



# GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: LDCF

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## PART I: PROJECT INFORMATION:

Project Title: Development of an improved and innovative management system for sustainable climate-resilient livelihoods in Mauritania			
Country(ies):	Mauritania	GEF Project ID: <sup>1</sup>	5580
GEF Agency(ies):	UNEP	GEF Agency Project ID:	1159
Other Executing Partner(s):	Ministry of Environment and Sustainable Development (MEDD)	Resubmission Date:	December 14, 2016
GEF Focal Area (s):	Climate Change Adaptation	Project Duration (Months)	48
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		

## A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>2</sup>

Focal Objectives/Programs	Area	Focal Area Outcomes	Trust Fund	(in \$)	
				GEF Project Financing	Co-financing
CCA-1		Outcomes 1.1 and 1.2	LDCF	2,949,000	5,000,000
CCA-2		Outcomes 2.1 and 2.3	LDCF	1,784,000	3,200,000
CCA-3		Outcome 3.2	LDCF	267,000	300,000
Total project costs				5,000,000	8,500,000

## B. PROJECT DESCRIPTION SUMMARY

<b>Project Objective:</b> To reduce the vulnerability to climate change of national government and local communities in the forests and rangelands of the Sahelian Acacia Savanna Ecoregion						
Project Components/Programs	Financing Type <sup>3</sup>	Project Outcomes	Project Outputs	Trust Fund	(in US\$)	
					GEF Project Financing	Confirmed Co-financing
Component 1	TA/Inv.	Outcome 1. Strengthened capacity at the national, provincial and local levels to use EbA measures to address climate change risks in rangelands.	1.1 A national adaptation strategy to inform adaptation planning developed.	LDCF	111,312	2,500,000
			1.2 Training events organised to increase technical capacity of national, provincial and local institutions to facilitate the implementation of appropriate adaptation measures.	LDCF	353,291	
			1.3 New AGLCs established and existing AGLC management committees trained on the use of EbA for the sustainable management of natural resources	LDCF	124,308	

<sup>1</sup> Project ID number remains the same as the assigned PIF number.

<sup>2</sup> When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

<sup>3</sup> Financing type can be either investment or technical assistance.

			including pastoral resources			
Component 2	Inv.	Outcome 2. Increased provision of pastoral resources and climate-resilient livelihoods via an EbA approach.	2.1 Management plans for natural resources including EbA interventions developed in collaboration with AGLCs.	LDCF	129,361	4,000,000
			2.2 EbA and other adaptation practices implemented to decrease vulnerability of pastoral resources to droughts, bushfires and sand dune encroachment within the management areas of the AGLCs selected under Output 2.1.	LDCF	2,734,439	
			2.3 Training, technical support and equipment provided to rural communities for the establishment of climate-resilient livelihoods.	LDCF	894,871	
Component 3	TA	Outcome 3. Increased awareness and knowledge of climate change risks, benefits of EbA and opportunities for climate-resilient livelihoods in Mauritania.	3.1 A knowledge management strategy – including long-term data collection, analysis and archiving – developed to capture and share information on the benefits of adaptation practices to rural communities.	LDCF	205,757	2,000,000
			3.2 Awareness-raising campaigns via different media – including radio and TV – on the benefits of an EbA approach and associated climate-resilient livelihoods developed and implemented for government staff and rural communities.	LDCF	154,031	
			3.3 A long-term strategy to upscale and sustain best adaptation measures including EbA.	LDCF	62,430	
Subtotal					4,769,800	8,500,000
Project Management Cost (PMC) <sup>4</sup>				LDCF	230,200	0
Total project costs					5,000,000	8,500,000

#### C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND TYPE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
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<sup>4</sup> For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

Annual Programme against Bushfires in Mauritania (APCBF)	Government of Mauritania	Grant	8,000,000
National Government Budget	Government of Mauritania	Cash	500,000
<b>Total Co-financing</b>			8,500,000

#### D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee <sup>a)</sup> (b) <sup>2</sup>	Total (c)=a+b
UNEP	LDCF	Mauritania	Climate change		5,000,000	475,000	5,475,000
<b>Total Grant Resources</b>							

a ) Refer to the [Fee Policy for GEF Partner Agencies](#)

#### E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>5</sup>

Provide the expected project targets as appropriate.

N/A

#### F. DOES THIS PROJECT INCLUDE A “NON-GRANT” INSTRUMENT?

N/A

### **PART II: PROJECT JUSTIFICATION**

#### A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF<sup>6</sup>

Several changes have been made in the alignment of the Project Document compared to the original project design described in the PIF. The following summarises the most significant changes in terms of GEF Focal Areas, title, budget allocation per component, co-financing, partner projects and the project's outcomes/outputs:

- Since the PIF was developed, the revised results framework for the GEF Adaptation Programme was introduced and therefore the focal area objectives of the project were revised to ensure that the project aligns with – and can be reported according to – the GEF Adaptation Monitoring and Assessment Tool (AMAT) of GEF 6. In the PIF, the project was aligned with three GEF Focal Area Objectives, namely CCA-1, CCA-2 and CCA-3. Alignment of the project with these three GEF Focal Area Objectives was maintained in the PD, however, the specific Focal Area Outcomes within each Focal Area Objective were modified in accordance with changes made to the GEF 6 AMAT indicators. From the PIF to the PD, the Focal Area Outcomes changed as follows: i) CCA-1, from Outcome 1.3 to Outcomes 1.1 and 1.2; ii) CCA-2, to Outcome 2.1 in addition to Outcome 2.3; and iii) CCA-3, from Outcome 3.1 to Outcome 3.2. Focal Area Outcomes in the PD were selected according to the activities and funds captured under the indicators for each Focal Area Outcome. Specifically, for CCA-3, the indicators under Focal Area Outcome 3.2 are better suited to measure investments made by the project in technical capacity building, compared to indicators under Focal Area Outcome 3.1.
- The title of the project was changed from “Development of an improved and innovative delivery system for climate resilient livelihoods in Mauritania” to “Development of an improved and innovative management system for sustainable climate-resilient livelihoods in Mauritania”. In this way, it is clearer that the improved and innovative system refers to the local management approach for natural resources through Local Collective Associations for the Management of Natural Resources (AGLCs).

<sup>5</sup> Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

<sup>6</sup> For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter “NA” after the respective question.

- The number of wilayas (i.e. provinces) to be targeted was first reduced from seven to five because the project entitled “Increase Capacity for Adaptation to Climate Change in Rural Areas” (ACCMR) will implement similar activities to the Least Developed Countries Fund (LDCF) project in the wilayas of Brakna and Assaba. Consequently, Brakna has been excluded from the project. It was subsequently decided by the national stakeholders that it would be preferable to further reduce the number of targeted wilayas to: i) facilitate implementation; and ii) focus on wetland areas that require sustainable management as a priority under the conditions of climate change. As a result, the wilayas of Gorgol and Trarza were excluded from the project. Reducing the number of project sites will enable a full set of complementary interventions to be implemented in each of the four wilayas.
- The budget for Component 1 was reduced from US\$1,425,000 to US\$541,477 because national stakeholders indicated that several projects are currently focused on increasing the capacity of DREDDs. Therefore it was proposed that the budget for on-the-ground activities be increased. Consequently, the budget for Component 2 – which corresponds to on-the-ground activities – was increased from US\$2,600,000 to US\$3,711,238. In addition, the budget for Component 3 was reduced from US\$750,000 to US\$374,785 to further increase the budget for the on-the-ground activities under Component 2 following in-country consultations.
- The amount of co-financing was increased. In the PIF, one baseline project was identified, namely the Annual Programme to Combat Bush Fires (APCBF) for a total co-financing amount of US\$6,400,000. In the PD, the co-financing amount from this project was estimated to be US\$8,000,000 over a four-year period. In addition to co-financing from the baseline project, the GoM will provide a total of US\$500,000 as cash co-financing.
- Several changes were made to the list of the main partner projects. Secondly, the following projects were not considered because they have concluded or are of minor relevance to the LDCF project: i) Support the Institutional Capacity Building and Research Activities of the West and Central African Council for Agricultural Research and Development (WECARD); ii) Participatory Environmental Protection and Poverty Reduction in the Oases of Mauritania (PEPPR); iii) Support to the Adaptation of Vulnerable Agricultural Production Systems (SAVAPS); iv) Muraille Sahel Programme (MSP); and v) Conservation of Biodiversity through Participatory Re-habilitation of Degraded Land in Arid and Semi-Arid Cross-Border Zones of Mauritania and Senegal (CBPRL). Thirdly, four projects recently developed and aligned with the project activities were added to the list of partner projects, namely: i) ACCMR project; ii) Mauritania Sustainable Landscape Management Project (MSLMP); iii) Improvement of the Investments in the Water Sector to Increase the Resilience of Pastoral and Forest Resources in the Southern Regions of Mauritania (REVUWI); and iv) Regional Project to Support Pastoralism in Sahel (PRASP). Additional details on these projects can be found in Section 2.7 of the Project Document.
- Some changes to the outcomes and outputs defined in the PIF were undertaken as a result of consultations with project stakeholders. These changes made to the Outcomes and Outputs to align with the country’s current requirements are presented and explained in the table below.

PIF	PD/CEO	PIF	PD/CEO	PD/CEO
Expected outcomes	Expected outcomes	Expected outputs <sup>7</sup>	Expected outputs	Justification of the change to the PIF
1: Adaptive capacity of national and local government to address climate change risks through an EbA approach in rangeland areas.	1: Institutional and technical capacity to address climate change risks through EbA.	1.1: Improved and innovative governance mechanism, to enable national and local government to deliver climate resilient livelihood options to rural communities.	1.1: A national adaptation strategy to inform adaptation planning developed.	Considering the gap in guidance for adaptation planning in Mauritania, a National Adaptation Strategy (SNA) was added to the logframe to contribute to advancing the National Adaptation Plan (NAP) process. Additionally, following the third SNC, one focal point and a committee for climate change was designated in each sector. A SNA is needed to help these focal points in fulfilling their role.

<sup>7</sup> In case of a single focal area, single country, single GEF Agency project, and single trust fund, no need to provide information for this table.

PIF	PD/CEO	PIF	PD/CEO	PD/CEO
Expected outcomes	Expected outcomes	Expected outputs <sup>7</sup>	Expected outputs	Justification of the change to the PIF
		1.2: Technical capacity of national and local government developed to facilitate the implementation of appropriate EbA measures to build climate resilient livelihoods of rural communities in rangelands.	1.2: Training events organised to increase technical capacity of national, provincial and local institutions to facilitate the implementation of appropriate adaptation measures.	The output description was changed slightly to include NGOs in the training activities.
		1.3: Strengthened AGLCs in Hodh El Gharbi, Guidimakha and Gorgol Wilayas technically trained on implementation of EbA measures.	1.3: New AGLCs established and existing AGLC management committees trained on the use of EbA for the sustainable management of natural resources including pastoral resources.	Output 1.3 and 1.4 from the PIF were combined into one output (Output 1.3) to streamline the logframe and to avoid redundancy in the activities considering that the training to new and existing AGLCs will be similar.
		1.4: AGLCs established in rangeland areas of Hodh El Gharbi, Assaba, Brakna and Trarza Wilayas, and committee members trained on implementation of EbA measures.	/	As above
		1.5: Strategy to upscale, sustain and replicate measures to build climate resilient livelihoods – based on an EbA approach – institutionalized within government.	/	This output was moved from Component 1 to Component 3 as it was more aligned with the outputs of Component 3 related to knowledge management and awareness raising to promote the implementation and maintenance of EbA interventions.
2: Climate resilient livelihoods for rural communities based on EbA measures in rangelands in seven Wilayas in the Sahelian Acacia Savanna Ecoregion.	2: Climate resilient livelihoods for rural communities using an EbA approach in rangelands in four Wilayas in the Sahelian Acacia Savanna Ecoregion.	2.1: AGLC management plans strengthened using a consultative process, including community/ecosystem maps to identify rangelands, degraded ecosystems, preferred EbA measures and climate-resilient livelihood opportunities.	2.1: Management plans for natural resources including EbA interventions developed in collaboration with AGLCs.	The wording of the output was simplified. The mapping intervention initially referred to in the output name is included in the activities (Activity 2.1.4).

PIF	PD/CEO	PIF	PD/CEO	PD/CEO
Expected outcomes	Expected outcomes	Expected outputs <sup>7</sup>	Expected outputs	Justification of the change to the PIF
		2.2: AGLC members and rural communities trained on implementation of improved fire management techniques using an EbA approach. This will include the establishment of fire management technical committees and pilot field schools to demonstrate the benefits of EbA to rural communities in surrounding Moughataas.	2.2: EbA and other adaptation practices implemented to decrease vulnerability of pastoral resources to droughts, fires and sand dune encroachment within the management areas of the AGLCs selected under Output 2.1.	Outputs 2.2 and 2.3 of the PIF were combined into one output (Output 2.2 of the PD). The wording of the output was revised to focus on the actual implementation of adaptation practices rather than focusing on the training that will lead to the implementation of these practices. This approach was preferred because the EbA activities under this output will not focus only on fire management and soil restoration but also on other adaptation and EbA practices such as reforestation practices and sand dune fixation. This output will also focus on activities such as dune fixation and restoration of wadi banks, <i>Acacia</i> woodlands and rangelands. As these activities are complementary, it was deemed simpler to combine them under one output.
		2.3 AGLC members and rural communities trained on implementation of improved soil restoration techniques using an EbA approach. This will include the establishment of pilot field schools to demonstrate the benefits to rural communities in surrounding Moughataas.	/	As above.
		2.4 Climate-resilient livelihood strategies developed, based on community needs and EbA measures implemented through outputs 2.2 and 2.3.	2.3: Training, technical support and equipment provided to rural communities for the establishment of climate-resilient livelihoods.	The output scope is unchanged but the wording was amended to specify the type of support that will be provided.
3. Awareness and knowledge of EbA and climate resilient livelihoods in the context of pastoralism and rangelands.	Awareness and knowledge of EbA and climate-resilient livelihoods.	3.1: Communication outreach strategy developed for government staff and rural communities, including a media campaign to increase awareness of the benefits of an EbA approach and associated climate resilient livelihoods.	3.2: Awareness-raising campaigns via different media including radio and TV on the benefits of an EbA approach and associated climate-resilient livelihoods developed and implemented for government staff and rural communities.	Outputs 3.1 and 3.3 of the PIF were combined into one output (Output 3.2) that included the awareness-raising campaign and the strengthening of the government web-based platform, considering that these outputs are both related to raising awareness on EbA to promote the use of this approach.

PIF	PD/CEO	PIF	PD/CEO	PD/CEO
Expected outcomes	Expected outcomes	Expected outputs <sup>7</sup>	Expected outputs	Justification of the change to the PIF
		3.2 EbA rangeland guidelines developed for technical government departments, policy makers and rural communities.	/	This output was included as an activity under Output 1.2 of the Project Document because it is more related to increasing technical capacity than increasing awareness.
		3.3 Existing government web-based platform strengthened to allow sharing of EbA-relevant information amongst government and NGO staff, and access to project products, including databases, activities, technical reports, guidelines and handbooks.	/	See comments for Output 3.1 of the PIF.
		3.4 Long-term monitoring plan established and initiated in collaboration with local research institutes and universities to evaluate the performance and cost-effectiveness of the EbA measures implemented through Component 2.	3.1: A knowledge management strategy – including long-term data collection, analysis and archiving – developed to capture and share information on the benefits of adaptation practices to rural communities.	To avoid confusion with the Monitoring and Evaluation (M&E) plan that is systematic in GEF/LDCF project, the terms “long-term monitoring plan” were replaced by “knowledge management strategy”. The scope of the output was also enlarged to include the adaptation interventions of the LDCF project as well as other adaptation projects.
			Output 3.3: A long-term strategy to upscale and sustain best adaptation measures including EbA.	See comment for Output 1.5 of the PIF.

## A.1. Project Description.

### 1) Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

Rural communities in Mauritania are heavily dependent on natural and agropastoral ecosystems for their livelihoods. Forests and rangelands provide *inter alia* pastoral resources, woodfuel, food and medicinal products. The combined effects of rapid population growth and widespread reliance on ecosystem goods and services have resulted in overexploitation and degradation of natural resources. In particular, the increased demand for wood and agricultural land has reduced forest cover from 415,000 hectares in 1990 to 242,000 hectares in 2010. Additionally, overgrazing by livestock has resulted in degradation and reduced productivity of rangelands. The frequent occurrence of bushfires also results in the reduced availability of pastoral resources and other negative effects on ecosystems, including reduced soil quality. As a result of the unsustainable management of natural resources and the reliance on ecosystem goods and services, rural communities in the Sahelian Acacia Savanna ecoregion already experience chronic food

shortages and nutritional insecurities, and are becoming increasingly vulnerable to the negative effects of ecosystem degradation.

The problems in Mauritania discussed above are exacerbated by changes in climate experienced since 1960. These observed changes in climate include *inter alia*: i) reduced annual precipitation; ii) longer drought periods; iii) increased mean annual temperature; and iv) increased occurrence of extreme weather events. These changes in climate are predicted to worsen and further increase the vulnerability of rural communities. Specifically, by 2050, mean annual precipitation is expected to decrease by 5–20% and mean annual air temperatures are expected to increase by 1.5–2°C, compared with the period 1961–1990. The predicted effects of future climate change also include *inter alia*: i) decreased availability of surface and ground water; ii) increased occurrence of bushfires; iii) increased severity of soil erosion; and iv) increased movement of sand dunes. Consequently, climate change will have a negative effect on agricultural activities by reducing crop productivity. Similarly, pastoralism will be affected by climate change through decreased availability of fodder and reduced number and output of watering points. The socio-economic effects of climate change will include *inter alia*: i) increased meat prices; ii) reduced income of livestock breeders; and iii) decreased crop yields. Therefore, climate change in Mauritania is expected to exacerbate ecosystem degradation and increase both poverty and food insecurity for the country's growing population (NAPA, 2004; TCN, 2014).

The problem that the project seeks to address is that local communities in the forests and rangelands of the Sahelian Acacia Savanna ecoregion are vulnerable to the current and future effects of climate change. This vulnerability is because: i) government authorities, including policy- and decision-makers, have limited knowledge and institutional capacity to integrate climate change adaptation measures – including Ecosystem-based Adaptation (EbA) – into policies, strategies and plans; ii) national and local governments have limited technical capacity to guide the implementation of EbA; iii) rural communities are not aware of the future effects of climate change and the potential options to reduce the negative effects of climate change on livelihoods; and iv) there are few on-the-ground interventions to demonstrate the effectiveness of the EbA approach.

The preferred solution to this problem is to enhance national and community-level capacity to adapt to climate change in the Sahelian Acacia Savanna forests and rangelands of Mauritania by: i) increasing the institutional and technical capacity of government sectors to plan for adaptation and promote the implementation of best adaptation practices (including EbA) throughout the country; and ii) guiding rural communities to adopt climate-resilient livelihoods based on natural and agropastoral ecosystems through the development of an innovative system for the sustainable management of natural resources.

There are several technical, institutional and financial barriers to achieving the preferred solution in Mauritania. By addressing these barriers to implementation, the project will contribute towards the achievement of the preferred solution at the local scale and contribute to building the required institutional and technical capacity at the national scale. These barriers are listed below (see Section 2.3 of the Project Document for a full description of the barriers).

- Limited knowledge on the value of viable ecosystems and EbA.
- Limited institutional and technical capacity of national and local government to support rural communities to implement EbA in forests and rangelands.
- Limited funding available to implement EbA.
- Limited technical capacity of rural communities to adopt climate-resilient livelihood strategies.

The LDCF project will increase the capacity of Mauritanian authorities and rural communities to adapt to climate change in the forests and rangelands of four wilayas in the Sahelian Acacia Savanna Ecoregion. The interventions of the project will demonstrate cost-effective, low-regret options for adaptation – including the demonstration of climate-resilient practices such as EbA and establishment of climate-resilient livelihoods – to benefit impoverished rural communities. The objective of the proposed project will be achieved through multiple complementary measures that will include: i) strengthening the institutional and technical capacity of national and local government to implement adaptation interventions using EbA; ii) integrating EbA into policies and strategies at national and local levels; iii) restoring degraded forests and rangelands using EbA; and iv) promoting climate-resilient livelihoods based on natural resources generated by restored ecosystems; and v) increasing awareness on the benefits of EbA and climate-resilient livelihoods (see Annex K<sup>8</sup>).

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<sup>8</sup> The Theory of Change in Annex K is to be refined during the inception phase of the project.



## 2) *Baseline scenario and associated baseline project*

As described above, Mauritania's natural resources are currently being exploited at an unsustainable rate. The resultant ecosystem degradation is caused largely by two anthropogenic factors, namely: i) the widespread dependence of rural communities on the savanna ecosystem for their livelihoods; and ii) Mauritania's growing population. Consequently, ecosystems such as forests and rangelands are becoming increasingly degraded. Specific anthropogenic activities that are causing the degradation of the Sahelian Acacia Savanna ecosystem are: i) harvesting of trees to meet the demand for woodfuel<sup>9</sup>; ii) clearing of forest for the expansion of agricultural land; and iii) increasing demand for pastoral resources and the resultant overgrazing.

The effects of ecosystem degradation include reduced vegetation cover and exposure of soil to the impact of raindrops. Specifically, bare soil is subject to splash erosion which detaches soil particles, alters soil structure and ultimately causes the formation of a crust at the soil surface. Decreased vegetation cover also reduces the extent of root systems, thereby reducing the stabilising effect of plant roots on soil structure. Degradation of surface soils results in a reduced rate of rainwater infiltration. Consequently, surface run-off of rainwater increases, which further exacerbates soil erosion and increases the intensity of flooding during the rainy season. Desertification and removal of vegetation cover results in an increased vulnerability to wind erosion, wind-blown sand and encroachment of sand dunes.

In rangelands, this cycle of degradation causes a decrease in food availability through the following process: i) availability of water for agriculture is reduced as a result of the decreased infiltration and increased evaporation of rainwater on degraded soils; ii) rural communities become increasingly dependent on ecosystems as a source of food as a result of decreased agricultural production; and iii) the reduced availability of water and fodder in degraded rangeland areas results in decreased productivity and increased mortality of livestock.

Pastoral resources are dependent on rainwater and are consequently vulnerable to drought. The current observed variability in rainfall, including longer drought periods and reduced rainfall, limits the regeneration of pastoral resources. In addition, local farmers do not have the resources or expertise to reduce their dependence on vulnerable pastoral areas or increase the efficiency of land use. Furthermore, the decreased productivity of agriculture and livestock results in an increased burden of debts on vulnerable farmers under the metayage system<sup>10</sup>.

The processes described above can be summarized as the range of social and environmental problems affecting communities in the targeted areas, including *inter alia*: i) degradation of natural resources; ii) dependence on pastoralism and agricultural resources; and iii) poverty and resulting food insecurity. These problems are all exacerbated by the current effects of climate change including reduced annual precipitation, longer drought periods, increased average annual temperature and increased occurrence of extreme weather events (see Section 2.1 of the Project Document). For example, pastoral resources are dependent on rainwater and are consequently vulnerable to drought. The current observed variability in rainfall limits the regeneration of pastoral resources.

Various national projects have been initiated to address these baseline problems, one of which have been included as baseline project for the LDCF project, while the others will be projects with which the LDCF project will align with as associated projects. The **Annual Programme against Bushfires in Mauritania** (APCBF) aims to protect pastoral and forestry resources against bushfires through a range of targeted interventions, as well as raising awareness of rural communities on the consequences of – and opportunities to – reduce the risk of bushfires and will provide baseline co-financing to the project worth a total of US\$ 8 million. The **Programme for the Management of Natural Resources** (ProGRN<sup>11</sup>) aims to create a framework for the sustainable management of natural resources by rural communities in selected areas. Finally, the **National Programme for Integrated Support to Decentralisation, Social Development and Youth Employment** (PNIDDLE<sup>12</sup>) is strengthening the Government's decentralisation process and promoting democracy and social development at the local scale are both projects that the LDCF project will align with closely (see further information on the baseline scenario and the baseline and associated projects below). However, the consideration of climate change into these projects is insufficient (see Section 2.6 of the Project Document) which is likely to restrain the benefits of their interventions.

<sup>9</sup> For example, in 2006, timber supplied ~70% of household energy needs.

<sup>10</sup> Cultivation of land where a proprietor enable someone to cultivate his land in exchange of a proportion of the production.

<sup>11</sup> Projet de Gestion des Ressources Naturelles.

<sup>12</sup> Programme National Intégré d'appui à la Décentralisation, au Développement Local et à l'Emploi des jeunes.

Climate change is recognised as a major threat to socio-economic development in Mauritania. For example, mitigation of climate change effects is noted as a priority in the third action plan of the Strategic Framework against Poverty (CSLP<sup>13</sup>). Furthermore, the first steps to initiate the National Adaptation Plan (NAP) process were made recently with the organisation of a NAP workshop in April 2015 by the German Agency for International Cooperation (GIZ) and NAP GSP. However, there is currently no national strategy for adaptation to climate change in place to guide: i) consistent, complementary and coordinated adaptation projects in Mauritania<sup>14</sup>; and ii) the integration of climate change adaptation into development planning. Therefore, in the absence of such a strategy, adaptation projects will continue to be designed and implemented in an *ad hoc* manner. Furthermore, although climate change influences a range of economic sectors, mitigating its effects is at present considered the sole responsibility of the Ministry of Environment and Sustainable Development (MEDD). The current policies, strategies and plans in the environmental sector – including water, livestock husbandry and agriculture – do not include practices for adaptation to climate change such as EbA. Consequently, in the absence of a multi-sectoral response, climate change will continue to severely impact on, and may even prevent, the achievement of the Sustainable Development Goals (SDGs), and other national objectives for socio-economic development (e.g. NSDS, DSRS).

Several initiatives have recently been implemented to enhance cross-sectoral coordination of planning and monitoring of interventions related to the environment and sustainable development in Mauritania. For example, the National Council for the Environment and Sustainable Development (CNEDD<sup>15</sup>) was established in 2012 by the Prime Minister. Corresponding regional institutions – Regional Councils for Environment and Sustainable Development (CREDDs<sup>16</sup>) – were established in each wilaya to promote communication and coordination and to support the implementation of field activities under the National Action Plan for Environment and Sustainable Development (PANE; see Section 2.4 of the Project Document). In addition, focal points for climate change were designated in 2014 within most of the ministries of the Government of Mauritania (GoM). However, these focal points, CNEDDs and CREDDs have only been active for a brief period and are not yet fully functional. Therefore, inadequate sectoral collaboration has hindered, and will continue to hinder, the implementation of a national response for adapting to climate change.

At the local level, the GoM is undergoing a process of decentralisation. For example, in the environmental sector, Regional Delegations for Environment and Sustainable Development (DREDDs<sup>17</sup>) were created in 2006 in each wilaya<sup>18</sup> to lead and coordinate the MEDD's interventions at the provincial level. DREDDs are also responsible for ensuring that these interventions are aligned with the existing policies, strategies and plans in the environmental sector. However, the DREDDs currently do not have the official premises, vehicles, human capacity and technical knowledge needed to implement the relevant interventions.

At the community level, local authorities have the right to allocate the management of natural resources to community associations. Past initiatives have demonstrated several approaches to community governance in Mauritania. Firstly, Local Development Associations (ADCs<sup>19</sup>) were established to develop existing income-generating activities (e.g. the establishment of butcheries and shops and the development of small-scale agricultural plots). Secondly, Pastoral Associations (APs<sup>20</sup>) were established to promote animal health, the use of migratory routes and food availability for livestock. Thirdly, AGLCs<sup>21</sup> were established to support the sustainable management of natural resources. However, currently these three types of community governance do not have adequate technical capacity to efficiently identify, design, budget for and implement socio-economic development interventions and natural resource management has therefore often been inadequate. The lack of land resource management, including management of plant species, water availability and soil fertility, has contributed to food insecurity and poverty<sup>22</sup>.

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<sup>13</sup> Cadre Stratégique de Lutte contre la Pauvreté.

<sup>14</sup> Mauritania has not started implementing the NAP process yet.

<sup>15</sup> Conseil National Environnement et Développement Durable.

<sup>16</sup> Conseil Régional Environnement et Développement Durable.

<sup>17</sup> Délégation Régionale de l'Environnement et du Développement Durable

<sup>18</sup> Mauritania is divided into 12 wilayas (i.e. provinces), 44 moughataas (i.e. departments) and 216 communes (i.e. municipalities).

<sup>19</sup> Association de Développement Communautaire. Located in the four wilayas of the proposed project.

<sup>20</sup> Association Pastorale. Located in the four wilayas of the proposed project.

<sup>21</sup> Association de Gestion Locale Collective des ressources naturelles. Located mainly in Hodh El Gharbi and Guidimaka wilayas.

<sup>22</sup> IMF. 2007. Islamic Republic of Mauritania: poverty reduction strategy paper.

AGLCs are community organisations for the sustainable management of resources. The AGLCs are the result of an extensive process of local discussions, negotiations of communities with DREDDs and communal authorities, organisation and planning workshops and administrative and legal processes to recognise AGLCs. At the end of this process, AGLC members become officially responsible for the sustainable management of a defined forest-agropastoral system. The AGLCs' mandates are obtained by local communities for 10-year renewable periods, except if: i) the AGLC is found to be responsible for resource degradation; or ii) there are conflicts within the local communities about representativeness among the AGLC members (see Appendix 16 Figure 5 in the Project Document for more information on AGLCs).

### *Technical capacity (Component 1)*

Currently the limited expertise on adaptation to climate change within the GoM – specifically with regards to policy- and decision-makers, regional delegations, mayors and Communal Councils – prevents the relevant authorities from planning effectively for sustainable development at the national and local levels. This is particularly true for cross-sectoral themes such as sustainable management of natural resources and adaptation to climate change. For example, government staff have not received training on the design and implementation of EbA interventions. As was observed during stakeholder consultations and workshops at the Project Preparation Grant (PPG) phase, a majority of government stakeholders are not aware of how EbA can contribute to reducing vulnerability to climate change. Consequently, in the absence of the required training, government staff will continue to lack the necessary capacity to implement EbA interventions to decrease vulnerability to climate change in Mauritania.

### *State of natural resources (Component 2)*

The latest inventory and quantified study of natural resources in Mauritania was conducted in 1982<sup>23</sup>. Therefore, there is currently no data to assess changes in resource availability over time. However, the degradation of natural resources is qualitatively evident (see Appendix 22.B of the Project Document, page 76) and results from several factors. The demand for woodfuel, which remains the primary source of energy for cooking and heating, is a major factor contributing to deforestation. In addition, overgrazing induced by an increasing density of livestock is also degrading natural resources, in particular pastoral resources and contributing to desertification. This is accentuated by the drought-induced shift from nomadic to sedentary lifestyle (see Section 2. 1 of the Project Document) that has resulted in increased livestock density around water points and settlements. In addition, the increasing adoption of sedentary lifestyles by previously nomadic pastoralists results in localised vegetation removal to create space for agricultural activities. Therefore, pastoralists have to purchase fodder to compensate for the loss of pastoral resources. These factors are all exacerbated by the current effects of climate change, such as the increased frequency and intensity of droughts (see Section 2.1 of the Project Document 1). Future changes in climate will intensify the negative impacts of these factors on local populations and the ecosystems on which they depend.

