



## **Sustainable Forest Management and Conservation Project in Central and South Benin**

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

#### **GEF ID**

9383

#### **Project Type**

FSP

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

GET

#### **Project Title**

Sustainable Forest Management and Conservation Project in Central and South Benin

#### **Countries**

Benin

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

AfDB

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

Ministry of Environment Department of Climate Change Management, Reforestation, and Natural Resource and Forest Protection

**Executing Partner Type**

GEF Agency

**GEF Focal Area**

Multi Focal Area

**Taxonomy**

Focal Areas, Biodiversity, Protected Areas and Landscapes, Species, Financial and Accounting, Land Degradation, Land Degradation Neutrality, Sustainable Land Management, Influencing models, Stakeholders, Type of Engagement, Integrated Programs, Food Systems, Land Use and Restoration, Capacity, Knowledge and Research, Knowledge Generation, Natural Capital Assessment and Accounting, Terrestrial Protected Areas, Threatened Species, Income Generating Activities, Restoration and Rehabilitation of Degraded Lands, Sustainable Forest, Carbon stocks above or below ground, Strengthen institutional capacity and decision-making, Beneficiaries, Local Communities, Participation, Deforestation-free Sourcing, Landscape Restoration, Training

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

Climate Change Mitigation 1

**Climate Change Adaptation**

Climate Change Adaptation 2

**Duration**

48In Months

**Agency Fee(\$)**

249,586

**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-1_P1	Improving Financial Sustainability and Effective Management of the National Ecological Infrastructure	GET	863,242	2,300,000
LD-2_P3	Landscape Management and Restoration	GET	459,018	1,864,748
CCM-2_P4	Promote conservation and enhancement of carbon stocks in forest, and other land use, and support climate smart agriculture	GET	429,224	759,838
SFM-1	Maintained Forest Resources: Reduce the pressures on high conservation value forests by addressing the drivers of deforestation	GET	437,871	2,016,970
SFM-2	Enhanced Forest Management: Maintain flows of forest ecosystem services and improve resilience to climate change through SFM	GET	437,871	1,905,859
<b>Total Project Cost(\$)</b>			<b>2,627,226</b>	<b>8,847,415</b>

**B. Project description summary**

**Project Objective**

To promote socially and environmentally sustainable forest management in central and south Benin by improving forest and land management to preserve forest cover, prevent biodiversity loss, and monitor carbon stocks and emissions.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 1: Improving sustainability management of forest and wildlife ecosystems in the departments of Borgou and Donga	Investment	<p><b>Outcome 1.1 :</b> Improvement in Benin's forest ecosystems in targeted departments, with an increase in total area protected and reduced pressure on high value forests</p> <p><b>Outcome 1.2:</b> Increased contribution of agro- and forest landscapes and their ecosystem services to local livelihoods and economic development</p> <p><b>Outcome 1.3 :</b> Improved management of protected areas in Benin's targeted regions, with concurrent reduction in encroachment and poaching rates of elephants, wild cats, and other threatened species</p> <p><b>Outcome 1.4 :</b> Capacity enhanced for sustainable forest management (SFM) within local communities to improved local livelihoods and economic development</p> <p><b>Outcome 1.5 :</b> Improved forest management and restoration</p>	<p><b>Output 1.1.1.</b> 150,000 ha of communal forests plantation included in 2 protected areas</p> <p><b>Output 1.1.2.</b> Implementation of management plans for 2 MPs (Mont Kouffé and Wari Maro Forest Reserves) (building on previous AfDB and WB projects), covering an area of 200,000 ha</p> <p><b>Output 1.2.1.</b> Agro-forestry promoted on 5,500 ha, including the introduction of Teak and Gmelina plants</p> <p><b>Output 1.2.2.</b> Enhanced area under community forestry (5,300 ha): 300 ha of nurseries to raise seedlings; 5,000 ha of forest plantations and woodlots, including 30,000 trees planted in fruit orchards</p> <p><b>Output 1.2.3.</b> At least 5 alternative income generating activities identified and implemented with local communities, based on climate smart</p>	GET	1,680,656	6,693,232

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 2: Greenhouse Gas Emissions Inventory	Technical Assistance	<p><b>Outcome 2.1:</b> Technical and institutional capacity strengthened to identify degraded forest landscapes and monitor forest restoration, carbon stocks, and other data</p> <p><b>Outcome 2.2:</b> Knowledge on carbon sequestration and accelerated adoption of monitoring practices to support GHG emission reduction and carbon sequestration and to improve the conservation and enhancement of carbon stocks in targeted forests</p>	<p><b>Output 2.1.1.</b> Integrated landscape restoration plans with participatory forestry monitoring, reporting, and verification systems established;</p> <p><b>Output 2.1.2.</b> Mapping of degraded areas with GIS, and training in targeted departments on forest monitoring to better identify, manage and monitor forest resources and loss.</p> <p><b>Output 2.2.1.</b> GHG emissions baseline established for communal forests;</p> <p><b>Output 2.2.2.</b> Develop models to quantify and account for sequestered carbon in the Djidja and Savalou ranch complex; Zogbodomey ranch; Mont Kouffé and Wari-Marou forest complex; communal forest plantation;</p> <p><b>Output 2.2.3.</b> Quantify carbon stocks in the Djidja and Savalou ranch complex; Zogbodomey ranch; Mont Kouffé and Wari-Marou forest complex; communal forest plantation;</p>	GET	522,070	388,389

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
Component 3: Project coordination and knowledge management	Technical Assistance	<p><b>Outcome 3.1:</b> Enhanced coordination, monitoring and evaluation</p> <p><b>Outcome 3.2:</b> Project knowledge management aspect enhanced to capture project results</p>	<p><b>Output 3.1.1.</b> Proper project M&amp;E mechanism and methodology established;</p> <p><b>Output 3.1.2.</b> Participatory implementation and coordination mechanism established to monitor the project</p> <p><b>Output 3.1.3.</b> Elaboration and implementation of a communication, education and information plan</p> <p><b>Output 3.1.4.</b> Project experiences documented and presented in periodic M&amp;E reports</p> <p><b>Output 3.2.1.</b> Knowledge products created and shared on formal website, following a strategy for KM (this comprises workshops to share project experiences) ;</p> <p><b>Output 3.2.2.</b> Relevant stakeholders engaged through a knowledge sharing platform aiming to promote the project experience replication in</p>	GET	300,000	1,334,489

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
				Sub Total (\$)	2,502,726	8,416,110
Project Management Cost (PMC)						
				GET	124,500	431,305
				Sub Total(\$)	124,500	431,305
				Total Project Cost(\$)	2,627,226	8,847,415



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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount(\$)
GEF Agency	AfDB	Loans	6,966,900
Government	Govt. Benin	Grant	1,000,000
GEF Agency	AfDB	Grant	880,515
Total Co-Financing(\$)			8,847,415

**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>
AfDB	GET	Benin	Biodiversity		No	863,242	82,007
AfDB	GET	Benin	Climate Change		No	429,224	40,776
AfDB	GET	Benin	Land Degradation		No	459,018	43,607
AfDB	GET	Benin	Multi Focal Area	SFM	No	875,742	83,196
<b>Total Grant Resources(\$)</b>						<b>2,627,226</b>	<b>249,586</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**

PPG Required

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100,000

9,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	NGI	Amount(\$)	Fee(\$)
AfDB	GET	Benin	Biodiversity		No	50,000	4,750
AfDB	GET	Benin	Multi Focal Area	SFM	No	25,000	2,375
AfDB	GET	Benin	Land Degradation		No	25,000	2,375
Total Project Costs(\$)						100,000	9,500

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	350,000.00	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	150,000.00	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 Djidja	125689	SelectOthers		3,000.00		<input type="checkbox"/>
Akula National Park Zogbodomey-Savalou	125689 33013	SelectProtected area with sustainable use of natural resources		147,000.00		<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	200,000.00	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)
<b>Akula National Park</b> Monts Kouffé	<b>125689</b> 6956	<b>Select</b> Protected Landscape/Seascape		125,000.00			125,000.00		<input type="checkbox"/>
<b>Akula National Park</b> Wari Maro	<b>125689</b> 6955	<b>Select</b> Protected Landscape/Seascape		75,000.00			75,000.00		<input type="checkbox"/>

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	33300.00	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)
	10,800.00		

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)
	22,500.00		

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)
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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)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	8000.00	0.00	0.00

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	8,000.00		

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

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

Type/Name of Third Party Certification

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

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

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

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

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

Title	Submitted
EX-ACT Tool Assumptions sheets	
EX-ACT Tool	

Title		Submitted		
Core Indicators Worksheet				
Indicator 6 Greenhouse Gas Emissions Mitigated				
Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)	0	7719012	0	0
Expected metric tons of CO <sub>2</sub> e (indirect)	0	0	0	0
Indicator 6.1 Carbon Sequestered or Emissions Avoided in the 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)		7,719,012		
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting		2020		
Duration of accounting		24		
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)				
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting				
Duration of accounting				
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)



Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

**\*Please note that the Indicator Worksheet, the EX-ACT Tool Excel file and the EX-ACT Tool Assumptions Excel file have been attached in the section "Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)" as no other suitable location in the portal was identified. As described for Indicator 3.1, the area of degraded agricultural land to be restored corresponds to 5,500 ha (Agro forestry for output 1.2.1 ) and 5,300 ha (enhanced community forestry for output 1.2.2) leading to a total of 10,800 ha. For Indicator 3.2, the area of forest and forest land restored corresponds to the rehabilitation of 20,000-25,000 ha of forest plantations under component 1. Since the exact number has not yet been determined at this stage, an average of 22,500 ha was indicated. Regarding indicator 6.1, according to the results of the EX-ACT tool, the project activities will yield a balance of emissions avoided of 1,713,387 tCO<sub>2</sub>eq per year, which corresponds to 7,719,012 tCO<sub>2</sub>eq over the lifetime of the project and 41,121,290 tCO<sub>2</sub>eq over the accounting period of 20 years post-project (including the 4 years duration of the project).**

## **PART II: Project JUSTIFICATION**

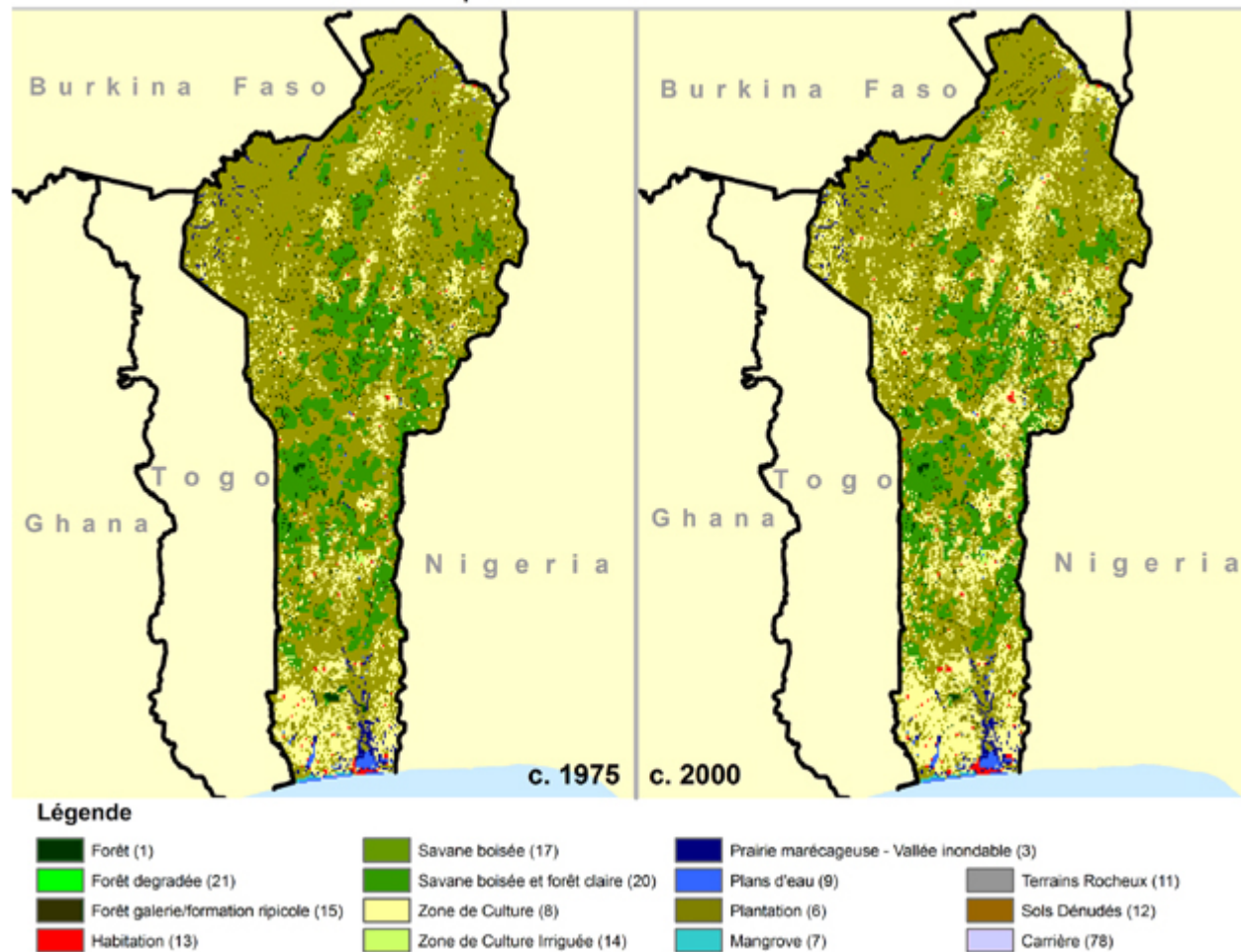
### **1. Project Description**

#### ***A.1.1: Global environmental problems, root causes and barriers***

Benin is situated in West Africa, on the northern coast of the Gulf of Guinea, between Togo and Nigeria, and covers an area of 112,622 square km. Agriculture is the primary economic activity, contributing 33.2% to the national GDP in 2009 and employing 70% of the workforce. According to the World Bank, forests, which comprise State, private and protected forests, cover 38.2% of Benin's total surface area, with the most densely forested areas found in the center of the country. Since the 1940s, the State has established 58 forest reserves covering an overall surface area of 27,000 km<sup>2</sup> (19% of the national territory) as well as Ramsar sites covering a surface area of 1,974,005 ha. This area comprises classified forests (1,292,543 ha), reforestation zones (4,162 ha) and national parks and hunting areas (777,050 ha). Unprotected forests include all unclassified State forests whereas individual forests include all private forests (natural or planted) including sacred forests, most of which are located in Zou, Collines and other Departments in southern Benin.

**Fig 1. Benin Land Use and Land Cover Maps and Trends**

Carte de l'Occupation et Utilisation des Terres du Bénin



Source: West Africa Land Use and Land Cover Trends Project, <http://lca.usgs.gov/lca/africalulc/results.php>

However, according to FAO figures and despite the measures mentioned above, the country has lost 29 percent of its forest cover since 1990. At 2.5 percent, Benin has one of the highest annual deforestation rates in the world[1]<sup>1</sup>. There are over 3,000 sacred (relic) forests concentrated in the south, covering 18,360 hectares (0.16% of the country). In Benin, a forest is often considered sacred in terms of the cultural services it provides to the riparian populations based on locally held beliefs which, ultimately, contributes to their spiritual enrichment. Aside from the “chief” priest, access to these forests is forbidden, which implies that it is strictly prohibited to cut down these trees, even though harvesting of medicinal plants can sometimes be allowed in certain sacred forests. These cultural practices and the indigenous rules that govern them have protected a number of forests up to the 1980s. Thereafter, gradually changing beliefs and the appearance of sects in increasing numbers weakened traditional forest uses, thus triggering deforestation processes at various scales.

It is estimated that about 70,000 hectares of forests were destroyed between 1990 and 2000 as a result of agriculture, animal husbandry, excessive logging and bushfires. In addition, internal migrations, transhumance, poor soils and overgrazing may have exacerbated forest degradation. The main constraints behind the unsustainable tapping of forest resources are: (i) poor knowledge and uneven distribution of forest resources over the territory; (ii) weak intervention capacity of the Forestry and Natural Resources Directorate (lack of human, material and financial resources) and lack of coordination in development and environmental policy making; and (iii) pauperization and weak ability of the rural population to sustainably manage natural resources.

