-disaggregated data, conducting gender analyses, and the integration of gender-sensitive indicators to allow for the measurement of changes in the roles and relations between women and men in a certain policy area, program or activity. These are further outlined in Annex 14 Gender Strategy and Action Plan where details on gender inclusion output by output are included.

Component 1: **Creating** the enabling conditions for the improved implementation of Forest and Landscape Restoration

Major investments in forest restoration through the Expanding the coverage of the National Greening Program (successor of the National Greening Programme) and other programs such as the Forest Management Project (FMP), and the Integrated Natural Resources Management Project (INREMP) are happening. Despite these major investments, multiple benefits including ecosystem services might be limited because of the following:

· Predominant use of conventional reforestation techniques and a limited range of species (not necessarily including the ones generating revenues for the local populations), which will likely result in plantations with limited structural or compositional diversity and limited socio-economic benefits,

· Lack of coordinated and strategic planning at the landscape level,

· Issues of land tenure, especially for those NGP areas that are not currently under any land tenure instrument; non- resolution of these issues will threaten the restoration gains,

· Lack of sustainability options, without clear benefits generated from restoration the long-term engagement of community participants is at risk.

The proposed project will support the promotion of restoration options delivering the multiple benefits through:

- Enhanced capacity building (e.g. development of guidelines and conduct of trainings) on restoration options delivering multiple benefits (output 1.1);
- Coordination mechanisms support to facilitate and catalyse the development of strategic plans generating multiple benefits from forest restoration (output 1.2)
- Promotion of land tenure security (output 1.3)
- Opportunities for long term incentives from restoration (output 1.4)

**Outcome 1: Environmental, livelihood and development benefits are effectively mainstreamed into Government support to restoration**

Under this Outcome, the project aims to achieve the following:

1. At least 3 government restoration programs (ENGP, Forest Management Project (FMP), and the Integrated Natural Resources Management Project) have formally adopted new technical guidelines on different restoration strategies.
2. 200 members (100 women, 100 men) of national institutions and 100 members (50 women, 50 men) of civil society are trained on the technical guidelines for restoration strategies
3. At least 2 draft policies are developed to support incentives systems for restoration initiatives
4. 4 inter-institutional cooperation mechanisms (with at least 30% women's representation) at national and local levels are supported/institutionalized, to support FLR implementation for livelihoods improvement.

These results will be primarily achieved through the 4 Outputs described below.

***Output 1.1: Manuals and Technical guidelines on restoration strategies promoting diverse models of sustainable land management and ecosystem restoration and the generation of multiple environmental, social and economic benefits***

Under this Output, planned activities are as follows:

*Activity 1.1.1: Develop refined technical guidelines for restoration programs (including the ENGP), providing for diverse models of sustainable, gender responsive forest and land management and ecosystem restoration and the generation of multiple environmental, social and economic benefits*

The current restoration efforts of the DENR under the auspices of the Forest Management Bureau (FMB) through the National Greening Program (NGP) are anchored in a set of guidelines. These range from the organizational matters to the technical ones starting with the setting up of an arboretum, as stipulated in FMB Bulletin No. 18. While most of the guidelines, which are contained in a series of technical bulletins come from the FMB, some related guidelines are issued from the Biodiversity Management Bureau, independently from FMB, or sometimes jointly (e.g., FMB-BMB Joint Bulletin 2014-01).

These guidelines are quite specialized and lay down procedures detailing how actions can be undertaken and accomplished, and at what cost. Overall, there are close to two dozen related guidelines underpinning the NGP.

A comprehensive review of the existing guidelines and interviews with key informants (see Annex 9), as well as the capacity development need assessment, highlighted the need for the development of two sets of products under the project:

1. A Manual describing the best restoration techniques to be applied in the different types of forest ecosystems in the Philippines to achieve multiple benefits. The first task will be to select the most relevant forest ecosystems for restoration in the Philippines. Currently, each guideline is distinct, narrowly focused and independent; hence, and it is difficult to see their application. The Manual will include case studies, on previous and current restoration efforts highlighting the factors of success and failure. Key issues to consider in selecting restoration methods/approaches are the degree of degradation, types of recurring disturbance in the project area, presence of natural regeneration, presence of seed dispersers, etc. For example, species diversification plans and the way they have been applied in NGP could be one of the themes of the case studies. The development of local nurseries and how they support high success rate and an improved mix of species could be another one. The case studies should highlight both the benefits in terms of biodiversity and livelihoods as well as the potential gaps in terms of implementation. Concrete case studies will make it easier for the stakeholders to relate to their own situation. As much as possible cost/benefit analysis of the different options should be conducted.

As indicated by the 2015 NGP Assessment Report, by the Philippine Institute for Development Studies, it is important to include climate and disaster vulnerability assessment during the planning of restoration activities and it is important to monitor the impact of restoration on this vulnerability. Future climate projections for the target regions will be reviewed with a view towards ensuring that species planted are suited to changing weather patterns, and that approaches implemented strengthen the resilience of the target communities.

2. A set of enriched guidelines which will support the implementation of multiple benefits restoration:

- Guidelines on fire management particularly the development and implementation of community-monitoring system. Fire, intentional or not, is always cited as one of the biggest threats to restoration. Most successful restoration programs include fire management as one of their key components. Fire management requires an institutional strategy that develops and promotes community responsibility and accountability (from both men and women). The enriched guidelines developed will cover the organization, technical support, logistics and training for communities needed to improve fire management.
- Guidelines on the establishment and management of High Conservation Value Forest Areas. For the moment, the Guidelines focus principally on secondary forest. It is important to better understand the structure and functioning of primary forest to better manage them and be able to replicate them, if need be, in the future. This activity could be led jointly with the sister UNDP project focusing on High Conservation Value Forest Areas. It could also look at the type of seeds, seedlings and nursery needed.
- Guidelines on Forest Restoration for Mine Rehabilitation. In Eastern Mindanao, one of the main cause of forest and land degradation is mining. The government has issued an ordinance (Executing Order 79) requiring mining companies to restore part of the mining areas. In his State of the Nation speech last September, the President drew attention to the Mining industry's responsible mining commitment, threatening mining operators to "shape up or ship out" insisting that "he wanted to see trees as tall as him in 6 months". Currently, DENR has issued a policy requiring mining companies to plant 100 trees to replace 1 tree cut (for new mining operations). This is a subjective ratio and no technical guidelines are available on how exactly this will be carried out. The project can play a key role here as currently no clear and systematic guidelines on forest restoration on mine site exist.

DAO 2015-02 which sought to harmonize provisions of the Philippine Environmental System (EIS) law and the Philippine Mining Act, required the establishment of a Contingent Liability and Rehabilitation Fund, which can be earmarked for guided forest restoration (although, there is none yet). The implementation of this fund will then make good use of the Guidelines. Indeed, they will provide mining companies with the needed tools to develop and implement multi-benefit restoration activities, possibly in cooperation with nearby communities thereby expanding the reach of the government-led restoration.

This work will be led in close synergy with the Mines and Geoscience Bureau (MGB) of DENR as they are currently developing a joint BMB (Biodiversity Management Bureau)-MGB DAO on biodiversity and mining rehabilitation.

While developing the refined guidelines and manual, gender analysis will be led to give appropriate recommendation for men and women involvement in restoration programs.

*Activity 1.1.2: Design relevant trainings materials on the use of technical guidelines and other technical needs for local application*

As briefly indicated above, the definition of the set of new material needed (see activity 1.1.1) came from a capacity gap analysis at the national, regional and local levels. The capacity development needs were assessed through Focused Group Discussions (FGD) and Key Informant Interviews (KII) with stakeholders during national workshops and field exchanges at the regional and local levels.

To complement the capacity need assessment, discussions with First Gen, National Irrigation Authority (NIA) and National Power Corporation (NPC), both during the workshops and field visits revealed the private sector's view on local communities' capacity development needs. Field-level interactions with leaders of local communities and people's organizations (POs) and DENR, PENRO and CENRO officers also indicated the enhancements needed to catalyse local action.

After developing the Manual and the different Guidelines mentioned above, capacity will be strengthened among stakeholders in order to enable them to implement these new procedures and standards. Capacity building material will be developed outlining the steps and procedures, which ultimately will serve as materials to implement 'trainings of trainers' both at the national and regional level. The training material will be gender sensitive and women will be trained as trainers. The trainees will have to commit to implement at least 5 local trainings in order to be able to access the training.

***Output 1.2: Policy recommendations on integrating appropriate incentives for households and communities to undertake FLR , based on assessments of existing incentives and disincentives (including security of tenure)***

Under this Output, planned activities are as follows:

*Activity 1.2.1 Document existing mechanisms to support socio-economic incentives and other benefits from restoration activities (including PES)*

In the Philippines, despite the interest of multiple projects for this topic, studies on incentive systems for forest and landscape restoration are currently fragmented and limited in scope. Nevertheless, diverse socio-economic incentives currently exist which could be adapted to support the implementation of restoration activities, by supporting forest management as an economic enterprise.

During the Focused Group Discussions (FGD) and Key Informant Interviews (KII), several socio-economic incentives were mentioned. The project selected nine priority topics to be studied in greater detail to better understand how they could support multi-benefits restoration. The studies and/or documentation of cases will consist of a series of technical review factsheets on the following topics:

Enhancement of NTFPs value chains:

1. Certified Sustainable Fuelwood and Charcoal Production. Fuelwood and charcoal production are both important in terms of livelihood and revenue generation. Making this value chain more sustainable and allow communities to gain higher revenues from it and can help limit continuing degradation of natural and planted forests from the inroads of fuelwood gathering and charcoal production.
2. Agroforestry integrating NTFPs such as bamboos and rattan. Improvement of value chains for agricultural crops as well as for NTFPs.

Enhancement of sustainable timber production:

3. Low Impact Timber Harvesting (LITH) in protected areas. Communities being able to benefit from the areas they are protecting is an important incentive for conservation provided that appropriate environmental safeguards are in place and implemented.

Other incentives:

4. Payment for Ecosystem Services (PES) & Ecotourism Development
5. PES & Water: accessing the share from the Sale of Power to support community-based enterprises
6. PES & REDD+: accessing the share from the carbon credits to support community-based enterprises
7. PES & land degradation: models promoting LandCare (Soil and Water Conservation Practices) in sloping forest and agricultural lands to address land degradation neutrality is supported
8. Accessing Corporate Social Responsibility (CSR) funding designed to link different forest management as economic enterprise initiatives or models with the Corporate Social Responsibility Projects of the Private Sector, i.e. mining companies
9. Accessing other public schemes able to support restoration, even indirectly, such as the Sustainable Livelihood Program (SLP) of the DSWD, which can provide Ecologically-Conditioned Cash Transfers to participating households.

Some of the key aspects the studies and/or documentation will look at are:

- i) how is the system set up, what are the rules of participation and how are the benefits shared within (between men and women and outside of the community)
- ii) how the system can support multi-benefit restoration,
- iii) what are the gaps (e.g. capacity building needs for stakeholders, unfair trade practices, unfair sharing of information) and opportunities for this scheme in the Philippines
- iv) what are the regulatory issues (property rights), and
- v) how can policy better support the scheme.

Some of these topics will be studied/documentated in conjunction with Output 2.3 and 2.5.

The studies and/or documentations may include case studies preferably from the Philippines such as the examples in the Box below for PES and water.

## **PES & Water in the Philippines**

The *National Power Corporation model* is to use the accumulated Universal Charge - Environmental Charge (UC) for Watershed Management. Pursuant to RA 9136 or Electric Power Industry Reform Act of 2001 (EPIRA law) as well as Section 34 (d), an environmental charge equivalent to one fourth of one centavo per kilowatt-hour (PhP 0.0025/kWh) is accruing in an environmental fund to be used solely for watershed rehabilitation and management. The funds are managed by NPC under existing arrangements. The PCWFR qualifies as it supports a hydropower plant and thus is eligible for watershed rehabilitation and protection projects.

*Water Levy of San Carlos City in Negros Occidental.* To address denudation of the watershed areas, the city government in 2005 designed a Watershed Development and Rehabilitation Project using an innovative financing scheme. The local government convinced its constituents to pay a water levy of seventy-five centavos per cubic meter of water that they consume. The water levy generates 1.2 million pesos annually, which goes to a Trust Fund that is managed by the San Carlos Development Board for watershed rehabilitation. This Trust Fund, together with additional contributions by other organizations and stakeholders, guarantees resource availability for future use and expansion purposes and is being used as leverage to get additional funding. This unique system for raising financial resources for rehabilitation sets apart this local government initiative.

At a much smaller scale, the *Bacolod City Water District (BACIWA)* bundles and collects a Production Assessment Charge (PAC), which it uses for the protection and rehabilitation of the Upper Caliban-Imbang Watershed formerly known as the BACIWA Watershed which has a total area of 1,000 hectares located 23 km east of Bacolod City.

### *Activity 1.2.2 Conduct policy study on incentive systems in support of ecosystem restoration*

Building on the case studies mentioned above, a policy study will be conducted to examine the regulatory environment for public and private sector incentive systems. The end users of the policy study are key DENR agencies, FMB and BMB, NCIP (on behalf of IP communities) including the decentralized units (PENRO, CENRO etc.). This study should set the stage and provide a general context for the development of a set of guidelines to create the proper enabling conditions for incentive systems in support of ecosystem restoration.

This work will collaborate with and build on the current work of the INREMP. Indeed, INREMP has explicitly provided for Payment of Ecosystem Services to Indigenous cultural communities, where 70% of a block grant is awarded for livelihood and the remaining 30% for ecosystem restoration work. However, the innovation still lacks more in-depth analysis that clearly shows definitive supply-side and demand-side scenarios of market transactions.

*Activity 1.2.3 Guidelines and policy recommendation on incentives systems in support of restoration activities*

In order to pilot test the result of Activities 1.2.1 and 1.2.2, guidelines and policy recommendation on selected incentives systems in support of restoration activities will be developed. The most promising incentive systems in the project pilot sites (Component 2) will be identified and guidelines and policy recommendation will be developed in order to support the pilot testing of these systems under Output 2.5.

In choosing the type of incentives that the project will study and eventually support, a careful mix of short and long-term incentives should be considered, so that the long-term sustainability of the forest and economic viability of the incentive plans developed under Output 2.2 are ensured.

Policy options supporting the bundling of different types of incentives should also be considered, as sustainable systems should rely on a mix of incentives.

***Output 1.3: Inter-institutional cooperation mechanisms at national and local levels in support of the development and implementation of multi-benefits restoration strategies***

Under this Output, planned activities are as follows:

*Activity 1.3.1 Support to existing coordination platforms at national level*

Cooperation mechanisms exist at the National Executive levels (Department level) as exemplified by joint technical bulletins by the Forest Management Bureau (FMB) and the Biodiversity Management Bureau (BMB). In the specific case of the PCWFR, Joint FMB-BMB Bulletin 2014-01 outlines supplementary guidelines on survey, mapping and planning of FMP sites. This project seeks to reinforce this type of collaboration, including even more stakeholders (including women and youth representatives) to support ecosystem restoration.

After the review of existing coordination mechanisms, two mechanisms have been selected to support ecosystem restoration at the national level:

***The National Forest and Landscape Restoration (FLR) working group.*** This group, whose secretariat is FMB, developed the FLR Philippine National Action Plan (2016-2018) with the support of FAO. The implementation of this plan is supported by FAO and other stakeholders. The project will support the expansion of the group to other stakeholders for the implementation of the FLR plan after 2018. Special attention will be given to include actors able to support particular activities of the plan such as SLP/DSWD and the private sector. To keep it an effective working group, the number of participants shouldn't exceed 20 members but should include representatives from FMB, BMB, NCIP, DAR, DA, CBFM PO, civil society/NGO and the private sector. Bi-annual meetings will be organized to follow up on the implementation of the plan and revise/extend it as needed.

***The National Convergence Initiative*** to work on FLR. As described in the Institutional setting section, the NCI was created in 1999, through the joint efforts of the DA, DAR and DENR to: i) develop and operationalize a common framework for sustainable rural development (SRD); and ii) facilitate the convergence of the resources of the three agencies to maximize the impact on countryside development. In 2010, to ensure countryside development as a strategy for poverty reduction, the Secretaries of DAR, DA DENR launched the Enhanced National Convergence Initiative for Sustainable Rural Development. The Enhanced NCI includes the NCIP and DILG and promotes a framework of sustainable agriculture and rural development which: (i) integrates the people, their economy and their environment; (ii) optimizes resources, creates substantial effect in the short-term; and (iii) makes possible model-building across ecosystems, production systems, and rural poverty sectors/small producers in the long-term. It also clarifies the recognition of the local government units (LGU) as the integrating and converging force at the local level for sustainability of interventions.

At the national level, infusing the National Convergence Initiative with fresh mandates from partner agencies to carry out ecosystem restoration is essential. Therefore, the project will be supporting yearly NCI summits focused on FLR. The summit will build on the results and planning efforts coming from the National Forest and Landscape Restoration (FLR) working group. It will also benefit from international knowledge sharing coming from initiative such as The Restoration Initiative.

For this activity, the project will closely work with the UNDP project as the two projects share similar issues and concerns on coordination mechanisms/systems.

*Activity 1.3.2 Support to existing coordination platforms at project area level*

Cooperation at the national level should be reflected through cooperation mechanisms at the regional and local level making sure that multi-stakeholder engagement is respected. The national and regional/local levels will be able to feed each other.

At the regional/local levels, the project will support multi-stakeholder coordination in the 2 target River Basins to better integrate FLR considerations. The basin organizations are a medium of exchange and consensus building to achieve synergy among key stakeholders. They will be supported to provide closer on-the-ground policy, program and project formulation, development and prioritization. The project will focus on the following organizations:

In Region 3, for the PCWFR, the Pampanga River Basin Committee (PRBC) is composed of the seven Central Luzon Provincial Governors, the two Mayors of Central Luzon's Highly Urbanized Cities, Regional Directors of the NEDA, DA, DENR, DPWH, DILG, the respective heads of the NWRB, DENR-RBCO and NAPOCOR, and one representative each from the private sector and Non-Government Organizations within the Pampanga River Basin. The PRBC is the premier regional coordinating body that exercises advisory, guidance, education and monitoring functions for the Basin's management and development. Support to the PCWFR PAMB (Protected Area Management Bureau) could also be considered to strengthen the PAMP (Protected Area Management Plan).

In Eastern Mindanao, the Agusan River Basin Organization (ARBO) represents a group of 200 stakeholders representing the provinces of the Davao Oriental, Compostela Valley, Agusan del Sur, Agusan del Norte, Bukidnon, Surigao del Sur. It is responsible for the implementation of conservation and development strategies for the river basin. In the completed ARB Master Plan, which provides the guidelines and strategies for the basin's sustainable management, the ARBO is crucial in bringing together upstream and downstream stakeholders to harmonize various plans and programs and to facilitate understanding, commitments, and the transfer of funds to mitigate threats within and around the basin. The Mindanao Development Authority (MinDA) through its MindaNOW! Nurturing Our Waters Program supports and facilitate the creation of river basin organizations in Mindanao. The Agusan River Basin Summit is the first to be organized among all of the RBOs in the country. It is expected to be the benchmark for best practices for the other 17 river basins in the Philippines.

As part of the ARBO, there are several sub-watershed sections. The project will focus on the Simulao watershed, which is part of the Middle Basin part. The project will support the Simulao Sub-Basin Management Council.

In order to achieve the objective of integrating FLR consideration into the RBO set of priorities and activities, the project will support annual meetings focused on strengthening alliances in River Basins to facilitate integrated watershed management measures.

To create a positive movement towards restoration, the project will also support yearly events in each of the site areas:

- PCWFR's Feast of the Forest: The event will build on the traditional community "fiesta", to bring various stakeholders to celebrate and act together. It will be especially important to acquire community support in preventing forest and grassland fires. For added relevance, communities who have made outstanding progresses towards FLR through restoration, improved fire management, and others will be recognized.

- Eastern Mindanao "Man, Mine, Land" Forum and Feast of the Forests: Following the same idea as the PCWFR's Feast of the Forest, a fiesta will be organized. In Simulao, the event will particularly focus on building a better understanding of the nature of mining and its interface with forest restoration. The idea is to demonstrate how to build bridges between the 2 activities.

When developing the activities in support of the coordination platforms, existing "soft institutions" (e.g., cultural values and norms) in the proposed project sites should be reviewed. This can serve as basis for the identification of common or shared goal to bring all stakeholders together. Promoting the integration of these institutions in the framework for inter-institutional cooperation can encourage more participation from different stakeholders.

During project development, the idea of developing a specific Caucus for Public-Private Sector Partnerships has been discussed. The Caucus would have been intended to provide the venue for dialogue and exchange with the private sector for exploring a common ground for action on forest and ecosystem restoration. The series of caucuses could have resulted in concrete agreements leading to the private sector's buy-in for NGP and other forest restoration projects, including private CSR for carbon offsets. The end result of these discussions

was not to constitute a particular body; but instead making a conscious and concerted efforts to include the private sector in all the different platforms supported by the project to achieve the same results.

***Output 1.4: National dialogue on land and resource tenure to support SFM and FLR and to address current absence of clarity on tenure issues for restored sites***

Clear land tenure arrangements are key for the long-term commitment of the communities to restoration. Unfortunately, they are still too rare for restoration sites.

DENR, through Executive Order (EO) 192, is vested with the mandate to rationalize and regulate the allocation of public forestlands. The Philippine Tenure regime is based on a series of sector laws (more than 60) and policies and a multiplicity of land tenure instruments that are not consistent and leave space for contradictions and overlaps.

Indeed, as discussed in the tenure section, the reality is that land classifications are not always clear-cut. The State upholds the policy of multiple land use so that the country's natural resources may be rationally explored, developed, utilized and conserved. This means that in actual use, forest rights such as community forestry agreements, mining rights, rattan permit, may overlap with ancestral domain claims; and ancestral domain claims may overlap with national parks.

Initially, NGP was concentrated in areas with existing land tenure instruments primarily within CBFMA areas managed by local communities. With subsequent evolutions of NGP, particularly with the minimum area requirement of 50 hectares, areas which are under default open access conditions (e.g., areas under no land tenure instruments) became the focus of NGP areas.

A typical situation under the NGP, is the signing of "quasi" tenure arrangement through a Memorandum of Agreement. This however, fell short of providing secure incentives and clear guidelines for tenure entitlement, after the 3-year cycle. The communities are left with unsecure tenure and therefore no incentive to continue caring for the land they have restored. This lack of security is reinforced by the fact that because of the protected status of the PCWFR, harvesting rights for timber are restricted to the Multiple Use and Buffer zones, both of which have yet to be delineated. Communities therefore find it more convenient to engage in charcoal making, as a livelihood activity to get around the restrictions imposed on timber harvesting. Other agencies such as the National Irrigation Administration (NIA), the National Power Corporation (NPC), including First Gen undertake reforestation either "by administration" (i.e. reforestation is conducted under the supervision of DENR personnel) mode or with their own customized Memorandum of Agreements.

Even for NGP sites under longer-term agreement such as CBFMA or IFMAs, the tenure is threatened by the application of Indigenous People's rights. Indeed, Tenure instruments such CBFMAs and IFMAs within ancestral domain continue to be in force and effect until they expire. DENR guidelines require FPIC of the concerned IPs before these tenure instruments are renewed, hence providing security of tenure for non-IP forest dependent communities depends on the results of the FPIC process with ancestral domain holders. The FMB estimates that the majority of the CBFM POs across the country are in this precarious situation.

Because of the lack of clarity in the future, Peoples Organizations or forestland-dependent households tend to focus on present opportunities and not on the long-term options. Such communities need to be supported with clear and stable tenure arrangements that takes the least transaction time and costs to access. Denying them the early opportunity to plan collectively over the long term, limits the possibility of early project success. To guarantee stewardship with tenure instruments that are simple to understand, access and follow is enough to engage and enable communities to adopt and even invest on sustainable land management measures.

To support improved access to adapted tenure instruments for restored sites, the project will i) deepen the analysis of current land tenure instruments, and right to trees provisions, and share more widely information on tenure, ii) support the renewal of expiring tenure instruments ensuring the rights to trees for local communities, and iii) support the national dialogue

Under this Output, planned activities are as follows:

*Activity 1.4.1 Deepen the analysis and diffusion of current land tenure instruments and right to trees provisions*

The tenure toolbox of DENR is already very extensive; however, the issue remains on how this can be made accessible to stakeholders. To achieve this, the project will develop a set of operational factsheets on the different options available for tenure of restored sites and make them available online (see Component 3) and in paper form. The role and responsibilities of men and women will be outlines. The factsheets will include a range of case studies starting with sites that have not started restoration up to sites having been fully restored. It will detail what each land tenure modality means in terms of stakeholder rights, responsibilities and legal entitlements with spatial information, with provisions for monitoring,

*Activity 1.4.2 Support the renewal of expiring tenure instruments ensuring the rights to trees for local communities*

Apart from the global analysis, the project will work on land tenure issues directly linked to the NGP:

· Design a “Bridging” Tenure Instrument for non-tenured completed NGP and other restored areas. While final tenure arrangements are being formulated, alternative tenure solutions should be sought. Indeed, the current set of guidelines fall short of providing dynamic tenure arrangements that secure farmer’s participation, following the end of the first contract cycle. This leaves plantations at a vulnerable state, where little or no maintenance and protection is provided. This happens, when POs are no longer connected and involved via a tenure arrangement which ensures entitlement to harvest and such arrangements are clear to them. The project will work on proposing a bridging instrument building on Land and Environmental Resource Management Agreement (LERMA)[1] or other relevant instruments.

· Develop guidelines and mechanism to facilitate the renewal of expiring tenure instruments within ancestral domains

· Facilitate issuance of certificate of non-overlap for the renewal of expiring tenure instruments out of ancestral domains

*Activity 1.4.3 Support the national dialogue on land tenure*

The NCI hasn’t been able to fully tackle the land tenure issues. The project is proposing to support a working group specifically on land tenure options for FLR. This FLR Tenure Working group could be a subgroup of the FLR national working group (supported in Output 1.3). It is intended to provide a secure venue for gathering issues from stakeholders and providing both quick responses and looking for long-term solutions. It will act as the Technical Working Group supporting the activities under 1.4.1 and 1.4.2. Initially, the main members of the group will be the ones of the FLR National Working Group.

A Land Tenure Expert will define the exact Terms of Reference of the Working Group. The group will meet at least twice a year and will support the organization of an annual National Dialogue on Land Tenure. **The results of the working group and national dialogue will be regularly followed by the project management team, especially through the**

knowledge management and advocacy work planned through Component 3 of the project. In addition, the working group's TOR (which will be developed and refined at project inception) will also identify activities by stakeholders involved to keep the issue moving between meetings, to ensure appropriate policy impacts of the meetings.

This activity will built on the success of the Mainstreaming governance of tenure in the Philippines (cf section 1.4 Lessons learned) project with the Land Management Bureau of DENR, which contributed to the Government's capacity to strengthen land tenure governance by mainstreaming the Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) principles and standards among key institutions dealing with the tenure of land and fisheries. Supporting a national dialogue on land tenure would be significant as under the land management thematic area of the Land Sector Development Framework (LSDF), an important outcome focuses on strategies/policies that stipulates Comprehensive Land Use Plan (CLUP) integrating the Forest Land Use Plans (FLUPs) as well as the Protected Areas and National Park Zoning and Development Plan. Moreover, the updated the LSDF is supporting the recognition of the rights of occupants through the issuance of individuals or collective tenurial instruments such as CBFMA, PACBRMA, etc., which constitutes a major component of this project.

Component 2: Implementation of restoration programs and complementary initiatives in forest landscape restoration, protected area management and biodiversity conservation

Currently, restoration planning is done primarily at the site level. This means much of the planning for restoration programs such as for NGP/ENGP and FMP are conducted with utmost concern on the establishment of forest cover at the site, and also on the capability of local communities to complete restoration within the three or four-year periods which are the durations of the Memorandum of Agreement (MOA), and financial and administrative transactions stipulated in the NGP and FMP programs respectively. This doesn't allow for the gathering of the multiple benefits at a larger scale.