### *Agriculture and pastoralism (Component 2)*

Drought-induced water shortages and sand encroachment due to desertification, exacerbated by drought, lead to further decreases of pastoral resources in these wilayas. Bushfires result in the degradation of thousands of hectares of rangelands land every year in Mauritania (see Section 2.1 of the Project Document). Indeed, it is estimated that an equivalent of US\$34 million per year in livestock fodder are lost to bushfires<sup>24</sup>. The four wilayas targeted by the LDCF project are in the regions most affected by forest- and bushfires. The resultant effects of reduced pastoral resources currently include: i) increased livestock and meat prices; ii) increased number of people adopting sedentary lifestyles; iii) decreased income of pastoralists; and iv) progressive shifts from raising bovid species to raising small ruminant and camelid species. Consequently, emergency programmes are regularly implemented in response to increased food insecurity in the most vulnerable communities. These programmes consist of helping pastoralists to purchase fodder, maintain livestock health and build new wells (i.e. Special Intervention Fund<sup>25</sup> in 2008 with a budget of US\$31 million and Hope 2012 with a budget of US\$17 million). These emergency interventions reduce the availability of budget for the GoM. In the absence of interventions to control bushfires, and the establishment of sustainable climate-resilient livelihoods that do not depend solely on agriculture and pastoralism, the impacts described above will be intensified by the effects of climate change.

<sup>23</sup> USAID, 1982. Inventaire des ressources du sud-ouest Mauritanien.

<sup>24</sup> MEDD, 2014. Communication conjointe en conseil des ministres relative à la campagne de protection des pâturages contre les feux de brousse 2014-2015.

<sup>25</sup> Plan Special d'Intervention.

### *Knowledge availability and community awareness (Component 3)*

A large amount of information is currently generated by multiple ongoing adaptation-related projects in the country. However, this information is generally not transformed into lessons learned or disseminated among stakeholders. Additionally, no long-term monitoring system is in place to rigorously collect and analyse data. This lack of data does not allow for the benefits of past, current and future interventions to be measured. Consequently, the identification and promotion of best practices for adaptation to climate change is prevented. This situation will persist unless targeted measures are implemented to generate and share relevant knowledge amongst government stakeholders.

Knowledge of EbA – that is currently viewed as one of the best approaches for long-term adaptation to climate change<sup>26,27</sup> – is currently limited in Mauritania, in part because experience is lacking and data is not collected and converted to policy relevant information. Although regional interventions relating to EbA are ongoing in the country (e.g. Great Green Wall project), these interventions are rare<sup>28</sup>, which limits the scope for collecting an EbA evidence base that could be used to further argue for its use in national adaptation actions.

In addition the awareness of CSOs and rural communities of climate change and adaptation options in Mauritania is currently limited. While national awareness-raising campaigns have been implemented in the country on other environmental topics (e.g. awareness-raising campaign on the negative effects of plastic bags on the environment has been ongoing since 2007), no awareness-raising campaigns on the effects of climate change and related adaptation options has been undertaken. Without awareness of climate change adaptation, rural communities do not autonomously implement adaptation interventions that could increase the resilience of their practices. This problem will be addressed partly by the United Nations Environment Programme (UNEP) Special Climate Change Fund (SCCF) SCTRC project that will: i) provide training to trainers, scientists, practitioners and government staff to plan, implement, manage and conduct research on the effects of concrete, on-the-ground EbA interventions; and ii) implement a small-scale awareness-raising campaign on EbA using local media. However, a national campaign that targets rural communities is still required. Without such a campaign, awareness of rural communities will continue to remain limited and negatively affect the sustainability of adaptation-related interventions implemented in the country.

### **Baseline project**

The **Annual Programme against Bushfires in Mauritania (APCBF)** is funded by the GoM. It was initiated in 2011 and has no termination date as the budget is allocated annually. During the implementation phase of the project, APCBF is expected to receive US\$2 million per year which corresponds to a co-financing amount of US\$8 million for the project. Within the four targeted wilayas, 48 communes will benefit from APCBF. The main objective of APCBF in these 48 communes is to protect pastoral and forestry resources against bushfires through the implementation of three approaches: i) a defensive approach which maintains a network of firebreaks using the appropriate equipment – e.g. graders and bulldozers – combined with a network of manual firebreaks created and maintained by rural communities around pastoral routes; ii) a preventative approach which raises awareness – in nomad and sedentary communities living within and around rangelands – on the risk of bushfires and methods of reducing this risk; and iii) a proactive approach which allocates appropriate financial and human resources to manage controlled fires. Another aspect of this programme is increasing the awareness of rural communities on the consequences of – and opportunities to – reduce the risk of bushfires. This includes: i) creating community-based committees at the village scale; ii) developing TV programs; iii) implementing awareness-raising workshops in villages and smaller settlements; and iv) producing newspaper articles and online publications. As agreed with APCBF during the PPG phase, the intervention sites of APCBF will be selected as a priority for the on-the-ground interventions of the LDCF project (see Appendix 15 of the Project Document).

The LDCF project will build on APCBF through implementing innovative fire-protection practices including fire-resilient green breaks through Output 2.2. The knowledge generated on this new practice against bushfire will be

<sup>26</sup> Munang, R. et al. 2013. Climate change and Ecosystem-based Adaptation: a new pragmatic approach to buffering climate change impacts. *Environmental Sustainability*, 5: 67-71; Colls, A. et al. Ecosystem-based Adaptation: a natural response to climate change. International Union for Conservation of Natural Resources (IUCN), Gland, Switzerland.

<sup>27</sup> SPREP, 2013. Rao N.S., Carruthers T.J.B., Anderson P., Sivo L., Saxby T., Durbin, T., Jungblut V., Hills T., Chape S. 2013. An economic analysis of ecosystem-based adaptation and engineering options for climate change adaptation in Lami Town, Republic of the Fiji Islands. A technical report by the Secretariat of the Pacific Regional Environment Programme. Apia, Samoa.

<sup>28</sup> The project “Ecosystem-based Adaptation through South-South Cooperation” is in the early stages of implementation. Together with the LDCF project, these two initiatives are the first to apply the EbA approach to restore and revegetate degraded ecosystems in Mauritania.

important for APCBF to further climate-proof their on-going activities, and in particular to integrate sustainable ecosystem-based approaches (with multiple co-benefits) in fire-protection practices, which has so far not been done in Mauritania. Consequently, an international consultant will be hired to implement this activity in close collaboration with the management team of APCBF. In addition, the activities of Output 2.2 will include training for rural communities on bushfire protection techniques such as green firebreaks and soil conservation practices. The implementation of such practices under the LDCF project will decrease the risk of bushfires, furthering the objectives of the APCBF.

A cash co-financing of US\$500,000 will be provided by the GoM as a contribution to the budget provided by GEF/LDCF to the project. During the implementation phase of the project, this cash co-financing will be used to support the implementation of the interventions through: i) covering for the salary of additional local government staff in the intervention sites if required; ii) purchasing complementary equipment for local government institution including DREDDs – e.g. vehicles, office equipment; iii) renting office or meeting venues; or iv) maintaining and running local government infrastructures – e.g. electricity, water, land line, construction work to maintain buildings.

### ***3) Proposed alternative scenario, with a brief description of expected outcomes and components of the project.***

The objective of the project is to reduce the vulnerability to climate change of Mauritanian authorities and local communities in the forests and rangelands of the Sahelian Acacia Savanna Ecoregion through the implementation of EbA measures<sup>29</sup>. The project will focus on the most vulnerable pastoral communities living in the wilayas of Guidimaka, Assaba, Hodh El Gharbi and Hodh El Chargui.

To enhance the capacity of government authorities and rural communities to adapt to climate change in the forests and rangelands of the targeted areas in Mauritania, building on the outcomes of baseline project and working in alignment with other related projects, the LDCF project will implement a suite of adaptation interventions. Under Component 1, the project will address gaps in institutional and technical capacity of government and non-government institutions to use best adaptation practices to decrease vulnerability to climate change in Mauritania. Under Component 2, EbA pilot interventions will be implemented both to increase knowledge on best adaptation practices and to decrease the vulnerability of rural communities to the effects of climate change such as droughts and bushfires. Finally, under Component 3, the experience gained through Component 2 and through the interventions of other adaptation projects – see Section 2.7 of the Project Document for further information on the corresponding projects – will be processed and disseminated. These interventions of the LDCF project are further described below.

#### **OUTCOME 1: Strengthened capacity at the national, provincial and local levels to use EbA measures to address climate change risks in forests and rangelands.**

Co-financing amount for Outcome 1: US\$2,500,000

LDCF: US\$ 798,750

Implementing Agency: UNEP

Component 1 will focus on strengthening the institutional capacity of: i) national government authorities; ii) decentralised government institutions including CREDD, DREDD and other regional delegations; and iii) CBOs including AGLCs. This strengthened capacity will enable planning and implementation of EbA interventions to build climate resilience at national and local levels.

The first step towards a national response to the effects of climate change will be the development of a national adaptation strategy. This will include best practices for adaptation to climate change – including the EbA approach – at the national scale as well as promoting gender equity under the climate change scenario. The strategy will be developed using a participatory approach in order to incorporate different sectoral evidence and experience of measures that help communities buffer extreme events. Representatives from relevant government sectors will participate in developing the strategy, including the focal points on climate change (see Section 2.6 of the Project Document). To support the implementation of the national adaptation strategy, revisions will be proposed to several relevant national laws, strategies and plans to: i) integrate adaptation to climate change; ii) promote the implementation of best adaptation practices, including EbA; and iii) increase gender considerations. The development

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<sup>29</sup> For more information on the process through which the proposed project will meet its objective, please see the Theory of Change in Appendix 19 of the Project Document.

of the strategy and revisions will be conducted in collaboration with GIZ to maximise support to the advancing of the NAP process.

At the communal level, institutional capacity for sustainable development planning under the scenario of climate change will be built (see Appendix 16 of the Project Document). Ten communes will be selected in the targeted wilayas (see Appendix 15 of the Project Document for the selection criteria of the intervention sites). For these ten communes, Communal Development Plans (CDPs) will be developed or revised in the light of climate change projections to integrate adaptation interventions – such as EbA – and to promote them as best practices for the management of natural resources.

The strengthening of the institutional framework at the national and local levels will be followed by providing government staff and other relevant stakeholders – including CBOs in targeted wilayas – with the required technical capacity to analyse their strategies in the light of climate change projections and to implement the revised strategies and plans. In addition to receiving training on the implementation of EbA, DREDDs and other relevant regional delegations will be trained on designing and implementing awareness-raising campaigns for local communities in their respective wilayas – particularly for AGLC members. The training interventions implemented under Component 1 will be supported by the production of guidelines that will be distributed to the stakeholders before the training sessions.

To facilitate the implementation of on-the-ground activities to build climate resilience, the appropriate institutional framework will be established at the local level, based on a stocktaking of the existing local associations in the four targeted wilayas. This stocktaking activity will include an analysis of the structure and achievements of each local association as well as an analysis of gender equity in decision-making processes within each association. Based on the findings of the aforementioned stocktaking exercise, the LDCF project will: i) strengthen 12 local associations that are not fully operational; and ii) establish 15 new AGLCs in important pastoral zones<sup>30</sup>. The establishment of the AGLCs will involve a process of local discussions, negotiations of communities with DREDDs and communal authorities, organisation and planning workshops, and administrative and legal processes to recognise the AGLCs. At the end of this process, AGLC members become officially responsible for the sustainable management of a defined forest-agropastoral system. Technical training will be provided to AGLC members in planning for climate change, on e.g. i) identifying best practice in restoration, agricultural and pastoral activities in a specific context; ii) using an ecosystems services approach to guide the design of interventions; iii) business plan development; iv) implementing ecosystem-based adaptation measures; and v) monitoring results. As part of the training sessions, gender equity within the AGLCs will be promoted in the project decision-making process, e.g. by including women as AGLC members and in designing planning processes that facilitate input from women. The establishment of AGLCs will upscale the activities implemented under ProGRN project (see Section B.1).

#### Output 1.1: A national adaptation strategy to inform adaptation planning developed.

The activities to be implemented under Output 1.1 are:

- 1.1.1. Develop – under the sponsorship of the Coordinating Unit of the National Programme of Climate Change (CCPNCC) – a national adaptation strategy with a matching costed and time-specific National Adaptation Plan in collaboration with the ACCMR project team and other relevant institutions as well as periodic review system to guide planning for adaptation to climate change – including the use of EbA – to advance the NAP process.
- 1.1.2. Initiate the validation process of the national adaptation strategy by taking the document through as many steps of the government validation process and dissemination as possible until project closure.
- 1.1.3. Propose revisions to the main sectoral policies, strategies and plans and develop briefs for the revised documents in the relevant sectors – including management of natural resources and sustainable development – to integrate adaptation to climate change, according into the national adaptation strategy developed under Activity 1.1.1.
- 1.1.4. Propose revisions to selected laws – including environmental, pastoral, water and forestry laws – and develop briefs of the revised documents to integrate adaptation to climate change, according into the national adaptation strategy developed under Activity 1.1.1.

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<sup>30</sup> The selection criteria to identify beneficiaries can be found as Appendix 15 of the Project Document.

- 1.1.5. Initiate the validation process of the revisions developed for selected policies, strategies, plans and laws under Activities 1.1.3 and 1.1.4 by taking the document through as many steps of the government validation process as possible until project closure.
- 1.1.6. Integrate the EbA approach into decision-making processes at the community level in at least 10 Local Development Plans (LDPs), according to the national adaptation strategy developed under Activity 1.1.1.

Output 1.2: Training events organised to increase technical capacity of national, provincial and local institutions to facilitate the implementation of appropriate adaptation measures.

The activities to be implemented under Output 1.2 are:

- 1.2.1. Develop training material to facilitate the use of EbA including technical EbA guidelines.
- 1.2.2. Provide training to policy- and decision-makers, government technical staff and NGOs, on the use of the technical EbA guidelines and other material developed under Activity 1.2.1.
- 1.2.3. Provide training and equipment<sup>31</sup> to relevant government staff – including the DREDDs – and sectors to collect and analyse data on the efficiency of adaptation practices.
- 1.2.4. Provide support to the DREDDs and other relevant regional delegations to design and implement awareness raising campaigns on EbA for rural communities, particularly municipalities' staff and AGLC members.

Output 1.3: New AGLCs established and existing AGLC management committees trained on the use of EbA for the sustainable management of natural resources including pastoral resources.

The activities to be implemented under Output 1.3 are:

- 1.3.1 Undertake a diagnostic review of government and community-based organisations in the targeted wilayas, to identify with the support of DRCL where AGLCs are most urgently required and where AGLCs should be strengthened.
- 1.3.2 Establish 15 new AGLCs and strengthen the operational framework of 12 existing AGLCs for the sustainable management of natural resources in the four targeted wilayas of the Sahelian Acacia Savanna Ecoregion.
- 1.3.3 Provide training on climate-resilient practices with a focus on EbA interventions and sustainable resource management to: i) the 27 AGLC steering committees targeted by the project; and ii) rural community representatives in the project intervention sites.

OUTCOME 2: Increased provision of pastoral resources and climate-resilient livelihoods via an EbA approach.

Co-financing amount for Outcome 2: US\$4,000,000

LDCF: US\$ 3,386,650

Implementing Agency: UNEP

Outcome 2 of the LDCF project will be implemented in participation with at least 12 of the 27 AGLCs trained through Component 1, to be identified using the selection criteria proposed in Appendix 15 of the Project Document. After selecting the AGLCs to be targeted for the on-the-ground interventions, a gender analysis will be undertaken in these AGLCs to identify how gender equity can be promoted in the adaptation interventions identified and implemented and to incorporate this into the strategy for Components 1 and 2. In addition, within the management areas of the selected AGLCs, an Integrated Ecosystem Assessment (IEA) will be undertaken to determine the extent of degradation and productivity levels of rangelands, forests and other ecosystems. The results of the IEA will be combined with the findings of community consultations to finalise the precise selection of planting sites for the EbA activities to be undertaken through Component 2 (see below). Following the site selection process, 2–4 Local Management Plans (LMPs) will be developed for each intervention site. These LMPs will guide the sustainable management of pastoral and forest resources for rural communities' development under the conditions of climate change in the management areas for a period to be defined in collaboration with local stakeholders (2–5 years). This management of natural resources will build climate resilience within the vulnerable communities living in the intervention sites within the four targeted wilayas.

<sup>31</sup> The equipment to be provided will likely include GPS devices, cameras, species identification books, sampling material and apparatus to measure vegetation indices and water quality.

To generate funding for the conservation of natural resources in the long term, the implementation of Payment for Ecosystem Services (PES) will be promoted where appropriate, and where the key success factors for PES exist (e.g. the availability of entities that are willing and able to pay for the conservation or generation of ecosystem services). The PES systems would be integrated into the LMPs, and could include agreements with the AGLCs on, for example, taxes to be paid by private companies or individuals for the commercial use of natural resources including water, wood and pastoral resources. The funds generated would then be allocated to community members whose practices contribute to conserving or promoting ecosystem services.

After developing the required local management framework the restoration interventions for pastoral and forest ecosystems will be implemented to build climate resilience in the intervention sites. For each restoration intervention described below, a preliminary study to assess the baseline state of the area to be restored will be conducted before planting activities commence. A long-term management system for the restoration sites will be implemented within the AGLCs including: i) monitoring the vegetation recovery in the set-aside plot; ii) maintaining the restoration areas; and iii) managing access to restored areas. To allow trees to reach maturity during the four-year lifespan of the project, nurseries will be implemented as soon as possible, once the project is initiated.

The first restoration activity will focus on watersheds that are greatly eroded. Trees and shrubs will be planted on 150 hectares of degraded watersheds to stabilise the soil and increase water infiltration into the soil. Potential candidate species to be grown in nurseries under this activity include: gum acacia (*Acacia senegal*), umbrella thorn acacia (*Acacia tortilis*), desert date tree (*Balanites aegyptiaca*) and jujube (*Ziziphus mauritania*).

The second restoration activity will include the design of set-aside practices that are climate-resilient. These will be used to rehabilitate at least 300 hectares of degraded ecosystems. Under the scenario of climate change, these set-aside plots will provide Non-Timber Forest Products (NTFPs) including fodder resources and fruits during the dry season thereby increasing the sources of income for rural communities during drought periods. The following sub-activities will be implemented: i) fencing set-aside plots to exclude livestock; ii) establishing tree nurseries in close proximity to the set-aside zones; and iii) supplementing the natural recovery and tree plantation in rangelands by sowing seeds.

The third restoration activity will focus on intervention sites where sand dunes are encroaching on pastoral and forest habitat because of desertification and leading to reduced resource availability. A combination of biological and mechanical fixation techniques for reducing sand dune encroachment will be implemented over 390 hectares. This will include: i) the establishment of nurseries; ii) the use of natural material – such as wooden stakes – to stabilise the dunes temporarily; and iii) the mechanical planting of saplings that will fix the sand in the long term. The following species are potential candidates for dune fixation in Mauritania: i) khimp (*Leptadenia pyrotechnica*); and ii) merkba (*Panicum turgidum*).

At least 150 hectares of protected forests and 210 hectares of *Acacia* woodlands will be restored as part of the fourth restoration activity. The degraded *Acacia* ecosystems targeted under this activity will be suitable for *Acacia senegal*, one of the main species producing gum Arabic in Mauritania. Therefore, this species – and other gum-producing tree species – will be planted to increase the production of gum and promote income-generating activities based on gum harvesting. The restoration of protected forest will follow similar steps to the restoration of *Acacia* woodlands (see Appendix 22.B page 119-120 of the Project Document for examples of tree species to be planted for forest and *Acacia* woodland restoration).

The fifth restoration activity will build on the APCBF project and increase the resilience of rural communities to bushfires in Mauritania. Approximately 20 hectares of green firebreaks will be developed as a pilot intervention. To do so, thick corridors – 20–25 meters wide – of perennial species will be planted<sup>32</sup>. Collectively, the selected species will be: i) fire resilient; ii) drought resilient; iii) fast-growing; iv) indigenous or presenting no invasion risk; and v) will exclude other species from growing beneath their foliage. The trade-offs between criteria for species selection will be determined largely by the site-specific purposes of the planting activities and the preferences of local communities. For example, potential species to be planted in the green firebreaks are: i) *Leptadenia pyrotechnica*; ii) *Vetiver nigriflora*; iii) *Guiera senegalensis*; iv) *Khaya senegalensis*; and v) *Piliostigma reticulata*. These species prioritised for planting in the green firebreaks will have multiple traditional uses for rural communities, including the provision of medicinal products and other NTFPs.

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<sup>32</sup> Potential communes for the plantation of these green firebreaks are Arr and Dafort in Guidimaka.



For further details on the restoration activities and descriptions of the co-benefits see Section 3.3 of the Project Document.

To increase the climate resilience of local livelihoods, activities to climate-proof existing agropastoral practices will be implemented. At least 50 hectares of agropastoral plots will be targeted by the project's interventions. Women, youth and marginalised groups will be the priority beneficiaries of these interventions. Potential species to be promoted to increase agropastoral productivity under the scenario of climate change are: i) crop species including onions, carrots, potatoes, melons and beetroots; ii) fodder species including lucerne (*Medicago sativa*), sorghum (*Sorghum* sp.), pigeon pea (*Cajanus cajan*) and cowpea/dolique mongette (*Vigna unguiculata*); and iii) fruit-tree species including mango (*Mangifera indica*), citrus (*Citrus* sp.), papaya (*Carica papaya*) and guava (*Psidium guajava*).

In addition to agropastoralism, climate-resilient economic activities based on ecosystems in the planting sites will be developed to sustain the restoration interventions. This direct generation of income from viable ecosystems is expected to create incentives for rural communities to preserve and sustainably use the restored and other ecosystems. The following NTFPs and the corresponding drought-resilient, NTFP-generating species will likely be promoted under the project: i) desert dates (*Balanites aegyptiaca*); ii) monkey bread (*Adansonia digitata*); iii) gum and resin trees (*Acacia* sp.); iv) doum palms (*Hyphaene thebaica*). Trees attracting bees such as *Acacia melifera* and medicinal trees will also be considered. After identifying a set of potential income-generating activities, the feasibility of developing value chains for the sale of NTFPs will be assessed. These value chains will safeguarding of climate-resilient livelihoods developed through the project.

After receiving the appropriate material to implement climate-resilient livelihoods, the AGLC members will be trained on the implementation of these livelihoods. The content of these training sessions will include: i) the concept of value chains for the selected agropastoral products and NTFPs; ii) the detailed role of the different actors in the value chain; iii) the requirements for setting up and maintaining a business – including budgeting and accounting; iv) the growing and collecting processes for the respective agropastoral products and NTFPs; v) the transformation processes needed to render the agropastoral products and NTFPs marketable; and vi) the methods and equipment required to maintain the agropastoral products and NTFP species. Potential transformation processes on which the beneficiaries will be trained are: i) drying collected products; ii) extracting vegetable oils; iii) soap production; and iv) handcrafting. These training sessions will be complemented by field visits in Mauritania or in neighbouring countries where the selected NTFPs are being used.

#### Output 2.1: Management plans for natural resources including EbA interventions developed in collaboration with AGLCs.

The activities to be implemented under Output 2.1 are:

- 2.1.1 Select AGLCs – among the AGLCs trained under Output 1.3 – that will benefit from the on-the-ground interventions of the project within the Sahelian Acacia Savanna Ecoregion.
- 2.1.2 Undertake a gender analysis in the selected AGLCs and identify opportunities to further integrate gender equity in the on-the-ground interventions of Component 2.
- 2.1.3 Undertake participatory baseline surveys to determine the level of degradation and productivity of rangelands and other ecosystems within the management areas of AGLCs established and strengthened under Output 1.3.
- 2.1.4 Produce geo-referenced digital maps of pastoral and forest resources in the AGLCs.
- 2.1.5 Develop and implement at least 9 LMPs for the sustainable management of pastoral and forest resources under the climate change scenario, including PES systems where appropriate, in collaboration with DREDDs, local authorities, AGLC members and other rural community members including EbA measures.

#### Output 2.2: EbA and other adaptation practices implemented to decrease vulnerability of pastoral resources to droughts, bushfires and sand dune encroachment within the management areas of the AGLCs selected under Output 2.1.

The activities to be implemented under Output 2.2 are:

- 2.2.1 Design and implement reforestation practices, and soil and water conservation practices on 150 hectares of degraded watersheds.
- 2.2.2 Design and implement set-aside plans for the restoration of 300 hectares of degraded ecosystems, and rainwater retention systems such as rainwater reservoirs, *zai*, stone rows and half-moons.

- 2.2.3 Design and implement fixation techniques to prevent sand dune encroachment on 390 hectares of pastoral routes including biological and mechanical fixation.
- 2.2.4 Develop restoration protocols and restore 210 hectares of gum tree forests and 150 hectares of protected forests.
- 2.2.5 Develop and implement fire-protection practices – including fire-resilient green breaks – on 20 hectares of rangelands.

Output 2.3: Training, technical support and equipment provided to rural communities for the establishment of climate-resilient livelihoods.

The activities to be implemented under Output 2.3 are:

- 2.3.1 Identify sustainable livelihood opportunities to climate-proof and diversify income-generating activities of pastoral communities under the climate change scenario, including market assessments – if required.
- 2.3.2 Promote the development of sustainable income-generating activities such as climate-resilient pastoral activities, small-scale agriculture and agroforestry.
- 2.3.3 Promote the development of traditional, climate-resilient, non-pastoral livelihoods – such as the exploitation of NTFPs from *Balanites aegyptiaca* and *Acacia senegal*, and/or apiculture – through the provision of equipment and training for the collection, processing and conservation of natural products.

OUTCOME 3: Increased awareness and knowledge of climate change risks, benefits of EbA and opportunities for climate-resilient livelihoods in Mauritania.

Co-financing amount for Outcome 3: US\$2,000,000

LDCF: US\$ 482,100

Implementing Agency: UNEP

Under Component 3, a long-term data collection, analysis and archiving strategy will be developed. To build on the systems that have already been implemented, a review of the existing data collection and analysis systems will be conducted. Following the review of existing systems, a centralised system for data collection and analysis – relevant on-the-ground interventions of the project and other adaptation-related projects – will be developed or strengthened. To complement the long-term system for data collection and analysis, an archiving system for the generated information will be developed. The archiving system will be designed through consultations with stakeholders, including government practitioners, scientists and other relevant stakeholders and informed by comparable information management systems<sup>33</sup>. For further details on the review, protocols for data collection and analysis, and archiving system see Section 3.3 of the Project Document.

The information assimilated through this knowledge management strategy will be disseminated to rural communities through a national awareness-raising campaign on the EbA approach and corresponding livelihood opportunities. This will increase the sustainability of the adaptation-related interventions, including those of the proposed project. The focus of this campaign will be on: i) current effects of climate change; ii) expected effects of climate change in the medium and long term; iii) the EbA approach; and iv) best adaptation options, including climate-resilient livelihoods based on natural and agropastoral ecosystems. By using a diversity of communication tools, it is expected that both men and women will have adequate access to the disseminated information. In addition, Ministry of Social Affairs, Childhood and Family (MASEF) will be consulted in the design of an awareness-raising campaign to reach as many women and young people as possible. At the governmental level, the dissemination of the generated information will be achieved by strengthening the knowledge-sharing platform of the MEDD, both for MEDD staff and other relevant ministries.

Lastly, a long-term strategy for upscaling the best interventions for adaptation to climate change will be developed. Such interventions will include: i) successful practices implemented under the project that already showed some success during the first years of the implementation phase; and ii) successful interventions implemented in the past and reviewed in the development of the knowledge management strategy (Output 3.1).

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<sup>33</sup> Statistical Commission Forty-second Session. 2010. Report on global geospatial information management. United National Economic and Social Council. Accessed on: 4 March 2015.

In addition, this long-term upscaling strategy will promote the upscaling of best adaptation practices identified in the future, guided by the long-term monitoring system. Firstly, the potential sites for the replication of the best adaptation interventions will be selected. Secondly, funding opportunities within the public and the private sectors to upscale best interventions for adaptation to climate change in the country will be identified. Thirdly, local authorities and local associations – with a particular focus on the AGLCs trained under Component 1 that did not benefit from the on-the-ground interventions – will be trained on: i) integrating the selected practices into LDPs and LMPs; ii) designing, budgeting and implementing these practices; iii) monitoring the efficiency of these interventions; and iv) maintaining these interventions to increase the long-term benefits. If funding opportunities identified under this output can be accessed directly by local stakeholders, training will also be provided on accessing these sources of funds. This will increase the capacity of these local stakeholders to raise – and efficiently use – funds allocated for local development by future projects.

Output 3.1: A knowledge management strategy – including long-term data collection, analysis and archiving – developed to capture and share information on the benefits of adaptation practices to rural communities.

The activities to be implemented under Output 3.1 are:

- 3.1.1 Review and identify the gaps in existing data collection and analysis systems for adaptation projects in the country.
- 3.1.2 Review the current and planned activities of all adaptation projects in the country, including precise geographical mapping of their interventions.
- 3.1.3 Develop and institutionalise a centralised system for long-term data collection and analysis to measure the costs and benefits of adaptation practices of the project and other projects implemented in Mauritania.
- 3.1.4 Develop and institutionalise an archiving system for: i) the data collected under Activity 3.1.3; ii) protocols for data collection and analysis; iii) information on the successes and failures of adaptation interventions; and iv) current best practices for adaptation interventions.

Output 3.2: Awareness-raising campaigns via different media – including radio and TV – on the benefits of an EbA approach and associated climate-resilient livelihoods developed and implemented for government staff and rural communities.

The activities to be implemented under Output 3.2 are:

- 3.2.1 Develop and implement awareness-raising campaigns on climate change to raise awareness about the benefits of ecosystem-based adaptation solutions especially given expected climate change, to be delivered through pamphlets and radio and television programmes. These campaigns will target: i) government staff at the national, provincial and local scales; ii) CSOs; and iii) rural communities including illiterate people.
- 3.2.2 Strengthen the knowledge-sharing platform of the MEDD for the timely dissemination – at national, provincial and local levels – of: i) the protocols developed under Activity 3.1.3; ii) documentation on the implementation of adaptation interventions including EbA; and iii) best adaptation practices identified under Activity 3.1.3.

Output 3.3: A long-term strategy to upscale and sustain best adaptation measures including EbA.

The activities to be implemented under Output 3.3 are:

- 3.3.1 Identify potential sites for replication of successful projects activities identified under Activity 3.1.3.
- 3.3.2 Provide training and raise awareness on the use of the successful practices to the AGLCs corresponding to the identified replication sites.