#### Biodiversity and forest degradation

While agriculture is the primary form of economic activity, it is also the main force behind the degradation of forest cover. A study conducted in 2009 estimated that the forestry sector contributed 6.64% to Benin's GDP and the firewood industry employs 200,000 people. In parallel, hundreds of acres are cleared by farmers each year. In addition, it was reported that a number of insect species suffer greatly from the excessive usage of pesticides. . Aside from being the primary source of fuel for households, forest resources also provide food, medicine, wood, and hunting products. A number of critical non-timber products also originate from forests, including fruits, resin, mushrooms, oils and vegetables. The harvest of those products supports Beninese livelihoods but simultaneously contribute to the degradation of targeted forests and loss of biodiversity. Areas of dense formations are diminishing and giving way to open formations, fallow areas, or cultivated lands.

There is a lack of appropriate indicators and benchmarks to evaluate the changing state of protected areas and their improvement.

#### **Key Biodiversity Area – the Benin central natural forests – Monts Kouffé and Wari Maro forests**

Benin is characterized by a diverse agro-ecological system. The North is covered by Sudano-Sahelian savanna woodland vegetation with scattered species such as *Parkia biglobosa*, *Vitellaria paradoxa*, *Daniella oliveri*, *Azizahia africana*, etc. Gallery forests which cut across the savanna woodlands harbour several rare species such as: *Khaya senegalensis*, *Khaya grandifoliola*, *Milicia excelsa*, *Azizahia africana*, *Isobornia*, etc. which, unfortunately, are being overlogged. In the Centre, the Wari-Marou and Monts Kouffé reserves are a real ecological complex, and one of the country's most important areas in terms of species abundance and diversity.

The South is covered by residual forests alternating with islands of deciduous and semi-deciduous forests and oil palms which occupy the entire sedimentary basin, virtually up to the coastal region where they give way to coconut trees which are today threatened and where there is little primary vegetation left.

Forests in Benin are governed by Law No. 93-9 of 2 July 1993 and implementation Decree No. 96-271 of 2 July 1996 which lays down conditions for the implementation of the said law. These instruments categorize State forests as classified forests and protected forests, and lay down classification and declassification conditions, customary rights and management and tapping conditions of State forests.

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In order to protect forests from excessive use, preserve Benin's biodiversity, and ensure ecological balance, the State has created a number of protected areas, including 58 forest reserves (see table 1 for classification) covering an overall surface area of 27,000 km<sup>2</sup>, representing 19% of the national territory.

Forest reserves are categorized in 3 ways by type of authorized activities<sup>[2]</sup>:

Table 1: Categorization of forests in Benin by authorized activity

Forest reserves categories	Forest reserves wherein hunting for fauna is forbidden but where forest or mining exploitation can be done	Forest reserves in which not only forest and mining exploitation but also hunting is authorized using traditional means of hunting	Forest reserves of especially small size
Current forests	Trois Rivières (259 500 ha), Ouémé Supérieur (177 542 ha), <b>Wari-Marô (107 500 ha)</b> , Goun-Goun (80 668 ha), Sota (53 000 ha), Wénou-Bénou (30 000 ha), Lama (16 250 ha), Tanéka (1 090 ha), Tchaourou (1 192 ha), Sérou (498 ha), and Tchatchou (200 ha).	<b>Monts Kouffé (186 203 ha)</b> , Alibori Supérieur (256 000 ha), Atchérigbé (3150 ha), Bassila (2 500 ha), Bellefoungou (1 300 ha), Birni (3 200 ha), Dan (1 237 ha), Dogo (31 850 ha), Guéné (1 300 ha), Kandi (250 ha), Collines de Kouandé (4 560 ha), Logozohé (1 200 ha), Savalou (1 159 ha), Agoua (63 182 ha), Atlantique (900 ha), Dassa –Zoumè (2 078 ha), Djigbé (3 594 ha), Agrimey (2497 ha), Setto (1 013 ha), Mékrou (9 390 ha), N'Dali (4 721 ha), Ouèdo (586 ha), Pénésoulou (5 470 ha), Toui (29 030 ha), and Bonou (645 ha).	Boko (300 ha), Ichédé (191 ha), Natitingou dam (142 ha), Soubroukou (84 ha), Touzoun (66 ha), Saké- té (60 ha), and Kilir (50 ha)

The total surface area covered by forests has declined considerably in Benin over the past decades due to agricultural extension, population growth and long-standing obsolete farming methods. The depletion of natural forests is especially severe in the southern region of the country where population density is highest. Natural forests continue to be depleted due to overlogging, bushfires and clearing of forests. Internal migration, transhumance, poor soils and the ensuing depletion and overgrazing have worsened the depletion of forests.

The proposed project intervention sites are the 2 forest reserves of Monts Kouffé and Wari Maro localized in the centre of Benin (see map 1). Given their localization in the country and their high concentration of fauna and flora, these 2 forest reserves are called Benin's *Noyau Central écologique*<sup>[3]</sup> by the Ministry of living Environment and sustainable development and represent since 2010 a forestry complex called "*Réserve de Faune du Complexe forestier Monts Kouffé et Wari Maro*".

Map 1: Illustration from **Network of protected areas of Benin** - [https://www.uni-frankfurt.de/47671003/BJ\\_08.pdf](https://www.uni-frankfurt.de/47671003/BJ_08.pdf)

With interventions in the 2 forests and additional activities in the forestry sector, the project aims to contribute to the following Aichi Targets:

Aichi Biodiversity Objective	Aichi Targets Indicator	Project Outputs
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<b>Strategic Goal A:</b> Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society	<b>Target 1 :</b> By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably	<ul style="list-style-type: none"> <li>ü #5,000 (TBC) of households benefiting from the promotion of alternative livelihood activities to poaching and deforestation, including via the introduction of new seeds</li> </ul>
	<b>Target 2</b> By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	<ul style="list-style-type: none"> <li>ü Forestry Resources Inventories completed</li> <li>ü Benin National Forester Code updated</li> </ul>
	<b>Target 4</b> By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	<ul style="list-style-type: none"> <li>ü Agro-forestry promoted on 5,500 ha, including the introduction of teak and gmelina</li> <li>ü Enhanced area under community forestry: 300 ha of nurseries to raise seedlings; 5,500 trees in forest plantations and woodlots; 30,000 trees planted in fruit orchards</li> </ul>
<b>Strategic Goal B:</b> Reduce the direct pressures on biodiversity and promote sustainable use	<b>Target 5:</b> By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	<ul style="list-style-type: none"> <li>ü 150,000 ha of communal forests included in protected areas</li> <li>ü Three (3) new wildlife ranches (communal) set up (Zogbodomey, Djidja and Savalou), with improved protected area management effectiveness scores for total 8,000 ha</li> <li>ü 150,000 ha of existing forest under improved management</li> </ul>
<b>Strategic Goal C:</b> To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity	<b>Target 12</b> By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	<ul style="list-style-type: none"> <li>ü Protection of endangered species - endemic monkey (<i>Cercopithecus erythrogaster</i>), Roan Antelope (<i>Hippotragus equinus</i>) in the 2 protected areas</li> </ul>

With interventions in the 2 forests and additional activities in the forestry sector, the project aims to contribute to the following Aichi Targets. In the project area, as everywhere in Benin, forests provide ecological functions (protection of soil and water resources, conservation of biological diversity, carbon storage and reduction of global warming, etc.) and also socio-economic functions.

Despite the existence of significant resources and potentialities, the proportion of "multi-dimensionally" poor of Benin population is estimated to 59.7%, reflecting that nearly 6 out of 10 Beninese suffer from multidimensional poverty (UNDP / NHRD 2015 ). The 05 departments targeted by PACEFCOM-II also have a relatively low level of human development.

### ***Challenges and drivers***

#### **Land Degradation**

In Benin, land degradation is a problem that today impeded the development and even the survival of the population. The loss of fertility of cultivated lands is the result of their mismanagement due to the rather low level of technology of farmers. Physical degradation is the result of erosions exposing the lower soil horizons and overexploitation of soils which sometimes leads to their acidification.

The decline in soil fertility is one of the main difficulties currently facing Beninese agriculture. In fact, cultivated land is being depleted at an accelerated rate and crop yields are decreasing continuously; This dangerously hinders the productivity and sustainability of the entire farming system. This has the consequence of reducing the income of farmers; the indebtedness of farmers; the high cost of agricultural products and food insecurity. Poor farming practices result in soil degradation and affect agricultural production. In addition, population growth also contributes indirectly to soil degradation. As the rate of population growth in southern and central Benin evolves at a worrying rate and to cope with the ever-increasing demand for agricultural products, farmers intensify their production by shortening fallow periods by encroaching on forests.

### Climate Change

According to the University of Notre-Dame Global Adaptation Country Index (ND-GAIN), which quantitatively describes a country's vulnerability and readiness in the face of climate change-related impacts, Benin is ranked at the 151st place out of 180 countries. This rank indicates that Benin is quite highly vulnerable and relatively unprepared to address potential climatic hazards that could drastically affect its population and livelihoods. In Benin, the main observed effects related to climate change are: a change in the distribution of rainfall, with more or less early, more or less late rain onset, a tightening of the annual rainfall distribution, frequent dry spells, more torrential rains, etc. The direct consequences of these changes are mainly: increased risks of crop failures due to the non-emergence of seedlings or low yields due to drought or the destruction of harvest by unusual heavy rains. These direct impacts of the climate on agriculture directly affect food security of the population, which results in lower yields of subsistence food crops, and cash crops such as cotton or cashew nuts, a pauperization, socio-economic fragility and increased sensitivity of rural populations, particularly vulnerable groups such as women and children, to diseases and epidemics. To the detrimental effects of global climate change are the disastrous consequences of overexploitation of forest resources in Benin (overgrazing, excessive cutting of wood for carbonization and logging, lack of regeneration) and the total lack of management and monitoring

The main sectors vulnerable to the effects of climate change in Benin are agriculture, water resources, forestry, fishing, coastal zone, human health and energy. The main adaptation objectives are aimed at reducing the vulnerability of socio-economic systems and ecosystems to climate variability and change, through the adoption of appropriate policies and measures, mainly: (i) strengthening of climate risk forecasting and early warning systems;; (ii) strengthening the availability of water resources; (iii) the protection of the coastal area from rising sea levels; and (iv) contribution to adaptation funding at local government level through strengthening local governance in activity planning and budgeting

### **Drivers of land and forest degradation**

Forest resources occupy 68% of the territory of Benin (about 7,67 million ha). The contribution of the forest sector to the socio-economic development of the country is estimated at nearly 7% of the national GDP (ProCGRN, 2009), taking into account only the fuel-wood and cashew nut sectors. The wood energy sector, the leading source of domestic fuel, employs 200,000 people in the country and has a turnover of nearly seven billion FCFA per year (DGFRN, 2010).

For several decades, forests have been severely degraded by the combined effect of population pressure and declining rainfall. This is reflected in the extension of agricultural and pastoral areas, practices that are not conducive to the sustainable management of natural resources (shifting agriculture, excessive logging, bush fires and land clearing and overgrazing) and soil depletion. About 100,000 ha of forest are destroyed annually for agricultural, hunting, pastoral and timber harvesting (timber and wood energy). The high population density in the south of the country has resulted in intense land use. The production of wood products has become very critical as forests are getting very scarce.

This degradation of the natural environment has adverse effects on soil degradation as well as accelerated erosion of the coastal fringe of the Gulf of Guinea. The main constraints facing Benin's natural environment relate to rapid population growth and the mismatch between the use of natural resources and their rate of renewal. The expected impacts of climate change (CC) on increasing temperature and precipitation will exacerbate the challenges facing the agriculture (water control) and forestry (deforestation) sectors while the coastal fringe will be subject to an accelerated rise in sea level.

The conjunction of all these factors has the following consequences: (i) the acceleration of erosion phenomena; (ii) a decrease in soil fertility, leading in turn to new clearings; (iii) drying up of rivers and a decline in water quality; (iv) the disappearance of the natural habitats of many species, with a decrease in biodiversity potential and (v) a decrease in plant biomass, the main source of energy and natural rangelands for livestock farming.

To respond to the challenges of forest degradation and the maintenance of a minimum forest cover to ensure ecological balance, the Administration had classified 58 forest areas, adopted the Forest Code Act and undertook several development operations with the aim of protection and concerted management of classified forests. The government has also promulgated the law on the organization of the Communes/districts in the Republic of Benin and the successive municipal elections that have taken place constitute a favorable framework to an intervention of management of these forests under the aegis of the Communes. The Government has also implemented the PAMF, PBF, PBF-II and PAGEFCOM I projects to support the implementation of the legal framework

#### Deforestation [MA1]

Forest resources occupy 68% of the territory of Benin (about 7,67 million ha). Preedictive vegetation modeling, conducted in 2012, based on the assumption that current exploitation practices will be maintained, suggests that in 2020 the mosaic of fields and fallow land will occupy about 60% of the territorial collectivities (communes), followed by woody and shrub savannah at 30%. Gallery forests, open woods and forest savannah will be represented in the form of small islets and occupy less than 3% of the communes.

For several decades, forests have been severely degraded by the combined effect of population pressure and declining rainfall. About 100,000 ha of forest are destroyed annually for agricultural, hunting, pastoral and timber harvesting (timber and wood energy). This is reflected in the extension of agricultural and pastoral areas, practices that are not conducive to the sustainable management of natural resources (shifting agriculture, excessive logging, bush fires and land clearing and overgrazing) and soil depletion. Moreover, the effects of climate change risk to further exacerbate the challenges facing the agriculture (water control) and forestry (deforestation) sectors while the coastal fringe will be subject to an accelerated rise in sea level. Main consequences include: (i) the acceleration of erosion phenomena; (ii) a decrease in soil fertility, leading in turn to new clearings; (iii) drying up of rivers and a decline in water quality; (iv) the disappearance of the natural habitats of many species, with a decrease in biodiversity potential and (v) a decrease in plant biomass, the main source of energy and natural rangelands for livestock farming.

#### Bush fires and Slash and Burn practices

Bush fires have clear seasonal patterns, and recurring bush fires and use of slash and burn practices impede vegetation growth. Fire is commonly used to clear lands and also as a hunting technique. Fires transform organic matter into ash, and ash is carried by wind and rain, depleting the soil. Repeated use of fire on agricultural lands and soils degrades the cover and nutrient composition of soils, encourages the growth of pyro-resistant plant species, and clears existing vegetation, eventually creating the conditions that result in pockets of arid lands, which are not conducive to reforestation or afforestation or cropping. It is noted in the UNCCD NAP for Benin that bush fires are present throughout the country, but particularly in the central departments, which include the target areas of this proposed project.

### **Barriers**

Given the above challenges, the following barriers to sustainable forestry management and biodiversity conservation in Benin were identified:

**Barrier 1 Insufficient public funding.** Presently funding for the forest sector is based entirely on annual government allocations. Most of the funding for the sector is provided through externally financed projects and programs, which are generally of short-term. Additionally, one of the the main causes of the underperformance recorded in this sector, is the weak capacity to mobilize resources for the regular and timely payment of statutory contributions to the agreements and conventions of which Benin is a party drastically limiting the country's ability to profit from the opportunities offered by these agreements.

**Barrier 2 Lack of project sustainability and weak legal framework.** Difficulties in ensuring the sustainability of projects funded largely by technical and financial partners represents a major challenge in Benin. The various field visits in September 2018 revealed a lack of ownership of project achievements and benefits by the communities,



compromising the long-term success of development projects and initiatives. Moreover, other barriers limiting project sustainability include the non-perpetuation of actions undertaken by the various projects especially those relating to restoration the conservation and the good management of the forest resources, and the non-application of the laws and the slowness updating some laws now obsolete. Specific examples of weakness in the sector policies and regulations include: (i) a forest policy of 1994, reviewed and revised in 2012, but not yet adopted by the government; (ii) the general lack of application of laws and regulations; (iii) the non-adoption of law application texts as planned making difficult their application; (iv) the situation of double taxation of forest products through the law 93-009 of 2 July 1993; (v) the law of decentralization and the finance bill 2008 authorizing municipalities to collect Local Development Tax on forest products; (vi) failure to complete the draft law on the orientation of the forest code in the Republic of Benin; (vii) a lack or low level of dissemination of legislative and regulatory texts; (viii) the lack of consideration in the national legal corpus of the provisions of the various conventions, treaties and international agreements to which Benin is a party; (ix) the non-application of administrative, financial and accounting procedures manuals; and (x) maladjustment of some law texts to current realities (decentralization and climate change).

