



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: GEF TRUST FUND

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PART I: PROJECT INFORMATION

Project Title:	Integrated management of natural resources in Middle and Upper Guinea		
Country:	Guinea (Conakry)	GEF Project ID:	9783
GEF Agency:	UNDP	GEF Agency Project ID:	5677
Other Executing Partner:	Ministry of Environment, Water Resources and Forestry / OGUIPAR / WFC / Guinee Ecologie / Local organizations	Submission Date:	March 3, 2017
		Re-submission Date:	March 29, 2017
GEF Focal Area:	MFA: CCM/BD/LD	Project Duration (Months)	72
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of parent program:	N/A	Agency Fee (\$)	670,726

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
BD-1 Program 2 Nature's Last Stand: Expanding the Reach of the Global Protected Area Estate	GEFTF	2,756,050	10,000,000
CCM-2 – Program 4 Promote conservation and enhancement of carbon stocks in forest, and other land-use, and support climate smart agriculture	GEFTF	2,664,726	8,000,000
LD-1 Program 2 SLM for Climate-smart Agriculture	GEFTF	1,639,498	7,000,000
Total Project Cost		7,060,274	25,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To promote an integrated and sustainable management of natural resources by introducing landscape approach and establishment and operationalisation of a core protected area (PA), corridors and buffer zones along the Bafing and Falémé rivers and establishing eco-villages around the PA

Project Component	Type ¹	Project Outcomes	Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
1. Integrated landscape management	TA	Strengthened integrated management of the Bafing-Falémé protected area (PA), providing multiple benefits across 815,300 ha, indicated by (i) official proclamation of 315,200 ha as the Bafing-Falémé PA, covering critical riverine habitats for globally significant species including chimpanzee; (ii) avoided GHG emissions by 7 million tCO ₂ eq through decreased deforestation rate over 517,000 ha and restoration of 10,000 ha. (iii) increase in land area under effective agricultural, rangeland and	<p>1.1. The “Bafing-Falémé Landscape Management Board” is established and operationalised as an integrated governance platform that serves as a joint decision mechanism for land use in the landscape. It will serve as a platform to ensure harmonisation of different management jurisdictions over specific management units within the landscape (all key stakeholders: OGUIPAR, FSE, DEF, local communes, professional and technical organizations, universities, research centers, NGOs, etc.) and the different levels of administration.</p> <p>1.2. Landscape Management Plan developed to ensure protection of key biodiversity areas (KBAs) including core wildlife habitats and corridors, and maintenance of biodiversity and ecosystem services. The management plan will be supported by biodiversity surveys, trade-off</p>	GEFTF	856,050	2,500,000
					BD: 431,050 LD: 200,000 CCM: 225,000	

¹ Financing type can be either investment or technical assistance.

		<p>pastoral management practices; (iv) increase in land area supporting climate-smart agriculture</p> <p><i>Indicators will be confirmed and baseline and targets will be determined during the PPG</i></p>	<p>analysis and include a financing plan and an eco-tourism development plan.</p> <p>1.3 The Bafing-Falémé Protected Area is officially proclaimed under Ministerial Order followed by Presidential Decree with clear boundary descriptions and governance framework</p>			
2. Operationalisation of the Bafing-Falémé PA and buffer zone management	Inv	<p>Improved management effectiveness in approximately 315,200 ha of Bafing-Falémé PA, indicated by: (i) increase in the METT score; (ii) increased budget for the PA operation; (iii) improved biodiversity and ecosystem conditions in core PA and buffer zones.</p> <p>Reduced threats to PAs indicated by: (i) increased institutional capacity for buffer zone and corridor management; (ii) increased income for communities from nature tourism operation (gender disaggregated).</p> <p><i>Indicators will be confirmed and baseline and targets will be determined during the PPG</i></p>	<p>2.1 PA management system established with adequate staffing, budget and management infrastructure and equipment, with skilled PA staff and co-management arrangements.</p> <p>2.2 Management plans of the Bafing-Falémé PA covering 315,200 ha, are developed integrating the climate change and land degradation dimensions. Robust biodiversity and ecosystem monitoring system will be developed and instituted.</p> <p>2.3 Buffer zones and corridors are defined, established and clarified covering 517,000 ha. This will involve identification of natural buffer zones and corridors and/or rehabilitation of degraded areas for effective functioning of the ecosystems. Corridors will be established between classified forests. An agreed land use plan will be developed by the “Bafing-Falémé Landscape Management Board” with full participation of the communities for the establishment of the buffer zones and corridors.</p> <p>2.4 A sustainable and high-end biodiversity-based tourism in the Bafing-Falémé complex is developed and implemented on a pilot basis, ensuring transparency and equity for participation of local communities, including focused capacity building support for community members.</p>	GEFTF	2,150,000 BD only	8,000,000
3. Establishment of the eco-village model in the PA buffer zone	Inv	<p>Firewood and charcoal production and use are transformed to be sustainable in and around the Bafing-Falémé PA, indicated by (i) number of households using energy efficient stoves, (ii) number of farmers using energy efficient kilns; (iii) reduction of GHG emissions by 52,608 tCO₂eq from the use of clean cooking technologies.</p> <p>Climate-resilient agriculture and livelihood activities adopted by villages in</p>	<p>3.1 Eco-village concept promoted at least in 10 villages in and around the Bafing-Falémé PA, promoting application of energy efficient production and utilisation of wood energy and climate-smart agriculture, supporting sustainable livelihoods.</p> <p>3.2 Energy efficient production and utilization of wood energy are implemented through a range of measures such as standard setting, testing and certification, and demand-side management (e.g. incentives and awareness) for use of improved cookstoves and kilns. Alternative long-term solutions to firewood will be explored.</p> <p>3.3 A “green belt” and ecological corridors created by restoring degraded forest</p>	GEFTF	3,479,224 CCM: 2,239,726 LD: 1,239,498	13,000,000

		<p>and around the PA improving basic living needs whilst enhancing quality of water and land resources, indicated by: (i) land area of existing gardens/ farms converted to sustainable agro-pastoral management; (ii) improved vegetation cover and soil productivity; (iii) increase in income level of men and women (including poor and excluded women through sustainable agro-pastoralism and farming.</p> <p><i>Indicators will be confirmed and baseline and targets will be determined during the PPG</i></p>	<p>ecosystems using a mix of native species. Woodlots for fuelwood production. Woodlots will favour rapid-growth native species adapted to the region for both wood energy production and forest conservation.</p> <p>3.4 Sustainable land management and climate-smart agro-pastoralism is implemented in selected villages and necessary training and capacity building support provided. This includes a range of water and soil management techniques, climate-resilient and sustainable agro-pastoral techniques, sustainable rangeland management, crop diversification and improved and participatory fire management with bushfire prevention and control strategy.</p> <p>3.5 Local livelihoods enhanced through diversification of crops and improvement in supply chains for income generation activities, including value addition to agriculture products, saponification, farming for traditional food and cosmetic items such as grasshopper, shea butter, sesame, tamarind vines, baobab leaves, nere seeds, etc.</p> <p>3.6 A community engagement and educational programme is operationalised with a focus on sustainable livelihoods and a capacity building programme. Community engagement will involve all levels: local councillors; council of elders; council of mosques/churches; representatives of women, youth, groups and association; and community administration.</p>				
4. Gender Mainstreaming, Knowledge Management and Learning	TA	<p>Gender Mainstreaming, Lessons learned by the project through participatory M&E are used to guide adaptive management, collate and share lessons, in support of upscaling, indicated by: (i) number of uptake of lessons; (ii) increased participation of poor and excluded women in ecovillage activities.</p> <p><i>Indicators will be confirmed and baseline and targets will be determined during the PPG</i></p>	<p>4.1 Gender mainstreaming strategy is implemented to guide project implementation, monitoring and reporting with particular focus on poor and excluded women.</p> <p>4.2. Key experiences and lessons learned are compiled and widely disseminated for replication through a range of communication tools including the project website, project stories, issue papers, and scaling up of project results supported.</p>	GEFTF	275,000	1,000,000	
Subtotal						6,760,274	24,500,000
Project Management Cost - PMC (BD:100,000; CCM:100,000; LD:100,000)					GEFTF	300,000	500,000
Total Project Cost						7,060,274	25,000,000

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type	Amount (\$)
Recipient Government	Ministry of Environment	In-kind	2,000,000
		Grants	5,000,000
Recipient Government	Other Ministries (Energy, Agriculture, Cooperation, etc.)	Grants	7,000,000
CSO/NGOs	WCF, Guinée Ecologie, SEG (to be determined)	In-kind	2,700,000
GEF Agency	UNDP	Grants	8,300,000
Total Co-financing			25,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY, COUNTRY AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area*	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
UNDP	GEFTF	Guinea	Biodiversity	n/a	2,756,050	261,825	3,017,875
UNDP	GEFTF	Guinea	Climate Change	n/a	2,664,726	253,149	2,917,875
UNDP	GEFTF	Guinea	Land Degradation	n/a	1,639,498	155,752	1,795,250
Total GEF Resources					7,060,274	670,726	7,731,000

