



## Enhancing pastoral farming producers resilience in South East watershed of Mauritania

### Part I: Project Information

**GEF ID**

10176

**Project Type**

FSP

**Type of Trust Fund**

LDCF

**CBIT/NGI**

CBIT

NGI

**Project Title**

Enhancing pastoral farming producers resilience in South East watershed of Mauritania

**Countries**

Mauritania

**Agency(ies)**

FAO

**Other Executing Partner(s)**

**Executing Partner Type**

**Other Executing Partner(s)**

Ministry of Environment and Sustainable Development (MEDD) National Observatory for Arid Regions (CNOEZA)

**Executing Partner Type**

Government

**GEF Focal Area**

Climate Change

**Taxonomy**

Climate Change, Focal Areas, Stakeholders, Capacity, Knowledge and Research, Knowledge Exchange, Climate Change Adaptation, Climate resilience, Innovation, Least Developed Countries, Community-based adaptation, Livelihoods, Private sector, Influencing models, Demonstrate innovative approaches, Civil Society, Non-Governmental Organization, Community Based Organization, Communications, Awareness Raising, Behavior change, Private Sector, SMEs, Individuals/Entrepreneurs, Beneficiaries, Local Communities, Type of Engagement, Participation, Partnership, Gender Equality, Gender results areas, Access to benefits and services, Capacity Development, Participation and leadership, Gender Mainstreaming, Gender-sensitive indicators, Peer-to-Peer

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

Climate Change Mitigation 0

**Climate Change Adaptation**

Climate Change Adaptation 2

**Duration**

48 In Months

**Agency Fee(\$)**

419,540

**Submission Date**

4/5/2019

**A. Indicative Focal/Non-Focal Area Elements**

<b>Programming Directions</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
CCA-1	LDCF	3,540,000	12,425,625
CCA-2	LDCF	876,210	2,574,375
	<b>Total Project Cost (\$)</b>	<b>4,416,210</b>	<b>15,000,000</b>

**B. Indicative Project description summary**

**Project Objective**

Strengthen the resilience of vulnerable rural populations by improving agriculture and livestock sector planning and the application of innovative practices at the catchment level.

Objective Level Indicator: Number of direct beneficiaries (22,500 male, 22,500 female)

<b>Project Component</b>	<b>Financing Type</b>	<b>Project Outcomes</b>	<b>Project Outputs</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Adaptation and resilience practices secured through local resource use planning and decision-making frameworks	Technical Assistance	<p>Private sector agriculture and livestock producers cooperatively and effectively managing shared resources to address climate change impacts and build system resilience</p> <p><b>Indicators:</b></p> <p>(i) Land use planning and management plans covering four tributary drainage basins formally adopted</p> <p>(ii) Hectares of degraded agricultural and grazing lands managed under a climate resilient land use management plan.</p> <p>(iii) At least twelve Municipal Councilors and technical staff trained and using VGGT</p> <p><i>Note: Precise targets to be identified during PPG with all relevant impact indicators disaggregated by gender</i></p>	<p>1.1 Community-based governance bodies established for climate resilient land and resource planning</p> <p>(This project will establish community-based governance bodies organized around each target watershed to support the completion of strategic land and resource use planning.)</p> <p>1.2 Land and resource use resilience planning operationalized</p> <p>(The project will set in place and operationalize community-based land and resource planning designed to identify and prioritize innovations and strategically address vulnerability and resilience issues at the catchment level, also deploying innovative mapping, planning and monitoring tools.)</p>	LDC F	650,000	1,767,305

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Innovations applied and supporting uptake of resilience measures by vulnerable communities	Investment	<p>Private sector agriculture and livestock producers deploy innovative technologies supported by creative financial instruments to adopt and benefit from climate coping practices resulting in basin-wide ecological resiliency improvements</p> <p><b>Indicators:</b></p> <p><i>(i) Number of livestock and agricultural producers engaging in APFS programming that report improved livelihoods, including levels of economic, environmental, and social well-being.</i></p> <p><i>(ii) Number of livestock and agricultural producers supported to adopt project identified climate resilient production methods.</i></p> <p><i>(iii) Hectares of agricultural lands (grassland, forest, and cultivated areas) evincing higher levels of resilience at the catchment level.</i></p>	<p>2.1 Climate change resilient and adaptive investments identified and prioritized to strengthen private sector production resilience</p> <p>(The project will utilize Agro-pastoral Field Schools (APFS) to transfer technologies and build producer capacity to implement innovative practices.)</p> <p>2.2 Strategic private sector implementation of proven climate change coping practices</p> <p>(The project will provide technical support and venture capital required for APFS participants to implement prioritized innovations.</p>	LDC F	2,890,000	10,658,320