**Barrier 3 Limited institutional framework and coordination.** The current instability of the supervisory authority of the sector (MAEP, MEHU, MEPN, MECGCCRPRNF, MCVDD) disrupts the implementation of effective reforms. Specific limitations include: (i) inadequate control of the sector by the DGEFC for sufficient capacity; (ii) insufficient collaboration between the Forestry Administration, the Directorate of Agriculture, the Directorate General for Energy and the Communes on the management of natural resources in the protected area, particularly agricultural land and biomass energy; (iii) weak coordination of the different actors intervening in the sector and a dysfunction related to the lack of follow-up of the respect of the rules and procedures relating to the animation of the public-private partnership; (iv) lack of a platform for inter-institutional concertation and coordination between public administrations such as those of the Ministries in charge of Agriculture, Livestock and Fisheries, Energy, Water and Mining, Justice, Decentralization to ensure coherence of sectoral policies; (v) weak information systems to facilitate assessments and monitoring of natural resources; (vi) lack of a system of forest research with a clear vision; (vii) limited human, material and financial resources; and (viii) insufficient consultations between the actors and institutional users of the sector.

**Barrier 4 Lack of monitoring tools and effective participatory management models.** Effective monitoring strategies for the protection of natural forests, national parks and state plantations, are not readily accessible to relevant stakeholders. Specific challenges include (i) growing covetousness, recrudescence of illegal settlements and violation of the forest sector's franchises, especially those in urban areas by the population; (ii) poor ownership of the concept of co-management of forests and wildlife reserves, as well as state ownership by stakeholders; (iii) the weak involvement of the Communes/districts in the protection and safeguarding of natural forests, national parks and state plantations, and the insufficient valorization of the results of the various programs and projects; (iv) the lack of valorization of non-timber forest products (NTFPs) whose exploitation remains informal, thus impeding its contribution to the forestry economy.

**Barriers 5 Unsustainable pastoral practices.** Herds use herbaceous pastures and "tree fodder" in the dry season from woody species: *Azizelia africana*, *Khaya senegalensis* and *Pterocarpus erinaceus*), which hinders their natural regeneration. Other key underlying factors leading to unsustainable pastoral practices include: (i) sedentarization of some pastoralists, (ii) use of uncontrolled fires for pasture management, (iii) failure to materialize and respect pastoral corridors and manage and secure grazing areas, (iv) mismanagement of conflicts, (v) lack of agro-pastoral infrastructure (water and vaccination points). Moreover, the September 2018 field visit and various community meetings revealed increasing risks in the region due to intensified conflicts between Fulani pastoralists and hunters, beekeepers, customary authorities and forest administration. In fact, the forests of Wari Maro and Mont Kouffé are under heavy pressure from transhumant pastoralists who do not respect transhumance corridors, destroy beekeepers' facilities, drive wild animals out of the forest and attack local communities.

N/A

*A.1.2: The Baseline scenario or any associate baseline projects*

Benin's forest resources consist primarily of dense forests and gallery forests forming corridors along rivers and wetlands which project into otherwise sparsely treed landscapes, such as savannas and grasslands. The Beninese government has attempted to address severe deforestation, at the rate of 150,000 ha per year over several decades between 1960 and 1980, caused by unsustainable forestry and agricultural practices. Forest cover in the targeted central departments had dwindled to a mere 5% prior to the first phase of the AfDB financed Support to Communal Forest Management project (PAGEFCOM I). Benin's remaining natural forests are threatened by a combination of increased population pressure, inefficient and unsustainable agricultural practices, and poverty. According to the CBD, predictive vegetation modeling, conducted in 2012, based on the assumption that current exploitation practices will be maintained, suggests that in 2020 the mosaic of fields and fallow land will occupy about 60% of the territorial collectivities (communes), followed by woody and shrub savannah at 30%.

The project addresses two broad sector issues concerned with (a) the continuing degradation of Benin's forest resources; and, (b) the direct negative impact that this will have on the livelihoods of forest dependent populations.

The African Development Bank (AfDB) is financing the second phase of the PAGEFCOM project in 5 Benin departments of Atlantique, Collines, Zou, Borgou and Danga. The project's main objective is to support local authorities in implementing effective forest management strategies and practices, and the second phase will build on the work implemented during the first phase, one result of which was the reforestation and/or afforestation of 150,000 hectares. Through more effective forest management practices, the project aims to improve the standard of living of local communities, many of which depend on forest ecosystems for their livelihoods. By preserving forest ecosystems and biodiversity assets, the project hopes to also reduce local poverty levels through the maintenance of ecosystem services and encourage the development of more sustainable value chains in the project areas based on forest enrichment.

The Benin forestry sector has benefitted from previous interventions funded by international organizations and MDBs, including the AfDB (PAMF, PAGEFCOM1) and the World Bank.

The table below shows the past and current intervention of donors in the forestry area in Benin (2016-2020):

Project	Outputs / Activities	Donor	Region
Fuelwood Plantations Project in Southern Benin (PBF)	(i) Training of some 2,800 independent farmers who cultivate about 4,801 ha of private plantations, (ii) Replanting of 5 severely degraded State forests (5,374 ha planted) and (iii) Preparation of participatory management plans for the 5 forests.	OPEC	Southern Benin
The Agoua, Kouffé and Wari-Marou Mountains Forest Reserves Management Project (PAMF)	Integrated management of the three forests (370,000 ha) – Agoua, Wari Maro et Mont Kouffé	AfDB, BADEA	Agoua, Kouffé and Wari-Marou Mountains Forest Reserves
PAGEFCOM 1 – Communal Forest Management Project Support	(i) Support to develop communal forest management plans, (ii) Enrichment of forests and plantations of rapid growth species (70,000 enriched with local species), (iii) Sensitization/literacy education / training of the population concerned and the Communal Councils, (iv) Intensification of techniques for the integrated management of soil fertility	AfDB	Agoua, Kouffé and Wari-Marou Mountains Forest Reserves
GGW: Forests and Adjacent Lands Management Project	(i) Increase in land area with Sustainable Land and Water Management in targeted areas measured by the number of additional hectares of forests or degraded forests brought under sustainable management; (ii) Number of forests reserves with management plans effectively implemented; (iii) Increase in the capacity of the National Forests institutions to implement forests management plans	WB	Agoua, Kouffé and Wari-Marou Mountains Forest Reserves

Building on previous interventions, the AfDB seeks to fund a second phase of the PAGEFCOM with the aim to continue implementation of the management plans prepared under the first phase, i.e. for 2 forests (Monts Kouffé and Wari Maro). The following activities will support a full implementation of the plans: (i) implement the remaining activities of the 2 forest management plans (Monts Kouffé and Wari Maro) that have not been completed under PAGEFCOM1 and the WB project (GEFID5215), (ii) create three (3) new wildlife ranches (communal) called Zogbodomey, Djidja and Savalou for a total of 8,000 ha, (iii) promote alternative livelihood activities, including via the introduction of new seeds, which will reduce poaching and deforestation.

The table below shows the complementarity and continuity of proposed activities with past interventions (PAMF, PAGEFCOM1 and WB GEFID5215 projects) in the 2 forests:

Table 2: Complementarity between projects in targeted areas:

Project	PAMF	PAGEFCOM1	WB GEFID5215
Sites	Mont Kouffé, Agoua and Wari Maro	23 communes of Atlantique, Zou and Collines	
Outputs	Forest Management plan (FMP) implemented of Agoua (full or almost complete), Wari-Marou (partly) and Mont Kouffé (partly)	<p>Preparation of Simplified Participatory Communal Forests Management Plans (SPCFMP)</p> <p>SFM activities involving communities (Enrichment of forests and plantations of rapid growth species)</p> <p>Creation of council plantations</p> <p>Support for the decentralization process</p> <p>Support to sacred forests</p> <p>Wildlife conservation plan setup</p>	<p>Three Forest Management plans updated (Kouffé, Wari-Marou and Angoua)</p> <p>Forest boundaries demarcated (19 sites)</p> <p>Nurseries operationalized</p> <p>7,700 ha under SFM - 1000 ha of degraded areas restored</p>
Period	2001 - 2008	2005 - 2012	2013-2018

Activities remaining still needing implementation	Agoua forest reserve partly completed	SPCFMP to be implemented Implementation of wildlife conservation component	Implementation of updated Forest Management Plans
<p>PAGEFCOM2/GEF</p> <p>(see table B for more details)</p> <p>(see section 1.4 for incremental reasoning proposed Baseline/GEF funding)</p>	<p><b>I- Enhancing conservation of forest ecosystems and wildlife in classified forests (Wari-Marô and Mont Kouffé)</b></p> <ul style="list-style-type: none"> <li>ü Increased area of communal forests ecosystems included in the 2 protected areas – Monts Kouffé and Wari-Marô (150,000ha)</li> <li>ü Increased protected area management effectiveness (full implementation of FMP of Mont Kouffé and Wari-Marô) – 200,000ha</li> <li>ü Reduced rates of poaching of high value threatened and endangered species in 2 protected areas</li> <li>ü Three (3) new wildlife ranches established (Zogbodomey, Djidja and Savalou) – 8,000ha</li> <li>ü New agroforestry activities promoted</li> <li>ü Endangered species protected in 2 PA - endemic monkey (<i>Cercopithecus erythrogaster</i>), Roan Antelope (<i>Hippotragus equinus</i>), the red flanked duiker, the yellow-back duiker, warthog, waterbuck, bushbuck, antelopes, including bohor reedbuck, buffalo, potamochoerus, Kob, oribi, and damaliscus.</li> </ul> <p><b>II- Improving sustainability and functioning of targeted forest ecosystems</b></p> <ul style="list-style-type: none"> <li>ü Rehabilitation of 20,000-25,000 ha of forest plantations</li> <li>ü Benin National Forestry Code updated</li> <li>ü Forestry Resources Inventories completed</li> <li>ü EWS to prevent bushfires installed</li> <li>ü Agro-forestry promoted on 5,500 ha, including the introduction of Teak and <i>Gmelina</i> plants</li> </ul> <p><b>III- Greenhouse Gas Emissions Inventory for forest sector</b></p>		

#### Main results and lessons learnt from PAGEFCOM1 and PAMF

The first phase of PAGEFCOM was completed in December 2014 and the Bank has conducted a project completion report (PCR) in April 2015 with an assessment of results (see attached PCR for more details in Annex A) and lessons learnt.

The table below shows some lessons learnt to be considered during PAGEFCOM2 implementation:

Lessons learnt	Details
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Implementation Unit	<p>Given the success of PAGEFCOM1 implementation (98% disbursement arte at the end of project) and building on capacity of existing project implementation unit, PAGEFCOM2 will be under the same PIU.</p> <p>The financial management (FM) arrangements for the PAGEFCOM2 will be based on the existing arrangements of PAGEFCOM1. The project financial, accounting and administrative manual will be revised in order to improve existing specific procedures to take into account lessons learnt from the previous experience.</p>
Fiduciary risk	<p>The PAMF implementation has shown some issues related to delays and misuse of funds. The AfDB project completion report did not raise any issue related to misuse of funds (AfDB window). However, there were some corruption allegations related to BADEA funded components.</p> <p>The second AfDB project (PAGEFCOM1) has been completed without any fiduciary issues.</p> <p>To prevent any future fiduciary risk or issue, it is proposed to strengthen the M&amp;E component of the proposed project. The Bank will supervise the project 3 times minimum a year compare to standard AfDB 2 supervision missions. In addition, the steering committee will meet a minimum of 4 times a year compared to 2 previously.</p>
Scaling-up	<p>The GEF project will provide technical skills in SFM and other farming/forestry practices that promote both sustainability and increased agricultural productivity in the project area. The activities will be closely monitored and evaluated with successful initiatives replicated and up-scaled. Effective alternative livelihood options will be demonstrated and greater emphasis will be given to upscaling successful practices. This proposed project is meant to scale up achievements and strong forest management practices implemented under the PAGEFCOM I project. This project will implement plans which were designed under the first phase of the baseline while addressing integrated environmental issues to maximize global environmental benefits. Lessons from the outcomes of this project can be applied in other protected areas throughout Benin and in forest landscapes throughout the region which suffer from similar root problems.</p>

The PAGEFCOM2 aims to achieve its objectives in the region through the implementation of three components:

*Component 1: Natural resources management (USD \$9.76 million)*

This component aims to support biodiversity protection through conservation, afforestation (funded by the baseline), reforestation, sustainable forest management practices and the preparation and implementation of simpler Forest Management Plans for Participatory Forestry Management, which will be accomplished through the executing of the following sub-components:

Subcomponent A. Natural Resources Management: (i) Identification and placing under concession of three sites for the establishment of three wildlife conservation parks in Zogbodomey, Djidja, and Savalou; and (ii) conservation of biodiversity in the Monts Kouffe and Wari Maro forests.

Subcomponent B. Communal forest management and reforestation: (i) Establishment of community Forest Management Plans for communal forest plantations; (ii) The creation of Teak and Gmelina forestry plantations on 2,198 ha of land; (iii) The organization of participatory monitoring and evaluation processes.

*Component 2: Technical and Institutional Support (USD \$4.7 million)*

Subcomponent A. Infrastructure rehabilitation: (i) Rehabilitation and development of infrastructure (ii) institutional support to Forest management administration within PAMF, at the local level (Wari Maro, Gbassa and Manigri); (iii) Social infrastructure including the provision of training at the local level (Manigri)

Subcomponent B. Institutional Support: (i) Development of forest management policies and updating legal frameworks to include wildlife parks and communal forests; (ii) A study on early warning systems to prevent wildfires and other emergencies, as climate information systems; (iii) Capacity building activities provided to the Directorate General for Forestry.

Subcomponent C. Community level technical assistance: Support for the development of green value chains and ecosystem services for forest products (both timber and non-timber), fishery products, etc.; and (iii) Agroforestry promotion.

**Component 3: Project management and coordination (USD \$1.47 million)**

Activities under this component include: (i) Project coordination; (ii) Administrative and financial management; (iii) Procurement of works and services; (iv) Design and implementation of a communications plan; (iv) Monitoring and Evaluation activities

***A.1.3 : Brief description of proposed alternative scenario, outcomes and components (The GEF project)***

Since PIF approval in April 2016, there have been little changes in the main concepts and envisaged outcomes of the proposed GEF Project “Sustainable Forest Management and Conservation Project in central and south Benin (Departments of Borgou and Donga)”. The objectives and issues that the proposed GEF project seeks to address remain unchanged from the PIF. The GEF funds will thus predominantly support and supplement the implementation of the PAGEFCOM II project, to an amount of 2,627,226 million USD, BD (863,242 USD), SFM (875,742) CCM (429,224 USD) and LD funding 459,018 USD).

As stated in the PIF, the GEF financed activities will be structured around 3 components, 9 outcomes and 28 outputs. This enhancing description of activity and component was necessary considering the issues emerging from the STAP review. The components and outputs are presented below.

**Component 1 Improving sustainability management of forest and wildlife ecosystems in the departments of borgou and donga**

Following STAP comments, this component is the result of a merger between the first two components laid out in the PIF.

This component aims to support PAGEFCOM's efforts to create and upscale national protected areas in Benin, with improved management effectiveness, which will offer sanctuary to wildlife and plant species in the central and south regions of Benin. The component will result in increased area of terrestrial forest cover in Benin's central and south regions (Departments of Borgou and Donga) and increased areas under protection.

In addition, activities under this component will support the implementation of sustainable forest management plans which were formulated under PAGEFCOM2 for the three Departments which were included under the first phase. For the Donga and Borgou departments, sustainable forest management plans will be designed. The plans will also identify revenue generation activities so as to ensure a sustainable funding source for this endeavor, while improving the management of forest areas in the targeted departments. They will also identify high conservation value forests in Donga and Borgou for the development of forest management and restoration plans.

### **Outputs**

**Outcome 1.1** : Improvement in Benin's forest ecosystems in targeted departments, with an increase in total area protected and reduced pressure on high value forests

- 1.1.1. 150,000 ha of forests plantation included in 2 protected areas
  - 1.1.1.1: Developing and conserving biodiversity at the WM & MK reserves level;
  - 1.1.1.3: Monitor core and hunting areas (monitoring plan and brigade);
  - 1.1.1.4: Conduct the study on the sustainability and empowerment of ranches, central core and hunting areas;
- 1.1.2. Implementation of management plans for 2 MPs (Mont Kouffé and Wari Maro Forest Reserves) (building on previous AfDB and WB projects)
  - 1.1.2.1: Elaborate the Simplified management plans (SMPs) of the reforestation areas of Parakou and Abomey;
  - 1.1.2.2: Support the implementation of the SPMs of the reforestation areas of Parakou and Abomey.