E. PROJECT PREPARATION GRANT (PPG)

Is Project Preparation Grant requested? Yes [X]

PPG AMOUNT REQUESTED BY AGENCY, TRUST FUND, COUNTRY AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/Regional/Global	Focal Area*	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee (b)	Total c = a + b
UNDP	GEFTF	Guinea	Biodiversity	n/a	75,000	7,125	82,125
UNDP	GEFTF	Guinea	Climate Change	n/a	75,000	7,125	82,125
UNDP	GEFTF	Guinea	Land Degradation	n/a	50,000	4,750	54,750
Total PPG Amount					200,000	19,000	219,000

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	815,300 ha of terrestrial landscapes, of which 517,200 ha are PA, corridors and buffer zones ²
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	10,000 ha ³
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	7 million tons of CO ₂ eq. ⁴

² The PA surface considered here includes (i) the core PA with 315,200 hectares; (ii) the Corridors and buffer zones surrounding the PA with 517,000; and (iii) the entire landscape covering 815,300 hectares.

³ Increased land area under sustainable land management – i.e. effective agricultural management practices and supporting climate-smart agriculture in 10,000 ha, enhancing vegetation cover, protecting water resources and conserving soils.

⁴ The carbon reduction estimates have been computed using the Ex-Ante Carbon-Balance Tool (EX-ACT) Tier Standard Edition, developed by FAO. The forest-type selected for the calculations is Tropical Wet Forest, building on a baseline of degraded land in a Wet Tropical climate. The soil-type generally consists of fertile Wetland soils, albeit highly degraded through prior deforestation activity and subsequent over-grazing/agriculture. The project involves conservation in 517,000 ha using native and introduced tree species selected for their adaptability to the area. To be conservative, 517,000 ha has been used in the calculation, instead of the entire 815,300 ha of landscape. The deforestation rate before the project is 0.5% (FAO 2010). According to FAO, between 1990 and 2010, Guinea lost an average of 36,000 ha or 0.50% per year. The deforestation rate after the project is 0.25%. 517,000 ha * 0.5% = 2,585 ha lost per year. Over the 10-year period, it is 25,850 ha lost meaning a remaining cover of 491,150 ha. This is exactly what is shown in the “without” column of the FAO EXACT sheet. The deforestation rate after the project is 0.25%, leading to 504,075 ha “with” the project. The difference of conservation (504,075 – 491,150 = 12,925 ha leads to 5.3 million of CO₂ emission avoided (Note that the remaining CO₂ emission reductions come from the climate smart agriculture and the clean cooking system). Over a period of 10 years, approximately 7 million tCO_{2e} will be avoided through the project's intervention.

The full EXACT sheet is attached to the PIF. A finer carbon benefit estimation will be made during the PPG phase. There is an estimated reduction of 52,608 tCO_{2e} from the clean cooking sector.

PART II: PROJECT JUSTIFICATION

1) PROJECT DESCRIPTION

The Republic of Guinea, usually called Guinea-Conakry, is a coastal country in West Africa. It covers 24.5 million hectares and its population is 10.5 million (2014). The country has over 1,000 rivers, including the three major rivers of West Africa, namely Niger, Senegal and Gambia.

Being within the Upper Guinea forest system, historically the region is estimated to have originally contained 100 million ha of tropical rainforest⁵. Estimates point towards a current cover of approximately 14 million ha. In Guinea, the original forest cover was estimated at 18 million ha. While current data is limited, estimates are of 0.7 million ha of forest remaining or about 4.1% of the original cover. Most of the current forest cover that remains is secondary forest as a result of anthropogenic changes to the landscape. The vegetation is very heterogeneous in the area, where almost all types of vegetation are found in the Sudano-Guinean zones; a mosaic of vegetation including gallery forests, open forests, wooded savannas, shrublands, and savannah grasslands. The history of these formations reveals that woodland and tree are most often the result of regressive evolution under the influence of anthropogenic factors, including agriculture slash and burn, bushfires, hunting, harvesting of honey, etc.

Guinea is a very important country for conservation efforts. It has rich biodiversity and serves as a major watershed for the region. Chimpanzees are a flagship species and Guinea has the largest population in west Africa of approximately 5,000 according to a survey conducted by the Wild Chimpanzee Foundation (WCF) between 2013-2014. The study confirmed the presence of about 5,000 chimpanzees living in the Middle and Upper Guinea, along the Bafing river. In addition to chimpanzees, other large mammals are also present: an index of 29.54 presence per km including carnivores, primates, antelopes and hippopotamus was compiled. Beside fauna, this part of Guinea is also very rich botanically.

Table 1: Number of index per group of animals (WCF, 2013-2,014)

Group	Number	Index (presence/km)
Chimpanzees	3,212	7.37
Carnivores (<i>Caracal, striped jackal, spotted hyena, red mongoose, marsh mongoose, common genet, African civet, genet tigrina</i>)	337	0.77
Antelopes (Harnesses Guib, black-backed duiker, yellow-backed duiker, Maxwell duiker, red-necked duiker and black duiker etc.)	239	0.55
Suidae (Common warthog and bushpig)	4,188	9.61
Monkeys	2,452	5.62
Other animals	2,449	5.62
Total	12,877	29.54

Based on the diversity of ecological conditions, Guinea has been sub-divided into four territories or “natural regions”, each corresponding to a type of climate, temperature, rainfall, soil, fauna and flora characteristics: Coastal Guinea, Middle Guinea, Upper Guinea and Forested Guinea. The country also has four phytogeographical characteristics, namely: mangrove, dry forest, savannah and rainforest. In recent decades, Guinea has faced severe adverse impacts of climate change and environment damage: loss of agricultural lands, biodiversity loss, recurrent droughts in the north of the country, floods and climate extremes.

The outbreak of the Ebola virus disease in West Africa (Guinea, Sierra Leone and Liberia) caused an international public health emergency, negatively impacting all sectors. In Guinea, the disease caused more than 2,000 deaths and resulted in nearly 6,000 orphans. Human health was clearly impacted but so was the economy. The decline in tax revenue was estimated at US\$ 160 million and there was a marked increase in unemployment).

⁵ Source: The general description of environmental problems in Guinea are mainly sourced from *Guinea Environmental threats and opportunities assessment* USAID (2012)

Project landscape

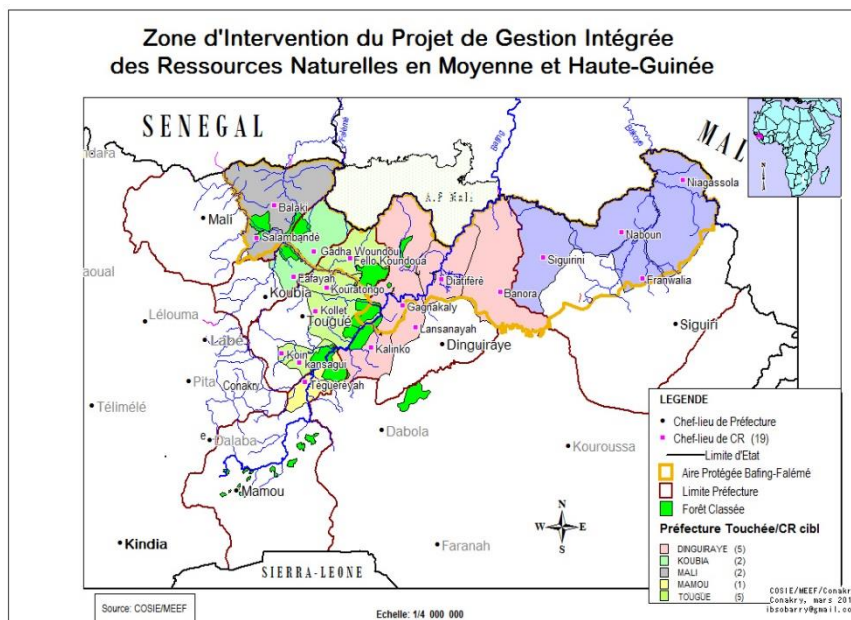
The project will focus on the 815,300 ha landscape in the larger Upper Guinea forest system that comprises Guinea, Liberia, Sierra Leone, Cote d'Ivoire, Ghana and Togo. These forests are identified as a biodiversity hotspot by Conservation International based on the high number of endemic plant and animal species.

