SUSTAINABLE FOREST ECOSYSTEM MANAGEMENT PROGRAMME (GDEF) FOR CLIMATE CHANGE ADAPTATION

MARCH 2017

CTCN
CLIMATE TECHNOLOGY CENTRE & NETWORK

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Foreword

This project note has been prepared in connection with CTCN technical assistance provided at the request of the Ministry of the Environment, Water and Forestry of the Republic of Guinea.

Apart from national economic development policies (Poverty Reduction Strategy Paper, Five-Year Development Plan, etc.), the Republic of Guinea Conakry has put together a series of policies to improve people's resilience in the face of the harmful effects of climate change. These include the National Adaptation Plan of Action (NAPA), the Initial National Communication and, more recently, the Intended Nationally Determined Contribution (INDC). This contribution provided an opportunity for Guinea to highlight the fundamental importance of taking account of climate change adaptation in the country's development process. The INDC stresses that adaptation is essential to anticipate the impacts of climate change and thereby reduce the costs and damage they cause. It also pointed out to the international community the huge efforts that Guinea needs to make to cope with the negative effects of climate change, as well as to shoulder its responsibilities in relation to the vulnerability of the West African sub-region.
Implementation of the project ideas and strategies is, however, still very limited due to lack of the expertise needed to put together "bankable" projects that can be financed by climate donors.
This is the background to the request for technical assistance made by the Republic of Guinea, through the National Environment Department, to the CTCN (Climate Technology Centre and Network) to overcome this barrier to access to finance for adaptation projects.
This assistance has helped to support a community of "champions" to come up with consolidated project ideas. The present sustainable forest ecosystem management programme for climate change adaptation is one of the five projects/programmes with strong climate change adaptation potential selected by the national authorities.

This concept note aims to present the broad lines of the project and enable potential funders to assess the relevance of the project with regard to the expected impacts and its own strategic orientations. The next step will be to determine the procedure for putting together a complete project file, taking account of the specific access requirements of each international donor.

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Summary presentation of the project

Project name	Sustainable Forest Ecosystem Management Programme (GDEF) for climate change adaptation
Project area	Whole of Guinea and specific sites
Main project partners	Ministry of the Environment, Water and Forestry (MEEF): National Environment Department (DNE), National Water and Forestry Department (DNEF), OGUIPAR (Guinean parks and reserves office) Guinée Ecologie
Summary	Located in the four natural regions of Guinea (Forest Guinea, Upper Guinea, Middle Guinea and Lower Guinea), the goal of the GDEF project is to help build people's capacities to adapt in the face of the effects of climate change through sustainable management of forest ecosystems. It will contribute to improving ecosystem services for local communities in the four natural regions of Guinea. The project hinges around the following components: Improvement of forest governance; Restoration and rehabilitation of degraded forest landscapes; Management of protected areas; and Improving people's living conditions through developing forest potential.

Goal: Contribute to building people's capacities to adapt in the face of the effects of climate change through sustainable management of forest ecosystems.

Specific objectives:

SO1 - Improve forest governance by involving all stakeholders and harmonizing laws and regulations

SO2 – Restore and rehabilitate degraded forest landscapes with a view to increasing the carbon sequestration rate and providing the resident communities with the ecosystem services on which they are heavily dependent to reduce their vulnerability to climate change

SO3 - Ensure sustainable management of protected areas through involving communities and stakeholders to improve natural resource conservation

SO4 - Improve the living conditions and resilience of local people through developing forest potential.

SPECIFIC OBJECTIVE 1 : Improve forest governance by involving all stakeholders and harmonizing laws and regulations

Result 1: Improved governance in the forest sector

Principal activities planned:

R1A1 – Analyse the legal and institutional framework in the forest sector, taking account of climate change-related issues.

R1A2 - Build the capacities of the field staff of the DNEF, OGUIPAR and DNE through on-the-job refresher training on improved forest management and protection methodologies, as well as other basic natural resource management techniques in relation to climate change

R1A3 - Support community governance through setting up Village Consultation Committees (VCCs) on forest ecosystem management.

SPECIFIC OBJECTIVE 2 : Restore and rehabilitate degraded forest landscapes with a view to increasing

the carbon sequestration rate and providing the resident communities with the ecosystem services on which they are heavily dependent to reduce their vulnerability to climate change

Result 2: Degraded forest landscapes restored and conserved

Principal activities planned:

R2A1 – Take an inventory of biodiversity and map national forest ecosystems and protected areas and monitor changes in the level of degradation

R2A2 - Raise the awareness of local communities in respect of trialling and spreading good agro-forestry practice and appropriate technology liable to help reduce pressure on natural plant resources

R2A3 - Set up nurseries to produce local species for restoration and rehabilitation of degraded forest landscapes