***4) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTE, LDCF, SCCF, and co-financing***

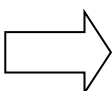
The current and predicted effects of climate change will have negative effects on rural communities living in the forests and rangelands of the Sahelian Acacia Savanna Ecoregion. In particular, the following changes are expected: i) reduced annual precipitation; ii) longer drought periods; iii) increased average annual temperature; iv) increased occurrence of extreme weather events; and v) increased occurrence of bushfires. Currently, the capacity to address the negative effects of climate change is inadequate in national (e.g. Ministries of Environment, Livestock Husbandry,

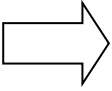
Agriculture, Hydraulic and Sanitation), provincial (e.g. regional delegation such as DREDDs) and local (e.g. municipalities) government and rural communities. Limitations in the availability of qualified staff, operational structures and evidence bases on appropriate adaptation practices hinder the effective implementation of a national response for adaptation to climate change. Furthermore, coordination and knowledge-sharing between and within sectors is limited. If the institutional and technical capacity of government and communities is not increased, rural communities in Mauritania will remain vulnerable to the negative effects of climate change

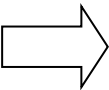
The LDCF project will increase the institutional and technical capacity of government stakeholders to enable the systematic planning and implementation of best adaptation practices including EbA. Interventions based on both scientific and traditional knowledge will address the effects of climate change through targeted restoration, engineering and sustainable management of beneficial ecosystems. Rural communities will implement the project's EbA interventions with the support of NGOs, and communal and provincial authorities. This support will include extensive institutional and technical capacity-building for community members. In addition, knowledge will be shared on the cost effectiveness of an EbA approach in reducing vulnerability to climate change and on associated climate-resilient livelihoods to raise awareness within and outside of the project target areas.

A summary of the adaptation alternative and the business-as-usual scenario is represented in the table below.

**Table 1:** Comparison of the business-as-usual scenario to the alternative adaptation scenario.

	<b>Business-as-usual</b>		<b>Alternative adaptation scenario</b>
<b>Problem Description</b>	Mauritania has experienced changes in climate since 1960, including <i>inter alia</i> : i) reduced annual precipitation; ii) longer drought periods; iii) increased mean annual temperature; and iv) increased occurrence of extreme weather events. During the droughts, human-induced pressure on natural resources such as forests and rangelands is increased in response to crop failures and food scarcity. The extractive pressure on natural resources is exacerbated by widespread poverty and the reliance of rural communities on pastoralism. In addition to the direct negative impacts of droughts, Mauritania's rural communities are also vulnerable to climate-related hazards such as bushfires and sand encroachment, which further decrease the availability of natural resources. These climate- and environment-related challenges result in a cycle of natural resource degradation, increased food insecurity and poverty. The future effects of climate change will include further scarcity of water and pastoral resources.		The project will focus on the restoration and sustainable management of forest and pastoral resources using an EbA approach. The activities demonstrated by the project will focus on planting drought-resilient, multi-use and indigenous species to: i) restore ecosystem services, including water infiltration; and ii) increase the generation of ecosystem goods, such as NTFPs. It is expected that these activities will restore ecosystem function and services to communities, thereby increasing their ability to e.g. buffer longer periods of dry spells and to increase agricultural productivity through better soil fertility. The project will also invest in diversified livelihoods for the communities in the targeted wilayas which is expected to help them become more resilient to climate variability and change by giving them alternative means to earn a living during drought periods. The interventions of the project will be selected, developed, implemented and maintained by the communities themselves so as to ensure buy-in and sustainability.
<b>Project Outcomes</b>	<b>Outcome 1:</b> <ul style="list-style-type: none"> <li>Limited institutional framework to guide a coordinated response to climate change in Mauritania.</li> <li>Limited sharing of experience and information between adaptation-related initiatives – particularly between environmental, water, agricultural and livestock husbandry sectors.</li> <li>Limited integration of priorities</li> </ul>		The project will: i) promote improved coordination between sectors to plan for adaptation to climate change; ii) develop the technical capacity of government authorities to increase awareness within rural communities of the current and future effects of climate change, as well as potential adaptation options; and iii) establish local institutions to assume responsibility for the decentralised management of natural resources. The interventions under this

	<p>and decision-making to adapt to climate change, such as EbA, in national strategies, plans and laws.</p> <ul style="list-style-type: none"> <li>• Limited technical capacity of national and local authorities to promote and guide the implementation of best adaptation practices, including EbA and the newly devised decentralised management of natural resources.</li> <li>• Limited availability of evidence on the effectiveness of EbA as a response to climate change.</li> <li>• Opportunities for developing climate-resilient livelihoods using EbA principles have not been studied.</li> <li>• Interventions using the EbA approach are not prioritised as part of national adaptation strategy.</li> <li>• Absence of the requisite knowledge of climate change and adaptation options within existing local associations to support implementation of best adaptation practices.</li> <li>• Implementation of environment-related projects will continue in an <i>ad hoc</i> manner with minimal consideration of climate change. Consequently, rural households in Mauritania will remain vulnerable to the negative impacts of climate change.</li> </ul>		<p>outcome will develop an enabling environment to catalyse the widespread adoption of EbA in Mauritania by:</p> <ul style="list-style-type: none"> <li>• Establishing a national strategy for adaptation to guide and coordinate adaptation planning.</li> <li>• Integrating EbA into institutional frameworks – including national strategies, plans and laws – to promote the implementation of the national strategy for adaptation.</li> <li>• Integrating EbA into communal development plans to promote the adoption of EbA in the four targeted wilayas.</li> <li>• Providing training to government authorities on planning and overseeing the implementation of EbA interventions.</li> <li>• Providing training to provincial and local authorities on data collection and analysis to increase the evidence base for best adaptation practices.</li> <li>• Establishing AGLCs in the intervention sites.</li> <li>• Training AGLC committees to enable the sustainable management of natural resources at the local scale under the scenario of climate change.</li> </ul> <p><b>Cost: LDCF US\$541,477</b></p>
	<p><b>Outcome 2:</b></p> <ul style="list-style-type: none"> <li>• The current status of Mauritania's ecosystems, such as spatial extent, health and threats, are largely unknown.</li> <li>• There is an absence of appropriate management plans at a local level to guide the efficient application of external funds.</li> <li>• Restoration interventions are implemented and maintained in an <i>ad hoc</i> manner by inappropriate institutions with limited consideration of current and future effects of climate change. Consequently, interventions are often unsustainable.</li> <li>• Limited knowledge on best practices for ecosystem restoration under the current and future effects of climate change.</li> <li>• Forest – including <i>Acacia</i> forests – and pastoral resources are degraded by unsustainable exploitation.</li> <li>• Bushfires and sand encroachment are exacerbated by droughts, thereby reducing the availability of forest and pastoral resources.</li> <li>• The unsustainable exploitation of forest and pastoral resources leads</li> </ul>		<p>The interventions of the project will promote and demonstrate the EbA approach as an option to increase the climate resilience of communities living in the targeted wilayas. The project will develop and apply evidence-based knowledge on best management practices for forest and pastoral ecosystems under the scenario of climate change. The climate-related hazards to be addressed by the project include: i) scarcity of pastoral resources; ii) scarcity of water resources; iii) bushfires; and iv) sand dune encroachment. These challenges will be addressed through:</p> <ul style="list-style-type: none"> <li>• Assessing the condition of natural and agropastoral ecosystems and mapping these ecosystems in the management area of each selected AGLCs.</li> <li>• Developing local management plans for the most vulnerable ecosystems identified to guide the interventions of the project and other initiatives, including exploring the scope for integrating PES systems in the plans.</li> <li>• Establishing climate-resilient and multi-use ecosystems in degraded watersheds, rangelands, protected forests and <i>Acacia</i> woodlands and implementing water conservation techniques to promote sustainability of the interventions and natural recovery of the ecosystem.</li> </ul>

	<p>to desertification that causes decreased water infiltration and increased erosion.</p> <ul style="list-style-type: none"> <li>• Rural communities employ techniques for agriculture, pastoralism and other resource uses that increase the degradation of ecosystems and their vulnerability to climate change.</li> <li>• Rural communities and their livelihoods remain vulnerable to the current and future effects of climate change.</li> <li>• Restoration initiatives in Mauritania will continue to be implemented without: i) taking into account the current and future effects of climate change; ii) focusing specifically on the adaptation needs of rural communities; and iii) realising adaptation benefits that can be generated by appropriately managed natural infrastructure.</li> </ul>		<ul style="list-style-type: none"> <li>• Increasing the generation of ecosystem goods (e.g. NTFPs) and services (e.g. water infiltration, soil fixation) in the medium term.</li> <li>• Measuring the efficacy of green firebreaks to combat bushfires in the targeted wilayas.</li> <li>• Providing technical training to AGLC members on establishing, managing and monitoring the interventions. This will promote community support of the interventions and increase the sustainability of the interventions beyond the lifespan of the project.</li> <li>• Identifying climate-resilient livelihoods in all intervention sites to supplement and increase the sustainability and compatibility of income-generating activities for rural communities with ecosystem restoration.</li> <li>• Providing the required training and equipment for the maintenance and profitability of these climate-resilient livelihoods.</li> </ul> <p><b>Cost: LDCF US\$3,711,238</b></p>
	<p><b>Outcome 3:</b></p> <ul style="list-style-type: none"> <li>• The interventions of ongoing adaptation-related interventions are not monitored beyond the project lifespan. Consequently, the experience gained on-the-ground is not sustained and the long-term effects of adaptation practices in Mauritania are poorly understood.</li> <li>• Limited cross-sectoral dialogue impedes the sharing of lessons learned, resulting in duplication of efforts and a risk of repetition of ineffective approaches.</li> <li>• Awareness on the current and future effects of climate change and adaptation options is minimal at the communal level in Mauritania's rural areas.</li> <li>• Limited capacity of communities to adopt appropriate practices to increase resilience of livelihoods undermines the long-term sustainability of interventions of past and ongoing initiatives.</li> <li>• Examples of community-based approaches to adaptation remain isolated and <i>ad hoc</i> in the absence of a strategy to promote replication and upscaling of best adaptation practices.</li> <li>• Environment-related interventions are often implemented by government authorities without full ownership of rural communities required to maintain them beyond the project lifespan.</li> </ul>		<p>The project will promote the generation and sharing of evidence-based knowledge to support widespread adoption of EbA, including the promotion of the EbA approach beyond the intervention sites of the project. These activities will include a strong focus on increasing the awareness of Mauritania's population on the topics of climate change and potential options for adaptation. Therefore, the interventions under this outcome will include:</p> <ul style="list-style-type: none"> <li>• Designing and institutionalising a centralised system for long-term data collection and analysis of the results of adaptation interventions.</li> <li>• Compiling and annually updating information on past, on-going and future adaptation-related interventions in Mauritania.</li> <li>• Implementing a national awareness-raising campaign on adaptation to climate change using multiple tools.</li> <li>• Strengthening the existing MEDD online platform for knowledge-sharing between and within sectors, with a focus on government staff and other relevant stakeholders.</li> <li>• Supporting the upscaling of appropriate adaptation practices through providing training on the results of this and other projects in the identified replication sites and guiding the mobilisation of funds for replication.</li> </ul> <p><b>Cost: LDCF US\$374,785</b></p>

**5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)**

## *Adaptation benefits*

Rural communities will gain direct adaptation benefits from the restoration of climate-resilient forests and rangelands in the four target wilayas, namely Guidimaka, Assaba, Hodh El Gharbi and Hodh El Chargui. These benefits will initially accrue only at a local level within the project area, with 1,200 individuals expected to benefit directly from the project interventions in terms of reduced vulnerability to climate change (to be validated at project inception). However, research/information on EbA that will be consolidated, generated and shared through Component 3 will promote the expansion and replication of local-level interventions nationally.

Through the national adaptation strategy that will be developed under Component 1, the project will strengthen the institutional and technical capacity of the national and local authorities to plan and implement EbA for adaptation to climate change. This will include activities to strengthen the institutional framework through integration of EbA into national policies and strategies. The lessons learned by the project will be publicly accessible through an online portal and will be actively shared through awareness-raising campaigns and distribution of guidelines on EbA.

At the local level, the generation of direct adaptation benefits for rural communities from EbA in forests and rangelands will be based on local management plans developed through the project for the most vulnerable ecosystems identified. Adaptation benefits will include:

- establishing climate-resilient and multi-use ecosystems in degraded watersheds, rangelands, protected forests and *Acacia* woodlands and implementing water conservation techniques to promote sustainability of the interventions and natural recovery of the ecosystem;
- increasing the generation of ecosystem goods (e.g. NTFPs) and services (e.g. water infiltration, soil fixation) in the medium term.
- Identifying climate-resilient livelihoods in all intervention sites to supplement and increase the resilience of income-generating activities for rural communities and further establish the benefits of ecosystem restoration.
- Providing the required training and equipment for the maintenance and profitability of these climate-resilient livelihoods.

In particular, EbA measures will be implemented across at least 1,200 hectares of degraded ecosystems – 150 hectares of watersheds, 300 hectares of rangelands, 390 hectares of sand dunes, 210 hectares of *Acacia* forests and 150 hectares of protected forests – to address climate change effects such as droughts, bushfires and sand dune encroachment. This restoration will build climate-resilience within these ecosystems, which will be the basis of the climate-resilient livelihoods developed through the project. The interventions of the project are considered to be “low regret” or “no regret” options which will generate benefits for government and rural communities irrespective of the effects of climate change. These co-benefits will be further explored with the targeted communities at the project inception phase, and appropriate indicators as well as a methodology for tracking them will be identified.

## **6) Innovativeness, sustainability and potential for scaling up**

### *Innovativeness*

The LDCF project is innovative in its design to improve and manage systems for the development of climate-resilient livelihoods in Mauritania. Firstly, **EbA approaches** that use climate-resilient, multi-use and indigenous plant species for restoration and revegetation of degraded ecosystems – based on a combination of indigenous knowledge and scientific information – have not previously been implemented in the country<sup>34</sup>. Moreover, these EbA interventions will be the basis of sustainable livelihoods that will both build the climate resilience of rural communities and promote the conservation of ecosystems. This is an innovative approach to safeguarding the benefits of the project.

Secondly, the development of diverse and sustainable climate-resilient livelihoods in rural communities will be enabled by the organisation of **rural communities into legal entities** for the sustainable management of natural resources. These CBOs (i.e. AGLCs) are expected to: i) be the main interface between the project and the community members; and ii) have a major role in the efficiency and sustainability of the project interventions. Building the technical capacity of these AGLC members is an innovative approach to facilitate the development of an appropriate framework for knowledge transfer between community members.

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<sup>34</sup> The project “Ecosystem-based Adaptation through South-South Cooperation” is in the early stages of implementation. Together with the LDCF project, these two initiatives are the first to apply the EbA approach to restore and revegetate degraded ecosystems in Mauritania.

Thirdly, the LDCF project will implement innovative **fire-protection practices including fire-resilient green breaks**. The perennial species planted in thick corridors will be: i) fire resilient; ii) drought resilient; iii) fast-growing; iv) indigenous or presenting no invasion risk; and v) will exclude other species from growing beneath their foliage. This innovative approach to fire-protection will be valuable to the relevant ongoing projects in the country (i.e. APCBF) and in similar ecosystems.

Lastly, the **private sector** will be engaged with to explore opportunities for upscaling the most successful project interventions for adapting to climate change. Additionally, to generate funding for the conservation of natural resources in the long term, the implementation of **Payment for Ecosystem Services (PES)** will be promoted in the intervention sites where appropriate. The PES concept is integrated into the Forestry Law<sup>35</sup> as an appropriate tool for stakeholders to manage and access natural resources. Where appropriate, local agreements will be developed with the AGLCs and integrated as required into the LMPs. These agreements can – for example – include taxes paid by private companies or individuals for the commercial use of natural resources including water, wood and pastoral resources except when it is part of a community management plan in a management area or on private land. The funds generated would then be allocated to community members whose practices contribute to conserving or promoting ecosystem services.

### *Sustainability*

The sustainability of the project's investments will be supported by: i) emphasising the active participation of relevant government and community stakeholders in decision-making and the project implementation strategy ; ii) strengthening the institutional and technical capacity at national, provincial and local levels to ensure that stakeholders have adequate knowledge and skill to maintain the benefits of the project's restoration interventions; iii) increasing public awareness of the benefits of EbA at a national level, thereby increasing the willingness to support and maintain the activities of adaptation-related projects; iv) creating community-led livelihood strategies that are sustainable and compatible with ecosystem conservation; and v) generating evidence to assess the benefits of EbA in Mauritania through the implementation of long-term data collection, analysis and dissemination. More information on these approaches is detailed below.

The project was developed in close consultation with government stakeholders at the national, provincial and local level during the PPG phase. These consultations included members of NGOs and CBOs and representatives of bilateral and multilateral donors (see Section 2.5 and Appendices 21 and 22 of the Project Document). These stakeholders will continue to be consulted intensively during the implementation phase to ensure the project answers their needs. This participatory approach will create and maintain support for the project's activities. An important aspect of the implementation of the project's activities on-the-ground is the leading role to be played by AGLCs. These AGLCs – with a 10-year renewable mandate for the sustainable management of a defined sylvo-agropastoral system – will be the primary implementers of the project and will also be the primary beneficiaries of the project's activities, in alignment with the National Strategy for Sustainable Development's (SNDD) emphasis on participatory management of natural resources (see Section 3.6 of the Project Document). Consequently, the participation of the AGLCs will strongly support the interventions' sustainability.

194. Training is recognised as essential for the sustainability of the LDCF-financed interventions and will be provided at all levels. At the central level, the institutional and technical capacity of government authorities, particularly the MEDD, ME, Ministry of Agriculture (MAg) and Ministry of Hydraulics and Sanitation (MHA) to implement EbA will be strengthened through training and raising awareness on adaptation options such as EbA. The training interventions will include the development of technical protocols, designing, planning and implementing EbA interventions, and monitoring their long-term efficiency. A National Strategy for Adaptation (SNA) will be developed and the EbA approach will be integrated into cross-sectoral and sectoral strategies and development plans. Additionally, a periodic revision process for these documents will be implemented to support adaptation planning beyond the project lifespan. As a result, the LDCF project will contribute to advancing the NAP process, thereby contributing to information and knowledge of adaptation planning in the medium and long term. At a local level, training on EbA will focus on ecosystem restoration, soil and water conservation, and management techniques for bushfires. Consequently, the project will generate the necessary knowledge, tools and institutional framework for rural communities targeted by the project to benefit fully from the project interventions in the long term.

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<sup>35</sup> Article 10 of the Forestry Law.



The sustainability of the project's investments will be further supported by the implementation of a national awareness-raising campaign on the benefits of the EbA approach. Information will be delivered through media such as TV and local radio stations and will target both urban areas and rural places. At a local level, the project will increase the awareness of EbA within communities in targeted wilayas following a training-of-trainers approach. The trained trainers will be able to continue the project's awareness-raising activities beyond the project lifespan.

#### *Potential for scaling up*

To promote the replication of successful EbA interventions, an upscaling strategy will be developed under Output 3.3 of the project. Government authorities and rural communities are expected to support the replication and upscaling of successful activities and approaches identified by the project because of the concrete livelihood benefits that the project is expected to deliver. The knowledge management strategy (Output 3.1) to gather data and support analysis on the benefits of adaptation practices to rural communities is expected to raise awareness and understanding among local authorities and communities of the benefits of doing things differently vis-a-vis resilience to climate change. Guidelines, protocols and lessons generated by the project will be documented to facilitate the replication and upscaling of the activities in other degraded rangelands in the country. The implementation of the upscaling strategy will be supported by the revision of existing national policies, strategies and plans to integrate the EbA approach. Consequently, an increasing number of EbA interventions will likely be integrated into national and local development planning processes.

The knowledge generated under Output 3.1 will provide an evidence base to identify the most locally appropriate and cost-effective approaches to EbA. Furthermore, the MEDD's current web-based platform will be strengthened and expanded to facilitate access to this evidence-based knowledge. New webpages will be created and organised in a user-friendly manner. For example, restoration protocols, technical reports, progress reports, evaluation reports and lessons learned from the project will be available on this website. This will facilitate the sharing of information between national and local government, project managers, NGOs and community leaders and other adaptation practitioners. This will promote the replication and upscaling of EbA activities beyond the project's intervention areas and implementation phase.

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

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

N/A

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

Elaborate on how the key stakeholder engagement, particularly with regard to [civil society](#) and [indigenous people](#), is factored in the preparation and implementation of the project.

#### *Project preparation*

The project was developed through extensive consultation with national stakeholders from various sectors of the GoM and provincial stakeholders of the MEDD. Consequently, the project was designed to build on existing initiatives in the country and address priority needs for adaptation in the targeted areas. Consultations with stakeholders included: i) the inception workshop held on 20 August 2014 (see Appendix 21 of the Project Document); ii) the validation workshop held on 18 December 2014 (see Appendix 21 of the Project Document); and iii) multiple meetings with individual stakeholders on 15–20 August 2014 and on 14–21 December 2014. The purpose of these consultations was to: i) identify the interventions of ongoing and future projects in the targeted wilayas; ii) select baseline projects to build on; iii) identify the most appropriate interventions, determined by experience gained under previous initiatives and vulnerabilities of rural communities in the targeted wilayas; iv) set up realistic indicators and targets for these interventions; and v) develop a list of specific criteria, based on GEF-LDCF criteria for the selection of the intervention sites within the targeted wilayas during the inception phase of the project. Additionally, the principles of GEF-LDCF projects, the development process for these projects and the EbA approach were explained to stakeholders during the workshops (see Appendix 21 of the Project Document).

In addition to consultations held with the project developer, three national consultants collected further information for the development of the project through various consultations undertaken between August 2014 and January 2015. The objectives of these consultations were to: i) further identify the priority needs in the targeted wilayas; and ii) develop a detailed list of interventions for the project. Consultations included were undertaken to engage with stakeholders at the

national, provincial and local levels and included site visits. At the provincial level, consultants met with: i) the Walis and related staff from eight wilayas, including the target wilayas; and ii) government staff from Regional Delegations in seven wilayas, including the targeted wilayas. At the local level, the consultants met with: i) three mayors; ii) members of local cooperatives; and iii) additional relevant community members (see Appendices 21 and 22 of the Project Document). Consequently, the activities of the project are well aligned with national and local requirements to adapt to climate change. The participatory approach with national, provincial and local stakeholders undertaken during the PPG phase will be pursued throughout the project implementation phase.

The main stakeholders for the project include:

- MEDD, including the Directorate for Nature Protection (DPN<sup>36</sup>), Directorate for Programming, Coordination and Environment Information (DPCIE<sup>37</sup>), Directorate for Environment Control (DCE<sup>38</sup>) and Directorate for Pollution Prevention and Environment Emergencies (DPUE<sup>39</sup>) and DRCL;
- MEDD, including the Climate Change Unit (CCPNCC); Directorate for Protection of Nature (DPN<sup>40</sup>), Directorate for Programming, Intersectoral Coordination and Data (DPCID<sup>41</sup>), Directorate for Environment Control (DCE<sup>42</sup>) and Directorate of Regulation and Control of Legality DRCL;
- Ministry of Livestock Husbandry (ME<sup>43</sup>): The Sectoral Focal Point
- Ministry of Hydraulics and Sanitation (MHA<sup>44</sup>): The Sectoral Focal Point
- Ministry of Agriculture (MA<sup>45</sup>): The Sectoral Focal Point
- Ministry of Social Matters, Childhood and Family (MASEF<sup>46</sup>): The Sectoral Focal Point
- Ministry of Economic Matters and Development (MAED<sup>47</sup>): The Sectoral Focal Point
- Ministry of the Interior and Decentralisation (MIDEC<sup>48</sup>): The Sectoral Focal Point
- Institute for Higher Technological Education (ISET<sup>49</sup>); and
- National Centre for Agronomic Research for Agricultural Development (CNRADA<sup>50</sup>).
- National School for Training and Agricultural Popularisation (ENFVA<sup>51</sup>);
- University of Nouakchott;
- University of Science, Technology and Medicine – USTM
- UNDP
- GIZ;
- NGOs and national associations, such as ONG Arbre, ONG Act for Environment<sup>52</sup>, Association Nazaha and Association Naforé. The potential role of additional relevant NGOs (ONG AFE, ONG AZIZA, ONG Sourire, Association TERRAHOUM and OCB NEZAHA) in the implementation of the LDCF project will be investigated at inception;
- CNEDDs;
- CREDDs;
- Regional Delegation of relevant Ministries including DREDDs, DREs, DRAs and DRHAs;
- Walis of the targeted wilayas;
- Local Government at the moughataa and communal levels;
- Local Associations, including AGLCs, APs and ADCs; and
- Rural communities.

<sup>36</sup> Direction de la Protection de la Nature.

<sup>37</sup> Direction de la Programmation, de la Coordination et de l'Information Environnementale.

<sup>38</sup> Direction du Contrôle Environnemental.

<sup>39</sup> Direction de la Prévention des Pollutions et des Urgences Environnementales.

<sup>40</sup> Direction de la Protection de la Nature.

<sup>41</sup> Direction de la Programmation, de la Coordination Intersectorielle et des Données.

<sup>42</sup> Direction du Contrôle Environnemental.

<sup>43</sup> Ministère de l'Élevage.

<sup>44</sup> Ministère de l'Hydraulique et de l'Assainissement.

<sup>45</sup> Ministère de l'Agriculture.

<sup>46</sup> Ministère des Affaires Sociales, de l'Enfance et de la Famille.

<sup>47</sup> Ministère des Affaires Economiques et du Développement.

<sup>48</sup> Ministère de l'Intérieur et de la Décentralisation.

<sup>49</sup> Institut Supérieur d'Enseignement Technologique.

<sup>50</sup> Centre National de Recherche Agronomique pour le Développement Agricole.

<sup>51</sup> Ecole Nationale pour la Formation et la Vulgarisation Agricole.

<sup>52</sup> Agir pour l'Environnement.

## Project implementation

The implementation strategy for the project includes extensive stakeholder participation. Details of the stakeholder participation during the PPG phase are provided in Appendices 21 and 22 of the Project Document. A stakeholder engagement plan to be used during the implementation phase will be developed during the project inception workshop. Stakeholders will be consulted throughout the implementation phase to: i) promote community understanding of the project's outcomes; ii) promote rural community ownership by promoting their engagement with the planning, implementation and monitoring of the interventions; iii) communicate with the public in a consistent, supportive and effective manner; and iv) maximise complementarity with other on-going projects.

The mechanisms for stakeholder consultations will include: i) initial meetings with national (i.e. the MEDD, ME, MA and MHA), provincial, departmental and communal authorities during the inception workshop (see Section 2.5 of the Project Document); ii) consultations with the coordinators of the baseline and partner projects (see Section 2.6 of the Project Document); iii) consultations with NGOs, local associations and cooperatives; and iv) consultations with other members of rural communities that will benefit from the project. Rural communities will be involved in the decision-making processes and implementation of the project. For example, the selection of species for the planting activities under Component 2 will be informed by the preferences of rural communities.

During project implementation, stakeholder consultations will be divided into three phases. Firstly, the "mobilisation" phase will take place during the first year of the project. This phase will focus mainly on engaging stakeholders and planning their participation in the project. This will include developing a detailed workplan for the activities on a monthly-basis according to availability of the required stakeholders and to biophysical parameters for planting interventions (e.g. seasons, growth rates). Secondly, the "consultative implementation" phase will run during the main implementation phase of the project. This phase consists of applying the stakeholder involvement plan to each of the activities defined during the mobilisation phase. Thirdly, the "completion and upscaling" phase will start during the last year of project implementation. This phase will support the sustainability of the project by further transferring responsibility for management of the project's investments to local stakeholders.

The engagement of specific stakeholders during the implementation phase of the project is presented in Table 2. As described in more detail in Section 2.6 (on the institutional arrangement for project implementation), the Project Manager will be responsible for coordinating the engagement and consultation of the stakeholders during project implementation. This will be done in accordance with the stakeholder engagement plan for the implementation phase, to be developed during the project inception workshop. The implementing partners (both government institutions and civil society organizations) will be invited to participate in the Project Steering Committee (PSC). MoUs will be signed between the different government and other institutions participating in the implementation of the project. The corresponding budget for each activity will then be transferred to the partnering government institution in charge. As the MEDD is responsible for the implementation of the majority of interventions, this system will only be followed when the implementation of the technical activities is undertaken by an expert institution.

**Table 2:** List of stakeholder responsibilities.

Outcome	Output	Activity	Stakeholders																						
			MEDD/DPN	MEDD/CCPNCC	MEDD/DPCIE	MEDD/DRCL	MEDD/DPUE	ME	MHA	MA	MASEF	MAED	MIDEC	MDRE	ISET	CNRADA	ENFVA	UdN	GIZ	NGOs	CNEDDs	CREDDs	Regional Delegations	Local Government	AGLCs
1	1.1	1.1.1	X	X	X	X	X	X	X	X	X	X	X	X					X		X				
		1.1.2	X	X	X	X	X	X	X	X	X	X	X	X					X		X				
		1.1.3	X	X	X			X	X	X	X	X	X	X							X				
		1.1.4	X	X	X	X	X	X	X	X	X	X	X	X							X				
		1.1.5	X	X	X		X	X	X	X	X	X	X	X					X	X	X	X	X	X	
	1.2	1.2.1	X	X				X	X	X				X					X	X			X	X	X

Outcome	Output	Activity	Stakeholders																						
			MEDD/DPN	MEDD/CCPNCC	MEDD/DPCIE	MEDD/DRCL	MEDD/DPUE	ME	MHA	MA	MASEF	MAED	MIDEC	MDRE	ISET	CNRADA	ENFVA	UdN	GIZ	NGOs	CNEDDs	CREDDs	Regional Delegations	Local Government	AGLCs
2	1.3	1.2.2	X	X			X	X	X				X					X	X			X	X	X	
		1.2.3	X	X	X		X	X	X					X	X	X	X	X		X	X	X			
		1.2.4	X	X	X	X		X	X	X	X			X			X		X	X		X	X	X	X
		1.3.1	X	X															X	X			X	X	X
		1.3.2	X	X	X	X		X	X	X	X		X	X					X	X		X	X	X	X
		1.3.3	X	X				X	X	X	X			X	X	X	X		X	X			X	X	X
	2.1	2.1.1	X	X				X	X	X													X	X	
		2.1.2	X	X							X			X					X	X		X	X	X	X
		2.1.3	X	X											X	X	X	X		X		X	X	X	X
		2.1.4	X	X																			X	X	X
		2.1.5	X	X	X			X	X	X	X		X	X					X	X			X	X	X
		2.2	2.2.1	X	X				X	X	X	X			X	X	X	X	X	X	X		X	X	X
2.2.2			X	X				X	X	X	X			X	X	X	X	X	X	X		X	X	X	X
2.2.3			X	X				X	X	X	X			X	X	X	X	X	X	X		X	X	X	X
2.2.4			X	X				X	X	X	X			X	X	X	X	X	X	X		X	X	X	X
2.2.5			X	X				X	X	X	X			X	X	X	X	X	X	X		X	X	X	X
2.3	2.3.1	X	X			X	X	X	X	X	X	X						X	X			X	X	X	
	2.3.2	X	X				X		X	X	X		X		X		X	X	X			X	X	X	
	2.3.3	X	X							X	X		X	X	X	X	X	X	X			X	X	X	
3	3.1	3.1.1	X	X	X			X	X	X		X		X	X	X	X	X	X				X		
		3.1.2	X	X	X			X	X	X	X	X		X							X	X	X		
		3.1.3	X	X	X			X	X	X		X	X	X	X	X	X	X			X	X	X		
		3.1.4	X	X	X			X	X	X		X	X	X	X	X	X	X			X	X			
	3.2	3.2.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		3.2.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		
	3.3	3.3.1	X	X	X			X	X	X		X	X	X					X		X	X	X	X	X
		3.3.2	X	X	X			X	X	X	X	X	X	X					X		X	X	X	X	X
		3.3.3	X	X	X			X	X	X		X	X	X					X		X	X	X	X	

#### A.4. Gender Considerations.

**Elaborate on how gender considerations were mainstreamed into the project preparation, taking into account the differences, needs, roles and priorities of men and women.**

In LDCs, women tend to have lower incomes and fewer opportunities compared to men. Their capacity to adapt to the current and future effects of climate change is therefore constrained<sup>53</sup>. Despite their capability to innovate and lead, women have historically been marginalised from national and local decision-making processes in most LDCs including Mauritania. The GoM has ratified several conventions that promote gender equality. Despite these laws and

<sup>53</sup> Lambrou, Y., & Piana, G. 2006. Gender: the missing component of the response to climate change. Food and Agriculture Organisation, Gender and Population Division.

regulations, gender equality has not yet been achieved. In 2014, Mauritania's Gender Inequality Index (GII) value was 0.610 – ranking it 139 out of 155 countries – and the Human Development Index (HDI) was 0.446 for females and 0.546 for males<sup>54</sup>. Women currently hold only ~25% of parliamentary seats<sup>55</sup> in Mauritania. In addition, participation in secondary school is 22% and 26% for males and females, respectively. Literacy rates in youth (15–24 years) are reduced in females (66.2%) compared with males (71.6%). For adults, male literacy is 100% while female literacy is 79.6%<sup>56</sup>. This restriction limits the participation of women in the formal economic sector and reduces their financial resources and technical capacity as compared to men. This compromises women's ability to meet their livelihood requirements. Additionally, at the household level, women generally stay at home to take care of the children while men are outside of home, working to generate income for the family. As a result, women are responsible for finding food and water for their children throughout the day which make them particularly vulnerable to droughts. They will also be less mobile in case of extreme climate events such as floods or fires because they have to move with their children. Consequently, women are more vulnerable to climate change than men.