**Outcome 1.2:** Increased contribution of agro- and forest landscapes and their ecosystem services to local livelihoods and economic development

- 1.2.1 Agro-forestry promoted on 5,500 ha, including the introduction of Teak and Gmelina plants
- 1.2.2 Enhanced area under community forestry: 300 ha of nurseries to raise seedlings; 5,500 trees in forest plantations and woodlots; 30,000 trees planted in fruit orchards
- 1.2.3 At least 5 alternative income generating activities identified and implemented with local communities, based on climate smart agro-practices

**Outcome 1.3** : Improved management of protected areas in Benin's targeted regions, with concurrent reduction in encroachment and poaching rates of elephants, wild cats, and other threatened specie

- 1.3.1 : Three (3) new wildlife ranches (communal) set up (Zogbodomey, Djidja and Savalou), with improved protected area management effectiveness scores for total 8,000 ha
  - 1.3.1.1: Recruit the International Ranch Expert;
  - 1.3.1.2: Inform and educate communities on ranching (Zogbodomey, Djidja, Savalou);
  - 1.3.1.3: Rehabilitate peripheral managements;
  - 1.3.1.4: Implement the internal management of the 3 ranches;
  - 1.3.1.5: Realize the re-introduction of animals;
  - 1.3.1.6: Conduct ranch monitoring (monitoring plan, brigade establishment, and training);
  - 1.3.1.7: Develop the concession award documents;
  - 1.3.1.8: Carry out the concession awarding;
- 1.3.2: Two (2) protected areas (Kouffé Mountains, Wari Maro) up-scaled to involve communities in the management process
  - 1.3.2.1: Delineate and georeference the three hunting zones (delineation of 50,000 ha per hunting area, milestone setting, opening of tracks and production of seedlings);

- 1.3.2.2: Carry out the development of eco-tourism routes in the Mont Kouffé and Wari-Marou (guiding and eco-tourist routes, Carnoville, Agbassa village, Mont Soubakperou);
- 1.3.2.3: Ensure the monitoring of the central core and hunting areas (monitoring plan and brigade);
- 1.3.2.4: Carrying out IEC on protection of ranches, central core and hunting area;
- 1.3.2.5 Carrying out the study on the identification and empowerment of the tourist offer chain in the project area;
- 1.3.2.6: Conduct the study on the sustainability and empowerment of ranches, central core and hunting areas;
- 1.3.3: Endangered species protected in 2 PAs - endemic species (details in section B)
- 1.3.3.1: Realize the re introduction of animals

**Outcome 1.4** : Capacity enhanced for sustainable forest management (SFM) within local communities to improved local livelihoods and economic development

- 1.4.1 : Capacity development for SFM within districts: # of trainings held in target departments to enhance community awareness and knowledge on forestry issues
- 1.4.2 Community groups formed and trained to oversee community forestry activities (Youth and women groups from villages/districts in the project area will be trained, hunters will be trained for ranch monitoring and the central core, communes, communities and villages will also be strengthened, and dialogue and local consultation between stakeholders will be strengthened).

**Outcome 1.5** : Improved forest management and restoration, with consequent conservation and enhancement of carbon stock

- 1.5.1 : Rehabilitation of 20,000-25,000 ha of forest plantations
- 1.5.2 : Benin National Forestry Code updated
  - 1.5.3 : Forestry Resources Inventories completed for targeted reserves
- 1.5.4 : Early Warning System (EWS) to prevent bushfires installed ;
  - § Conduct spatio-temporal study of bush fire dynamics in MK-MW and ranches;
  - § Conduct the study on fire risk estimation (natural, meteorological, anthropogenic) in MK-MW and ranches;
  - § Conduct the study on the definition, implementation and calibration of equipments for the production of index data;
  - § Conduct the study on the implementation of the system of early warnings of wildfires in MK-MW and ranches;
  - § Carry out the study on the establishment of the structure for the production and dissemination of fire warning in MK-MW and ranches;
  - § Conduct the study on the assessment of response capacity to fire warning in the project area and endogenous alert mechanisms
  - § Develop based on the results of the studies a Standard Operating Procedure of the wildfire Early Warning System (Wildfire EWS) /SOP WF-EWS);
  - § Validate the Standard Operating Procedure of the Wildfire EWS (SOP WF-EWS);
  - § Strengthen the capacities of stakeholders on the standardized protocol for communication and warning diffusion in the event of a forest fire;
  - § Acquire equipment (drones, etc.) for the EWS EWS;
  - § Install Wildfire EWS equipments.

## **Component 2: Greenhouse Gas Emissions Inventory**

This component will build the technical and institutional capacity of local and national authorities to identify degraded forest landscapes and monitor forest restoration, carbon stocks, land use change and other data in the targeted departments. The aim is to support the accelerated adoption of innovative technologies and management practices for GHG emission reduction and carbon sequestration to promote the conservation and enhancement of carbon stocks in Benin central and south forests and forests throughout the central region of Benin. A support to the greenhouse gas inventory will be provided to commit the project to the carbon funds. A study on carbon sequestration in the project area that will lead to the development of quantification models of sequestered carbon in protected areas. As well as a strategy for monitoring carbon stock dynamics.



**Outcome 2.1:** Technical and institutional capacity strengthened to identify degraded forest landscapes and monitor forest restoration, carbon stocks, and other data

2.1.1 Integrated landscape restoration plans with participatory forestry monitoring, reporting, and verification systems established;

2.1.2 Mapping of degraded areas with GIS, and training in targeted departments on forest monitoring to better identify, manage and monitor forest resources and loss.

**Outcome 2.2:** Knowledge on carbon sequestration and accelerated adoption of monitoring practices to support GHG emission reduction and carbon sequestration and to improve the conservation and enhancement of carbon stocks in targeted forests

2.2.1: GHG emissions baseline established for communal forests;

2.2.2: Develop models to quantify and account for sequestered carbon in the Djidja and Savalou ranch complex; Zogbodomey ranch; Mont Kouffé and Wari-Maró forest complex; communal forest plantation;

2.2.3: Quantify carbon stocks in the Djidja and Savalou ranch complex; Zogbodomey ranch; Mont Kouffé and Warimaro forest complex; communal forest plantation;

2.2.4: Develop the strategy for monitoring carbon stock dynamics at the Djidja, Savalou and Zogbodomey ranches; Monts Kouffé and Wari-Maró forest complex; communal forest plantation;

2.2.5: Elaborate the methodology for the submission of communal plantations to carbon credits.

### **Component 3: Project Coordination and Knowledge Management**

This component will oversee the creation of knowledge products which relay information and data generated by the project, M&E documentation, and a dissemination mechanism for such knowledge products, including an online platform dedicated to project results which will serve as a portal for sustainable forest management and practitioners across Benin to coordinate on current interventions and share experiences and best practices.

**Outputs for outcome 3.1:** Enhanced coordination, monitoring and evaluation

- Proper project M&E mechanism and methodology established;
- Participatory implementation and coordination mechanism established to monitor the project
- Elaboration and implementation of a communication, education and information plan
- Project experiences documented and presented in periodic M&E reports;

**Outputs for outcome 3.2:** Project knowledge management aspect enhanced to capture project results

- Knowledge products created and shared on formal website, following a strategy for KM (this comprises workshops to share project experiences) ;
- Relevant stakeholders engaged through a knowledge sharing platform aiming to promote the project experience replication in other country.
- Database for project data established

For coordination, the following activities are planned:

(i) Organization of the strategic and operational planning of the project

- (ii) Coordination of project activities,
- (iii) Administrative, accounting and financial management,
- (iv) Procurement of goods, works and services,
- (v) Establishment of a training and communication plan
- (vi) Monitoring and evaluation of project implementation

The Ministry of Living Environment and Sustainable Development (MCVDD) will be responsible for managing and coordinating the project. It will be supported by a full-time Project Management Unit (PMU) under MCVDD. The PMU will be primarily responsible for the coordination, monitoring and control of project activities.

***A.1.4 : Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing***

The incremental GEF resources will be used to strengthen and consolidate project achievements from the phase I and ensure long term sustainability of project results to advance environmental sustainability in these priority areas. The project's main objective is to support local authorities in implementing effective forest management strategies and practices building on the work implemented during the first phase. Through more effective forest management practices, the project aims to improve the standard of living of local communities, many of which depend on forest ecosystems for their livelihoods. By preserving forest ecosystems and biodiversity assets, the project hopes to also reduce local poverty levels through the maintenance of ecosystem services and encourage the development of more sustainable value chains in the project areas based on forest enrichment.

Without GEF intervention, increasing human pressure and pastoral resource use conflicts increase land and forest degradation, habitat fragmentation, and biodiversity loss. The strong pressure on natural resources also generates various forms of conflict and disputes between different actors and users (between farmers and farmers, between farmers and pastoralists, between fishermen and fishermen, between indigenous / non-native / migrant, between protected area managers) and farmers and / or herders, etc.) who compete for access, control and management of these resources.

The project will contribute to the promotion of green economy value chains, promote good practices in smart agriculture, develop expertise in climate change resilience and disseminate innovative actions that value local knowledge and skills, promote women participation in the sustainable management of natural resources including non-timber forest products.

The baseline project scenario and the added value of the GEF activities are presented as follows:

<b>AfDB Baseline scenario</b>	<b>GEF alternative scenario</b>
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The overall objective of the baseline project is to contribute to the improvement of living conditions of populations in the preservation of forest ecosystems and their biodiversity and the reduction of poverty. Improved conservation at the core will ensure the stability of forest cover and climate regulation, which in turn provide capital for production and agricultural productivity and well-being of populations in the country.

#### Component 1: Natural Resources Management

1.1 Facilities management of wildlife ranches and conservation of biological diversity

1.2 Implementation of 2 PA (Kouffé, Wari Maro ) Management of communal forests and reforestation

The baseline investment focuses on natural resources management of the central and south region's forest resources, including wildlife assets. It will finance the construction of infrastructure in these areas and support biodiversity protection through conservation, reforestation, and sustainable forest management practices.

Construction of social infrastructures (school, hospital, etc)

Training of rangers and hunters

#### Component 2: Technical and Institutional Support

2.1 Rehabilitation of infrastructure around the central forested and ecological area

2.2 Strengthening capabilities (Support for the development / updating of policies and forestry and to the study of the early warning system for wildfires)

2.3 Improving the welfare of populations through community level technical assistance

The baseline investment is centered on infrastructure rehabilitation and development. It will finance ecological and social infrastructure in the region as well as the development of forest management plans and policies around the wildlife parks, protected areas around the communal forests, and the surrounding forest areas.

#### Component 3: Project Management and Coordination

Activities under this component include: (i) Project coordination; (ii) Administrative and

In the GEF alternative scenario, the focus is on social and environmentally sustainable forest management by strengthening and improving the capacity of forest preservation.

Component 1: Improving sustainability management of forest and wildlife ecosystems in the departments of borgou and donga

*Outcome 1.1 : Improvement in Benin's forest ecosystems in targeted departments, with an increase in total area protected and reduced pressure on high value forests*

*Outcome 1.2: Increased contribution of agro- and forest landscapes and their ecosystem services to local livelihoods and economic development*

*Outcome 1.3 : Improved management of protected areas in Benin's targeted regions, with concurrent reduction in encroachment and poaching rates of elephants, wild cats, and other threatened species*

The GEF project will ensure improved management effectiveness of these protected areas, develop local capacities for sustainable forest management, and support alternative livelihoods away from traditional agricultural practices to generate incomes from ecosystem based services in the area. The aim is to create a conducive environment which will support the growth of alternatives income activities in the area for the observation of wildlife in the three protected zones.

The GEF financing will be used toward a number of supporting and improving protected area and capacity building activities among local communities. The project will implement activities to support the development of green activities in the protected areas and conserve biodiversity while ensure that production methods are sustainable, such as agroforestry and fish farming.

Component 1: Improving sustainability management of forest and wildlife ecosystems in the departments of borgou and donga

*Outcome 1.4 : Capacity enhanced for sustainable forest management (SFM) within local communities to improved local livelihoods and economic development*

*Outcome 1.5 : Improved forest management and restoration, with consequent conservation and enhancement of carbon stock*

The GEF financing will support the implementation of sustainable forest management plans which were formulated under the PAGEFCOM I for the three Departments which were included under the first phase. It will identify revenue generation activities so as to ensure a sustainable funding source for this endeavor, while improving the management effectiveness of forest areas in the targeted departments.

#### Component 3: Greenhouse Gas Emissions Inventory

The GEF financing will build technical and institutional capacity of local and national authorities to identify degraded forest landscapes and monitor forest restoration, carbon stocks, and other data in the targeted departments. The aim is to support the accelerated adoption of innovative technologies and management practices for GHG emission reduction and carbon sequestration to promote the conservation and enhancement of carbon stocks in Benin central and south forests and forests throughout the central region of Benin.

The GEF financing for climate change mitigation will enable local institutions to improve

To this end the GEF financing will support the implementation of sustainable forest management plans which were formulated under the PAGEFCOM I for the three Departments which were included under the first phase. In these priority areas, technical capacity of relevant stakeholders will be strengthened, the sustainability of value chains will be strengthened, biodiversity and ecosystem services will be preserved and valorized, and climate change activities will be implemented for resilient landscapes and livelihoods.

In the GEF alternative scenario, the focus is on social and environmentally sustainable forest management by strengthening and improving the local capacity for forest preservation through the implementation of participatory management models. GEF financing through the proposed activities will improve management effectiveness of target protected areas, strengthen local capacities for sustainable forest management, and support alternative livelihoods away from traditional agricultural practices to generate incomes from ecosystem based services in the area. The aim is to create a conducive environment which will support the growth of alternative income activities that promote sustainable livelihoods through the promotion of nature based tourism activities in the three protected zones.

The GEF financing will support a number of capacity building activities among local communities to strengthen effective participation in the co-management of protected areas. Further, the project will implement activities to support the development of green activities in the protected areas and conserve biodiversity while ensure that production methods are sustainable, such as agroforestry and fish farming.

The GEF financing will build technical and institutional capacity of local and national authorities to identify degraded forest landscapes and monitor forest restoration, carbon stocks, and other relevant data in the targeted departments. The aim is to support the accelerated adoption of innovative technologies and management practices for GHG emission reduction and carbon sequestration to promote the conservation and enhancement of carbon stocks in Benin central and south forests.

The GEF financing for climate change mitigation, will enable local institutions to improve their capacities to collect accurate baseline and emissions data from this region, as well as to develop estimation of existing carbon stocks, and carbon stock tracking in regional forests resulting from the implementation of this integrated sustainable forest management project.

#### ***A.1.5: Global Environmental Benefits and/or adaptation benefits (LDCF/SCCF)***

The project will deliver global environmental benefits (GEBs) across three focal areas, namely: Biodiversity, Land Degradation and Climate Change.

**Climate Change.** In adherence with CCM-2, Program 4, this project aims to address the drivers of deforestation, and, de facto, emissions linked to deforestation and land use changes, and to support Beninese institutions to increase their capacity to improve the accuracy of GHG emissions estimates from LULUCF and forestry. The baseline project with GEF co-financing will strongly contribute to Benin's NDC goal as regards to the reduction of CO<sub>2</sub> and other GHG emissions (-32% by 2035) in accordance with the Paris Agreement and other decisions under the United Nations Framework Convention on Climate Change (UNFCCC). Moreover, it will have significant global environmental benefit in terms of CO<sub>2</sub> emission sequestration resulting from the promotion of SFM and plantation, while interventions under the baseline project are expected to replicate low carbon forest management models. Carbon sequestration estimation studies are planned by the project at the incipient stages of the project. The project will then facilitate the active engagement of local communities in the carbon market with reliable emission reduction estimates.

**Biodiversity Conservation and Land Degradation.** Planned activities under Component 1 Sustainable Management of Natural forest and wildlife, will contribute to the sustainable management and conservation of Benin's forest ecosystems and protected areas in targeted departments. Relevant GEBs will include an increase in total area protected and reduced pressure on high value forests, biodiversity and associated ecosystem services.