R2A4 - Replant degraded areas

R2A5 - Ensure maintenance of the new plantations

SPECIFIC OBJECTIVE 3: Ensure sustainable management of protected areas through involving communities and stakeholders to improve natural resource conservation

Result 3: Protected areas sustainably managed through the involvement of communities and stakeholders for better natural resource conservation

Principal activities planned:

R3A1 - Draw up or update and support implementation of full management plans for protected areas, including cross-border protected areas, to ensure sustainable natural resource management and include climate change issues in these plans

R3A2 – Create and restore ecological corridors in order to ensure ecological connectivity and improve the viability of flora and fauna species as well as the quality of water and water courses;

SPECIFIC OBJECTIVE 4 : Improve the living conditions and resilience of local people through developing forest potential

Result 4: Improved living conditions and resilience of communities living in and around protected areas as a result of developing forest potential

Principal activities planned:

R4A1 - Evaluate and enhance positive endogenous knowledge and practices with a view to sustainable management of forest resources

R4A2 – Develop the potential of non-timber forest products, through support in the production, processing and marketing of these products

R4A3 – Promote ecotourism and income-generating activities for local communities with a view to enhancing their climate change resilience.

Total project duration	**7 years**
Budget estimate	**USD 23,151,758**

1 Background

1.1. Introduction

Climate change, the consequences of which threaten the whole of humanity, stems from greenhouse gas emissions, primarily as a result of consumption of fossil fuels and biomass to carry out various socio-economic activities. Measuring the risk posed by the ever-growing increase in greenhouse gas emissions, the international community adopted the United Nations Framework Convention on Climate Change (UNFCCC) with a view to finding palliative solutions. Following ratification of the UNFCCC by Guinea, various studies were conducted as part of the national climate strategy (Initial National Communication, 2002; NAPA-CC, 2006). They dealt with estimated greenhouse gas emissions and mitigation measures; technology transfer and capacity-building needs; assessment of the vulnerability of particular resources to climate change; and adaptation strategies.

These studies highlighted the impact of human activities on forest ecosystems, i.e.

- **Charcoal production**: long reliant on forest species, charcoal production now involves some fruit tree species such as mango. This business attract speculators, knowing that people are heavily dependent on charcoal for their energy needs.
- **Excessive woodcutting**: aimed at producing firewood and timber, this practice is totally unorganized. Each user cuts what they need where and when they want. There is little or no supervision of the activities of logging professionals and foresters in some areas. The result is overexploitation of the entire resource. There is a real mismatch between wood offtake and the potential of each cut-block, causing woody resources to run low.
- **Land clearance** for agriculture, mining, uncontrolled gathering activities, etc.
  Climate change accentuates the degradation already seen. The NAPA (2007) identified forest resources as amongst those most vulnerable to climate change at national level. If the projections of a rainfall deficit and rising temperature are correct, there will be changes in the distribution of forest formations, arid zones will expand and the potential of the country's forest resources will decline. Other effects may include alterations in the frequency of forest fires and changes in the behaviour of pests and diseases.

To meet these challenges, Guinea has placed the issue of sustainable management of forest resources and the environment at the heart of its economic and social development process. Since 1986, the Guinean authorities have been aware of the need to plan and implement a sustainable natural resource management and environmental protection strategy. In its initial national communication on climate change in 2002, Guinea undertook to support rural communities' efforts to adapt by developing agro-silvo-pastoral techniques that would enable them both to continue their activities and preserve the resources on which they rely. Extensive farming methods destroy plant cover over wide areas, while livestock is left to wander freely. Effective ways to safeguard forest resources include adopting agro-forestry techniques, marking out grazing areas and establishing natural resource conservation sites.

1.2. Constraints

Sustainable, climate change-resilient forest ecosystem management is currently subject to several constraints:

- **<u>Constraint No. 1:</u> a legislative and regulatory framework does exist but is rarely put into practice.**

In the interests of improving preservation of the natural environment and people's living environment, the government has launched significant initiatives with support from development partners. Laws and regulations with comprehensive and sectoral scope have been adopted and promulgated.

These instruments do not, however, currently include climate change-related issues. Moreover, it should be noted that not all the legal codes are accompanied by implementing provisions and none of them have been widely distributed nationally. There is therefore a real need to update and harmonize the legal and regulatory framework and disseminate it at local level to enhance its effectiveness.

- **<u>Constraint No. 2:</u> institutional instability in respect of management and preservation of natural resources and the environment**

The institutions in charge of natural resource and environmental management lack stability in Guinea. Environment was initially placed under three ministerial departments before becoming a fully fledged Ministry[1]. This severely limited the effectiveness of ecosystem protection, because the transfers were accompanied by a loss of human resources able to ensure sound ecosystem management in view of the incomplete handover of the information and skills needed to perform that task. These successive changes have also caused difficulties in identifying and involving stakeholders, as individual roles are not always clear.