Earlier, NGP had no minimum area requirements; hence, small areas can be applied for restoration contracts with local communities, primarily through People's Organizations (POs) organized within local forest communities. Smaller areas allow for quicker completion of restoration efforts within the duration of the projects and enable quicker planting of areas for forest cover. Subsequent evolution of the NGP had minimum area requirements of at least 50 hectares which also had the unintended consequence of conducting restoration areas outside of tenured areas (e.g. CBFM) in order meet the minimum area requirement. These areas were restored under a more tenuous and temporary MOA.

The NGP provided a system to support communities/farmers for the first three years of the plantation only. This often resulted in a loss of interest after this period. It is evident after visiting the completed/planted NGP sites that these planted areas, which are supposed to have at least 80 percent survival, are no longer managed and protected. It was also observed that in many of these completed NGP areas, surviving saplings are few and often isolated, nowhere close to the 80 percent survival rates supposedly achieved as of the end of the third year when the planted NGP areas were turned over to the government (DENR) by the local communities or people organization who did the planting. In fact, it was evident during field visits that many of these areas are dominated by grasses, weeds, or other vegetation. The remaining seedlings, which conservatively can be estimated at 20 percent of the original number, are outcompeted and dominated by other vegetation.

To overcome this gap, the Expanding the coverage of the National Greening Program (EO 193) was designed not only to expand the coverage of NGP to new areas, but also to provide mechanisms aimed at managing these existing NGP areas. In addition, the ENGP also includes proposals for alternative livelihood activities aimed at providing incentives to local communities to protect and manage completed NGP areas. These livelihood activities include assistance to local communities in developing or building entrepreneurial activities or enterprises aimed at providing economic benefits to local communities for the management of these completed NGP areas.

To date, specific plans in support of such enterprise initiatives of ENGP are still unclear and not in place. Hence, more specific livelihood initiatives and enterprises for implementation in ENGP is still lacking.

Finally, a larger and more comprehensive approach to support communities/farmers involved in restoration is needed to ensure they fully benefit from their involvement in restoration.

As the alternative scenario, the project will support improved planning and implementation to achieve multiple benefits. These can be done by adopting approaches to restoration that supports:

- Information gathering and improved planning at landscape level where restoration will happen (output 2.1)
- Developing participatory multistakeholders' restoration plans at landscape level encouraging diverse approaches to restoration that are expected to deliver multiple benefits (output 2.2)

To incentivize communities/farmers, the project will work on:

- Supporting the development of restoration plans including a short and long term financial plan to support restoration efforts (output 2.2)
- Developing Community Development funds linked to restoration to increase the communities' ownership of restoration activities (output 2.2)
- Supporting farmers, to enable them to obtain livelihood and economic benefits in a sustainable manner from restoration of degraded areas through the provision of technical, organisational, value chain analysis and marketing support (output 2.3)

- Insuring stakeholders engaged in restoration activities will have right to trees (output 2.4)
- Promoting Payment for Ecosystem Services so that farmers/communities can be rewarded for their restoration activities on the long term. (output 2.5)

**Outcome 2: Diverse and sustainable restoration practices are effectively applied, contributing to the generation of multiple environmental and social benefits**

Under this Outcome, the project aims to achieve the following:

1. 2 landscape level restoration management plans and enhanced: prioritising restoration initiatives and proposing diverse restoration approaches based on landscape-wide and site-specific considerations, harmonized with local and regional development and land use plans, forest management plans and PA management plans.
2. 40 site specific restoration plans, including a long-term financing plans, are developed and implemented
3. 40 communities or POs have enough technical and financial resources to implement the restoration plans

These results will be primarily achieved through the 5 Outputs described below.

***Output 2.1: Output 2.1 Landscape Assessment Reports, with social, economic, institutional, biophysical aspects of target areas identified, priority locations and actions agreed, and sequence of activities for FLR***

Output 2.1 focuses on in-depth characterization of the project areas at the landscape/watershed level (PCWFR and Simulao) to support the development of restoration focusing on the delivery of multiple benefits through restoration. These plans need to be developed through participatory multi-stakeholders' processes to ensure that they are widely accepted. These plans will both be informed by and provide input to plans at a smaller scale such as the Forest Land Use Plan (FLUP) and Comprehensive Land Use Plans (CLUP) of local government units. **When developing these plans, future climate projections for the target regions will be reviewed with a view towards ensuring that species planted are suited to changing weather patterns, and that approaches implemented strengthen the resilience of the target communities.**

Under this Output, planned activities are as follows:

*Activity 2.1.1 Generate data/information on land cover, land use, forest cover, key biodiversity areas, NGP, FMP (existing and proposed), degraded, tenured and untenured areas of project sites*

The project will support a science-based approach to restoration, with detailed and highly applied studies of the different land units composing the target landscapes. This will help to ensure that the restoration plans and strategies developed at the landscape (then at the site) level are cost-effective, environmentally and socially sustainable, and maximize the generation of environmental and social benefits.

Focusing on a landscape, instead of specific sites spread over within a landscape, increases the benefits derived from each activity by bringing synergies and interconnectivity.

The table below summarizes the bio-physical and land information needed for planning and highlight what is currently available (the DENR local office has strong GIS capacities), and what needs to be developed through the project in the different areas. The data used in the analysis was generated by the National Mapping and Resource Inventory Administration (NAMRIA) in 2015.

Information	PCWFR	Simulao	
Total Project area <sup>1</sup>	84,500 hectares	97,800 hectares of which 43,351 ha are the critical watershed	
		R11	R13
Average Canopy cover (%) <sup>2</sup>	Not available (to be generated during project implementation)	Not Available to be determined – to be generated during project implementation)	Not Available to be determined – to be generated during project implementation

Areas of Existing Projects <sup>3</sup>			
NGP With Tenure (CBFM)	149 (average size 2.4 hectares)	To be determined during project implementation	To be determined during project implementation
NGP without Tenure (Under MOA <sup>6</sup> )	2,580	To be determined during implementation	107
CBFM (outside but adjacent to PCWFR)	5,955	Not applicable	Not applicable
NGP areas within ancestral domain	Not applicable	To be determined during project implementation	2,035
Key Biodiversity Areas <sup>4</sup>	KBAs minimally overlaps but adjacent to PCWFR	Whole Project Area within KBA	Whole Project Area within KBA
Indigenous Peoples Ancestral Domains			
Two CADC Applications (CADC 022 and 023 belonging to the Bugkalot Tribe)	73,081.60	To be determined during project implementation	To be determined during project implementation
CADC Application (CADC 066 belonging to the Kalanguya Tribe)	25,373	To be determined during project implementation	To be determined during project implementation

<sup>1</sup>Based on the most recent maps developed by NAMRIA (2015)

<sup>2</sup>Based on Global Dataset of Hansen (2017)

<sup>3</sup>Data obtained from Region 3 (PCWFR) and Region 13 (Eastern Mindanao)

<sup>4</sup> KBA areas obtained from Biodiversity Management Bureau

<sup>5</sup>Degraded forests are based on Forest Cover. Areas below % canopy cover considered degraded

<sup>6</sup>These areas are untenured; NGP was done and completed under a 3-year Memorandum of Understanding (MOA)

*Note: The table also shows existing areas restored under the NGP, both those under land tenure instruments and those that are untenured*[\[1\]](#).

Details about the locations, geographic coordinates, maps and other attributes or characteristics of the NGP sites, geographic extent of the project areas, and other information are described in more detail in Annex 7.

During implementation, the project will obtain updated landcover data (current baseline data is from 2015), along with other important datasets such as percent tree canopy cover, rate of deforestation, rate and extent of forest degradation and forest biomass which are important especially in determining areas suitable for specific restoration strategies such as Assisted Natural Regeneration (ANR). Climate projections for the target regions will also be reviewed with a view towards ensuring that species planted are suited to changing weather patterns, and that approaches implemented strengthen the resilience of the target communities.

Throughout project implementation, the project will continue to generate the same datasets, preferably annually, so that progress of the project can be assessed and monitored.

To supplement data obtained through traditional sources (e.g. NAMRIA, PhilGIS), the project will also explore other non-traditional sources of data such as those provided globally. In addition, the Collect Earth system developed by FAO should be explored. Building on the Collect Earth Open FORIS work in the Philippines (FAO has already conducted a series of training/capacity building for DENR), the project will be able to obtain data and conduct additional spatial analysis to make sure that new concerns or other objectives can be incorporated in the future.

Apart from bio-physical data, socio-economic information (including gender and IP concerns) should be gathered to guide the definition of actions under 2.1.2. If/when possible it would be important to have a data layer on climate and disaster vulnerability as this information is key for planning appropriate restoration activities.

To obtain the data needed described above during implementation, a Forest Management and Land Use Planning/GIS Spatial Analyst consultant will be hired to support DENR in the spatial analyses. Data Enumerators will also be hired to collect field data not available on GIS maps (socio-economic analysis, fine land tenure, etc.) and validate results of the spatial analysis.

*Activity 2.1.2 Support the development of participatory multi-stakeholders' restoration plans for the target area to support the delivery of multiple benefits*

Building on the data obtained in Output 2.1.1 (summarized as figures and maps shown in Annex 7) and the multi-stakeholder platforms supported in Output 1.3.2 at landscape level, multi-stakeholder landscape planning will be supported. This planning exercise in both the PCWFR and Simulao Watershed will improve the restoration of both landscapes while generating multiple benefits. For instance, biodiversity conservation objectives such as connectivity of KBAs can be achieved by prioritizing sites to be restored in the corridor between the KBAs. To achieve this, diverse approaches to restoration must be adopted depending on the environmental and socio-economic conditions. The work done under 1.1 on the different approaches to restoration and their cost/benefits should be used as a guideline.

For the PCWFR project area, the institutional coordination platform which will be supported by the project is the Pampanga River Basin Committee whose geographic extent covers PCWFR as well as the LGUs, CBFM, and CADC/CADTs impacted by the watershed.

For the Simulao project area, the Simulao Sub-Basin Management Council, as part of the Agusan River Basin Organization, through the Middle Agusan River Basin Council (Board) will serve as the institutional coordination platform. The geographic extent of the Middle Agusan River Basin covers the project area as well as other LGUs, local and indigenous communities impacted by the river basin.

This project will adopt innovative tools to reinforce landscape level planning. The use of integrated multicriteria spatial analysis tools and the data generated in Output 2.1.1 will allow the project to: 1) more strategically locate restoration areas that address concerns of multiple stakeholders (e.g. local communities, local government units); 2) consider several objectives of management (e.g. protected area concerns, restoration of degraded areas, protection of catchment area of the watershed) and 3) consider the livelihood needs of the local communities and the gender impact of the activities.

For instance, to strategically locate sites as candidates for restoration, the degraded sites between the two KBA areas in the south east of PCWFR could be considered (see. Figure 7.3 in Annex 7).

The integrated multi-criteria spatial planning approach described above will be conducted through participatory multi-stakeholder/agency consultation, which will involve the DENR, LGUs, Regional agencies, local communities, Protected Area Management Board, and others.

To lead the consultations and support landscape planning, the project will engage the services of a Forest Landscape Restoration Specialist. The Consultant will lead workshops at the landscape level to define, in practical and operational terms, the goals and objectives of the stakeholders for the landscape (e.g. protected area or watershed). These workshops will be

facilitated by both the Forest Restoration Specialist, and the Forest Management and Land Use Planning/GIS Specialist. Choices and decisions on restoration and conservation goals and other multiple objectives will be translated into operational field level options such as allocation of forest areas into diverse set of land uses.

The project will also provide the platform for plans to be harmonized so that both regional and community level goals are met or at least not compromised. Indeed, currently plans are developed at different levels with minimal linkages between each other hindering the success of their implementation. Consequently, the benefits and the long-term sustainability of the restoration plans are often compromised. Hence, workshops will also be conducted at the project site level, including at the LGU level. The workshops are intended to ‘harmonize’ the plans – from the landscape level to the LGU and community level. Negotiations and adjustments of plans at both levels will done to achieve harmonization.

To ensure sustainability of the spatial two-level planning process described above, the project will conduct capacity building activities to enable local government, community and landscape level staff to conduct the same planning process in the future. These capacity building activities will be led by the two consultants/specialists.

Lessons learned from this process will be gathered and organized under Component 3 to develop a planning framework at the broad landscape level such as at the region or watershed level. The framework should provide the platform or protocol that serves as general guide for lower level plans such as FLUP/CLUP or protected areas, or community forests.

As background information on which the project should build on, the situation in the 2 project areas is as follows:

The type, geographic scope, and extent of the plans are currently at two levels:

- The landscape level which can be at the protected area level (e.g. PAMP of PCWFR), Watershed Level or possibly at the regional level such as those prepared by the regional development council.

- The community level such as forest protection and management plans of NGP projects, and at the LGU levels such as Forest Land Use Plans (FLUP) and Comprehensive Land-use Plans (CLUP).

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***In the Pantabangan Carranglan Watershed Forest Reserve:***

For the PCWFR, the municipalities that are covered within the project area are: Pantabangan and Carranglan. The following plans currently exist:

- Protected Area Management Plan (PAMP). Initial efforts to update the Protected Area Management Plan of PCWFR have been made. The project can build on this effort in supporting the multistakeholder engagement and the integrated spatial planning approach.
- As for of all other Protected Areas, the plan is administered by the Protect Areas Management Board (PAMB) which is comprised of members from the DENR. The Regional Director serves as the Head/Chair of the Board.
- Forest Land Use Plans (FLUP). These plans are also required plans for all LGUs.
- Comprehensive Land Use Plans (CLUP). These plans are also mandated by law for all municipalities. These plans include the FLUP and other development plans including climate change or disaster risk protection plans.
- Comprehensive Resource Management Plans for CBFM areas. In addition, CBFM areas may also have Resource Use Plans (RUP) if the area has on-going (or proposed) harvesting of some of its products
- Four PCWFR Sub-watershed Management Plans (Barat, Diaman, Pinagloriahan and Segium) 2015-2025
- PCWFR Ecotourism Development and Management Plan

In addition to these plans, other complementary plans developed and implemented by other agencies such as National Irrigation Authority, and other organizations including the private sectors such as First Gen, will be considered in the context of the landscape level planning process. Interactions and initial discussions with these organizations indicate that they are very interested to collaborate with the project in exploring and implementing joint restoration initiatives within the PCWFR.

***In Simulao Watershed, Middle Agusan River Basin:***

The Simulao Watershed (Sub-Basin) covers the municipalities of Trento, and Sta. Josefa, Agusan del Sur, the Municipality of Lingig Surigao del Sur, and portion of the Municipality of Boston, Davao Oriental and Monkayo, Compostela Valley. It is one of the sub-watersheds within the Middle Agusan River Basin (ARB). The following plans currently exist:

- Agusan River Basin Master Plan prepared in 2008 and updated in 2016.
- Simulao Sub-Watershed Management Plan
- Forest Land Use Plans (FLUP). These plans are also required plans for all LGUs.
- Comprehensive Land Use Plans (CLUP). These plans are also mandated by law for all municipalities. These plans include the FLUP and other development plans including climate change or disaster risk protection plans.
- Comprehensive Resource Management Plans for CBFM areas. In addition, CBFM areas may also have Resource Use Plans (RUP) if the area has on-going (or proposed) harvesting of some of its products

Landscape level planning support for restoration in the Simulao Watershed is also needed and the region, through some of the regional agencies such as the National Economic Development Authority (NEDA), Department of Interior and Local Government (DILG) and Department of Agriculture (DA), and the Department of Agrarian Reform are interested in collaborating with the project on restoration initiatives within the region.

Direct collaboration with the sister UNDP Project will be done in Eastern Mindanao. Here, KBAs identified by UNDP through spatial analysis of wildlife habitat (e.g. use of survival envelopes to delineate the habitat of key species and species groups) will serve as the ‘focal area’ where areas for restoration will be identified by strategically locating them in areas where connectivity of fragmented habitat can be enhanced. Indeed, biodiversity conservation is one of the concerns of the project and as part of the plan, interventions designed to enhance the connectivity of fragmented habitats of important or key species will be particularly targeted. The project will collaborate very closely with the UNDP project in pursuing this activity.

***Output 2.2: Community restoration plans including technical pathways as well short & long term financial plans developed and implemented***

After a comprehensive and in-depth characterizations of the project areas and considering the set of restoration approaches developed as part of the landscape planning, Output 2.2 focuses on the restoration, protection and maintenance activities of priority degraded areas at the project site level. Understanding the different roles and responsibilities of men and women will be central to the success of this output.

All the activities are designed so that they complement each other in achieving the output: drafting and implementing effective and sustainable restoration plans ensuring that multiple benefits are achieved and sustained in the long term.

To support and complement Output 2.2, particularly on the provision of incentives for restoration activities:

- Output 2.3 supports programmes enabling communities to enable to obtain livelihood and economic benefits in a sustainable manner from and through the restoration activities.
- Output 2.4 focuses on long-term land tenure and right to trees as an incentive for restoration.
- Output 2.5 supports the development of Payment for Ecosystem Service in support of restoration activities.

Under this Output, planned activities are as follows:

*Activity 2.2.1 Assess, prioritize and select NGP and other degraded areas in need of protection and management*

During the landscape planning phase, a set of potential good candidate as sites for this project will be defined. Using this information, multi-stakeholders' consultations will be organized to narrow down the choice of sites and an extension officer will be introducing the project to the selected LGU to validate their interest in the project. This will lead to the selection of the most appropriate sites with the consent and support of the stakeholders and local communities. The exact localization of the sites (GPS coordinates), including maps of these sites will be communicated to the GEF secretariat in due time.

To identify more specific project sites within these two areas, the following features must be considered:

- Existing institutional/governance capacities (CBFM, watershed, RBCs): Because of limited funding support, the project's strategy is to conduct intervention activities in areas where governance is already clear, already under land tenure instrument with already established institutional capabilities.
- Size of the area: Larger size area (above 50 ha if possible) will be considered to maximize the coverage and create meaningful biodiversity corridors.
- Presence of forestry-based enterprises, cooperatives, other value chain actors: This criterion puts premium on the choice of site selection to those potential areas that already have high potential for entrepreneurship by virtue of having forestry-based enterprises and other value chain actors.
- Less investment risk - Commitment from communities, POs (active stakeholders), reinforce champions: This criterion puts the project in a risk averse posture by focusing on those areas where the ingredients for successful implementation are in place, and barriers are also at a minimum
- Maximize investment coverage: This complements the principle of 'incremental' support, or additionally by focusing project investments on those that will complement government's initiatives
- Optimization of linkages with BMB-UNDP sites in Eastern Mindanao (convergence area). This will ensure maximum complementarity between the two sister projects, particularly in the common site at Eastern Mindanao.

The project will mainly focus on two types of sites:

(i) Areas having already benefitted from the NGP or FMP, and having strong income generation potential thanks to restoration, but having issues to sustain the results after the three-year subsidy period. These areas need to be supported to avoid losing the investment in these sites. After field visits and inspection of several completed NGP sites, it became clear that some of these areas are in urgent need of protection and management. Many areas have been overrun and outcompeted by weeds and other vegetation, many of which are pioneer, non-desirable species. After extensive consultation with DENR colleagues, particularly those directly involved in the project areas, it was decided that the project should put significant effort in the protection and management of completed NGP areas as well as in finding ways to make restoration sustainable in these areas. One of the ways to do so is to link restoration with improved livelihoods. This is particularly significant in PCWFR because large tracts of NGP areas (more than 90% of completed and turned over to DENR) within the watershed are 'untended' and are therefore left unmanaged and unprotected. Support for these areas is needed and can help address the problem of degradation within PCWFR. Value adding strategies will be particularly suitable at NGP project sites in Eastern Mindanao because a number of these areas, especially those planted in 2011 to 2013 are relatively mature, with some of their products (e.g. falcata trees, rubber, cacao, coffee) ready to be harvested.

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(ii) Areas which would be suitable candidate for the Enhanced NGP (E-NGP) and can benefit from technical assistance to ensure multi-benefits are derived from restoration activities. The ENGP will support the restoration activities and they will be completed by technical support from the project. The experience gathered while working on existing NGP sites above, will be particularly interesting for these sites. One of the expressed goals of ENGP is to provide ‘value adding’ opportunities to completed and ‘mature’ NGP areas. The objective of value adding is quite clear: provide livelihood and economic incentives to local communities and encourage them to continue to protect and manage the NGP areas.

*Activity 2.2.2. Support the development or the revision of the restoration plans in the selected sites, including a short & long-term financing/incentive plan*

Once the sites are identified, a deep review of their planned, or already achieved restoration activities, will be conducted.

Depending on the status of the site as described in Activity 2.2.1 (i.e. either completed NGP site or future E-NGP site) the project support might vary with the absence or presence of a restoration plan. In the completed NGP sites, the restoration plan might need to be developed (e.g. untenured NGP sites) or updated (e.g. tenured NGP sites such as those within CBFM areas), and the restoration actually done needs to be verified. Indeed, preliminary field observations showed that restoration activities done through NGP did not always yield favourable results as manifested by few surviving plants only a few years after the 3-year NGP period. This implies that restoration wasn’t always done according to plan. This limits the possibility to gain full benefits from the restoration efforts. For example, fruit trees were not planted in a way that makes economic sense, i.e. too far away from each other in difficult terrain making harvest not economically efficient.

In all the cases, restoration planning should be done with consideration of the provision of multiple benefits: economic, ecological and social. Indeed, a plan with only restoration activities and no clear benefits to the communities has fewer chances to be implemented and sustained than one that includes activities from which communities can gather benefits in the long or short term (i.e., agro-forestry, activities linked to payment for ecosystem services, etc.).

In the selected sites, PO, communities or the LGU will be supported to review or develop restoration plans responding to the need of the areas as well as the need for long term sustainability of the efforts. Such restoration plan must: 1) address the restoration needs of the area, 2) be consistent with the landscape or broader plan developed in Output 2.1; and, 3) include a short and long-term financial/incentive plan that provides for long term benefits of the local communities drawn from the gains of implementing the restoration plans over a period of 10 to 15 years.

The financial/incentive plan (or package) should include different forms of incentives available in the short to long term including:

- Direct subsidies
- Free FLR technical support/capacity building activities (see 2.2.3.)
- Improved security of tenure and right to trees (see 2.4)
- Economic revenue from community enterprises linked to restoration (see 2.3) or PES schemes (see 2.5)
- Etc.

The incentive/financing plan should also be making links to other existing livelihood development programs of the Government, to increase the financial support to the community. Examples are provided in Output 2.3.

To achieve the objectives of this activity, the project will hire two consultants; a Landscape Restoration Specialist, and a Landscape Restoration Financial Specialist. The two specialists will: 1) lead workshops and conduct training on business planning and restoration planning; 2) assist in the review/development of restoration plans for project sites including multi benefits and 3) assist in the development of financial/incentives plans for project sites. The Landscape Restoration Financial Analysis will benefit from the support of an international FLR Finance expert.

*Activity 2.2.3. Design and implement relevant trainings on restoration, protection and management of degraded areas*

Success in any restoration, protection and management of forests hinges on the application of suitable restoration strategy that matches the conditions of the site and the site requirements of the species planted.

According to the needs expressed during consultation sessions after the restoration planning, the project will design appropriate training modules that will be conducted by restoration experts targeting stakeholders directly involved in the restoration, protection and management of NGP/ENGP areas. The trainings could cover diverse topics ranging from Assisted Natural Regeneration implementation, firebreaks or local seeds/seedlings nursery. For the economic activity support (value chain improvement etc.) the support is under output 2.3.

For this activity, close linkages will be built with the Agricultural Training Institute (ATI) of the Department of Agriculture (DA), which will create bridges with the services of the Research, Development and Extension of the nearest State University. In the case of the PCWFR, it is the Central Luzon State University and in the case of Region 13, it is the CARAGA State University.

*Activity 2.2.4. Support the development of community development funds for the implementation of restoration and financial plans in selected sites*

As described above, the project will support DENR in making “old” and new NGP sites sustainable.

Under the NGP program, local communities were engaged in restoration activities through various forms of modalities. Part of the modalities was for the local communities to be ‘compensated’ for restoration activities they have completed. The ‘payment scheme’ was based on a staggered system where communities are paid in tranches: First tranche for mobilization and start up including cost of seedling (approximately 6,500 Php/hectare) given on the first year; then protection and maintenance of 3,000 Php per hectare on the second year, and finally about 3,000 to 4,000 Php per hectare on the third year. Payments were conditioned (subject to verification) by a survival rate of at least 80% at the end of the second and third years. Field visits to these areas have shown that although documentary evidence, including geotagged photos, show that these areas were in good condition at the end of the three years (e.g. 80 percent survival is required and satisfied), many of these areas when visited barely two years after that have been overrun and overtaken by weeds and undesirable vegetation. Hence, these areas are i) in need of protection and maintenance to allow surviving seedlings to develop and grow and ii) in need of a long-term plan to support the restored area.

To improve sustainability, the project will support the development and implementation of restoration plans bundled with financial/incentives plans ensuring sustainability. For the old NGP sites, it will be about supporting them to be able to gather the fruits of their earlier restoration and managing the revenues to support continued restoration. While the new NGP sites will benefit from the experience of the old NGP sites and have a sustainability vision from the start. These experiences will have an influence on the implementation of the ENGP.

To empower the communities in the management of restoration funds, Community Development Funds (CDF) will be set up to manage the monetary incentives linked to restoration coming from subsidies/ PES schemes (see 2.5) or from the generation of revenues from community-based enterprises linked to restoration (see output 2.3). As restoration activities at the community level have been historically managed at by PO, the CDF could be set up at that level. The first task of the Development Fund Specialist in charge of this activity will be to understand under which body the CDF should be localized to respect the regulation/law on decentralization and local customs.

CDF development includes the definition of: 1) the governance mechanism of the funds; 2) procedures and safeguards for the deposit and disbursement of finances from the fund; 3) benefit sharing schemes and mechanisms among communities. During the CDF definition and implementation phases, equal participation of women and men in decision-making processes that affect the use, protection and regeneration of resources needed for sustainable livelihood will be ensured.

The project will hire a Development Fund Specialist and organize meetings in all the pilot sites to present, discuss and set up CDF. He will be able to draw on the experience of other projects from UNCDF and FAO (mainly in Niger, developing Green windows in Community Development Funds)

Depending on the site, the restoration activities as well as the incentive package will differ, but all of them will include the development of livelihoods activities linked to the restored areas.

The project will support 3 main types of sites and related incentive packages:

***(1) NGP sites that are non-tenured:***

Two related incentives innovations will be implemented in these areas:

· First is to support DENR to provide a tenure instrument to these untenured NGP areas (see. Output 1.4). The first innovation is for the project to draft new land tenure instrument (an adaptation from CBFMA and PACBRMA), consistent with the restored sites principles promoted earlier in the DENR, and consistent with the unified land tenure system (e.g. LERMA) which was studied, considered but not yet piloted by DENR. The land tenure instrument will be bundled with the ‘conditionality’ that protection and management must be conducted.

· Second is the setup of the Community Development Fund. This Fund could benefit from seed funding which will have as its basic element the following:

- 1) financial grants will be in tranches (not lumpsum) conditioned on satisfactory conduct of the protection and maintenance conditionality;
- 2) grants are not actually payment for labour; instead they can be used for developing the area for value adding and livelihood generating benefits;
- 3) ‘pay back’ is also a requirement for subsequent tranche grants (amount of payback can be set as a certain percent of proceeds);

***(2) Existing NGP areas with tenure:***

In these sites, the work will focus the CDF development and value adding to the restoration area. If the area is in good condition the project could support seed funding to support enterprise development, but with the requirement that restoration activities (including replanting) be done within the NGP areas. As pointed out earlier, value adding is one of the primary objectives of the enhanced NGP (ENGP). Support for this is important so that local communities will continue to have interest in managing and sustaining their NGP areas. The support to value adding is described in more details in output 2.3.