As described for Indicator 3.1, the area of degraded agricultural land to be restored corresponds to 5,500 ha (Agro forestry for output 1.2.1 ) and 5,300 ha (enhanced community forestry for output 1.2.2) leading to a total of 10,800 ha. For Indicator 3.2, the area of forest and forest land restored corresponds to the rehabilitation of 20,000-25,000 ha of forest plantations under component 1. Since the exact number has not yet been determined at this stage, an average of 22,500 ha was indicated. Regarding indicator 6.1, according to the results of the EX-ACT tool, the project activities will yield a balance of emissions avoided of 1,713,387 tCO<sub>2</sub>eq per year, which corresponds to 7,719,012 tCO<sub>2</sub>eq over the lifetime of the project and 41,121,290 tCO<sub>2</sub>eq over the accounting period of 20 years post-project (including the 4 years duration of the project).

#### ***A.1.6 : Innovativeness, sustainability and potential for scaling-up***

The proposed project is innovative as a result of a number of aspects:

- Its integrated approach. The project combines SFM, land use planning, income generating activities development and forest management to ensure impact and results.
- The project contributes to the implementation of a number of conventions (NDC, UNFCCC, Minamata Convention) by creating linkages and co-benefits;
- The project combines capacity building activities (soft activities with indirect environmental benefits) with operational investments (hard activities with direct and quantitative environmental benefits);
- The project addresses forest management as a sector that can contribute to creating employment and incomes for the populations at different levels along its value chain, promoting the green economy of forest in Benin.

**Sustainability** is ensured through the provision of technical and institutional support and the execution of training programs for key stakeholders aimed to create capacity and ensure institutional memory. Additionally, financing mechanisms will be established within regional forest management plans, to ensure that sufficient funding will be available to continue the measures initiated under this project. The project comprises an important number of outputs and activities with both environmental and socioeconomic benefits. The project targets young men and women at local level as prime stakeholders. The knowledge management outputs will help in sharing the project results and replicate them. Many outputs and activities are planned as demonstration and pilot actions; experience will serve to determine best practices to be replicated. It is also important to note the project support rural communities in the SFM and alternative activities. In case of success, these stakeholders will be able to scale up and replicate activities.

**Scaling up:** The GEF project will provide technical skills in SFM and other farming/forestry practices that promote both sustainability and increased agricultural productivity in the project area. The activities will be closely monitored and evaluated with successful initiatives replicated and up-scaled. Effective alternative livelihood options will be demonstrated and greater emphasis will be given to upscaling successful practices. The project achievements under PAGEFCOM1 will be scaled up under this phase. This proposed project is meant to scale up strong forest management practices implemented under the PAGEFCOM I project. This project will implement plans which were designed under the first phase of the baseline while addressing integrated environmental issues to maximize global environmental benefits. Lessons from the outcomes of this project can be applied in other protected areas throughout Benin and in forest landscapes throughout the region which suffer from similar root problems.

**Innovation:** The integrated approach that will be implemented through the project coordinated between government institutions and communities will provide an innovative example that is expected to generate important lessons at the national and local level particularly among the targeted regions. While LD and SFM strategies themselves are not innovative, projects integrating these with CCM and BD activities with an alternative livelihood approach are not widely practiced. The proposed project will work at the government, community, and individual levels to generate capacity and incentives for improved SFM. The GEF project will also enhance innovation and the scaling up of interventions through the participatory and replicable nature of its approach on the ground. Moreover, it will facilitate exchange of knowledge across the 5 targeted departments, thus facilitating up-scaling amongst them in order to promote green economy. Most of the works will be very little mechanized, so the impacts on the environment will be relatively limited. The few minor to moderate negative effects and impacts identified could be mitigated by ESMP measures and by the measures and activities already foreseen by the project (reforestation program,

application of good practices, EIC program and capacity building, improvement of value chains, promotion of non-timber forest products, establishment of a fire early warning system and an environmental services payment mechanism, etc.).

The development of the exit and sustainability strategy (ranching, PES, early warning) will make it possible to use the success formulas encountered in the project intervention area. This PAGEFCOM II pilot model will be replicated to all other forest areas.

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[MA1] This title does not really fit with the text below

#### **A.2. Child Project?**

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

Not applicable.

#### **A.3. Stakeholders**

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

Key stakeholders were involved in the preparation of the project at many levels (collection of data, formulation of objectives, activities and results framework, validation of the project documents, etc.).

As part of the formulation of the Project, a series of stakeholder consultations were conducted in Benin (the list of people met is available in annex). These consultations started with working sessions with the authorities in charge of environmental policy and technical services in Cotonou, followed by a series of other meetings and consultations with the local communities and grassroots communities concerned and the stakeholders involved in the implementation of the project. The objectives of these consultations were to inform the stakeholders about the project, involve them in this formulation phase, and collect and integrate the suggestions and recommendations of the stakeholders that could optimize the implementation of the project. These meetings also made it possible to collect complementary data on the project and its area of influence.

A working session was held with the GEF Operational Focal Point and the officials of the Benin Environment Agency (BEA), who were informed of the project objectives and targeted areas. The BEA made various information available and undertook to accompany the project to comply with the regulations in the field of environmental and social assessments, but also in the implementation of the project.

A working session was also held on September 03, 2018 with the Gender Unit of the Ministry of Supervision of the project, which provided information on their mission and highlight the need to involve the Unit in the Monitoring Committee GEF/ PAGEFCOM, to better take into account the gender dimension and the empowerment of women in the implementation of the project.

A global validation workshop (Cotonou, 11 September 2018), gathering all stakeholders on the priorities and implementation mechanisms of the Project (PAGEFCOM-II), closed the process of consultation. This meeting with the stakeholders helped to clarify and confirm the objectives, axes and areas of intervention of the project and also to collect important contributions to optimize the implementation of the project. From all these consultations, it emerged that the project meets the expectations of the Government, local communities, communities and elected representatives and grassroots communities.

According to the different actors, the continuity of the phase 1 of this project of reforestation and natural resources management should improve the living conditions of the populations, the capacity building in the field of the management of natural resources, etc. Representatives of local authorities insisted on strengthening communal plantations, setting up alternative activities (the establishment of game farms, the development of the blue economy); the development of ecotourism, the improvement of the conditions of access to certain biodiversity sites; etc.

In term of involvement of stakeholders in the project implementation, the PAGEFCOM1 steering committee will be maintained and used to monitor the second phase. The PAGEFCOM1 steering committee (COS) is chaired by the MAEP (Ministry of Agriculture, Livestock and Fisheries) or his representative and comprise a representative of each of the Ministries of (i) Environment, Housing and Town Planning (MEHU/DE); (ii) Finance and Economy (MFE/CAA); (iii) Planning and Development (MECDP/DCRE); (iv) Interior, Security and Decentralization (MISD/Chairperson of the Decentralization Mission); and (v) Family, Social Protection and Solidarity (MFPSS/DPF). Local NGO and civil society organizations (CSO) will seat as observers and provide guidance and inputs. The COS will meet at least once a year in ordinary session.

Village communities: implementation of local community infrastructure in villages will be carried out by local groups with shared interests in forest management and professional agricultural organizations grouped together within Village Committees. These Committees will act as delegated contracting authorities of Communes on the basis of agreements. They will intervene at all stages of planning and programming in accordance with the participatory approach which will be adopted by the Project.

During the mission of September 2018, all the state structures involved in the memorandum of understanding (MOUs) with the project were met. We noted a strong enthusiasm and a desire for appropriation and result.

The field visits allowed to interact with local communities, dignitaries, customary and religious leaders, local authorities and the forestry administration in the field. Please see photos and summary table.

A national CEO Endorsement validation workshop was held on Tuesday, 11 September in Cotonou with around 80 participants representing all stakeholders.

### **PAGEFCOM II Stakeholder mapping**

<b>Stakeholders</b>	<b>Roles and responsibilities</b>	<b>Mandate</b>
DPP GEF focal point	Monitor projects and participate in the GEF process	
COFORMO (Community driven Management Association of municipalities in the project area)	Implementation of the project in the field	MOU with PAGEFCOM II
Directorate General for Water Forestry and Hunting (DGEFC)	Administers the country's natural resources, manages the public forest estate and controls the exploitation of forests	MOU with PAGEFCOM II for technical activities
Local Forest Inspections (Cantonment of the DGEFC)	Oversee and enforce regulations for the exploitation and conservation of biological and forest resources	Promote the sustainable use of local forests and biodiversity resources

Stakeholders	Roles and responsibilities	Mandate
Municipalities / Mayors	Define the direction and implement the local development strategy for forest and natural resources located within the limits of their municipality	Promote the sustainable use of local forests and biodiversity resources MOU for forest management
Regional Directorate of Waters and Forests : Parakou, Abomey	Implementation of the project in the field	Partnership with PAGEFCOM II
Laboratory of Applied Ecology LEA (University of Abomey-Calavi / Faculty of Agricultural Sciences)	Research activities development	MOU with PAGEFCOM II
Ministry of Agriculture MAEP / Livestock Directorate-Fisheries Directorate	Promotes research related to the preservation and sustainable use of renewable natural resources, Support for the implementation of alternative blue economy activities	MOU with PAGEFCOM II
Department of Commerce / trade direction	Ensures the institutional strengthening of structures promoting shea and beekeeping	Assist project community associations
CENATEL (National Remote Sensing Center)	Manages mapping databases of forest resource and monitors environmental changes, Support wildfire EWS	Geographical Information System of Forest Resources
Benin METEO (Meteorological service)	Manages weather databases, mapping natural resources and monitors environmental changes, Support wildfire EWS	MOU with PAGEFCOM II for EWS
ABE (Benin agency for environment)	Promotes and offers assistance in the implementation of projects related to forest management and use Monitoring the implementation of the ESMP, Environmental monitoring of the project	MOU with PAGEFCOM II Biodiversity preservation and forest management
Local authorities / municipalities	Project management of the areas Reforestation actions	Partnership with PAGEFCOM II
Community economic interest groups (farmers, breeders, beekeepers, shea processor, fish farmer)	Promotes the development of economic activities to generate employment and income	Poverty reduction
Traditional leaders (King / Head of land)	Traditional authority over forests and land as guardian or steward. Provides protection and facilitates access to forest resources according to rituals	Protection of forests and sacred sites used for traditional and religious rituals (continuity of power before colonization and the population gives them a lot of credit)
Religious Dignitary (Priests of Voodoo)	Perform rituals and ceremonies related to voodoo religious practices in sacred forests	Protection of cultural and religious traditions
Chief of the village	political authority over the forest resources of the village	Conservation of resources Natural
Forest Management Committee	Organizes monitoring of forest resource use	Conservation of forests and their resources
Hunters Association (community organization)	Manages wildlife resources (game) inhabiting buffer zones and forests	Reduction of poverty and food insecurity



## 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.**

**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 PAGEFCOM1 steering committee (COS) is chaired by the MAEP (Ministry of Agriculture, Livestock and Fisheries) or his representative and comprise a representative of each of the Ministries of (i) Environment, Housing and Town Planning (MEHU/DE); (ii) Finance and Economy (MFE/CAA); (iii) Planning and Development (MECDP/DCRE); (iv) Interior, Security and Decentralization (MISD/Chairperson of the Decentralization Mission); and (v) Family, Social Protection and Solidarity (MFPSS/DPF). Local NGO and civil society organizations (CSO) will seat as observers and provide guidance and inputs. The COS will meet at least once a year in ordinary session.

Village communities: implementation of local community infrastructure in villages will be carried out by local groups with shared interests in forest management and professional agricultural organizations grouped together within Village Committees. These Committees will act as delegated contracting authorities of Communes on the basis of agreements. They will intervene at all stages of planning and programming in accordance with the participatory approach which will be adopted by the Project.

In addition, the mechanisms of communication and capitalization of project results, the process of generating value for the benefit of women and youth through the development of value chains, as well as participatory and civil society involvement assessments integrated into the project implementation mechanism will also participate in knowledge management.

#### 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).**

Women are key target beneficiaries of both the GEF project as well as the baseline investment. All project activities are designed with the aim of having a positive impact in empowering women. Key project outcomes include: (i) Reduction of time and labor intensiveness of household chores by ensuring the availability of harvested forest resources in close proximity to households; (ii) Increased capacity for training and educating women on activities related to sustainable forest management and conservation; (iii) Improved overall health due to healthcare centers and other social infrastructure (schools, primary care centers, roads and paths) built under the baseline investment. Additionally, forest management activities will create opportunities for generating alternative incomes from the production and sale of processed forestry products such as shea butter, fruits, and vegetables, which will subsequently improve standards of living as a whole.

Surveys have confirmed that women are fully involved in the management of natural resources and that these resources provide them with a significant share of income (gathering of NFPs, collection of firewood, processing and marketing of productions, etc.). The degradation of natural resources has a significant impact on women's living conditions. The consultations also revealed the need to strengthen their involvement in the implementation of the project, to consolidate the achievements of the first phase by increasing and diversifying the NTFP processing units, strengthening their management capacity, etc. The specific needs of women, their views and concerns should be well articulated and taken into account during project implementation, particularly with regard to capacity building programs and value chain improvement. During implementation, the project plans to ensure that women are represented at all decision-making levels.

In the project area, women heads of households represent 15% in the 3 departments. The social climate between land holders and farmers is enhanced by the emergence of long-term land contracts for women and women's groups. The project will continue to focus on rural activities that are usually popular with women, and for which they have recognized a know-how (market gardening, rice growing, processing, marketing, etc.) and from which they can earn income. A "market gardening perimeters" component will be implemented specifically for women, including securing land for sites developed for their benefit. In general, the project will promote gender mainstreaming in all components including equitable access to capacity building resources and activities. The project will ensure that women access inputs (35% of developed land and 60% of processing and marketing equipment and materials), technical, vocational and organizational training (50%) and equitable access to the 17 planned financial services under the project (50%). It will contribute to the organization of women in cooperatives and the installation of young entrepreneurs in the agricultural sector (50%). The project will ensure that women occupy at least 30% of the decision-making bodies of the management committees to be set up.

The Programming and Prospective Department of the MCVDD will monitor the equitable consideration of gender in the management as well as the benefits of the project. It is also planned to establish a monitoring and evaluation system based on gender-disaggregated data as well as gender-related indicators based on gender analysis in the departments. Project Management Structures and gender stakeholders will be supported through capacity building with donation of work equipments. The gender component will be implemented with the decentralized structures of the Ministry in charge of Gender. The budget allocated for gender activities is UA 3.27 million, or 39% of the budget.

#### 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**

A "market gardening perimeters" component will be implemented specifically for women, including securing land for sites developed for their benefit. In general, the project will promote gender mainstreaming in all components including equitable access to capacity building resources and activities. The project will ensure that women access inputs (35% of developed land and 60% of processing and marketing equipment and materials), technical, vocational and organizational training (50%) and equitable access to the 17 planned financial services under the project (50%). It will contribute to the organization of women in cooperatives and the installation of young entrepreneurs in the agricultural sector (50%). The project will ensure that women occupy at least 30% of the decision-making bodies of the management committees to be set up.

**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;**

**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?**

TBD

The Programming and Prospective Department of the MCVDD will monitor the equitable consideration of gender in the management as well as the benefits of the project. It is also planned to establish a monitoring and evaluation system based on gender-disaggregated data as well as gender-related indicators based on gender analysis in the departments.