The topography is hilly with an altitude between 400 and 1000 meters. It is crossed by several rivers, the main one being the Bafing, which is later called Falémé, then Senegal, in one of its effluents. The landscape is divided into 19 administrative rural communities with approximate population of 384,000 (2014).

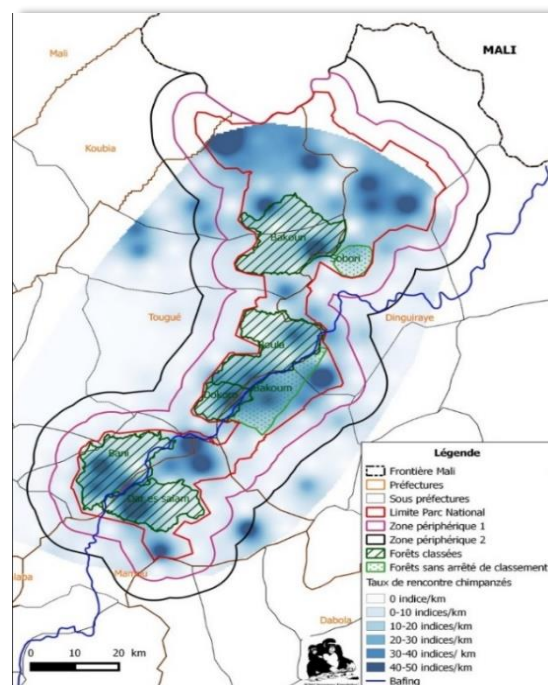
Based on Wild Chimpanzee Foundation (WCF) data, the hotspot of chimpanzees found (blue points in the map) covers an area of 315,200 ha. This surface, indicated with the red line on Map 2, is suggested to become a protected area. However currently it is a mixture of open lands, classified forests and a few villages, with no formal protection. Corridors and buffer zones (purple line on Map 2) encompass an additional area of 517,000 ha (it corresponds to a strip of 5 km wide). Finally, the dark green line comprises the entire landscape. The boundaries of classified forests are marked in green.

The vegetation pattern in this landscape is mainly formed by wooded savannas. Bamboo forests and, to a lesser extent, gallery forests are also fairly well represented. The site includes 7 classified forests that are already protected and managed by the Directorate of Water-and-Forests (Eaux-et-Forets). These are: Bakoun (1&2), Sobory, Boula, Dokoro, Bani and Darou-Salam. In Guinea, classified forests are designated to protect forests that are in danger or are near by a protected area (as buffer zones). Any land use change is prohibited in these forests (agriculture, deforestation, etc.). Pastoralism is also prohibited, unless it is formally authorized by local authorities in a case by case. Any clearing, hunting, charcoal production is also not allowed in classified forests.

The soil in the landscape is lateritic and very rich in bauxite, attracting many extractive activities. The landscape also agriculture fields cultivated by local people, mainly for their subsistence. Main crops are rice, maize, millet, peanuts, manioc, fonio. The slash and burn method is used for land re-fertilization.



Map 1 - Limits of the Bafing-Falémé landscape (to be confirmed during PPG stage)



Map 2 – Chimpanzee habitats in Bafing-Falémé

Threats to biodiversity and ecosystem integrity

Guinea's biodiversity, tropical forest resources and the natural environment are threatened on many fronts and are under extreme pressure in many areas. Main threat categories are as follows.

Habitat loss and degradation: Northern Guinea, as well as the adjacent parts of southern Mali and Senegal, is facing dramatic deforestation posing serious threats to biodiversity and ecosystem services, as well as releasing a large amount of carbon in the atmosphere. Between 1990 and 2010, Guinea lost 9.9% of its forest cover, meaning 720,000 ha of rainforest has been converted or severely degraded. Main causes for deforestation are agricultural expansion, slash and burn agriculture, logging and mining (both industrial and small scale artisanal mining). Construction of two hydropower dams is planned along the Bafing river, which requires clearing of a large chunk of natural forest and construction of transmission lines in long distances. Around 10 mining companies operates in Middle and Upper Guinea mining Bauxite, diamond and gold. Expansion of mining concessions and land use change could affect natural habits in the region. These not only threaten the globally significant biodiversity in the target landscape but also negatively impact on access to water, accelerate land degradation forcing people to migrate.

Unsustainable agricultural practices: Related to the above threat, unsustainable practices have become more common in Guinea, and northern Guinea is no exception. Human population growth both in terms of clearing land for housing as well as agricultural production, is posing significant pressures on ecosystems. Slash and burn agriculture is a widespread practice which clears significant amounts of forest cover in order to plant seasonal crops. Unfortunately, soils in the landscape can only provide a few growing seasons due to a lack of agricultural inputs and loss of the vital water and nutrient cycling the forests typically provide. This loss of productivity results in continually shifting fields and compounded pressures on forests. As human populations continue to increase, the need for further land for housing will also pose continued pressures on fragile lands.

Unsustainable hunting and sale of bush meat: Hunting for bush meat (mainly antelopes) has a severe impact on wildlife population. Logging introduces further stress on forest resources through hunting for consumption and sale of bush meat. Bush meat not only serves as a source of revenue for some, it is an important source of protein for many, in both rural and urban areas. The bush meat trade, with major markets in forested Guinea, is a major threat to biodiversity throughout the country. Additionally, chimpanzees face population pressures as a result of being sold in Conakry and other cities as pets.

Overharvesting of wood resources: Whether for production of charcoal, which remains the major source of fuel for cooking throughout the country, or for construction, the removal of trees in Guinea's rainforest and savannah continues to have an impact on reducing forest cover. Charcoal, the main source of cooking fuel in cities and urban areas, is currently harvested largely from natural forests instead of plantations. The latter has the potential to serve as a more sustainable means of providing fuel wood. More than 90% of households use firewood or charcoal for their domestic energy needs and this is one of the country's main sources of greenhouse gas emissions. Population growth means that wood harvesting is greater than natural biomass renewal, with an estimated national deforestation rate of 36,000 ha/year⁶. In the project targeted areas, like in all rural areas of the country, the "three stone" system with very low energy efficiency is used. This system consumes much more wood, while releasing harmful smoke, constituting health hazards to exposed groups (women and children).

Climate change: Climate change is severely affecting the country. In the northern regions of Guinea, including Middle and Upper Guinea, a decrease in rainfall of about 30-50% and in river flows (rivers such as Bafing and Falémé) have been observed since the 1970s, affecting productivity of land in the target landscape. Beside the decrease in rainfall, the other main impacts of climate change in the targeted landscape are: (i) average increase of temperatures which could reach 36% in 2050 and 40% in 2100; (ii) Severe drought leading to degraded lands, reduced agricultural yields, sedimentation of rivers, increase of bushfires, and decrease in water availability; and (iii) recurrent flooding leading to erosion and loss of arable land, loss of agriculture yields, loss of access to agricultural lands and displacement of populations. (NAPA 2007).

Long-term Solution

The long-term solution for safeguarding biodiversity and ecosystem services and for significantly reducing GHG emissions from forest loss in Guinea is to apply a landscape approach to managing land and natural resources. A landscape approach will ensure integrity of landscape level ecosystem services and biodiversity richness, introducing a suite of sustainable land management practices that will have both multiple environmental benefits and development benefits.

The baseline

With the institutional and political changes since 2000, new perspectives were emerging for Guinea, through macroeconomic governance and the economic and social development strategies initiated (including the five-year Development Plan 2011-2015) focusing on investment in sectors that generate economic growth (infrastructure, energy and mining). But this has been deeply affected since 2014 by a serious epidemic, the Ebola haemorrhagic fever, which constituted the most extreme emergency that the country and surrounding regions (Liberia and Sierra Leone especially) has had to face.

⁶ Source: FAO Global Forest Resources Assessment 2010

Despite the above, towards the long-term solution, the government with support of various partners, has been making tremendous efforts and investment. Key baseline initiatives are as follows.

The government has established an objective of 25% of its land under protection by 2025 in its National Biodiversity Strategy and Action Plan (NBSAP 2016). The actual rate of land coverage by PAs in the country is 15%, excluding the Bafing-Falémé to be officially created. Current protected areas with management statutes include two Biosphere Reserves (Mounts Nimba of 145,200 ha and Massif of Zياما of 112,300 ha), the Reserve of the Biodiversity of Kankan (approximately 530,000 ha), the national parks (Badiar 38,200 ha, High Niger 55,400 ha, Mafou 52,400 ha), the Wildlife Reserve of Kankan (538,000 ha), and 16 RAMSAR sites. They are managed by OGUIPAR (Parks and Reserves Office of Guinea). In addition, the government has designated 162 classified forests covering 1,182,133 ha, representing about 4.8% of the national territory. It invests approximately \$ 0.5 million per year for PAs including classified forests.