- **<u>Constraint No. 3:</u> the weight of socio-economic factors: rural communities are often the poorest and those most dependent on natural resources**

Forest resources have many uses: wood for domestic purposes or economic activities (to fire bricks, for smoking/curing or other economic activities), ecosystem goods and services (contribution to soil fertility and structure, preservation of water resources and habitats of rare or protected species, etc.), as a place of transhumance or source of food for livestock, the products of hunting, forest land used for agriculture, as a source of non-timber forest products (NTFPs), etc. The forest as a whole is a source of income and subsistence for rural communities.

Climate change adds to the human pressure in threatening these forest ecosystems. Yet the more ecosystems are degraded, the more vulnerable to climate change communities are and the more they increase pressure on ecosystems, the poorer they become, feeding the vicious circle.

These income sources are essential to the livelihoods of rural communities, in a situation where the incidence of poverty at national level has risen from 53% in 2007 to 55.2% in 2012, although there was a fall between 2010 and 2012 (58% against 55.2%), with a real GDP growth rate increasing from 1.9% in 2010 to 3.9% in 2012. This growth is more attributable to income redistribution than performance in terms of real growth, with a very uneven picture across urban and rural areas. At national level, the poverty rate has risen by 2.2 points of which 1.3 points relate to the growth effect and 0.9 points to income distribution unfavourable to the poorest. In rural areas, poverty worsened by 1.7 points, almost entirely due to weak economic growth, confirming persistent income inequality in those areas. Women are the most vulnerable group, because 80% of them are engaged in

[1] Successively coming under the Ministry of Mines, Geology and Environment, the State Secretariat for Energy and Environment, the Ministry of Agriculture, Livestock and the Environment and then the Ministry of the Environment and Sustainable Development before becoming the present Ministry of the Environment, Water and Forestry (MEEF).

vegetable production and the use and processing of NTFPs, so they are far more dependent on forest resources to meet their families' needs (PRSP III, 2013).

2 Programme presentation

2.1. Programme description

➲ **GOAL:**

The programme aims to contribute to building people's capacities to adapt in the face of the effects of climate change through sustainable management of forest ecosystems.

➲ **SPECIFIC OBJECTIVES:**

SO1 - Improve forest governance by involving all stakeholders and harmonizing laws and regulations

SO2 – Restore and rehabilitate degraded forest landscapes with a view to increasing the carbon sequestration rate and providing the resident communities with the ecosystem services on which they are heavily dependent to reduce their vulnerability to climate change

SO3 - Ensure sustainable management of protected areas through involving communities and stakeholders to improve natural resource conservation

SO4 - Improve the living conditions and resilience of local people through developing forest potential.

Details of the outputs and activities relating to the various specific objectives appear in the table below.

Table 1: Presentation of the logical framework

Specific objectives and expected results	Activities	Participants
Objective 1: Improve forest governance by involving all stakeholders and harmonizing laws and regulations		
Result 1: Improved governance in the forest sector	Activity 1.1: Analyse the legal and institutional framework in the forest sector, taking account of climate change-related issues.	DNE, DNEF, OGUIPAR, legal advisers
	Activity 1.2: Build the capacities of the field staff of the DNEF, OGUIPAR and DNE through on-the-job refresher training on improved forest management and protection methodologies, as well as other basic natural resource management techniques in relation to climate change.	DNE, DNEF, OGUIPAR
	Activity 1.3: Support community governance through setting up Village Consultation Committees (VCCs) on forest ecosystem management	Project, technical services and decentralized authorities, NGOs
Objective 2 : Restore and rehabilitate degraded forest landscapes with a view to increasing the carbon sequestration rate and providing the resident communities with the ecosystem services on which they are heavily dependent to reduce their vulnerability to climate change		
Result 2: Degraded forest landscapes restored and conserved	Activity 2.1: Take an inventory of biodiversity and map national forest ecosystems and protected areas and monitor changes in the level of degradation	Project, technical services and local authorities, research institutes, NGOs
	Activity 2.2: Raise the awareness of local communities in respect of trialling and spreading good agro-forestry practice and appropriate technology liable to help reduce pressure on natural plant resources	Project, NGOs, local authorities and technical services
	Activity 2.3: Set up nurseries to produce local species for restoration and rehabilitation of degraded forest landscapes	Project, NGOs, local authorities and technical services
	Activity 2.4: Replant degraded areas	
	Activity 2.5: Ensure maintenance of the new plantations	