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
3. Monitoring, evaluation, and capture of lessons learned to informed decision-making and upscale of resilience improvements	Technical Assistance	<p>Best climate resilient and adaptive practices are mainstreamed and being applied at local, regional, and national levels.</p> <p><b>Indicators:</b></p> <p><i>(i) Number of national policies and plans integrating adaptation considerations and best practices resulting from project implementation;</i></p> <p><i>(ii) Number of Government extension officers and other service providers utilizing project developed practices outside the immediate project target area;</i></p> <p><i>(iii) Number of stakeholders actively engaged and utilizing project communication and visibility products</i></p> <p><i>Note: Precise targets to be identified during PPG with all relevant impact indicators disaggregated by</i></p>	<p>3.1 Results strengthen national level resilience and adaptation policies</p> <p>(The project will provide the technical inputs required for project results to be fully integrated within relevant National, Regional, and Commune level policies.)</p> <p>3.2 Project lessons captured, mainstreamed and disseminated</p> <p>(Best practices and lessons learnt from project implementation will be translated into knowledge products and communication outputs.)</p> <p>3.2 Effective Monitoring and Evaluation implemented</p> <p>(Project activity will be comprehensively monitored and evaluated to guide adaptive management and promote uptake, including gender mainstreaming.)</p>	LDC F	665,914	2,002,945

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
				<b>Sub Total (\$)</b>	<b>4,205,914</b>	<b>14,428,570</b>
<b>Project Management Cost (PMC)</b>						
				LDCF	210,296	571,430
				<b>Sub Total(\$)</b>	<b>210,296</b>	<b>571,430</b>
				<b>Total Project Cost(\$)</b>	<b>4,416,210</b>	<b>15,000,000</b>



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

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Government	National Observatory for Arid Regions (CNOEZA)	Grant	Investment mobilized	500,000
Government	Ministry of Rural Development	Grant	Recurrent expenditures	1,000,000
GEF Agency	FAO	Grant	Investment mobilized	500,000
Donor Agency	GCF	Grant	Investment mobilized	10,000,000
Government	Ministry of Environment and Sustainable Development	Grant	Recurrent expenditures	2,000,000
Government	National Observatory for Arid Regions (CNOEZA)	Grant	Recurrent expenditures	1,000,000
			<b>Total Project Cost(\$)</b>	<b>15,000,000</b>

**Describe how any "Investment Mobilized" was identified**

The CNOEZA is providing a co-financing that amounts to USD1,5M distributed as follows: USD500,000 as investment and USD1M as recurrent expenditures. FAO will provide USD 500,000 through a technical cooperation project (TCP, financing instrument) as a new investment. The Ministry of Rural Development (including agriculture and livestock) and the Ministry of Environment and Sustainable Development will provide USD3M as recurrent expenditures coming from projects implemented in the same geography as the LDCF project (details below in baseline projects section). GCF funds will be used for investing in capacity development activities but also for acquisition of fixed assets and equipment.

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

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
FAO	LDCF	Mauritania	Climate Change	NA	4,416,210	419,540	4,835,750
<b>Total GEF Resources(\$)</b>					<b>4,416,210</b>	<b>419,540</b>	<b>4,835,750</b>

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

**PPG Amount (\$)**

150,000

**PPG Agency Fee (\$)**

14,250

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>	
FAO	LDCF	Mauritania	Climate Change	NA	150,000	14,250	<b>164,250</b>	
					<b>Total Project Costs(\$)</b>	<b>150,000</b>	<b>14,250</b>	<b>164,250</b>

## Core Indicators

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

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

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

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

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

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

Type/Name of Third Party Certification

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

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

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

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

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

Title	Submitted
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CCA core indicators worksheet and metadata	
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
<b>Female</b>				
<b>Male</b>				
<b>Total</b>	0	0	0	0

## Part II. Project Justification

### 1a. Project Description

#### 1a. Project Description

##### Background

Mauritania is located in Northwest Africa. The total land area is 1,030,700 km<sup>2</sup>. The total population is approximately 4.4 million with most of the population residing in the country's southern Sahelian zone. The remaining 75% of the country is defined by the Sahara desert which is largely uninhabited.

Mauritania is a Least Developed Country. In 2016, Mauritania ranked 157 out of 187 on the Human Development Index (HDI). Approximately 44.4% of the population lives in poverty and 25.1% live in extreme poverty. The country's most vulnerable populations live in rural areas and depend upon livestock and agriculture production for their survival. According to the World Bank, approximately 50% population and more than 75% of the country's poor depend upon agriculture and livestock. Over 61% of rural Mauritians earn less than US\$ 1.5 per day<sup>[1]</sup>.

Mauritania is administratively organized into regions (wilaya), departments and communes. Nationally, there are 15 regions, 44 departments, and 250 communes. The project will target four tributary drainage basins within the shared catchment of three South-East Mauritania Wilayas.