***(3) New ENGP sites:***

In these sites, as in the others, restoration and incentive/financial plans will be developed. The project will support the setting up of Community Development Funds but won’t be inputting any seed money, which will come from the DENR or other sources of funding.

Much has been learned from the experiences of DENR from their different restoration programs such as NGP, FMP and INREMP. This project will collaborate with DENR in harnessing these lessons learned and enhance them with experiences and reported successes in other areas with the intent of developing knowledge products that can be used by DENR for new ENGP areas.

***Output 2.3: Technical, organizational and marketing support is provided to communities to enable them to obtain livelihood and commercial benefits in a sustainable manner through restoration of degraded areas***

In addition to the material and advisory support that will be provided through the successor to the National Greening Program, the project will provide complementary technical, organizational and marketing support to partner communities to enable them to carry out productive activities effectively, viably and sustainably in restored areas and thereby generate livelihood and commercial benefits. This support will generate funds which could be partly funding the Community Development Funds. The project will ensure that safeguards are in place to ensure that the activities are both supportive of community livelihoods and contribute directly to global environmental benefits. This will be ensured through combined efforts by the project team, community led monitoring and evaluation and through government led monitoring. Development of the alternative livelihoods activities will be part of the restoration plan agreed by the community and will be regularly self-monitored. The project funded business development expert will also make sure that the business plans put together are sustainable on the long term. The fact that the entire community will get benefits from the restored land should also ensure a social control of these activities. In addition, as these activities will be part of the governmental program NGP, so they will be monitored by the government.

Under this Output, planned activities are as follows:

*Activity 2.3.1 Conduct value chain analyses for trees and non-timber forest products, which have potential livelihood benefits*

Several productive options exist in the two project areas, which have the potential to be established following ecosystem restoration, to favour biodiversity and sustainable forest and land management, and to generate significant livelihood and commercial benefits for farmers.

Field visits and consultations conducted suggest that value adding efforts can be pursued for commodities corresponding to the NGP modalities such as:

- legalized fuel wood, green charcoal, cacao and bamboo for PCWFR
- falcata, coffee, cacao and rubber for Eastern Mindanao.

Once these options have been further validated at the onset of the project, localized value chain analyses (VCAs) shall be conducted for each commodity to ensure higher productivity and income in each phase of the chain from seed production and land preparation, to processing, packaging and trading of the product. These studies should build on existing value chain studies already done by the DTI for the selected commodities.

Local fora to share the VCA results will also be supported by the project to facilitate possible adoption and replication of other NGP sites with similar commodities not supported by the project. The results of the VCA will also be very useful for the development of the enterprises described in activity 2.3.2.

To support the DENR, the project will establish linkages with government and non-government programs that offer both technical and financial support in enterprise development to maximize its impact. Some examples are provided below:

- The Sustainable Livelihood Program (SLP) of the Department of Social Welfare and Development (DSWD) is a capacity building program to develop the entrepreneurial and labour skills of poor households by providing them with opportunities to enhance their access to basic social services and standard of living.
- Project KAPATID is an initiative of the Department of Trade and Industry (DTI) and the Philippine Centre for Entrepreneurship (PCE) to help the country's micro and small enterprises (MSEs) through three key components:
  - o The Mentor ME (micro entrepreneurs) program, a coaching and mentoring approach where large corporations teach MSMEs on different aspects of business operations
  - o The Adopt-an-SSF (Shared Service Facility) program, which aims to help micro entrepreneurs by providing them access to SSFs in their community
  - o The Inclusive Business (IB) model where MSEs are linked into large companies' value chains

The Department of Labour and Employment's (DOLE) Integrated Livelihood Program (DILP) program is designed to reduce the vulnerability to risks of the poor, vulnerable and marginalized workers by providing them access to a grant assistance for capacity-building on livelihood ventures either for individual or group undertakings.

The Philippine Program of the Non-Timber Forest Products Exchange Programme (NTFP-EP) is a collaborative network of non-governmental organizations and community-based organizations that empowers forest-dependent communities to utilize and manage their forest resources in a sustainable manner. It works with more than 50 community based NTFP enterprises in 12 provinces in the Philippines.

The UNCTAD EMPERTEC centre which is providing entrepreneurial training and also looking for value chain and sites where entrepreneurs could use their skills.

In Simulao, CSR from mining companies should be explored to develop livelihoods activities and support restoration as it is required by law.

*Activity 2.3.2 Provide technical, business and marketing support, including seed capital, to establish viable forest-based community enterprises*

In addition, the project will engage Business Development Experts that will provide direct coaching to entrepreneurs, including the development of simple business and financial plans. The support will be spread over 2 years and could be extended, as needed. Stakeholders directly involved in the enterprises will be coached by business development experts (not only focused on marketing but on all the different aspects of business development). Up to 8 enterprises/entrepreneurs linked to FLR will be selected to benefit from direct coaching: supporting the business and financial plans of the enterprise, which will include partnerships with enterprise support programs of other NGAs such as DTI and DSWD to provide seed capital. The project will also provide seed funding for these enterprises.

Indeed, through the CDF established under Output 2.2, limited short-term financial support from the project may be provided to local communities for adding value to harvested products through processing; in parallel, the project will assist in linking producers to sustainable sources of finance to meet their ongoing needs. This will be complemented by funds sourced from partner agencies mentioned above. Project support to these aspects will also ensure that the beneficiaries of the project access the proper tenure and use rights, as proposed under Outputs 1.2 and 2.4.

These enterprises will be closely linked to restoration either through the commercialization of goods for restored areas or surrounding areas or through the proposition of goods and services for restoration such as the setting up local seeds/seedlings nurseries. Enterprise led by women and youth will be of particular interest using the *Gender Responsive ENR Enterprises (GREEN) Kit* developed by DENR, which is a compilation of existing enterprises managed by women, families and peoples' organizations using DENR-based resources.

The requirements of specific industries should also concur with the Good Agriculture Practices (GAP) for commodities under consideration; these refer to practices that address environmental, economic and social sustainability for on- farm processes, and which result in safe and quality food and non-food agricultural products (RA 10611 Food Safety Act of 2013). These practices are categorized into several modules: food safety; produce quality; environmental management; and workers health, welfare and safety.

Various government agencies are involved in the development and regulatory efforts on food safety. For example, the Department of Agriculture (DA), Department of Health (DOH), Department of Trade and Industry (DTI), Department of Science and Technology (DOST), and the Department of Interior and Local Government (DILG) are involved in the country's rural development and food safety systems. DA monitors and regulates the safety and quality of fresh, primary-, and secondary-processed agricultural and fishery products (GAP is one of its tools to do this); DOH takes care of highly processed foods; DTI regulates trade matters for local producers, exporters, importers, and consumers of food; DOST supports the conduct of R&D in improving food processing technologies; and DILG is responsible for helping local government units (LGUs) put in place food production programs and implement food safety procedures for local consumers.

***Output 2.4: Simplified mechanisms to ensure stakeholders' rights to use and market trees and non-timber forest products that they have established and/or sustainably managed***

The right to trees is very closely linked to land tenure and is the responsibility of the DENR. It is key to ensure that the communities involved in restoration activities are able to harvest the timber and non-timber forest products of the restored plots. It is also important to understand how the communities can benefit from existing trees and sustain restoration efforts, while the newly planted trees are maturing.

DENR's mission is to oversee the complex task of encouraging timber plantation development and protecting the remaining natural forests. A comprehensive but clear set of regulations already apply to tree registration and timber harvest and transport in the Philippines, the legal basis of which is summarized in the Table below (Calub, F, 2005). Productive Forestry measures through tree plantations can take place in agricultural lands and in agrarian reform areas. The tree registration process is flexible in terms of timing – possible at plantation establishment through to harvest time – and provides harvest security. Many farmers have registered their plantations, some with areas as small as less than one

hectare. The system of registration for private lands is clear. For landowners to be given approval for their timber harvesting, it is necessary that their private tree plantations be first registered with the DENR. The documentation of tree plantations on private land is covered by Department Memorandum Circular No. 97-09. This is designed to determine the extent of tree planting on private land and at the same time facilitate the processing of documentation for future harvests.

Legal basis for tree registration, harvest and transport regulation, in private lands

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a	MNR Administrative Order # 4, s.'87
b	DENR Administrative Order #86, s.'88
c	DAO # 26, s.'90
d	DENR Administrative Order #79, s.'90
e	DMC # 97-09 & DMC # 97-23
f	DENR Memorandum Order #99-20
g	DAO # 2004-04
h	Memo dated 5 November 2004

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The DENR's policy on tenure over trees, which guarantee right to harvests, process and trade as well, is defined in various mechanisms depending current tenure regime (Annex 12). Navigating through the different land tenure options and their implications can be quite a tedious process.

In the case of public forest lands where NGP projects are located, the prospective application of CBFMA or PACBRMA, respectively, provides systematic coverage after key conditions are met. The approved Comprehensive Resource Management Framework (CRMF) sets the scope with which harvesting can be undertaken. This sets the stage for the issuance of an approved Resource Use Permit (RUP) by the DENR. The downstream activities are similarly covered by the necessary processing and transport permits.

Once the tenure, and associated right to trees, has been clarified, the main contentious issue left is the harvesting of naturally growing trees, which remain to be prohibited by Executive Order No. 23. This has limited the ability of the CBFM POs to optimize benefits from their CBFMAs, which could support their transition needs for livelihood, while waiting for the planted trees to reach their economic rotation.

Apart from the DENR, the key actors involved on the right to trees are the LGUs. Indeed, how to handle People's Organizations economic activity in classified Public Forestlands isn't clear yet. The LGU's facilitative role can be constructively engaged if POs are able to acquire representation in local special bodies at the municipal level. The special body such as the local environment and natural resource committee under the municipal development council, can provide the regular venue for PO participation.

Enabling local governance support to secure guarantees for tree tenure is key to sustaining uninterrupted enterprise development activity at the community level.

Under this Output, planned activities are as follows:

*Activity 2.4.1 Analyse gaps and barriers in existing policy frameworks related to stakeholders' rights to trees and non-timber forest products*

To support the development of community-based enterprises and the long-term sustainability of restoration, this activity will build on the Output 1.4 on Tenure. The project will analyse gaps and barriers in existing policy frameworks related to stakeholders' rights to trees and non-timber forest products. This will include desk study as well as conducting workshops, LGU and community consultations, etc.

*Activity 2.4.2 Design alternative agreements for rights to trees and NTFPs and recommend course of action for LGUs*

The results of the study and consultations under 2.4.1 will be used to design alternative agreements for rights to trees and NTFPs and recommend course of action for LGUs.

As part of the recommendations, the following lead could be further investigated:

- PO could negotiate that host LGUs should spare levying assessment charges, while the plantations are still in their developmental stages.
- Making the LGUs fully aware of the POs long-term development plan to ease the follow up. Thus, the tree registry system should be a redundant feature at the local government level, particularly at the level of the concerned barangay. The safeguards then, would require a certification system along with the chain of custody, to ensure that only the trees coming from the plantations would be covered by the harvesting and transport permit.
- Catalysing interest and commitment from the host LGU to develop the necessary governance system to provide the enabling conditions to support the generation of multiple and integrated resource optimization and benefits.

### ***Output 2.5: Functional system of payment of environmental services rewarding stakeholders for restoration***

Under this output, the project will explore different approaches and mechanisms by which forest communities can be incentivized to restore forests and landscape. Payment for Ecosystem Services (PES) is one such mechanism where communities can receive financial or economic benefits in exchange for their efforts in sustainably managing their forests and protecting the landscape. It is therefore one of the ways to get money into the Community Development Funds.

The project will initially mainly focus on Water related PES and REDD+ schemes. There have been a few successful applications of PES in the Philippines, many of which are centered on the use of water (see box 1 under Component 1). Water-based PES is well suited for the project area in PCWFR with the watershed and the dam. The scope of the system in terms of who are the protectors (i.e. upland communities) and the users (downstream communities) can be delineated and the system of actors (buyers and sellers) identified.

For REDD+, the project will build on past studies and projects (e.g. GIZ, B+WISER) on how to carry out a REDD+-like initiative. The project will pursue REDD+ a bit differently compared to the traditional REDD+ concept. REDD+ will be developed and carried out as a potential avenue for providing opportunities for corporate social responsibility for the private sector instead of the 'payment for carbon credit' idea of traditional REDD+. Hence, the project will pursue the typical REDD+ activities (e.g. establishment of the Reference Emission Level and the development of an MRV (Measurement, Verification and Reporting System)). However, the procedure and process of developing and conducting these activities will not be restricted to generating 'certified carbon credits' that can be 'sold' in the carbon market. Instead, the ultimate goal of the system is to provide verifiable carbon benefits which the private sector can claim as their CSR. The + will also include a suite of other social benefits coming from restoration. This allows for a less stringent, but still verifiable, carbon benefits without the expensive transaction cost that is required by the more stringent REDD+ for carbon credits and markets.

To set up PES scheme, the project will conduct the following major activities:

*Activity 2.5.1 Conduct survey of possible PES system applicable in the target areas*

Using the work done under output 1.2, conduct survey of possible PES system applicable in the target areas. The project should review these successful applications taking note of the properties of the systems that work or were successful, the components of the system that needed to be in place, and the institutional and organizational infrastructure of the systems, including policies and possible regulations that were put in effect to make the system work. In other words, the assessment should focus on the lessons learned.

From these lessons learned, the project should select potential sites that can be used as a model or pilot site.

Under this Output, planned activities are as follows:

*Activity 2.5.2 Conduct survey of buyers (users) and sellers (forest communities) of water and other potential ecosystem services*

In conducting the survey, the project will also conduct consultations with stakeholders and potential partners in the PES such as buyers and sellers.

*Activity 2.5.3 Assessment/valuation of user fees*

This activity refers to the conduct a valuation study to determine the value (or amount) that can be charged to buyers (users) in exchange of the service rendered. This activity can use the information gathered in the “Assessment of the socio-economic value of the goods and services provided by Mediterranean forest ecosystems”[\[2\]](#) which present an analysis of several methods to assess this valuation by users.

#### *Activity 2.5.4 Facilitate the setup of a PES scheme*

This activity will include other sub-activities such as:

- Develop the payment scheme and other financial/benefit sharing schemes to ‘sellers’
- Develop the overall administration, management, and control of the PES
- Explore the possibility of drafting a policy instrument (national or local such as ordinances at the LGU) to enforce the implementation of PES.

To accomplish this activity, the project will engage the services of a consultant who will conduct the review and survey of PES systems, including the results and experiences of past REDD+ studies. The consultant will also lead a series of workshops and conduct consultations with the communities and LGUs about PES, both for water services and REDD+. In addition, data enumerators/collectors will also be hired to assist the consultant in conducting the survey needed for the water-based PES.

#### Component 3: Knowledge, Partnerships, Monitoring and Assessment

This component has 2 foci:

***Knowledge Management:*** A lot of experiences are existing on multiple benefits approaches to restoration, but they are often neither well documented nor easily accessible in the Philippines. To address this, the project will work on an integrated Knowledge Management (KM) system.

The KM system has three sub-components: the KM platform; the content; and the delivery system. These sub-components correspond to three of the Component’s outputs: a comprehensive knowledge management platform composed of electronic, community and stakeholder networks; the systematization/organization of the content (indigenous, local and technical knowledge on forest restoration and multi-benefits); and the production and dissemination of knowledge products based on the content.

The development of the project knowledge management system will be guided by a KM and systematization framework based on the four dimensions of the science of delivery or SOD (Kim, 2014):

1. Support for frontline implementation by capturing local and indigenous knowledge and feeding that knowledge back into practice through systematization and dissemination.
2. Increased capacities for dissemination and knowledge delivery skills based on the tacit knowledge of stakeholders.
3. Involvement of research stakeholders (i.e., academe) to spur innovation and evaluate new interventions.
4. Construction of an integrative ontology-based systematization model that can organize and explain successful approaches to solving forest restoration problems.

Please refer to the Appendix for a comprehensive discussion on the KM and systematization framework.

**Monitoring & Evaluation:** The monitoring of restoration activities within the NGP is currently restricted to survival rate of plant, which doesn't give any indication on the success of restoration more globally as growth rate, species diversity, fruits yields, etc. are not considered. The project will work on a monitoring system for restoration easy to implement looking at the success of restoration more globally as survival rate hasn't proved to be a very efficient indicator. It will build on existing monitoring tools in the Philippines as well as the work done by the FLRM/IKI project on Monitoring.

### **Outcome 3: Knowledge of diverse approaches to restoration is effectively managed and applied, permitting sustainability and scaling up**

Under this Outcome, the project aims to achieve the following:

1. 75% of key stakeholders from Government agencies, CSO and beneficiary communities with increased awareness of restoration options delivering multiple benefits
2. 40 sites implementing restoration techniques/activities that they learnt from other sites
3. 2 forest restoration modules added to the Forest Farmer Field School Manual

4. 1 National FLR M&E system that incorporates lessons from project M&E system

These results will be primarily achieved through the 4 Outputs described below.

***Output 3.1: A multi-level, multi-modal and multi-dimensional project KM developed, tested and rolled out***

To capitalize and share existing knowledge on restoration approaches the project will develop, test and roll out a multi-level, multi-modal and multi-dimensional project knowledge management system. Its purpose is the sharing and reuse of project results, best practice and lessons learned internally and externally at the local, national and global levels. Its users will be: project staff; project beneficiaries; decision makers; policy makers; the international forest restoration community of practice; and the general public (for success and human-interest stories).

Under this Output, planned activities are as follows:

*Activity 3.1.1: Validate and further identify/analyze existing knowledge resources and KM systems at the global, national and local levels relevant to landscape level conservation.*

Existing knowledge management platforms on landscape restoration at the regional, national and international levels were assessed during the project preparation phase. The key findings are:

*At the international level, land restoration knowledge is generally found in SLM KM platforms. Since much of restoration knowledge has been traditionally categorized under sustainable land management, they are being made available in online SLM knowledge platforms such as WOCAT (World Overview of Conservation Approaches and Technologies). In the case of TRI, FAO leads its global knowledge component, which would eventually include this Project's KM system.*

*Regionally and locally, experiences on multiple benefits approaches to restoration are neither well documented nor easily accessible.* Related regional KM platforms on natural resources management exist such as SEARCA's Knowledge Center for Climate Change (KC3) and the ASEAN Center for Biodiversity (ACB). However, there are no KM systems dedicated exclusively to forest and landscape restoration. It does not account substantively in their current content. WOCAT has its national counterpart, PHILCAT (Philippine Conservation Approaches and Technologies) maintained by the BSWM (Department of Agriculture Bureau of Soils and Water Management). Currently, the BSWM is implementing the GEF-UNDP Implementation of Sustainable Land Management Practices to Address Land Degradation and Mitigate Effects of Drought. The possibility of plugging in a GEF-FAO project module into PHILCAT is currently being considered by the GEF-UNDP project.

*Several agencies maintain legacy systems that are related but are not dedicated to forest and landscape restoration.* There are several other legacy systems in the Philippine environment and natural resources sector, focusing on biodiversity, ecosystem flows, and carbon sequestration respectively maintained by the Biodiversity Management Bureau, the Climate Change Commission and the Forest Management Bureau. However, the most relevant to the project is PHILCAT.

*A system devoted to traditional, indigenous or local knowledge on land restoration does not yet exist.* However, at the local level, KM networks need not be digital networks. These may consist of project initiated informal social networking groups, i.e., communities of practice, active on the Facebook platform. The existence of such CoPs may be validated in the social development baseline studies conducted by the project.

The proposed KM platform will be made up of electronic and non-electronic knowledge networks. The electronic component will be linked with the global TRI system maintained by FAO as well as other systems for documentation and sharing of best practices relative to sustainable land management and forest and landscape restoration.

To deepen the analysis made during the project preparation phase, the identification and analysis of additional knowledge sources and systems need to be undertaken at project start-up. A special attention will be given to similar products being developed in the TRI countries.

*Activity 3.1.2: Deploy a G Suite platform for internal KM and develop a PHILCAT plug-in on forest restoration for external KM.*

The electronic KM System will have two components: internal KM and external KM.

The internal KM system having as its primary users, project staff and stakeholders, will be deployed using Google Suite or G Suite. The project G Suite for instance would encompass the following functionalities: project email (Gmail), project messaging (Hangouts), project scheduling (Calendar); storage and file sharing (Drive); workgroup collaboration (Docs, Sheets, Slides, Forms, and Sites); database (Google SQL); and video and photo documentation and sharing (YouTube) including a digital interactive whiteboard (Jamboard) for multi-point remote meetings. In this regard, the project should apply for a Google Suite Account.

The external KM system will be hosted externally and will assume content management system functionalities. We propose the latter to be a forest restoration plug-in within PhilCAT. With the concurrence of the DA Bureau of Soils and Water Management, a forest-restoration plug in for the project will be deployed. PhilCAT is the Philippine node of WOCAT, the global repository of conservation technologies. Although basically a content management system (CMS), it may accommodate additional functionalities that would enable it to serve as a knowledge management system for internal and external users. . In effect, WOCAT through PhilCAT will be the project's platform for substantive contributions to the global body of knowledge on sustainable land management (SLM).

PhilCAT possesses geotagging and metadata management capability but it cannot manage qualitative data. The nature of knowledge is qualitative and contextual (e.g., audio-visual data; narratives, etc.). Although it may be electronically captured, it cannot be efficiently and effectively managed without the appropriate handles/ attributes. Additional attributes that characterize best practices, lessons learned, success stories, project insights, local solutions and indigenous knowledge should be incorporated into the system via refined ontologies and semantic links. These attributes serve as semantic metadata that allows for the management/ manipulation of the qualitative data mentioned above. The CMS Developer hired by the project will be in charge of making sure that the plug-in has all the necessary attributes.

*Activity 3.1.3. Create linkages with other legacy systems focusing on biodiversity, ecosystem flows and carbon sequestration respectively maintained by BMB, ERDB, SEARCA, ACB, CCC and FMB*

Following up on the identification of relevant sources of knowledge in activity 3.1.1. The project will create linkages with the different sources of information.

In the Philippines, the institutional legacy systems are more of databases and information systems rather than knowledge management systems. Generally, their content has metadata links that allow for sharing and reuse of quantitative, nominal and descriptive content. Others accommodate online discussions and file sharing among communities of practice (COP).

However, none exist that make use of semantic links and tags that are necessary for KM systems. Furthermore, these legacy systems are purely electronic and are not linked to non-digital networks which are part and parcel of KM systems. The project will organize/build on this type of system to make the best use of them.

*Activity 3.1.4: Organize knowledge networks at community level w/links to community media.*

A system devoted to traditional, indigenous or local knowledge on land restoration does not yet exist. However, at the local level, KM networks need not be digital networks. These may consist of project initiated informal social networking groups, i.e., communities of practice, active on social media platforms. Furthermore, community media such as local radio and community cable TV stations may be used.

Opportunities exist to establish local knowledge networks. Additionally, formal and informal channels for indigenous/local knowledge sharing and reuse may be tapped with the participation of local CSOs such as the Kababaihang Masigla ng Nueva Ecija (KMNE) and the academe such as the Central Luzon University (CLSU) for the Region III Project site. Private sector support may also come from corporate social responsibility (CSR) funding for the Eastern Mindanao project site. Companies that are about to embark in mining operations in the area may provide this support as part of the mitigating measures required for them to obtain an ECC.

*Activity 3.1.5: Implement internal and external knowledge sharing and reuse actions.*

Once the networks have been established and the systems are in place, internal and external sharing and reuse of forest restoration knowledge and multi-benefits should be continually undertaken.

*Activity 3.1.6: Initiate and facilitate electronic, community and interpersonal networks.*

The full-size project should also maintain knowledge networks among stakeholders. It should include the following nodes: academe; local media (radio and cable stations); LGU workers; NGOs; and community leaders.

In summary, the proposed KM system will be multi-level, multi-modal and multi-dimensional and will be the responsibility of the KM & Systematization Specialist with the support of the CMS Developer and the Knowledge Networks and CoPs Expert as indicated below. It will take into consideration the needs and communication accessibility of all stakeholders (including women, youth, etc...) considering that different stakeholders may value, access and use knowledge on forest restoration differently.

KNOWLEDGE NETWORKS	RESPONSIBILITY	INTERNAL KM CONTENT	EXTERNAL KM CONTENT	USER LEVELS
Electronic Network (Messaging & collaboration, KM content management system) <i>Platforms: Google Suite and PhilCAT</i>	<i>KM &amp; Systematization Specialist</i> administers KM electronic network. <i>CMS Developer</i> designs and programs PhilCAT plug-in. CMS will be maintained by BSWM.	Project activities and output Lessons learned M&E information	Best practice Success stories Infographics Electronic knowledge products	Global, National, Local: project staff; project beneficiaries; decision makers; policy makers; the international TRI communities of practice; and the general public
Community Media Network <i>Platforms: Community Cable, Local Radio Stations &amp; others</i>	<i>Knowledge Networking Expert</i> taps and liaise with local media and venues.	-	Knowledge products	Local: pilot communities
Stakeholders Network <i>Platform: Social Media</i>	<i>Knowledge Networking Expert</i> forms social media groups	Project activities/output	Technical knowledge Local knowledge	National, Local communities of practice
Interpersonal Networks <i>Platform: Messaging &amp; Interpersonal Communication</i>	<i>Knowledge Networking Expert</i> establishes texting messaging protocol and captures local/indigenous knowledge	-	Local knowledge Indigenous knowledge	Local: pilot communities

**TABLE. KM System Design**

*Output 3.2. Forest restoration knowledge compiled, organized & systematized*

Existing knowledge on restoration, best practice, project results and lessons learned will be organized and systematized. The project will conduct systematization workshops at local, national and global levels. The following are the major activities attendant to systematization:

Under this Output, planned activities are as follows:

*Activity 3.2.1: Conduct knowledge audit of knowledge resources in Output 3.1.*

A sector-wide knowledge audit of knowledge resources on forest restoration and multi-benefits should be initiated at project start-up as a prelude to systematization. This will build on the work undertaken in activity 3.1.1.

Systematization has been adopted globally in generating knowledge on natural resources management. Systematization of experience is a method aimed at improving practice based on a critical reflection and interpretation of lessons learned from that practice. Within the context of forest restoration this involves a facilitated process of capturing, analyzing and structuring tacit knowledge, specifically, best practice and lessons learned, from the perspective of the major stakeholders, i.e., the forest community, the local government, the CENRO/ PENRO and the FMB. The methodology encompasses the identification, documentation and transfer of experiences and key lessons extracted from a project or an initiative, or group of projects or initiatives for the purpose of advocacy, learning and replication/scaling up.

The systematization methodology was introduced to the natural resources management sector by Jorge Chavez-Tafur (2007, 2013) and adopted in Latin America, Asia and Africa. Systematization has been endorsed by the FAO Knowledge and Capacity Development Office (OEKC) as part of content provision for KM systems. In 2011, with funding from IFAD, the KM and Capacity Building Expert of this PPG collaborated with Chavez-Tafur and Denise Melvin of FAO OEKC in piloting the systematization approach among CSOs, NGOs and people's organizations involved in forest conservation projects in South Asia (Kathmandu) and in natural resources management undertakings in Southeast Asia (Los Baños).

The systematization method may be expanded by introducing levels to the systematization process and ontologies[3] for forest restoration knowledge. The systematization method as outlined by Chavez-Tafur occurs at the community level. The full-size project may opt to expand systematization to include regional, national and global levels. This would require the development of ontologies for forest restoration encompassing the entire spectrum of practices and technologies from assisted natural regeneration to accelerated reforestation and biodiversity spread. However, this will necessitate a global dialogue leading towards standards and a substantive interface with a global knowledge management system.

*Activity 3.2.2: Develop systematization framework incorporating community, national and global forest restoration knowledge systematization.*

Systematization of experience is a method aimed at improving practice based on a critical reflection and interpretation of lessons learned from that practice. Within the context of the full-size project this involves a facilitated process of capturing, analyzing and structuring tacit knowledge on forest restoration, specifically, best practice and lessons learned, from the perspective of the major stakeholders, i.e., the forest community, the local government, the CENRO/ PENRO and the FMB. The methodology encompasses the identification, documentation and transfer of experiences and key lessons extracted from a project or an initiative, or group of projects or initiatives for the purpose of advocacy, learning and replication/scaling up.