Women are often the primary guardians of local and traditional knowledge and consequently need to be included in decision-making processes<sup>57</sup>. Therefore, the project will include measures to capitalise on women's knowledge, while increasing the capacity of women to adapt to climate change<sup>58</sup>. In alignment with the National Gender Strategy (SNIG), climate-resilient livelihoods will be developed with a focus on including female-headed households and the participation of women in AGLCs. Training on project interventions will also be delivered with gender sensitivity to: i) empower both male and female participants to participate meaningfully in the trainings; and ii) make all participants aware of their responsibility to respect the views of all of their colleagues during training sessions. Trainers will be required to have the skills and experience necessary to plan and facilitate gender-sensitive training. For example, training and awareness-raising activities will take place with an appropriate proportion of women that will be determined during the process of consultations with local authorities and communities. The Project Management Unit (PMU) will be responsible for monitoring and reviewing gender sensitivity in the training activities and the application of gender-disaggregated indicators. The promotion of women's participation under the project is in line with GEF guidance and standards<sup>59</sup>. To monitor the progress of gender mainstreaming, gender-disaggregated targets have been included in the Project Results Framework (see Annex A).

At inception, the need for a gender analysis of climate change- and environment-related policies – to investigate the extent to which gender is considered in these policies – will be assessed and if applicable, the corresponding analysis will be included in the activities under Output 1.1. In addition, wherever possible the project will include measures to promote the needs of other disadvantaged and more vulnerable groups including children, the elderly and disabled people.

#### **A.5 Risk.**

**Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):**

For the project objective to be met, the risks to implementation need to be identified and assessed (Figure 1). Effective identification and assessment of risks will allow for appropriate countermeasures to be taken. Monitoring and updating the project risks will be an important task of the TA throughout the project implementation phase. Table 3 summarises the identified risks and suggested countermeasures.

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<sup>54</sup> UNDP, 2014. Human Development Reports 2014. [http://hdr.undp.org/sites/all/themes/hdr\\_theme/country-notes/MRT.pdf](http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MRT.pdf)

<sup>55</sup> World Bank, 2014. World development Indicators: Women in development. World View. <http://wdi.worldbank.org/table/1.5> Accessed 06 March 2015.

<sup>56</sup> UNICEF, 2012. Adult literacy rate for the period 2008-2012. [http://www.unicef.org/infobycountry/mauritania\\_statistics.html](http://www.unicef.org/infobycountry/mauritania_statistics.html) Accessed 06 March 2015.

<sup>57</sup> National Adaptation Programme of Action, 2004. Ministry of Rural Development and Environment of Mauritania.

<sup>58</sup> Denton, F. 2002. Climate change vulnerability, impacts, and adaptation: Why does gender matter? *Gender & Development*, 10(2), 10–20.

<sup>59</sup> GEF. 2008. Mainstreaming Gender at the GEF. Washington, USA.

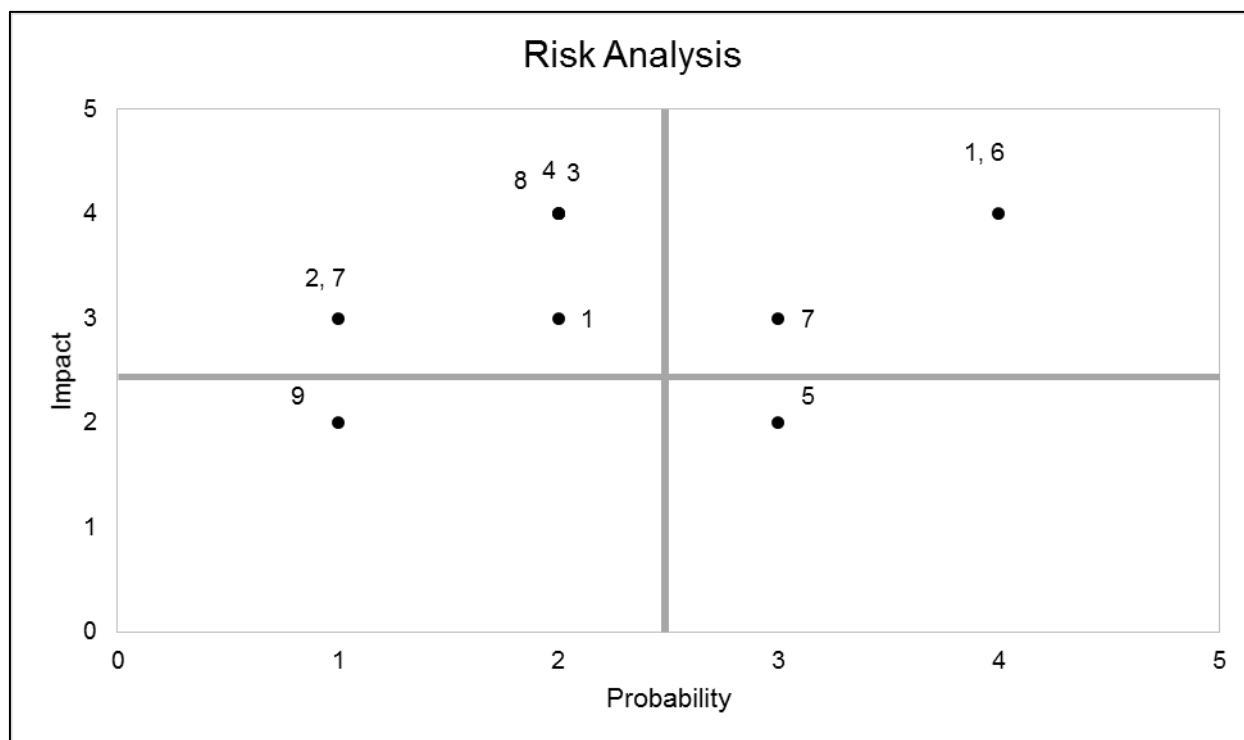
**Table 3:** Summary of the risks to the project's objectives and suggested countermeasures.

#	Risk description	Potential consequences	Risk rating	Countermeasures	Risk category	Probability & Impact (1–5)
1	Current climate and seasonal variability and/or hazards prevent the implementation of planned activities.	Economic loss or physical damage in restoration areas is a challenge to the timely implementation of project activities.	Low	<ul style="list-style-type: none"> <li>• Consider current climatic variability in the occurrence of droughts and bushfires during the restoration process.</li> <li>• Focus on climate-resilient species and techniques to: i) assist plant growth particularly in the seedling/sapling phase; and ii) reduce risk of damage from hazard events.</li> <li>• Take into account meteorological predictions for droughts, winds, rains, and seasonal variability into account to reduce the risk of damage to plants.</li> </ul>	• Economic	P = 2 I = 3
2	Climate change adaptation priorities undermined by national emergencies or civil unrest.	Changes in government and project staff lead to a delay in the implementation of the project activities. Natural and financial capital is lost.	Low	<ul style="list-style-type: none"> <li>• The Project Manager (PM) will keep abreast of national events and politics to plan contingency activities when/if necessary.</li> </ul>	• Socio-environmental	P = 1 I = 3
3	The selected sites for on-the-ground interventions are not chosen efficiently and do not address the needs of most vulnerable communities or the distance between sites makes the implementation difficult.	Project activities are delayed and the project is not as beneficial as planned. The benefits to vulnerable communities are limited.	Low	<ul style="list-style-type: none"> <li>• Detailed, clear and specific selection criteria are provided in Appendix 15 of the Project Document to guide the selection of the best intervention sites. Additionally, a detailed geographic map of the intervention sites of all adaptation projects in the country will facilitate the efficient selection of intervention sites. The collaboration with partner projects such as ACCMR and ProGRN will also contribute to selecting the most appropriate sites and maximise the benefits of the project interventions for rural communities.</li> </ul>	• Technical	P = 2 I = 4

4	Rural communities do not support the proposed EbA interventions.	Limited support of rural communities may result in continued degradation of forests and rangelands and the unsustainable use of natural resources.	Medium	<ul style="list-style-type: none"> <li>• Local stakeholders will be engaged throughout implementation of adaptive management approaches and will participate in project planning, implementation and monitoring. Furthermore, the project stakeholders will be organised into AGLCs to ensure that they are empowered in making decisions about the management of natural resources in their management area.</li> <li>• The project will focus on raising awareness on the benefits of EbA for the sustainable management of natural resources in the four targeted wilayas.</li> <li>• The project will develop and implement income-generating activities for pastoral communities that are socially viable and dependent on functioning ecosystems to increase incentives for ecosystem protection..</li> </ul>	• Socio-environmental	P = 2 I = 4
5	High staff turnover in Project Steering Committee, project management team and responsible government departments.	Frequent changes in government bodies and limited institutional memory results in a disruption and/or delays in the project implementation and may jeopardize the sustainability of the project.	Medium	<ul style="list-style-type: none"> <li>• A principal and a secondary focal point will be identified in each relevant government institution (e.g. MEDD, ME, MAg, MHA) during the inception phase of the project.</li> <li>• Dialogue between stakeholders will be promoted during the implementation phase.</li> <li>• The processes of decision-making, design and implementation under the project will be well documented.</li> <li>• Established government structures have already been engaged with strongly during the PPG phase. This approach will be continued as much as possible during the implementation phase.</li> </ul>	• Institutional	P = 3 I = 2

6	Limited capacity of institutions to undertake rigorous scientific research.	Long-term research will not be continued and the long-term efficiency of the activities will be unknown.	High	<ul style="list-style-type: none"> <li>• Institutional representatives from relevant government institutions such as the university and research institutes will be consulted to develop the institutional framework for the long-term data collection, monitoring and archiving system and agree on the roles and responsibilities in this system.</li> <li>• Lesson learned from the implementation of the research projects under the SCCF project will be used to maximise the efficiency and sustainability of the long-term research system under the LDCF project.</li> </ul>	• Economic	P = 4 I = 4
7	Limited technical capacity to implement the project.	Adaptation interventions are not designed appropriately and does not fully provide expected benefits.	Medium	<ul style="list-style-type: none"> <li>• Capacity of national and local government will be substantially strengthened to enable the planning and implementation of EbA measures.</li> <li>• International experts will work closely with local experts, PM and other relevant stakeholders to achieve timely delivery of project outputs and further increase in-country technical capacity.</li> </ul>	• Technical	P = 3 I = 3
9	Interventions are not cost-effective.	Project interventions are not upscaled for large-scale EbA programmes.	Low to medium	<ul style="list-style-type: none"> <li>• EbA is an inherently cost-effective approach and ensuring cost-effectiveness will be a core principle of the project.</li> <li>• Detailed information on cost-effectiveness will be collected and analysed during the PPG Phase to inform the design of project interventions.</li> </ul>	• Economic	P = 2 I = 4
10	Large scale infrastructure development in project area during implementation.	Project activities are disrupted or delayed.	Low	<ul style="list-style-type: none"> <li>• The PM will collaborate with relevant government agencies (e.g. MEDD, ME, MAg, MHA) to ensure appropriate coordination between all ongoing projects in the intervention sites.</li> </ul>	• Institutional	P = 1 I = 2





**Figure 1:** Probability and impact of risks to the project.

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

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

The project will be implemented over a period of four years (see workplan in Annex G). The process of hiring project staff will be undertaken shortly after the CEO endorsement and project internalisation. Implementation will be informed by the lessons learned from the Strengthening Capacity, Knowledge and Technologies for the Climate-resilience of Vulnerable Developing Countries (SCTRC) project (see Section 2.7 in the Project Document for more information). During the inception phase of the project, the following steps will be undertaken<sup>60</sup>: i) organisation of the inception workshop to inform existing and new stakeholders about the project and the roles of each stakeholder during the implementation phase; and ii) intensive consultation with national and local stakeholders (see Section A.3) to select the intervention sites of the project (see Appendix 15 of the Project Document for the site selection process); iii) conducting the baseline study in the selected sites to measure the baseline values of the indicators selected for the Project Results Framework (see Annex A).

UNEP will be the Implementing Agency (IA) for the project and will oversee the project and provide the technical assistance required to meet the project goal (see details of UNEP's comparative advantage in Appendix 18 of the Project Document). Therefore, UNEP will be responsible for project supervision to ensure consistency with GEF and UNEP policies and procedures. This supervision will be the responsibility of the Task Manager (TM), who will be appointed by UNEP. The TM will formally participate in the following: i) Project Steering Committee (PSC) meetings; ii) the mid-term and final evaluations; iii) the clearance of Half-yearly Progress Reports and Project Implementation Reviews, expenditure reports and budget revisions; and iv) the technical review of project outputs.

#### *Management structure*

The management structure of the project is presented in Figure 2. This structure will comprise: i) the PSC; ii) the National Executing Agency (NEA); iii) the Project Manager (PM); iv) the national Monitoring and Evaluation (M&E) specialist; v) field officers; vi) an administrative assistant; vi) a financial assistant; and vii) national technical experts as needed. The project will rely mostly on the regional technical professionals where appropriate on a task force

<sup>60</sup> According to the decree 2007.105 on Environment Impact Assessments (EIAs), the interventions of the proposed project will not necessitate to conduct EIAs.

assignment basis. The roles and responsibilities specific to each component of the management structure is described in the TOR contained in Appendix 10 of the Project Document.

The mandate of the PSC will include: i) overseeing project implementation; and ii) reviewing annual workplans and project reports. All decisions taken by the PSC will be communicated to the Minister to seek his/her approval prior to execution and then to the Project Management Unit (PMU). The PSC will include national representatives from the MEDD (CCPNCC, DPN, DAPL, DPCID, DRCL), ME, MA, MHA, MASEF, and MIDEDEC. The Secretary General of MEDD will chair the PSC, and the NEA representing MEDD. The PSC will meet twice a year, with *ad hoc* meetings held when necessary to discuss the main performance indicators of the project and to provide future guidance. Members of relevant implementing NGOs and CBOs as well as community leaders will also be invited to participate to the PSC to ensure local ownership and guidance for the project. Coordinating structures at the level of the wilayas and lower-level government structures will be determined during the inception phase.

The CCPNCC under the MEDD will be the National Executing Agency (NEA). A full-time, dedicated PM from DPN will be hired by the MEDD to lead the PMU and execute the day-to-day management of the project. He/she will operate in a transparent and effective manner in line with all budgets and workplans. In addition, the PM will report on a monthly basis to the TM and the Chief Technical Advisor (CTA) on the progress and challenges encountered on-the-ground during the execution of activities. In particular, the PM will: i) lead the day-to-day planning and implementation of the project in close collaboration with the NEA; ii) provide on-the-ground information for UNEP progress reports; iii) engage with stakeholders; iv) organise the PSC meetings; v) provide technical support to the project, including measures to address challenges to project implementation; vi) manage the project budget and resource allocation; and vii) participate in training activities, report writing and facilitation of consultant activities that are relevant to his/her area of expertise. Additionally, the PM will meet with the managers of the baseline and partner projects twice a year or more frequently if necessary as part of a coordination working group. The focus will be on sharing lessons learned and avoiding duplication of activities.

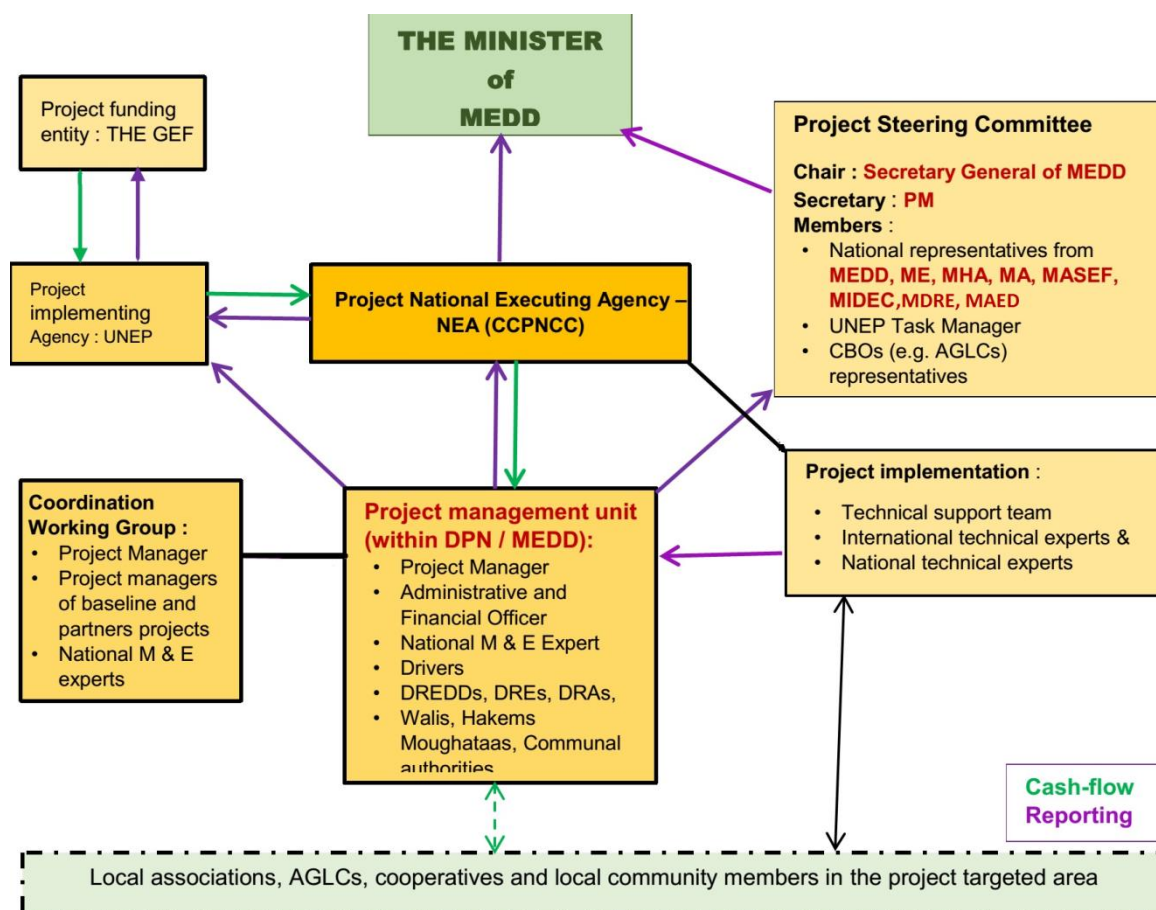
The PM will be supported in meeting the project objective by an M&E specialist whose duties will include: i) establishing a performance monitoring framework to define bi-annual targets for the project to meet the targets defined in the Project Document by the end of the implementation phase; ii) measuring project and AMAT indicators at least 1–2 times per year to evaluate the progress of the project in meeting the targets; and iii) reporting to the PMU and PSC on the performance of the project according to project and AMAT indicators. As part of his/her responsibilities, the M&E specialist will oversee and monitor the application of gender-disaggregated indicators. If the expected ratio is not achieved, corrective actions will be designed by the M&E specialist, the PM and the relevant expert. The latter will be responsible for implementing these corrective actions until a satisfactory level of participation of women is reached.

The role of the field officers will include: i) the timely execution of activities and achievement of expected deliverables; ii) promoting dialogue between stakeholders, particularly at a local level; and iii) facilitating the participation of rural communities in project activities. To achieve this, the field officers will be required to visit the intervention sites regularly and work in close collaboration with the PM (see Appendix 10 in the Project Document). In addition, an administrative assistant and a financial assistant will be hired part-time to support the PM. The administrative assistant will help the project staff with technical, logistical and administrative matters. The accountant will handle the accounts of the project and prepare the expenditure reports to the standard required by UNEP. The PMU members will be responsible for monitoring and reviewing gender sensitivity in the training activities. A driver will be hired to assist with transport of the management team, particularly field officers. Procurement of services, goods and works of the project will follow the national procurement regulations. Two vehicles will be purchased duty free and a driver will be hired to assist with transport of the management team, particularly field officers. Procurement of services, goods and works of the project will follow the national procurement regulations.

Consultants will be hired for specific tasks which requires specific expertise and which cannot be undertaken by government staff. International technical assistance will be sourced for specialist tasks only where existing national capacity is insufficient. Appropriate international expertise will be sourced with the support of UNEP's network for procurement of consulting services in participation with the PM. Descriptions of consulting services required are included in the budget notes of Appendices F and E. Each technical expert will be responsible for ensuring that the gender equity ratio pertaining to their activities (as defined in Appendix 3) is reached. This will be clearly stipulated in their ToRs. ToRs for project staff are presented in Appendix 10 in the Project Document. The MEDD will support the work of project staff and consultants by providing office space and other logistic support in the targeted wilayas of the project during the implementation phase.

Budget disbursement will be managed by UNEP to facilitate timely expenditure, disbursement and transparency. Expenditure reports will be prepared quarterly based on the UNEP's UMOJA System and will be made available to the MEDD and other members of the PSC for review, subject to clearance by UNEP.

During the implementation phase of the project, at least one representative of the management team of the baseline and partner projects will be invited to the PSC meetings. The PM of the LDCF project will meet on a regular basis (at least twice a year in addition to the PSC meetings) with the management team of the baseline projects to identify opportunities for complementarity.



**Figure 2:** Organogram of the project management structure. The arrows mean that the teams of both baseline and partner projects, and the CTA will be part of the coordination working group.

## Coordination with other GEF and non-GEF initiatives

There are several projects underway in Mauritania that present opportunities for synergies, collaboration and knowledge exchange with the proposed project. A brief description of these partner projects is provided below. As outlined above, a Coordination Working Group will be established as a forum for the partner projects to exchange information, identify opportunities for collaboration, and discuss potential areas of overlap. A coordination plan for the project will be developed at project inception, to identify the strategic key areas for coordination and possible collaboration to be explored in more detail.

The project to **Increase Capacity for Adaptation to Climate Change in Rural Areas (ACCMR)** was initiated in 2014 and will run until 2018. This four-year project has a total budget of US\$3.6 million provided by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the EU. It is executed by GIZ and the MEDD. The interventions of the ACCMR are focussing on the wilayas of Brakna and Assaba – the latter being in common with this project. ACCMR is divided into three components: (i) mainstreaming adaptation to climate change into the development process of national strategies and plans; (ii) designing and implementing site-specific adaptation interventions; and (iii) increasing capacity to coordinate climate change and rural development. The first component

of ACCMR will contribute to advancing the NAP process and is of particular relevance to the LDCF project. In particular, the ACCMR interventions under Component 1 include: (i) training on the NAP process; (ii) developing the NAP road map; (iii) awareness-raising campaigns on NAP; (iv) developing a funding strategy for the NAP process; and (v) supporting the integration of adaptation to climate change into policies, strategies, plans and budgets. The documents to be targeted by ACCMR have not been defined yet. Therefore, the LDCF project will consult ACCMR at implementation phase to identify the remaining gaps in the mainstreaming of adaptation to climate change in the main sectors. The national adaptation strategy proposed under the LDCF project will also be designed in collaboration with the management of ACCMR. Under the second and third components of ACCMR, the most relevant interventions include activities to increase capacity of local institutions to adapt to climate change in the wilayas of intervention and to support the implementation of awareness-raising campaigns on adaptation to climate change. Consequently, the LDCF project will maintain close collaboration with the management team of ACCMR to prevent duplication and maximise complementarities between the two projects in these areas, in particular in the wilaya of Assaba which is an intervention area shared by the two projects.

The **Mauritania Sustainable Landscape Management Project (MSLMP)** under the Sahel and West Africa programme (SAWAP) is funded by GEF, LDCF and Special Climate Change Fund (SCCF) to support the Great Green Wall of the Sahara and the Sahel Initiative (GGWSSI). The budget of SAWAP allocated by GEF to 12 countries is US\$105.4 million for 2014–2020. Under this programme, MSLMP has a budget of US\$4,810,000 for Mauritania and focuses on restoration of ecosystems which are important for the production of gum arabic in the wilayas of Trarza, Brakna and Gorgol. A sustainable value chain for gum arabic will be developed as part of MSLMP interventions. Though the MSLMP is operated in different wilayas to the ones included in the LDCF project, this project is of particular relevance for the implementation of Activities 2.2.2 and 2.2.4 of the LDCF project. Consequently, active coordination between the two projects will be sought to ensure that potential synergies between the projects are capitalized on, in particular in terms of mutual learning and exchange of information on ecosystem restoration approaches and lessons learnt. Information, experiences and lessons learnt will be shared between the project teams, and opportunities for joint activities and sharing of resources will be identified, where appropriate. In particular, the management team of MSLMP will be engaged in the design and implementation of the restoration interventions in rangelands and gum tree forests under the LDCF project.

The project for **Improvement of the Investments in the Water Sector to Increase the Resilience of Pastoral and Forest Resources in the Southern Regions of Mauritania (REVUWI<sup>61</sup>)** is funded by SCCF and AfDB for the period 2015–2018. This project is implemented by AfDB and has a total budget of US\$6,350,000. REVUWI focuses on the sustainable management of natural resources within the sectors of forestry and pastoralism to increase the resilience of local communities and their source of livelihood to climate change. The project's activities are mainly focused on seven wilayas, including Hodh El Chargui, Hodh El Gharbi, Assaba, Guidimaka, Gorgol, Brakna, Tagant and Trarza, four of which will be targeted by the LDCF project. The project is structured into the following five components: i) strengthening institutional capacity at the local level for the sustainable management of natural resources; ii) reducing the vulnerability to climate change of infrastructure and water management activities in the rural areas; iii) diversifying and strengthening livelihood opportunities and income-generating activities for agropastoral communities; iv) management and knowledge sharing, monitoring and evaluation; and v) project management. The presence of water-focused projects, including REVUWI, has been identified as one of the criteria for the selection of the communes to be targeted by this project (see Appendix 15 of the Project Document). In this way, the LDCF project funds for on-the-ground interventions could be complementary on EbA, as the availability of water resources will enable planting interventions to start during the early stages of the project inception phase. To prevent any overlap between the interventions of REVUWI and the LDCF project relating to livelihood opportunities, and to maximise the synergy between their interventions, active coordination will be maintained between the two management teams throughout the project implementation phase. Specific strategic areas for potential collaboration will be identified at the project inception stage.

The **Regional Project to Support Pastoralism in the Sahel (PRAPS)** started in October 2015 with an implementation period of five to six years. It is a regional project for the six Sahelian countries<sup>62</sup> funded by the World Bank and the International Development Association. The total budget for this project is ~US\$250 million, of which the proportion allocated to Mauritania is not yet finalised. The five components of the project are: i) Improving animal health; ii) Improve the management of natural resources including rangelands and water resources; iii)

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<sup>61</sup> Projet d'amélioration des investissements du secteur de l'eau destinés à la résilience des ressources pastorales et forestières des régions méridionales de Mauritanie.

<sup>62</sup> Namely Burkina Faso, Mali, Mauritania, Niger, Sénégal and Chad.

competitiveness of production channels and access to markets; iv) Improve the management of pastoral crises; and v) management, administration, monitoring and evaluation, knowledge sharing, and communication. The project management team of PRASP was consulted at the PPG phase by the project management team to present the LDCF project, to promote coordination and to avoid duplication between the activities of the two projects, in particular in the area of natural resources management.

The project for **Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania (PARSACC<sup>63</sup>)** is funded by the World Food Programme of the Adaptation Fund and implemented by the MEDD. PARSACC is being implemented in 75 communes, in Assaba (14), Brakna (10), Gorgol (7), Guidimaka (4), Hodh El Chargui (6), Hodh El Gharbi (13), Tagant (5), and Trarza (16). These wilayas include the four covered by the LDCF project. A budget of US\$7.8 million is allocated for the period 2014–2018 to enhance environmental governance through: i) ecological monitoring; ii) management and sharing of climate change knowledge; and iii) engagement with and participation of local communities to adapt to climate change, increase climate-resilience of their livelihoods and increase food security. To achieve this objective, PARSACC interventions are grouped into three components: i) strengthening technical capacity of government and local communities to understand the risks and impacts of climate change, and developing plans and adaptation measures; ii) developing and implementing on-the-ground adaptation interventions through the creation of community-based adaptation plans against desertification and degradation of natural resources; and iii) developing and implementing on-the-ground interventions to diversify and improve the livelihoods of local communities that are vulnerable to climate change. The partnership with this project could potentially enable the complementarity of capacity development interventions for adaptation to climate change, community-based adaptation planning and increased food security.

**Strengthening Capacity, Knowledge and Technologies for the Climate-resilience of Vulnerable Developing Countries (SCTRC)** is an SCCF project implemented by UNEP. It is jointly executed by the MEDD and the National Development and Reform Commission (NDRC) of China. The objective of SCTRC is to build climate resilience in vulnerable African and Asia-Pacific countries by providing support for planning, financing and implementing EbA in coastal, mountain and arid/semi-arid ecosystems. The project contains three components: i) inter-regional coordination and capacity-building for African and Asia-Pacific developing countries to plan and implement EbA; ii) increased availability of synthesized knowledge on EbA best practices; and iii) increased climate resilience of priority coastal, mountain and arid/semi-arid ecosystems in Seychelles, Nepal and Mauritania. The budget allocated to Mauritania is US\$900,000 for 2013–2018. SCTRC-Mauritania focuses on providing strategic support for adaptation to climate change to agricultural production systems in Mauritania. This will be done by increasing the resilience of plant and animal production systems that are vulnerable to the effects of climate change. The LDCF project will benefit from the experience and lessons learnt of SCTRC, which is expected to generate the first evidence-based knowledge on the implementation of EbA interventions in Mauritania.