Region	Total Area (ha)	Total Population	Target Project Area (ha)	Target Population	Target Agriculture Area (Ha)	Target Livestock Area (Ha)
Guidimakha	1,030,000	261,201	6,500	20,500	1,200	5,300
Assaba	3,660,000	315,059	14,000	5,000	800	13,200

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<sup>[1]</sup>

Hodh El Gharbi	5,340,000	285,088	51,000	19,500	5,000	46,000
Subtotals	10,030,000	861,348	71,500	45,000*	7,000	64,500

\*Direct beneficiaries

These three regions are located along the border with Senegal and Mali. They are part Mauritania's eastern and southern agricultural belt situated along the uplands of the Senegal River. Local communities rely upon farming and livestock production. The most vulnerable depend upon rainwater for rain-fed agriculture and nomadic cattle breeding.

The area is strongly influenced by the permanent presence of water. The hydrographical network is defined by a vast endorheic system of 71,500 ha with between 200 and 400mm/year isohyets. In these areas with low annual precipitation levels, the hydrological network plays a key-role for rural development, concentrating agricultural, forestry and pastoral activities in limited areas. While rain water percolates into sandy soils, compact or clay soils are found along waterways and depressions. This results in a mosaic of pools, swamps, marigots and rivers along main waterways.

There are approximately 7,200 households practicing nomadic pastoralism. This represents nearly 36,000 persons and more than 500,000 heads of livestock. Most pastoralists in the region raise ovine with some caprine, bovine and camels as well. Livestock production is primarily for consumption and sale (meat and milk) as well as leather. Over 64,500 hectares of land are utilized by these pastoralists. In a typical year, these regions constitute a refuges for others nomads from outside regions. Consequently, overgrazing push the nomads to migrate to Mali and Senegal borders.

There are approximately 1,800 households in the target areas that practice agriculture. There are approximately 7,000 hectares under some form of cropping. Traditional crops include sorghum, millet, maize, wheat, barley, and "niebe" (beans) and their related wild species. These species may be grown in association with varieties of gourds. Traditional agricultural methods rely upon both rain-fed cropping ("dieri") and flood irrigation.

Forests are primarily defined by woody species, especially acacias and balanitis. Forests are used for fodder production, fuelwood, and charcoal. Approximately 2,000 hectares of the targeted area are forest covered.

## **Threats, Causes and Climate Related Issues**

Mauritania is divided into two climatic zones: the Saharan-Sahel region to the North and the Sahel region to the South. The project area is in the Saharan-Sahel zone. Across both zones, the hot and dry trade winds blow from September to June. The anticyclone humid winds occur during the remainder of the year, bringing limited rainfall. Both winds contribute to soil erosion desert expansion which moves from North to the South.

Mauritania is at constant risk of drought and desertification. Only 0.5 % of the national territory is arable with most situated near the Senegal River flood plain. Nearly 70% of freshwater withdrawals in Mauritania are dedicated to agriculture, an estimated 1.7 billion cubic meters annually. Water access and supply (infrastructure, services and institutional capacity), water harvesting, water use efficiency and productivity are limited.

The UNDP Climate Change Country Profile states that the mean annual temperature will likely increase by 1.3 to 3.8°C over the next several decades. Mauritania's National Communication predicts precipitation declines greater than 20%. Climate changes include a shift in seasonal patterns and a reduction in wet periods. Hydro-meteorological monitoring stations have been situated in the region since 1987. GGW National Agency data from these monitoring systems show significant year-to-year variability. The average annual rainfall shifts between 100 mm in the North and 600 mm in the South. The increased duration of dry periods is accompanied by more intense heat. During most of the year, the average temperatures vary between 23.4° and 37.4°. During the months of April and May temperatures may exceed 40°C and sometimes reach 60°C.

The Sahara desert is slowly moving southwards, absorbing more of Mauritania productive landscapes. This is a result of resource over-exploitation, including grazing and forest reductions, compounded by climate change. Evapo-transpiration and erosion are increasing as climate change advances. The duration of waterless periods is growing. Desertification is expanding. Rivers and oueds are disappearing. Pasture and arable lands are losing productivity and rapidly degrading. The project area has experienced an increase in floods, later rains, shorter rainy seasons and periods of prolonged drought. Increased land degradation advances and vegetative cover loss has accelerated soil erosion and siltation.

Climate change combined with unsustainable resource management practices is forcing local communities to alter traditional production methods. Spatial and temporal nomadic movements is being reduced. Livestock production is becoming sedentary. The pasturelands available for nomadic livestock producers is being reduced. In response, pastoralists are shifting from camels and sheep to less-mobile livestock such as cattle that have higher water and fodder demands. Groundwater availability is declining. Longer periods of



fodder shortage are causing malnutrition. Rising temperatures and reduction in rainfall affects the nutritional value of the feed and the health of livestock, reducing herd fitness and vitality. FAO estimates that food production and associated food security have declined substantially over the last decades accompanied by malnutrition. Domestic demands for meat and dairy are no longer met.