For the past decade, the systematization methodology has been championed by the global CSO movement and the international development assistance community including IFAD and FAO OEKC because of its inclusive knowledge generation process. However, systematization as prescribed, would only occur at the local level.

The project should not only adopt the systematization methodology but expand it to national, regional and global levels. The systematization method as outlined by Chavez-Tafur mainly occurs at the community level. The project may opt to expand systematization to include regional, national and global levels. This would require the development of ontologies for forest restoration encompassing the entire spectrum of practices and technologies from assisted natural regeneration to accelerated reforestation and biodiversity spread. This, however, will necessitate a global dialogue leading towards standards and a substantive interface with a global knowledge management system.

*Activity 3.2.3: Capture and make available indigenous and local knowledge on restoration innovation*

There is a consensus among project stakeholders of the importance of local and indigenous knowledge. In fact, the academic community is eager to facilitate the systematization process of forest restoration knowledge. Key informants from the University of the Philippines Los Baños - some retired, others in active service - many of them coming from the Department of Social Forestry, are familiar with the limits of technical knowledge coming from the academe and see the value of indigenous and local knowledge. Most of all, they recognize the need to involve stakeholders in what was referred to as the “social construction of forest restoration knowledge.”

Therefore, modules particularly adapted to indigenous peoples will be prepared to make sure indigenous knowledge is included in the systematization process. This, however, may be initiated only upon obtaining the necessary clearances from pertinent tribal councils as per guidelines from the National Commission on Indigenous Peoples.

#### *Activity 3.2.4: Conduct community level systematization workshops*

Local level systematization workshops will be conducted semi-annually in the project sites to capture, process and codify/organize project generated forest restoration best practice and lessons learned. Social forestry department of state colleges and universities active in the pilot areas should be involved as workshop facilitators while project staff will serve as documenters and rapporteurs.

#### *Activity 3.2.5: Conduct national level systematization workshops*

National level systematization workshops will be conducted annually by FMB to capture, review, process and codify/organize forest restoration knowledge generated by the full-size project and other similar undertakings in the Philippines. The UPLB College of Forestry social forestry department should be involved as workshop facilitators while national project and FMB staff will serve as documenters and rapporteurs.

#### *Activity 3.2.6: Collaborate with TRI for global level systematization and ontology framing workshop*

In its lifetime, the full-size project should organize and conduct two bi-annual international conferences on forest restoration knowledge systematization. This will be done in collaboration with the TRI program and other advocates of the Bonn challenge. These conferences will be organized just after or before the annual TRI meeting to benefit from the gathering already organized by the TRI. In these conferences, ontologies for forest restoration encompassing the entire spectrum of practices and technologies from assisted natural

regeneration to accelerated reforestation and biodiversity spread will be agreed upon. A global dialogue leading towards standards and the project KM system's substantive interface with a global knowledge management system on forest restoration will be pursued.

*Activity 3.2.7: Mainstream systematization framework*

Currently in the Philippines, the systematization method of forest restoration knowledge is not being applied. Although Philippine agencies participated in the IFAD-FAO systematization workshops conducted for Southeast Asia conducted in 2011, the practice has not prospered nor even picked up by the government, private and NGO sectors. When asked why systematization was not applied in their natural resources management undertakings, some of the participants explained that with the preponderance of NRM research and development agencies and the presence of state colleges of agriculture and forestry in almost every province, they thought it best to leave the systematization of knowledge to these institutions instead as recommended restoration and conservation technology come from them. This, of course, defeats the purpose of systematization since the exclusion of other stakeholders from the knowledge generation process leads to restoration recommendations which may eventually be ignored by forest communities.

This project presents an opportunity for the mainstreaming of systematization in the Philippine natural resources management sector.

Through its experience at the community, national and international levels, the project will put together a systematization framework to be used by other projects.

The activities under this output will be under the responsibility Knowledge Management and Systematization Specialist with the support of the Knowledge Networking Expert.

***Output 3.3. Knowledge products shared; project results and lessons learned disseminated locally, nationally and internationally***

The project will implement the sharing of knowledge products and dissemination of project results and lessons learned locally, nationally and internationally.

The following are the major activities attendant to dissemination:

*Activity 3.3.1: Populate and publish internal and external KM system content.*

Local and project knowledge will be disseminated through the project KM system utilizing electronic (content management system) and non-electronic (CoPs, community media, stakeholders) networks. Nationally generated forest restoration knowledge will be disseminated through the project KM system utilizing its electronic (content management system) network. Best practice and lessons learned will be shared internationally through PhilCAT.

*Activity 3.3.2: Produce and publish knowledge products on best practice, success stories*

During the project lifetime, the KM Team should actively disseminate knowledge related to forest restoration. Several stakeholders will assist in this undertaking. These include NGOs, CSOs and local governments. Conventional as well as community media (print, radio, audio-visual) will be used.

*Activity 3.3.3: Link up with other national and global KM systems for content sharing.*

Given current assisted natural regeneration (ANR) initiatives in Africa, Asia and Latin America there is a diversity and volume of lessons learned and best practice. Many of these have been traditionally categorized under sustainable land management (SLM). The diversity and volume of restoration is expected to increase dramatically with the implementation of The Restoration Initiative (TRI), a program to help countries restore degraded landscapes at scale. With support from the GEF, TRI unites ten countries (Cameroon, Central African Republic, China, Democratic Republic of Congo, Guinea-Bissau, Kenya, Myanmar, Pakistan, Sao Tome and Principe, and Tanzania) and three GEF agencies (IUCN, FAO and the UNEP) in working to overcome existing barriers to restoration. TRI is being implemented in support of the Bonn Challenge, a global effort to bring 150 million hectares of degraded and deforested land into restoration by 2020 and 350 million by 2030.

*Activity 3.3.4: Incorporate restoration modules in upland farmers' field schools.*

A forest restoration module will be prepared for inclusion into the Farmers' Field School curriculum for upland farmers.

*Activity 3.3.5: Initiate local study tours for cross-fertilization among upland farmers.*

In the Philippines, the most extensively used medium for dissemination is interpersonal communication or word of mouth. Community field training, workshops and farmers' field schools are among the more popular forms since these enable the cross-fertilization of ideas among forest communities. Field visits between Region III and Eastern Mindanao will be organized and conducted to encourage the cross-fertilization of ideas.

*Activity 3.3.6: Initiate international study tour for LGU and community stakeholders to TRI sites.*

The project will organize a study tour among project beneficiaries (including at least 30% women) to other TRI sites in Africa and Asia. The study tour will be developed in close collaboration with the Global component of the TRI project in charge of Knowledge Management. It will ensure that the study tour will target the most relevant topics for the project implementation.

The dissemination activities described above at the local, national and international levels will make use of different modes and media. It will make sure that the needs of all the different stakeholders (including women, youth and IP) are fulfilled as different stakeholders' value, access and use knowledge on forest restoration differently. The following matrix defines the project dissemination strategy:

TARGET AUDIENCE	MODE	MEDIA
Project Staff	Electronic network	Internal Messaging and Collaboration system; Knowledge products in CMS
Beneficiary Communities	Non-electronic network	Community media, Social media networks, Interpersonal networks, Local level workshops, Field visits (FFS), Study Tours

CSO/ NGO Workers	Electronic network Non-electronic network	Social media networks, Interpersonal networks, Local level workshops, Knowledge products in CMS
Local Government Extension Workers	Electronic network Non-electronic network	Social media networks, Interpersonal networks, Local level workshops, Knowledge products in CMS
Technical Staff of Relevant National Government Agencies	Electronic network Non-electronic network	Social media networks, National workshops, Knowledge products in CMS
National Decision Makers Policy Makers	Electronic network Non-electronic network	National workshops Knowledge products in CMS
Global TRI Communities of Practice	Electronic network Non-electronic network	International Conferences Knowledge products in CMS
General Public	Electronic network Non-electronic network	Knowledge products in CMS

***Output 3.4 National FLR M&E framework supported and Project M&E framework set up***

Under this Output, planned activities are as follows:

***Activity 3.4.1 Development and pilot testing of a M&E system for restoration activities in the Philippines***

The incentive system of the NGP is based on the survival rate of the plant. If the survival rate is over 80%, the PO or the community organization in charge of the restoration gets the incentive payment.

The issue of looking only at the survival rate is that important factors can be missed such as the growth of the plant (is the plant growing properly?) or the distribution of the different species during restoration. Indeed, if the plantation is not done according to the original plan, the multiple benefits in terms of biodiversity and livelihoods will not be achieved. For example, in one of the NGP sites visited, the fruit trees were planted on very rough terrain (very difficult to access) and far from each other, making harvesting of fruits a tedious process and likely not profitable.

The project will support the development of monitoring indicators, which can be monitored with existing tools and set up within DENR, reflecting better the multi-benefit purpose of the NGP. The M&E consultant in charge of the development of these indicators will be able to use the work under the FLR Monitoring Roadmap coordinated by FAO in coordination with a large set of actors. It will pay a particular attention to sex desegregated indicators.

To develop this set of indicators, multi-stakeholder consultations will be held to secure general agreement on the set of indicators and activities to be monitored for restoration projects. These consultations will happen both at the national level and at the local level to make sure that all the stakeholders are comfortable with the set of indicators adopted.

The indicators will then be tested in 3 sites to better understand which ones are the most relevant and the practical to ensure that appropriate data for monitoring are gathered.

The Monitoring and Evaluation expert hired by the project and part of the PMU, will be in charge of M&E activities. He will benefit from the support of the TRI Global team and the IKI regional and global teams also working on FLR M&E.

#### *Activity 3.4.2 Development and implementation of a M&E system for the project*

Under this activity, a monitoring system will be developed to monitor the progress of the achievements of the results framework presented in Annex 1 with special attention to socio-economic and sex-disaggregated indicators. But the monitoring system should not only focus on the results of the project but also its impacts. For this purpose, the M&E expert will lead a participatory multi-stakeholder consultation, involving primarily the TWG, designed to generate meaningful indicators that will assess the impact of the project at broader scales and over a long-term time horizon.

In addition to monitoring the progress of the results framework, the M&E expert will also monitor the progress of the Workplan, specifically the accomplishments of the activities of each output as shown in Annex 2.

The M&E system will be developed after a careful review of existing monitoring systems in the Philippines such as those developed for NGP and FMP, and other related systems particularly: 1) those adopted by the Forest Resources Assessment (FRA); 2) The LAWIN System; 3) The eBMS system; and 4) the system currently in place at FMB, namely KISS and eFIS. These systems are briefly described below. It will also have strong linkage with the systems developed by the TRI countries to facilitate exchanges of experiences.

FRA is an FAO-developed system which is adopted by FMB. Many of the bio-physical data required by this project are also dataset collected in FRA. However, FRA is only conducted every 5 years; hence, this project may only interface with FRA once during the life of the project.

LAWIN, stands for Forest and Biodiversity Protection System, it is user-friendly integrated science-based assessment. It adopts an innovative technology developed for monitoring the status of the forest. It can also assist in environmental monitoring especially with respect to forest and biodiversity of high conservation value areas. The system is currently being used as the primary protection monitoring system by DENR. In view of the nation-wide adoption of LAWIN, this project, through the M&E expert, will take note of the indicators collected and monitored by the LAWIN system, select key indicators relevant to the project, and ultimately incorporate them in the set of indicators included in the M&E plan for the project.

In addition to LAWIN, another monitoring system that the M&E plan should consider is eBMS (Enhanced Biodiversity Monitoring System). eBMS is a GIZ-supported project aimed at enhancing the Biodiversity Management Bureau's (BMB) Biodiversity Monitoring System particularly in terms of improving the data collection procedures, database structure, application software and institutional and governance framework for effective implementation of national spatial biodiversity monitoring/information system for Protected Areas. The UNDP sister project will be building on the results of this previous project and will develop an automated SMART Biodiversity Monitoring System which will be tested in two biological corridors, including EM Mindanao. This project will work closely with the UNDP Project so that the M&E plan developed will incorporate the key elements and parameters to be developed in the SMART-eBMS developed by the UNDP sister project.

FMB, through the Knowledge and Information System Section (KISS) has developed and adopted an Enhanced Forestry Information System (eFIS). The e-FIS is a web-based database integrated forestry application system that provides efficient management of forest data. The data infrastructure of eFIS is developed so that it can provide and facilitate

adequate data support for policy formulation and decision-making. It also features the integration of geographical information system with the digital maps of tenured areas, protection and production forest and other land use to determine the right forest management system and tenured instruments. As currently configured, eFIS can be a useful reference for the M&E during its development. For example, M&E data and indicators for monitoring the progress of this project can be imbedded in eFIS so that collection and monitoring of these data is mainstreamed in DENR, which has already adopted eFIS.

Building on these existing systems, the main tasks of the Monitoring and Evaluation expert hired by the project and part of the PMU will be to:

- review current M&E system for the project and develop and set up the Project's M&E system including data collection, analysis and means of verification for indicators and project output
- Conduct field survey and site visits for collecting and analysing data needed for monitoring condition and progress of indicators and output. Manage the data collector team.

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[1] It is also noteworthy to mention that significant, in fact almost all, NGP areas within PCWFR are on untenured lands. This offers a great opportunity for the project to explore and pilot test land tenure arrangements for these untenured areas.

[2] <http://planbleu.org/en/publications/assessment-socio-economic-value-goods-and-services-provided-mediterranean-forest-0>

[3] A set of concepts and categories in a subject area or domain that shows their properties and relations between them.

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[1] Governance of Tenure study, GIZ, 2015

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[1] <http://ati.da.gov.ph/car/about/cordillera-administrative-region-car>, quoting BSWM 1993

[2] The term “biological corridor” is not recognized under Philippines legislation and so the alternative of “priority area for biological connectivity” is used here, being understood as areas where management regimes and development should be made compatible wherever possible with the promotion of biological connectivity. These concepts will be further refined during the formulation and implementation of the UNDP/BMB sister project.

[3] Philippine Biodiversity Conservation Priorities: a second iteration of the National Biodiversity Strategy and Action Plan (2002)

[4] IUCN categories: NT = Near Threatened, VU = Vulnerable, EN = Endangered, CR = Critically Endangered,

[5][http://www.researchgate.net/publication/280721421\\_The\\_Eastern\\_Mindanao\\_Biodiversity\\_Corridor\\_Conservation\\_Framework](http://www.researchgate.net/publication/280721421_The_Eastern_Mindanao_Biodiversity_Corridor_Conservation_Framework)

[6] <http://pcij.org/stories/stats-on-the-state-of-the-regions-hubs-of-wealth-ponds-of-poverty/>

[7] Basic or simple literacy is the ability of a person to read and write with understanding a simple message in any language or dialect. In 2013, 96.5 percent of 74 million Filipinos 10 years old and over were basically literate. The proportion of basically literate females was higher (97.0%) than their male counterparts (96.1%). The basic literacy rate in 2013 (96.5%) represents an improvement from 95.6 percent recorded in 2008. Central Luzon posted one of the highest basic literacy rates at 98.2%, while Caraga is at 96.2%.

[8] Direct extraction from ARB Master Plan 2016

[9] Direct extraction from ARB Master Plan 2016

[10] Felix, Leny. Exploring the Indigenous Local Governance of Manobo Tribes in Mindanao. *Philippine Journal of Public Administration, Vol. XLVIII, Nos.1 & 2 (January-April 2004)*.

[http://lynchlibrary.pssc.org.ph:8081/bitstream/handle/0/1610/08\\_Exploring%20the%20Indigenous%20Local%20Governance%20of%20Manobo%20Tribes%20in%20Mindanao.pdf?sequence=1](http://lynchlibrary.pssc.org.ph:8081/bitstream/handle/0/1610/08_Exploring%20the%20Indigenous%20Local%20Governance%20of%20Manobo%20Tribes%20in%20Mindanao.pdf?sequence=1)

[11] See MGB Region 13 Status of mining permits as of September 2018 [http://mgb.gov.ph/attachments/article/51/R11\\_MTSR\\_SEP\\_2018.pdf](http://mgb.gov.ph/attachments/article/51/R11_MTSR_SEP_2018.pdf)

[12] <http://www.mindanews.com/environment/2010/08/mining-firm-pays-p72-5-million-to-ips-from-2006-to-2008-mamanwa-to-go-into-pizza-and-pasta-business/>

[13] <https://www.usaid.gov/philippines/energy-and-environment/bwiser>

[14] Bueser, GL; Bueser, K. G.; Afan, D.S.; Salvador, D.I.; Grier, J.W.; Kennedy, R.S. and Miranda, H.C., Jr. (2003). "Distribution and nesting density of the Philippine Eagle *Pithechophaga jefferyi* on Mindanao Island, Philippines: what do we know after 100 years?" (PDF). *Ibis* 145: 130–135. doi:10.1046/j.1474-919X.2003.00131.x.

[15] D.B. Magcale-Macandoga and C.D. Predob: Environmental and Economic Impacts of Land-Use Change in Imperata Areas: A Bioeconomic Modelling Approach ([http://www.mssanz.org.au/MODSIM03/Volume\\_03/B02/08\\_Macandog.pdf](http://www.mssanz.org.au/MODSIM03/Volume_03/B02/08_Macandog.pdf))

[16] Some of this area is natural grassland climax vegetation, but the vast majority is degraded *Imperata*-dominated grassland.

[17] <http://www.denr.gov.ph/priority-programs/national-greening-program.html>

[18] <http://ngp.dentr.gov.ph/index.php/accomplishment>

[19] <http://forestry.dentr.gov.ph/fmp/about-us/#nav>

[20] <https://www.adb.org/projects/41220-013/main#project-pds>

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[1] <http://www.fao.org/3/a-i5412e.pdf>

[2] <https://www.usaid.gov/philippines/energy-and-environment/bwiser>

[3] National Commission of Indigenous Peoples Strategic Directions (2016-2022).

Note: Ethnicity variable was added in the 2010 census by the PSA but the results of 8 million IP was contested by NCIP and other groups. No data gathering process of the enumerator was questioned; UNDP uses the estimate of 14 to 20 million IPs.

[4] UNDP Fast Facts

[5] Tebtebba, Submission to the Committee on Economic, Social and Cultural Rights, 57<sup>th</sup> Pre-Sessional Workshop, March 7-11, 2016

[6] Poverty estimates for self-employed and unpaid family workers serve as a proxy indicator for informal sector workers.

[7] The labour force is the sum of economically active persons that are either employed or unemployed

[8] Regional and Provincial Summary - Number of Provinces, Cities, Municipalities and Barangays. <http://www.dilg.gov.ph/facts-and-figures/Regional-and-Provincial-Summary-Number-of-Provinces-Cities-Municipalities-and-Barangays/32>

[9] **Republic Act No. 7160, Local Government Code of 1991.** The implementation of social forestry and reforestation initiatives, the management of communal forests not exceeding 5,000 ha. the protection of small watershed areas, and the enforcement of forest laws are devolved to local government units.

[10] Commonwealth Act #141 otherwise known as Public Land Act, promulgated in 1936

[11] “Rainforestation Farming Technology” is a restoration technology by which only indigenous local tree species are used, including shade-loving, slow –growing primary forest species of tropical hardwood trees, sun-demanding, fast-growing pioneer trees and fruit trees. <https://www.euronatur.org/fileadmin/docs/projekte/Rainforestation.PDF>

[13] Section 38, IPRA

The table below presents the incremental cost reasoning for each project outcome:

Outcome	Baseline Scenario	GEF Alternative Scenario
<p>Outcome 1: Environmental, livelihood and development benefits are effectively mainstreamed into Government support to restoration.</p>	<p>Major investments in forest restoration through the Expanding the coverage of the National Greening Program (successor of the National Greening Programme) and other programs such as the Forest Management Project (FMP), and the Integrated Natural Resources Management Project (INREMP) are happening. Benefits for biodiversity, habitat connectivity and livelihoods will be limited because of the predominant use of conventional reforestation techniques and a limited range of species, which will result in plantations with limited structural or compositional diversity.</p> <p>The current project works at the site level but the benefits of the NGP are hindered by: (i) land tenure issues especially those NGP areas currently outside of any land tenure instrument; without resolution of these issues the restoration activities are threatened, and (ii) sustainability options without benefits or incentives generated from restoration will most likely create issues on long term engagement.</p>	<p>The proposed project will support gender-responsive restoration activities delivering multiple benefits through:</p> <ul style="list-style-type: none"> <li>· Enhanced capacity building (guidelines and training) on the type of restoration bringing multiple benefits</li> <li>· Support coordination mechanisms to discuss and plan for forest restoration options delivering multiple benefits</li> </ul> <p>The proposed project will work on supporting the restoration efforts on the long term by:</p> <ul style="list-style-type: none"> <li>· Looking into long term incentives for restoration</li> <li>· Promoting land manager security of tenure</li> </ul>

Outcome 2:

Diverse, gender-responsive, and sustainable restoration practices effectively applied, contributing to the generation of multiple environmental and social benefits.

Restoration planning happens at the site level hindering a larger ecosystem and landscape vision that allows for connectivity and multiple benefits to be generated.

The NGP provides a system to support communities/farmers for the first 3 years of the plantation only. This often results in loss of interest after this period. To overcome this gap, the enhanced NGP does have alternative livelihoods activity support as part of the plan; however, support for implementation is still needed. A larger and more comprehensive approach to support communities/farmers involved in restoration is needed to ensure they fully benefit from their involvement in restoration.

The project will support improved planning and implementation to achieve multiple benefits. These can be done by adopting approaches to restoration that supports:

- information gathering and improved planning at the landscape level where restoration will be conducted
- developing participatory multi-stakeholder restoration plans at landscape level encouraging diverse approaches to restoration that are expected to deliver multiple benefits

To incentivize communities/farmers, the project will work on:

- Supporting the development of restoration plans including a short and long-term financial plan to support restoration efforts
- Developing Community Development funds linked to restoration to increase the communities' ownership of restoration activities
- Supporting farmers (with a special focus on women and youth) to enable them to obtain livelihood and economic benefits in a sustainable manner from restoration of degraded areas through the provision of technical, organisational, value chain analysis and marketing support
- Insuring stakeholders who are engaged in restoration activities will have right to trees
- Promoting Payment for Ecosystem Services so that farmers/communities can be rewarded for their restoration activities in the long term

<p>Outcome 3: Knowledge of diverse approaches to restoration is effectively managed and applied, permitting sustainability and scaling up.</p>	<p>Substantial amount of experience now exists on restoration approaches that lead to multiple benefits; however, they are often neither well documented nor easily accessible.</p> <p>Monitoring of restoration activities within the NGP is currently restricted to survival rates after planting, which doesn't give any indication on the success of restoration more broadly as growth rate, species diversity, fruit yields, and others are not considered.</p>	<p>The project will work on systematization, review and improved dissemination of knowledge on multiple benefit-based approaches to restoration.</p> <p>It will use innovative techniques (such as Community of Practices, farm field technical days, etc..) to make multi-benefit-based restoration techniques more known and accessible</p> <p>The project will develop a monitoring system for restoration that: i) is easy to implement, and ii) looks at the success of restoration more broadly beyond survival rates which has not proven to be an efficient indicator. The system will build on existing monitoring tools in the Philippines as well as the work done by the FLRM/IKI project on Monitoring.</p>
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5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF);

The project will generate GEBs under as it is expected that it will contribute to: 1) having 127,851 hectares of land under restoration plans generating multiple benefits with a clear path to achieve restoration at the landscape/watershed scale, and 2) 5,821 ha of land where innovative restoration alternatives/solutions to ensure long term commitment to restoration are tested and influencing restoration options at the landscape level. These objectives are intimately linked to livelihood improvement of local communities involved in restoration, the project aiming at directly benefiting 45,000 people (and potentially 320,000 indirectly).

The direct lifetime GHG emission mitigation potential from the project is **estimated as 6,146,968tCO<sub>2</sub>eq** (see Annex 11).

6) Innovativeness, sustainability and potential for scaling up

### **Innovativeness**

The project has been designed to test innovative models for restoration in the Philippines to bring innovation and potential improvement to the NGP/ENGP. The main innovations proposed by the project are the following:

- The new way of thinking about restoration going beyond the greening objective to achieve multiple benefits for the local population and the larger population which will be presented through the new guidelines and implemented in targeted areas.

- The application of an integrated landscape-wide planning to restoration, designing and locating restoration activities in such a way as to optimize synergies between areas under restoration and other land units (managed for example for production, connectivity and habitat/species conservation). This approach will seek to improve the delivery of the multiple benefits coming from restored areas.
  
- The development of short & long-term incentives/financial plans linked to the restoration plans to ensure sustainability. Usually restoration plans are set up looking mainly at what makes the most sense considering the bio-physical conditions of the land but not with a strategy in mind to make sure that the restoration can be sustained over the short and long term. For example, if the restoration plan only include essence that will bring a benefit in the long term, how can we make sure that the restoration will be maintained over the years if nothing is there to compensate the community in the short term. Taking this into consideration, the restoration plans should include also some restoration activities bringing shorter terms benefits i.e. through mixed system with cash crops. This will be done through the promotion of incentives to communities accomplished by value chain analysis of different forest products, high value agricultural crops, and other livelihood options
  
- The development of local development funds for restoration. The development of these funds and their management by the local communities will increase the sense of ownership by the local communities. The development of these funds together with the short & long-term financing plans will give incentives to the communities to keep working on restoration.
  
- The project is innovative in its work to catalyse public and private sector engagement in forest and landscape restoration through the development of sustainable models and tools incentivizing investment in restoration. For example, the project will develop guidelines to restore mining sites and partners with mining companies in EM for restoration activities implementation.

All these innovations have the objective to have restoration being more replicable and sustainable.

### **Sustainability**

The project promotes forest and landscape restoration and the good management of ecosystems. In this way, the project directly contributes to environmental sustainability. The project aims to improve FLR practices in the Philippines to secure essential ecosystem services (including biodiversity and carbon benefits) as well as the production of commodities based on a sustainable and inclusive economy. The project will be implemented in areas under severe threat of degradation and in a particularly fragile environment, which is highly vulnerable to the impacts of climate change. This project will intensify efforts to manage forests sustainably ensuring the flow of ecosystem services and supporting the diversification of the rural economy. Pressures on the forests will be reduced by improving the efficiency in the use of resources - including providing alternatives to unsustainable/illegal tree felling, minimizing the waste of biomass and improving the harvesting of NWFP. This coupled with assisted natural regeneration and other FLR techniques will allow the rehabilitation of

native vegetation as well as sustainable agriculture. Environmental sustainability will also be enhanced by the project's emphasis on supporting strong local ownership of the project and developing short & long-term financing plans linked to restoration plans.

The whole project strategy is built around environmental sustainability. FLR is anchored in an environmentally sustainable approach that aims to bring back the good functioning of ecosystems and the overall quality of the environment in the long term, while improving local communities' livelihoods.

In its first component, the project will seek to improve guidelines and policy to support the implementation of more biodiversity and livelihoods-oriented restoration plans.

In its second component, the project will support landscape planning integrating FLR and other activities ensuring that all activities have their place to avoid conflict. It will ensure inclusive benefit sharing, restoration planning and initiatives that are demand driven, transparent, and involving all stakeholders, particularly local communities, women and ethnic minorities. The pilot activities will use forms of incentives that will motivate land managers to continue to maintain ecosystems in their restored states.

The third component will focus on developing a stronger monitoring for environmental and social results of restoration and ensure proper adaptive management of the project. The Knowledge component part will also ensure that the good practices tested can be replicated in the Philippines and beyond.

In addition, the project will build capacity among key county-level stakeholders to implement FLR activities. These different measures will directly contribute to the environmental sustainability of project activities as it will improve efficiency in the use of forest resources while contributing to conserving, protecting and enhancing natural ecosystems.