The **Poverty Reduction Project in Aftout South and Karakoro Phase 2 (PASK2)** was initiated in 2012 and will end in 2020. It is funded by the International Fund for Agriculture Development and has a budget of US\$22.9 million. The objective of PASK2 is to improve income and living conditions for targeted communities. PASK2 will help to increase economic and social security based on sustainable natural resource management by and for poor rural households. The project includes the following four components: i) increased institutional and management capacity; ii) development of infrastructure in rural areas, including road and water infrastructure; iii) promotion of income-generating activities; and iv) coordination, monitoring and evaluation of the project. The interventions of PASK2 will focus on: i) soil restoration; ii) surface water management; iii) crop and livestock management; and iv) local development support. This project is implemented in three wilayas, namely Gorgol, Guidimaka and Assaba. The LDCF project interventions in the three wilayas of PASK2 will be implemented in close collaboration with PASK2 to benefit from their experience – particularly in local management of natural resources in rural areas – and maximise the complementarity of the two projects. The LDCF project will also benefit from the infrastructure built under PASK2 in Guidimaka.

The **Project for the Conservation, Restoration and Improvement of the Resilience of Ecosystems in Continental Wetlands (PCRIRE)** is an IUCN project under development. The budget allocated by GEF-LDCF to this project is US\$4.45 million. It is expected to start in 2017 and will focus on: i) restoration and rehabilitation of wetlands; ii) improvement of the resilience and the capacity for adaptation of the populations living near wetlands; iii) wetland knowledge management and monitoring/assessment; and iv) communication, monitoring and assessment of project activities. As part of the project's interventions, participatory management plans for wetlands will be developed.

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<sup>63</sup> Projet d'Amélioration de la Résilience des communautés et de leur Sécurité Alimentaire face au Changement Climatique.

Additionally, local livelihoods will be diversified through development of income-generating activities based on natural resources such as fishing, fodder production and bee-keeping. Therefore, PCRIRE will benefit from the experience of the LDCF project in local management of natural resources and adoption of climate-resilient livelihoods by local communities.

The Project Promoting Inclusive Chains and Concertation Tables (**PROFITABLE**) will be launched by IFAD in 2018, in collaboration with the Mauritanian Government. The overall objective of PROFITABLE is to improve the income, living conditions and nutritional status of the rural population (women and youth in particular) in its intervention areas. The development objective of PROFITABLE is to develop sustainable and inclusive partners for the benefit of different chain actors, particularly of poor rural producers, including women and youth.

Mauritania is included within the countries that receive support by two LDCF-funded projects under the NAP Global Support Programme. The first one entitled **Assisting LDCs with country-driven processes to advance NAPs** seeks to strengthen technical capacities of LDCs for preparation of NAPs through building on their NAPAs. The second project **Building capacity for LDCs to participate effectively in intergovernmental climate change processes** will strengthen institutional and technical capacities in LDCs for more effective participation in intergovernmental climate change negotiations and coordination of climate change efforts. This project is funded by LDCF and implemented by UNDP and UNEP. The proposed LDCF project is aligned to these NAP processes because it will provide support to Mauritania to enhance adaptation planning at the national level, which will help to access climate finance. The evidence base will be developed through this project on the cost effectiveness of investing in ecosystems as an adaptation measure. More broadly, the project will generate lessons learned, and strengthen national and local government coordination mechanisms, implementation partnerships, and awareness and capacity that will be relevant to continuing adaptation planning in the country.

#### **Additional Information not addressed at PIF Stage**

##### **A.7. Benefits.**

**Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?**

The LDCF project has been designed to align with Mauritania's national priorities and identified needs related to climate change adaptation, with associated socio-economic benefits. At a national level, the project will include the integration of adaptation to climate change including the use of EbA into relevant legislation, policies and strategies at all levels of government. The revision of these documents will contribute to advancing a major component of the National Adaptation Planning (NAP) process that consists in mainstreaming adaptation to climate change in all sectors. These policies should include those economic sectors that are vulnerable to climate change – such as the agricultural, forestry and water sectors – and should encourage cross-sectoral collaboration. In addition, these revised policies and strategies will support the country to meet the development objectives defined under national strategies and SDGs (see Section 2.4 of the Project Document) for sustainable socio-economic development in Mauritania. The revised legislation, policies and strategies of Mauritania will be aligned with global and regional conventions on sustainable development, climate change, biodiversity and desertification.

Further, the institutional and technical capacity of national government authorities will be strengthened to enable the systematic planning and implementation of best adaptation practices, including EbA. These EbA interventions will apply a combination of scientific and traditional knowledge to address the effects of climate change through targeted restoration, protection and engineering of beneficial ecosystems. The implementation of EbA in degraded ecosystems will result in multiple benefits including: i) reduced desertification; ii) increased generation of marketable NTFPs; iii) increased quantity and quality of fresh water; iv) reduced severity of soil erosion and floods; and v) increased productivity of fodder for livestock production. As a result, the interventions of the project will benefit several economic sectors including agriculture, pastoralism, water and health.

At a local level, a combined 1,200 ha of climate-resilient ecosystem will be established through the project – see Section A.1.5 for specific details. This will be based on management plans developed for new and existing AGLCs. As noted above, the restored ecosystems and the services they provide will have numerous socio-economic benefits for rural communities. In addition to agropastoralism, climate-resilient economic activities based on these ecosystems will be developed. At least 300 individuals will receive training, technical support and equipment to adopt climate-resilient livelihoods. Therefore, at least 300 households or 1,690 individuals – at least 40% of which will be female –

will receive direct socio-economic benefits through the project including *inter alia* poverty alleviation, strengthened food security and improved health. Additionally, these income-generation opportunities are expected to create incentives for rural communities to preserve the restored ecosystems, and harvest these other natural and agropastoral ecosystems sustainably.

Rigorous socio-economic surveys will be conducted to identify the best opportunities for the development of these climate-resilient, income-generating activities based on the NTFPs produced by natural and agropastoral ecosystems in the intervention sites. This study will mainly be based on consultations of a representative sample of community members in the intervention sites to: i) investigate what are the current income-generating practices based on NTFPs; ii) assess their profitability; iii) assess their climate resilience and sustainability; and iv) identify which practices based on NTFPs the rural community members – with a balanced number of men and women – would be willing to expand or adopt. After piloting a set of potential income-generating activities, the feasibility of developing value chains for the sale of NTFPs will be assessed. This will sustain the socio-economic benefits beyond the project target period.

The interventions of the project will generate evidence-based information on: i) the socio-economic and environmental value of EbA in Mauritania; and ii) EbA-based, climate-resilient livelihoods. Through the project, this information – and that of other adaptation projects in the country – will be used to increase public awareness on the role of viable ecosystems and on the EbA approach using diverse tools and media such as TV, radio, Internet and art.

#### **A.8. Knowledge Management.**

**Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.**

The Knowledge Management approach to the project is outlined in Component 3 of Section A.1.3. In summary, the experience gained through implementation of the climate change adaptation interventions under Component 2 of the project – and through other adaptation projects in Mauritania – will be processed and disseminated. A long-term data collection, analysis and archiving strategy will be developed. This will facilitate the collection of currently available information on climate change adaptation, as well as information from future adaptation projects. This knowledge will be disseminated to rural communities through a national awareness-raising campaign on the EbA approach and corresponding livelihood opportunities.

The awareness-raising campaign will include information such as: i) current and future effects of climate change; ii) principles of the EbA approach; iii) the development of climate-resilient livelihoods using EbA; and iv) guidance for the implementation of EbA interventions. The campaign will use several forms of media including: i) TV; ii) radio; iii) Internet; iv) posters; v) art (e.g. music and poems); and vi) national and local newspapers. Lessons learned during the project will be integrated into the awareness-raising campaign to ensure that the most recent information on best adaptation options is disseminated.

At the governmental level, the dissemination of the generated information will be achieved by strengthening the knowledge-sharing platform of the MEDD, both for MEDD staff and other relevant ministries. The MEDD website will be revised and updated to include information on the following: i) latest news on the effects of climate change in the region; ii) activities and interventions sites of ongoing projects; iii) technical and progress reports from adaptation projects; and iv) guidance on successful practices and potential replication sites for project developers and donors. In addition, lessons learned from the implementation of EbA interventions will be shared directly with other relevant stakeholders during meetings and workshops.

For further detail, please see Section 3.3 (Component 3) of the Project Document.

#### **B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

##### **B.1. Consistency with National Priorities.**

**Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:**

Several national strategies have been developed in Mauritania, and international conventions ratified, in response to observed degradation of natural resources. The LDCF project will contribute to realising the objectives of these national plans for adaptation to climate change. Such plans include the National Adaptation Programme of Action (NAPA, 2004). In particular, the project is aligned with the NAPA priorities listed below:

- Priority 7 “Reorganisation of the communities adversely affected by climate change” will be addressed by the creation, strengthening and support of AGLCs for the sustainable management of natural resources (Output 2.1).
- Priority 11 “Participatory reforestation for energy and agroforestry in agricultural zones” will be addressed through the restoration of watersheds, listed forests, *Acacia* woodlands and rangelands over a total of 1,200 hectares. These restoration activities will be designed using a participatory approach and implemented using a community-based approach (Output 2.2).
- Priority 20 “Development of fodder crops” will be contributed to by promoting the use of climate-resilient practices for agriculture and pastoralism (Output 2.3).
- Priority 25 “Improved knowledge on forest resources and their sustainable management” will be addressed through: i) developing sustainable exploitation of NTFPs (Output 2.3); and ii) implementing of long-term data collection, analysis and archiving system (Output 1.2 and 3.1).
- Priority 28 “Institutional reinforcement of the body responsible for nature conservation” will be addressed under Outputs 1.1, 1.2, 3.1 and 3.2 through the creation of a SNA, integration of adaptation to climate change into policy revisions, training on best practices for the sustainable management of natural resources and increasing access to best available information for sustainable development in Mauritania.

The **Sustainable Development Goals (SDGs)** are a set of targets that have been proposed to replace the Millennium Development Goals, which expire in 2015. However, the SDGs take a broader approach on environmental sustainability. There are 17 SDGs that are to be achieved by 2030. The LDCF project will contribute to the following SDGs:

- **SDG 5 – Achieve gender equality and empower all women and girls**, by promoting gender equity throughout the project and targeting women in specific project activities;
- **SDG 6 – Ensure availability and sustainable management of water and sanitation for all**, by implementing EbA interventions in forests and rangelands of the Sahelian *Acacia* Savanna Ecoregion;
- **SDG 13 – Take urgent action to combat climate change and its impacts**, specifically:
  - 13.1 *Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries*, by increasing the technical capacity of national, provincial and local institutions to facilitate the implementation of appropriate adaptation measures;
  - 13.2 *Integrate climate change measures into national policies, strategies and planning*, by developing a national strategy to inform climate change adaptation; and
- **SDG 15 – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss** through the implementation of EbA and other adaptation practices which will decrease the vulnerability of pastoral resources to droughts, bushfires and sand dune encroachment.

The **Third National Communication (TCN) on Climate Change** for Mauritania was published in July 2014. The adaptation measures recommended under the TCN that are aligned with the project include: i) managing surface- and ground-water for the sustainable restoration and promotion of rangelands; ii) promoting technologies for ecosystem restoration and participatory monitoring; and iii) managing sustainably pastoral resources.

The project is also aligned with the following strategies and plans:

- **National Strategy against Poverty (CSLP)** in 2001. The strategy was initiated in 2001 to guide the country’s objectives related to poverty reduction and the improvement of rural communities’ livelihoods to achieve the Millennium Development Goal (MDGs). The CSLP III (2011–2015) contains the following five pillars: i) increase the economic growth rate and strengthen the macroeconomic framework; ii) target economic growth for people leaving under the poverty threshold; iii) develop human resources and increase access to social services; iv) improve national governance and strengthen capacities; and v) strengthen the guiding, monitoring and evaluating and coordinating systems. The project will contribute to the second (Component 2), fourth (Component 1) and fifth (Component 3) of CSLP’s pillars. Particularly, climate change considerations are included under the fourth pillar of CSLP III that contains a sub-section about environmental governance. The objectives of this sub-section include integrating climate risks and sustainable management of land and natural resources into development strategies and plans. To meet this objective, the following activities are recommended: i) promotion of the productivity of natural and agropastoral ecosystems; ii) sustainable management of land and natural resources; iii) soil restoration; iv) integrated management of natural resources including water, fish and forests,



whilst preserving natural areas and wetlands; v) biodiversity conservation; and vi) involvement of rural communities in resource management. The interventions of the project are aligned with each of these activities. In addition, the GoM plans to introduce tracking mechanisms for climate change risks. The LDCF project team will therefore engage with the IMF at inception to determine the potential for collaborations during the implementation phase. These collaborations will enable the GoM to expand its activities from tracking climate change risks to assessing the progress of EbA interventions in the country.

- **Mauritania's National Sustainable Development Strategy (SNDD)** (2006–2015). The strategy aims to integrate the principles of environmental sustainability into national policies. It is composed of five pillars: i) strengthened institutional framework for the sustainable management of environmental and natural resources; ii) increased access to social services to reduce poverty; iii) integrated and participatory management of natural resources; iv) sustainable management of local and global environment in compliance with the ratified international conventions; and v) developed funding mechanisms to implement the **National Action Plan for Environment and Sustainable Development (PANE)**. PANE II (2011–2016) was developed to implement the SNDD following the completion of the PANE I (2007–2011). This action plan was created to protect the environment through activities including: i) measures to control desertification; ii) sustainable and fair management of terrestrial resources; iii) sustainable and fair management of fishing resources; and iv) management of environmental problems related to urban development, mines and industries. To facilitate sustainable management of the environment, the **Regional Institutional framework for the Environmental Sector (RISE/Regional<sup>64</sup>)** was developed to set prerequisites for the management and sustainable development of the environment.
- **Strategy for Rural Sector Development (SDSR)** (2013–2025). The strategy was developed in 2013 to be undertaken until 2025 and has the main objectives of: i) increasing productivity in the agricultural and animal husbandry sectors to reduce food insecurity; and ii) providing the necessary tools to develop the regulatory framework for agriculture and pastoralism, including consideration of tailored strategies for different production channels such as livestock/meat, leather, fruits and vegetables and gum Arabic. The project will contribute to the development of several production channels through the promotion of agroforestry and sustainable practices in agriculture and animal husbandry.
- **National Action Plan to Combat Desertification in Mauritania (PAN-LCD)** in 1987. The strategy was developed to address the severe problem of ongoing desertification. The PAN-LCD was revised in 2013 to align with the National Framework to Combat Desertification (CNLCD<sup>65</sup>), based on the following five principles: i) a participatory approach to combat desertification; ii) improving livelihoods through combining the management of natural resources and poverty reduction; iii) combining the objectives of the three conventions, namely desertification, biodiversity and climate change; iv) building on previous initiatives to combat desertification and reduce the effects of drought; and v) flexibility of the PAN-LCD.
- **National Strategy and Action Plan for Biodiversity (SPANB)** in 1999. The strategy comprises eight major principles that define the national view on biodiversity. Among these principles, five are particularly relevant to the project: i) biodiversity is a priority for sustainable development; ii) biodiversity conservation and sustainable use of natural resources is the responsibility of every Mauritanian; iii) the ecosystem approach is necessary to support biodiversity conservation and sustainable use of natural resources; iv) the conservation and development of knowledge, innovations, traditions, and indigenous and local practices is of major importance; and v) collaboration and sharing of knowledge, costs and benefits between all sectors and government levels is required for the conservation of genes, species and ecosystems.
- **National Strategy for Food Security (SNSA)** (2012–2015). The overall objective of the SNSA is to support vulnerable populations to acquire adequate physical and economic access to a healthy diet. The following principles underpin this overall objective: i) promoting a diversified rural and peri-urban economy that is adapted to climate change; ii) improving commercial trade routes; iii) strengthening mechanisms to prevent food shortage crises; and iv) promoting good governance toward food security.
- **National Gender Strategy (SNIG)** (2006). The SNIG aims to improve women's social and economic rights and to achieve equitable development. To do so, it promotes the integration of inequality and discrimination reduction into national development strategies.
- **Development Strategy of the Water and Sanitation Sector (SDSEA)** (2009) aims to improve the governance of the water sector and develop integrated management of water resources and increase access to drinking water and sanitation in Mauritania. The project will support this aim through *inter alia* restoring degraded watershed ecosystems.

<sup>64</sup> Revue Institutionnelle du Système de l'Environnement en Mauritanie.

<sup>65</sup> Cadre National de Lutte contre la Désertification.

- **National Action Plan for Disaster Risk Management (PAN-GRC)** in 2007. PAN-GRC focuses on responding to, and preventing risks and disasters related to: i) food security; ii) the environment including drought, desertification, bushfire and pollution; and iii) health.
- **United Nations Development Assistance Framework (UNDAF)** (2012-2016). The project aligns with Mauritania's UNDAF particularly Cooperation Area 3 related to the improvement of environmental governance and rational use of natural resources. Furthermore, the project will contribute to improving governance of natural resources taking into account the effects of climate change and to strengthening national capacity for intersectoral coordination of natural resource management. The collaboration with other UN agencies including UNDP and one UN for the implementation of the LDCF project will be ensured by UNEP and MEDD. Last, the results obtained and lessons learned through the implementation of the project will inform the development of the new UNDAF thereby promoting the approach used and contributing to sustaining the project results.

In addition to the project, there are a number of international institutions that provide support for the GoM to meet national priorities and plans. Such institutions include UNEP, United Nations Development Programme (UNDP), United Nations Educational, Scientific and Cultural Organisation (UNESCO), Food and Agriculture Organisation (FAO), World Bank (WB), International Union for the Conservation of Nature (IUCN), World Wildlife Fund (WWF) and GIZ. Furthermore, two very closely aligned national projects the LDCF project will build on are the **Programme for the Management of Natural Resources (ProGRN<sup>66</sup>)** and **National Programme for Integrated Support to Decentralisation, Social Development and Youth Employment (PNIDDLE)** projects (please refer to Section 2.7 in the Project Document for more details).

## **B.2. Fund Strategies. GEF focal area<sup>67</sup> and/or fund(s) strategies, eligibility criteria and priorities.**

The LDCF project is aligned with the GEF VI programming strategy for LDCF/SCCF projects. Particularly, the following GEF Focal Area Objectives are addressed in the project:

- *CCA-1: Reduce the vulnerability of people, livelihoods, physical assets and natural systems to climate change.*  
*Outcome 1.1: Vulnerability of physical assets and natural systems reduced.* Under project Component 2, EbA and other adaptation practices will be implemented to reduce the vulnerability of pastoral resources to droughts, bushfires and sand dune encroachment. This will include the implementation of reforestation and soil and water conservation practices in degraded watersheds, restoration of degraded rangeland ecosystems through set-aside plans, implementation of fixation techniques to prevent sand dune encroachment, restoration of forests, and implementation of fire-protection practices (including green breaks) on rangelands.  
*Outcome 1.2: Livelihoods and sources of income of vulnerable populations diversified and strengthened.* EbA interventions within Component 2 will include: i) creating AGLCs to enable the sustainable management of natural resources by rural communities; ii) developing management plans to guide the sustainable use of natural resources; iii) training rural communities on restoring ecosystems with climate-resilient and multi-use species; iv) training rural communities to adopt and maintain income-generating activities in the long term; and v) training local authorities to support rural communities beyond the project lifespan (see Section 3.3 Component 2).
- *CCA-2: Strengthen institutional and technical capacities for effective climate change adaptation.*  
*Outcome 2.1: Increased awareness of climate change impacts, vulnerability and adaptation.* The project will implement a national campaign to increase awareness on current and future effects of climate change, as well as potential options for adaptation. These awareness-raising activities will use a wide range of tools to reach remote parts of the country and all age and gender categories (See Section 3.3, Component 3). In the intervention sites, the knowledge on adaptation practices will be further increased through: i) providing site-specific information on the current and future effects of climate change and best adaptation practices; and ii) using a community-based approach for all on-the-ground activities.  
*Outcome 2.3: Institutional and technical capacities and human skills strengthened to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures.* Under Component 1, the project will strengthen the institutional capacity of national government authorities, decentralized government institutions, and CBOs including AGLCs. This will include the provision of training to policy- and decision-makers, government technical staff and NGOs on the planning, budgeting, implementation and monitoring of EbA measures.
- *CCA-3, Integrate climate change adaptation into relevant policies, plans and associated processes.*  
*Outcome 3.2. Policies, plans and associated processes developed and strengthened to identify, prioritise and integrate adaptation strategies and measures.* Under Component 1, the project will support the development of

<sup>66</sup> Projet de Gestion des Ressources Naturelles.

<sup>67</sup> For biodiversity projects, please describe which [Aichi Target\(s\)](#) the project will directly contribute to and what indicators will be used to track progress towards achieving these specific Aichi target(s).

Communal Development Plans at the communal level and Local Management Plans for AGLCs to guide the sustainable management of natural resources using an EbA approach. This will be done in the targeted communes. In addition, an upscaling strategy to extend the use of these decentralised plans for sustainable management of natural resources will be developed. Lastly, national strategies, plans and legislation will be revised to integrate EbA and support the use of these decentralised systems at the national scale.

For additional information on LDCF and overall GEF conformity, please see Section 3.1 of the Project Document.

### **C. Describe the budgeted M&E plan**

The project will follow UNEP standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarised in Table 4. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by the executing agency and UNEP.

The M&E plan of the project is consistent with the GEF M&E policy. The Project Results Framework presented in Annex A includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarised in Appendix 14 of the Project Document. Other M&E related costs are also presented in the costed M&E Plan and are fully integrated in the overall project budget.

The M&E plan will be reviewed and revised if required during the project inception phase. This process will enable project stakeholders to understand their roles and responsibilities in terms of project M&E. Indicators and their means of verification will also be fine-tuned if necessary at the inception workshop or during the baseline study at the latest. Day-to-day project monitoring is the responsibility of the project management team particularly the PM, the M&E specialist and the Field Officers (see Appendix 10 of the Project Document). In addition, other project partners will be responsible to collect specific information to track the indicators. It will be the responsibility of the PM to inform UNEP of any delays or difficulties during implementation. This communication allows the appropriate support or corrective measures to be implemented with minimal delays.

The PSC will receive periodic reports on progress and will make recommendations to UNEP on the need to revise any aspects of the Results Framework or the M&E plan. The Task Manager is responsible for project oversight to ensure that the project complies with UNEP and GEF policies and procedures. The Task Manager will also review the quality of project outputs, provide feedback to the project partners, and establish peer-review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan during the inception phase of the project, which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager's supervision will be on monitoring outcomes, without neglecting financial management and monitoring of the project's implementation. Progress regarding the delivery of the agreed project benefits will be assessed by the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project M&E will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure effective use of financial resources.

As indicated in the project milestones, a mid-term management review or evaluation will take place at the end of the second year of implementation of the project. The purpose of the Mid-Term Review (MTR) or Mid-Term Evaluation (MTE) is to: i) provide an independent assessment of project performance at mid-term; ii) determine whether the project is on track and whether any challenges are impeding progress; and iii) decide on the corrective actions required for the project to achieve its intended outcomes by project completion in the most efficient and sustainable way. In addition, it will include all parameters recommended by the GEF Evaluation Office for Terminal Evaluations (TEs) and will verify information gathered through the GEF tracking tools, as relevant. The Project Steering Committee will participate in the MTR or MTE and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented. The MTR will be managed by the UNEP Task Manager at DEPI. The MTE will be managed by the Evaluation Office of UNEP. The Evaluation Office will determine whether a MTE is required or whether an MTR is sufficient.

An independent TE will take place at the end of project implementation. The Evaluation Office of UNEP will manage the TE process. The TE will provide an independent assessment of project performance – in terms of relevance, effectiveness and efficiency – and determine the likelihood of impact and sustainability. The TE will have two primary purposes: i) to provide evidence that accountability requirements have been met, and ii) to promote learning, feedback and knowledge sharing through results and lessons learned among UNEP and executing partners, particularly the MEDD, ME, MAg and MHA. The direct costs of the evaluation will be charged against the project evaluation budget. The TE report will be sent to project stakeholders for comments. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating system. The final determination of project ratings will be made by the Evaluation Office when the report is finalised. The evaluation report will be publically disclosed and will be followed by a recommendation compliance process.

The GEF tracking tools are attached as Appendix 14 of the Project Document. These will be updated at mid-term and at the end of the project and will be made available to the GEF Secretariat along with the project PIR report. As mentioned above the MTR and TE will include the verification of the information on the tracking tools.


**Table 4:** Costed M&E plan.

Type of M&E activity	Responsible Parties	Budget US\$ (Excluding project team staff time)	Time frame
<b>Inception workshop and report</b>	<ul style="list-style-type: none"> <li>• PM</li> <li>• M&amp;E Specialist</li> <li>• UNEP TM</li> </ul>	Indicative cost: US\$12,300	Within the first two months of project start up. Will be undertaken at the national and sub-national scales.
<b>Baseline study</b>	<ul style="list-style-type: none"> <li>• PM</li> <li>• M&amp;E Specialist</li> <li>• UNEP TM</li> </ul>	Indicative cost: US\$40,000	At project inception.
<b>Measurement of means of verification of project results</b>	<ul style="list-style-type: none"> <li>• UNEP TM</li> <li>• M&amp;E Specialist</li> <li>• PM</li> </ul>	To be finalised at Inception Workshop. This includes hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	Start, mid and end of project (during evaluation cycle) and annually when required.
<b>Measurement of means of verification for project progress on output and implementation</b>	<ul style="list-style-type: none"> <li>• UNEP TM</li> <li>• PM</li> <li>• M&amp;E Specialist</li> <li>• CTA</li> </ul>	To be determined as part of the AWP's preparation.	Annually prior to PIR and to the definition of annual work plans.
<b>PIR</b>	<ul style="list-style-type: none"> <li>• PM</li> <li>• M&amp;E Specialist</li> <li>• UNEP TM</li> <li>• UNEP FMO (Fund Management Officer)</li> </ul>	None.	Annually

Type of M&E activity	Responsible Parties	Budget US\$ (Excluding project team staff time)	Time frame
<b>Audit</b>	<ul style="list-style-type: none"> <li>• PM</li> <li>• UNEP TM</li> <li>• UNEP FMO (Fund Management Officer)</li> </ul>	Total indicative cost: US\$20,000 (US\$ 5,000 per year).	Annually
<b>Periodic status/ progress reports</b>	<ul style="list-style-type: none"> <li>• PM</li> <li>• M&amp;E Specialist</li> <li>• UNEP TM</li> </ul>	None	Quarterly
<b>MTR/MTE</b>	<ul style="list-style-type: none"> <li>• UNEP TM/UNEP Evaluation Office</li> </ul>	Indicative cost: US\$35,000	At the mid-point of project implementation.
<b>Terminal Evaluation (TE)</b>	<ul style="list-style-type: none"> <li>• UNEP Evaluation Office</li> </ul>	Indicative cost: US\$35,000	At least three months before the end of project implementation.
<b>Project terminal report</b>	<ul style="list-style-type: none"> <li>• PM</li> <li>• M&amp;E Specialist</li> <li>• UNEP FMO</li> <li>• UNEP TM</li> </ul>	None	On completion of the TE.
<b>Visits to pilot intervention sites</b>	<ul style="list-style-type: none"> <li>• UNEP TM</li> <li>• M&amp;E Specialist</li> <li>• PM</li> <li>• PSC representatives</li> </ul>	For GEF supported projects, paid from IA fees and operational budget	Supervision mission by UNEP twice per year.
<b>Consultants</b>	<ul style="list-style-type: none"> <li>• International M&amp;E specialist</li> </ul>	Included in the baseline assessment, MTR and TE costs.	During baseline assessment in inception phase, at the mid-point of project implementation and at least three months before the end of project implementation
<b>TOTAL indicative COST</b> Excluding project team staff time and UNEP staff and travel expenses			Estimated to cost US\$142,300

### **PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)**

This request has been prepared in accordance with GEF policies<sup>68</sup> and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Brennan Van Dyke Director, GEF Coordination Office, UNEP		December 14, 2016	Jessica Troni Adaptation Portfolio Manager, Ecosystems Division	+254-20- 762-3794	<a href="mailto:jessica.troni@unep.org">jessica.troni@unep.org</a>

<sup>68</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

## Annex A: Project results framework

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
To reduce the vulnerability to climate change of national government and local communities in the forests and rangelands of the Sahelian Acacia Savanna Ecoregion	Total number of direct beneficiaries (% of which are women) of the project's EbA activities.	Zero	At least 400 (to be validated at inception) including 40% of women <sup>69</sup> .	At least 1200 (to be validated at inception) including 40% of women (to be verified at baseline)..	Household surveys and reports.
<b>Component 1: Institutional and technical capacity to address climate change risks through EbA.</b>					
<b>Outcome 1:</b> Strengthened capacity at the national, provincial and local levels to use EbA measures to address climate change risks in rangelands.	1.1.1 Degree to which capacity of targeted government institutions at national and sub-national levels is strengthened to identify, prioritise, implement, monitor and assess effectiveness of EbA interventions.	1.1.1 Current estimated level of capacity to identify, prioritize, implement, monitor and assess effectiveness of EbA interventions is 2. Institutions have limited capacity to monitor and identify climate risks. They are able	1.1.1 Increase of 3 in the capacity score assessment of each institution.	1.1.1 Increase of 5 in the capacity score assessment of each institution.	1.1.1 Verified through scoring methodologies developed by the TAMd and PPCR and adapted from the GEFSec - AMAT (2014) <sup>70</sup> .  The indicator is based on a five-step criteria of a capacity assessment framework (expressed as questions): <ul style="list-style-type: none"> <li>• Are the institutions in the process of identifying climate change risks and appropriate EbA interventions?</li> <li>• Are the institutions prioritising EbA interventions and specifying budget allocations and targets for these</li> </ul>

<sup>69</sup> The initial targets for gender-disaggregated indicators were set in a conservative manner – i.e. lower than 50% of direct beneficiaries comprising women –based on Mauritania's women HDI and GII. Such low levels of human development reflect significant gender-based inequalities in the country. Because of such low baselines for gender development, conservative targets have been set for the training interventions of the LDCF project. A 50%-50% target for gender disaggregated indicators is unlikely to be achievable given the social dynamics in Mauritania.

<sup>70</sup> Adapted from TAMd (2013) and PPCR (2014) scorecard indicators.

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
		<p>to design, budget and implement restoration interventions but not EbA interventions. Increasing vegetation cover is prioritised by national institutions but not EbA.</p> <p>Baseline study to be conducted at the project inception stage (to verify the overall score).</p>			<p>interventions?</p> <ul style="list-style-type: none"> <li>• Have the institutions defined clear roles and responsibilities for the coordination and implementation of EbA interventions?</li> <li>• Is there evidence of effective implementation of EbA interventions by the institutions?</li> <li>• Is there evidence of adequate institutional capacities for the continuous assessment, learning and review of adaptation strategies and measures?</li> </ul> <p>Each question is answered with an assessment and score for the extent to which the associated criterion has been met: not at all (= 0), partially (= 1) or to a large extent/ completely (= 2). An overall score is calculated, with a maximum score of 10 given to five criteria. These five criteria will be reviewed and validated at inception phase of the project.</p>
	1.1.2 Number of policy revisions proposed for sectoral strategies, plans and laws to integrate adaptation to climate change, and submitted to government for validation.	1.1.2 Zero, the existing strategies, plans and laws in the sectors of management of natural resources and sustainable development makes minimal mention of adaptation to climate change (to be further defined during the baseline study).	1.1.2 At least two sectoral strategies, plans and laws.	1.1.2 At least six sectoral strategies, plans and laws.	1.1.2 Proposed revisions to the relevant policy documents.



Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
	1.2. National adaptation strategy developed.	1.2. The ACCMR project includes the development of a NAP road map that should be produced in the near future. However, there is no national adaptation strategy to guide adaptation planning in Mauritania.	1.2. N/A	1.2. One gender-sensitive national adaptation strategy developed.	1.2. National adaptation strategy document.

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
	1.3. Number of local government officials, environmental committee members and local community representatives with capacity to plan, budget and implement and monitor EbA interventions (disaggregated by gender).	1.3. No trainings that have been provided to support national, provincial and local government in implementing appropriate adaptation measures, including EbA interventions. A more quantitative assessment of this indicator will be made at inception phase.	1.3. At least: i) 40 government technical staff members ; ii) 30 NGO staff members; iii) 20 staff members from DREDDs and other relevant institutions have increased capacity to plan, budget, implement and monitor EbA interventions (of which at least 40% of women).	1.3. At least: i) 50 government technical staff; ii) 20 government decision-makers; iii) 40 NGO staff members; iv) 30 staff members from DREDDs and other relevant regional delegations have increased capacity to plan, budget, implement and monitor EbA interventions (of which at least 40% of women).	<p>1.3. Attendance registers from training sessions and training reports. A scoring scale methodology will be used to measure the capacity of trained officers. To measure people's capacity to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures; the tracking tool recommends the following scoring scale:</p> <p>1 = Very limited or no evidence of capacity  2 = Partially developed capacity  3 = Fully developed, demonstrated capacity</p> <p>Depending on the nature and scope of the training provided, the tracking tool may provide an average score based on an assessment of capacity along the following criteria:</p> <p>(a) understanding what is EbA and its role in adapting to climate change;  (b) identifying EbA adaptation options and their use to restore ecosystems in Rwanda;  (c) developing climate-resilient livelihoods based on restored and resilient ecosystems;  (d) identifying cost-effective adaptation interventions;  (e) Planning, budgeting and implementing EbA measures.</p>
	1.4. Number of AGLCs established for the sustainable management of natural resources including pastoral resources using EbA.	1.4. There are ~45 AGLCs in the intervention areas that are located mainly in Guidimaka and Hodh El Gharbi.	1.4. 5 new AGLCs established for the sustainable management of natural resources including pastoral resources using EbA.	1.4. 15 new AGLCs established for the sustainable management of natural resources including pastoral resources using EbA.	1.4. Ministerial order for each AGLC.

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
	1.5. Number of training events for AGLC committees on the use of EbA for the sustainable management of natural resources including pastoral resources.	1.5. Some of the existing local associations that will be targeted by the project will likely have received some training on ecosystem management and tree planting when they were created. However, these local associations represent a minority of those focused on by the project and EbA approach was not part of this training.	1.5. Six training events for at least 30 committee members from at least four AGLCs each on the use of EbA for the sustainable management of natural resources including pastoral resources.	1.5. Nine training events for at least 30 committee members from four AGLCs each on the use of EbA for the sustainable management of natural resources including pastoral resources.	1.5. Reports of training sessions.
<b>Component 2: Climate resilient livelihoods for rural communities using an EbA approach in rangelands in four wilayas in the Sahelian Acacia Savanna Ecoregion.</b>					
<b>Outcome 2:</b> Increased provision of pastoral resources and climate-resilient livelihoods via an EbA approach.	2.1. Number of AGLCs with management plans for natural resources include EbA interventions in the four wilayas of the project.	2.1. No management plans for natural resources including EbA interventions in the project intervention area.	2.1. At least six management plans (1 for each individual AGLC) for natural resources including EbA interventions developed.	2.1. At least nine management plans (1 for each individual AGLC) for natural resources including EbA interventions developed.	2.1. Management plans for AGLCs.

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
	2.2. Number of hectares of pastoral ecosystems benefiting from EbA measures (adapted from AMAT indicator 4).	2.2. Protection measures involving mechanical and manual firebreaks, and mechanical sand fixation techniques are being implemented mainly under the APCBF project. However, the use of EbA to combat the adverse effects of climate change is limited.	2.2. EbA measures implemented across at least 400 hectares within the management areas of the AGLCs selected under Output 2.1 to address climate change effects such as droughts, fires and sand dune encroachment.	2.2. EbA measures implemented across at least 1200 hectares – 150 hectares of watersheds, 300 hectares of rangelands, 390 hectares of sand dunes, 210 ha of <i>Acacia</i> forests and 150 hectares of protected forests – to address climate change effects such as droughts, bushfires and sand dune encroachment.	2.2. Surveys of the project intervention sites and monthly reports provided by DREDDs These surveys will also investigate land ownership in the areas benefitting from EbA measures to check that an appropriate proportion (to be defined during the baseline assessment or by the national M&E specialist) of women is represented.
	2.3. Number of individuals receiving training, technical support and equipment to adopt climate-resilient livelihoods.	2.3. A limited number of individuals received training, technical support and equipment to adopt climate-resilient livelihoods in the targeted wilayas (to be confirmed by the baseline study).	2.3. At least 100 individuals have received training, technical support and equipment to adopt climate-resilient livelihoods.	2.3. At least 300 individuals have received training, technical support and equipment to adopt climate-resilient livelihoods.	2.3. Surveys of the project intervention sites; list of material procured; reports of the training sessions; list of attendees to the training sessions.
<b>Component 3. Awareness and knowledge of EbA and climate-resilient livelihoods</b>					
<b>Outcome 3:</b> Increased awareness and knowledge of climate change risks, benefits of EbA and	3.1. Proportion of the population in the four wilayas of the project with increased awareness	3.1. There is limited awareness of climate change effects and adaptation options	3.1. At least 2 out of 10 people with increased awareness on climate change effects and adaptation options in the	3.1. At least 3 out of 10 people with increased awareness on climate change effects and adaptation options in the	3.1. Household surveys in the four wilayas of the project.  Indicative questions to measure awareness are listed below. These questions should be

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
opportunities for climate-resilient livelihoods in Mauritania.	and corresponding behavioural change on climate change effects and adaptation options.	in the wilayas of the project (less than 5%, to be confirmed by the baseline study).	wilayas of the project (of which ~50% are women).	wilayas of the project and at least 1 out of 10 people with corresponding behavioural changes (of which ~50% are women).	<p>validated at project inception, and amended if necessary (each of the questions should be followed by a question on how they know about it to check that it is actually the effects of the awareness raising campaign that are being measured):</p> <ul style="list-style-type: none"> <li>• Do you know what climate change is? (ask interviewee to explain to be sure)</li> <li>• What are the current climate change effects in the main regions of Mauritania?</li> <li>• What climate change effects are predicted for Mauritania in the near future? And in the longer term?</li> <li>• Do you know what can be done to reduce the negative effects of climate change on your livelihood? If yes, what could be done at your level to reduce your vulnerability to climate change?</li> </ul> <p>The following questions illustrate what could be used to measure the change in behaviour of Mauritians:</p> <ul style="list-style-type: none"> <li>• Have you done anything differently as a result of the awareness-raising campaign? (e.g. talking about climate change with other community members, talking about the role of natural resources with other community members, seeking for information to adopt climate-resilient practices, installing rainwater collection system, planting a tree)</li> <li>• Do you plan to implement new practices as a result of the awareness-raising campaign? (e.g. changing your agricultural/pastoral practices).</li> </ul>

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
	3.2. Number of knowledge management strategies on the benefits of EbA interventions to local communities developed to capture and share experiences from and between all adaptation projects developed.	3.2. There is no knowledge management strategy on the benefits of EbA interventions to local communities to capture and share experiences from and between all adaptation projects.	3.2. N/A	3.2. One knowledge management strategy on the benefits of EbA interventions to local communities to capture and share experiences from and between all adaptation projects developed and implemented – the knowledge-sharing element of the strategy will include specific guidelines to promote gender equity in access to information.	3.2. Mandate for the data collection system, data collection protocols and databases; knowledge management strategy document.
	3.3. Number of communication tools developed to increase awareness of government staff and local communities on the benefits of an EbA approach and associated climate-resilient livelihoods.	3.3. The EbA approach is unknown in the country and there are limited communication tools to increase awareness on the benefits of an EbA approach and associated climate resilient livelihoods (to be confirmed during the baseline study).	3.3. At least one website developed/strengthened to increase awareness of government staff and local communities on the benefits of an EbA approach and associated climate resilient livelihoods.	3.3. At least one radio show, one TV show and one website to increase awareness of government staff and local communities on the benefits of an EbA approach and associated climate resilient livelihoods.	3.3. Communication tools including radio shows, TV shows, pamphlets and website visitor statistics.

Objective/Outcomes	Indicators	Baseline	Mid-term target	End-of-project targets	Means of Verification
	3.4. Long-term strategy developed to upscale and sustain best adaptation measures including EbA.	3.4. No strategy to upscale and sustain best adaptation measures including EbA exists in Mauritania.	3.4. N/A	3.4. A long-term strategy to upscale and sustain best adaptation measures including EbA developed.	3.4. Review of the progress reports; strategy document in existence.

## Annex B: Responses to project reviews

German council comments	Response
So far there is no or little experience in controlled burning in Mauritania. In order to avoid more damage to pastures, natural regeneration of trees and biodiversity, <u>Germany suggests testing controlled burning measures with the support of (probably international) fire management experts before demonstrating measures in pilot field schools.</u> Testing should include the proposed measures (green firebreaks and soil restoration by trees) as well as existing measures (manually created firebreaks, protection of natural regeneration, etc.) in order to prove that controlled burning can work.	Controlled burning was removed from the interventions of the project. To build on the business-as-usual scenario regarding the control of bushfires, green firebreaks will be tested on 20 hectares of rangelands to measure the efficiency of this innovative method for reducing vulnerability to bushfires in Mauritania. Additionally, soil restoration will be a major criterion for the selection of tree species to be planted and restoration techniques to be selected under the project to rehabilitate degraded ecosystems and increase the production of natural resources.
Germany recommends addressing technical concerns with regard to the feasibility of the methodology through a discussion with all experienced stakeholders in Mauritania in the phase of preparing the final project proposal.	Two workshops (in August and December 2014) and multiple consultations were held with representatives of relevant ministries (e.g. MEDD, MDR, MHA, MASEF), DREDDs, funding and implementing agencies (e.g. UE, GIZ, UNDP), and CSOs for the development of the project document during the PPG phase. During the validation workshop, the first draft of project activities was discussed. Following these meetings, further institutional and technical information was collected to define the activities further. The second draft of the project activities was validated by the stakeholders during the second workshop (please see Section 2.5, and Appendices 21 and 22 of the Project Document).
With regard to green firebreaks, <i>Vetiver senegal</i> is a grass normally used for erosion control. It is not clarified if it is appropriate to be used in green fire breaks. The use of <i>Tamarix aphylla</i> might be possible and needs to be tested within the current pasture regime and the planned controlled burning.	A pilot study is proposed to test several species to be planted in green firebreaks. This method has not been used yet in Mauritania. The following species expected to be fire-resilient among other characteristics (e.g. drought resilient, fast growing) will likely be tested in the green firebreaks: <i>Leptadenia pyrotechnica</i> , <i>Vetiver nigrina</i> , <i>Guiera senegalensis</i> , <i>Khaya senegalensis</i> and <i>Piliostigma reticulata</i> (please see Section 3.3 of the Project Document).
With regard to restoration of degraded soil by planting trees, there might be constraints. Plantations have to be protected against livestock and related infrastructure. It is not clear whether intercropping with the species named for green firebreaks will prevent the burning of the planted seedlings. <u>Germany recommends specifying where the seedlings will come from and what the nursery management approach will be (government, CBO, private).</u>	To prevent seedlings from being grazed, fencing, guarding and awareness-raising campaigns will be implemented. The green firebreaks will be thick corridors, 20 to 25 meters wide. Species providing NTFPs will be preferred to create incentives for rural communities to maintain the green firebreaks. However, under this pilot intervention, no intercropping will be done. The fire breaks will prevent pastoral resources outside of these corridors from being burnt.  The restoration protocols – including the establishment of nurseries, tree planting, management of the nurseries and planting sites, and monitoring – will be developed by national experts in ecosystem restoration. They will include the species to be planted and where to purchase the seedlings from.
Germany suggests also considering other technical solutions that have been proven effective for soil and water conservation (e.g., drawing on the experiences of KfW and GIZ on behalf of BMZ in Mauritania).	All experience in Mauritania in terms of soil and water conservation will be used to design the on-the-ground interventions of the project. This is particularly true for the experience of GIZ that is a major partner to the project that will be consulted regularly.
In terms of coordination with other relevant initiatives, the “Natural Resource Management Program” financed by BMZ and implemented by GIZ is very willing to collaborate with the GEF/ UNEP project for scaling-up the AGLC approach.	The two main on-going projects of GIZ related to the management of natural resources in Mauritania are integrated into the Project Document. Close collaboration with GIZ will be maintained throughout the implementation phase of the project to build on GIZ experience in the country.
Germany kindly asks for some corrections under A.4 with regard to funding amount of the current “phase” 2014-2016 (this is 4 Mio EUR) and fields of intervention (these are 1- Environmental policy, 2- Marine and coastal	The ProGRN project is no longer considered for co-financing. The components of this project are described in Section 2.6 of the PD.



biodiversity conservation and 3- Decentralized natural resource management).	
The Natural Resource Management Program has developed over the last years the AGLC approach mentioned in the PIF and currently supports 40 AGLC in 3 Wilayas. As the GEF/ UNEP project will build on the experiences of this program implemented by GIZ, <u>Germany would appreciate to also include GIZ in the consultation process described under A.2 (page 17) and to state them as a collaborating partner (see Component 1, page 12).</u>	GIZ was consulted twice during the PPG phase and participated in the inception and validation workshops (see Section 2.5, and Appendices 21 and 22 of the Project Document). The ProGRN project implemented by GIZ is a highly relevant and aligned project (see Section 2.6 and 5 of the Project Document). Consequently, GIZ is expected to participate continuously to the implementation of the project.
Regarding the EU project “Global Climate Change Alliance Mauritania” it should be mentioned that it is implemented by UNDP and GIZ; the financing by the EU is 4 Mio EUR (not 8 Mio EUR).	The correction was made in Section 2.7 of the Project Document.
There is further potential for synergies with the new BMZ/ GIZ project “Strengthening capacities for Adaptation of Climate Change in Rural Areas” (2 Mio EUR BMZ funding and 1.23 Mio EUR co-financing by the EU Project Global Climate Change Alliance Mauritania; 2014 to 2018).	The similarities between the LDCF project and ACCMR project are recognised. This is the reason why Brakna was removed from the list of wilayas targeted by the LDCF project. Close collaboration will be established for both projects to be implemented synergistically (see Section 2.7 of the Project Document).
Indicated co-funding by the National Government of 11.4 Mio US\$ seems to be rather high and National Government funding sources (in kind and in cash) are not clear. <u>Germany suggests to clearly identifying the MEDD units which will be involved in the implementation, since national government funding is allocated to specific activities of different MEDD units in the Sector Program.</u>	The nature and sources of the co-financing is clearly specified in Section 7.2 and Appendix 2 of the Project Document. Additionally, the involvement of the project partners including the Department of MEDD that are relevant to the project is described in the table of Section 5 of the Project Document.
The PIF still uses the abbreviation MDEDD which means Ministère Délégué auprès du Premier Ministre chargé de l’Environnement et du Développement Durable. However, since September 2013 the Ministry of Environment is a “proper” ministry Ministère de l’Environnement et du Développement Durable (MEDD).	In the Project Document and CEO endorsement, the acronym MEDD is used throughout.
Under B.1 there is so far no reference made to the draft Sector Program (Programme Sectoriel Environnement et Développement Durable, 2012-2016) which is developed for the implementation of the National Environment Action Plan (2012-2016) and the GEF/ UNEP project is not yet included in the draft Sector Program (of December 2013).	The relevant laws, strategies and plans including the National Strategy for Sustainable Development (SNDD) and the National Action Plan for Environment and Sustainable Development (PANE) are described in Section 3.6 of the Project Document.
It is only in the intervention areas of the BMZ/GIZ supported Natural Resource Management Program that the creation of manual firebreaks by the AGLC is supported in collaboration with the regional directorates of MEDD (DREDD). The prevention of bushfires is integrated in the overall AGLC approach to natural resource management (pasture and forest resources) and monitoring has shown that the approach is successful with regard to the rehabilitation of the vegetation.	The proposed project will build on the experience of GIZ in sustainable management of natural resources and replicate the AGLCs approach in areas where these institutions have not been created yet. The successful interventions implemented by GIZ including for the prevention of bushfires using the AGLC approach will be investigated, adjusted and complemented if necessary, and replicated as appropriate in the intervention sites of the LDCF project.
<b>US council comments</b>	
The United States welcomes this project concept. We appreciate its dual focus on	We note the comment with appreciation.

<p>improving governance frameworks at the national level and building capacity of organizations at the local level. This comprehensive approach will help facilitate open channels of communication between relevant parties in order to maximize the effectiveness of project implementation and ensure sustainability post -implementation. In addition, we appreciate that there are clear linkages between project components including the sequencing of expected outputs. For example, output 2.4 (climate-resilient livelihoods) will be developed based on outcomes of activities under outputs 2.2 and 2.3 (local community members trained on soil restoration and fire management techniques). Finally, we welcome the proposed implementation of ecosystem -based approaches to adaptation.</p>	
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## **Annex C: Status of implementation of project preparation activities and the use of funds**<sup>71</sup>

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: US\$ 95,000			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
National consultants	29,500	29,500	-
Meetings and conferences	19,000	19,000	=
Travel	10,500	10,500	-
Communications costs	1000	1000	
International consultants	40,000	32,500	7,500
<b>Total</b>	100,000	92,500	7,500

<sup>71</sup> If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

**Annex D: Calendar of expected reflows (if non-grant instrument is used)**

N/A

## Annex E: Draft Procurement Plan

National consultants	US\$/person month	Estimated person months	Tasks to be performed
National specialist in policy-making and adaptation (40 days @ US\$150/day)	3,000	2	<p>The national consultant (NC) with proven expertise in policy development and adaptation to climate change will undertake the following activities:</p> <ul style="list-style-type: none"> <li>i) prepare the National Strategy for Adaptation and organise the validation workshop in collaboration with the CCPNCC and relevant institutions (Activities 1.1.1 and 1.1.2);</li> <li>ii) propose revisions for at least five sectoral strategies and plans to integrate adaptation to climate change into the management of natural resources sustainable development (Activity 1.1.3); and</li> <li>iii) propose revisions for at least four sectoral laws to include adaptation to climate change, according to the National Strategy for Adaptation (Activity 1.1.4).</li> <li>iv) initiate the validation process of the revisions developed for selected strategies, plans and laws under Activities 1.1.3 and 1.1.4 by taking the document through as many steps of the government validation process as possible until project closure (Activity 1.1.5).</li> </ul> <p>In addition, the NC will organise one validation workshop for every document produced/revised.</p>
National specialist in local management of natural resources, adaptation and awareness raising (80 days @ US\$150/day)	3,000	4	<p>The NC will:</p> <ul style="list-style-type: none"> <li>i) review and identify gaps in government and community-based organisations in the targeted wilayas to identify where AGLCs need to be established or strengthened (Activity 1.3.1);</li> <li>ii) establish 15 new AGLCs and strengthen the operational framework of 12 existing AGLCs (Activity 1.3.2);</li> <li>iii) Provide training to the 27 AGLC steering committees and local community representatives on EbA interventions for the sustainable management of forest and pastoral resources (Activity 1.3.3);</li> <li>iv) collaborate with the national consultant for communication to develop and implement a national awareness-raising campaign on adaptation to climate change and the value of viable ecosystems;</li> <li>v) consult intensively with national stakeholders to develop the awareness-raising campaign (Activity 3.2.1);</li> <li>vi) review the websites currently available to policy- and decision-makers, technical</li> </ul>

			<p>staff and other relevant stakeholders;</p> <p>vii) propose a revised website that improve access to information on adapting to climate change, including documents generated under the project (Activity 3.2.2); and</p> <p>viii) provide technical support for the creation of awareness-raising tools and media (Activity 3.2.1).</p>
National specialist in management of natural resources and adaptation to climate change (30 days @ US\$150/day)	3,000	1.5	<p>The NC will work closely with AGLC members, other rural community members and DREDDs to:</p> <p>i) select AGLCs that will benefit from on-the-ground interventions (Activity 2.1.1);</p> <p>ii) undertake participatory baseline surveys in the management areas of AGLCs established and strengthened under Output 1.3 to determine the level of ecosystem degradation and the productivity of rangelands (Activity 2.1.4);</p> <p>iii) develop and implement at least nine local management plans for forest and pastoral resources (Activity 2.1.5);</p> <p>iv) identify potential sites for replication of successful project activities identified under Activity 3.1.3 (Activity 3.3.1);</p> <p>v) provide training and raise awareness on the use of the successful practices to the AGLCs corresponding to the identified replication sites (Activity 3.3.2); and</p> <p>vi) develop a long-term plan to identify and mobilise funds for the large-scale implementation of best adaptation practices (Activity 3.3.3).</p>
National gender expert (30 days @ US\$150/day)	3,000	1.5	<p>The NC will identify the gender issues relative to climate change in the AGLCs selected for the implementation of the on-the-ground interventions. Based on this analysis, he will develop recommendations for the project management team to further promote gender equity in the interventions of the project, particularly under Component 2 (Activity 2.1.2).</p>
National expert in geomatics (45 days @ US\$150/day)	3,000	2.3	<p>The NC will produce geo-referenced maps of forest and pastoral resources in the AGLCs selected under Output 2.1 (Activity 2.1.4).</p>
National specialist in pastoralism, agronomics and climate-resilient livelihoods (30 days @ US\$150/day)	3,000	1.5	<p>The NC will:</p> <p>i) design and implement set-aside plans for the restoration of 300 hectares of degraded ecosystems, and rainwater retention systems such as rainwater reservoirs, zaï, stone rows and half-moons (Activity 2.2.2);</p> <p>ii) design and implement fixation techniques to prevent sand dune encroachment on 390 hectares of pastoral routes including biological and mechanical fixation (Activity 2.2.3);</p> <p>iii) promote the development of climate-resilient, income-generating activities such</p>

			<p>as small-scale agriculture and agroforestry (Activity 2.3.2);</p> <p>iv) identify traditional, climate-resilient, non-pastoral livelihood opportunities under the climate change scenario through the consultations of rural communities (Activity 2.3.1); and</p> <p>v) identify the required equipment, and provide local communities with equipment and training for the collection, processing and conservation of natural products to promote the development of the selected traditional, climate-resilient, non-pastoral livelihoods (Activity 2.3.3).</p>
<b>International consultants</b>	<b>US US\$/ person week</b>	<b>Estimated person weeks</b>	<b>Tasks to be performed</b>
National Chief Technical Advisor (CTA)	1,300	10	<p>i) Overall responsibility for providing technical assistance for project activities under the LDCF project, including those related to planning, monitoring and site operations, and assuming quality control of interventions;</p> <p>ii) Assure timely and efficient coordination of activities funded through the LDCF project, through close consultations with the PM and in collaboration with all key partners including the UNFCCC FP, MEDD, the LDCF Project Steering Committee (PSC), and the UNEP Task Manager.</p> <p>iii) Oversee, guide and, as may be needed, directly support work to achieve the following tasks:</p> <p>iv) Provide hands-on support to the PM, project staff and other government counterparts in the areas of project management and planning, management of site activities, monitoring, and impact assessment;</p> <ul style="list-style-type: none"> <li>○ Prepare and finalize, in coordination with the PM, Terms of Reference for technical consultancies and sub-contractors, and assist in the selection and recruitment process;</li> <li>○ Provide quality assurance and technical review of project outputs</li> <li>○ Undertake technical review of project outputs (e.g. studies and assessments).</li> <li>○ In collaboration with PM, coordinate and organize the inception phase including the inception workshop;</li> <li>○ Supervise the work of national and international experts.</li> <li>○ Assist the PM to Provide technical supervisory function to the work carried out by the other technical assistance consultants hired by the project.</li> <li>○ In collaboration with PM, coordinate the work of all consultants and sub-contractors, ensuring the timely delivery of expected outputs, and</li> </ul>

			<p>effective synergy among the various sub-contracted activities;</p> <ul style="list-style-type: none"> <li>○ Prepare and revise in consultation with the PM the Management Plan as well as Annual Work Plans;</li> <li>○ Assist the PM in monitoring the technical quality of project M&amp;E systems (including AWP, indicators and targets).</li> <li>○ Provide advice on best suitable approaches and methodologies for achieving project targets and objectives</li> <li>○ Adjust, in consultation with the PM, the project Results Framework, as required and in line with corporate requirements;</li> <li>○ Coordinate preparation of the periodic Status Report when called for by the PM;</li> <li>○ Prepare, in consultation with the PM, the Combined Project Implementation Review (PIR), inception report, technical reports, quarterly financial reports for submission to UNEP and the GEF and other donors and Government Departments, as required (in English);</li> <li>○ Assist the PM in mobilizing staff and consultants in the conduct of a mid-term project evaluation, and in undertaking revisions in the implementation program and strategy based on evaluation results;</li> <li>○ Assist the PM in liaison work with project partners, donor organizations, NGOs and other groups to ensure effective coordination of project activities;</li> <li>○ Assist in knowledge management, communications and awareness raising and document lessons from project implementation and make recommendations to the PSC for more effective implementation and coordination of project activities;</li> <li>○ Compile and report on lessons learned in project implementation, so as to contribute to international learning and replication in other projects; and</li> <li>○ Perform other tasks as requested by the PM, PSC and other project partners</li> <li>○ Facilitate the development of strategic regional and international partnerships for the exchange of skills and information related to climate change adaptation.</li> </ul>
International specialist in EbA (20 days @ US\$500/day; 1 flight @ US\$2500/flight; 15 days in-country @	2,500	4	<p>The international consultant (IC) will work closely with DREDDs, national stakeholders and NGOs to:</p> <ul style="list-style-type: none"> <li>i) provide training to policy- and decision-makers, government technical staff and NGOs including the development of training support such as technical EbA guidelines;</li> </ul>



US\$166/day)			<ul style="list-style-type: none"> <li>ii) provide training and equipment to relevant government staff including the DREDDs and other sectors to collect and analyse data on the efficiency of adaptation practices (Activities 1.2.1, 1.2.2 and 1.2.3);</li> <li>iii) select the natural and agropastoral ecosystems to benefit from the restoration interventions (Activities 2.1.1 to 2.1.4);</li> <li>iv) develop at least nine Local Management Plans for forest and pastoral resources (Activity 2.1.5); and</li> <li>v) implement the restoration activities (Activities 2.2.1 to 2.2.4).</li> </ul>
International specialist in fire-resilient green breaks (30 days @ \$500/day; 1 flight @ \$2500/flight; 20 days in-country @ \$166/day)	2,500	6	The IC will develop and implement fire-protection practices – including fire-resilient green breaks – on 20 hectares of rangelands (Activity 2.2.5). This will be done in close collaboration with the management team of the APCBF programme.
International M&E specialist for the baseline assessment	2,500	11	<p>The international consultant will work with the project management team and ensure close collaboration with MEDD and UNEP, the main objective of the consultancy is to establish: i) an updated project logical framework; and ii) baseline information for project and AMAT indicators, against which the project performance and impact will be measured. The consultant is expected to carry out baseline surveys in the 4 wilayas of intervention of the project.</p> <p>The specific tasks of the consultant are to:</p> <ul style="list-style-type: none"> <li>i) assess and briefly describe the status of each of the indicators, and where appropriate, validate or further develop the indicators and targets for each outcome and output included in the Project Document according to the adaptation results the projects are aiming to generate. Indicators and targets should be SMART (Specific, Measurable, Achievable, Results-based, and Time-bound), results-based and gender-sensitive, and means of verification should be as easy and cost-effective as possible. This will include the following steps:</li> <li>ii) collect baseline data for the project indicators established. Baseline values should be fully established for the relevant project indicators on the basis of the data collected.</li> <li>iii) identify data gaps and agree in consultation with UNEP and MHUE on a methodology to fill in the data gaps. The consultant should prepare complete baseline information.</li> <li>iv) develop a sampling design and a data collection and management protocol.</li> </ul>

			This data sampling protocol should provide a detailed description of the methodology used to obtain values for each indicator so that monitoring of each indicator can be independently replicated by external reviewers – e.g. for Mid Term Reviews, and Terminal evaluations.
International M&E specialist for the mid-term evaluation	2,500	10	<p>The international consultant will:</p> <ul style="list-style-type: none"> <li>i) assess achievements and challenges at mid-point and in particular assess the implementation of planned project planned outputs and project performance against actual results. The risks to achievement of project outcomes and objectives will also be appraised.</li> <li>ii) focus on identifying the corrective actions needed for the project to achieve maximum impact. Review findings will feed back into project management processes through specific recommendations and 'lessons learned' to date.</li> <li>iii) consider sustainability issues and 'exit strategy'.</li> </ul>
International M&E specialist for the final evaluation	2,500	10	<p>The international consultant will assess progress towards achievement of increased resilience/reduced vulnerability, and actions taken to achieve sustainability and replicability. To do so, the consultant will:</p> <ul style="list-style-type: none"> <li>i) systematically assess and disclose levels of project or programme accomplishments and will make overall judgments about the extent to which the intended and unintended results were achieved;</li> <li>ii) organize and synthesize experiences and lessons that may help improve the selection, design, implementation, and evaluation of future adaptation projects;</li> <li>iii) identify how project achievements contribute to the mandate of UNEP and GEF;</li> <li>iv) provide feedback into the decision-making process to improve ongoing and future projects, programmes, and policies; and</li> <li>v) assess the relevance, effectiveness, and efficiency of project design, objectives, and performance.</li> </ul>
<b>Equipment and materials</b>		<b>Total</b>	<b>Notes</b>
Computer equipment		14,000	Monitors, processors, cables, software packages, printers etc.
Office supplies		13,000	Stationery, office furniture, etc.
Equipment for data collection and analysis		105,000	GPS devices, cameras, species identification books, sampling material and apparatus to measure vegetation indices and water quality
Awareness-raising equipment		119,000	Pamphlets, design materials, presentation materials.