Impacts are particularly evident in critical riparian areas where use is intensifying. Pastoralists and agriculturalists are concentrating their use of these areas as their need for finding moist ground becomes more desperate. Pastoralists now utilize wooded and humid areas along riparian zones for longer periods. They also harvest trees for fuelwood and fodder. Seasonal pressure is particularly severe during March and August. The resulting degradation of wooded uplands exacerbates water loss and erosion. They seek these areas for water and the ability to shelter against heat waves and sand storms. At the same time, the period of livestock remaining near permanent watering points is increasing. Agriculturalists and pastoralists are now concentrated in and near the last remaining humid areas with relatively reliable water resources. Competition for these dwindling resources is generating conflict.

## **Barriers**

Barrier 1 : *Limited institutional and technical capacity to plan, mainstream and implement climate adaptation measures*

Institutional capacity in Mauritania in regard to Climate Change remains inadequate due to lack of knowledge, awareness/understanding of climate threats and appropriate response options (implementation failure) of pastoralists/farmers and government agencies at local and national level. A lack of understanding of vulnerability in regards to the nature, magnitude and implications of climate hazards, and the relationships between sustainable natural resources management and adaptation to climate change are among the impediments to appropriate climate response at community level. In the existing situation, there are no operational examples of land use planning organized at the watershed level designed to successfully address climate change challenges. Competition to access to natural resources involves a host of highly vulnerable private stakeholders with often conflicting interests. The situation is dynamic and highly complex. Degradation and associated risks will increase without an informed process to assist vulnerable communities to strategically identify issues and solutions. Unless resource use is strategically planned and effectively managed, continued environmental stress compounded by climate change will inevitably lead to more conflict as vulnerable stakeholders become more desperate to access dwindling resources.

Barrier 2 : *Limited effective public and private finance mechanisms to access climate adaptation innovative practices*

The frequency and magnitude of natural hazards triggered by climate change has been increasing. Current investments in adaptation do not address the needs to avoid negative future impacts. Although, vulnerable communities are anxious to gain exposure and knowledge of innovative practices that can be applied to address negative impacts of climate change, limited effort was made to support pilot projects. This includes funding pilots that can showcase of examples of innovative solutions to climate change problems as well as provision of incentives to support the delivery required to move innovations forward. Even if technological improvements were identified, there is an absence of venture capital required to model coping strategies and improved practices.

Barrier 3 : : *Limited policies and programs that mainstream and integrate comprehensive and coordinated adaptation initiatives*

Practices, technologies and tools are being developed to support adaptation to Climate Change, but mainstreaming Climate Change in plans and policies is translated slowly into robust actions on the ground in Mauritania. Technical agencies that can facilitate the promotion of best practices sharing across sectors and policy domains seem to be critical in bridging the implementation gap. The challenges faced in the project's target areas are emblematic of issues faced across much of the country. There is a need to set in place a program that can deliver valuable lessons that may be captured and upscaled across a wider geographic area. The multiple benefits of an integrated, participatory and knowledge-based approach to land use planning organized at the watershed level where competition is most severe are not well known at the regional or national level. These principles and practices are not integrated into national planning and policy. There is a need to show that this sort of approach buoyed by innovative improvements to production practices is capable of reducing climate related risks for vulnerable communities.

## **1.2 The Baseline Scenario**

The Government of Mauritania recognizes the challenges and is committed to improving the capacity of vulnerable peoples to strengthen their climate change resilience. The Government is dedicated to improving surface water use, arresting desertification and soil erosion, increasing agricultural yields, and promoting productivity of the agro-forestry ecosystems. The Government of Mauritania, with the support of its technical and financial partners, has undertaken several initiatives directed towards these challenges, which form part of the baseline scenario.

### Institutional Framework

Under the baseline scenario, there are a number of institutions at national, regional and commune levels which support natural resource management, agricultural development and livestock production. However, these institutions generally have limited capacity to identify and implement innovations required to address climate change challenges.

At the national level, three institutions are particularly relevant:

- The Ministry of Environment and Sustainable Development (MEDD) is responsible for overall environmental management. In addition to its five directorates, the MEDD also houses the National Agency for the Great Green Wall. The MEDD serves as focal point for the UNFCCC. The annual budget is approximately USD 4.2 million.
- Ministry of Rural Development (MRD) oversees agricultural development and livestock producers, promotion of pastoralism and support for animal health. The annual budget is approximately USD 29.3 million.
- The Ministry of Water Resources and Sanitation oversees all investments related to mobilization of potable water, irrigation water and sanitation. The annual budget is approximately USD 1.6 million.