The environmental sustainability has to be couple with socio-economic benefits and sustainability. These benefits are described in details in section A 7 (below).

### **Potential for scaling up**

The potential for scaling up is very high for this project and is two-fold in the Philippines:

*i)* The project will develop and demonstrate a set of best practices for the integrated approach on ecosystems management and restoration. These best practices will serve as guidelines for scaling up and replication in other forest restoration efforts regionally and nationally. The ambition is to have an impact on all the restoration initiative in the Philippines to make them more sustainable environmentally and socially. As restoration is high in the Philippines agenda, such activities can be easily scaled up if they demonstrate clear results and benefits. A series of knowledge management products and publications will be produced by the project aimed at increasing awareness about forest restoration & the need and significance of healthy and restored forest ecosystems and give practical guidelines on how to improve forest and landscape restoration. These knowledge products will also be used for awareness raising events that will support the enhancement of forest ecosystem restoration initiatives, including the adoption of best practices in forest restoration in other, and larger, areas.

*ii)* The project will empower local community to involve them in restoration over the long term. To support scaling up activities, the project will develop sort & long-term incentive/financial plans linked to the restoration plans and pilot test the establishment of community development funds for restoration at the community-level that will help sustain and expand investments beyond the project period. To do this, the project will work towards improving the capacity of local communities (i.e. POs including IP groups) to manage such revolving funds, meet financial reporting requirements and be accountable for effective management of such funds. The project will also help in facilitating linkages with rural banks and microfinance institutions. The implementation of the financial plans linked to the restoration plans will ensure that the funds will keep working beyond the project and achieve greater results.

The best practices based on lessons learned will also be shared regional and international workshops, conferences and field visits for national and sub-national staff to improve learning and exchange of experiences in mainstreaming landscape restoration and landscape natural resource planning and practices. The Restoration Initiative will offer a good platform for such initiatives. Based on these best practices and lessons learned, replication will be ease in other part of the country and the larger region.

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[1] <https://www.usaid.gov/philippines/energy-and-environment/bwiser>

[2] Bueser, GL; Bueser, K. G.; Afan, D.S.; Salvador, D.I.; Grier, J.W.; Kennedy, R.S. and Miranda, H.C., Jr. (2003). "Distribution and nesting density of the Philippine Eagle *Pithechophaga jefferyi* on Mindanao Island, Philippines: what do we know after 100 years?" (PDF). *Ibis* 145: 130–135. doi:10.1046/j.1474-919X.2003.00131.x.

[3] D.B. Magcale-Macandoga and C.D. Predob: Environmental and Economic Impacts of Land-Use Change in Imperata Areas: A Bioeconomic Modelling Approach ([http://www.mssanz.org.au/MODSIM03/Volume\\_03/B02/08\\_Macandog.pdf](http://www.mssanz.org.au/MODSIM03/Volume_03/B02/08_Macandog.pdf))

[4] Some of this area is natural grassland climax vegetation, but the vast majority is degraded *Imperata*-dominated grassland.

[5] <http://www.denr.gov.ph/priority-programs/national-greening-program.html>

[6] <http://ngp.denr.gov.ph/index.php/accomplishment>

[7] <http://forestry.denr.gov.ph/fmp/about-us/#nav>

[8] <https://www.adb.org/projects/41220-013/main#project-pds>

[9] For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which **Aichi Target(s)** the project will directly contribute to achieving..

[10] Governance of Tenure study, GIZ, 2015

[11] It is also noteworthy to mention that significant, in fact almost all, NGP areas within PCWFR are on untenured lands. This offers a great opportunity for the project to explore and pilot test land tenure arrangements for these untenured areas.

[12] <http://planbleu.org/en/publications/assessment-socio-economic-value-goods-and-services-provided-mediterranean-forest-0>

[13] A set of concepts and categories in a subject area or domain that shows their properties and relations between them.

**A.2. Child Project?**

**If this is a child project under a program, describe how the components contribute to the overall program impact.**

N/A

**A.3. Stakeholders**

**Please provide the Stakeholder Engagement Plan or equivalent assessment.**

The Stakeholders Matrix below contains information on relevant project stakeholders (many of whom were consulted during the PPG stage) at the national and local (project area) levels, including an assessment of their level of involvement (from a scale of 1-5, 1 being the lowest and 5 highest) in project implementation. Lower levels of involvement mean that these stakeholders may be informed or consulted on some project initiatives, while higher levels will entail more involvement, collaboration and even empowerment of such stakeholders.

*Stakeholders Matrix*

Stakeholders	Characteristics	Level of involvement	Role in the project	
National level - Government Stakeholders				
Department of Environment and Natural Resources (DENR)	Forest Management Bureau (FMB)	<ul style="list-style-type: none"> <li>• Provides technical guidance on the effective protection, development, and conservation of forestlands and watersheds.</li> <li>• Recommend policies and programs towards the achievement of sustainable forest management, based on science and principles of good forest governance</li> <li>• Manages key forest restoration programs of the DENR such as the National Greening Program (NGP) and Forestland Management Program (FMP)</li> <li>• No station/office in project areas/sites</li> </ul>	5	<ul style="list-style-type: none"> <li>• Lead executing partner</li> <li>• Hosts the Project Management Unit (PMU) and coordinates project activities</li> <li>• Secretariat of the Project Steering Committee (PSC)</li> <li>• Technical leadership for policy development</li> <li>• Provision of expertise for restoration activities and coordination</li> <li>• Coordinates with other implementing partners</li> <li>• Technical and financial reporting</li> <li>• Participation in populating PhilCAT with forest restoration content</li> </ul>
	Biodiversity Management Bureau (BMB)	<ul style="list-style-type: none"> <li>• Formulate and recommend policies, guidelines, rules and regulations for the establishment and management of an Integrated Protected Areas System such as national parks, wildlife sanctuaries and refuge, marine parks and biosphere reserves</li> <li>• No station/office in project areas/sites</li> </ul>	5	<ul style="list-style-type: none"> <li>• Executing partner for the project</li> <li>• Member of the PSC</li> <li>• Technical expertise on biodiversity conservation</li> </ul> <p>Participation in populating PhilCAT with forest restoration content</p>

Stakeholders		Characteristics	Level of involvement	Role in the project
	Mines and Geosciences Bureau (MGB)	<ul style="list-style-type: none"> <li>Responsible for the conservation, management, development and proper use of mineral resources, including those in reservations and public domains</li> <li>Able to assist in the conduct of investigation of complaints (including illegal mining activities)</li> </ul> <p>Has offices at the regional level</p>	4	<ul style="list-style-type: none"> <li>Enforcement of environmental regulations to mining companies</li> <li>Assist in systematization workshops dealing with community engagement protocols</li> </ul>
	Ecosystems and Research Development Bureau (ERDB)	<ul style="list-style-type: none"> <li>Expertise to conduct research and development on the five major ecosystems of the Philippines which include forests, upland farms, grassland and degraded areas, coastal zone and freshwater, and urban areas</li> </ul>	2	<ul style="list-style-type: none"> <li>Conduct soil analysis and develop a centralized database containing the results of soil analysis to determine appropriate species to be introduced and to identify interventions to improve the soil condition in NGP areas (as per ENGP guidelines)</li> <li>Assist in facilitation of national forest restoration knowledge systematization workshops</li> </ul>
	Foreign-Assisted and Special Projects Service (FASPS)	<ul style="list-style-type: none"> <li>Familiar with GEF key focus areas and objectives</li> <li>Experience and expertise in project management</li> </ul>	4	<ul style="list-style-type: none"> <li>Support and guide the PMU in GEF and FAO related concerns</li> <li>Document and disseminate lessons learned, experiences gained, and technologies generated from the project</li> </ul>

Stakeholders		Characteristics	Level of involvement	Role in the project
Department of Agriculture (DA)	Bureau of Soils and Water Management (BSWM)	<ul style="list-style-type: none"> <li>Formulate measures and guidelines for the effective utilization of soil and water resources</li> </ul>	4	<ul style="list-style-type: none"> <li>Member of the PSC</li> <li>Will be involved in the identification of appropriate sustainable land management practices for some project sites, particularly in Eastern Mindanao</li> <li>Host the PhilCAT forest restoration module of project KM system</li> <li>Assist in populating content for PhilCAT forest restoration module</li> <li>Participate in national systematization workshops</li> </ul>
	Agricultural Training Institute	<ul style="list-style-type: none"> <li>Leads in implementation of the Climate Smart Farmers' Field Schools</li> <li>Develops curricula of Farmers' Field Schools</li> <li>Publishes Farmers' Field Schools Manual</li> </ul>		<ul style="list-style-type: none"> <li>Accommodate specific module on Forest Restoration for Upland Farmers in Farmers' Field Schools curricula</li> </ul>
Department of Agrarian Reform (DAR)		<ul style="list-style-type: none"> <li>Technical expertise on land tenure services and agrarian legal and advisory support services</li> </ul>	3	<ul style="list-style-type: none"> <li>Support the project in engaging agrarian reform beneficiaries or communities</li> </ul>
DA-DAR-DENR National Convergence Initiative (NCI)		<ul style="list-style-type: none"> <li>Established to develop and operationalize a common framework for sustainable rural development (SRD) that will facilitate the convergence of the resources of the three agencies to maximize the impact on countryside development</li> </ul>	3	<ul style="list-style-type: none"> <li>National body that may be tapped as a coordination mechanism by the project</li> <li>Participate in community and national systematization workshops</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Department of Trade and Industry (DTI)	<ul style="list-style-type: none"> <li>• Has a Bureau of Small and Medium Enterprise Development (BSMED) that addressing the specific needs of MSMEs in the areas of technology development and transfer, financing, marketing, and training</li> <li>• Has offices at the regional level</li> </ul>	3	<ul style="list-style-type: none"> <li>• Support to sustainable/bio-diversity friendly enterprise development in agribusiness or ecotourism</li> <li>• Exchange of information on the country's top agro-forest based commodities and their value chains</li> </ul>
Department of Social Welfare and Development	<ul style="list-style-type: none"> <li>• Implementing the Sustainable Livelihood Program (SLP), a community-based capacity building program that aims to improve the socio-economic condition of poor Filipinos by facilitating opportunities for development and management of resources viable for micro-enterprises and employment facilitation</li> <li>• Has offices at the regional level</li> </ul>	3	<ul style="list-style-type: none"> <li>• Explore linking NGP communities to the SLP program (see B+WISER model in Mindoro)</li> </ul>
National Mapping and Resource Information Authority (NAMRIA)	<ul style="list-style-type: none"> <li>• Able to base maps in a scale of 1:10,000 meters. These will serve as bases for the generation of a control map which contains locations of river basins and watersheds, land classification, topography, slope, land cover, areas under tenure arrangements, development projects, and other similar datasets</li> </ul>	3	<ul style="list-style-type: none"> <li>• Assist in the preparation of maps and spatial data needed by the project</li> <li>• Provide updated spatial data whenever they become available, or as they are able to generate them</li> </ul>
River Basin Control Office (RBCO)	<ul style="list-style-type: none"> <li>• Provide the DENR Field Offices with copies of the master plans for the 18 major river basins</li> </ul>	3	<ul style="list-style-type: none"> <li>• Assist the project in establishing links with the Middle Agusan River Basin Council</li> <li>• Serve as a conduit for the project to establish links with other relevant institutions and/or organizations such as watershed management councils within the project areas</li> </ul>
Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA)	<ul style="list-style-type: none"> <li>• Able to provide climatic data which will provide LGUs with bases when developing their planting calendars and planning</li> </ul>	3	<ul style="list-style-type: none"> <li>• Provide meteorological data that may be needed in identifying potential ENGP sites</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Local Water Works Utilities Administration (LWUA)	<ul style="list-style-type: none"> <li>Has the power of supervision over local water districts, which can be engaged in the piloting of water-mediated, payment for environmental services schemes</li> </ul>	3	<ul style="list-style-type: none"> <li>Can be engaged to be a principal in a water-based PES pilot</li> </ul>
National Commission on Indigenous Peoples (NCIP)	<ul style="list-style-type: none"> <li>Mandate to document and preserve the country's cultural and natural heritage overlaps with the reforestation aspects of the project</li> <li>Research and technical capacities</li> <li>Knowledge of local context in indigenous people's communities located in project sites</li> </ul>	4	<ul style="list-style-type: none"> <li>Provide support to strengthen NGP convergence in ancestral domains</li> </ul>
Philippine Commission on Women (PCW)	<ul style="list-style-type: none"> <li>An effective inter-institutional mechanism to actively promote gender equality in sustainable development</li> <li>Developed tools and checklists to ensure gender mainstreaming and analysis in project management</li> </ul>	2	<ul style="list-style-type: none"> <li>Technical resource for gender mainstreaming in natural resource management</li> <li>It's network/pool of accredited GAD resource experts may be tapped by the project</li> </ul>
University of the Philippines Los Banos College of Forestry Department of Social Forestry	<ul style="list-style-type: none"> <li></li> </ul>		<ul style="list-style-type: none"> <li>Facilitation and moderation of national forest restoration knowledge systematization workshops</li> </ul>
National level - International organizations			
FAO (Philippines)	<ul style="list-style-type: none"> <li>Thematic expertise</li> <li>International knowledge base</li> <li>Past and present related projects in the country</li> </ul>	5	<ul style="list-style-type: none"> <li>GEF Implementing/ Executing agency</li> <li>Member of the PSC</li> <li>Oversight and technical backstopping</li> <li>Strong linkages with DA, DAR, DENR</li> <li>Overall delivery of project objectives</li> <li>Monitoring and evaluation</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
UNDP (Philippines)	<ul style="list-style-type: none"> <li>• Thematic expertise</li> <li>• International knowledge base</li> <li>• Past and present related projects in the country</li> </ul>	5	<ul style="list-style-type: none"> <li>· GEF sister project</li> <li>· GEF project on Sustainable Land Management with BSWM</li> <li>· Member of the PSC</li> <li>· Technical backstopping</li> <li>· Participate in national systematization workshops</li> </ul>
Japan International Cooperation Agency (JICA)	<ul style="list-style-type: none"> <li>• Funding the ten-year (2012-2022) Forestland Management Project that aims to strengthen forestland management in three critical river basins through the implementation of collaborative and comprehensive Community-Based Forest Management (CBFM) strategies</li> </ul>	3	<ul style="list-style-type: none"> <li>· Explore sharing resources for PCWFR-wide watershed and forest governance framework enhancement, given that they are working in Carranglan</li> </ul>
Asian Development Bank (ADB)	<ul style="list-style-type: none"> <li>• Funding the Integrated Natural Resources and Environment Management (INREM) Project</li> </ul>		<ul style="list-style-type: none"> <li>· Share knowledge products and lessons learned on forest restoration to the project</li> <li>· INREM project sites may serve as learning laboratories during forest restoration training</li> </ul>
Project Area – Pantabangan-Carranglan Watershed and Forest Reserve (PCWFR) in the Cordillera/Caraballo Mountain Range			
DENR Region 3 <ul style="list-style-type: none"> <li>· PENRO (Nueva Ecija)</li> <li>· CENRO (Munoz)</li> </ul>	<ul style="list-style-type: none"> <li>· Technical expertise</li> <li>· Co-manages the LAWIN Forest and Biodiversity Protection System together with the LGUs</li> <li>· Office facilities and equipment near the project sites</li> </ul>	5	<ul style="list-style-type: none"> <li>· Support to the development, enhancement and implementation of protected area management plans and restoration activities</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Protected Area Management Board (PAMB)	<ul style="list-style-type: none"> <li>• Multi-stakeholder body that manages the reserve</li> <li>• Four sub-watershed management plans (2015-2025) developed and being implemented. Plans identify critical issues and priority actions</li> </ul>	5	<ul style="list-style-type: none"> <li>· Possible target beneficiary for capacity development if they show interest</li> <li>· Participate in community systematization workshops</li> </ul>
Pampanga River Basin Committee (PRBC)	<ul style="list-style-type: none"> <li>· Composed of the seven Central Luzon Provincial Governors, the two Mayors of Central Luzon's Highly Urbanized Cities, Regional Directors of the NEDA, DA, DENR, DPWH, DILG, the respective heads of the NWRB, DENR-RBCO and NAPOCOR, and one representative each from the private sector and Non-Government Organizations within the Pampanga River Basin</li> </ul>	5	<ul style="list-style-type: none"> <li>· Regional body that may be tapped as a coordination mechanism by the project and also for technical assistance in PA management</li> </ul>
<p>Local Government Units</p> <ul style="list-style-type: none"> <li>· Province of Nueva Ecija</li> <li>· Municipality of Pantabangan</li> <li>· Municipality of Carranglan</li> </ul>	<ul style="list-style-type: none"> <li>• Local governance</li> <li>• Devolution of agricultural sector</li> <li>• Financial resources</li> <li>· Political will</li> </ul>	5	<ul style="list-style-type: none"> <li>• Support to project implementation</li> <li>• Support for policy development and regulatory improvements</li> <li>· Benefit from capacity building</li> <li>· Areas for development in the approved Integrated Watershed Management Plans (IWMPs), identified community watersheds, proclaimed watersheds and Forest Land Use Plans (FLUPs) of the LGUs should be considered in the identification of potential areas for reforestation</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
People's Organizations	<ul style="list-style-type: none"> <li>· Existing organized groups</li> <li>· Knowledge of local context</li> <li>· Local leadership</li> <li>· Labour force</li> <li>· Many are not empowered to make decisions</li> <li>· Lack of sustainable income</li> </ul>	5	<ul style="list-style-type: none"> <li>· Active role in the implementation of key project activities</li> <li>· Specifically targeted beneficiaries due to their higher vulnerability</li> </ul>
National Economic Development Authority (NEDA) Region 3	<ul style="list-style-type: none"> <li>· Heads the Regional Development Council in the region which coordinates the preparation, implementation, monitoring and evaluation of short- and long-term regional development plans and investment programs, regional physical framework plan and special development plans</li> </ul>	3	<ul style="list-style-type: none"> <li>· Policy and oversight support</li> </ul>
National Irrigation Authority (NIA)	<ul style="list-style-type: none"> <li>· Key water user and provider institution whose network of irrigation systems typically constitute the midstream and downstream</li> <li>· Required to include site enhancement and protection measures in consonance with DENR's priority flagship programs such as the NGP</li> <li>· Oversees protection and management of the PCWFR through climate adaptation budget from the regular General Appropriations Fund</li> </ul>	3	<ul style="list-style-type: none"> <li>· Interested in sustainable water management in project sites</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
National Power Corporation (NPC)	<ul style="list-style-type: none"> <li>· Guaranteed source of financing for its watershed rehabilitation and forest protection efforts, from the Universal Charge-Environmental Charge of Power Utilities</li> <li>· Responsible for rehabilitating 14,000 hectares in the PCWFR</li> </ul>	3	<ul style="list-style-type: none"> <li>· Will form a key part of the corporate-private sector partnership platform with the NGP</li> <li>· Technical backstopping on restoration approaches</li> <li>· Resource mobilization</li> <li>· Sharing of information</li> </ul>
First Gen Hydro Power Corporation	<ul style="list-style-type: none"> <li>· Owns and operates the 132-MW Pantabangan-Masiway Hydroelectric Power Plant complex (PMHEP)</li> <li>· Undertakes watershed rehabilitation and protection with livelihood and enterprise development in the exercise of its corporate responsibility</li> <li>· Experience working in PCWFR, especially re SLM/SFM practices that could generate income</li> </ul>	3	<ul style="list-style-type: none"> <li>· Will form a key part of the corporate-private sector partnership platform with the NGP</li> <li>· Technical backstopping on restoration approaches</li> <li>· Resource mobilization</li> <li>· Sharing of information</li> </ul>
CalEnergy Philippines	<ul style="list-style-type: none"> <li>· Operates and maintains a power plant (part of the Casecnan Multipurpose Irrigation and Power Project) through a build-operate-transfer arrangement with the Philippine government</li> <li>· Provides assistance to local governments and communities through its corporate social responsibility programs and supports educational opportunities, livelihood projects, and environmental stewardship, and infrastructure development</li> </ul>	3	<ul style="list-style-type: none"> <li>· May complement biodiversity monitoring and protection efforts in the Casecnan Protected Landscape</li> <li>· Technical backstopping on restoration approaches</li> <li>· Resource mobilization</li> <li>· Sharing of information</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Tan Yang Kee Foundation, Inc (TYKFI)	<ul style="list-style-type: none"> <li>· Corporate social responsibility arm of the Lucio Tan Group of Companies</li> <li>· Has supported education, culture and sports; health and social welfare including environmental concerns; research; and manpower development initiatives over the last 30 years</li> </ul>	2	<ul style="list-style-type: none"> <li>· Potential key partner in the Carranglan side of the PCWFR that can support community mobilization and human resource development for forest protection</li> </ul>
Central Luzon Integrated Agricultural Research Center (CLIARC)	<ul style="list-style-type: none"> <li>· Coordinates and manages agriculture and fisheries research and development (R&amp;D) in the region</li> <li>· Has expertise in mushroom production which uses agricultural wastes that are abundant in the region (rice hulls, rice straw, and saw dust) as substrates for mushroom propagation</li> </ul>	2	<ul style="list-style-type: none"> <li>· The consortia can develop a regional R&amp;D agenda based on the inputs of other government institutions, farmers, private sector, etc.</li> <li>· Incorporate knowledge management in the R&amp;D agenda</li> </ul>
Philippine Center for Postharvest Development and Mechanization (PHilMech)	<ul style="list-style-type: none"> <li>· Provider of post-harvest mechanization and technologies</li> <li>· Located in Munoz, Nueva Ecija, about 2 hours away from the project sites</li> </ul>	2	<ul style="list-style-type: none"> <li>· Technical resource</li> </ul>
Philippine Carabao Center (PCC)	<ul style="list-style-type: none"> <li>· National lead agency for livestock biotechnology research and development in the Department of Agriculture</li> <li>· Located in Munoz, Nueva Ecija, about 2 hours away from potential project sites</li> </ul>	2	<ul style="list-style-type: none"> <li>· Technical resource</li> </ul>
Central Luzon State University	<ul style="list-style-type: none"> <li>· Known for its known for its breakthrough researches in aquatic culture, ruminant, crops, orchard, and water management</li> <li>· Located in Munoz, Nueva Ecija, about 2 hours away from potential project sites</li> </ul>	2	<ul style="list-style-type: none"> <li>· Technical resource</li> <li>· Facilitation and moderation of community forest restoration knowledge systematization workshops</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Kababaihang Masigla ng Nueva Ecija (KMNE)	<ul style="list-style-type: none"> <li>· A women's group based in Quezon, Nueva Ecija, is known for its dried tomato sweets, jellies, tamarind sweets, hot and spicy and concentrated tamarind juice, dried and sweetened kamias, dried mango, sweetened karamay, ginger tea, tilapia danggit or tilanggit (dried fish), rice wine, and rice coffee</li> <li>· Demo farms and facilities are near the project sites</li> </ul>	2	<ul style="list-style-type: none"> <li>· Technical resource</li> </ul>
Mackay Green Energy	<ul style="list-style-type: none"> <li>· \$10 million bio-charcoal facility in Pantabangan producing charcoal, methane, bio-char, and bio-oil</li> <li>· Green business</li> <li>· Business-oriented</li> </ul>	2	<ul style="list-style-type: none"> <li>· Technical resource</li> </ul>
Project Area – Simulao Watershed, within the Agusan River Basin in the Eastern Mindanao Biological Corridor			
DENR Region 13 <ul style="list-style-type: none"> <li>· PENRO Agusan del Sur</li> <li>· PENRO Surigao del Sur</li> <li>· CENRO Bunawan</li> <li>· CENRO Sta. Josefa</li> <li>· CENRO Bislig</li> </ul>	<ul style="list-style-type: none"> <li>· Technical expertise</li> <li>· Co-manages the LAWIN Forest and Biodiversity Protection System together with the LGUs</li> <li>· Office facilities and equipment near the project sites</li> </ul>	5	<ul style="list-style-type: none"> <li>· Support to the development, enhancement and implementation of protected area management plans and restoration activities</li> </ul>
Simulao Sub-Basin Management Council	<ul style="list-style-type: none"> <li>· Responsible for the implementation of conservation and development strategies in the Simulao watershed where the project will focus its activities in</li> </ul>	5	<ul style="list-style-type: none"> <li>· Planning and coordination body that the project will partner with</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Agusan River Basin Organization (ARBO)	<ul style="list-style-type: none"> <li>· Represents a group of 200 stakeholders representing the provinces of the Davao Oriental, Compostela Valley, Agusan del Sur, Agusan del Norte, Bukidnon, Surigao del Sur</li> <li>· Responsible for the implementation of conservation and development strategies for the river basin</li> </ul>	5	<ul style="list-style-type: none"> <li>· Planning and coordination body that the project will partner with</li> </ul>
<p>Local Government Units</p> <ul style="list-style-type: none"> <li>· Province of Agusan del Sur</li> <li>· Province of Surigao del Sur</li> <li>· Municipalities of Trento, Lingig, Veruela and Sta. Josefa in Agusan del Sur</li> <li>· Bislig City, Surigao del Sur</li> </ul>	<ul style="list-style-type: none"> <li>• Local governance</li> <li>• Devolution of agricultural sector</li> <li>• Financial resources</li> <li>· Political will</li> </ul>	5	<ul style="list-style-type: none"> <li>• Support to project implementation</li> <li>• Support for policy development and regulatory improvements</li> <li>· Benefit from capacity building</li> <li>· Areas for development in the approved Integrated Watershed Management Plans (IWMPs), identified community watersheds, proclaimed watersheds and Forest Land Use Plans (FLUPs) of the LGUs should be considered in the identification of potential areas for reforestation</li> </ul>
People's Organizations	<ul style="list-style-type: none"> <li>· Existing organized groups</li> <li>· Knowledge of local context</li> <li>· Local leadership</li> <li>· Labour force</li> <li>· Many are not empowered to make decisions</li> <li>· Lack of sustainable income</li> </ul>	5	<ul style="list-style-type: none"> <li>· Active role in the implementation of key project activities</li> <li>· Specifically targeted beneficiaries due to their higher vulnerability</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Regional Development Council (headed by National Economic Development Authority, Region 13)	<ul style="list-style-type: none"> <li>· Promoting a better-balanced regional investment planning approach that will provide communities livelihood alternatives to mining such as in agriculture and fisheries, forestry and ecotourism sectors</li> </ul>	4	<ul style="list-style-type: none"> <li>· Policy and oversight support</li> </ul>
Mindanao Development Authority (MinDA)	<ul style="list-style-type: none"> <li>· Supports and facilitate the creation of river basin organizations in Mindanao like the ARBO through its MindaNOW! Nurturing Our Waters Program</li> </ul>	3	<ul style="list-style-type: none"> <li>• Policy and oversight support</li> </ul>
National Commission on Indigenous Peoples (NCIP) Region 13	<ul style="list-style-type: none"> <li>· Knowledge of local context in indigenous people's communities located in project sites</li> <li>· Evaluates all application for FPIC</li> <li>· Performs dispute resolution functions (quasi-judicial)</li> </ul>	4	<ul style="list-style-type: none"> <li>· Provide support to strengthen NGP convergence in ancestral domains</li> <li>· NCIP Regional Office will evaluate any request/ application for FPIC and upon favourable evaluation, will issue a work order to the Provincial Office to conduct a field validation for FPIC under Section 39, FPIC Guidelines</li> <li>· Prepare and issue the Certificate Pre-condition upon favourable report by the FPIC validation team</li> <li>· Possible mechanism that the projects can explore partnering with is the Regional Consultative Council comprising the 6 IP tribes in the region, with NCIP 13 as the de facto Secretariat</li> </ul>
Indigenous Peoples Mandatory Representative (IPMR) - individual	<ul style="list-style-type: none"> <li>· Selected by the tribes and confirmed by the NCIP, DILG and the LGU, the IPMR sits in the local legislative councils at the barangay, municipal and provincial level with the same powers and standing as a regular local legislator</li> <li>· Bridge IP communities' issues/concerns to the LGU</li> </ul>		<ul style="list-style-type: none"> <li>· Champion and facilitate policy proposals at the provincial, municipal and barangay level</li> <li>· Support the consultation and FPIC process</li> </ul>

Stakeholders	Characteristics	Level of involvement	Role in the project
Mining companies operating in Region 13/Caraga Region	<ul style="list-style-type: none"> <li>Caraga Region is now hosting several mining projects producing various mineral commodities particularly but not limited to gold, copper, chrome, nickel, iron and limestone for concrete cement production</li> </ul>	4	<ul style="list-style-type: none"> <li>Mining companies are open to changes or innovations as long as there are clear mechanisms/policies to comply with (e.g. compliance to DAO 2018-19)</li> <li>Provide counterpart funding for community systematization workshops</li> <li>Publish systematization of community engagement protocols</li> </ul>
Caraga State University	<ul style="list-style-type: none"> <li>Has R&amp;D programs on environmental management and eco-governance; mineral resources management and responsible mining; and sustainable agri-fishery and forest resource management</li> </ul>	2	<ul style="list-style-type: none"> <li>Technical resource</li> <li>Facilitation and moderation of community forest restoration knowledge systematization workshops.</li> </ul>
CARAGA Integrated Agricultural Research Center (CARAGA-IARC)	<ul style="list-style-type: none"> <li>Coordinates and manages agriculture and fisheries research and development (R&amp;D) in the region</li> </ul>	2	<ul style="list-style-type: none"> <li>The consortia can develop a regional R&amp;D agenda based on the inputs of other government institutions, farmers, private sector, etc.</li> <li>Incorporate knowledge management in the R&amp;D agenda</li> </ul>

## Stakeholder engagement

FAO is committed to ensuring meaningful, effective and informed participation of stakeholders in the formulation and implementation of FAO programmes and projects. This process seeks to enhance transparency, two-way communication, information provision and enable fair and representative participation of all sections of affected populations, including the most vulnerable and marginalized. During the PPG phase, a number of stakeholders were consulted through one-on-one interviews, small group meetings, focus group discussions, workshops (national and local), technical working groups and phone and email correspondence. Details can be found in Annex 13. PPG Stakeholder Consultations.