Support for the process of creation of each AGLC	33,997	Projectors and screens, advertising boards. Whiteboards, raw material such as felt pens and paper for awareness-raising exercises
Establishment of tree nurseries for the planting activities	341,188	Seedlings, containers, shading equipment and construction material
Restoration of watersheds including water conservation methods	247,500	Seedlings, seeds, material for planting, transport and maintenance
Establishment of tree nurseries to be planted in 300 hectares of set-aside pastoral lands	120,000	Seedlings, containers, shading equipment and construction material
Sowing on 100 ha of set-aside rangeland	20,000	Seeds, nursery materials, planting equipment
Fencing 300 ha of rangeland including the development of a rotation system for setting-aside	510,000	Fencing material, digging equipment
Establishment of tree nurseries to be planted in 390 ha of drifting dunes	120,000	Seedlings, containers, shading equipment and construction material
Dune fixation with stick and trees	546,000	Wooden stakes, digging equipment
Restoration of listed forests including water conservation methods	315,000	Seedlings, seeds, material for planting, transport and maintenance
Restoration of Acacia woodlands including water conservation methods	399,000	Seedlings, seeds, material for planting, transport and maintenance
Establishment of tree nurseries for the fire-resilient green breaks	50,000	Seedlings, containers, shading equipment and construction material
Plantation of fire-resilient green breaks	22,000	Seedlings, planting equipment
Provide the required equipment to adopt agropastoral practices that are climate-resilient	507,900	Seedlings, containers, shading equipment, construction material and irrigation equipment
Provide the required equipment to adopt climate-resilient livelihoods based on NTFPs	270,000	Equipment to collect, process and conserve NTFPs such as an oil press, stocking material, conservation material, drying material, a mill and weighing scales.
Data collection and analysis equipment	40,000	GPS devices, cameras, species identification books, sampling material and apparatus to measure vegetation indices and water quality

Archiving equipment	55,827	Hard drives, flash disks, CDs, archiving software, an appropriate IT system and contribution towards the establishment of a consulting room, including the purchase of books.
Purchasing vehicles	85,858	Vehicles and necessary licenses/permits

## Annex F: Detailed GEF Budget

Project number:															Budget Notes
Project executing partner				Direction for the Protection of Nature (DPN) in partnership with Ministry of Environment and Sustainable Development (MEDD) and Ministry of Livestock Husbandry (ME), Ministry of Agriculture (MA) and Ministry of Hydraulics and Sanitation (MHA)											
Project implementation period				Expenditure by project component/activity						Expenditure by calendar year					
From:				Outcome 1	Outcome 2	Outcome 3	PM	M&E	Total	Year 1	Year 2	Year 3	Year 4	Total	
To:															
UNEP Budget Line															
10	PERSONNEL COMPONENT														
	1100		Project personnel												
		1101	National project manager (48 months @ \$2500/month)				120,000		120,000	30,000	30,000	30,000	30,000	120,000	
		1199	Sub-total	0	0	0	120,000	0	120,000	30,000	30,000	30,000	30,000	120,000	
	1200		Consultants												
		1201	International specialist in EbA (20 days @ \$500/day; 1 flights @ \$2500/flight; 15 days in-country @ \$166/day)	15,000					15,000	5,000	6,250	3,750	0	15,000	1
		1202	National Technical Advisor (50 days @ \$150/day)	7,500					7,500	1,900	1,900	1,900	1,800	7,500	
		1203	National specialist in policy-making and adaptation (40 days @ \$150/days)	6,000					6,000	580	2,980	1,890	550	6,000	2
		1204	National specialist in local management of natural resources, adaptation and awareness raising (80 days @ \$150/days)	12,000					12,000	3,940	5,240	2,820	0	12,000	3

		1205	International specialist in fire-resilient green breaks (30 days @ \$500/day; 1 flight @ \$2500/flight; 20 days in-country @ \$166/day)		21,000				21,000	0	11,000	10,000	0	21,000	4
		1206	National specialist in management of natural resources and adaptation to climate change (30 days @ \$150/day)		4,500				4,500	2,250	2,250	0	0	4,500	5
		1207	National gender specialist (30 days @ \$150/day)		4,500				4,500	2,250	2,250	0	0	4,500	6
		1207	National expert in geomatics (45 days @ \$150/day)		6,750				6,750	4,000	2,750	0	0	6,750	7
		1208	National specialist in pastoralism, agronomics and climate-resilient livelihoods (30 days @ \$150/day)		4,500				4,500	3,700	800	0	0	4,500	8
		1209	Field officers for Assaba, Guidimaka, Hodh El Gharbi and Hodh El Chargui (2 x 48 months @ \$400/month)		38,400				38,400	9,600	9,600	9,600	9,600	38,400	
		<b>1299</b>	<b>Sub-total</b>	40,500	79,650	0	0	0	120,150	33,220	45,020	29,960	11,950	120,150	
	<b>1300</b>		<b>Administrative Support</b>												
		1301	Administrative Assistant (48 months				14,400		14,400	3,600	3,600	3,600	3,600	14,400	

			@ \$300/month)												
		1302	Financial Assistant (48 months @ \$500/month)				24,000		24,000	6,000	6,000	6,000	6,000	24,000	
		1303	M&E Specialist (8 months @ \$2500/month)				20,000		20,000	5,000	5,000	5,000	5,000	20,000	
		1304	Project Steering Committee meetings				4,800		4,800	1,200	1,200	1,200	1,200	4,800	
		1399	Sub-total	0	0	0	63,200	0	63,200	15,800	15,800	15,800	15,800	63,200	
	1600		Travel on official business												
		1699	Sub-total	0	0	0	0	0	0	0	0	0	0	0	
1999		Component total		40,500	79,650	0	183,200	0	303,350	79,020	90,820	75,760	57,750	303,350	
20	SUB-CONTRACT COMPONENT														
	2100		Sub-contracts (MOUs/LOAs for supporting organisations)												
		2101	Subcontract for the development of the website			22,000			22,000	0	15,000	7,000	0	22,000	9
		2102	Subcontract for the development of the data collection, analysis and archiving system			35,500			35,500	0	20,000	15,500	0	35,500	10
		2199	Sub-total	0	0	57,500	0	0	57,500	0	35,000	22,500	0	57,500	
	2200		Sub-contracts (for commercial purposes)												
		2201	Subcontract for the production of the awareness-raising material including TV and radio shows			84,600			84,600	0	30,000	34,600	20,000	84,600	11
		2299	Sub-total	0	0	84,600	0	0	84,600	0	30,000	34,600	20,000	84,600	

2999		Component total	0	0	142,100	0	0	142,100	0	65,000	57,100	20,000	142,100	
30	TRAINING COMPONENT													
	3200	Group training												
	3201	Workshops for the integration of EbA into decision-making and LDPs	60,000					60,000	0	20,000	20,000	20,000	60,000	12
	3202	One-day training for each of the 3 groups on the use of the EbA guidelines	12,000					12,000	4,000	8,000	0	0	12,000	
	3203	Two sessions of 3 days will be provided in each of the four wilayas (the training in Assaba and Guidimaka will be combined)	48,000					48,000	24,000	0	24,000	0	48,000	
	3204	Three-days training of the organisation of awareness-raising campaigns in the wilayas	24,000					24,000	0	24,000	0	0	24,000	
	3205	Training for the steering committees of 27 AGLCs	63,000					63,000	23,000	40,000	0	0	63,000	13
	3210	One participatory baseline survey for each AGLCs.		31,500				31,500	16,500	15,000	0	0	31,500	14
	3211	Workshops for the development of LMPs.		27,000				27,000	8,000	19,000	0	0	27,000	15
	3212	Training of the AGLC members to implement the restoration activities		20,000				20,000	0	8,000	8,000	4,000	20,000	
	3213	Training of the AGLC members on the climate-resilient		20,000				20,000	0	0	10,000	10,000	20,000	



			sources of income												
		3214	Ten training days on the central system for data collection, analysis and archiving			30,000			30,000	0	8,000	22,000	0	30,000	
		3215	Training on the use of appropriate adaptation practices in the replication sites.			18,000			18,000	0	0	8,000	10,000	18,000	
		<b>3299</b>	<b>Sub-total</b>	207,000	98,500	48,000	0	0	353,500	75,500	142,000	92,000	44,000	353,500	
	<b>3300</b>		<b>Meeting/Conferences</b>												
		3301	Validation workshops for the NAS, sectoral strategies and laws	27,000					27,000	2,700	0	10,800	13,500	27,000	
		3302	Workshop for the development of the website			3,000			3,000	0	3,000	0	0	3,000	
		<b>3399</b>	<b>Sub-total</b>	27,000	0	3,000	0	0	30,000	2,700	3,000	10,800	13,500	30,000	
<b>3999</b>			<b>Component total</b>	234,000	98,500	51,000	0	0	383,500	78,200	145,000	102,800	57,500	383,500	
<b>40</b>	<b>EQUIPMENT AND PREMISES COMPONENT</b>														
	<b>4100</b>		<b>Expendable equipment</b>												
		4101	Computer equipment				14,000		14,000	8,000	2,000	2,000	2,000	14,000	
		4102	Office supplies				13,000		13,000	6,000	3,000	3,000	1,000	13,000	
		<b>4199</b>	<b>Sub-total</b>	0	0	0	27,000	0	27,000	14,000	5,000	5,000	3,000	27,000	
	<b>4200</b>		<b>Non-expendable Equipment</b>												
		4201	Equipment for data collection and analysis	105,000					105,000	71,000	0	34,000	0	105,000	16
		4202	Awareness-raising equipment	119,000					119,000	22,670	79,330	17,000	0	119,000	17
		4203	Support for the process of creation of each AGLC	33,977					33,977	11,322	22,655	0	0	33,977	18

		4204	Establishment of tree nurseries for the planting activities		341,188				341,188	80,000	190,000	40,000	31,188	341,188	19
		4205	Restoration of watersheds including water conservation methods		247,500				247,500	37,500	80,000	80,000	50,000	247,500	
		4206	Establishment of tree nurseries to be planted in 300 hectares of set-aside pastoral lands		120,000				120,000	40,000	50,000	20,000	10,000	120,000	20
		4207	Sowing on 100 ha of set-aside rangeland		20,000				20,000	0	20,000	0	0	20,000	
		4208	Fencing 300 ha of rangeland including the development of a rotation system for setting-aside		510,000				510,000	110,000	250,000	150,000	0	510,000	
		4209	Establishment of tree nurseries to be planted in 390 ha of drifting dunes		120,000				120,000	40,000	50,000	30,000	0	120,000	
		4210	Dune fixation with stick and trees		546,000				546,000	96,000	250,000	200,000	0	546,000	
		4211	Restoration of 150 hectares of listed forests including water conservation methods		315,000				315,000	70,000	150,000	70,000	25,000	315,000	
		4212	Restoration of 210 hectares of Acacia woodlands including water conservation methods		399,000				399,000	60,000	130,000	130,000	79,000	399,000	
		4213	Establishment of tree nurseries for the fire-resilient green breaks		50,000				50,000	10,000	20,000	15,000	5,000	50,000	
		4214	Plantation of 20 hectares of fire-resilient green breaks		22,000				22,000	0	15,000	7,000	0	22,000	

		4215	Provide the required equipment to adopt agropastoral practices that are climate-resilient		507,900				507,900	50,000	150,000	250,000	57,900	507,900	21
		4216	Provide the required equipment to adopt climate-resilient livelihoods based on NTFPs		270,000				270,000	0	80,000	160,000	30,000	270,000	22
		4217	Data collection and analysis equipment			40,000			40,000	0	20,000	20,000	0	40,000	23
		4218	Archiving equipment			55,827			55,827	0	33,580	16,580	5,667	55,827	24
		4219	Purchasing vehicles			85,858			85,858	85,858	0	0	0	85,858	
		4299	Sub-total	257,977	3,468,588	181,685	0	0	3,908,250	784,350	1,590,565	1,239,580	293,755	3,908,250	
4999		Component total		257,977	3,468,588	181,685	27,000	0	3,935,250	798,350	1,595,565	1,244,580	296,755	3,935,250	
50	MISCELLANEOUS COMPONENT														
	5100		Operation and maintenance of equipment												
		5101	Vehicule maintenance		33,000				33,000	8,000	8,000	8,500	8,500	33,000	
		5199	Sub-total	0	33,000	0	0	0	33,000	8,000	8,000	8,500	8,500	33,000	
	5200		Reporting costs												
		5201	Reports		24,000				24,000	6,000	6,000	6,000	6,000	24,000	
		5299	Sub-total	0	24,000	0	0	0	24,000	6,000	6,000	6,000	6,000	24,000	
	5300		Sundry												
		5301	Production of the guidelines	9,000					9,000	3,000	6,000	0	0	9,000	
		5302	Printing of geo-reference digital maps for each targeted AGLCs		7,500				7,500	3,500	4,000	0	0	7,500	25
		5303	Communication for PM and M&E				20,000		20,000	5,000	5,000	5,000	5,000	20,000	
		5399	Sub-total	9,000	7,500	0	20,000	0	36,500	11,500	15,000	5,000	5,000	36,500	
	5500		Evaluation												

		5501	Baseline					40,000	40,000	40,000	0	0	0	40,000	
		5502	Mid-term evaluation					35,000	35,000	0	35,000	0	0	35,000	
		5503	Final evaluation					35,000	35,000	0	0	0	35,000	35,000	
		5504	Inception workshop and report					12,300	12,300	12,300	0	0	0	12,300	
		5505	External financial audit					20,000	20,000	5,000	5,000	5,000	5,000	20,000	
		5599	Sub-total	0	0	0	0	142,300	142,300	57,300	40,000	5,000	40,000	142,300	
5999		Component total		9,000	64,500	0	20,000	142,300	235,800	82,800	69,000	24,500	59,500	235,800	
99	GRAND TOTAL			541,477	3,711,238	374,785	230,200	142,300	5,000,000	1,038,370	1,965,385	1,504,740	491,505	5,000,000	

Budget notes:

Number	Budget note
1	The international consultant will develop context-specific technical guidelines on EbA for each of the three groups, including developing a template of the guiding document and the preparation of training events for the use of these guidelines. At least one day of training will be organised for each group. The national consultant will prepare material for the DREDDs on how to monitor adaptation interventions and deliver training to the DREDDs based on this material. 3 days of training will be provided at the beginning of the project implementation phase in each of the targeted wilayas (training events for Assaba and Guidimaka will be combined) and when most of the activities are in place, i.e. approximately at the mid-term of the project. Additionally, the international consultant will oversee the selection of natural and agropastoral ecosystems to be targeted by the project and will support the study on the state of those ecosystems. The international consultant will also participate in the development and implementation of LDPs, including EbA interventions of the proposed project.
2	The national consultant will oversee the preparation of the National Strategy for Adaptation. This will include the validation workshop. In addition, the revision of sectoral strategies and plans to integrate EbA (at least 5 documents will be revised) as well as the revision of sectoral laws (at least 4 documents will be revised) will be undertaken. One validation workshop will be organised for each document.

3	The national consultant will be responsible for conducting a stock-take of existing local associations in the intervention areas and evaluating how functional and efficient they are. AGLCs already in existence will be reviewed. Thereafter, the consultant will identify sites for the establishment of 15 AGLCs. The national consultant will be responsible for the process through which these AGLCs will be established. In addition, the national consultant will prepare training material for the steering committee of AGLCs on the sustainable management of natural resources using an EbA approach. 2 sessions of 3 days will be organised in each wilaya (the sessions for Assaba and Guidimaka will be combined). In addition, the national consultant will develop and implement a national awareness-raising campaign on adaptation to climate change and the value of viable ecosystems. The national consultant will be responsible for designing the campaign and developing the awareness-raising material. This will involve intensive consultations with national stakeholders. In addition, the national consultant will review the GoM's websites currently available to policy- and decision-makers, technical staff and other relevant stakeholders. According to the structure and content of these websites, the national consultant will propose revisions that facilitate improved access to information on adapting to climate change, including documents generated under the proposed project.
4	The international specialist in fire-resilient green breaks will design the planting activities, produce planting and maintenance protocols, and provide training to the AGLC members and the management team of APCFB on restoration techniques.
5	The national consultant will select the ecosystems to benefit from the project interventions in collaboration with the international consultant. The national consultant will also oversee the baseline surveys in each of the AGLCs and the production of geo-referenced maps of natural resources. Four days are allocated for each baseline survey. Additionally, the national consultant will support the AGLCs in developing LDPs that include the interventions of the proposed project, further EbA interventions and PES systems if appropriate. In addition, the national consultant will identify: i) best adaptation practices from the proposed project and related projects according to the system developed under Output 3.1; and ii) replication sites for the most successful practices. The national consultant will also: i) develop material for training and awareness-raising and ii) organise training events for AGLC members and local authorities on the use of best adaptation interventions in their area. Finally, the national consultant will develop a funding strategy to enable the upscaling of best adaptation interventions in consultation with national stakeholders.
6	A national gender expert will identify the gender issues relative to climate change in the AGLCs selected for the implementation of the on-the-ground interventions, and develop recommendations for the project management team to further promote gender equity in the interventions of the project, particularly under Component 2.
7	The national consultant will produce digitised maps for natural resources for each of the targeted AGLCs. 45 days are allocated to the data collection, analysis and production of 12 geo-referenced maps.
8	The national specialist in pastoralism and adaptation will design the restoration activities, produce restoration and maintenance protocols, and provide training to the AGLC members on the restoration techniques. In addition, the national consultant will be responsible for identifying the best practices to increase the resilience of agropastoral activities to climate change. The national consultant will also provide the list of necessary equipment and train local community members on these new practices as well as the maintenance of this equipment. The national consultant will also be responsible for identifying the best income-generating activities based on NTFPs to be developed under the interventions of the proposed project. During the early stages of the proposed project, the national consultant will participate in the selection of species to be planted as part of the restoration activities under Output 2.2.
9	The selected service provider will collaborate with the specialist in awareness-raising to develop the website.
10	The selected service provider will collaborate with the specialist in project monitoring and knowledge management to set up the system for data analysis and archiving. This will both include implementing the system and providing the necessary assistance to support its use by the stakeholders.
11	Awareness-raising material to be developed include TV and radio shows, art and pamphlets. The budget allocated for this is US\$84,600.
12	A workshop will be organised in each commune targeted by the project. A budget of US\$6,000 is allocated for each workshop. This budget will include: i) reviewing existing LDPs; ii) training local authorities on EbA and its integration into LDPs; and iii) integrating EbA into existing LDPs or create LDPs when missing.
13	US\$7,000 is allocated to organising three sessions of two days of training for the steering committees of AGLCs in each wilaya (the steering committees of AGLCs in the wilayas of Assaba and Guidimaka will be trained jointly). This budget includes the transportation of committee members to the training sites.
14	US\$1,166 is allocated for each participatory baseline survey.

15	US\$1000 is allocated per workshop to cover for the provision of drinks, snacks, small material and transportation costs for the participants where needed. Three workshops are budget for to create each LDP.
16	The equipment for data collection and analysis to be provided includes GPS devices, cameras, species identification books, sampling material and apparatus to measure vegetation indices and water quality. US\$35,000 is allocated to the regional authorities of each wilaya (the regional authorities of Assaba and Guidimaka will receive a combined budget of US\$35,000).
17	The budget of US\$40,000 is allocated to each wilaya (Assaba and Guidimaka will receive a combined budget of US\$40,000) and the beneficiaries will be DREDDs, CREDDs and other regional delegations. The equipment to be purchased includes: i) projectors and screens; ii) advertising boards; iii) whiteboards; iv) raw material such as felt pens and paper for implementing awareness-raising exercises such as the production of 3D maps.
18	A budget of US\$2,200 allocated to support local communities to establish AGLCs including travel to and from Nouakchott.
19	US\$28,432 is allocated for each nursery (four nurseries will be established in Hodh El Gharbi and Hodh El Chargui, respectively and four nurseries will be divided between Assaba and Guidimaka) to: i) build nurseries and purchase the required material, including seedlings, containers, and shading equipment; and ii) purchase construction material to restore watersheds, listed forests and <i>Acacia</i> woodlands.
20	US\$20,000 is allocated per nursery (two nurseries in Hodh El Gharbi and Hodh El Chargui, respectively and two nurseries divided between Assaba and Guidimaka) to i) build nurseries and purchase required material including seedlings, containers, shading equipment; and ii) purchase construction material to restore 300 hectares of set-aside rangeland.
21	This will include: i) the establishment of nurseries to grow agroforestry species providing NTFPs; ii) the provision of crop species; iii) the development of drought-resilient irrigation methods; and iv) training on the cultivation of the planted species. US\$169,300 is allocated to increase the resilience of agropastoralism in the intervention sites.
22	US\$90,000 per wilaya (the wilayas of Assaba and Guidimaka will receive a combined amount of US\$90,000) is allocated for the purchase of equipment required for collecting, processing and conserving NTFPs and to provide the corresponding training. Potential material to be provided includes an oil press, stocking material, conservation material, drying material, a mill and weighing scales.
23	The data collection and analysis equipment provided at the national level will be similar to the one provided at the regional level under Activity 1.2.2, but refined according to stakeholder needs. The information collected by regional delegations will determine how a system for data collection and analysis is institutionalised. US\$35,000 is allocated at the national level.
24	The archiving equipment will include hard drives, flash disks, CDs, archiving software, an appropriate IT system and a contribution towards the establishment of a consulting room, including the purchase of books.
25	Each geo-referenced map will be printed five times in large format (A0) for distribution to AGLCs and DREDDs.

**Table 1.** Co-financing by source and UNEP budget lines.

Project number:						
Project executing partner				Direction for the Protection of Nature (DPN) in partnership with Ministry of Environment and Sustainable Development (MEDD) and Ministry of Livestock Husbandry (ME), Ministry of Agriculture (MA) and Ministry of Hydraulics and Sanitation (MHA)		
Project implementation period						
From:				GEF	National government	National government
To:				Grant	Cash	In kind
UNEP Budget Line						
	1100		Project personnel			
		1101	National project manager (48 months @ \$2500/month)	120,000	0	0
		1199	Sub-total	120,000	0	0
	1200		Consultants			
		1201	International specialist in EbA (20 days @ \$500/day; 1 flights @ \$2500/flight; 15 days in-country @ \$166/day)	15,000	0	249,688
		1202	National Technical Advisor (50 days @ \$150/day)	7,500	0	124,844
		1203	National specialist in policy-making and adaptation (40 days @ \$150/days)	6,000	0	99,875
		1204	National specialist in local management of natural resources, adaptation and awareness raising (80 days @ \$150/days)	12,000	0	199,750
		1205	International specialist in fire-resilient green breaks (30 days @ \$500/day; 1 flight @ \$2500/flight; 20 days in-country @ \$166/day)	21,000	0	349,563
		1206	National specialist in management of natural resources and adaptation to climate change (30 days @ \$150/day)	4,500	0	74,906
		1207	National gender specialist (30 days @ \$150/day)	4,500	0	74,906
		1208	National expert in geomatics (45 days @ \$150/day)	6,750	0	112,360
		1209	National specialist in pastoralism, agronomics and climate-resilient livelihoods (30 days @ \$150/day)	4,500	0	74,906

		1210	Field officers for Assaba, Guidimaka, Hodh El Gharbi and Hodh El Chargui (2 x 48 months @ \$400/month)	38,400	0	639,201
		1299	Sub-total	120,150	0	2,000,000
	1300		Administrative Support			
		1301	Administrative Assistant (48 months @ \$300/month)	14,400		
		1302	Financial Assistant (48 months @ \$500/month)	24,000		
		1303	M&E Specialist (8 months @ \$2500/month)	20,000		
		1304	Project Steering Committee meetings	4,800	20,000	
		1399	Sub-total	63,200	20,000	0
	1600		Travel on official business			
		1699	Sub-total	0	0	0
1999		Component total		303,350	20,000	2,000,000
20	SUB-CONTRACT COMPONENT					
	2100		Sub-contracts (MOUs/LOAs for supporting organisations)			
		2101	Subcontract for the development of the website	22,000		
		2102	Subcontract for the development of the data collection, analysis and archiving system	35,500		
		2199	Sub-total	57,500	0	0
	2200		Sub-contracts (for commercial purposes)			
		2201	Subcontract for the production of the awareness-raising material including TV and radio shows	84,600		
		2299	Sub-total	84,600	0	0
2999		Component total		142,100	0	0
30	TRAINING COMPONENT					
	3200		Group training			
		3201	Workshops for the integration of EbA into decision-making and LDPs	60,000	5,000	339,463
		3202	One-day training for each of the 3 groups on the use of the EbA guidelines	12,000	5,000	67,893
		3203	Two sessions of 3 days will be provided in each of the five wilayas	48,000	5,000	282,885



		3204	Three-days training of the organisation of awareness-raising campaigns in the wilayas	24,000	5,000	141,443
		3205	Training for the steering committees of 27 AGLCs	63,000	5,000	339,463
		3210	One participatory baseline survey for each AGLCs.	31,500	5,000	178,218
		3211	Workshops for the development of LDPs.	27,000	5,000	152,758
		3212	Training of the AGLC members to implement the restoration activities	20,000	5,000	113,154
		3213	Training of the AGLC members on the climate-resilient sources of income	20,000	5,000	113,154
		3214	Ten training days on the central system for data collection, analysis and archiving	30,000	5,000	169,731
		3215	Training on the use of appropriate adaptation practices in the replication sites.	18,000	5,000	101,839
		<b>3299</b>	<b>Sub-total</b>	<b>353,500</b>	<b>55,000</b>	<b>2,000,000</b>
	<b>3300</b>		<b>Meeting/Conferences</b>			
		3301	Validation workshops for the NAS, sectoral strategies and laws	27,000		
		3302	Workshop for the development of the website	3,000	10,000	
		<b>3399</b>	<b>Sub-total</b>	<b>30,000</b>	<b>10,000</b>	<b>0</b>
<b>3999</b>			<b>Component total</b>	<b>383,500</b>	<b>65,000</b>	<b>2,000,000</b>
<b>40</b>	<b>EQUIPMENT AND PREMISES COMPONENT</b>					
	<b>4100</b>		<b>Expendable equipment</b>			
		4101	Computer equipment	14,000	10,000	
		4102	Office supplies	13,000	20,000	
		<b>4199</b>	<b>Sub-total</b>	<b>27,000</b>	<b>30,000</b>	<b>0</b>
	<b>4200</b>		<b>Non-expendable Equipment</b>			
		4201	Equipment for data collection and analysis	105,000	30,000	107,465
		4202	Awareness-raising equipment	119,000	30,000	121,794
		4203	Support for the process of creation of each AGLC	33,977		34,775
		4204	Establishment of tree nurseries for the planting activities	341,188		349,198
		4205	Restoration of watersheds including water conservation methods	247,500		253,310
		4206	Establishment of tree nurseries to be planted in 300 hectares of set-aside pastoral lands	120,000		122,817
		4207	Sowing on 100 ha of set-aside rangeland	20,000		20,470

		4208	Fencing 300 ha of rangeland including the development of a rotation system for setting-aside	510,000		521,973
		4209	Establishment of tree nurseries to be planted in 390 ha of drifting dunes	120,000		122,817
		4210	Dune fixation with stick and trees	546,000		558,818
		4211	Restoration of 150 hectares of listed forests including water conservation methods	315,000		322,395
		4212	Restoration of 210 hectares of Acacia woodlands including water conservation methods	399,000		408,367
		4213	Establishment of tree nurseries for the fire-resilient green breaks	50,000		51,174
		4214	Plantation of 20 hectares of fire-resilient green breaks	22,000		22,516
		4215	Provide the required equipment to adopt agropastoral practices that are climate-resilient	507,900		519,823
		4216	Provide the required equipment to adopt climate-resilient livelihoods based on NTFPs	270,000	10,000	276,339
		4217	Data collection and analysis equipment	40,000	30,000	40,939
		4218	Archiving equipment	55,827	25,000	57,138
		4219	Purchasing vehicles	85,858		87,874
		4299	Sub-total	3,908,250	125,000	4,000,000
4999		Component total		3,935,250	155,000	4,000,000
50	MISCELLANEOUS COMPONENT					
	5100		Operation and maintenance of equipment			
		5101	Vehicule maintenance	33,000	40,000	
		5199	Sub-total	33,000	40,000	0
	5200		Reporting costs			
		5201	Reports	24,000	10,000	
		5299	Sub-total	24,000	10,000	0
	5300		Sundry			
		5301	Production of the guidelines	9,000		
		5302	Printing of geo-reference digital maps for each targeted AGLCs	7,500		
		5303	Communication for PM and M&E	20,000	10000	
		5399	Sub-total	36,500	10,000	0
	5500		Evaluation			

		5501	Baseline	40,000		
		5502	Mid-term evaluation	35,000		
		5503	Final evaluation	35,000		
		5504	Inception workshop and report	12,300		
		5505	External financial audit	20,000		
		5599	Sub-total	142,300	0	0
5999		Component total		235,800	60,000	0
99	GRAND TOTAL			5,000,000	300,000	8,000,000

## Annex G: Workplan

Output	Activity	Annual breakdown				Quarterly breakdown															
		Year 1	Year 2	Year 3	Year 4	Year 1				Year 2				Year 3				Year 4			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Outcome 1:																					
Output 1.1	1.1.1																				
	1.1.2																				
	1.1.3																				
	1.1.4																				
	1.1.5																				
	1.1.6																				
Output 1.2	1.2.1																				
	1.2.2																				
	1.2.3																				
	1.2.4																				
Output 1.3	1.3.1																				
	1.3.2																				
	1.3.3																				
Outcome 2:																					
Output 2.1	2.1.1																				
	2.1.2																				
	2.1.3																				
	2.1.4																				
	2.1.5																				
Output 2.2	2.2.1																				
	2.2.2																				
	2.2.3																				
	2.2.4																				
	2.2.5																				
Output 2.3	2.3.1																				
	2.3.2																				
	2.3.3																				
Outcome 3:																					
Output 3.1	3.1.1																				
	3.1.2																				

Output	Activity	Annual breakdown				Quarterly breakdown															
	3.1.3																				
	3.1.4																				
Output 3.2	3.2.1																				
	3.2.2																				
Output 3.3	3.3.1																				
	3.3.2																				
	3.3.3																				

## **Annex H: Tracking Tool for Climate Change Adaptation Projects**


Attached as a separate file.

## Annex I: OFP Endorsement Letter

République Islamique de Mauritanie  
Honneur – Fraternité – Justice

**Ministère Délégué auprès  
du Premier Ministre  
Chargé de l'Environnement  
et du Développement Durable**

**Direction de la Programmation de la  
Coordination et de l'Information  
Environnementale**



الجمهورية الإسلامية الموريتانية  
شرف – إخاء – عدل

**وزارة المنتدبة لدى الوزير الأول  
المكلفة بالبيئة والتنمية  
المستدامة**

**إدارة البرمجة والتنسيق  
والمعلومات البيئية**

N° ..... 0000159 ..... /DPCIE

N Réf:

V Réf:

رقم..... اب ت م

Nouakchott le 24 June 2019 انواكشوط

*Le Directeur*

المدير

TO / MARYAM NIAMIR-FUELLER  
DIRECTOR, GEF COORDINATION OFFICE  
UNEP, NAIROBI, KENYA

**Endorsement for development of an improved and innovative delivery system for climate resilient livelihoods in Mauritania**

In my capacity as GEF Operational Focal Point for Mauritania, I confirm that the above project proposal is (a) in accordance with my government's national priorities including the priorities identified in the National Adaptation Programme of Action of Mauritania and our commitment to the relevant global environmental conventions and (b) was discussed with relevant stakeholders, including the global environmental conventions focal points.

I am pleased to endorse the preparation of the above Project proposal with support of UNEP. If approved, the proposal will be prepared and implemented by MDEDD-CCPNCC. I request UNEP to provide a copy of the project document before it is submitted to the GEF Secretariat for CEO endorsement.

The total financing from LDCF being requested for this Project is **US\$ 5 584 500**, inclusive of the Project Preparation Grant (PPG), if any, and Agency fees for project cycle management services associated with the total GEF grant. The financing requested for Mauritania is detailed in the table below.