Objective 3: Ensure sustainable management of protected areas through involving communities and stakeholders to improve natural resource conservation		
Result 3: Protected areas sustainably managed through the involvement of communities and stakeholders for better natural resource conservation	Activity 3.1: Draw up or update and support implementation of full management plans for protected areas, including cross-border protected areas, to ensure sustainable natural resource management and include climate change issues in these plans	Project, technical services
	Activity 3.2 : Create and restore ecological corridors in order to ensure ecological connectivity and improve the viability of flora and fauna species as well as the quality of water and water courses	Project, NGOs, local authorities and technical services
Objective 4: Improve the living conditions and resilience of local people through developing forest potential.		
Result 4. Improved living conditions and resilience of communities living in and around protected areas as a result of developing forest potential	Activity 4.1: Evaluate and enhance positive endogenous knowledge and practices with a view to sustainable management of forest resources	Project, NGOs, local authorities and technical services
	Activity 4.2: Develop the potential of non-timber forest products, through support in the production, processing and marketing of these products	Project, NGOs, local authorities and technical services
	Activity 4.3: Promote ecotourism and income-generating activities for local communities with a view to enhancing their climate change resilience	Project, NGOs, private operators, local authorities and technical services

2.2. Project's transformational power

Integrated management of forest landscapes is a key approach in climate change adaptation and mitigation. The vulnerability of forest formations to climate change depends on the hydric deficit of the various climate zones. The projected rainfall deficit and increased temperature will contribute to a change in the distribution of plant formations by 2025. The North-Eastern and North-Western zones will see the wooded savannah transformed into dry savannah following a 200 mm reduction in annual average precipitations; dense vegetation will disappear in Fouta region and Kérouané, Beyla, Lola and N'Zérékoré prefectures. It will gradually gave way to wooded savannah, which will advance from North to South. Arid zones will expand, with a decrease in some less drought-resistant forest species. This will considerably reduce the country's forest potential (NAPA 2007).

There is a twofold link between protected areas and climate change adaptation. On the one hand, conserving protected areas is an effective way of helping communities adapt to climate change. If