#### **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.**

This table below presents these risks and states the measures to mitigate them:

Description of risk	Ranking	Mitigation measures
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Description of risk	Ranking	Mitigation measures
NTFP processing Pollution risk Risk of accident Non use of appropriate operating techniques Risk of increasing pressure on natural resources	Moderate	Organization of actors and capacity building Implementation of good practices Information and awareness Environmental monitoring
Beekeeping promotion Risks related to inappropriate operating practices	Moderate	Application of good practices Professionalization and improvement of techniques. Organization of actors, capacity building and improvement of operating systems (hive and appropriate and adapted equipment)
Fish farming Competition with other uses of water Risks of overexploitation of resources : Rather valid for fishing, Risks of deterioration of water quality (pollution by inappropriate fertilizers, deoxygenation, accumulation of ammoniacal nitrogen etc.). Risks of dynamic disturbance of the ecosystems of water bodies Impoverishment and risk for local populations with the introduction of alien species or new species	High	Application of good practices Establishment of semi-extensive fish models integrating in particular the natural richness of the ponds Choice of local species of fish Favor the use of organic fertilizers (from local by-products, corn rice sounds, etc.) Organization of actors and capacity building ; Information and awareness Set up a pilot project to identify problems and learn from experience Environmental monitoring
Development and concessioning of wildlife ranches Restricting people's access to natural resources Risks of frustration and conflict if riparian populations do not benefit from the benefits of the activity Risk of conflict with livestock activities Risk of disease transmission from livestock to wild animals	High	Establishment of consultation frameworks Association of local communities in the implementation of the project Information and awareness Provide local residents with the benefits of the project, support to improve the rate of access to basic socio-economic facilities ; give them priority jobs for all low and medium technical positions, etc. Privilege the High Intensity Labor Force (HILO/HIMO) approach; Animal prophylaxis, vaccinations, veterinary checks Environmental Monitoring
Strengthening infrastructure (tracks rehabilitation and completion of unfinished facilities PAMFI) Deforestation of ways Discomfort and nuisances (noise, dust and production of construction waste) during the works	Moderate	Application of good practices Give priority to the recruitment of premises and the HILO approach;
Eco tourism Risk of site degradation and ecosystem disturbance Risk of pollution, fire, etc. :	low	Information and awareness Supervision of visits, delimitations and supervision of circuits Development and equipment of rest areas in garbage cans, etc.

#### A.6. Institutional Arrangement and Coordination

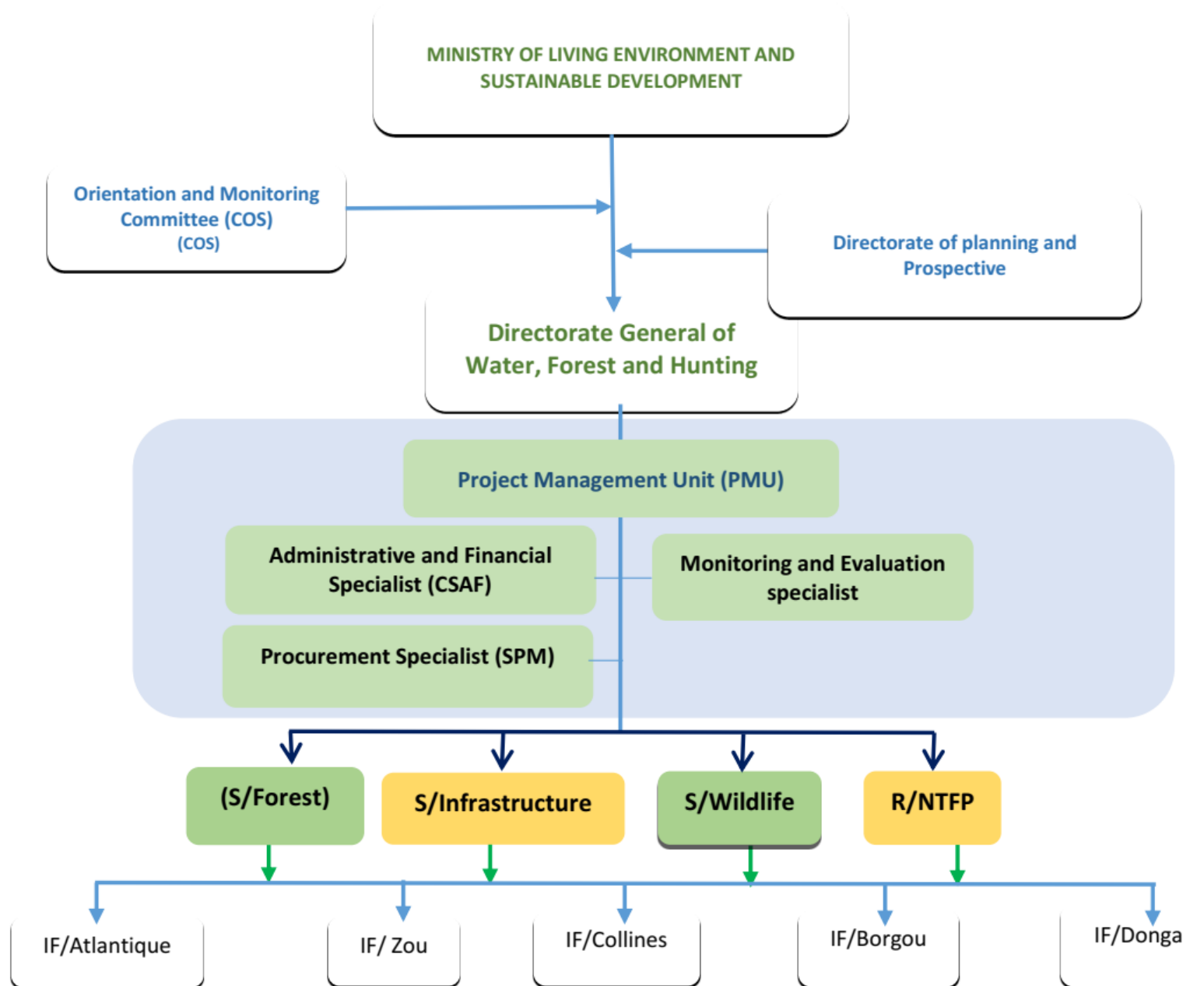
**Describe the Institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.**

Partnership support for PAGEFCOM was developed within the context of annual reviews for priorities in Benin's Growth and Poverty Reduction Strategy (GPRS), led by the Committee for Investments and Development Financing (DGIFD) in the Prime Minister's office, which oversees all economic development issues.

Government partners are engaged in addressing key themes in the GPRS, which include: (i) monitoring and evaluation; and (ii) macroeconomics and management of public finance. This is done through a coordination framework which includes 12 sectoral groups to ensure complementarity and participatory exchange. A joint annual review with technical and financial government partners is conducted biannually. At the sectoral level, coordination of development initiatives is overseen by the Ministry of Climate Change Management, Reforestation and the Protection of Natural and Forest Resources.

The Bank's Benin field office actively participates in the above meetings and exchanges with development partners, including the UNDP, the World Bank, IFAD, BOAD, GIZ, BTC, the government of the Netherlands, the EU and the FAO. Other members of the Environment Working Group involved in this project act as advisors, and provide a strong knowledge network for which this proposed GEF project can draw from and build on.

*Figure : Diagram of project implementation*



As shown in the above figure, the Project will be managed by the Project Management Unit (PMU) of PAFEMCOM II which will be attached to the Directorate General of Water, Forests and Hunting (DGEFC), under the supervision of the Ministry of the Living Environment and Sustainable Development (MCVDD ) and having its headquarter in Cotonou. The PMU will be primarily responsible for the coordination, monitoring and control of project activities. It will be composed as follows: (i) a Project Coordinator; (ii) an Internal Monitoring and Evaluation Specialist; (iii) a Forestry Specialist; (iv) a procurement specialist; (V) a wildlife specialist (VI) an infrastructure specialist (v) a chief administrative and finance officer (v) an accountant.

The wildlife specialist and the specialist monitoring and evaluation are the only staff supported by the GEF.

An Orientation and Monitoring Committee (COS) has been set up to monitor and guide project activities. The COS is consisted of representatives of the Ministry of Planning and Development (DGFD), the MCVDD (DGEFC & DPP), the Ministry of Economy and Finance (CAA). The COS is chaired by the Minister of Living Environment and Sustainable Development (MCVDD) or his designated representative, and the secretariat is headed by the project coordinator.

**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)?**

The expected benefits of the project are focused on improved vegetation cover and promotion of the green economy, including:

- (i) sustainable promotion of value chains of non-timber forest products (NTFPs), such as shea kernels, honey (beekeeping), néré pods, zaban fruit, Baobab fruit , the fruits of Detarium, the pods of Acacia, the leaves and the barks used in the traditional medicine;
- (ii) promotion of the blue economy (pond fish farming, floating cage and off-ground tanks);
- (iii) additional agricultural production through climate smart farming, for productions in the project area benefiting from climate regulation by forest cover and regarding products such as maize, cassava, cowpea, rice, onion, tomato, etc. ;
- (iv) improving the ecological balance and maintaining a habitat conducive to wildlife development that also offers environmental opportunities;
- (v) improving the well-being of the population by preventing drought and famine, improving food security, reducing the medical bill with the regulation of climatic conditions, reducing the hardship of work of the population and families, especially women and vulnerable groups, improving people's life expectancy, better incomes for access to health care and education, etc.
- (vi) improvement of animal and livestock production, because of the quality and abundance of pasture and water; (vii) spin-offs from carbon sequestration (carbon credit);
- (viii) the creation of temporary and permanent jobs, resulting from project achievements.

To this end, it is planned to implement a major program of activities in the field of natural resources management, which will focus on reforestation activities (plantations and forest enrichment); information and awareness-raising and capacity building; promotion of value chains, etc., which will have considerable positive effects and impact on the natural and human environments and will also contribute to improving the resilience to climate change of the ecosystems of the areas targeted by the project .

These effects and major positive impacts on the natural environment will occur through the restoration of the forest cover; recreation of natural habitats; better conservation of biodiversity; soil conservation and regeneration; reducing greenhouse gas emissions and increasing carbon sequestration capacity, strengthening the fight against desertification, .etc.

Moreover, the discrimination of certain categories (women and young people in particular) and the non-involvement of the grassroot population and local elected representatives could also compromise the achievement of the objectives set by the project. However, these impacts will be mostly minor to moderate. Project activities will not result in involuntary resettlement or resettlement or significant asset losses.

**Positive Project Impacts:** To a large extent, project activities will contribute to improved natural resource management and climate change resilience of ecosystems and communities in project-targeted areas. The project will have major positive effects and impacts on vegetation replenishment; protection, conservation and sustainable management of natural resources and biological diversity, improvement of ecosystem resilience to climate change and variability, conservation and regeneration of soils, reduction of gas emissions contributing to the greenhouse effect, increasing carbon sequestration capacities, strengthening the fight against desertification, etc.

PAFEMCOM-II project interventions will contribute to improving the productivity of agricultural, silvicultural, pastoral and fisheries production systems, thereby improving household production and food security, reducing poverty and promoting employment of young people and women. The project will also contribute to the reduction of potential sources of conflict between communities for access to land and the use of space (especially with regard to transhumance).

The project has provided for a major program of support and capacity building of the populations in the management of natural resources, which will also make it possible to prevent recurring conflicts and disputes in the zone of influence of the project, concerning the use of natural resources, natural resources and space management. In addition, the project promotes the employment of young people in project activities, through short training courses and internship.

#### **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.**

This project includes a dedicated component for knowledge management and project coordination and a detailed KM plan will be developed at CEO endorsement phase. KM will be focused on a Web platform onto which relevant M&E data and project results will be made available, following an Open Data policy. This is meant to encourage interaction and input from development partners and increase awareness of the project in the case that any relevant initiatives are being developed in the region.

An estimated 11% of the GEF IW allocation (for components 1 to 3) will be used to strengthen the technical and administrative capacity of local and national institutions across the natural resources management spectrum, to ensure that their capacity and effectiveness is improved. This will contribute to increasing the impacts of other aspects of the project as the resources will be more effectively deployed as institutional capacity deficits are reduced. The project will build social capital by working, wherever possible through existing local structures that have established norms and procedures for cooperation, and through local champions who can serve as ‘multipliers’ in the community. The project will work through partnerships that recognize different skills and comparative advantages.

Transboundary learning mechanisms, Knowledge Management (KM), communication, consultations and awareness building activities will be undertaken at community, national and basin levels.



Experiences will be shared through the establishment of websites, bi-annual GEF conferences, regional meetings, IW: LEARN, technical papers, video, technical forums and other relevant forums. Training and consultative workshops will be organized to sensitize stakeholders on climate change issues and the strategies to enhance climate resilience of communities.

Some studies of Phase I will be updated as part of the finalization of the core documents. The PAFEMCOMII will generate knowledge on: (i) ranches, in terms of design and management in partnership with the private sector; (ii) forestry and early warning system (EWS); and (iii) biodiversity. The project will develop local expertise in forest ecosystem management, biodiversity, non-timber forest products, green economy and blue economy development, resilience and adaptation capacity building of local communities to the recurrent effects of climate change, from the mastering of management by the local communities of natural resources.

PAGEFCOM-II will establish a baseline situation based on field surveys (including value chains), that will be used to build a reliable gender-disaggregated database to measure project outcome and impact indicators. A geo-referenced map will be produced to inform on the sites facilities and infrastructures developed. Specific impact evaluation studies (rapid and complete) will be carried out by competent firms and the results will feed into the existing database. This information will be made available on the GEF website and shared with all stakeholders. The project will also support the training and the consolidation of knowledge of the various local actors, first and foremost the communes, the rural women involved in the processing and marketing of non-timber forest products and natural resources. The project will focus on disseminating good practices of climate smart agriculture. The project will also develop expertise in climate change resilience and disseminate innovative actions promoting local know-how, including that of women, in the development of natural resources, including non-timber forest products. The mechanisms of communication and capitalization of project results, the process of generating value for the benefit of women and youth through the development of value chains, as well as participatory and civil society involvement assessments integrated into the project implementation mechanism, also participate in knowledge management.

#### **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 Benin's National Communication (2005 and 2015)**

The initial and second National Communication (NC) of Benin clearly state the main sources of GHGs of the country comprising emission from agriculture, energy and the measures to reduce them. They also comprise adaptation strategies and actions against climate change.

##### **Alignment with Benin's NAP (2008):**

The National Adaptation Plan (NAP) to climate change of Benin comprises many programmes and measures concerning energy, agriculture and forest management and agriculture. Benin NAP recommends:

- Strengthening the capacities of communities bordering forests for the prevention and fight against wildfires, support for the participatory management of gallery forests and non-gallery forests
- Support for communal plantations, promotion of agroforestry, and promotion of income-generating activities

The Republic of Benin is one of the Least Developed Countries (LDCs) whose greenhouse gas (GHG) emissions are estimated at about 6251 Giga gram CO<sub>2</sub> equivalent (Gg E-CO<sub>2</sub>), or about 1 tonne of E-CO<sub>2</sub> per capita in 2000, land allocation, land-use change and forestry (LULUCF) sector excluded. These emissions come mainly from the Agriculture and Energy sectors. Taking into account the LULUCF sector, the GHG emissions and removals report shows that Benin is globally a GHG sink with an absorption capacity of 5082 Gg E-CO<sub>2</sub> in 2000, that is to say that its emissions GHGs are largely offset by the uptake of CO<sub>2</sub> in its forest cover. Although Benin remains a sink, its ability to sequester carbon, or even CO<sub>2</sub> absorption, at the level of its vegetation cover decreased by 14% between 1995 and 2000.

#### **Summary of Intended Benin Determined Contributions (INDC) in line with the project:**

Benin is a signatory to the UN Framework Convention on Climate Change (UNFCCC), and several member belong to the Least Developed Countries (LDC). The INDC of Benin is summarized in this table, demonstrating a firm commitment of Benin to contribute share to the achievements of the COP21 targets and objectives. The PGEFCOM II and GEF project will assist Benin towards the attainment of its COP21 targets.

Adaptation to climate change is an important aspect of this climate strategy which is presented as an opportunity for the development of Benin.

Actions planned by the INDCs: Promote public, communal and private plantations covering an area of 100,000 ha from 2016 to 2030. Promote alternative activities to the exploitation of forest resources. Program for the Management and Sustainable Management of Classified Natural Forests.

The expected impact of these mitigation efforts is estimated to avoid emissions at 120 Mt Eq-CO<sub>2</sub> and to sequester 163 Mt CO<sub>2</sub> from 2020 to 2030. Carbon sequestration, due to national reforestation / planting efforts, is the unconditional contribution of the Republic of Benin.

#### **Aichi targets**

The proposed project is also aligned with the Aichi Biodiversity Targets and will contribute to their achievement, particularly:

#### **Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society**

- Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably
- Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting
- Target 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

#### **Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use**

- Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced

#### **Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services**

- Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained

#### **Several other strategies in Benin are perfectly in line with PAGEFCOM II:**

The PAG (2016-2021) has planned several actions and reforms to "relaunch in a sustainable manner the economic and social development of Benin" including the development and implementation of adaptation measures, mitigation and disaster management through further implementation of the NAPA, forest protection, reforestation and greening initiatives at the municipal level, the fight against coastal erosion, a strategy for climate-smart agriculture, the promotion of rational and sustainable management of natural and forest resources, etc.