These national institutions generally have representation in each region and most departments. These regional representatives often have direct responsibilities for planning and coordination of resource use. However, these offices face significant capacity challenges. The MEDD, for instance, has Regional Delegations for the Environment and Sustainable Development (DREDD). These work at both the regional and community level.

### Laws and Policies

The existing baseline provides a fairly strong national legal and policy framework for project implementation. However, there is a need to more fully integrate climate change adaptation and resilience innovations particularly at the Region and Commune levels.

The primary national regulatory framework is represented by the Pastoral Code (2000) This law governs land tenure, water access, pastoral organizations, and the role of local authorities in the livestock sector. The code provides a baseline to reconcile sedentary agricultural and pastoralism, including priorities regarding passage and access. Additional frameworks under the baseline include: The Environment Law (2000); Hunting and Nature protection Law (1997); Plant Protection Law (2000); Agrarian and Tenure Law (1983); Forest Code (2007); and, the Water Law (2005). Many rural areas continue to apply traditional systems to manage land and other resources. There are also provisions within many of these codes for decentralized decision-making. This includes provisions within the Water Code, Forest Code, and Pastoral Code. For instance, many communes have the ability to delegate management to local associations. This includes resources such as water and forests and provides an entry point within the baseline for potential project innovations.

### Implementation of strategies and plans

Mauritania is involved in alliances (multi-country projects) against climate change with neighbouring countries and the international community to developing strategies and national and international action plans, such as the *Great Green Wall Initiative* and the *Global Alliance Against Climate Change (AMCC2)*. This latter aims at sustainably strengthening the resilience of agro-sylvo-pastoral systems in the Soudano-Sahelian area. Other large-scale bilateral and multi-lateral donor-funded projects include the *Regional Sahel Pastoralism Support Project* designed to support poverty reduction through improved productivity, sustainability, and resilience of pastoral livelihoods; and the *Value Chains Development Programme for Poverty Reduction*, which works to improve the value chains of vegetables, dates, milk, poultry, skins and hides, red meat and non-timber forest products.

The LDCF funded project will build upon the results of these investments and take advantage of the lessons learnt of these past and ongoing investments.

### Baseline projects

The following development partner projects and programs constitute the baseline projects for the LDCF project, as they will be providing co-financing. They operate in the same geography as the LDCF project. They provide evidence, lessons, tools and approaches. They complement activities and therefore help achieve and sustain the results of the LDCF project engaging a larger partnership.

Baseline Project	Baseline Project Details	Complementarity as LDCF Baseline Project
<p>Enhancing the resilience to climate change of livelihoods and food security of agro-silvo-pastoral communities in southwestern Mauritania</p>	<p><b>Financier:</b> Green Climate Fund (GCF)</p> <p><b>Amount:</b> USD 42.5 (including co-financing)</p> <p><b>Implementing agency:</b> FAO</p> <p><b>Duration:</b> 2020-2026</p> <p><b>Potential Co-financing:</b> USD 10 M</p>	<p>The project aims to increase the climate resilience of 250,000 small-scale agro-sylvo-pastoral producers, which are the most vulnerable livelihoods in Mauritania’s Sahel area, through ecosystem-based adaptation of agro-sylvo-pastoral systems. The project covers 4 Wilayas (Trarza, Brakna, Guidimakha, and Gorgol), i.e. the same target Wilayas as the LDCF project.</p> <p>The livelihoods and food security of local producers and communities are vulnerable to climate change induced temperature increases and erratic precipitation patterns. This project will increase the resilience of affected livelihoods through strengthening the capacity of government institutions to develop and implement climate sensitive policies and projects and through improving the capacity of smallholder producers to adapt agro-sylvo-pastoral practices to CC. The project will be executed by the Ministry of Environment and Sustainable Development (MEDD), with support from the Ministries of Agriculture and Livestock. The GCF project will : (i) strengthen the capacity of government institutions by integrating informed CCA considerations in adopted and future policies, programmes, and extension services; (ii) strengthen climate change adaptive capacity of agro-sylvo-pastoral livelihoods through extension services and participatory climate change adaptation planning; (iii) strengthen livelihoods through climate-adapted agriculture practices; and (iv) restore agro-sylvo-pastoral landscapes to support system resilience to climate change. The GCF project and the LDCF project have different scales and levels of ambition. The LDCF project will be mostly implemented at local level whereas the GCF project is a multi-scale project, implemented at national, regional and local levels. Moreover, it includes important infrastructure investments. Innovations promoted in the LDCF project such as the <i>Caisse de Resilience</i> or Climate Smart Agriculture practices can be upscaled in the GCF project.</p> <p>GCF funded activities include: (i) capacity building of institutions and communities; (ii) large-scale restoration of agro-sylvo-pastoral systems for sustainable food and fodder production; (iii) market development; and (iv) improved income-generating activities for small holders and agro-sylvo-pastoral producers through diversification of livelihood options (including sustainable exploitation and management of NWFPs for instance). As a result, the project, which is complementary in design, will contribute to components 1, 2 and 3 of the LDCF project.</p>