During actual project implementation, the project team will draft a Stakeholder Engagement and Communication Plan once specific project sites have been selected and community stakeholders per site identified and engaged. As a process, stakeholder engagement is iterative and needs to be managed. It should not be limited to a stage, phase or component. Project staff, in coordination with key partners, will be assigned to oversee the implementation of stakeholder participation, and regularly review and update it. The proposed strategy below outlines five components of the plan:

1. *Stakeholder identification and analysis* – This component includes a review and validation of stakeholders initially identified during the PPG phase (see Stakeholder Matrix above), and an assessment of their stake in land and biodiversity restoration of the project sites. During this stage, it is important to recognize that land degradation and/or restoration may mean different things to different stakeholders. Particular attention should also be given to vulnerable groups like indigenous peoples and women.
2. *Stakeholder engagement planning* – Based on the outcome of the stakeholder identification and analysis, the stakeholder engagement plan defines the (1) potential areas of influence/interest and possible role/s of each prioritized stakeholder, (2) the engagement strategy (approach, tools and frequency), and (3) designates who is responsible for managing the stakeholder.
3. *Stakeholder communication* - Guided by the stakeholder engagement plan, key messages are drafted towards informing and educating stakeholders, and priming them for specific engagements. This component should also include a grievance mechanism (which will be part of the plan) that will allow communities to present legitimate and relevant concerns during the life of the project.

4. *Stakeholder engagement* – It is recommended that the stakeholder engagement plan be approved by the project steering committee (or a similar body) before it is carried out.

5. *Stakeholder engagement monitoring and plan enhancement* - The stakeholder engagement plan will have to be monitored and assessed as it is being delivered to ensure that is actually contributing to the achievement of project objectives. Enhancements will have to be made in case of changes in contexts and stakeholder analysis and feedback.

In Eastern Mindanao, the process shall also be closely informed by the FPIC process discussed in the previous sections and in Annex 15: “Suggested steps in the process of respecting FPIC”.

## Documents

Title

Submitted

**In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.**

The roles of key stakeholders as project execution agency or as members of project steering committee are explained in the project's section 3.1 INSTITUTIONAL & IMPLEMENTATION ARRANGEMENTS. Other stakeholders such as local indigenous communities and other local communities will be strongly involved in project activities and their free prior informed consent will be sought for relevant activities as outlined in the project.

As for other stakeholders, their roles and involvement are described in the Stakeholder Matrix table (pasted above and available in project document). As for general other stakeholders, they will be kept involved through various workshops organized by the project - such as the inception workshop, dissemination workshop at mid term and final workshop. In addition, the project's communication strategy will outline regular information dissemination and communication with all key stakeholders throughout the lifetime of the project.

**Select what role civil society will play in the project:**

**Consulted only;**

**Member of Advisory Body; Contractor;**

**Co-financier;**

**Member of project steering committee or equivalent decision-making body;**

**Executor or co-executor;**

**Other (Please explain) Yes**

The project will involve the civil society. Under Component 1 for example, 100 members (50 women, 50 men) of civil society are planned to be trained on the technical guidelines for restoration strategies. Members of civil society will also be involved in *The National Forest and Landscape Restoration (FLR) working group envisioned under Output 1.3.*

#### **A.4. Gender Equality and Women's Empowerment**

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

The Government of the Philippines, at all levels, is dedicated to ensuring that gender and development (GAD) are fully incorporated in all projects design, implementation, monitoring, communication and evaluation. The passage of Republic Act 9710 or the Magna Carta of Women (MCW), and the subsequent effectivity of the Implementing Rules and Regulations (IRR) in 2010, provided the Philippine Commission on Women (PCW) with a fresh and expanded mandate to oversee women's concerns, as a catalyst for gender mainstreaming and as a lead advocate of women's empowerment, gender equity and equality. This landmark law further mandated the PCW to i) be the primary policy-making and coordinating body on women and gender equality concerns, ii) be the overall monitor and oversight on the MCW and its IRR and iii) lead the capacity development of agencies to enable them to implement the MCW. Indigenous women's customary rights to the land, including access to and control of the fruits and benefits, their indigenous practices on seed storage and cultivation, as well their roles as knowledge holders are also protected under the MCW. The law further mandates government agencies to provide economic opportunities for indigenous women, particularly access to market for their produce.

The FAO Policy on Gender Equality (GEP) identifies gender mainstreaming and women-specific targeted interventions as a twofold strategy for the achievement of gender equality in agriculture and the rural sector. In 2017, FAO Philippines undertook a Country Gender Assessment (CGA) to analyze the agricultural and rural sector of the Philippines from a gender perspective at the macro (policy), meso (institutional) and micro (community and household) level to identify gender inequalities in access to critical productive resources, assets, services and opportunities. Some of the key CGA findings relevant to this project are:

- Numerous enabling policies, guidelines and mechanisms to close the country's gender gap have been enacted and institutionalized such as the Magna Carta of Women, Philippine Plan for Gender-Responsive Development 1995–2025, Women in Development and Nation Building Act, to name a few.

- While existing policies, guidelines and mechanisms have helped create an enabling environment and basic guidelines for women empowerment in the agriculture and rural sector, social and political institutional dynamics as well as cultural norms continue to exacerbate gender inequalities.

· Despite women's key contribution to agriculture and fisheries, Filipino rural women are often described as "invisible". About three-quarters of employed persons in agriculture, hunting, forestry and fishing are men, while only one quarter are women. But these statistics do not take into account the various unpaid care work that rural women perform on a continuous basis. This results in an inaccurate measurement of rural women's contribution to the sector. Rural women are underutilized in productive work; very few of them own land, and lack access to credit, technology and other productive resources. Women are also less likely to be targeted for extension services, as many extension agents still do not recognize women as agricultural producers.

· These gender inequalities are mainly brought about by societal and cultural norms about the role of women and men, which are still very much prevalent in the agriculture and in the rural sector. It is assumed, for instance, that the husband as the traditional head of the family gets the first chance to apply for a land title. Women are often considered the "farmer" or "agricultural holder" only when there is no male adult in the family. The majority of care work such as cleaning, cooking and caring for children or elderly, is usually performed by women and girls and is usually unpaid. This undermines women and girls' rights and limits their opportunities.

· Men are often excluded from discussions and efforts that address food security and (mal)nutrition. This only perpetuates the supposed norm that the preparation of nutritious food for the family lays in the domain of women.

Related literature on gender and natural resource management and biodiversity from the World Bank and FAO, as well as some case studies in the Philippines, reveal that:

· Rural women and men have different roles, responsibilities, and knowledge in managing natural resources, which result in different needs, priorities, and concerns. For example, in many regions men use natural resources in agriculture, logging, and fishing for commercial purposes more than women. Men also tend to focus on market-oriented or cash crop production, whereas women often work with subsistence crops and vegetable gardens. In the Philippines, rural women are community leaders, organizing events and passing on environment-related messages to other members of family and communities.

· However, without secure land rights, rural women and men have little or no incentive to engage in natural resource management and conservation practices. Poor rural women lacking secure land tenure often depend on common property resources for fuel wood, fodder, and food, which are necessary for the wellbeing of their households.

· According to the PCW, although women may be viewed as agents of environmental degradation by the nature of their activities and responsibilities, they have an equally significant impact on environmental conservation due to their multiple roles. Women's day-to-day activities such as growing, collecting or buying food, tending domestic animals, gathering wood and water, and caring for children and the home have provided them with special knowledge of the environment.

· In the Philippines, in national government agencies such as DENR, the perception of a forester as "male only" is changing, and more work opportunities for men and women are available now compared to before when foresters had limited opportunities other than those associated with forest regulation. There are allocated slots for women in forestry department such as laboratory technicians, entomologists and Geographical Information System technicians. There are more women compared to men working, especially in the DENR's Forest and Management Bureau, with more women now in leadership positions like the Director General. DENR's Community-Based Forest Management (CBFM) policy also mandates 30 percent representation of women in CBFM, which led to more than 30 percent women's leadership in CBFM committees. These positive results

are often attributed to the implementation of the GAD approach and other relevant gender-sensitive policies and programs in forestry sector (Joint Regional Initiative for Women's Inclusion in REDD++, 2014).

- DENR's Community Resource Management Framework (CRMF) and planning guidelines (which inform NGP activities carried out by CBFM people's organizations) explicitly identifies gender parity as a key principle and defines this as the management and utilization of forest resources where equal opportunities for men and women to participate and share in attendant to their responsibilities and benefits are provided.

The project will work to address gender related issues, as well as harness the positive results in advancing GAD in the Philippines, across all its three components. The work will include the collection of sex-disaggregated data, conducting gender analyses, and the integration of gender-sensitive indicators to allow for the measurement of changes in the roles and relations between women and men in a certain policy area, program or activity. These are further outlined in Annex 14 Gender Strategy and Action Plan where details on gender inclusion output by output are included.

**Annex 14 of the Project Document** also provides more details on the status of rural women in the Philippines; Philippine Government GAD related commitments, strategies, plans and legislation; some recommended gender considerations per project component; and related GAD tools and resources that the project implementation team may review further.

To ensure that the gender perspective is included in the project implementation:

- The National Coordinator and DENR-FMB Gender Focal Point will be responsible for overseeing implementation, monitoring and reporting of gender-related achievements to GEF
- Terms of Reference of all consultants will include responsibilities to ensure gender mainstreaming in their work
- Gender-sensitization training will be carried out as part of project orientation, for all levels of staff, consultants, contractors, and facilitators.
- Both female and male staff will be given equal opportunity to participate in non-gender related training and capacity development programs.
- The PMU team will use the existing GAD tools and checklists to guide the team in preparing gender sensitive indicators and preparing checklists for evaluation of gender responsiveness of proposed subprojects.

## Documents

Title

Submitted

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

Yes

**If yes, please upload document or equivalent here**

The following is presented in Annex 14 of the full project document.

Gender Strategy and Action Plan

In developing and implementing a gender strategy and action plan for the project, it is important to understand the current status of rural women in the Philippines as well as the various policies, plans, mechanisms and platforms that provide the enabling conditions for gender-sensitive approaches to be integrated in the project. In addition, incorporating gender as a tool for natural resource management helps to ensure equitable participation, use and benefit of both women and men project beneficiaries from resource use. And when women and men can develop the same or complementary activities in relation to nature, this increases opportunities for sustainable activities.

This gender strategy and action plan serves as roadmap for mainstreaming gender concerns and gender equality throughout and across the project components. It is recommended that this draft strategy and plan be reviewed at onset of the project prior to its implementation.

### *The Situation of Rural Women in the Philippines*

- While both Filipino women and men farmers remain poor because of the underperformance of the agricultural sector, women farmers are at an even greater disadvantage.
- 74 percent of employed persons in agriculture, hunting, forestry and fishing are men, while only 26 percent are women (2015 data). But these statistics do not take into account the various *unpaid* work that rural women perform. This is why rural women are often described as “invisible” farmers. Their contribution to the sector is not accurately measured, they are underutilized, very few of them own land, and they lack access to credit, technology and other resources.

· Women are less likely to be targeted for extension services as many extension agents still do not recognize women as farmers. Research shows that despite their primary role in the family's food security, only 36 percent of women farmers have access to irrigation, only 29 percent have access to seeds, 26 percent to training, 23 percent to extension services, 21 percent to fertilizers and seeds subsidy, 20 percent to pest control management, 20 percent to calamity assistance and 14 percent to financial assistance.

· Women are involved in fisheries and aquaculture mainly because it provides them with better income earning opportunities than other sectors, or their families owned the farms where they have to share work or due to lack of other employment options. Women are involved in various stages of aquaculture from pond preparation, seed collection and hatcheries, feeding and guarding, account and book-keeping, seafood processing, marketing and research and development. Their role is growing significantly in certain areas like the fish processing industry.

· Men are often excluded from discussions and efforts that address malnutrition. This only perpetuates the supposed norm that the preparation of nutritious food for the family is the domain of women. In addition, stereotypes of men's toughness and emotional strength can result to their denial of stress and trauma arising from disaster (natural or manmade) or deter them from seeking psychosocial support.

· These gender inequalities are mainly brought about by societal and cultural norms about the role of women and men, which are still very much prevalent in the agricultural and rural sector. Customary practices and traditional patriarchal relations in families and communities discriminate against women. It is assumed, for instance, that the husband as the traditional head of the family gets the first chance to apply for a land title. Women are often considered the "farmer" or "agricultural holder" only when there is no male adult in the family.

· Unpaid care work is a barrier to gender inequality across all sectors, not just agriculture. The majority of care work such as cleaning, cooking and caring for children or elderly, is performed by women and girls and is usually unpaid. This unequal burden of unpaid care undermines women and girls' rights, limits their opportunities and, therefore, impedes their economic empowerment and hinders women from seeking employment and income, which in turn holds them back economically.

#### *Philippine Government Commitments, Strategies, Plans and Legislation*

The Philippines signed the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) on July 15, 1980 and ratified it on August 5, the first country of the Association of Southeast Asian Nations (ASEAN) to do so.

The Philippines' participation to CEDAW has been instrumental in the advancement and empowerment of Filipino women, including through the enactment of the Magna Carta of Women (MCW), a comprehensive women's human rights law that seeks to eliminate discrimination against women, especially those in the marginalized sectors (PCP, 2009). Specifically, Section 36, Chapter VI of the MCW provides that all departments, including their attached agencies, offices, bureaus, state universities and colleges, government-owned and -controlled corporations, local government units and other government instrumentalities adopt gender mainstreaming as a strategy to promote women's human rights and eliminate gender discrimination in their systems, structures, policies, programs, processes and procedures (PCP, 2009). The passage of the Magna Carta of Women (MCW) provided the PCW with an expanded role as oversight body and authority on women's concerns, as a catalyst for gender mainstreaming and as a lead advocate of women's empowerment, gender equity and gender equality. It also further mandated the PCW to be the primary policy-making and coordinating body on women and gender equality concerns, to be the overall monitor and oversight on the MCW and its implementing rules and regulations and to lead the capacity development of agencies to enable them to implement the MCW.

Besides CEDAW and MCW, the Philippines has several other laws, measures and instruments that protect women from discrimination and violence, such as:

- RA 7877 Anti-Sexual Harassment Act of 1995
- RA 8353 Anti-Rape Law
- RA 8505 Rape Victim Assistance and Protection Act
- RA 9208 Anti-Trafficking in Persons Act
- RA 9262 Anti-Violence against Women and their Children Act of 2004
- Executive Order No. 209 Family Code of the Philippines
- RA 10354 Responsible Parenthood and Reproductive Health Act of 2012

<b>Title</b>	<b>Integration of issues relevant for gender equality and rural women's empowerment in agriculture, rural development and natural resource management</b>
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Title	Integration of issues relevant for gender equality and rural women's empowerment in agriculture, rural development and natural resource management
<p>Republic Act 9710 Magna Carta of Women (MCW)</p>	<p>Declares that equal status is given to women and men in land titling and issuance of land instruments.</p> <p>Recognizes the following human rights of marginalized women farmers, fishers, rural workers, and indigenous peoples:</p> <p>MCW, Section 20: “(a) Right to Food. – The State shall guarantee the availability of food in quantity and quality sufficient to satisfy the dietary needs of individuals, the physical and economic accessibility for everyone to adequate food that is culturally acceptable and free from unsafe substances and culturally accepted, and the accurate and substantial information to the availability of food, including the right to full, accurate, and truthful information about safe and health-giving foods and how to produce and have regular easy access to them;</p> <p>(b) Right to Resources for Food Production. – The State shall guarantee women a vital role in food production by giving priority to their rights to land, credit, and infrastructure support, technical training, and technological and marketing assistance[...] to ensure women's livelihood, including food security: [...] 9) Women-friendly and sustainable agriculture technology shall be designed [...] 10) Access to small farmer-based and controlled seeds production and distribution shall be ensured and protected; 11) Indigenous practices of women in seed storage and cultivation shall be recognized, encouraged, and protected [...]”.</p>

Title	Integration of issues relevant for gender equality and rural women's empowerment in agriculture, rural development and natural resource management
<p>Republic Act 7192 Women in Development and Nation Building Act</p> <p>-</p>	<p>The State recognizes the role of women in nation building and shall ensure the fundamental equality before the law of women and men. The State shall provide women rights and opportunities equal to that of men.</p> <p>SECTION 5. Equality in Capacity to Act — Women of legal age, regardless of civil status, shall have the capacity to act and enter into contracts which shall in every respect be equal to that of men under similar circumstances.</p> <p>In all contractual situations where married men have the capacity to act, married women shall have equal rights.</p> <p>To this end:</p> <ol style="list-style-type: none"> <li>(1) Women shall have the capacity to borrow and obtain loans and execute security and credit arrangements under the same conditions as men;</li> <li>(2) Women shall have equal access to all government and private sector programs granting agricultural credit, loans and non-material resources and shall enjoy equal treatment in agrarian reform and land resettlement programs;</li> <li>(3) Women shall have equal rights to act as incorporators and enter into insurance contracts; and</li> <li>(4) Married women shall have rights equal to those of married men in applying for passports, secure visas and other travel documents without the consent of their spouses.</li> </ol> <p>In all other similar contractual relations, women shall enjoy equal rights and shall have the capacity to act which shall in every respect be equal to those of men under similar circumstances.</p>
<p>Indigenous Peoples' Rights Act of 1997 (IPRA)</p>	<p>SECTION 26. Women. — ICC/IP women shall enjoy equal rights and opportunities with men, as regards the social, economic, political and cultural spheres of life. The participation of indigenous women in the decision-making process in all levels, as well as in the development of society, shall be given due respect and recognition.</p> <p>The State shall provide full access to education, maternal and child care, health and nutrition, and housing services to indigenous women. Vocational, technical, professional and other forms of training shall be provided to enable these women to fully participate in all aspects of social life. As far as possible, the State shall ensure that indigenous women have access to all services in their own languages.</p>

Title	Integration of issues relevant for gender equality and rural women's empowerment in agriculture, rural development and natural resource management
<p>Comprehensive Agrarian Reform Law / CARL (Republic Act/RA 6657, 1988)</p> <p>Comprehensive Agrarian Reform Program Extension with Reforms / CARPER (RA 9700, 2009)</p>	<p>CARP: Contains a section on rural women as a special area of concern.</p> <p>CARL: Promotes the rights of rural women, independent of their male relatives and of their civil status, to own and control land, to receive a just share of fruits of the land and to be represented in advisory or appropriate decision-making bodies.</p> <p>Under the CARL, women rural labourers have equal rights to own land. However, most women are seasonal workers who rank third in the priority order of beneficiaries. The DAR has since adopted the Memorandum Circular 18 of 1996 and the Administrative Order No. 1 of 2001 to improve women's position and implement the gender equality provisions of the CARL. These guidelines specify that no sex discrimination can be made in beneficiary selection, and land titles are to be issued in the name of both spouses (FAO, 2018b).</p>
<p>Republic Act 10000 Agri-Agra Law of 2009</p>	<p>The Agri-Agra Law of 2009 mandates all banking institutions to set aside at least 25 percent of their total loanable funds for agriculture and fisheries: 15 percent for agricultural lending and 10 percent for agrarian-reform beneficiaries. The law defines "qualified borrowers" and is gender-neutral in its description.</p>
<p>Expanded National Integrated Protected Area Systems (ENIPAS) Act of 2018</p>	<p>Sec. 11. Protected Area Management Board. - a Protected Area Management Board (PAMB) shall be created for each of the protected areas designated as initial components, established by presidential proclamation, and declared by republic act.</p> <p>The PAMB members duly appointed prior to the effectivity of this act shall continue their term until the expiration of their appointment. Thereafter, members of the management board shall be appointed in accordance with the provisions of this act: <i>provided</i>, that the regional director of DENR shall ensure that the relevant members of the PAMB are duly appointed by the DENR secretary: <i>provided, further</i> that, if feasible, at least twenty (20%) of the PAMB members shall be women, pursuant to Republic Act No. 9710 or the Magna Carta of Women.</p>

<b>Title</b>	<b>Integration of issues relevant for gender equality and rural women’s empowerment in agriculture, rural development and natural resource management</b>
Philippine National Action Plan on Forest and Landscape Restoration 2016-2018	<p>Activity 5. Gender Sensitivity of Forest Landscape Restoration</p> <p>[OBJ] [OBJ] [OBJ] [OBJ]</p> <p>Key to successful and sustainable river basin management is the adherence of programs and projects to gender sensitivity and empowerment principles. Women, elderly and youth sectors have special roles and stakes over the river basin resources. Providing them space in the management will further encourage their collective participation in watershed, water, and wetland conservation. The following are the objectives that the activity entails: to organize women, elderly, and youth groups to become partners in river basin management, and; to capacitate existing women, elderly, and youth organizations to become better partners in river basin management. Organizing and capacity building activities for women, elderly and youth groups will be done in collaboration with Local Government Units, the Department of Social Welfare and Development, Department of Education, Culture and Sports, civil society groups (such as church-based organizations) and NGOs. The expected benefits/impacts of this activity include increased number of gender-based organizations supporting forest landscape restoration activities, transformed values and perceptions towards FLR, and visibility and access of gender- based organizations over FLR planning, implementation, and decision-making.</p>

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The operationalization of these commitments and policies on the ground are enabled by **Joint Circular 2012-01**, issued by the Philippine Commission on Women, National Economic & Development Authority, Department of Budget and Management, which provides instructions and guidelines on the following:

- Preparation of **Annual Gender and Development (GAD) Plans and Budgets** and Accomplishment Reports to Implement the Magna Carta of Women by all heads of Executive Departments, Agencies, Bureaus, Offices, State Universities and Colleges, Government Owned and/or Controlled Corporations, Legislative and Judiciary Branches, Constitutional Bodies, Other Government Instrumentalities and All Others Concerned (Note: The **GAD budget which should be at least 5 percent of the Maintenance and Other Operating Expenses (MOOE)** budget of respective office)
  
- Creation or strengthening of the **GAD Focal Point System (GFPS)** both in the national and field levels, and capacitating the GFPS through training programs, seminars and other capacity building programs to ensure the effective and efficient implementation of GAD mainstreaming activities

- Conduct of **gender analysis using existing tools, such as the Harmonized Gender and Development Guidelines (HGDG)**, to ensure that the different concerns of women and men are addressed equally and equitably in Government Programs, Activities and Projects (PAPs).

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#### DENR GFPS and GAD Office

DENR Administrative Order 2018-06 (signed April 2018) aims to strengthen the DENR GFPS and establish a GAD Office that will undertake the following functions and tasks:

- Lead in mainstreaming gender perspective in the Department's policies, plans and programs;
- Ensure the assessment of the gender responsiveness of the systems, structures, policies, programs, processes and procedures of the Department based on priority needs and concerns of constituencies and employees and the formulation of recommendations including their implementation;
- Assist in the formulation of new policies in advancing women's status;
- Lead in setting up appropriate systems and mechanisms to ensure the generation, processing, review and updating of sex-disaggregated data or GAD database to serve as basis in performance-based gender-responsive planning;
- Coordinate efforts of different divisions/offices/units of the Department and advocate for the integration of GAD perspectives in all their systems and processes.

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#### GAD Resource Pool and GAD Local Learning Hubs

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A component of the National GAD Resource Program (NGRP), the GAD Resource Pool (GR Pool) is composed of technical assistance providers with expertise on gender and development and gender mainstreaming. Formed by the Philippine Commission on Women (PCW), the GR Pool serves as PCW's support group in the provision of technical assistance, monitoring and evaluation and conduct of gender related researches and studies. The members are selected from National Government Agencies (NGAs), Local Government Units (LGUs), academe, Civil Society Organizations (CSOs) and independent gender consultants who have the competencies and experience in the provision of technical assistance for various client groups. To date, PCW has certified 110 females and 22 males or a total of 132 GR pool members.

The following link contains the latest information on GAD seminars and trainings and access to a database of GAD experts and resources: <https://grp.d.pcw.gov.ph>

In addition, the PCW has certified five GAD Local Learning Hubs (LLH) as part of its LGU-centred technical assistance portfolio. LGUs interested to learn from the five LLH on GAD may contact:

Quezon Provincial Gender and Development (PGAD) Office; Iloilo Provincial GAD Council (PGADC); Davao City Integrated Gender and Development Division (IGDD); Aklan Provincial Planning and Development Office; and the Naga City Council for Women (NCCW).

*Community-based Women Organizations (Taken from FAO CGA)*

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In the Philippines, there is a National Coalition of Rural Women (Pambansang Koalisyon ng Kababaihan sa Kanayunan or PKKK) composed of organizations of women small-scale agricultural producers, fishers, indigenous peoples, and formal and informal workers in the rural areas. In addition, the MCW requires that 40 percent of all representatives in local special bodies, including sector-specific councils be comprised of women (CEDAW, 2015). However, according to the PCW, women are not as widely represented as men in agricultural organizations, cooperatives, councils, *Bantay Dagat*, or law enforcement agencies because of gender biases. PKKK has also expressed concern that women representatives in decision-making bodies are often not from marginalized or grassroots sectors.

However, there is an additional nation-wide mechanism that allows rural women to become effective partners in community development called the Rural Improvement Clubs (RICs). Organized by DA in the 1960s and supported by the LGUs, RICs are non-government, barangay-based organizations that seek to raise the living standards of its members and make them productive community members through livelihood capability-building activities. Those activities range from agri/fishery entrepreneurship, credit, pest management, compost making, poultry/livestock/fisheries growing and fattening to production and processing of fruits, vegetables and seafood. RICs members have also become active participants in decision-making bodies such as the Regional Agricultural and Fisheries Council (RAFC), Municipal Agricultural and Fisheries Council (MAFC), cooperatives, bottom up budgeting and anti-poverty councils.