The PSDSA and its investment plan (PNIASAN) base their actions on five priority axes namely: (a) improvement of the productivity and production of plant, animal and fishery products of agricultural sectors; (b) promoting and equitably structuring value chains, animal and fish products in priority sectors; (c) strengthening the resilience of farms to climate change and improving the food and nutrition security of vulnerable populations (nutrition, safety nets, etc.); (d) the equitable improvement of governance of the agricultural sector and food and nutrition security; and (e) the establishment of appropriate and accessible financing and insurance mechanisms for different types of agricultural holdings and categories of farming. actors in agricultural sector links, including women, young people and young entrepreneurs (PSDSA, PNIASAN, 2017).

The Environmental Action Plan (EAP), developed and implemented since June 1993, is the national environmental policy and strategy adopted in June 1994 and aims at: (a) behavioral change, including raising the standard of living and awareness of all Beninese, (b) mastering the evolution of natural resources and better management of biodiversity (c) improving the living environment of all Beninese.

National Climate Change Adaptation Plans (NAPs) aimed at: (i) reducing vulnerability to the impacts of climate change by enhancing adaptive capacity and resilience; (ii) integration of adaptation in a coherent manner into relevant ongoing and new policies, programs and work, especially development planning strategies, in all relevant sectors and at different levels, as it suits

The National Strategy for the Promotion of Climate Smart Agriculture (ACI), currently being adopted, includes: (a) strengthening the legislative and regulatory framework related to climate change and improving the coordination of related climate change interventions; (b) strengthening the resilience of farming systems and ecosystems (promotion of CSA practices and co-management practices of ecosystems) and (c) reduction of GHG emissions in the agricultural sub-sectors.

The "Benin 2025" vision and the Government Action Plan GAP (2016-2021) are also consistent with the Bank's 10-year strategy for green growth, which integrates the issue of sustainable growth, through the protection of resources and promoting the sustainable use of natural resources as a source of innovation and job creation, including green jobs. The Bank has also taken the option of accompanying Benin, in the context of the "Benin 2025" vision and the GAP 2016-2021, by including in the Country Strategy Paper (CSP-2012-2016) the promotion of good governance in pillar II. The third specific objective of this pillar concerns, inter alia, "capacity building for the adequate implementation of policies on adaptation to climate change". The project is also in line with pillar I of the CSP, in its result 2 on strengthening infrastructure for increased competitiveness, by continuing the establishment of sustainable water resources management infrastructure which is the first capital for agricultural production and productivity, because of its climate regulation function which in turn ensures land improvement. In addition, the project is consistent with the Bank's five (05) top-operational priorities (Top 5), through its strategic axes 2 and 5 that are respectively: "Feeding Africa" and "Improving the quality of life for the people of Africa ", by creating the conditions for high-performance and sustainable agriculture, as well as reducing global warming. In particular, the 2016-2025 Agriculture Transformation Strategy ("Feeding Africa") has identified climate change as a limiting factor in the transformation of agriculture and defines the promotion of climate smart agriculture, as the one of the actions of the 6th Catalyst of 7 Transformation, focused on increased inclusivity, sustainability and nutrition.

The Government of Benin and the Bank have selected the agricultural sector and the modernization of agriculture for the sustainable and optimal exploitation of its potential as one of their priorities in the CSP (2012-2016), translated through Pillar I: Development support infrastructure for production and competitiveness. Particular emphasis will be placed on mainstreaming cross-cutting themes such as gender, social inclusion, youth employment and resilience to climate change to contribute to inclusive and green growth.

### **C. Describe The Budgeted M & E Plan:**

Monitoring and evaluation includes a series of linked activities, including annual project reports, mid-term evaluation and terminal evaluation.

**Important M&E milestones** in the Project calendar are:

- *National Project launch/inception workshop* with all concerned stakeholders, including and national Focal Structures, GEF Focal Points, AfDB representatives, national Technical Departments, representatives of NGOs and beneficiary local communities, etc. These workshops shall finalize amongst others the Results Framework; the work plans and budgets for the first year; the M&E Plan; the role and responsibilities of each stakeholder and actor in the project for project implementation and M&E; fiduciary and procurement arrangements; communication and decision-making procedures, and the establishment of coordination committees and/or mechanisms.
- *Semi-annual Progress Reports*: These will be assessed based on the Project Results Framework. The detailed semi-annual reports will be prepared by the Project Manager and submitted to the PSC and the AfDB, covering the periods January – June and July – December. The reports will include *inter alia* physical progress on inputs and target outputs, progress indicators, impacts and lessons learned, updates of work programs, risk management and adaptation of work plan to identified risks, GEF focal area indicators, details of any unforeseen impediments to project implementation and remedial measures proposed and/or taken. The report will include up-to-date financial information on the expenditure of project funds. The reports will be reviewed, amended as required and approved by the PSC as part of the minutes of their meetings.
- *Annual Project Implementation Review (PIR)*: The PIR will be prepared by the Project Manager to monitor the progress made since the commencement of project implementation and in particular for the previous reporting period of 12 months. The annual PIR will combine both AfDB and GEF reporting requirements. The PIR report will include details on the progress made towards realization of project objectives and project outcomes, project outputs delivered per project outcome, lessons learned in the implementation of the project, financial expenditure reports, risk and adaptive management, etc.
- *Annual Project Report (APR)*: This report will be prepared by the Project Manager in consultation with the relevant Stakeholders and will be submitted to AfDB and GEF. The report shall enable project partners to obtain information on the performance of the project regarding the implementation of agreed activities. The APR will also provide details on project achievements, initial evidence of success, including constraints in the implementation of agreed activities and how such constraints and/or shortcomings will be addressed in subsequent years. The report will also include a compilation of lessons learned and financial expenditure statements.
- *Mid-Term Evaluation (MTE)*: The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation (mid 2019), in order to i) assist the recipient Governments, AfDB, and the beneficiaries and stakeholders to improve the efficiency, effectiveness, relevance and impact of the project; ii) take corrective action to improve the planning, project formulation and implementation phases; and iii) ensure accountability for results to the financial donors (GEF and AfDB), stakeholders and beneficiaries. The mid-term project evaluation shall thus focus on relevance, performance (effectiveness, efficiency and timeliness), issues requiring decisions, and actions and lessons learned on the project design, implementation and management. The evaluation will also include all parameters recommended by the GEF Evaluation Office for mid-term evaluations and will verify information gathered through the GEF tracking tools, as relevant. The evaluation will be carried out using a participatory approach - parties that benefit or are affected by the project will be consulted. Such parties will be identified during a detailed stakeholder analysis to be undertaken during the first six months of project implementation. The project Steering Committee, National Focal Points and other stakeholders will participate in the MTE of the project. The PIU/RCU will prepare a management response to the mid-term evaluation recommendations along with a plan for implementing the required changes in project implementation. The AfDB Task Manager will have the responsibility of monitoring the implementation of agreed recommendations. The Terms of Reference for the MTE and recruitment of consultants will be handled by the AfDB Task Manager in consultation with the GEF coordinator.
- *Final Evaluation (FE)*: An independent final evaluation will take place six (6) months prior to the final Project Steering Committee meeting or the scheduled Project closure date. This final evaluation will be undertaken in accordance with AfDB and GEF procedures and will focus on the same issues as the MTE. In addition it will also examine the early evidence of project impact and sustainability of results, including the project's contribution to capacity building and the achievement of global environmental benefits (GEBs). GEF Tracking Tools will also be compiled before the final evaluation and entries shall be verified by the consultant. The final evaluation will focus on the delivery of the project's outputs and outcomes detailed in the project document and as amended following the MTE, as the case may be. The final evaluation will assess the impact and sustainability of results, including contribution to capacity building in the Niger River Basin region, including also the achievement of GEBs. The Terms of Reference for the FE and recruitment of consultants will be handled by the AfDB Task Manager. The final evaluation will also provide recommendations for follow-up activities. The management response to issues raised in

the final evaluation report will be prepared by the RCU/PIU in consultation with the National Focal Points and NCUs. The final evaluation report shall be submitted to the GEF Evaluation Office not later than 6 months after the completion of the Final Evaluation.

- *Final Project Report:* This report will be prepared by the PIU/RCU during the last three months of the project. The report will provide details on the achieved results (outcomes and outputs), lessons learnt, problems and constraints experienced and specific areas where results may not have been achieved. It will also provide recommendations on measures that should be put in place to ensure sustainability and replication of the project's results. The recommended follow-up actions will be the responsibility of the NBA, to ensure long-term sustainability of project results.

- *Project Implementation Review (PIR):* The GEF/PAGEFCOM II project will need to participate in the GEF Project Implementation Review (PIR) process. The PIR is mandatory for all GEF projects that have been under implementation for at least a year at the time that the exercise is conducted. The PIR will be carried out between June and September of each year of implementation. It will contain sections on basic project data, financial status, procurement data, impact achievement and progress in project implementation. The basic outline will follow the structure of the Results Framework with indicators assigned to objectives, means of verification, and assumptions. The PIR questionnaire is sent to the Project Manager, usually around the beginning of June of each year, who will have on average 1.5- 2 months to collect the necessary information, and submit the PIR to the AfDB.

- *Periodic supervision missions:* Supervision and monitoring of project progress at field level by the RCU/PIU, and GEF, Steering Committee members and AfDB supervision missions.

- *Periodic Site Visits (PSV) to support project implementation:* PIU/RCU staff will conduct periodic field visits to project sites in the participating countries based on a schedule to be agreed during the Project's inception workshop and subsequent PSC meetings. These visits will be factored in the annual Work Plans of the project. The purpose of site visits will be to assess the progress in the implementation of specific project interventions in the field. Members of the Project Steering Committee may be invited to join these visits as deemed appropriate. A field visit report will be prepared by the mission team within a period of one month after the visit to the field. The CPA Service to be contracted for annual audits may also undertake ad hoc site visits.

**M&E budget :** The GEF support to M&E is estimated at USK\$ 760,013, directed towards i) the project's launch/inception workshops, ii) harmonizing data gathering and analyses procedures, methods, standards, tools and protocols among countries, and developing information sharing protocols, linked to the web-based Management Information System (MIS), (iii) part of the cost of external audits, and (iv) M & E missions to the project area by the RCU/PIU

*Table : Cost estimate for the M&E component of the PAGEFCOM II and GEF/PAGEFCOM projects (700,713 K\$ to be charged to the FAD and 59,340 K\$ to be charged to GEF financing)*

<b>M &amp; E Activity (covering the baseline PAGEFCOM II and GEF projects)</b>	<b>Timing/ Frequency</b>	<b>Responsibility</b>	<b>Budget in "000" USK\$</b>	<b>GEF (59,340)</b>	<b>ADF (700,713)</b>
National project launch/inception workshops; agreement on detailed Results Framework and baseline surveys	Months 2	Project coordination	174,173	0	174,173
Harmonizing data collection and analyses procedures, methods, standards, tools and protocols; and developing a M&E system, through a web-based MIS	Months 2 - 4	Consultant	249,642	59,34	190,342
External Audit Reports (annual or every other year)	Annually (6)	NBA, Accountant Firm	136,529	0	136,529
Periodic M&E Reports and visits to project area	Semi-annually	NBA, RCU/PIU	144,509	0	144,509

<b>M &amp; E Activity (covering the baseline PAGEFCOM II and GEF projects)</b>	<b>Timing/ Frequency</b>	<b>Responsibility</b>	<b>Budget in "000" USK\$</b>	<b>GEF (59,340)</b>	<b>ADF (700,713)</b>
Mid-Term Review	Year 3 (2019)	Consultants	27,057	0	27,057
Final Evaluation – Final Report	Year 6 (2022)	Consultant	28,103	0	28,103
		<b>TOTAL cost (USK\$)</b>	760,013	59,340	700,713

**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>
Ayanleh Daher Aden	11/23/2018	Laouali Garba		l.garba@afdb.org

**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).

**ANNEX A: PROJECT RESULTS FRAMEWORK FOR BASELINE AfDB PAGEFCOM II Project**

**Countries and Project Title:** Benin, Sustainable Forest Management and Conservation Project in central Benin (Departments of Borgou and Donga)

**Project development Objective:** To promote socially and environmentally sustainable forest management in Benin by improving forest and land management to preserve forest cover, prevent biodiversity lo , and monitor carbon stocks and emissions.

RESULTS CHAIN		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISK AND MITIGATION MEASURES
		INDICATORS	BASELINE 2016	TARGETS (2022)		
IMPACT	Long term		2016	2022 and beyond		
	Reduce the trend of degradation of natural resources	Annual rate of deforestation in the country (ha / year)	70,000	≤ 35,000 (2022)	MCVDD report	
		Percentage of forest cover at national level (%)	≤ 19.00%	≥ 22% (2020)	Studies / Reports forest Sector	
		Duration of land fertility cycles (number of years of land use cycles for agriculture)	5	30 (in2022)	MAEP / MCVDD reports	
EFFECTS	Medium Term		2017	2021		
	1. Improve the state of forest cover in the project area	Reduction of the percentage of illegal occupation of classified forests (%)	≥ 35%	≤ 15%	<ul style="list-style-type: none"> <li>Mid-term evaluation report ;</li> <li>Project completion report ;</li> <li>Periodic reports of Water, Forest and Hunting Department.</li> </ul>	<b>Risks :</b> <ul style="list-style-type: none"> <li>Insufficient public ownership of the project</li> <li>Land pressure also extends to classified forests and protected areas</li> </ul> <b>Mitigation Measures _ :</b> <ul style="list-style-type: none"> <li>The project was designed on the basis of extensive stakeholder consultations to</li> </ul>
		Number of hectares of privately established private plantations (ha)	5.600 ha	≥ 20,000 ha		
	2. Improved resource availability	Duration of rainy seasons (months) / average duration of river floods (months) per year	≤ 2 / ≤ 3	≥ 6 months / ≥ 8		
		Reduction of the depth of the water table (meters)	≥ 25 m	≤10 m		
	3. Develop Value Chains	Number of NTFP value chains organized	0	≥ 3		



	of the Green Economy	Number of operational PES mechanisms	0	≥ 1		ensure that it addresses their concerns in the field ; · Forest pressure will be mitigated under the project through a smart agriculture program focusing on productivity	
		Number of submissions deemed eligible for the carbon credit	0	≥ 1			
	3. Build capacity national	Level of knowledge on non-timber forest products (%)	≤ 20%	≥ 65%			
		Share of national expertise in the forestry sector (%)	≤ 10%	≥ 55%			
		Operational level of the Forest Administration (%)	≤ 25%	≥ 75%			
PRODUCTS	Short term		2015	Before 2020		<b>Risks :</b> · Institutional weakness of MCVDD in field implementation · Slowness in the implementation of the project <b>Mitigation measures :</b> · The MCVDD Capacity Building Program and the PMU for project administration, procurement and financial management will mitigate this risk. · The use of the former team and project structures of PAGEFCOM I with the experience required for project type implementation is a means of mitigating delays and delays, or even a guarantee of success.	
	COMPONENT 1 PROMOTION OF VALUE CHAINS OF THE GREEN ECONOMY (US \$ 678,330)						
	A.1. NTFPs are promoted	Number of groups / reinforced for the shea added value chain AVC for the benefit of men / women (M / F)	0/0	0/4	· Monitoring/Report-Evaluation · Quarterly ProgressReport · Activity reports of the technical services responsible for the monitoring the execution · Contracts with companies · Reports from the control offices · Activity report · Procurement Plan (PPM) · EWS system · Annual External Audit Reports · Supervision mission report		
		Number of groups / reinforced for AVC of Beekeeping for (M / F)	0/0	3/1			
		Number of alternative economic activities of overexploitation of forests for the benefit of M / W	0/0	2/1			
	A.2. the blue economy in the forests is developed	Number of floating cages installed for the benefit of Men / Women (M / F)	0/0	3/2			
		Number of ponds installed for the benefit of Men / Women	0/0	3/2			
	A3. Economic alternatives to overexploitation of forests are supported	Number of male / female game keepers installed	0/0	4/1			
		Number of people (Men / Women) affected by IEC	0	350/650			
	COMPONENT 2 SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES ( US \$ 4,673,470)						
	B1. Institutional support for forest and natural resource management is assured						
		Amount of rehabilitated management infrastructure (FCFA)	0	390,000,000			
		Number of km of rehabilitated tracks	0	80			