Resilience of food insecurity and nutrition in the Sahel of Mauritania

**Financier:**

African Development Bank

**Amount:**

USD20.8M (USD283M for the Region)

**Implementing agency:**

National Government/ MoA

**Duration:**

2015-2020

**Potential Co-financing:**

USD 1M

This project is designed to reduce poverty and hunger through improvements to the agro-sylvo-pastoral and fishery sectors. The project's specific objective is to increase, on a sustainable basis, agro-sylvo-pastoral and fishery productivity and production in the Sahel. The programme will be implemented through four projects each implemented over a five-year period in three components, namely: (i) Rural Infrastructure Development; (ii) Value Chains and Regional Markets Development; and (iii) Project Management. The project will ultimately reduce the prevalence rate of acute malnutrition to 11%. It will improve the living conditions of over three million people, 51% of them women. In addition, the project will take into account endogenous systems of solidarity and social protection arrangements that will be strengthened by the States and other partners.

The project is operational in the same geography as the proposed LDCF project. The demonstration activities and natural resource governance models will link with the LDCF effort, particularly in its component 2.

Boosting restoration, income, development,  
Generating Ecosystem Services  
(BRIDGES)

**Financier:**

Turkey and EU-ACP

**Amount:**

USD 3.6M

**Implementing agency:**

National government/MEDD

**Duration:**

2018 -2021

**Potential Co-financing:**

USD 1M

The BRIDGES project aims to catalyze action, support sustainable management and restoration of dryland forests and agro-sylvo-pastoral systems in three Great Green Wall countries - Eritrea, Mauritania, Sudan - stimulating production, benefiting livelihoods and generating ecosystems goods and services. It also helps stimulate South-South cooperation between Turkey and Africa's Great Green Wall and across dryland regions worldwide.

The complementarity with the LDCF investments is assured through its components 1 and 2, namely: (1) implement participatory restoration activities to increase livelihood resilience and combat desertification (including soil conservation, water harvesting, natural regeneration, ...); and (2) strengthen NTFPs value chains benefitting the local communities.

This project is executed by FAO in the same intervention area as the LDCF project and will contribute to component 2 of the latter.

<p>Mauritanian Alliance against Climate Change (Alliance mauritanienne contre le changement climatique - AMCC phase 2)</p>	<p><b>Financier:</b> European Union</p> <p><b>Amount:</b> Euro 7.5M</p> <p><b>Implementing agency:</b> National Government/MEDD</p> <p><b>Duration:</b> 2019-2023</p> <p><b>Potential Co-financing:</b> USD 1M</p>	<p>This project is aimed to enhance food and nutrition security through adaptation to climate change.</p> <p>The project covers 5 regions in Mauritania (Trarza, Brakna, Assaba, Gorgol and Guidimaka). It mainly contributes to progressively meeting SDG Goal 13, but it also promotes progress towards achieving the SDGs 1 (poverty); 2 (hunger) and 15 (biodiversity). Its overall objective is to sustainably strengthen the resilience of natural systems and ecosystem services from which the most vulnerable people can benefit. It has two specific objectives: (i) reinforce the institutional set-up to monitor and coordinate climate change issues in the country; and (ii) adopt good practices for CC adaptation and sustainable management of human and agro-sylvo-pastoral systems in the saharo-sahelian region. Therefore, it supports the achievement of component 2 of the project.</p>
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**Additional sources of co-financing include:**

1/ CNOEZA will contribute with a USD1,5M co-financing. USD1M is coming from its regular budget to support data collection, analysis and monitoring on the state of the natural resource base in the project pilot areas and project management. An additional USD500,000 is made available as a cash new and additional contribution in support of further capacity development of CNOEZA and national institutes on assessing natural resource state.

2/ An FAO-Technical Cooperation Project is being designed ad hoc to complement the GEF investment. This TCP will aim at linking:

- o the climate change adaptation work, which traditionally and more often addresses the slow onset of climate change (temperature increase and reduced precipitation) and the development work in support of climate resilient ecosystems and livelihoods, and

- o climate emergency response efforts.

The TCP project will look into ways to build in the increasingly recurrent climate risks, such as pest outbreaks, droughts, erratic and unpredictable rains outside of the cropping seasons, into the landscape management plans developed under component 1. The TCP project will ensure climate risks are accounted for in the land and resource use resilience

plans and the Community-based governance bodies are equipped to provide an early response to climate risks. The TCP builds upon a number of ongoing climate emergency related TCP projects in the country. It will be a 2-year project, financed by FAO's regular budget for a maximum amount of USD500,000.