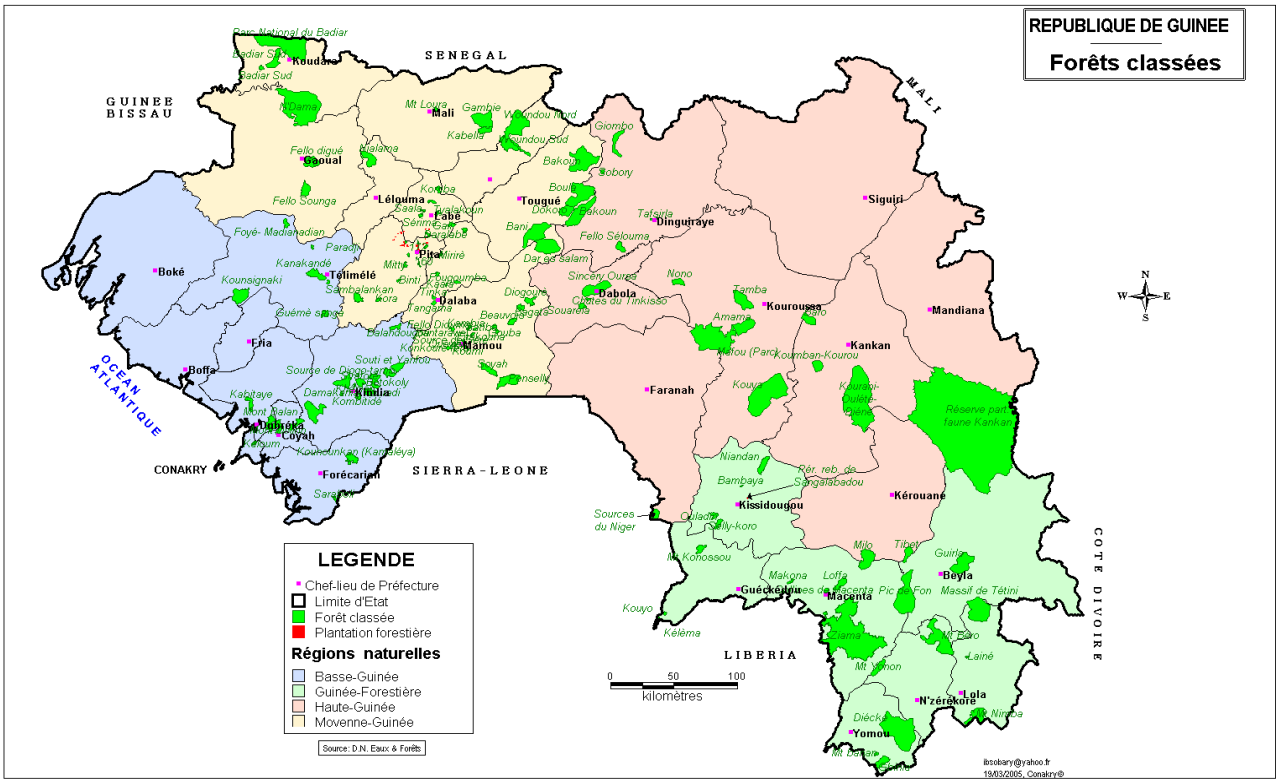

Figure 1: Map of classified forest in Guinea

well-managed, they provide a means of subsistence for communities, particularly through development of buffer zones, and help to keep in place the various ecosystem goods and services needed to develop these areas. Yet the more natural resources come under threat from degradation by climate change and are at risk of becoming insufficient for communities, the more the latter will tend to become vulnerable and liable to turn to protected areas to tap into resources in an unsustainable way. On the other hand, under the effect of climate change, protected areas are liable to experience impoverishment of the biodiversity they hold and a significant loss of value in ecosystem terms.

➲ **CONTRIBUTION TO ADAPTATION**

The project aims to contribute to reducing the impacts of climate change by drawing up and implementing a policy and legal framework conducive to the conservation of ecosystems and

important habitats. It will also help to boost the adaptation capacity of rural communities dependent on forest resources by creating opportunities such as jobs in forest restoration and conservation, wood production and manufacture of wood-based articles, ecotourism, etc. and increasing their income.

➲ **CONTRIBUTION TO MITIGATION**

The national GHG inventory showed that the conversion of forests is the largest source of emissions in Guinea, followed by emissions from energy production, of which 7% from hydrocarbons and 87% from the residential sector (burning biomass). Forest conservation would considerably reduce greenhouse gas (GHG) emissions and thereby mitigate the effects of climate change (MEEF, 2006).

➲ **PROJECT SUSTAINABILITY**

Local communities will be at the heart of the whole process of project implementation. The income-generating activities will be developed and the communities will continue to benefit. Community benefits may include: i) income returned to the communities from the proceeds of tourism and sustainable use of wildlife; ii) income from use and promotion of non-timber forest products; iii) the jobs created in tourism and conservation activities; iv) increased economic benefits from community sub-projects; v) several types of training and skills development; and vi) improved institutional capacity-building. The field staff of the OGUIPAR and DNEF will be equipped with technical resources so that they can continue to conserve forest ecosystems, even after the end of the project. Village consultation committees will be set up and work with the staff of the OGUIPAR and DNEF and feed back any important information relating to forest ecosystem conversion.

In environmental terms, protection of spring heads will improve the quality and flow of water courses. Countries crossed by these rivers will continue to benefit from the related ecosystem services and also the environmental benefits of galley forests which play host to significant flora and fauna species common to all these countries.

The project will be of direct benefit to local people living in the project area through the promotion of sustainable, income-generating activities.

2.3. The participants

The participants in the programme are shown in Table 2.

Table 2: List of participants and stakeholders

No.	Stakeholders/participants	Role
1	National Water and Forestry Department	Restoration and rehabilitation of degraded forest. Promotion of agro-forestry
2	Guinée Ecologie	Identification, creation and restoration of ecological corridors, spring heads and the banks of water courses.
3	OGUIPAR (Guinean parks and reserves office)	Restoration and creation of protected areas
4	Ministry of the Environment, Water and Forests/DNE	Technical support/institutional guarantor of the climate convention
5	Ministry of Agriculture/IRAG	Technical support in development of NTFPs
6	Ministry of Livestock	Identification and extension of adaptation-related pastoral techniques.
7	Local communities	Beneficiaries and participants

8	Prefectural authorities	Support at local level
9	Geo-synaps Guinée	Mapping of sites
10	COSIE	Information system, environmental and forest databases
11	Thematic Mapping and Remote Sensing Office	Thematic mapping
12	National Local Development Department/MATD	Involvement of local communities
13	National Observatory of the Republic of Guinea (ONRG)	Mapping, thematic studies
14.	National Geographical Institute	Mapping
15.	Ministry of the Budget	Contribution from the National Development Budget
16	Guinean Nature Association (AGUINA)	Awareness-raising
17	Biodiv-Guinée	Awareness-raising, identification, creation and restoration of ecological corridors, spring heads and the banks of water courses.

2.4. Programme steering

Institutional steering

The project will be implemented in the field and supervised by a national project co-ordinating unit (DNEF, DNE, OGUIPAR, NGOs) appointed by the MEEF.

A project management committee (CGP) will be set up and include a delegate from the MEEF, the leaders of the rural communities, NGO representatives, civil society representatives and representatives of the donor or donors. The management committee will be supported by a network of technical services staff, NGOs, socio-professional organizations and young people's and women's associations. In addition, it will seek collaboration and develop synergies with the programmes of other development partners with similar or complementary objectives.