	Number of staff (M / F) who benefited from capacity building	0	225/75
	Number of strategic documents developed	0	5
B.2 PAPS & PAPS Sound Updated and updated	Number of PMPs Implementation	0	6
	Number of PMPs implemented	0	85
B.3 Support for the preservation of biodiversity is assured	Number of ranches developed and concessioned	0	3
	Number of eco-tourism tours created	0	3
<b>COMPONENT 3 SUPPORT FOR ADAPTATION TO CLIMATE CHANGE (US \$ 1,462,090)</b>			
C1. Forest cover is improved	Enriched Classified Forest Area (ha)	0	100,000 ha
	Area of forest plantations completed (ha)	0	6.120
C2. Early warning system vegetation fire is set up	Number of (retransmitted) synoptic weather stations acquired, installed or rehabilitated	0	5
	Number of EWS platforms installed	0	2
C3. Payment for the Environment and Carbon Sequestration Services is effective	Number of open environmental service desks	0	3
	Number of plantations subject to carbon credit	0	25
<b>COMPONENT 4 PROJECT MANAGEMENT is insured (US \$ 1,576,430)</b>			
Coordination and management	Disbursement rate	0	
	Rate of physical execution of the project	0	≥ 95%
	Number of supervision missions carried out by the Bank	0	20
	Mid-term report is approved	0	1
	Completion Report is posted on the Bank's Website		

**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).**

**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).

COMMENTS AND RECOMMENDATIONS FROM STAP (May 08, 2017)	GEF AGENCY ANSWERS
<p><b>1.</b> There needs for more clarity in the description of outputs.</p> <ul style="list-style-type: none"> <li>• What exactly does the PIF mean by 150,000 ha of communal forests in protected areas? Are these are parts of the PAs, or are they new? Who will they be governed? Are these indigenous forests of plantation forests? (1.1.1) also p 18</li> <li>• What is needed to implement PA management plans? (1.1.2)</li> <li>• What is the prognosis of PA financial plans? (1.1.3)</li> <li>• What does the PIF mean by "up-scaling two protected areas to involve communities in the management process"? (1.2.2) also p 18</li> <li>• What are the exact alternative livelihoods activities, given how hard is it to create alternative livelihoods?</li> </ul> <p>What new seeds is the PIF referral too? Is there any technical information about these seeds? (1.2.3)</p> <ul style="list-style-type: none"> <li>• How will the endangered species be protected exactly?(1.2.4)</li> <li>• Is capacity development for SFM only about training? What about rights, community governance, etc.? (1.3.1)</li> </ul> <ul style="list-style-type: none"> <li>• What are the community groups that will be formed? Are these villages? Do they have title to land / forests and other rights? Will they get these? (1.3.2). There is no mention of issues of open access, community rights, governance, etc.</li> <li>• What are the alternative income generating activities, and what is the technical basis for believing this? will work? (2.2.3)</li> <li>• How many integrated landscape restoration plans? What do these look like? At what scale are they? village, area, and district? Who implements and monitors them? (3.1.1)</li> <li>• What does a robust GHG accounting system look like? Who is responsible for it? (3.2.2)</li> <li>• What infrastructure will be rehabilitated? P 17</li> <li>• What is the meaning of institutional forest management? P17</li> </ul>	<p><b>1.</b> Thank you for the comment.</p> <ul style="list-style-type: none"> <li>• The inclusion of 150,000 ha communal forests under protected area means that these surface area is not currently under protection and that the project will seek to include it as part of the 2 PAs (Wari Maro and Monts Kouffé) as appropriate.</li> <li>• The implementation of PA management plans will require decentralized participatory management with a supporting local workforce</li> <li>• In addition, a study was done on the PA financial plans of which the results can be found in the PAMF project document</li> <li>• The “up-scaling” of the two Pas will involve communities in the management process such as hunting brotherhoods and traditional hunters. The approach used in the project will therefore be participatory with appropriation of traditional hunting practice for protection. It is therefore a form of management with the population and for the population.</li> <li>• The new seeds referred to in the PIF are the fast-growing species Gmelina, and other species such as teak (<i>Tectona grandis</i>) and acacia (<i>Acacia auriculiformis</i>) <i>Pentadesma</i> for the river banks.</li> <li>• The endangered species will be protected through ecological monitoring techniques, ranch protection, monitoring and wildfire EWS for the protection of biodiversity</li> <li>• The community groups that will be formed are women and men, hunters, fish farmers, breeders, beekeepers, shea processors</li> </ul> <p>Regarding community rights and governance, the villages are in the communes of the project area. The populations have no “land title” although the decentralized management system of classified forests are participatory.</p>
<p><b>2.</b> Project complexity is increased by fragmentation of outputs. STAP suggests that it could be simplified by focusing on three components:</p> <ul style="list-style-type: none"> <li>• Effective PA management of Kouffé and Wari Maro forest reserves (STAP is still unclear if people live in these protected forest or not. If people live in PAs, combine this component with the next one)</li> <li>• Sustainable community forest management that integrates outputs from components 1 and 2 in the same communities</li> <li>• A component at central level that updates forest codes, inventories resources, and integrates these with GHG accounting. This could also include participatory implementation (component 4).</li> </ul>	<p>At the beginning of the implementation of the plan (2007), a strategic identification of capacity building needs of all the actors will be made. It will cover the ten years of implementation of the plan for the benefit of co-management bodies. The capacity building plan of the co-management bodies will cover mainly aspects related to environmental education and training, literacy of the appropriate target groups, techniques of rational production and exploitation of natural resources, production techniques, environmentally friendly farming in agro-forestry series as well as in riparian lands and management techniques. A diagnostic study could be</p>

3. STAP recommends that the PIF needs to analyze the status, the barriers, the theoretical background, and the theory of change community-based governance in more detail. Successful community based management is likely to require:

- the delineation of community forests and the correct scale (ie village of 200 households),
- the devolution of rights (use, management, benefit, exclusion) and responsibilities (resource protection and monitoring),
- the internal governance of communities (governance),
- oversight of this governance, and
- land use zoning and generation of benefits.

The inclusion of three community game ranches is a positive suggestion that is encouraged by STAP. It is

highly likely that these can generate sustainable benefits and wildlife recovery, especially if high-value trophy

hunting is introduced. However, this might not be possible on a total area of 6,000 hectares should be given to increase this area. The financial viability of gambling ranching also needs to be assessed as "alternative livelihood options". Game ranching is often viable and is likely to be so in this case. The presence of buffalo especially, and local varieties of large mammals, is likely to be attractive to foreign customers who will pay high fees. Meat production is unlikely to be viable the short term except a by-product of high value hunting.

4. The most important risk identified in the PIF is the lack of ownership of local communities. This therefore, needs to be addressed by the project. Given the high risk of poaching, wildfires, unsustainable land use etc. is linked to a commons tragedy, hence the importance of community ownership and delineation. However, the problem of open access (and demography) is never PIF and needs to be addressed.

conducted during the first quarter of 2019 to refine the areas thus selected. Implementation contracts will be signed with specialized structures in the different areas. With regards to forest administration officers, the focus will be on techniques for implementing the participatory approach, management techniques, planning and measurement of monitoring indicators evaluation of the management plan at the environmental, economic and social levels. Performance enhancement techniques for agents will also be provided to managers at higher levels of the hierarchy. Particular emphasis will be placed on transparency in both financial and material management as well as human resources.

· There are no fundamental issues in relation to land tenure issues. The formalities of provision of land (plantation) are made to the communes by communal decrees.

· With regards to land restoration plans they are as follows:

- 54 PMPs; (2) SMPs
- Massifs of Mount Kouffé Wari Maro (1 Management Plan)
- The central core (1 management plan)
- Village and communal level
- The whole is managed by the Forest Directorate (DGEFC)

· Estimates of carbon calculations are planned in the project with an agreement with the laboratory of Applied Ecology of the University of Abomey Calavi (LEA, UAC, Benin).

· Regarding the rehabilitation of certain infrastructure, it will encompass the fencing of perimeters, cantonment in Parakou, some internal tourist facilities; development of the sacred water spring in the reforestation area of

5. Although the PIF refers to previous projects PA management, community empowerment, alternative livelihoods from any of these projects or from the extensive literature and experience in these issues. STAP suggests that the project builds on knowledge and lessons generated by other projects on these topics.

Abomey); in the district of Bassila, District of Manigri: the three-school class module, the ecological center of the village of Manigri and the three-school class module and the health center of Igbèrè village; In the municipality of Tchaorou, District of Alafiarou: the antenna of the village Agbassa and the antenna of the village Wari Maro in the Borough of Bétèrou; in Bantè Commune, Akpassi District, the health center of Banon.

**2. and 3.** Thank you for the comments. We have merged Components 1 and 2 of the PIF into one component (Component 1) in the CEO Endorsement. The support to the administration concerns the improvement of national capacities through: the elaboration of the fundamental documents (forest policy, forest code (the updating of the forest code to include the ranches and the communal forests), manual of procedure of control forestry, code of ethics, ethics and conduct for good governance of the forestry sector, document on sector performance indicators, and support to the Directorate General of Forests through capacity building.

**4.** Thank you for the comment, the project will indeed seek to address this risk. An ownership and sustainability strategy for the project will be developed and available in the first half of 2019 to address these areas of risk of insufficient ownership. A dialogue and conflict resolution commission will be set up together with awareness raising campaigns.

Follow-up Mechanisms: The Orientation and Monitoring Committee (COS) of PAFEMCOM II. It is chaired by the MCVDD, the parent ministry or its representative and composed of a representative of the CAA for the Ministry of Finance MFE, the DGEFC and the DPP for the MCVDD and the DGFD for Ministry of Planning and Development. The COS will meet at least twice a year in ordinary session. The COS Secretariat is chaired by the Project Coordinator (PC). The responsibilities of the COS are: (i) to monitor the activities of the Project; (ii) review of external evaluation reports; and (iii) provide direction to the PMU for potential reorientation of the Project.

Monitoring and evaluation: The internal monitoring and evaluation will be carried out by the Project Monitoring and Evaluation Unit, while the external monitoring and evaluation will be carried out by the DGEFC, the DPP for the (MCVDD), the CAA for the Ministry of the Economy and Finance and DGFD for the Ministry of Planning and Development.

Environmental monitoring: Environmental monitoring will be provided by the Benin Environmental Agency (ABE) or any organization / expert able to play that role according to the rules of art. It will ensure that the effective application of the measures produces the expected effects on the basis of previously defined monitoring indicators. This monitoring will focus on verifying and measuring the environmental impacts due to the implementation of the Project. In a practical and operational way, terms of reference will be elaborated as to contract specific tasks

### GEF-6 GEF SECRETARIAT REVIEW FOR FULL-SIZED/MEDIUM-SIZED PROJECTS

Questions	Secretariat Comment at PIF Stage	AfDB Response to Secretariat comments at CEO Endorsement
<p>Are the components in Table B sound and sufficiently clear and appropriate to achieve project objectives and the GEBS?</p>	<p><b>1. Component 3:</b></p> <p>- We need basic information on GHG emission mitigation. For example, how did the project set a target of 10,000 tonnes of CO2 emission reduction? What are the assumptions and parameters of estimation (we need detailed calculation in the CEO Endorsement Request stage) ?</p>	<p><b>1.</b> Thank you for the comment. Benin has not yet deepened research on CO2 emission. Benin NDC data are based on second national communication. Estimates of carbon calculations are planned as part of the project with an agreement with the laboratory of Applied Ecology of the University of Abomey Calavi (LEA, UAC, Benin).</p> <p>Assumptions for estimation are based on the fact that the annual rate of total deforestation in natural forests is estimated at 60 000 ha; emissions linked to the deforestation of one hectare of natural forest amount to approximately 120 t E-CO2 whereas the sequestration capacity of natural tropical forests is around 4 t E- CO2/ha/year. In addition, carbon sequestration capacity of forest plantations is 2 t E-CO2/ha/year; implementation of a reforestation plan with the aim of creating 15 000 ha of forest plantation per year; protection and conservation of natural forests that would reduce and maintain the rate of deforestation to 35 000 ha / year.</p>

Questions	Secretariat Comment at PIF Stage	AfDB Response to Secretariat comments at CEO Endorsement
Recommendations	<p><b>2.</b> At CEO endorsement, please address the following points:</p> <ul style="list-style-type: none"> <li>- Detail the GEB and the way to measure them;</li> <li>- Include a comprehensive risk assessment (notably the potential risks associated to forest plantations; we would prefer to see these activities clearly financed by the cofinancing);</li> <li>- Confirm the cofinancing;</li> <li>- Confirm the monitoring and assessment program (baseline, indicators, methods);</li> <li>- Detail the implementation arrangements with local communities and CSO;</li> <li>- Please, ensure a good coordination with other donors and partners (GIZ on the Mono river for instance, WB/PGFTR2, etc.)</li> </ul>	<p><b>2.</b> Thank you for these recommendations.</p> <ul style="list-style-type: none"> <li>- All reforestation activities and forest plantations are financed by AfDB;</li> <li>- We confirm the PAGEFCOM co-financing as it was approved by the AfDB Board in March 2017 and certain activities are already in progress;</li> <li>- Follow-up Mechanisms: The Orientation and Monitoring Committee (COS) of PAFEMCOM II. It is chaired by the MCVDD, the parent ministry or its representative and composed of a representative of the CAA for the Ministry of Finance MFE, the DGEFC and the DPP for the MCVDD and the DGFD for Ministry of Planning and Development. The COS will meet at least twice a year in ordinary session. The COS Secretariat is chaired by the Project Coordinator (PC). The responsibilities of the COS are: (i) to monitor the activities of the Project; (ii) review of external evaluation reports; and (iii) provide direction to the PMU for potential reorientation of the Project.</li> <li>- Monitoring and evaluation : The internal monitoring and evaluation will be carried out by the Project Monitoring and Evaluation Unit, while the external monitoring and evaluation will be carried out by the DGEFC, the DPP for the (MCVDD), the CAA for the Ministry of the Economy and Finance and DGFD for the Ministry of Planning and Development.</li> </ul> <p>Environmental monitoring: Environmental monitoring will be provided by the Benin Environmental Agency (ABE) or any organization / expert able to play that role according to the rules of art. It will ensure that the effective application of the measures produces the expected effects on the basis of previously defined monitoring indicators. This monitoring will focus on verifying and measuring the environmental impacts due to the implementation of the Project. In a practical and operational way, terms of reference will be elaborated so as to entrust specific tasks to the EBA and an independent consulting firm.</p> <p>To monitor the implementation of the project, two supervision missions are planned each year during the implementation period and will make it possible to assess the progress of the project vis-à-vis the annual work plan, to make the review of the procurement plan and financial management.</p> <p>We have provided details on the implementation arrangements with local communities and CSO in the PAGEFCOM II Stakeholder mapping which was included in section A.3 of the CEO Endorsement document. The General Directorate for Forests, which coordinates all forest-related activities and manages the PAGEFCOM2, ensures this coordination and sharing of information.</p>



## **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:**

## **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)**

Not applicable.

### **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.

As described for Indicator 3.1, the area of degraded agricultural land to be restored corresponds to 5,500 ha (Agro forestry for output 1.2.1 ) and 5,300 ha (enhanced community forestry for output 1.2.2) leading to a total of 10,800 ha. For Indicator 3.2, the area of forest and forest land restored corresponds to the rehabilitation of 20,000-25,000 ha of forest plantations under component 1. Since the exact number has not yet been determined at this stage, an average of 22,500 ha was indicated. Regarding indicator 6.1, according to the results of the EX-ACT tool, the project activities will yield a balance of emissions avoided of 1,713,387 tCO<sub>2</sub>eq per year, which corresponds to 7,719,012 tCO<sub>2</sub>eq over the lifetime of the project and 41,121,290 tCO<sub>2</sub>eq over the accounting period of 20 years post-project (including the 4 years duration of the project).

### **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

Focal Areas, Biodiversity, Financial and Accounting, Natural Capital Assessment and Accounting, Protected Areas and Landscapes, Terrestrial Protected Areas, Species, Threatened Species, Land Degradation, Sustainable Land Management, Income Generating Activities, Restoration and Rehabilitation of Degraded Lands, Sustainable Forest, Land Degradation Neutrality, Carbon stocks above or below ground, Influencing models, Strengthen institutional capacity and decision-making, Stakeholders, Beneficiaries, Local Communities, Type of Engagement, Participation, Integrated Programs, Food Systems, Land Use and Restoration, Deforestation-free Sourcing, Landscape Restoration, Capacity, Knowledge and Research, Knowledge Generation, Training, Climate Finance (Rio Markers), Climate Change Adaptation 2, Climate Change Mitigation 2





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