The government, with support of bilateral and multilateral agencies and NGOs, is also investing in the following related projects and programmes.

Project Title	Duration	Budget (\$ million)	Financiers	Key objectives
Sustainable Management of Forest Ecosystems and Protected Areas for the Prevention of Emerging Infectious Diseases in Guinea	2017-2019	11.6	UNDP and other partners	The project has several objectives, among them: (i) Conduct an inventory of wildlife fauna and flora resources at the national level; (ii) Assess and restore forest ecosystems in the prefectures of Macenta, Guékédou and Forécariah which are the most affected by the Ebola virus; (iii) Promote the diversification of the livelihoods of communities bordering on key areas through Income Generating Activities (AGR); (iv) Strengthen stakeholders' intervention capacities for monitoring hunting and consumption of bush meat; (v) Develop a participatory epidemio-surveillance programme based on the integrated single health approach, "One Health", taking into account the health of humans, wildlife, domestic animals and ecosystems; and (vi) Establish a sub-regional consultation framework for the Mano-River countries on the links between forest fragmentation and outbreaks of Ebola and other zoonotic diseases in humans.
National Multifunctional Platform Programme for Post-Ebola Recovery of Guinea	2017 – 2022	9.5	UNDP and other partners	This programme aims at reducing poverty and inequality in Guinea through the increase of modern energy access in rural areas provided by multifunctional platforms. The project has four components: (i) to put in place an adequate legal framework; (ii) to promote access modern energy services through MFPs; (iii) to promote productive use and income-generating activities; and (iv) to promote bioenergy (biogas, biofuel and clean cooking). The project will be implemented at country level in over 350 villages, including some in Middle and Upper Guinea.
Strengthening vegetation protection in the Republic of Guinea	2017 – 2022	18	BADEA	The objective of the project is to improve the protection of plants and foodstuffs stored in the country at all levels (centralized and decentralized) and to consolidate better phytosanitary coverage. It is financed by the Arab Bank for Economic Development in Africa (BADEA) for a period of 5 years, starting in 2017. The components of the project are: (i) Consolidation of the regulatory system of vegetation protection; (ii) Protection of stored plants and foods; (iii) Pesticide management and related issues; (iv) Training and research; and (v) Capacity building of the national vegetation protection laboratory.
West Africa Agriculture Productivity Program (WAAPP)	2017 – 2020	15	ECOWAS / World Bank	WAAPP is a programme initiated by the Economic Community of West African States (ECOWAS) with technical and financial support from the World Bank, to support regional cooperation in agriculture. The approach is based on the integration and harmonization of agricultural policies in the ECOWAS region in conjunction with the establishment of links/cooperation between research, extension, producers and operators of the rice sector. Launched in March 2012, WAAPP-Guinea received financial support of US \$ 9 million for a five-year period. A second phase with additional funding is foreseen in 2017 with an amount of US\$ 15 million for 3 years.
Programme Support for Community Livelihoods at Village level - 3 rd Phase (PACV3)	2016 – 2020	33	AFD / World Bank	The programme support for community livelihoods at village level aims to strengthen local governance in rural areas of Guinea and to promote the social and economic empowerment of rural people, including women, youth and other marginalized groups. PACV3 intervenes in the 304 rural municipalities of the country and is funded by the French development agency and the World Bank for a period of 5 years (2016-2020).
National programme	2011 – 2017	77	IFAD	The objective of PNAFA is to increase the incomes and improve food security of the rural population of Guinea. The project aims to specifically improve the

Support for stakeholders in the agriculture sector value chain (PNAFA)				production and productivity of small-scale producers in the development of agriculture value chains. PNAFA is financed by IFAD and OFID for a period of 6 years (2011-2017). It covers the Middle and Upper Guinea (like the present GEF funded project) in addition to the Forested Guinea region.
Promotion of Sustainable Tourism Development in Badiar National Park	2017 - 2021	3.5	UNDP and other partners	The project will (i) establish necessary synergies between environmental and tourism activities, and (ii) innovate in the development and promotion of ecotourism in Guinea. Specifically, the project will promote sustainable development of tourism in the Badiar National Park as a mean for reducing the poverty in surrounding communities coupled with effective conservation measures and ecosystem preservations.

Barriers

Despite the significant baseline efforts, the following barriers remain hampering effective ecosystem conservation and achievement of the aforementioned long-term solution.

Barrier #1. Limited experiences among key government and civil society stakeholders in implementing sustainable forest landscape management: Landscape management is a relatively new concept in Guinea, and each land unit in the Bafing-Falémé landscape is managed independently. There is little coordination between the departments within national and local government agencies which have jurisdiction over different land units or natural resources in the landscape, inhibiting the operationalisation of an effective integrated forest landscape management system on the ground. There is no landscape level management plan nor a governance framework to ensure that biodiversity and ecosystem services in the landscape will be maintained as the foundation for sustainable development. Despite the global significant nature of the landscape and preparatory work that was conducted for proclamation of the Bafing-Falémé PA, official gazettal has been delayed due to lack of champions and consensus among sectoral departments of the governments. More consultations with local stakeholders and communities also need to take place to finalise boundaries and natural resource use regime. There is little capacity within the government and communities to inventory and monitor biodiversity and ecosystem health on the ground inhibiting their ability to manage the resources effectively. There is an unmet need to test the different means for achieving connectivity, and action in this regard is constrained by insufficient incentives and weak land managers' capacities for internalising biodiversity conservation and sustainable land and forest management in land management activities, with little means for financing.

Barrier #2. Low management effectiveness of the Bafing-Falémé landscape: Despite the high concentration of globally significant biodiversity and appeal from scientists and environmentalists since the 1970's, the Bafing-Falémé is still not adequately protected nor managed. There is a plan to designate the area as a PA and efforts have been made since 2000, however it is not yet officially proclaimed. This means that the area is not really under any form of structured management. Only 3 administrative staff of OGUIPAR (the national park agency) have been assigned to work in the area with suboptimal capacity, equipment nor infrastructure and with no clear management framework. As a result of insufficient staff and surveillance, biodiversity is severely threatened. Poaching and timber harvesting are wide-spread. There is an urgent need for expediting the PA proclamation, identification of corridors and instalment of management system for these areas and PA buffer zones. There is also a disconnect between the plan for creating the PA and plans for sustainable local development. For the PA to function well, there is a need for creating income generating opportunities based on the natural asset which the Bafing-Falémé landscape offers.

Barrier #3. Insufficient capacity for sustainable land management and livelihood diversification Communities around the Bafing-Falémé rivers are not used to or trained on sustainable use principals. The capacity of communities for ensuring sustainable land and natural resource management is weak. First, the land management itself is not properly known by communities. It is essential to work closely with the communities to have their proper buy-in and provide simplified measures, such as simplified zoning plans, strengthened hunting management and agreed human wildlife conflict management measures. Current agriculture practices are not sustainable. For example, the preferred method of land re-fertilization is still the slash and burn, which is a serious threat if the PA is established. However, there are no incentives for conservation for these communities to currently implemented a sustainable land management attitude. Activities such as community based tourism are lacking. Community training, coupled with partnerships are needed in order to have alternative activities. In addition, the use of "3-stone stoves" are widely used for cooking, leading to massive use of wood. Firewood and charcoal are also produced using traditional methods, which are not energy efficient. Wood are harvested using active deforestation. The principle of woodlot is not known by communities.

Barrier #4. Lack of adequate knowledge management and gender mainstreaming: Reliable data, data collection and data storage/sharing remains a substantial hurdle to ensuring proper science-based monitoring of the threats to the environment in Guinea. Additionally, the minimal amount of information available faces challenges of sharing and scaling-up of successes and lessons learned in the numerous efforts being promulgated by international, national and local level actors in the environment and natural resource management field throughout the country. Building capacity together and sharing more reliable data is essential to move forward towards any better management of environmental governance. In additional, gender disaggregated data and mainstreaming into policies and programmes is not in common use and needs strengthening. In particular, there is a need to take full in to account situations of poor and excluded women as applicable.

The project

In order to remove the above mentioned barriers, the project will implement a landscape approach which will yield multi-focal impacts. The project **objective** is to promote an integrated and sustainable management of natural resources by introducing landscape approach and establishment and operationalisation of a core PA, corridors and buffer zones along the Bafing and Falémé rivers and establishing eco-villages around the PA. The project will achieve this by stabilizing land-use, strengthening biodiversity conservation measures and safeguarding a stream of ecosystem services, thereby generating global environmental benefits sustained by the associated generation of national and local socio-economic benefits.