Implementation structures

The Guinean technical services will be in charge of implementing project activities under the institutional responsibility of the Ministry of the Environment, Water and Forestry (National Environment Department), representing the Guinean State vis-à-vis the donor or donors. The project will support the services of the Ministry, which will also benefit from the activities to develop integrated forest ecosystem management and environmental governance skills throughout the territory. As the local offices of these services are also at the disposal of the local authorities (CRD), the latter will participate through that channel where necessary.

The stakeholders involved in implementation are the local authorities, territorial administrations, non-governmental organizations, socio-professional associations, etc. If the project is to achieve its objectives and ensure the continuity of its dynamics, the beneficiary communities and local structures must have a sense of ownership from start to finish. Concern for continuity must underlie both the activities and the organization of the implementation framework. Consequently, it is suggested here that the co-ordinating unit should comprise people from the local authorities and beneficiary communities in order to strengthen their involvement in the project over the long term. Along the same lines, the project's material goods should be kept within the area and activities relating to the project's objectives. The institutional management framework must therefore reflect this aim, stimulating participatory implementation and the development of a genuine partnership

between the State services, local authorities, non-governmental organizations and socio-professional groupings. The project will be managed in accordance with the donor's current procedures.

The NGOs and civil society organizations, most of which have played an active part in conservation and development programmes, have a wealth of expertise in terms of stimulation of community interest, facilitation, awareness-raising and implementation of sustainable development activities which will be essential to the success of the project and continuity of the dynamics post-project.

Monitoring/evaluation of implementation

Every six months, the co-ordinating unit will prepare an interim report on the project's progress based on evaluation of the indicators. The report will be sent as a priority to the management committee or steering committee.

The project management committee is responsible, on a continuous basis throughout the project, for monitoring and evaluation of progress towards achievement of the expected results. It approves the annual work plans and checks every six months on activities and project progress in the field. It meets immediately afterwards to decide how to follow up its observations. The findings of such missions will then be made available to the committee for further action.

Readjustments may be made to the activities or budget, with the approval of the donor or donors, if the stakeholders consider it necessary during project implementation in order to meet the conditions for achieving the expected results or adapt the project due to unforeseen circumstances.

Management of assets and gains after the end of the project

The Ministry of the Environment and Water and Forestry (National Forestry Department, National Environment Department, OGUIPAR) and the donor or donors will take the necessary steps to ensure the continuity of the gains of the project. To this end, the people who have played a part, in their respective positions in the field, in implementation of the project activities will be gradually replaced in order to ensure continuity and transmission of information. The various stakeholders will retain the roles and prerogatives acquired in connection with the project. Similarly, they will continue to hold and use the equipment made available to them by the project.

3 The scale of the project and the potential impacts expected

3.1. Principal environmental and social impacts of the programme

The degradation of forest ecosystem services caused by uncontrolled exploitation and climate change represents a real threat to people's survival. These services are needed to support economic growth, encourage social equilibrium and improve people's well-being and living environment. Access to the ecosystem services of the forest is essential for both the subsistence of local communities to escape poverty and human dignity.

3.2. Macro-economic and sectoral analysis of the programme

In Guinea, forests are omnipresent and play an important economic, social and environmental role:

- forests represent one of the main pillars of the economy;
- they support various wildlife-related activities, such as hunting, trapping and fishing and various job creation opportunities;

- in environmental terms, forests represent a significant carbon sink and play host to many species of birds, mammals, fish, etc.

It is estimated that more than **10,523,261 people,** of whom more than half are women, will benefit directly or indirectly from the project (RGPH3, 2014). They are distributed as follows:

- 2,914,091 for ecosystem services in Upper Guinea;
- 1,578,030 for ecosystem services in Forest Guinea;
- 1,725,646 for ecosystem services in Middle Guinea;
- 4,305,494 for ecosystem services in Lower Guinea.

In addition to the creation of permanent jobs and temporary job opportunities, the PGDEF will generate:

- An improvement in the work tools of field staff related to climate change, helping them to protect the forests and natural resources in the programme areas;
- Greater effective community involvement in forest management;
- Consideration of climate change aspects in the legal framework;
- A reduction in practices that destroy plant cover;
- A reduction in anarchic cropping and transhumance practices;
- An improvement in the plant cover in the hydroelectric basins and sub-basins in Upper Guinea, Middle Guinea, Forest Guinea and Lower Guinea, which will also help to:
  - intensify the sequestration capacity of the country's carbon sinks;
  - protect spring heads of sub-regional significance;
  - contribute to soil stabilization and regulation of the soil moisture regime;
- Improved knowledge of national forest resources;
- Improved availability of mapping information on forest landscapes and protected areas;
- Improved conservation of protected areas to make better use of biodiversity and enrich the ecological corridors.