The major problems underlined by the baseline projects are the risks due to the temporally and spatially erratic character of rainfall, frequently leading to general or local droughts with subsequent increase of human pressure on rangelands. Based on baseline projects, Mauritania is vulnerable to droughts and climate change extreme events, which affects agriculture (including pastoralism) which employs 77% of active labour and mostly the poor. The baseline projects also reflect poverty, low technologies, lack of planning, low support, and limited scaling up of results and of lessons learnt. Planning, innovations, knowledge sharing and climate finance are instrumented to be promoted to deal with climate change.

### **1.3 The Alternative Scenario**

Under the existing situation, rural populations in south-eastern Mauritania are highly vulnerable to climate change. Climate change is causing weather patterns to shift, intensifying and disrupting weather patterns. These changes and associated impacts are not compatible with traditional production methods. This is forcing vulnerable communities to compete for dwindling resources and concentrating production within already degraded watersheds. This situation is simply exacerbating resource degradation, compounding the negative impacts of climate change, and increasing the vulnerability of already at-risk communities.

Vulnerable communities do not benefit from the capacity and experience required to implement strategic management. This is highly critical for communities dependent upon shared resources to sustain productive management. Communities required the skills and knowledge to identify climate change impacts, strategically identify appropriate responses, and generate production models designed to enhance resilience.

The project is designed around three fully integrated Components. The project will simultaneously assist vulnerable private enterprises engage in livestock and agriculture production to strengthen their capacity to implement production improvements. With financial support from LDCF to cover additionality, the proposed alternative will address this situation by assisting communities to identify and adopt necessary management improvements. The alternative will set in place two innovative and complementary tools that FAO and its partners have developed extensively in recent years: Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) and Agro-pastoral Field Schools (APFS). Based on past experience in the region, these tools and approaches work to ensure that vulnerabilities are sustainably reduced in rural communities facing similar issues.



Under Component one, the project will build the capacities required to engage in strategic land and resource use planning focused upon assisting private sector agriculturalists and livestock owners to effectively identify and address climate change risks while alleviating climate related conflicts. This will be achieved through setting in place a strategic resource planning scheme supported by a comprehensive conflict resolution mechanism. Land-use and sustainable livelihood planning will again be focused upon generating climate change adaptive practices and ecosystem-based resilience. The end result will be the establishment of a formal land use planning system designed around catchment areas. This effort will assist communities to identify climate-resilient practices required to maintain productive systems and deliberately manage shared resources through a comprehensive and adaptive planning framework. A co-benefit of strategic planning and on-going monitoring of resource use management will be to assist communities to build early warning capacities. The project will approach strategic land use planning as a land-based measure to address poverty, conflict, and displacement. To facilitate the strategic planning and resource use process, the project will apply Voluntary Guidelines on the Responsible Governance of Tenure (VGGT). This tool will assist communities to implement a management system for informed and cooperative decision making. VGGT is particularly useful in conflict-ridden areas where land access and land tenure are key factors contributing to conflict. Co-developed by FAO and FIAN international, VGGT is a comprehensive, fully-inclusive, structured and participatory tool to create dialogue, to support negotiations, to identify win-win pathways, to collaboratively determine priorities and challenges, to formulate joint objectives and activities, and to establish structures for management, decision-making and conflict resolution. FAO has recent experience in Mauritania with the application of VGGT through the Senegal-Mauritania-Mali VGGT project.

Under Component two, the project will assist private producers to reduce vulnerability and increase resilience through innovation and technology transfer. Specific activities to be undertaken will be informed and guided by the strategic planning process undertaken through Component 1. This will ensure that implemented innovations are fully compatible with strategic, climate change risk reduction needs identified through the planning process and based upon comprehensive, ecosystem-based approaches. Technology transfer will be supported by capacity building efforts designed to enhance the effectiveness of extension workers and other government service providers to assist private producers to identify, prioritize, and implement suitable climate resilient practices. To facilitate this process, Agro-pastoral Field Schools (APFS) will be used to deliver technical capacity to target producers. APFS is a group-based, practical-oriented, participatory extension approach. The APFS will provide an opportunity for farmers to learn together, using practical and hands-on methods of discovery learning. APFS emphasizes methods such as observation, discussion, analysis, collective decision-making, presentation and taking appropriate action. Discussion and analysis are also important ways to combine local indigenous knowledge with new concepts and bring both into the decision-making process. Typically, the APFS approach revolves around a planned series of time-bound activities (generally over one agricultural production cycle), involving a group of willing men and women pastoralists and farmers, guided by specially trained facilitators or by other lead farmers. Over the past decade FAO has developed the APFS approach so that it can address combined pastoralist and farmer user groups. Each APFS unit will be provided with innovative technologies as well as venture capital to implement resilience and adaptation actions.