Component 1 - Integrated landscape management

This first component aims to develop an appropriate and integrated regulatory framework for both ecosystem preservation and basic needs of population depending on natural resources. The country has various laws, codes, and policies for almost every environmental resource but they are not being consistently applied. There is no clear direction about how to implement them. In addition, laws, codes and policies are still in their silos, with no appropriate and integrated regulatory framework. Thus, the focus of the proposed GEF-financed project will be on integrating, sustaining and enforcing the legal and regulatory framework governing the management of natural resources.

The project will develop a Landscape Management Plan to ensure protection of key biodiversity areas (KBAs) including core wildlife habitats and corridors, and maintenance of biodiversity and ecosystem services. The management plan will be supported by biodiversity surveys, trade-off analysis and include a financing plan and an eco-tourism development plan.

The project will also help in finalizing the creation, delimitation and recognition of the Bafing-Falémé Protected Area. As previously stated, several endangered and vulnerable species live along the Bafing and Falémé rivers. The idea of creating this protected area emerged in the 1970s but has never materialized. The process of creating officially the protected area began in 2000. However, it is not yet finalized. Across the border, the neighbouring country Mali has created a protected area along the border named Bafing-Makana Park.

The project will design specific activities in order to create a newly recognized protected area named Bafing-Falémé Protected Area. It will be proclaimed under Ministerial Order followed by Presidential Decree with clear boundary descriptions and governance framework. Components #2 and #3 will focus on coordinating actions between the protected area and the surrounding population.

Component 2 – Operationalisation of the Bafing-Falémé PA and buffer zone management

Work under this component will strengthen the management effectiveness of the Bafing-Falémé PA and corridors. The project will establish a PA management system with adequate staffing, budget and management infrastructure and equipment, with skilled PA staff and co-management arrangements. A management plan of protected areas and classified forests along the Bafing and Falémé rivers will be developed by integrating climate change and land degradation dimensions. This will include the creation of buffer zones around the newly established protected area. Corridors will be established between classified forests. It will set specific rules regarding the usage of the buffer zone. Local population will be involved in all decision makings. Women groups will also be involved to foster greater ownership and enable replication. An agreed land use plan will be developed by the “Bafing-Falémé Landscape Management Board” with full participation of the communities for the establishment of the buffer zones and corridors. Robust biodiversity and ecosystem monitoring system will be developed and instituted.

The staff of the PA will be equipped, trained and made operational. This capacity-building programme will be based on the guidelines provided by the IUCN publication *Protected Area Staff Training: Guidelines for Planning and Management*⁷, and will target two objectives: (i) increasing the capacity of PA managers and operational staff to adapt to new challenges, using innovative and creative approaches; (ii) a team of well-trained and adequately equipped PA rangers is operational. The team will engage in improved anti-poaching actions, which will include the development of cross-entity (including cross-border) collaboration in implementing a highly effective surveillance network and rapid response strategy; (iii) basic infrastructure needed for PA management is repaired or constructed.

⁷ See more details in https://www.iucn.org/sites/dev/files/import/downloads/pag_017.pdf

Through this component, the project will also develop cross-border eco-tourism. It is globally demonstrated that eco-tourism is an effective tool to reduce poverty and ensure better use of biological diversity. A sustainable and high-end biodiversity-based tourism in the Bafing-Falémé complex will be developed and implemented on a pilot basis, ensuring transparency and equity for participation of local communities, including focused capacity building support for community members. The project will promote non-woody forest products (shea butter, sesame, tamarind vines, baobab leaves, nere seeds, etc.) through their use in the artisanal and cultural sector. Surrounding and local populations will be deeply involved in eco-tourism activities: reception, eco-guide, rangers, lodging, restoration, animation, etc. In addition, it will ensure socio-economic benefits such as construction of health centers and schools. Best ecosystem management practices will be developed.

Component 3 – Establishment of the eco-village model in the PA buffer zone

This component will implement the eco-village concept around the protected area. By promoting low-carbon technologies (energy efficient production and utilization of wood energy) and climate-smart agriculture, the project will reduce the pressure on forest for firewood production and utilization, look for alternative long-term solutions to firewood, and disseminate best agricultural practices.

It is designed to integrate a top-down approach at national level of providing support through policy measures (e.g. standards, testing and certification) and demand-side management (e.g. incentives and awareness), and a bottom-up approach of providing financial incentives to secure supply and stimulate demand for energy-efficient stoves (both wood and charcoal based models) in the project targeted sites. To enhance the effectiveness of these approaches and to create an enabling environment among the stakeholders and value chain actors in the project, capacity building and training activities will be conducted to enhance the technical and business capacity of the value chain actors.

There are essentially 5 stages in the charcoal value chain. In light of discussions with key stakeholders in the country, the project proposes a series of integrated interventions that are mostly focused on stages 1 (forest management), 2 (charcoal production) and 5 (charcoal consumption) of the value chain. This also applies to fuelwood production and utilization.

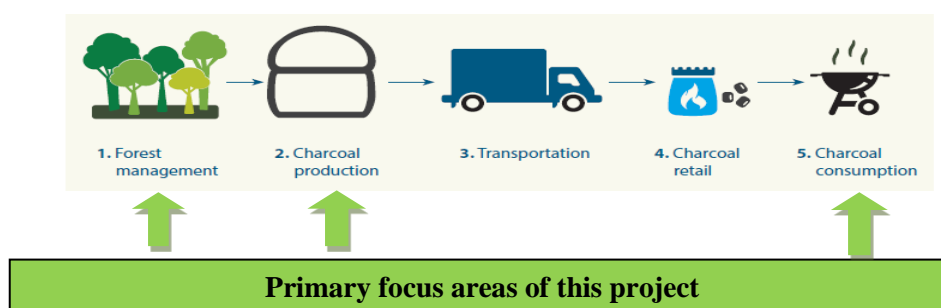


Figure 3: Charcoal Value Chain – Interventions by Stage

Improved kilns under stage 2 will consist mainly of Casamance prototypes. Improved cookstoves under stage 5 will include prototypes using charcoal or fuelwood. Through this component, a viable business model for improved kiln and improved cookstove production and distribution will be designed and implemented. The project will also facilitate the dissemination of 5,000 improved cookstoves and 50 improved kilns.

Forest management under stage 1 will consist of a green belt and ecological corridors created by restoring degraded forest ecosystems. It will also include some wood lots for fuelwood production. Woodlots favor rapid-growth native species adapted to the region for both wood energy production and forest conservation. During the PPG phase, UNDP’s social and environmental safeguards will be applied to minimize any associated risks.

Alternative sustainable solutions to wood energy such as biogas will also be explored and assessed.

An eco-village concept will be promoted among villages surrounding the protected area. This will help to meet the need of communities in terms of sustainable and integrated management of natural resources. The project will showcase the eco-village model in some villages in terms of biodiversity conservation, climate-smart agriculture and low-carbon development. It will improve the management of community trusts to provide alternative resources and revenues based on sustainable management and ecotourism. This will also involve land-use planning at the village level. The different technologies and mechanisms will be implemented in the same villages to really reflect an eco-village concept, maximize

the multiple benefits, and avoid dispersion. A detailed lesson learned from the Senegal ecovillages project will be conducted during PPG phase and its lessons learned incorporated in the project document.

Sustainable land management (SLM) practices will be implemented by communities to reduce threats to the PA and to increase food security, agricultural productivity and resilience, including climate smart agriculture, sustainable harvesting of wood and biomass energy, forest restoration, fire management-assisted natural regeneration and water management. This component will support a bushfire prevention and control strategy around the PA. The project will also implement an initiative to promote climate-smart agriculture. This will include training and capacity building on techniques for assisted natural regeneration (ANR) and water management and also assistance in equipping and organizing communities to implement ANR initiatives using methods such as: “Zai compost pits”, “half-moons”, and other water harvesting techniques. These initiatives will be strategically placed in a few degraded buffer-zone areas where agricultural productivity has declined or disappeared. The focus will be on setting the example and on convincing farmers of the effectiveness of such techniques so that they replicate them on their own initiative. The strategy for implementing the SLM would follow the methodology developed by the World Resources Institute for “Scaling-Up Regreening”.⁸ Regreening is a process in which farmers protect and manage trees that naturally regenerate on their land, rather than cut them down. Regenerated trees and shrubs help restore degraded lands and provide many benefits – from increased crop yields, recharging groundwater, providing fodder and firewood, and sequestering carbon.

Component 4 - Gender Mainstreaming, Knowledge Management and Learning

Under this component, gender will be mainstreamed throughout the integrated management of natural resources. In addition, community-learning mechanisms will be established and experiences will be shared through radios, SMS, websites, technical publications, videos and other relevant media. Communication products (films, articles, posters, reports, etc.) will be developed to inform about the newly-established protected area and the eco-village concept project. Information will be disseminated through the project website and newspaper, television, exhibitions and national workshops.