The RICs of the Province of Zamboanga del Sur are a good example of how rural organizations are providing women with opportunities to influence local agricultural and rural development policies and programs. Established in 2008, the Women Empowerment Movement – Rural Improvement Club (WEM-RIC) is a province-wide federation of over 42,000 women (90 percent rural women) that promotes mutual cooperation among its members and encourages activities for the welfare of the family and the community.

*Gender Considerations per Project Component*

Component 1: Setting up the enabling conditions for the improved implementation of forest landscape restoration, protected area management and biodiversity conservation
Outcome 1: Environmental, livelihood and development initiatives are effectively mainstreamed into Government support for forest restoration

	<b>GENDER RECOMMANDATIONS</b>
Output 1.1: Refined technical guidelines on restoration strategies are developed and adopted by the Government's restoration programs (including the National Greening Program)	<ul style="list-style-type: none"> <li>· Subject refined guidelines to a gender analysis to better understand the role of and benefit by men and women in restoration programs</li> <li>· Gender balance in trainings conducted (equal participation of women and men resource speakers and participants; at least 30% are women)</li> <li>· Gender Specialist included in production of training materials and modules</li> </ul>
Output 1.2: Mechanisms and policies to support socio-economic incentives and other benefits from restoration activities are developed and adopted	<ul style="list-style-type: none"> <li>· Meaningful participation of community members (at least 30% are women) in the policy development process (from formulation, implementation to M&amp;E)</li> </ul>
Output 1.3: Inter-institutional cooperation mechanisms are reinforced at national and local levels in support of the development and implementation of different restoration strategies	<ul style="list-style-type: none"> <li>· Enhance existing coordination platforms by improving their capacity to plan, design, implement, and monitor programs and projects that address gender issues</li> <li>· At least 30% women's representation in cooperation mechanisms</li> </ul>
Output 1.4: Security of tenure is improved for restored areas	<ul style="list-style-type: none"> <li>· Land tenure instruments should equally benefit women and men</li> </ul>

Component 2: Implementation of restoration programs and complementary initiatives in forest landscape restoration, protected area management and biodiversity conservation
Outcome 2: Diverse and sustainable restoration practices are effectively applied, contributing to the generation of multiple environmental and social benefits

	<b>GENDER RECOMMENDATIONS</b>
Output 2.1 Restoration and management plans for protected, and key biodiversity areas are in place and harmonized with existing management plans at the project area levels	<ul style="list-style-type: none"> <li>• Equal participation of women and men in decision-making processes that affect the restoration, protection and management of degraded areas</li> <li>• At least 30% women's representation during consultations and assessment for developing restoration plans</li> <li>• Gender balance (at least 30% women) in restoration planning body membership</li> </ul>
Output 2.2: Restoration, protection and maintenance of priority degraded areas	<ul style="list-style-type: none"> <li>• Gender balance in protection and maintenance activities, and in trainings conducted (equal participation of women and men resource speakers and participants; at least 30% are women)</li> <li>• Sensitize communities on the role of women and men in both productive and reproductive work by integrating Gender Sensitivity Trainings (GST) in restoration related capacity building (GAD Resource Pool can be tapped for this)</li> <li>• Ensure equal access of women and men to the community fund; monitor and track fund access by women and men</li> </ul>
Output 2.3: Technical, organizational and marketing support are provided to communities to enable them to obtain livelihood and commercial benefits in a sustainable manner through restoration of degraded areas	<ul style="list-style-type: none"> <li>• Equal participation of women and men in decision-making processes that affect the use, protection and regeneration of resources needed for sustainable livelihood</li> <li>• Sensitize communities on the role of women and men in both productive and reproductive work by integrating Gender Sensitivity Trainings (GST) in livelihood/enterprise development related capacity building (GAD Resource Pool can be tapped for this)</li> <li>• Review <i>Gender Responsive ENR Enterprises (GREEN) Kit</i> developed by DENR, which is a compilation of existing enterprises managed by women, families and peoples' organizations using DENR-based resources</li> </ul>
Output 2.4: Simplified mechanisms that ensure stakeholders' rights to use and market trees and non-timber forest products that they have established and/or sustainably managed	<ul style="list-style-type: none"> <li>• Consider equity and incentive issues related to trees and non-timber products in CADT and CBFM areas, and how these may affect women's or men's capacity to continue to provide for their basic daily needs or to earn income from natural resources</li> </ul>
Output 2.5: Functional system of payment of environmental services (PES) is in place and rewarding stakeholders for restoration	<ul style="list-style-type: none"> <li>• Women's interest in water use and management is often complex, reflecting their multiple productive and reproductive roles and responsibilities, i.e., water for bathing and personal hygiene, laundry and cooking</li> <li>• At least 30% women's representation in PES mechanisms</li> </ul>



Component 3: Knowledge, Partnerships, Monitoring and Assessment
Outcome 3: Knowledge of diverse approaches to restoration is effectively managed and applied, permitting sustainability and scaling up

	<b>GENDER RECOMMENDATIONS</b>
Output 3.1: A multi-level, multi-modal and multi-dimensional project KM is developed, tested and rolled out	<ul style="list-style-type: none"> <li>· KM system developed should integrate gender considerations of Component 1 and 2 activities in its design and roll-out</li> <li>· At least 30% women's representation in knowledge networks</li> </ul>
Output 3.2: Forest restoration knowledge is compiled, organized & systematized	<ul style="list-style-type: none"> <li>· KM audit to consider that women and men may value, access and use knowledge on forest restoration differently</li> <li>· Include documentation of on-the-ground initiatives of rural women in forest restoration and natural resource management</li> <li>· Equal participation of women and men systematization workshops (at least 30% women)</li> </ul>
Output 3.3: Knowledge products are shared and project results and lessons learned are disseminated locally, nationally and internationally	<ul style="list-style-type: none"> <li>· Gender Specialist included in production of knowledge products</li> <li>· Consider linking with Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN), a women-led international membership network of women and men professionals and women's associations, which focuses on addressing policy gaps and other barriers to women's leadership roles in the agricultural and natural resource management sector</li> </ul> <p>Equal opportunity for women and men farmers and community stakeholders to participate in study tours</p>
Output 3.4: System for the monitoring and evaluation of the effectiveness of forest land restoration (biophysical, productive	<ul style="list-style-type: none"> <li>· Collect and analyse sex-disaggregated data and understand that improving and standardizing data collection, analysis, and use will greatly enhance gender equality in the</li> </ul>

and socioeconomic aspects, including gender impacts)

sector

· Review *GAD Checklist for Natural Resource Management Projects* and *Handbook on the Application of the Enhanced Gender Mainstreaming Evaluation Framework (2016)* prepared by the Philippine Commission on Women

· Mid-term review to assess achievements and constraints in gender strategy and action plan implementation and propose adjustments for better project performance

*GAD Tools and Resources*

Tool/Resource	Source
<p><b>Harmonized Gender and Development Guidelines</b></p> <p>GAD Checklists most relevant to the project:</p> <ul style="list-style-type: none"> <li>· Natural Resource Management</li> <li>· Agricultural and Agrarian Reform</li> </ul>	<p>Philippine Commission on Women (PCW)</p> <p><a href="http://w3.neda.gov.ph/hgdg">http://w3.neda.gov.ph/hgdg</a></p>
<p><b>Gender in Forestry Module</b></p> <p>(Sustainable Forest Management (SFM) Toolbox)</p> <p>Intended for forest and other land managers, land-use planners interested in the role of forests in sustainable development, and forest-related civil-society, non-governmental and private-sector organizations and associations. The module provides basic and more detailed information on gender in forestry, as well as tools and case studies on gender mainstreaming in forestry.</p>	<p>Food and Agriculture Organization of the United Nations</p> <p><a href="http://www.fao.org/sustainable-forest-management/toolbox/modules/gender-in-forestry/cases/en/?page=2&amp;ipp=10">http://www.fao.org/sustainable-forest-management/toolbox/modules/gender-in-forestry/cases/en/?page=2&amp;ipp=10</a></p>
<p><b>Country Gender Assessment (CGA) of Agriculture and the Rural Sector in the Philippines</b></p> <p>The objective of the CGA is to analyse the agricultural and rural sector of the Philippines from a gender perspective at the macro (policy), meso (institutional) and micro (community and household) levels to identify gender inequalities in access to critical productive resources, assets, services and opportunities. In particular, the Assessment identifies the roles, needs and constraints of both women and men in selected areas of FAO's mandate. Also, it provides recommendations and guidance to increase attention to gender in future programming and projects, as well as identifying possible partners for gender-related activities</p>	<p>Food and Agriculture Organization of the United Nations</p> <p><a href="http://www.fao.org/3/CA1345EN/ca1345en.pdf">http://www.fao.org/3/CA1345EN/ca1345en.pdf</a></p>

**Gender-Responsive Toolkit on Ecotourism Planning and Management (Published 2013)**

Provides information to LGUs and protected area managers in preparing and developing their ecotourism management plans and ensuring that ecotourism strategies are gender responsive

GREAT Women Project Management Office Philippine Commission on Women (PCW)

Protected Areas and Wildlife Bureau Department of Environment and Natural Resources (DENR)

[http://bmb.gov.ph/downloads/References/Gender-responsive\\_Toolkit\\_on\\_Ecotourism\\_PM\\_10%20MB-secured.pdf](http://bmb.gov.ph/downloads/References/Gender-responsive_Toolkit_on_Ecotourism_PM_10%20MB-secured.pdf)

**If possible, indicate in which results area(s) the project is expected to contribute to gender equality:**

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

**Improving women's participation and decision making** Yes

**Generating socio-economic benefits or services or women** Yes

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

Yes

#### **A.5. Risks**

**Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.**

The project Environmental and Social Risk has been rated as moderate.

The Environment and Social Management Plan is attached at page 143 of the project Document.

Risk No.

Risk statement

Impact

(effect on project organization if risk were to occur: H, MH, ML, or L)

Likelihood

(estimate of likelihood: H, MH, ML, or L)

Overall ranking

(Red/Amber/Green)

Mitigating action

Action owner

**1**

Changes or reductions in Government priorities in relation to reforestation and restoration

MH

Low: The Government's commitment is expressed in a number of major policy documents

Green

The project will focus strongly on demonstrating the feasibility, cost-effectiveness and social and sustainability benefits achievable through appropriate restoration approaches.

PMU & PSC

**2**

Continued mistrust between actors in relation to conservation and development goals

MH

Medium: attitudes are ingrained, and dominant narratives strongly focus on the conflicts between economic development and conservation

Amber

The project will provide concrete demonstrations of "win-win" situations in which conservation and development goals are reconciled in relation to forest restoration, and will invest strongly in awareness-raising and the facilitation of dialogue

PMU & PSC

**3**

Long gestation periods for alternative livelihoods to mature and yield benefits which can undermine the restoration initiatives and weaken community participation

H

ML

Amber

The restoration plans will include livelihood menu of options (including activities with short-term gestation periods like high value agricultural crops as buffer until longer-term investments generate sustainable benefits). This is to help diversify the livelihood and resource base, including linkage with on-going governmental and NGO programs to supplement and complement project activities.

PMU

**4**

Incentives for watershed protection and carbon capture fail to materialize as expected

H

Medium: conditions are still being developed for REDD+ (but are expected to have advances significantly by the time the project starts); few experiences exist of payment for hydrological services. Producers will receive short term incentives from the NGP successor programme.

Amber

The project will help to link its target stakeholders with incentive schemes, as they materialize; it will also wherever possible promote “use-based” approaches (tailored to management/conservation objectives and conditions) that will allow land managers to obtain direct benefits from their restored lands even if these external incentives do not materialize.

PMU

**5**

Lack of clear land and resource tenure, overlapping jurisdictions and conflicting land claims

M

Medium: these forms of uncertainty are widespread but can to some extent be avoided through site selection

Green

The project will support the review of tenure models of relevance to restoration, based on field experiences; support dialogue and conflict resolution mechanisms; and promote the matching of restoration models with local tenure conditions

PMU

6

Renewal of existing or expiring tenure instruments, such as CBFMA.

M

ML

Green

The project is supportive of traditional access and tenure, as well as rights-based natural resource use. The project will work on these issues and will hopefully solved them with NCIP and DENR early on.

PMU

7

Delayed process of obtaining FPIC as it involves several steps both at the national, regional and local levels. A number of projects before were either delayed or unable to proceed altogether because of their failure to obtain FPIC

H

Medium

Amber

During the project preparation phase, strategies and activities were designed to support the tenure and access rights for rights based FLR activities and inclusive and participatory processes to better involve IP in the NGP. This will have to be s communicated by the project implementation team during the stage 1 (Orientation, Consultation and Consent-Seeking). Tips are elaborated in the Annex to guide the project implementation team.

PMU

8

Current and future climate change impacts threaten the sustainability of FLR investments

MH

Moderate

Amber

Future climate projections for the target regions to be reviewed regularly with a view towards ensuring that species planted are suited to changing weather patterns, and that approaches implemented strengthen the resilience of the target communities and aren't maladaptive. The result of these analysis (i) are part of the Manual on restoration to be developed under Output 1.1 and that will guide NGP investments and (ii) will guide the development fo the restoration plans under Component 2.

#### A.6. Institutional Arrangement and Coordination

**Describe the Institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.**

Roles and responsibilities of main institutions

The main institutions and their roles in the project are described in detail in the Stakeholder matrix in section 1.3.4.

##### *Institutional and management arrangements*

The Department of Environment and Natural Resources (DENR) will be the lead executing partner. The DENR, with the support of the Operation Partner, its technical Forest Management Bureau (FMB), will have the overall executing and technical responsibility for the project, with FAO providing technical oversight as GEF Agency. The DENR will coordinate all efforts to implement the project's components, aligning with other initiatives and assuring that all deadlines are achieved and that the project's results are discussed throughout all national and local institutions involved.

The Food and Agriculture Organization (FAO) will be the GEF Implementing Agency for the Project, providing project cycle management services as established in the GEF Policy. FAO, as GEF Implementing Agency, holds overall accountability and responsibility to the GEF for delivery of the results. FAO will provide oversight of project implementation and technical support to ensure that the project is being carried out in accordance with agreed standards and requirements. Technical support will be provided by FAO in coordination with government representatives participating in the Project Steering Committee.

FAO responsibilities, as GEF agency, will include:

- Administrate funds from GEF in accordance with the rules and procedures of FAO;
- Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers, Operational Partners Agreement(s) and other rules and procedures of FAO;
- Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;
- Provide services as agreed with the OP such as Staff hire (with the understanding that the OP will be part of the hiring panel) or procurement when need be;
- Conduct at least one supervision mission per year; and
- Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, on project progress and provide financial reports to the GEF Trustee.

The FMB will be the Operational Partner (OP) for the project based on the standard Operational Partners Agreement to be signed between FAO and FMB. The OP will be responsible for the day-to-day management of project results entrusted to it in full compliance with all terms and conditions of the Operational Partners Agreement to be signed by the OP, and GEF relevant requirements.

As OP of the project the FMB is responsible and accountable to FAO for the timely and quality implementation of the agreed project results, operational oversight of implementation activities, timely reporting, and for effective use of GEF resources for intended purposes. The implementation of all agreed results and activities in full compliance with the OPA provisions and due diligence with regard to FAO Social and Environmental Quality Standards will be ensured by the OP.

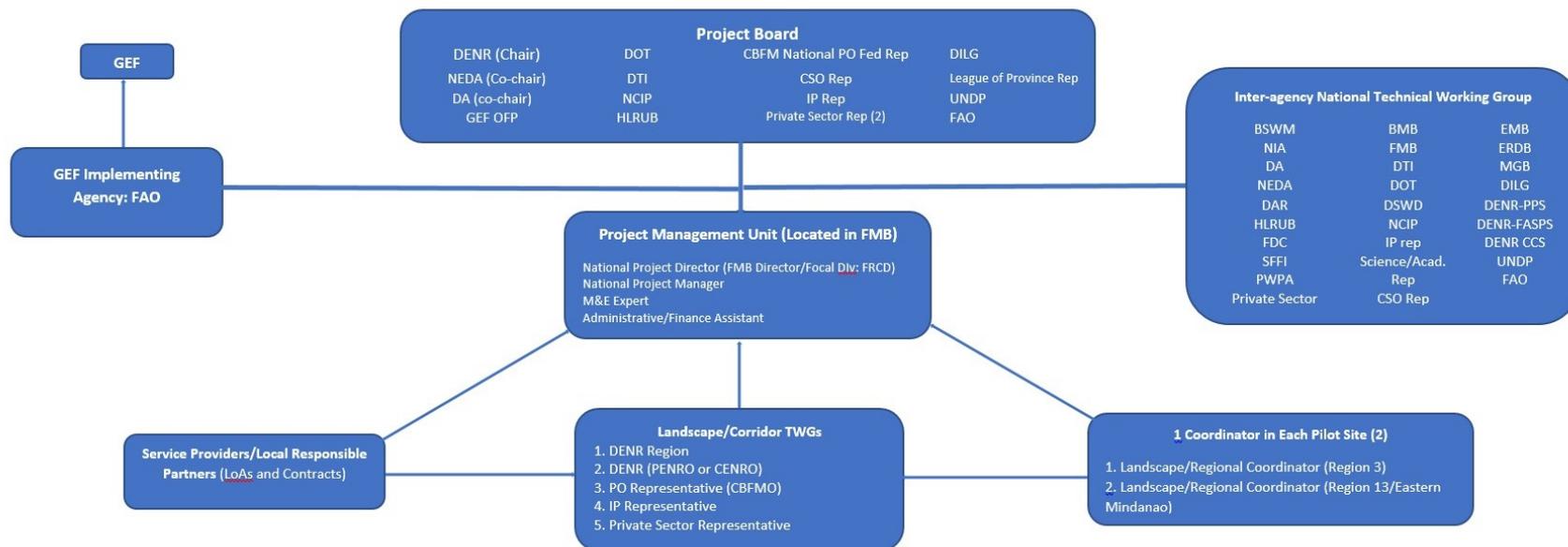
The OP will bear full fiduciary and programmatic risk and will be administratively and technically responsible to FAO for the implementation of the agreed results of the project, monitoring and financial management in accordance with the rules and procedures as established in the signed OPA. Such responsibility extends over all funds disbursed by the OP to any entity under contract with the Operational Partner.

The Operational Partner will coordinate all efforts to implement the project's components, aligning with other initiatives and assuring that all deadlines are achieved in a timely manner and that the project's results are discussed with national and local institutions involved.

This project is a sister project of the UNDP/BMB project Integrated Approach in the Management of Major Biodiversity Corridors in the Philippines (IA-Biological Corridors). Therefore it has been discussed that in order to align as much as possible the 2 projects, they will have a common Project Board and Inter-agency Technical Working Group at the national level and in the common site. Also the National Project Director to be identified by DENR will be different to the 2 projects, represented by the respective heads of the two executing agencies, FMB and BMB.

The diagram below presents the institutional structure highlighting in yellow the staff to be recruited under the FAO-FMB project. In this project the role of the decentralized institutions: Regional Offices, PENROs and CENDROs are key to the success of the field activities.

The project organization structure is as follows:



A Project Board will be established, chaired by the Undersecretary of DENR overseeing FMB and BMB and co-chaired by NEDA and DA. This Board will be common with the UNDP-BMB project. The members of the Board from FMB and DENR will each assume the role of a Focal Point for the project in their respective agencies. Hence, the project will have a Focal Point in each concerned institution.

The National Project Manager (see below) will serve as the Secretary to the Project Board. The Board will meet at least two times per year to ensure:

- Oversight and assurance of technical quality of outputs;
- Close linkages between the project and other ongoing projects and programmes relevant to the project;
- Timely availability and effectiveness of co-financing support;
- Sustainability of key project outcomes, including up-scaling and replication;
- Effective coordination of government partner work under this project;
- Approval of the six-monthly Project Progress and Financial Reports, the Annual Work Plan and Budget;
- Making by consensus, management decisions when guidance is required by the National Project Manager of the PMU

As Focal Points for their agencies, the concerned Project Board members will (i) technically oversee activities in their sector, (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project, (iii) facilitate coordination and links between the project activities and the work plan of their agency, and (iv) facilitate the provision of co-financing to the project.

The government will designate a **National Project Director (NPD)**. The NPD will be the FMB Director supported by the focal division of Forest Resources Conservation Division (FRCD) will have the responsibility of supervising and guiding the National Project Manager (see below) on the government policies and priorities. He/she will also be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners. He/she will be responsible for requesting FAO the timely disbursement of GEF resources that will allow the execution of project activities, in strict accordance with the Project Results-Based Budget and the approved AWP/B for the current project year.

A **Project Management Unit (PMU)** will be co-funded by the GEF and established within FMB at the national level and the local CENROs at the regional level. The main functions of the PMU, following the guidelines of the Project Board, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU, at national level, will be composed of a National Project Manager (NPM), an M&E Expert and an Administrative/Finance Assistant (for the national level and PCWFR and support to the Administrative/Finance Assistant in Simulao). A part time CTA (60 days/year, 4 years) will technically support the project. In each of the two target project areas, a full time regional coordinator will be responsible for project implementation. In Simulao, Administrative/Finance Assistant will be hired (based together with the Regional coordinator) and report to the national Administrative/Finance Assistant.

The **National Project Manager (NPM)** will be in charge of daily implementation, management, administration and technical supervision of the project, on behalf of the Operational partner and within the framework delineated by the PSC. He will also be in charge of the M&E and Knowledge Management part of the project.

S/he will be responsible, among others, for [1]: i) coordination with relevant initiatives; ii) ensuring a high level of collaboration among participating institutions and organizations at the national and local levels; iii) ensuring compliance with all OPA provisions during the implementation, including on timely reporting and financial management; iv) coordination and close monitoring of the implementation of project activities; v) tracking the project's progress and ensuring timely delivery of inputs and outputs; vi) monitoring, providing technical support and assessing the outputs of the project national consultants, who will be hired with GEF funds, as well as the products generated in the implementation of the project, including products and activities carried out by project consultants; vii) approve and manage requests for provision of financial resources by FAO using FAO provided format in OPA annexes; viii) monitoring financial resources and accounting to ensure accuracy and reliability of financial reports; ix) ensuring timely preparation and submission of requests for funds, financial and progress reports to FAO as per OPA reporting requirements; x) maintaining documentation and evidence that describes the proper and prudent use project resources as per OPA provisions, including making available this supporting documentation to FAO and designated auditors when requested; xi) implementing and managing the project's monitoring and communications plans; xii) organizing annual project workshops and meetings to monitor progress and preparing the Annual Budget and Work Plan; xiii) submitting the six-monthly Project Progress Reports (PPRs) with the AWP/B to the PSC and FAO; xiv) preparing the first draft of the Project Implementation Review (PIR); xv) supporting the organization of the mid-term and final evaluations in close coordination with the FAO Budget Holder and the FAO Independent Office of Evaluation (OED); xvi) submitting the OP six-monthly technical and financial reports to FAO and facilitate the information exchange between the OP and FAO, if needed; xvii) Inform the PSC and FAO of any delays and difficulties as they arise during the implementation to ensure timely corrective measure and support. FAO will support the National Project Coordinator, as needed, including through annual supervision missions.

The draft Terms of Reference (TOR) for the National Project Manager (NPM) and Project Team (PT) are listed in Appendix 6.

FAO assurance role will be provided by FAO Philippines and technical support provided by FAO RAP and HQ. FAO will provide technical and financial backup and training to the OP to ensure that the procedures are followed according to FAO and GEF guidelines.

In this project the **role of the decentralized institutions**: Regional Offices, PENROs and CENDROs are key to the success of the field activities. The 2 Landscape/**Regional Project Coordinators** and the Administrative/Finance Assistant for Simulao will be located in the target areas.

- For the **PCWFR**, the regional coordinator will be hosted by the PENRO, as it is close to the target area, with oversight from the Assistant Regional Director and backstopping from the Regional Conservation and Development Division (CDD).
- For **Simulao Watershed**, the regional coordinator will be hosted by the UNDP CMU at the Regional office and will then be transferred to the closest PENRO once the site selection will have been finalized.

Other main institutions involved in the project are described in the stakeholder's engagement Table (see section 1.3.4). FAO and the project partners will collaborate with the implementing agencies of other programs and projects to identify opportunities and facilitate synergies with other relevant GEF projects, as well as projects supported by other donors. This collaboration will include: (i) informal communications between GEF agencies and other partners in implementing programs and projects; and (ii) exchange of information and outreach materials between projects.

The project will develop mechanisms for collaboration with the following GEF initiatives (see section below):

- UNDP MSP “Implementation of SLM Practices to Address Land Degradation and Mitigate Effects of Drought” (GEF ID 5767): promoting inter-sector coordination and landscape-wide planning of agriculture, land management and environmental sector activities.
- FAO FSP “Dynamic Conservation and Sustainable use of Agro-Biodiversity in Traditional Agro-ecosystems of the Philippines” (GEF ID 5549): working in Luzon (including the Cordillera Administrative Region where the present project will also work) and Mindanao; supporting traditional resource management systems, with a landscape-wide perspective, from which lessons may be learned in terms of locally-appropriate and sustainable restoration methods (such as the muyong system).
- The ADB FSP “CTI Integrated Natural Resources and Environmental Management Sector” (GEF ID 3980): aiming to restore the productive capacity of critical watersheds, enhance biodiversity conservation in production landscape and reduce poverty of resource-dependent communities in selected watersheds, including the Cordillera Administrative Region.

- UNDP FSP “CTI: Partnerships for Biodiversity Conservation: Mainstreaming in Local Agricultural Landscapes” (GEF ID 3859): promoting the mainstreaming of biodiversity in local government planning, with target sites on Luzon and Mindanao.
- IUCN/FAO/UNEP “The Restoration Initiative” (GEF ID 9264): To contribute to the restoration and maintenance of critical landscapes to provide global environmental benefits and enhanced resilient economic development and livelihoods, in support of the Bonn Challenge.

Please see letter from OFP supporting FAO's technical support for some items of project execution, which has been uploaded in Document section for this project.

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[1] Detailed Project manager Terms of Reference are available in Appendix 6

**Additional Information not well elaborated at PIF Stage:**

#### **A.7. Benefits**

**Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptaion benefits (LDCF/SCCF)?**

At the national level, the socio-economic benefit from the project is an enabling environment that includes institutions and coordination mechanisms with a stronger capacity to plan and implement forest restoration strategies at a landscape level (Output 1.1 and 1.2). It is expected that these enhanced capacities will lead to improved and expanded technical and advisory extension service on FLR and SLM to clarify issues around land tenure, rights to trees and other forest products, and other opportunities for long-term incentives from restoration (Output 1.3 and 1.4) for the benefit of local communities. For example, new or refined technical guidelines and case studies on the best restoration techniques to be applied in the 12 different types of forest ecosystems in the Philippines will allow national government service providers to guide communities on options that will achieve both biodiversity and livelihood benefits in their local context. Along the same line, better defined tenure arrangements will reassure communities to invest in the long term in their lands, bringing environmental and livelihoods benefits.

At the local or project area/site level, it is expected that harmonized landscape-level restoration management plans (Output 2.1), one in each project area, will inform and facilitate more coordinated, socially-acceptable and cost-effective approaches to restoration, protection and maintenance activities of priority degraded areas (Output 2.2). More project-specific restoration plans (about 40 are targeted under the project) will also integrate financing plans; this is expected to increase local ownership and sustainability of community restoration efforts because of the clear economic benefit it will bring. Another expected socio-economic benefit is increased incomes of households and people's organizations that will receive technical, organizational and marketing support to develop livelihood activities from NGP commodities such as coffee, cacao, bamboo and legalized fuelwood (Output 2.3). Related to this are the strengthened local value chains of such commodities, which will benefit a multitude of players (input providers, processors, buyers, etc) across the chains. Clearer policies and processes on land tenure, rights to trees and other incentives like PES (developed under Component 1 and applied through Outputs 2.4 and 2.5) will encourage communities to continue to protect and manage NGP areas. Finally, the project offers opportunities to successfully model public-private collaboration for restoration wherein stakeholders such as large power and mining companies are provided a platform to create social and environmental value in the communities they work in.