Source of Funds	GEF Agency	Focal Area	Amount (in US dollar)			
			Project Preparation	Project	Fees	TOTAL
LDCF	UNEP	CC	100,000	5 000 000	484 500	5 584 500

**Mohamed Yahya LAFDAL**

GEF Political and Operational Focal Point



Copy to :

• UNFCCC - NFP

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BP : 170- Tél./ Fax : +222 524 31 43 - Rue 21-185- Ksar- Nouakchott - Mauritanie

## Annex J: Co-finance Letter

<b>République Islamique de Mauritanie</b> Honneur – Fraternité – Justice <b>Ministère de l'Environnement et du Développement Durable</b>		<b>الجمهورية الإسلامية الموريتانية</b> شرف – إخاء – عدل <b>وزارة البيئة والتنمية المستدامة</b>
N° 0069 / MEDD/SG	Nouakchott, le: 29 DEC 2014	انواكشوط في:
<b>Le Secrétaire Général الأمين العام</b>		
V/Réf :	A	
V/Réf :	<b>Dr. Naoko Ishii</b> <b>CEO &amp; Chairperson</b> Global Environment Facility 1818 H Street, NW Washington DC 20433, USA Email: <a href="mailto:nishii@thegef.org">nishii@thegef.org</a>	
<p><b>Objet :</b> Engagement du Ministère de l'Environnement et du Développement Durable pour le cofinancement du projet GEF LDCF intitulé « renforcement de la capacité technique et institutionnelle du gouvernement aux niveaux national et local pour réduire la vulnérabilité des communautés locales aux changements climatiques dans les zones de pâturage de Mauritanie »</p> <p>Le Ministère de l'Environnement et du Développement Durable est chargé de la protection, conservation et du développement des ressources naturelles. A ce titre, il exécute annuellement le « <b>Programme Annuel de Lutte Contre les Feux de Brousse (APCBF)</b> ». Ce programme sert de ligne de base au projet GEF LDCF financé à hauteur de 5 Millions de dollars USA.</p> <p>Cette lettre est destinée à confirmer le cofinancement du projet GEF LDCF par la Mauritanie à hauteur de 600 Millions MRO par an correspondant pour la durée de 4 ans du projet à 2,400 Milliards MRO, équivalents à <b>8,00 Millions USD</b> à travers le « <b>Programme Annuel de Lutte Contre les Feux de Brousse (APCBF)</b> » exécuté par le Ministère de l'Environnement et du Développement Durable. Un cofinancement à hauteur de 500.000 USD (10% du financement mobilisé par le GEF LDCF) répartis sur la durée du projet est accordé à titre de contrepartie par le budget d'investissement consolidé (BCI) de l'Etat pour renforcer les capacités des structures du Ministère de l'Environnement et du Développement Durable en charge de l'exécution dudit projet.</p> <p>Ce qui porte le montant du cofinancement total de la Mauritanie à HUIT MILLION CINQ CENT MILLE DOLLARS USA ( 8.500.000 USD ).</p> <p>Nous nous réjouissons de cette collaboration rapprochée.</p> <p>Cordialement,</p>		
<b>Ampliations :</b> <ul style="list-style-type: none"><li>- MEDD</li><li>- PF GEF</li><li>- PF UNFCCC</li></ul>	<b>MOHAMED ABDALLAH SALEH OULD AHMEDOUA</b> 	
ص. ب: 170 - هاتف/فاكس: (+222) 45 24 31 39 - شارع: 21 - 185 - رقم: 838 - لكسر - انواكشوط - موريتانيا B P: 170 - Tél : (+222) 45 24 31 39 - Rue : 21 - 185 N° 838 Ksar - Nouakchott - Mauritanie		



## Annex K: Environmental and Social Safeguards

Please note that as part of the GEFs evolving Fiduciary Standards that Implementing Agencies have to meet is the need to address ‘Environmental and Social Safeguards’.

To address this requirement UNEP-GEF have developed this checklist with the following guidance:

1. Initially filled in during concept development to help guide in the identification of possible risks and activities that will need to be included in the project design.
2. A completed checklist should accompany the PIF.
3. Check list reviewed during PPG phase and updated as required.
4. Final check list submitted with Project Package clearly showing what activities are being undertaken to address issues identified.

<b>Project Title:</b>	Development of an improved and innovative management system for sustainable climate-resilient livelihoods in Mauritania.		
<b>GEF project ID and UNEP ID/IMIS Number</b>	1159	<b>Version of checklist</b>	One
<b>Project status (preparation, implementation, MTE/MTR, TE)</b>	<b>Preparation</b>	<b>Date of this version:</b>	<i>Mar-15</i>
<b>Checklist prepared by (Name, Title, and Institution)</b>	<i>Nina Raasakka, Task Manager, GEF CCAU, DEPI UNEP.</i>		

*In completing the checklist both short- and long-term impacts shall be considered.*

### Section A: Project location:

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
Is the project area in or close to a		
- densely populated area	No	The project will be implemented in the Sahelian Acacia Savanna Ecoregion near the Senegal River valley which has a population density of around 10-20 people per km <sup>2</sup> . This is more densely populated than the majority of Mauritania that borders the western Sahara desert, but is not as densely populated as the capital, Nouakchott. At least 500 households will be targeted by the on-the-ground interventions of the project. With an average of 6.3 people per household in the project area, at least 9,450 individuals will benefit directly from Component 2. No negative impact is anticipated as the project's interventions aim to build adaptive capacity of national and local government by raising awareness on climate risks and rehabilitated ecosystems.
- cultural heritage site	No	
- protected area	No	
- wetland	No	
- mangrove	No	

- estuarine	No	
- buffer zone of protected area	No	
- special area for protection of biodiversity	No	
- Will project require temporary or permanent support facilities?	No	
<i>If the project is anticipated to impact any of the above areas an Environmental Survey will be needed to determine if the project is in conflict with the protection of the area or if it will cause significant disturbance to the area.</i>		

**Section B: Environmental impacts, i.e.**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
- Are ecosystems related to project fragile or degraded?	Yes	The Sahelian Acacia Savanna Ecoregion is considered fragile and is already degraded. Provisioning of ecosystem goods and services is suboptimal. In addition, the current level of degradation is expected to increase with current and future effects of climate change. Consequently, these ecosystems are targeted for rehabilitation and resilience-building under the project.
- Will project cause any loss of precious ecology, ecological, and economic functions due to construction of infrastructure?	No	No infrastructure likely to cause any ecological or economic damages will be built under the project.
- Will project cause impairment of ecological opportunities?	No	This project seeks to increase ecological opportunities.
- Will project cause increase in peak and flood flows? (including from temporary or permanent waste waters)	No	The project will contribute to reduced risk of flooding through planting trees in watersheds.
- Will project cause air, soil or water pollution?	No	No pollution will be generated by the project activities.
- Will project cause soil erosion and siltation?	No	This project will lead to improved soil restoration techniques implemented by rural communities.
- Will project cause increased waste production?	No	The project activities will not cause any increase in waste production.
- Will project cause hazardous Waste production?	No	The project activities will not generate any hazardous waste.
- Will project cause threat to local ecosystems due to invasive species?	No	For all planting activities, priority will be given to indigenous species. After indigenous species, priority will be given to resident species. If further species are required, only species that grow in neighbouring countries, in similar conditions and do not present an invasion risk will be considered.
- Will project cause Greenhouse Gas Emissions?	No	Under the restoration activities of Output 2.2, at least 600,000 trees will be planted. In addition, the construction of green firebreaks will reduce the loss of trees resulting from bushfires. Both of these outputs will reduce the atmospheric concentration of greenhouse gases.
- Other environmental issues, e.g. noise and traffic	No	
<i>Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.</i>		

### Section C: Social impacts

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
- Does the project respect internationally proclaimed human rights including dignity, cultural property and uniqueness and rights of indigenous people?	Yes	Consultations with national and provincial government, NGOs and CBOs were held during PPG phase and will continue to ensure alignment with Mauritania's social goals and internationally proclaimed human rights in accordance with UN guidelines.
- Are property rights on resources such as land tenure recognized by the existing laws in affected countries?	Yes	According to the revised Forestry Law, the management of natural resources is the responsibility of local authorities who can delegate it to AGLCs if the latter request this mandate. The project will apply this law through organising the project beneficiaries into AGLCs and supporting them in the sustainable management of these resources.
- Will the project cause social problems and conflicts related to land tenure and access to resources?	No	No social problems or conflicts are expected. Firstly, the AGLC system will ensure that all members benefit from the project interventions rather than specific individuals. Secondly, the distribution of material for the development of climate-resilient livelihoods will be undertaken in a transparent manner to ensure widespread understanding of the selection criteria. Thirdly, decision-making for on-the-ground interventions will be undertaken in participatory meetings involving local community members and CBOs such as youth and women associations. If any conflict exists, it is expected to arise during these meetings where solutions will be provided by the management team.
- Does the project incorporate measures to allow affected stakeholders' information and consultation?	Yes	Stakeholders' vulnerability is a major criteria for the selection of project beneficiaries (see Appendix 8.15). All on-the-ground activities will be implemented by rural communities. As part of these interventions, rural communities will be trained and a participatory approach to decision-making will be used. In addition, a national awareness-raising campaign on the effects of climate change, EbA and climate-resilient practices will be undertaken.
- Will the project affect the state of the targeted country's institutional context?	Yes	The focus of Component 1 is the building of institutional and technical capacity in national and local government to assist rural communities in the implementation of EbA. This increased capacity, in combination with the establishment of a SNA, the revision of policies, strategies and plans and the development of an upscaling strategy will promote the replication and maintenance of adaptation interventions to build climate-resilient livelihoods, based on an EbA approach. Therefore, the project will be beneficial to Mauritania's institutional context.
- Will the project cause change to beneficial uses of land or resources? (incl. loss of downstream beneficial uses (water supply or fisheries)?	No	The project is designed to enhance ecosystem services and access to resources. This includes increasing water infiltration and reducing erosion.
- Will the project cause technology or land use modification that may change present social and economic activities?	Yes	The project seeks to promote climate-resilient income-generating activities in rangeland areas. Consequently, economic activities are expected to be partly modified. This will happen during the implementation phase.
- Will the project cause dislocation or involuntary resettlement of people?	No	No translocation of people is required for the project activities.
- Will the project cause uncontrolled in-migration (short- and long-term) with opening of roads to areas and possible	No	No new roads will be built under the interventions of the project and no movement of people is expected.

overloading of social infrastructure?		
- Will the project cause increased local or regional unemployment?	No	No long-term change in formal employment is anticipated to occur as a result of project activities. Community members will be employed for short periods to achieve specific project objectives where necessary. Livelihoods of rural communities will be developed in project sites to improve community resilience to the effects of climate change.
- Does the project include measures to avoid forced or child labour?	Yes	The project conforms to national and international guidelines and laws regarding forced labour. All required labour (short-term employment only) will be provided through community engagement and remunerated in accordance with national laws.
- Does the project include measures to ensure a safe and healthy working environment for workers employed as part of the project?	Yes	The project conforms to all national and international guidelines and laws regarding health and safety for workers employed as part of the project. Community training for the implementation of on-the-ground interventions will ensure that health and safety regulations are understood and adhered to.
- Will the project cause impairment of recreational opportunities?	No	The planting of species for NTFPs will promote recreational opportunities.
- Will the project cause impairment of indigenous people's livelihoods or belief systems?	No	The project implementations will be undertaken after stakeholder consultation and in accordance with local belief systems. Livelihoods of people in the intervention sites will be improved by the project's activities.
- Will the project cause disproportionate impact to women or other disadvantaged or vulnerable groups?	No	The project will help reduce the exposure of climate vulnerable groups, including women, youth and people reliant on small-scale agriculture and herding to climate risks.
- Will the project involve and or be complicit in the alteration, damage or removal of any critical cultural heritage?	No	
- Does the project include measures to avoid corruption?	Yes	All project disbursements will be monitored by UNEP administrative structures and regular reporting by the project management team will ensure financial and administrative transparency is maintained throughout the project's lifetime.
<i>Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.</i>		

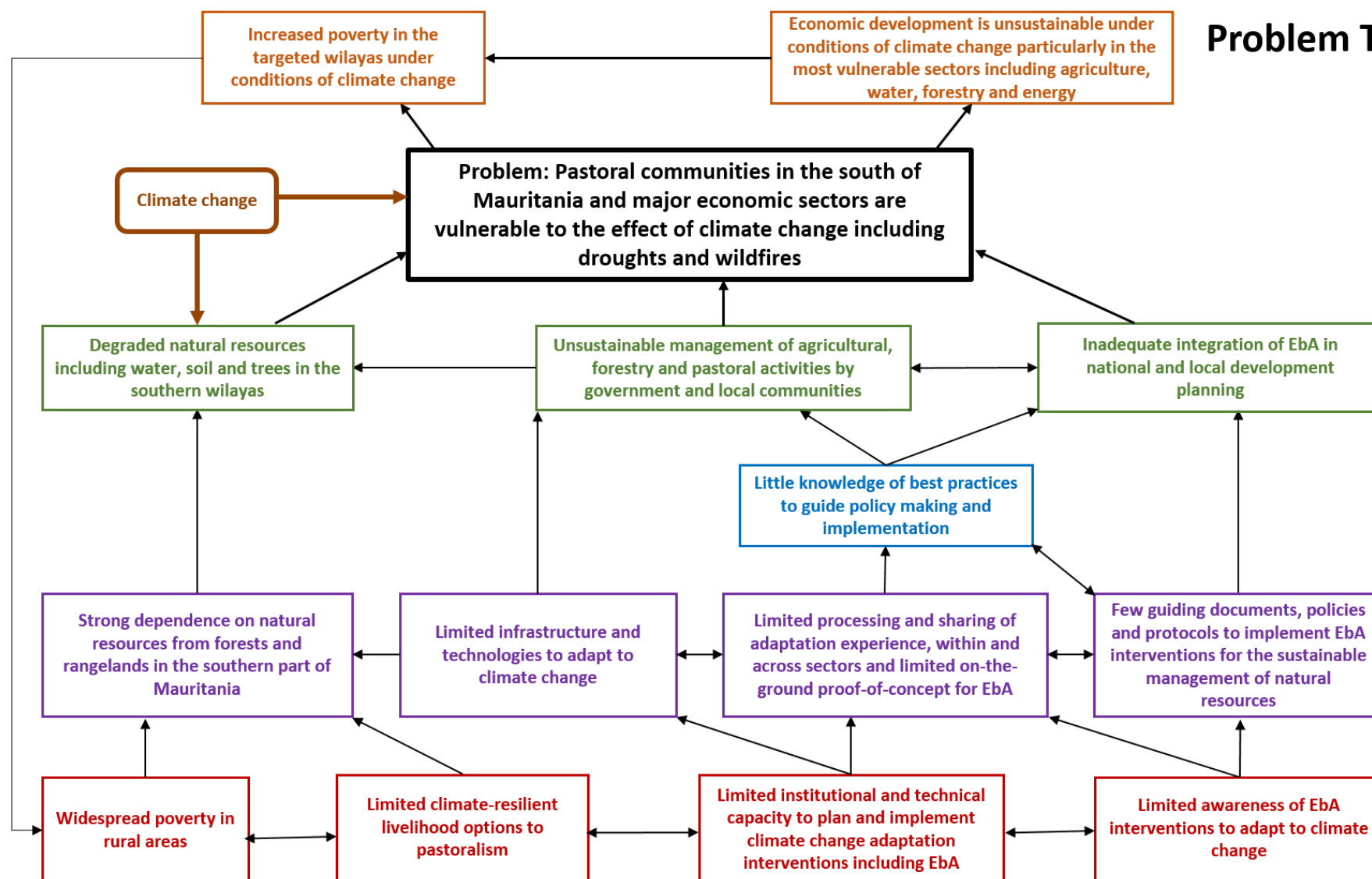
#### **Section D: Other considerations**

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
- Does national regulation in affected country require EIA and/or ESIA for this type of activity?	No	There is not a sufficiently large structural component to this project to trigger an EIA.
- Is there sufficient national capacity to ensure a sound implementation of EIA and/or SIA requirements present in affected country?	N/A	
- Is the project addressing issues, which are already addressed by other alternative approaches and projects?	No	The APCBF programme focuses on the reduced frequency and extent of bushfires. However, this project has not considered the effects of climate change or the use of EbA measures to address these effects. The ACCMR project implements similar activities to the project to

		increase drought-resilience through the sustainable management of natural resources. However as activities of the ACCMR project and the project will be implemented in different wilayas, opportunities for synergy and complementarity will arise.
- Will the project components generate or contribute to cumulative or long-term environmental or social impacts?	Yes	The project seeks to increase adaptive capacity in forests and rangelands under the conditions of climate change. This will result in positive social and environmental impacts.
- Is it possible to isolate the impact from this project to monitor E&S impact?	Yes	Indicators were developed during the PPG phase to monitor the E&S effects of the project. Additional indicators will be developed if required during the baseline study to ensure comprehensive monitoring of the project's progress.

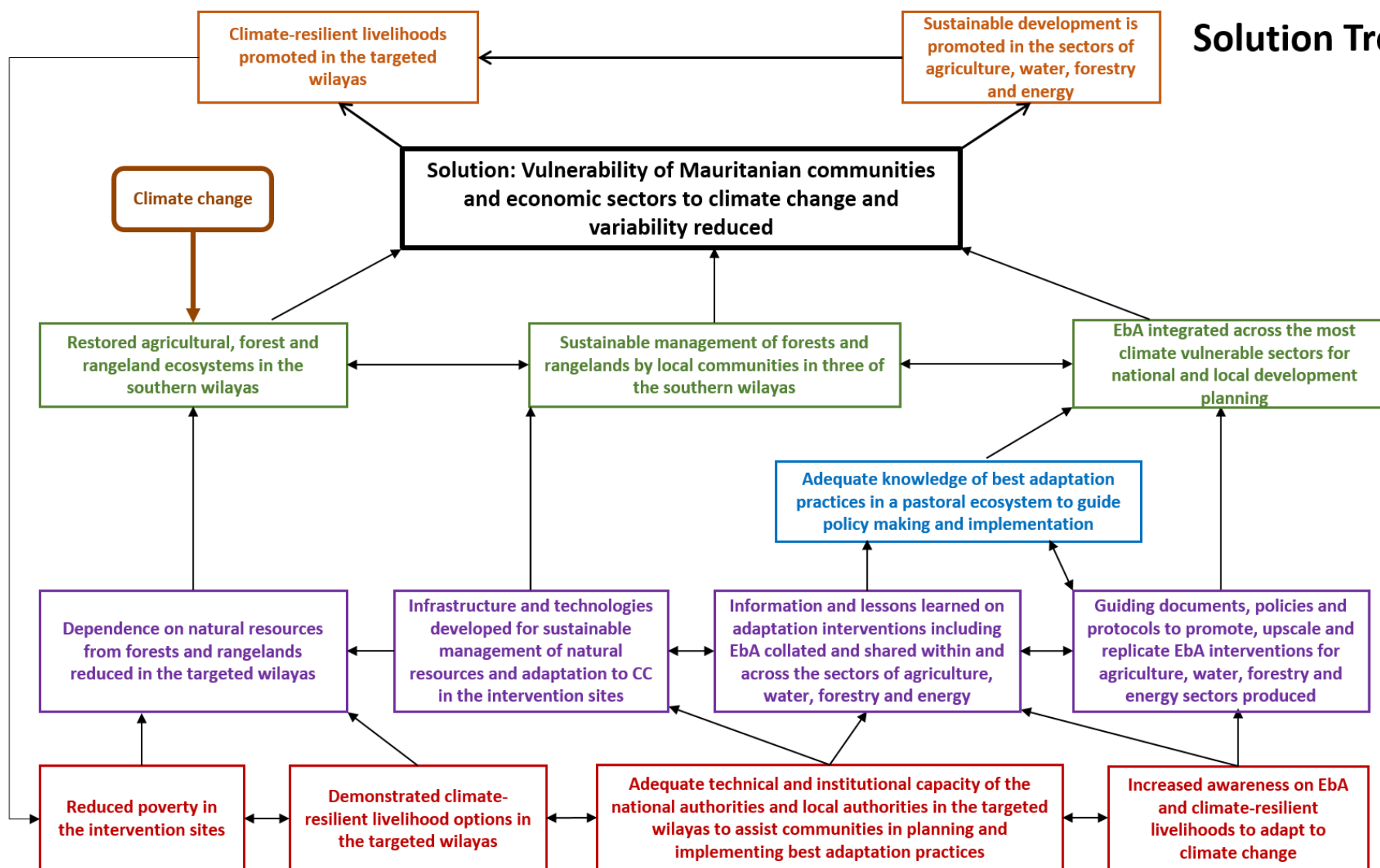
# Problem Tree



Theory of Change

Annex K:

## Solution Tree



## Annex I: Acronym list

### ACRONYMS AND ABBREVIATIONS

Acronym	English	French
<b>ACCMR</b>	Project to increase Capacity for Adaptation to Climate Change in Rural Areas	Projet d'Augmentation des Capacités pour l'Adaptation au Changement Climatique en Milieu Rural
<b>ADC</b>	Local Development Association	Association de Développement Communautaire
<b>AfDB</b>	e	Banque Africaine de Développement
<b>AFO</b>	Administration and Financial Officer	Responsable Administratif et Financier
<b>AGLC</b>	Local Collective Association for the Management of Natural Resources	Association de Gestion Locale Collective des Ressources Naturelles
<b>AMAT</b>	Adaptation Monitoring and Assessment Tool	Outil de Suivi et d'évaluation de l'adaptation
<b>AP</b>	Pastoral Association	Association Pastorale
<b>APCBF</b>	Annual Programme to Combat Bushfires in Mauritania	Programme Annuel de Lutte Contre les Feux de Brousse
<b>CCPNCC</b>	Coordinating Unit of the National Programme of Climate Change	Cellule de Coordination du Programme National Changement Climatique



<b>CDP</b>	Communal Development Plans	Plans Communaux de Développement
<b>CNEDD</b>	National Council for Sustainable Development	Conseil National Environnement et Développement Durable.
<b>CNRADA</b>	National Centre for Research on Agronomics and Agricultural Development	Centre National de Recherche Agronomique et de Développement Agricole
<b>CNRE</b>	National Centre of Water Resources	Centre National des Ressources en Eau
<b>CREDD</b>	Regional Council for Environment and Sustainable Development	Conseil Régionale Environnement et Développement Durable.
<b>CSLP</b>	Strategic Framework to Combat Poverty	Cadre Stratégique de Lutte contre la Pauvreté
<b>CTA</b>	Chief Technical Advisor	Conseiller Technique Principal
<b>DH</b>	Department of Hydraulics	Le Département de l'Hydraulique
<b>DPN</b>	Direction for Nature Protection	Direction de la Protection de la Nature
<b>DRA</b>	Regional Delegation of the Ministry of Agriculture	Delegation Régionale de l'Agriculture
<b>DRE</b>	Regional Delegation of the Ministry of Livestock Farming	Delegation Régionale de l'Elevage
<b>DREDD</b>	Regional Delegation of the Ministry of Environment and Sustainable Development	Délégation Régionale de l'Environnement et du Développement Durable
<b>DRHA</b>	Regional Delegation of the Ministry of Hydraulics and Sanitation	Delegation Régionale de l'Hydrolique
<b>ENFVA</b>	National School for Agricultural Training and Extension	Ecole Nationale pour la Formation et la Vulgarisation Agricole
<b>EPCV</b>	Permanent Survey of Living Conditions of households in Mauritania	Enquête Permanente sur les Conditions de Vie des ménages en Mauritanie
<b>FAO</b>	Food and Agriculture Organisation	Organisation pour l'Alimentation et l'Agriculture
<b>FSP</b>	Full-size Project	Projet de grande taille
<b>FST</b>	Faculty of Sciences and Technology	Faculté des Sciences et Techniques
<b>GEF</b>	Global Environmental Facility	Fonds de l'Environnement Mondial - FEM
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit	Société allemande pour la coopération internationale ou Coopération Technique Allemande
<b>GoM</b>	Government of Mauritania	Gouvernement Mauritanien
<b>HDI</b>	Human Development Index	Indice de développement humain
<b>IEA</b>	Integrated Ecosystem Assessment	Evaluation intégrée de l'écosystème
<b>IEDD</b>	Inspector of Environment and Sustainable Development	Inspecteur de l'Environnement et du Développement Durable
<b>IMIS</b>	Integrated Management Information System	Système intégré de gestion de l'information
<b>ISSET</b>	Institute for Higher Technological Education	Institut Supérieur d'Enseignement Technologique
<b>IUCN</b>	International Union for the Conservation of Nature	Union internationale pour la conservation de la nature
<b>IWRM</b>	Integrated Water Resources Management	Gestion intégrée des ressources en eau

<b>LCE</b>	Master Plan for the Environment	Loi Cadre de l'Environnement
<b>LDCF</b>	Least Developed Countries Fund	Fonds des Pays les Moins Avancés
<b>LDP</b>	Local Development Plan	Plan de développement local
<b>LMP</b>	Local Management Plan	Plan de gestion locale
<b>M&amp;E</b>	Monitoring and Evaluation	Suivi et évaluation
<b>MAg</b>	Ministry of Agriculture	Ministère de l'Agriculture
<b>MAED</b>	Ministry of Economic Matters and Development	Ministère des Affaires Economiques et du Développement
<b>MASEF</b>	Ministry of Social Matters, Childhood and Family	Ministère des Affaires Sociales, de l'Enfance et de la Famille
<b>MDG</b>	Millennium Development Goal	Objectif du millénaire pour le développement
<b>MDRE</b>	Ministry of Rural Development and the Environment	Ministère du Développement Rural et de l'Environnement
<b>ME</b>	Ministry of Livestock Farming	Ministère de l'Élevage
<b>MEDD</b>	Ministry of Environment and Sustainable Development	Ministère de l'Environnement et du Développement Durable
<b>MHA</b>	Ministry of Hydraulics and Sanitation	Ministère de l'Hydraulique et de l'Assainissement
<b>MIDEC</b>	Ministry of the Interior and Decentralisation	Ministère de l'Intérieur et de la Décentralisation
<b>MSLMP</b>	Mauritania Sustainable Landscape Management Project	Projet Mauritanien de gestion durable des paysages
<b>MTE</b>	Mid-term Evaluation	Evaluation à mi-parcours
<b>MTR</b>	Mid-term Review	Revue à mi-parcours
<b>NAP</b>	National Adaptation Plan	Plan National d'Adaptation
<b>NAPA</b>	National Adaptation Programme of Action	Plan d'Action National d'Adaptation
<b>NEA</b>	National Executing Agency	Agence nationale d'exécution
<b>NTA</b>	National Technical Assistant	Assistant Technique National
<b>NTFP</b>	Non-Timber Forest Products	Produits forestiers non-ligneux
<b>PANE</b>	National Action Plan for Environment and Sustainable Development	Plan d'Action National pour l'Environnement et le Développement Durable
<b>PAN-GRC</b>	National Action Plan for Disaster Risk Management	Plan d'Action National pour la Gestion des Risques et Catastrophes
<b>PAN-LCD</b>	National Action Plan to Combat Desertification	Plan d'Action National de lutte Contre la Désertification
<b>PES</b>	Payment for Ecosystem Services	Paiement des services environnementaux - PSE
<b>PIR</b>	Project Implementation Review	Examen de l'exécution du projet
<b>PM</b>	Project Manager	Coordinateur du projet
<b>PNIDDLE</b>	The National Programme for Integrated Support to Decentralisation, Social Development and Youth Employment	Programme National Intégré d'appui à la Décentralisation, au Développement Local et à l'Emploi des jeunes
<b>PPG</b>	Project Preparation Grant	Subvention pour la préparation du projet
<b>PRASP</b>	Regional Project to Support Pastoralism in the Sahel	Projet Régionale d'Appui au Pastoralisme au Sahel
<b>PARSACC</b>	Enhancing Resilience of Communities to the Adverse Effects of Climate Change on Food Security in Mauritania	Projet d'Amélioration de la Résilience des communautés et de leur Sécurité Alimentaire face au Changement Climatique

<b>PRLP</b>	Regional Plans against Poverty	Plans Régionaux contre la Pauvreté
<b>ProGRN</b>	Programme for the Management of Natural Resources	Projet de Gestion des Ressources Naturelles
<b>PSC</b>	Project Steering Committee	Comité de pilotage du projet
<b>REVUWI</b>	Project for Improvement of the Investments in the Water Sector to Increase the Resilience of Pastoral and Forest Resources in the Southern Regions of Mauritania	Projet d'amélioration des investissements du secteur de l'eau destinés à la résilience des ressources pastorales et forestières des régions méridionales de Mauritanie
<b>RISE/Regionale</b>	Regional Institutional Framework for the Environmental Sector	Revue Institutionnelle du Système de l'Environnement en Mauritanie
<b>SAWAP</b>	Sahel and West Africa Programme in support of the Great Green Wall Initiative	Subvention pour la Préparation du projet
<b>SCAPP</b>	National Strategy for Accelerated Growth and Shared Prosperity	Stratégie de Croissance et de Prospérité Participative
<b>SCCF</b>	Special Climate Change Fund	Fonds spécial pour les changements climatiques
<b>SDSEA</b>	Development Strategy of the Water and Sanitation Sector	Stratégie de Développement du Secteur Eau et Assainissement
<b>SDSR</b>	Development Strategy for the Rural Sector	Stratégie de Développement pour le Secteur Rural
<b>SFP</b>	Sectoral Focal Points	Point Focal Sectoriel
<b>SEPANE</b>	Monitoring and Evaluation System of the National Action Plan for the Environment	Système de Suivi-Evaluation du Plan d'Action National pour l'Environnement
<b>SNA</b>	National Strategy for Adaptation	Stratégie Nationale d'Adaptation
<b>SNDD</b>	National Strategy for Sustainable Development	Stratégie Nationale de Développement Durable
<b>SNIG</b>	National Gender Strategy	Stratégie Nationale d'Institutionnalisation du Genre
<b>SNLP</b>	National Strategy against Poverty	Stratégie Nationale de Lutte contre la Pauvreté
<b>SNSA</b>	National Strategy for Food Security	Stratégie Nationale pour la Sécurité Alimentaire
<b>SPANB</b>	National Strategy and Action Plan for Biodiversity	Stratégie et Plan d'Action National sur la Biodiversité
<b>TCN</b>	Third National Communication	Troisième Communication Nationale
<b>TE</b>	Terminal Evaluation	Evaluation finale
<b>TM</b>	Task Manager	Coordonnateur
<b>ToR</b>	Terms of Reference	Termes de référence
<b>UNDAF</b>	United Nations Development Assistance Framework	Cadre de l'aide au développement des Nations Unies
<b>UNDP</b>	United Nations Development Programme	Programme des Nations Unies pour le Développement
<b>UNEP</b>	United Nations Environment Programme	Programme des Nations Unies pour l'Environnement
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation	Organisation des Nations Unies pour l'Education, la Science et la Culture
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change	Convention Cadre des Nations Unies pour le Changement Climatique
<b>UoN</b>	University of Nouakchott	Université de Nouakchott
<b>WB</b>	World Bank	Banque Mondiale
<b>WWF</b>	World Wildlife Fund	Fonds Mondial pour la Nature