The capacity of the project team will be strengthened to effectively produce and disseminate knowledge and lessons learned from the project. The first targets of the communication strategy will be the population around protected areas, local authorities and Government staff. Communication tools will be developed with the objective of widely disseminating the integrated approach.

Incremental/additional cost reasoning and Global environment benefits

Incremental Cost Reasoning. The project’s alternative from the baseline and expected global benefits follows:

<i>Baseline Scenario</i>	<i>Alternative</i>	<i>Global Environmental benefits</i>
<p>Decline in water resources, habitat fragmentation, deforestation and forest degradation trends experienced in Middle and Upper Guinea will continue and likely accelerate</p> <p>Mining activities will continue in the area with little care to biodiversity and ecosystem conservation. In addition, hunting and sale of bush meat, collection of wood for fuelwood and charcoal, unsustainable agriculture techniques such as slash and burn, will remain to be the local practice</p> <p>Government agencies working in environment issues will likely continue to work in silos, with little cooperation and coordination in their actions.</p> <p>The Bafing-Falémé landscape will</p>	<p>An integrated landscape natural resource management will be governing the environment sector. A land scape management plan will guide sustainable and resilient landuse patterns and practices and ensure protection of core wildlife habitats including corridors and maintenance of biodiversity and ecosystem services. Mechanisms for coordination among stakeholders in the landscape will be put in place to avoid/minimise negative impacts from a range of threats through instalment of sound decision making taking in full account of biodiversity and ecosystem services maintenance.</p> <p>The Bafing-Falémé is officially recognised as a Protected Area with clear management regime for the core area, corridors and buffer zones. High-end low impact tourism model will be developed and piloted providing tangible benefits for local communities.</p> <p>Villages around the PA will adopt sustainable methods in all aspects of their livelihoods: cooking, farming, income generated activities. They will become eco-villages,</p>	<p>BD benefits</p> <p>Improved management o 815,300 ha of terrestrial landscapes, of which 517,200 ha are PA, corridors and buffer zones</p> <p>Expansion of the national protected area system by 315,200 hectares through proclamation of the Bafing-Falémé PA, safeguarding critical habitats for globally significant species including chimpanzee and other herbivores and carnivores.</p> <p>CCM benefits</p> <p>7 million tCO₂eq emissions avoided from through decreased deforestation rate over 517,000 ha and restoration of 10,000 ha</p> <p>52,608 tCO₂eq emissions avoided from the use of clean cooking</p>

⁸ See more details in <http://www.wri.org/publication/scaling-regreening-six-steps-success>.

<i>Baseline Scenario</i>	<i>Alternative</i>	<i>Global Environmental benefits</i>
<p>remain unprotected, leading to biodiversity loss and loss of opportunity for local communities to capitalise on the globally significant natural asset.</p> <p>Villages surrounding this biodiversity hotspot will continue to use unsustainable means for their livelihood development. Overexploitation of wood resources for fuel wood will significantly impact biodiversity and provisions of ecosystem services.</p>	<p>meeting their needs in terms of sustainable and integrated management of natural resources.</p> <p>Improved cook stoves and kilns will be used for cooking. Fuelwood will be harvested sustainably using woodlots.</p> <p>Sustainable land management practices will be implemented. Best agriculture practices will increase food security, agriculture productivity and forest restoration.</p> <p>Communities will have their capacities strengthened and alternative livelihoods will be available for them with incentives for conservation.</p>	<p>technologies</p> <p>LD benefits</p> <p>Increased land area under sustainable land management – i.e. effective agricultural management practices and supporting climate-smart agriculture in 10,000 ha, enhancing vegetation cover, protecting water resources and conserving soils.</p>

Innovation, sustainability and potential for scaling up.

Innovation. The project adopts an integrated landscape management approach, which is new to the country. Through this approach, the project will engineer a paradigm shift in the management of ecosystem services. The project will not only establish a Protected Area, but will be innovative by combining this creation with climate change and land degradation aspects. The project will disseminate an Eco-Village model around the PA. The Eco-Village concept consists of both low-carbon technologies and climate-smart agriculture at village level, in addition to biodiversity aspects in regards to the management of the PA.

Sustainability. The project will have several aspect of sustainability: institutional, financial and social. At institutional level, an integrated governance platform will be put in place. This will ensure not only harmonization of different management jurisdictions, but sustainability in all institutional aspects. At financial level, the project will promote Eco-tourism to ensure an effective tool to reduce poverty and ensure better use of biological diversity. At social level, communities will have their capacities strengthened, their engagement re-enforced, and their incentives for conservation increased. By adopting a participative approach, the project will guarantee maximum coverage of impact: the inclusion of all social groups, with particular attention to the participation and inclusion of women. The project will also develop the eco-village concept around the PA. This will include clean cooking aspects with viable financial mechanisms for the sustainability of the value chain; and as well smart-agriculture with transformation of agriculture products and income generated activities.

Scaling-up. The Bafing-Falémé protected area is part of a wider landscape not including Middle and Upper Guinea only, but across the border in Mali and Senegal. Mali has created a PA up to its border. Senegal has disseminated the eco-village concept. So the project has a great opportunity for scaling up to neighbouring countries, for not only the PA management, but as well for the integrated approach. It is foreseen to have a cross border integrated management of the ecosystem with exchange of experiences and lessons learned.

2) STAKEHOLDERS

<i>Stakeholder</i>	<i>Relevant Role</i>
Ministry of Environment, Water Resources and Forestry	The Ministry of environment will coordinate the overall project preparation and activities. In close collaboration with all its Directorates (Eaux-et-Forets; OGUIPAR, FSE, etc.), it will ensure consistency in the project.
OGUIPAR (Parks and Reserves Office of Guinea)	OGUIPAR will play a pivotal role in the implementation process of the protected area creation and eco-tourism management as the official coordinator/mediator of the proposed management board. OGUIPAR is expected to be the project's implementing partner. To be confirmed during the PPG.
Other ministries (Energy, Agriculture, etc.)	Ministries in charge of energy, agriculture, local development, mining, tourism, finance, etc. All of these entities will be consulted during the PPG.
Research and Development	University of Conakry, CERESCOR and COSIE will be involved in project design and ensure a transfer of technologies and capacities from NGOs to research institutions.
NGOs, SMEs, private economic operators	WCF, Guinee Ecologie, CERE, SEG, and CNOP-G will be involved in project design and ensure a share of knowledge.
Local communities and CSOs	Participative approach is ensured throughout the project, from preparation to implementation. Participation of local communities and CSOs will help in organizing and conducting awareness-raising campaigns, and

<i>Stakeholder</i>	<i>Relevant Role</i>
	ensure strong support and buy-in from project beneficiaries. several local NGOs/CSOs, SMEs, and local stakeholders
Farmers, charcoal and fuelwood producers and other cooking value-chain stakeholders	All stakeholders in the cooking value-chain will be duly consulted during the PPG. Farmers and charcoal/fuelwood producers will be involved in the design of financial mechanisms of clean cooking products.
Private Sector	Regarding the private sector, the most important stakeholders are the agribusiness developing agricultural projects around the Bafing-Falémé Complex – who need to start complying with land-use regulations and adopting more sustainable land-use practices. Stakeholders in the tourism sector will also need to comply with new regulations and fully participate in the development of the PAs. Private sector role during the project preparation would mainly be to share needs in term of investments and to provide feedbacks vis-à-vis designed project instruments.
All other potential co-financiers	Will be duly consulted and involved in the PPG phase.
UNDP	GEF Agency for this project. Will coordinate the PPG in close collaboration with Government.

3) GENDER EQUALITY AND WOMEN’S EMPOWERMENT.

[Are issues on gender equality and women’s empowerment taken into account? Yes]

Gender relations will be considered in every aspect of the project’s implementation, in particular in regard to Components 2 and 3. Women are a very important group under this project. While also relevant to the consumption of wood-based resources, their role as the primary collectors and users of non-timber forest products, in seed selection, seed saving, and use of wild plants for food and medicines plays a major role in biodiversity conservation and sustainable land-use. Especially, with regards to clean cooking, fuelwood use for domestic purposes is synonymous with women in the country. Although women may share the task of collecting fuel wood with children, they are entirely responsible for cooking in the households. Therefore, this project will directly impact women. It is estimated that the time spent for wood collection varies between 2 to 3 hours per woman per day in the country. With adequate management of firewood and improved cookstoves, this can be reduced to only 2 or 3 hours per week.