Both national and local project stakeholders will also benefit from a more robust monitoring and knowledge management systems (Component 3) that harness technology as well as more indigenous methods of generating, sharing and disseminating data, information and best practices relevant to restoration. This will reduce time spent on research and development and facilitate learning and sharing of innovative ideas among and between local, national and even international experts and practitioners, possibly influencing program and policy formulation at different levels.

The project's strong focus on gender equity and on ensuring free prior informed consent are also expected to strengthen social sustainability. With equal rights and opportunities to participate and benefit from the project, women, men, the youth and indigenous peoples can become agents of change for sustained socio-economic development in their communities.

All these efforts support FLR development at the local, regional and national levels giving both the tools to implement it and the incentives to keep doing it over the long term. Through FLR implementation, Global Environment Benefits are reached through land degradation reduction, sustainable forest management and improved biodiversity habitat connectivity.

#### A.8. Knowledge Management

**Elaborate on the Knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user- friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.**

The capture and management of knowledge is fundamentally important to this project. 3 of the 4 outputs of Component 3 are dedicated to it. As detailed in Component 3, to capitalize and share existing knowledge on restoration approaches the project will develop, test and roll out a multi-level, multi-modal and multi-dimensional project knowledge management system. Its purpose is the sharing and reuse of project results, best practice and lessons learned internally and externally at the local, national and global levels. Its users will be: project staff; project beneficiaries; decision makers; policy makers; the international forest restoration community of practice; and the general public (for success and human-interest stories). The knowledge gathering and dissemination will be gender sensitive.

The project will ensure that stakeholders at all levels can both benefit from lessons learned and contribute to generation of new knowledge and good practices during the systemization workshops.

As detailed in component 3, each group of stakeholders will have communication channels adapted to their needs.

KNOWLEDGE NETWORKS	RESPONSIBILITY	INTERNAL KM CONTENT	EXTERNAL KM CONTENT	USER LEVELS
Electronic Network (Messaging & collaboration, KM content management system) Platforms: Google Suite and PhilCAT	KM & Systematization Specialist administers KM electronic network. CMS Developer designs and programs PhilCAT plug-in. CMS will be maintained by BSWM.	Project activities and output Lessons learned M&E information	Best practice Success stories Infographics Electronic knowledge products	Global, National, Local: project staff; project beneficiaries; decision makers; policy makers; the international TRI communities of practice; and the general public

Community Media Network Platforms: Community Cable, Local Radio Stations & others	Knowledge Networking Expert taps and liaise with local media and venues.	-	Knowledge products	Local: pilot communities
Stakeholders Network Platform: Social Media	Knowledge Networking Expert forms social media groups	Project activities/output	Technical knowledge Local knowledge	National, Local communities of practice
Interpersonal Networks Platform: Messaging & Interpersonal Communication	Knowledge Networking Expert establishes texting messaging protocol and captures local/indigenous knowledge	-	Local knowledge Indigenous knowledge	Local: pilot communities

The project's technical team will be tasked with working to make certain best international principles and practices are reflected in all project activities and outcomes. The website will serve as a knowledge repository and function as an organic monitoring, assessment, and reporting tool. The website will provide stakeholders with information regarding best practices and the results of on-going/implemented project activity.

Effective communication is essential for achieving upscaling of project results to national level, particularly within the framework of the future Government initiatives linked to restoration. Best practice, lessons learned, tools and new knowledge and awareness developed by the TRI project will inform and synergize with this work, and this will further broaden and strengthen the project, as well as its monitoring and evaluation. Importantly, this linkage will enhance local-global level dialogue and engagement of the Philippines in FLR (with LD, BD, CCM co-benefits) at the country level.

## **B. Description of the consistency of the project with:**

### **B.1. Consistency with National Priorities**

**Describe the consistency of the project with nation strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.**

#### Alignment with national development goals and policies

The project will contribute to the priorities set out in the Philippine Development Plan (2017-2022) (PDP) regarding the conservation, protection and rehabilitation of the environment and natural resources, including the improved conservation, protection and rehabilitation of natural resources with a focus on integrated ecosystem-based management. Indeed, the PDP under the Part VI "Foundation for Sustainable Development" has an entire Chapter on "Ensuring Ecological Integrity, Clean and Healthy environment. It clearly states the target of "pursuing strategies that will restore and rehabilitate degraded natural resources, protect and maintain those healthy and improve the welfare of the resources-dependent communities". It follows on the efforts of the previous PDP (2011-2016) targeting "transforming open, denuded and degraded areas into protection forests and/or economically productive assets", and "encouraging communities to develop multipurpose forests in open, denuded and degraded areas".

The project will also contribute to Part III “Inequality-reducing Transformation” where one of the focus is “Expanding Economic Opportunities in Agriculture, Forestry and Fisheries”. With a strong component focusing on supporting enterprises development linked to restoration, this project fits very well with the Philippines’ Development Strategy.

The Philippine National Action Plan on Forest Landscape Restoration also intends to promote NGP expansion to accelerate the rehabilitation and reforestation of these unproductive, denuded and degraded areas. The agenda seeks to engage the participation and investment of the private sector with a view towards enabling private companies to achieve carbon neutrality (Carandang, PNAP-FLR). A Notable objective is the promotion of Conservation Farming Villages (CFVs), which will need strong anchorage on local development programs. This is to develop working models and achieve a critical mass of adopters with sustainable land management practices.

The restoration to be promoted by the project on deforested lands will contribute to the aspirational goal of the Asia Pacific Economic Cooperation (APEC) of increasing forest cover in APEC countries by 20 million hectares by 2020.

Alignment with National Action Plans on Biodiversity, Climate Change Mitigation and Adaptation, Combat Desertification

The project will contribute to the goals of the National Biodiversity Strategy and Action Plan (NBSAP) by expanding and improving knowledge on the extent, characteristics, uses and values of biodiversity, through the assessments of restoration areas and the demonstration of the effectiveness of alternative restoration strategies for biodiversity conservation; and by institutionalizing innovative but appropriate biodiversity conservation approaches to address the problem of fragmentation of ecosystems.

It will also contribute to the target of the country’s National Action Plan (NAP) to Combat Desertification, Land Degradation, Drought and Poverty, of preventing desertification and further expansion of land degradation. Rehabilitating critical watershed ecosystems in Mindanao and Luzon strategic areas is critical for the improvement of agriculture and fisheries production as well as the rehabilitation/reestablishment of minor forest products.

The project is aligned with the aims of the Philippine National REDD+ Strategy (PNRPS) to empower forestland managers and support groups that sustainably and equitably manage forestlands and ancestral domains with enhanced carbon stock and reduced greenhouse gasses emissions. Besides reducing forest degradation and deforestation, the strategy aims to alleviate poverty, conserve biodiversity, and improve governance. Specifically, the project will support and complement the National Greening Program (E0 No. 26), and its extension. The forest restoration and management prescriptions to be promoted through the project will be aligned with the provisions of the Climate Resilient Forestry Master Plan, which gives continuity to the Forestry Master Plan that was developed in 2003 with a 25-year duration. It focuses on sustainable forest management, poverty alleviation and food security in upland communities in the Philippines; the renewed Master Plan has in addition strengthened emphasis on mitigation and adaptation to climate change.

**C. Describe The Budgeted M & E Plan:**

The table below presents an overview of the M&E plan.

Type of M&E Activity	Responsible Parties	Time-frame	Budget
Inception Workshop	PMU, FAO Philippines	January 2020	5,000 USD
Project Inception Report	PMU	January 2020	Included in PMU ToRs

Type of M&E Activity	Responsible Parties	Time-frame	Budget
Inception Workshop in Project Areas	PMU, FAO Philippines	February 2020	5,000 USD
Field based impact monitoring	M&E expert	Periodically - to be determined at inception workshop.	USD 95,000
Monitoring of indicators outlined in project results chain	M&E Expert, PMU	Bi-Annually	
Supervision visits by FAO	FAO Philippines, LTO, FLO	Annually	Covered by GEF fees
Sixth monthly Project Progress Reports	PMU, with inputs from project partners	Semi-annually	Covered by staff costs
Project Implementation Review report	PMU, with inputs from project partners as well as FAO PTM, LTO	Annually	Covered by staff costs
Co-financing Reports	BH with support from PMU with input from other co-financiers	Annually	Completed by PMU
Mid-term Review	MTR: FAOPH Representative, project task force, including the FAO-GEF Coordination Unit and others- in consultation with PMU and PSC	At mid-point of project implementation	USD 30,000 for independent consultants and associated costs. In addition, the agency fee will pay for expenditures of FAO staff time and travel
Final evaluation	Under the responsibility of FAO Office of Evaluation OED in consultation with the project team including the GCU and other partners	At the end of project implementation	USD 50,000 for external, independent consultants and associated costs. In addition, the agency fee will pay for expenditures of FAO staff time and travel
Terminal Report	PMU, LTO, TCSR Report Unit	At least two months before the end date of the Execution Agreement	USD 6,000
Total Budget			196,000 USD

**PART III: Certification by GEF partner agency(ies)**

**A. GEF Agency(ies) certification**

<b>GEF Agency Coordinator</b>	<b>Date</b>	<b>Project Contact Person</b>	<b>Telephone</b>	<b>Email</b>
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Alexander Jones

**ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).**

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
<p><b>Project Objective:</b></p> <p>To deliver multiple and integrated environmental, livelihood and development benefits through the promotion of the cost effective and sustainable restoration of the biological and productive capacities of degraded forest land ecosystems</p>	<p># of ha (area) under long term restoration plans delivering multiple global environmental benefits</p> <p># of ha restored[1] delivering multiple environmental, social and economic benefits</p> <p>3. # of ha restored49 delivering multiple environmental, social and economic benefits with a focus on enhancing connectivity of selected key biodiversity areas</p>	<p>0 of target project areas</p> <p>0</p> <p>0</p>	<p>50% of total project areas</p> <p>1,500 ha</p> <p>1,500 ha</p>	<p>Total project areas (PCWFR 84,500 ha + Simulao sub-watershed 43,351 ha)</p> <p>2,821 ha</p> <p>3,000 ha</p>	<p>M&amp;E reports, maps</p> <p>Annual Reports</p>	<ul style="list-style-type: none"> <li>· The climatic conditions are favourable for restoration activities</li> <li>· Participatory and multi-stakeholder consultation will result in the identification, prioritization, and selection of areas for restoration</li> <li>· Only restoration strategies acceptable to local communities and other stakeholders are implemented</li> <li>· KBAs heavily fragmented are prioritized for restoration</li> </ul>

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
Component 1: <b>Creating</b> the enabling conditions for the improved implementation of forest landscape restoration, protected area management and biodiversity conservation	4. # of people that have diversified sources of income from the project's restoration initiatives	0	20,000 (including at least 30% of women) – direct impact	45,000 (including at least 30% of women) - direct impact	M&E reports, maps	· Women and men are engaging in activities allowing them to benefit from restoration activities
	5. # of people's organizations (POs) that have diversified sources of income from the project's restoration initiatives	0	20	40	Annual reports	
	6. # tCO <sub>2</sub> eq emissions mitigated through project activities over a 20-year period	0		6,146,968 tCO <sub>2</sub> eq	FAO-EXACT	· The project manages to keep the existing restored areas as forested areas

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
<b>Outcome 1:</b> Environmental, livelihood and development initiatives are effectively mainstreamed into Government support for forest restoration	7. # of government restoration programs that have formally adopted new technical guidelines on different restoration strategies	0	1	3 (ENGP, Forest Management Project (FMP), and the Community-Based Forest Management-Comprehensive Agrarian Reform Program (CBFM-CARP)	Programme documents or meeting minutes of the government	<ul style="list-style-type: none"> <li>· Stakeholders are open to restoration techniques delivering multiple benefits</li> <li>· The government is open to integrate and support new approaches to restoration, including subjecting new/revised guidelines/technical notes to a gender analysis</li> <li>· Topic remains of high relevance to government. The E-NGP receives continuous support</li> </ul>
	8. # of technical people with increased knowledge gained from trainings on the technical guidelines for restoration strategies	0	100 (50 women, 50 men) members of national institutions trained  50 (25 women, 25 men) members of civil society trained	200 (100 women, 100 men) members of national institutions trained  100 (50 women, 50 men) members of civil society trained	Training documentation  Pre and post tests	

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
	9. # of draft policy recommendations/ briefs developed and under discussion on incentives systems in support of restoration	0	1	2	Policy notes	
	10. # of inter-institutional cooperation mechanisms at national and local levels institutionalized, to support FLR implementation for livelihoods improvement	0	4 (with a target of 50% and at least)	4 (with a target of 50%)	Meeting notes from coordination meetings	
<p>Output 1.1: Manuals and Technical guidelines on restoration strategies promoting diverse models of sustainable land management and ecosystem restoration and the generation of multiple environmental, social and economic benefits (target: one 1. Manual on best restoration techniques for the different forests types in the Philippines for multiple benefits; one guideline each on i) fire management particularly the development and implementation of community-monitoring system ii) establishment and management of High Conservation Value Forest Areas iii) Forest Restoration for Mine Rehabilitation)</p> <p>Output 1.2: Policy recommendations on integrating appropriate incentives for households and communities to undertake FLR , based on assessments of existing incentives and disincentives (including security of tenure) (note links to 2.5 for field applications and tenure issues under Output 1.4)</p> <p>Output 1.3: Inter-institutional cooperation mechanisms at national and local levels in support of the development and implementation of multi-benefits restoration strategies (2 at national level and 1 in each watershed)</p> <p>Output 1.4: National dialogue on land and resource tenure to support SFM and FLR and to address current absence of clarity on tenure issues for restored sites</p>						
<b>Component 2: Implementation of restoration programs and complementary initiatives in forest landscape restoration, protected area management and biodiversity conservation</b>						

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
<b>Outcome 2:</b> Diverse and sustainable restoration practices are effectively applied, contributing to the generation of multiple environmental and social benefits	11. # of enhanced-landscape level restoration management plans prioritising restoration initiatives and proposing diverse restoration approaches based on landscape-wide and site-specific considerations, harmonized with local and regional development and land use plans, forest management plans and PA management plans	0	2 (drafts)	2	Documented maps and reports (PCWFR and Simulao sub-watershed)	<ul style="list-style-type: none"> <li>Stakeholders are ready to plan at landscape level. Region 11 and 13 will want to collaborate in improving PA plans and biological corridor plans for selected Key Biodiversity Areas</li> </ul>
	12. # Site specific restoration plans based, including a long-term financing plans, under implementation	0	20	40	Restoration plans in the selected sites, including a long-term financing plan	<ul style="list-style-type: none"> <li>Concerned institutions and stakeholders are willing to collaborate together</li> <li>Agreement are found</li> </ul>

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
	13. # communities or POs with enough technical and financial resources to implement the restoration plans	0	20	40		<p>between DENR and other entities (e.g. POs and private enterprises such as NPC, First Gen, mining companies) to restore selected areas</p> <ul style="list-style-type: none"> <li>· Markets for restoration product/by-products exist</li> <li>· Economic activities linked to restoration are attractive to farmers/local communities</li> <li>· Activities respond to the real needs of local communities (including women and vulnerable people)</li> <li>· Agreement and interest on the part of buyers and sellers to be part of PES schemes</li> </ul>

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
<p>Output 2.1 Landscape Assessment Reports, with social (including gender, culture and tenure), economic (including valuation of key ecosystem services), institutional, biophysical aspects of target areas identified, priority locations and actions agreed, and sequence of activities for FLR (2 landscapes)</p> <p>Output 2.2: Community restoration plans including technical pathways as well short &amp; long term financial plans developed and implemented (40 plans through linkages with 2.3,2.4 &amp; 2.5)</p> <p>Output 2.3: Technical, organisational and marketing support to communities to enable them to implement restoration plans and to obtain livelihood and commercial benefits in a sustainable manner through restoration of degraded areas (8 value chain analysis &amp; 4 enterprises directly supported)</p> <p>Output 2.4: Simplified mechanisms to ensure stakeholders' rights to use and market trees and non-timber forest products that they have established and/or sustainably managed</p> <p>Output 2.5: Functional system of payment of environmental services rewarding stakeholders for restoration (2 PES systems)</p>						
<b>Component 3: Knowledge, Partnerships, Monitoring and Assessment</b>						
<b>Outcome 3:</b> Knowledge of diverse approaches to restoration is effectively managed and applied, permitting sustainability and scaling up	14. % of key stakeholders from Government agencies, CSO and beneficiary communities with increased awareness of restoration options delivering multiple benefits	0	25	75	Baseline vs Midterm vs Terminal Evaluation findings	<ul style="list-style-type: none"> <li>· There is sufficient interest from stakeholders to learn about FLR</li> <li>· Stakeholders provide consent for sharing information</li> <li>· Limited administration rights to PhilCAT is assigned to the Project</li> <li>· Agreement with</li> </ul>
	15. # of sites that show implementation of activities that they learnt from other sites	0	5	10	Annual reports	
	16. # of forest restoration modules added to the Forest Farmer Field School Manual	0	1	2	2022 Edition of the Farmers Field School Manual of the DA Agriculture Training Institute	

Results Chain	Indicators	Baseline	Mid-term milestone	Target	Means of Verification (MOV)	Assumptions
	17. # national FLR M&E system that incorporates lessons from project M&E system	0	1	1	<p>Site-level project M&amp;E reports showing progress of project implementation</p> <p>National FLR monitoring system report showing progress of achieving targets and status of indicators</p>	<p>DENR and other stakeholders on the set of indicators to monitor forest restoration</p> <p>Stakeholders are ready to implement a new M&amp;E framework for restoration activities.</p>
<p>Output 3.1: A multi-level, multi-modal and multi-dimensional project KM developed, tested and rolled out</p> <p>Output 3.2: Forest restoration knowledge compiled, organized &amp; systematized</p> <p>Output 3.3: Knowledge products shared, and project results and lessons learned disseminated locally, nationally and internationally</p> <p>Output 3.4: National FLR M&amp;E framework supported and Project M&amp;E framework set up</p>						

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[1] where innovative restoration alternatives/solutions to ensure long term commitment to restoration are tested and influencing restoration options at the landscape level

## **ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).**

Answer to GEF Council comments

The answers to the comments are in blue.

### **Germany's Comments**

Germany approves this project in the work program but asks that the following comments are taken into account:

Germany welcomes the proposal, which is overall sound and considers key issues such as alternatives to reforestation; the importance of tenure and restrictions to sustainable forest management; collaboration between Forest Management Bureau and Biodiversity Management Bureau; support to farmers; and sustainable use.

Suggestions for improvements to be made during the drafting of the final project proposal:

- The overall focus is on ecosystem restoration (paragraph 36) linked to the National Greening Program (NGP). Path dependencies are a risk of such an approach. An effective (rehabilitation) strategy should comprise a diverse suite of adaptation strategies to avoid path dependencies and ultimately a reduction in adaptive capacity. Conserving existing forests is often more effective than forest rehabilitation (restoration) or replanting/planting new forests. Supporting natural regeneration is another effective strategy.

The project, as it is now presented, will promote adaptive capacities. Indeed, the project support planning at a landscape level to better understand where the restoration activities should happen and how to position them to protect existing forests. The project seeks to promote restoration approaches generating multiple benefits: environmental, social and economic. This means using a mix of approaches, including ANR, agro-forestry, etc.. to ensure resilience.

Also this project will focus on sites having been recently restored, as well as new sites, to ensure that they don't go back to their initial state. The long term sustainability of restoration activities is at the heart of the project.

- A monitoring system will be established for the project linked to existing systems, particularly forest audit system (paragraph 60). When taking this positive approach we suggest considering two important issues: First, the proposed Monitoring & Evaluation (M&E) system should not be limited to output monitoring (ha planted etc.) but focus on impacts. Second, the institutional set-up and sustainability of such an M&E system need to be detailed in the proposal. This is particularly important given recent developments in Department of Environmental and Natural Resources (DENR) such as Lawin and eBMS and requests to keep databases in DENR central (KISS) and not in staff Bureaus.

As detailed in the full Project document, there is a need for a stronger M&E mechanism for FLR (including more diverse indicators than the current ones) in the Philippines to support all the restoration efforts. This system will not only look at results but also at impact. This project will develop such a system using existing systems mentioned above. The project will be based and managed by FMB, the M&E system will be developed and tested with the ENGP team ensuring its sustainability beyond the project life.

### **United States' Comments**

Our in-country experts believe that there is a risk that this project might unintentionally deny local communities access to the degraded land that will be restored. There seem to be appropriate mechanisms in place for stakeholder engagement, redress of any lost income, and benefit sharing provisions, however we would like to stress the importance in insuring these mechanisms are duly following through project implementation.

This is indeed a critical point. In order to avoid what is mentioned above several outputs (output 1.4 and 2.4) are dedicated to the clarification of tenure and access right to ensure restoration will be fully beneficial to local communities and IP.

## **ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS.**

**A. Provide detailed funding amount of the PPG activities financing status in the table below:**

PPG Grant Approved at PIF: 100,000 USD			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Activity 1: Overall project conceptualization and stakeholder engagement plan operationalization	15000	15000	0
Activity 2: Collection, synthesis and analysis information to elaborate Component 1 and Component 2	45000	40000	5000
Activity 3: Synthesis and analysis (including prioritization) of information to inform full project design	25000	19000	6000
Activity 4: Detailed design of project components, result frameworks, environmental and social impact assessment, financial plan and budget and detailed project work plan, including institutional and management arrangements for project implementation and monitoring framework	15000	13000	2000
Total	100000	87000	13000

**ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)**

**Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)**

**ANNEX E: GEF 7 Core Indicator Worksheet**

Use this Worksheet to compute those indicator values as required in Part I, Table G to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

**Annex E: GEF 7 Core Indicator Worksheet**

Use this Worksheet to compute those indicator values as required in Part I, Table E to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

<b>Core Indicator 1</b>		<b>Terrestrial protected areas created or under improved management for conservation and sustainable use</b>				<b>(Hectares)</b>			
		<i>Hectares (1.1+1.2)</i>							
		<i>Expected</i>				Achieved			
		PIF stage	Endorsement		MTR	TE			
<b>Indicator 1.1</b>		<b>Terrestrial protected areas newly created</b>							
Name of Protected Area	WDPA ID	IUCN category	Hectares						
			Expected				Achieved		
			PIF stage	Endorsement		MTR	TE		
		Sum							
<b>Indicator 1.2</b>		<b>Terrestrial protected areas under improved management effectiveness</b>							
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score					
				Baseline			Achieved		
					Endorsement		MTR	TE	
<i>PCWFR</i>			<i>84,500</i>		<i>51</i>				
		Sum	<i>84,500</i>						
<b>Core Indicator 2</b>		<b>Marine protected areas created or under improved management for conservation and sustainable use</b>				<b>(Hectares)</b>			
		<i>Hectares (2.1+2.2)</i>							
		<i>Expected</i>				Achieved			
		PIF stage	Endorsement		MTR	TE			
<b>Indicator 2.1</b>		<b>Marine protected areas newly created</b>							
Name of Protected Area	WDPA ID	IUCN category	Hectares						
			Expected				Achieved		
			PIF stage	Endorsement		MTR	TE		

		Sum					
<b>Indicator 2.2</b>	<b>Marine protected areas under improved management effectiveness</b>						
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score (Scale 1-3)			
				Baseline		Achieved	
				PIF stage	Endorsement	MTR	TE
		Sum					
<b>Core Indicator 3</b>	<b>Area of land restored</b>						<b>(Hectares)</b>
			Hectares (3.1+3.2+3.3+3.4)				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
			0	5,821			
<b>Indicator 3.1</b>	<b>Area of degraded agricultural land restored</b>						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
			0	600			
<b>Indicator 3.2</b>	<b>Area of forest and forest land restored</b>						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
			0	5,221			
<b>Indicator 3.3</b>	<b>Area of natural grass and shrublands restored</b>						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
<b>Indicator 3.4</b>	<b>Area of wetlands (including estuaries, mangroves) restored</b>						
			Hectares				

			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
<b>Core Indicator 4</b>	<b>Area of landscapes under improved practices (hectares; excluding protected areas)</b>					<b>(Hectares)</b>	
			Hectares (4.1+4.2+4.3+4.4)				
			Expected		Expected		
			PIF stage	Endorsement	MTR	TE	
			0	43,351			
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
			0	4,300			
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations						
	Third party certification(s):		Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
Indicator 4.3	Area of landscapes under sustainable land management in production systems						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided						
			Hectares				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
				39,051			
<b>Core Indicator 5</b>	<b>Area of marine habitat under improved practices to benefit biodiversity</b>					<b>(Hectares)</b>	

Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):	Number				
	Expected		Achieved		
	PIF stage	Endorsement	MTR	TE	
Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial				
	Number				
	Expected		Achieved		
	PIF stage	Endorsement	MTR	TE	
<b>Core Indicator 6</b>	<b>Greenhouse gas emission mitigated</b>				<b>(Tons)</b>
	Tons (6.1+6.2)				
	Entered		Entered		
	PIF stage	Endorsement	MTR	TE	
	Expected CO2e (direct)				
	Expected CO2e (indirect)				
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector				
	Tons				
	Entered		Entered		
	PIF stage	Endorsement	MTR	TE	
	Expected CO2e (direct)	0	1,187,102	0	
	Expected CO2e (indirect)				
	Anticipated Year	2039			
Indicator 6.2	Emissions avoided				
	Hectares				
	Expected		Achieved		
	PIF stage	Endorsement	MTR	TE	
	Expected CO2e (direct)				
	Expected CO2e (indirect)				
	Anticipated Year				
Indicator 6.3	Energy saved				
		MJ			

			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
<b>Indicator 6.4</b>	<b>Increase in installed renewable energy capacity per technology</b>					
		Technology	Capacity (MW)		Achieved	
			Expected	Endorsement	MTR	TE
			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 7</b>	<b>Number of shared water ecosystems (fresh or marine) under new or improved cooperative management</b>					
						<i>(Number)</i>
<b>Indicator 7.1</b>	<b>Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation</b>					
		Shared water ecosystem	Rating (scale 1-4)		Achieved	
			Expected	Endorsement	MTR	TE
			PIF stage	Endorsement	MTR	TE
<b>Indicator 7.2</b>	<b>Level of Regional Legal Agreements and Regional Management Institutions to support its implementation</b>					
		Shared water ecosystem	Rating (scale 1-4)		Achieved	
			Expected	Endorsement	MTR	TE
			PIF stage	Endorsement	MTR	TE
<b>Indicator 7.3</b>	<b>Level of National/Local reforms and active participation of Inter-Ministerial Committees</b>					
		Shared water ecosystem	Rating (scale 1-4)		Achieved	
			Expected	Endorsement	MTR	TE
			PIF stage	Endorsement	MTR	TE
<b>Indicator 7.4</b>	<b>Level of engagement in IWLEARN through participation and delivery of key products</b>					
		Shared water ecosystem	Rating (scale 1-4)		Achieved	
			Rating	Endorsement	MTR	TE
			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 8</b>	<b>Globally over-exploited fisheries Moved to more sustainable levels</b>					
			Metric Tons			<i>(Tons)</i>

			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 9</b>	<b>Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products</b>					<b>(Tons)</b>
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) and POPs containing materials and products removed or disposed					
			Metric Tons			
POPs type			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.3	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
<b>Core Indicator 10</b>	<b>Reduction, avoidance of emissions of POPs to air from point and non-point sources</b>					<b>(Grams)</b>
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			

			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
Indicator 10.2	Number of emission control technologies/practices implemented						
			Number				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
Indicator 10.3	Number of countries with legislation and policy implemented to control chemicals and waste						
			Number of Countries				
			Expected		Achieved		
			PIF stage	Endorsement	MTR	TE	
<b>Core Indicator 11</b>	<b>Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</b>						<b>(Number)</b>
						Number Achieved	
						MTR	TE
			Female			10000	22500
			Male			10000	22500
			Total			20000	45000

**ANNEX: Project Taxonomy Worksheet**

Use this Worksheet to list down the taxonomic information required under Part1 by ticking the most relevant keywords/topics//themes that best describes the project



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