4 Project risks

The following risks are connected with the Sustainable Forest Ecosystem Management Programme for climate change adaptation:

D	Risks	Risk reduction strategy
1	Local communities' perception of forest assets as State property.	Information and awareness-raising sessions will be held upstream to inform local communities of their role in forest ecosystem management. The provisions of the legal codes governing local authorities, wildlife and forests will be explained during these sessions.
2	Lack of synergy between the various stakeholders:	All stakeholders will be identified, involved and empowered during preparation of the project document.
3	Local people kept out of the process of combating deforestation and poverty.	Local people will take part in the whole process of project implementation through the village consultation committees (VCCs) to be set up and local authority managers. Their opinion will be taken into account whenever decisions are taken during community consultations.

4	Lack of transparency in managing the various project activities	To ensure transparency, the PMU will follow the administrative and financial management procedure to be put in place. Penalties will be imposed for any breaches.
5	Staff assigned to the project having a poor grasp of the concepts and techniques relating to forest ecosystem management; risk of staff transfers during the project	Recruitment notices for project staff will indicate the required profile and terms of reference for the post to be filled. A committee will be set up to examine applications in order to avoid selecting people whose profiles are unsuitable. The selected candidate must undertake to remain in post throughout the contract term.

5. Human and financial resources required for the programme

The preliminary project needs assessment has identified the following requirements:

5.1. Human needs

➲ **Programme management**

National Co-ordination (7 people)	Regional Co-ordination (16 people)	Site leaders (8)
One co-ordinator One programme officer One monitoring and evaluation officer One administration and finance officer One accountant One driver One secretary	Regional co-ordination for Lower Guinea and its local offices: One programme officer One monitoring and evaluation officer One secretary/accountant One driver Regional co-ordination for Middle Guinea and its local offices: One programme officer One monitoring and evaluation officer One secretary/accountant One driver Regional co-ordination for Upper Guinea and its local offices: One programme officer One monitoring and evaluation officer One secretary/accountant One driver Regional co-ordination for Forest Guinea and its local offices: One programme officer One monitoring and evaluation officer One secretary/accountant One driver	Each site includes: One site leader One nursery man/woman One agro-forester Three extension workers

5.2. Preliminary budget estimate

Table 3 : Budget of the (seven-year) Sustainable Forest Ecosystem Management Programme for Climate Change Adaptation

Items	Unit	Number	Unit price in USD	Total price in USD
ACTIVITIES = Sub-total (1+2+3+4)				**19 211 000**
Objective 1: Improve forest governance by involving all stakeholders and harmonizing laws and regulations				
Activity 1.1: Analyse the legal and institutional framework in the forest sector, taking account of climate change-related issues	Legal Codes	5	5 000	25 000
Activity 1.2: Build the capacities of the field staff of the DNEF, OGUIPAR and DNE through on-the-job refresher training on improved forest management and protection methodologies, as well as other basic natural resource management techniques in relation to climate change.	Training	7	500 000	3 500 000
Activity 1. : Support community governance through setting up Village Consultation Committees (VCCs) on forest ecosystem management.	Local structures	50	15 000	750 000
Sub-total 1.				**4 275 000**
Objective 2: Restore and rehabilitate degraded forest landscapes with a view to increasing the carbon sequestration rate and providing the resident communities with the ecosystem services on which they are heavily dependent to reduce their vulnerability to climate change				
Activity 2.1 : Take an inventory of biodiversity and map national forest ecosystems and protected areas and monitor changes in the level of degradation	Maps produced	1	1 500 000	1 500 000
Activity 2.2: Raise the awareness of local communities in respect of trialling and spreading good agro-forestry practice and appropriate technology liable to help reduce pressure on natural plant resources	Facilitation session	4	500 000	2 000 000

Items	Unit	Number	Unit price in USD	Total price in USD
Activity 2.3 : Set up nurseries to produce local species for restoration and rehabilitation of degraded forest landscapes	Seedlings per nursery	5000000	1	4 400 000
Activity 2. 4: Replant degraded areas	Area in ha	2000	723	1 446 000
Activity 2.5: Ensure maintenance of the new plantations	Area in ha	2000	400	800 000
Sub-total 2.				**10 146 000**
Objective 3: Ensure sustainable management of protected areas through involving communities and stakeholders to improve natural resource conservation				
Activity 3.1: Draw up or update and support implementation of full management plans for protected areas, including cross-border protected areas, to ensure sustainable natural resource management and include climate change issues in these plans	Study	5	500 000	2 500 000
Activity 3.2: Create and restore ecological corridors in order to ensure ecological connectivity and improve the viability of flora and fauna species as well as the quality of water and water courses	Project	4	60 000	240 000
Sub-total 3.				**2 740 000**