Women are also a privileged channel for community education and capacity building (particularly through the community’s children) and are usually receptive to local development actions that aim at improving livelihoods and reducing pressures on the landscape. Furthermore, women, children and the elderly are frequently amongst the more vulnerable of the poor. In the face of climate change and lower landscape-level resilience, their vulnerability will likely be exacerbated. Hence, women will not only be a key indirect beneficiary of conservation measures under this project, but they will also play a protagonist role in promoting the mainstreaming of sustainable resource-use of this landscape. The focus on women and their economic empowerment is crucial for the sustainability of the project and for addressing gender developmental issues including those who are particularly poor and may be excluded. It does so by creating surpluses – of energy, water, food and ultimately free-time. Furthermore, during the PPG project indicators will be broken down by gender where applicable and gender concerns incorporated in the planning of specific activities.

The project’s Components adopt a participative approach in order to guarantee maximum coverage of impact: the inclusion of all social groups, including marginalized groups, with particular attention to the participation and inclusion of women. Gender considerations will be part of the formulation process, and attention paid to identifying and promoting appropriate forms of benefit-sharing that acknowledge and reward the differing contributions of women and men to conservation. Women will be represented in all consultations conducted by the proposed management board, and will certainly have a representative on the board itself. Women’s participation in all stages of the project will ensure that their needs are met and that their constraints are addressed.

A full gender assessment will be conducted and a project specific gender mainstreaming plan will be developed during the PPG phase.

4) RISK.

The following risks have been identified. This will be further examined and updated during the PPG phase.

Risk	Level of Risk	Mitigation Action
<p>Political risk Guinea Conakry has faced political instability in the past. Several coups d'état have taken place. However, a new elected and more stable Government has been ruling since 2010. If new political instability suddenly occurs again, it will certainly negatively impact the overall investment climate and cause delays in project implementation. Another risk for stability would be a further spread of EBOLA.</p>	<p>P=4 I=4</p>	<p>The project will work as much as possible with decentralized authorities in provinces and rural areas in Middle and Upper Guinea. The political will to support this project in these regions is strong. The impact of political instability at national level is seen more in the capital, Conakry. The project will also build a wide coalition of partners and stakeholders whose interest in rural development will likely sustain, even in case of regime change. They include local businesses and communities, NGOs and international development agencies.</p>
<p>Regulatory framework Difficulties in constructing the required collaborative process through an effective management board</p>	<p>P=2 I=4</p>	<p>Guinea has several national agencies, offices and directorates working in the environment conservation. The Government departments work in silo without cooperation/collaboration. The project will put in place a platform for collaborative integrated natural resource management and governance. All the relevant administrative levels of Government will be engaged in the process and represented in the platform, together with PA managing entities, NGOs and other stakeholders.</p>
<p>Financial risk Widespread poverty and lack of sustainable sources of income, resulting in low ability to pay for new services. Ex: Households in eco-villages may not be able to purchase improved cookstoves; and improved kilns may not be affordable to charcoal producers.</p>	<p>P=2 I=3</p>	<p>The project will conduct assessments of the capacity and willingness to pay of end-users. In addition, income generated activities introduced by the project such as ecotourism and transformation of agriculture products will increase the ability to pay for new services in the villages.</p>
<p>Social risk Local communities and relevant groups of stakeholders (e.g. municipal authorities, community groups, NGOs, public entities) are not receptive to changing unsustainable (traditional or otherwise) practices that threaten the provision of ecosystem services.</p>	<p>P=2 I=3</p>	<p>Project success will depend on the participation and commitment of all the relevant stakeholders including “the right mix” of local and national agencies, NGOs and community groups. The Government has expressed its commitment to ensuring full community participation in project activities that relate to livelihoods and the management of natural assets. They also committed to creating adequate incentives for resource stewardship to communities, e.g. through participatory planning and decision-making mechanisms and financial and technical support for communities to self-regulate access to and sustainable use of resources. Ultimately, success in engaging local communities will depend on whether the project can produce tangible socio-economic benefits to resource users in its effort to produce global environmental benefits. The project will invest, where possible and through implementing partners, in awareness-raising campaigns, building local capacities, introducing alternative technologies and production methods. The project will work with other projects and programmes active at project site level on a plethora of sustainable livelihood activities. The aim is to enhance demonstration of benefits (income, employment, etc.) from sustainably using natural assets and maintaining ecosystem services.</p>
<p>Environment risk Potential modifications of the whole landscape by planned hydropower dams.</p>	<p>P=2 I=4</p>	<p>Several hydropower dams are planned in the region. However, it has to be recalled that some of these projects are quite old, over decades ago. But indeed, they may constitute a risk if they came into effect. Three hydro dams (Koukoutamba, Bouréya and Bafassa) are planned in the project site. Their environment and social impact studies are underway and not yet completed. If these results are available during PPG phase, they will be fully incorporated into the project document. It is also expected that, if the environment and social impacts are high, that the Government may choose other sites that are not located in rich ecosystem sites. The above 3 mentioned sites are only 3 among a long list of potential hydropower dams.</p>

Risk	Level of Risk	Mitigation Action
		If the construction of the dams does happen, effective mitigation measures will be put in place such as design of the dams (proper location, height, technical aspects, management of water flows, etc.) to avoid direct impacts on sensitive biodiversity resources; or compensatory measures (offsetting the loss of ecosystem). This will be looked more in details during PPG phase. A close coordination with OMVS (Senegal River Basin Development Authority) is expected.
Climate risk Climate change risks may cause changes in Middle and Upper Guinea.	P=1 I=3	Middle and Upper Guinea regions are generally susceptible to the negative impacts of climate change such as flooding and drought. For the duration of the project, these will be monitored as part of the general national efforts in this respect. The project, when under implementation, will then gauge if there is room for adding specific adaptation strategies in the landscape and PA management interventions.

5) COORDINATION.

During the PPG phase, in-depth consultations will be undertaken to establish partnerships and practical modalities for linking and collaborating with several ongoing and planned initiatives with impacts in Middle and Upper Guinea. This is not only to avoid unnecessary duplication but also to ensure that GEF resources build on the progress and achievements made to date through such initiatives. A strategy and plan for collaboration with relevant ongoing and planned initiatives such as those stated below will be prepared during the preparatory phase, including defining the roles and responsibilities of critical stakeholders.

The project will closely work with:

- Coordination with GEF-SGP on actions at community and village level.
- “*Ecosystem-Based Adaptation Targeting Vulnerable Communities of the Upper Guinea Region*” GEF/UNDP project: The project has the same partial geographical scope with the proposed project. The first one focusing on climate change adaptation while the proposed project will work on climate change mitigation, biodiversity and land degradation. The two projects will be fully complementary.
- “*Developing a Market for Biogas Resource Development and Utilization in Guinea*” GEF/UNDP project: The project has a country wide coverage and is working partly in the targeted sites of the proposed project. Through the Ecovillage concept, the proposed project will promote clean cooking technologies such as Biogas.
- “*Strengthening Resilience of Farming Communities' Livelihoods against Climate Changes in the Guinean Prefectures of Gaoual, Koundara and Mali*” GEF/UNDP project: The project covers partly the Middle Guinea region and thus will be complementary with the proposed GEF project in strengthening farming communities and develop climate smart agriculture.

In addition, several GEF/UNDP projects have been developed in Guinea and surround countries in the past decades. Among these projects, there are (but not limited to): the SPWA-BD: GEF Program in West Africa: Sub-component on Biodiversity (GEF#3785); the Pilot ecovillages in Senegal (GEF#4080); the Protected Area Buffer Zone Management in Burkina Faso (GEF#4221), the West African Regional Biosafety Program (GEF#2911), the Conservation of the Biodiversity of the Nimba Mountains through Integrated and Participatory Management (GEF#1139). A thorough study on lessons learned from previous GEF funded projects will be conducted during PPG phase. Evaluations of older national and regional projects will be considered and their lessons learned fully integrated into the project document. A detailed annex on these lessons learned will be available in the UNDP Project Document.

6) CONSISTENCY WITH NATIONAL PRIORITIES.

The project strategy and proposed outputs are consistent with national development priorities, and have close substantive and institutional links and complementarities with the primary national development strategies and plans. The five-year Development Plan, previously for 2011-2015, and then updated towards 2020, strongly promotes natural resources conservation, reduce deforestation and tourism development. The project is fully in line with the country’s National Biodiversity Strategy and Action Plan (NBSAP, 2016). According to the NBSAP, the Government aim to increase the PA estate to be 25% of its territory by 2025, which will require creation of new PAs covering 10% of the country’s land surface (or 2,458,500 ha). The project will contribute to attainment of Aichi Target 5 (loss of habitat); 7 (areas under

sustainable management); 10 (vulnerable ecosystems); 11 (protected areas); 12 (preventing extinction); 14 (essential ecosystem services); and 15 (restoration and resilience). Moreover, the National Communications and INDC of Guinea to the UNFCCC: the INC (2002) highlights that the Forestry (LUCF), Agriculture and Energy sectors are the main sources of GHG emissions. The INDC (2015) projects an 15% decrease in CO₂ emissions by 2030, in the same three main sectors highlighted by the Second National Communication (2012). Furthermore, Guinea's National Action Programme (NAP 2006) under UNCCD, which highlighted that the country is facing continuous desertification and actions such as better land use planning and climate smart agriculture have to be promoted.