Items	Unit	Number	Unit price in USD	Total price in USD
Objective 4: Improve the living conditions and resilience of local people through developing forest potential.				
Activity 4.1: Evaluate and enhance positive endogenous knowledge and practices with a view to sustainable management of forest resources	Project	1	50 000	50 000
Activity 4.2: Develop the potential of non-timber forest products, through support in the production, processing and marketing of these products	Project	8	150 000	1 200 000
Activity 4.3: Promote ecotourism and income-generating activities for local communities with a view to enhancing their climate change resilience	Project	8	100 000	800 000
Sub-total 4.				**2 050 000**
OPERATING COSTS				
Vehicles	Co-ordination	5	150 000	750 000
Motorcycles	sites	8	2 700	21 600
Fuel and lubricants	Flat rate	65 520	1	57 658
Salaries/allowances	Staff	71	42 000	2 982 000
Monitoring/Evaluation	Missions	28	1 500	42 000
Communications	Workshops	7	5 000	35 000
Office and equipment	Rental per year	5	10 500	52 500
Sub-total 5.				**3 940 758**
Grand total = Operating costs +Activities				**23 151 758**

Appendix: Programme area per activity and justification

No.	Activities	Site	Region	Justification
Objective 1: Improve forest governance by involving all stakeholders and harmonizing laws and regulations				
	Activity 1.1: Analyse the legal and institutional framework in the forest sector, taking account of climate change-related issues	National	National	Obsolete legal framework Incomplete implementing provisions Failure to take account of climate change in these instruments.
	Activity 1.2: Build the capacities of the field staff of the DNEF, OGUIPAR and DNE through on-the-job refresher training on improved forest management and protection methodologies, as well as other basic natural resource management techniques in relation to climate change.	National	National	Technical and material weakness of field staff with regard to climate change and natural resource protection
	Activity 1. : Support community governance through setting up Village Consultation Committees (VCCs) on forest ecosystem management.	National	National	Effective community involvement through local natural resource management structures

No.	Activities	Site	Region	Justification
Objective 2: Restore and rehabilitate degraded forest landscapes with a view to increasing the carbon sequestration rate and providing the resident communities with the ecosystem services on which they are heavily dependent to reduce their vulnerability to climate change				
	Activity 2.1 : Take an inventory of biodiversity and map national forest ecosystems and protected areas and monitor changes in the level of degradation	National	National	Inadequate knowledge of national forest resources Lack of mapping information on forest ecosystems and protected areas
	Activity 2.2: Raise the awareness of local communities in respect of trialling and spreading good agro-forestry practice and appropriate technology liable to help reduce pressure on natural plant resources	At all the chosen sites	All regions	Destruction of plant cover by poor cropping practices and uncontrolled transhumance as well as brick oven practices/proximity to the Sahel. Uncontrolled woodcutting.
	Activity 2.3 : Set up nurseries to produce local species for restoration and rehabilitation of degraded forest landscapes	National	National	Level of degradation of forest landscapes Promotion of local species
	Activity 2. 4: Replant degraded areas	National	National	Destruction of plant cover
	Activity 2.5: Ensure maintenance of the new plantations	National	National	Ensuring plantation sustainability

No.	Activities	Site	Region	Justification
Objective 3: Ensure sustainable management of protected areas through involving communities and stakeholders to improve natural resource conservation				
	Activity 3.1: Draw up or update and support implementation of full management plans for protected areas, including cross-border protected areas, to ensure sustainable natural resource management and include climate change issues in these plans	- Upper Niger National Park - Gbayasiwoula and Folonigbè wildlife reserves - Dieké Hill reserve - Badiar National Park - Kounounkan classified forest	National	Severe level of degradation Absence of management plan or obsolete management plan Need for inclusion of climate issues in management plans
	Activity 3.2: Create and restore ecological corridors in order to ensure ecological connectivity and improve the viability of flora and fauna species as well as the quality of water and water courses	. Haut Bafing . Konkouré . Mano	. Middle Guinea . Forest Guinea	. Problems of protecting the springhead and banks, the Bafing river crosses several classified forests, the area is upstream of the Koukoutamba dam. The Konkouré river has several hydroelectric dams downstream (Kaleta and Souapeti, plus Amarya at planning stage). On reaching the sea, it forms a delta of huge importance as a Ramsar site The Mano river provides ecosystem services to four countries.

No.	Activities	Site	Region	Justification
Objective 4: Improve the living conditions and resilience of local people through developing forest potential.				
	Activity 4.1: Evaluate and enhance positive endogenous knowledge and practices with a view to sustainable management of forest resources	At all chosen sites	All regions	Combating poverty with a view to boosting communities' adaptation capacity
	Activity 4.2: Develop the potential of non-timber forest products, through support in the production, processing and marketing of these products	At all chosen sites	All regions	Combating poverty with a view to boosting communities' adaptation capacity
	Activity 4.3: Promote ecotourism and income-generating activities for local communities with a view to enhancing their climate change resilience	At all chosen sites	All regions	Combating poverty with a view to boosting communities' adaptation capacity Taking advantage of significant biodiversity