SMART indicators to track the project's contribution towards Aichi targets are many. Main indicators are indicated below against each target:

Target 5: trends in the extent of ecosystems and habitats (forest area); and trends in the abundance and distribution of threatened species and the connectivity/fragmentation of ecosystems.

Target 7: the area of forest, agricultural and ecosystems under sustainable management; and the proportion of products derived from sustainable sources.

Target 10: the incidence of human-induced ecosystem failure.

Target 11: management effectiveness of PAs; and increase in coverage of ecoregions.

Target 12: the change in status of threatened species.

Target 14: the health and well-being of communities who depend directly on local ecosystem goods and services.

Target 15: the carbon sequestration and GHG calculations.

7) KNOWLEDGE MANAGEMENT.

Knowledge management is very important for this project, due to its integrated approach. Component 4 will specifically deal with knowledge management. Through this component, the project will ensure that community-learning mechanisms are established and experiences are shared through radios, SMS, websites, technical publications, videos and other relevant media. Communication products (films, articles, posters, reports, etc.) are developed to inform about the newly established protected area and the eco-village concept project. Information are disseminated through the project website and newspaper, television, exhibitions or national workshops.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT AND GEF AGENCY


A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

(Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFF endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
MR. AHMADOU SEBORY TOURE	OPERATIONAL FOCAL POINT FONDS DE SAUVEGARDE POUR L'ENVIRONNEMENT	MINISTRY OF ENVIRONMENT	05/16/2016

B. GEF AGENCY CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Adriana Dinu Executive Coordinator, UNDP GEF		March 29, 2017	Saliou Toure Technical Advisor EITT	+251 912 503 320	Saliou.toure@undp.org

Annex 1: CO2 calculations - FAO EXACT result sheet

The EX-Ante Carbon-balance Tool (EX-ACT)

Start Description Land Use Change Crop production Grassland Livestock Management Degradation Coastal Wetlands Inputs Investments Fisheries Aquaculture Detailed Results

Project Name: Integrated management of n. Climate: Tropical (Wet) Duration of the Project (Years): 10
 Continent: Africa Dominant Regional Soil Type: Wetland Soils Total area (ha): 527000

Components of the project	Gross fluxes			Share per GHG of the Balance					Result per year			
	Without	With	Balance	All GHG in tCO2eq			N ₂ O	CH ₄	Without	With	Balance	
	All GHG in tCO2eq			Biomass	Soil	Other						
Land use changes												
Deforestation	10,641,230	5,328,128	-5,313,102	-4,702,912	-617,703		-7,513	0	1,064,123	532,813	-531,310	
Afforestation	0	-1,930,170	-1,930,170	-1,603,177	-326,993		0	0	0	-193,017	-193,017	
Other LUC	0	0	0	0	0		0	0	0	0	0	
Agriculture												
Annual	0	-134,771	-134,771	0	-136,710		1,939	0	0	-13,477	-13,477	
Perennial	0	0	0	0	0		0	0	0	0	0	
Rice	0	0	0	0	0		0	0	0	0	0	
Grassland & Livestocks												
Grassland	0	0	0	0	0		0	0	0	0	0	
Livestocks	0	0	0	0	0		0	0	0	0	0	
Degradation & Management												
Coastal wetlands	0	0	0	0	0		0	0	0	0	0	
Inputs & Investments												
Fishery & Aquaculture	0	0	0	0	0		0	0	0	0	0	
Total	10,641,230	3,263,187	-7,378,043	-6,306,089	-1,081,406	0	-5,574	0	1,064,123	326,319	-737,804	
Per hectare	20	6	-14	-12.0	-2.1	0.0	0.0	0.0				
Per hectare per year	2.0	0.6	-1.4	-1.2	-0.2	0.0	0.0	0.0	2.0	0.6	-1.4	

0.Start 1.Description 2.LUC 3.Cropland 4.Grassland 5. Management 6. Coastal 7. Inputs 8. Fish 9. Results Help

The carbon reduction estimates have been computed using the Ex-Ante Carbon-Balance Tool (EX-ACT) Tier Standard Edition, developed by FAO. The forest-type selected for the calculations is Tropical Wet Forest, building on a baseline of degraded land in a Wet Tropical climate. The soil-type generally consists of fertile Wetland soils, albeit highly degraded through prior deforestation activity and subsequent over-grazing/agriculture. The project involves conservation in 517,000 ha using native and introduced tree species selected for their adaptability to the area. To be conservative, 517,000 ha has been used in the calculation, instead of the entire 815,300 ha of landscape. The deforestation rate before the project is 0.5% (FAO 2010). According to FAO, between 1990 and 2010, Guinea lost an average of 36,000 ha or 0.50% per year. The deforestation rate after the project is 0.25%. 517,000 ha * 0.5% = 2,585 ha lost per year. Over the 10-year period, it is 25,850 ha lost meaning a remaining cover of 491,150 ha. This is exactly what is shown in the “without” column of the FAO EXACT sheet. The deforestation rate after the project is 0.25%, leading to 504,075 ha “with” the project. The difference of conservation (504,075 – 491,150 = 12,925 ha leads to 5.3 million of CO2 emission avoided (Note that the remaining CO2 emission reductions come from the climate smart agriculture and the clean cooking system). Over a period of 10 years, approximately 7 million tCO2e will be reduced through the project’s intervention. The full EXACT sheet is attached to the PIF. A finer carbon benefit estimation will be made during the PPG phase.

Direct emissions from low-carbon technologies: CO₂ emission reduction attributed to the deployment of 50 energy-efficient charcoal kilns (Casamance model) and the dissemination of 5,000 improved cook stoves (to start one year after project implementation).

IMPROVED COOK STOVES							
Parameter	Year						
	1	2	3	4	5	6	7

Number of improved cook stoves disseminated (units)	100	400	1,000	1,500	2,000		
Total number of improved cook stoves in use (units)	100	500	1,500	3,000	5,000	4,600	3,600
Total reduction of CO ₂ equivalent per improved cook stove (in tonnes)	0	750	2,250	4,500	7,500	6,900	5,400
Lifetime of the improved cook stove (ICS), years						3	
CO ₂ emission reduction per ICS, tonnes/year ⁹						1.5	
Total CO ₂ emission reduction from the ICSs, tonnes						27,300	

SUSTAINABLE CHARCOAL PRODUCTION

Type of Charcoal Kilns	Number of Units Installed	Annual Production, tonnes	Useful Life, Years	Total Lifetime Production, tonnes	No. of Replacements
Casamance Kiln	50	9.6	5	7,200	2

NOTES:	Charcoal to Wood Ratio	Useful Life, years
Traditional Kilns	0.208	3
Casamance Kiln	0.25	5

	CO ₂ Emission Reduction, tonnes			Charcoal Production and Operational Losses, tonnes	Net CO ₂ Emission Reductions, tonnes
	Pyrolytic CH ₄ avoidance	Use of non-renewable biomass	Total		
Casamance Kiln	0	26,640	26,640	1,332	25,308

- Traditional Kilns have a minimum charcoal yield of 250 kg from 1,200 kg wood.
- Retorts kilns have an average yield of 250 kg of charcoal from 650 kg of wood (dry basis)
- Average annual production from Retort kilns is 24 tonnes of charcoal; for Casamance, it is 9.6 tonnes of charcoal
- Based on data from a leading study¹⁰, with a conservative estimate of the percentage carbon content in wood, the CO₂ reduction conversion factor savings from avoiding the use of non-renewable biomass represents an emission reduction of roughly 3.7 tCO₂e per tonne of charcoal produced.
- Total losses (i.e. production facility, charcoal transport and distribution to consumers) do not exceed 5%.

Total CO₂ emission reduced from improved kilns and cookstoves: 27,300 + 25,308 = **52,608 tCO₂**

⁹ Stockholm Environment Institute, Working Paper (2013), *Assessing the Climate Impacts of Cookstove Projects: Issues in Emissions Accounting*.

¹⁰ Bailis (2009), *Modeling Climate Change Mitigation from Alternative Methods of Charcoal Production in Kenya*.