Under Component three, the project will make certain that best-practices are evaluated, captured, mainstreamed, and upscaled. This will include linkages to important national and regional institutional and policy frameworks. This will also include making certain that best practices are comprehensively captured and effectively disseminated for uptake to generate impacts at higher geographic and social scales. Project efforts and results will feed into regional, national, and international knowledge management frameworks. A major part of this effort will include twinning with the recently submitted Sudan LDCF/FAO Project: “Resilience of Pastoral and Farming Communities to Climate Change in North Darfur”. Both the Sudan and Mauritania projects set-out to address similar issues related to resource constraints, climate change impacts, and conflicts between agrarian and pastoral interests. By aligning the two projects through comparable project frameworks and approaches, FAO will assist to generate South-South learning exchanges. This will also improve cost-efficiency and improve effectiveness of both endeavors. At the national level, the project will work closely with the FAO/GEF project: “Integrated ecosystem management project for the sustainable human development in Mauritania” which is currently under consideration. Details are provided in the coordination section below and will be fully elucidated during the PPG phase.

Project results will greatly increase the resilience of highly vulnerable private producers to climate change and variability and will directly contribute to improving their food security and nutritional status. Results will include more reliant water availability, reduced erosion and desertification, and reduced conflicts. The project will work to strengthen the ability of vulnerable communities to identify, strategically plan for, and implement innovations designed to address emerging climate related challenges. The project will set in place innovative tools to manage risk, including concrete tools at the production level and supportive policies and capacities within decision-making structures. Gender is and will be well considered and integrated within all project efforts. The project will take an ecosystem-based approach, working to support private enterprise and government service providers to assess resource issues holistically integrating soil, water, weather, forage, forestry, and other factors critical to maintaining the ecosystem services and resilience upon which rural communities depend.

The target beneficiaries are private enterprises comprised of most vulnerable agriculture/livestock producers. These target communities will be benefitting from tangible interventions designed to drive climate resilient and adaptive practices at the producer level. The positive impacts will result in a community-based program that benefits from a strong decision-making framework. The project’s direct beneficiaries will encompass numerous villages and several thousand households. The immediate and direct beneficiaries will be approximately 45,000 persons with 50% female representation. The project will directly result in climate resiliency improvements impacting several thousand hectares of currently degraded and at-risk catchments.

## **Project Framework**

The Project Objective is to strengthen the resilience of vulnerable rural populations by improving agriculture and livestock sector planning and the application of innovative practices at the catchment level.

Component 1: Adaptation and resilience practices secured through local resource use planning and decision-making frameworks

Output 1.1 Community-based governance bodies established for resilient land and resource planning

The project will support the establishment of governance bodies organized around each target watershed to support the completion of strategic land and resource use planning. The project will apply VGGT to support decision-making and planning processes, building the capacities of government service providers and community members to utilize this tool. This will generate cooperation regarding the governance of catchment areas and provide a framework for land and resource use plan creation and implementation.

The project will support the completion of comprehensive community profiles focused upon private sector agriculture and livestock producers along the traditional migratory routes. Profiling will cover both the resident population and the mobile population that spends part of its annual cycle in the villages. Profiling will lead to a detailed understanding of socio-economic activities, of status by group, of power structures, of decision-making structures, of recent and current use of natural resources, of age group differentiation, of past and previous resource-based conflicts, of past and present consultation tools (e.g. Peace Committee, VDC, etc). Profiling will entail a thorough gender differentiation regarding challenges and opportunities.

At each target site, communities will be organized into steering committees and professional user groups. The project will particularly target and engage women and youth. For instance, the project will support the establishment of women specific cohorts to inform the planning process. These bodies will be designed to assist communities to coordinate and collaboratively generate strategic approaches to address vulnerability challenges. The project will assist the established community groups to improve capacity to understand fundamental vulnerability issues, identify best international principles and practices, and apply these practices to address local challenges. The process will be informed by a vulnerability and adaption risk analysis. The planning process will benefit from the use of FAO's Resilience Index Measurement and Analysis II (RIMA-II)<sup>[2]</sup>.

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Based upon the comprehensive assessment of community profiles, the project will support the emplacement of conflict resolution tools. These tools will be focused upon mitigating conflict while addressing the complex challenges related to climate change impacts, resource degradation, and the need for the private sector producers to address economic and food security concerns. The conflict resolution/decision-making structures will reduce stress between agriculture and livestock producers using a cross-cutting and comprehensive approach. The tools will reflect traditional systems while integrating best international principles and practices. The approaches will be neutral and seen to be neutral. Importantly, they will empower private producers and government services agencies to have the capacity to resolve conflicts and to make informed decisions regarding necessary adaptive measures.

The process will involve training of municipal councilors regarding community-based planning and the integration of climate change adaptation and resilience practices. This will include regional managers and staff from the Ministry of Environment and Sustainable Development and its Regional Delegations. The project will link with Dimitra Listeners' Groups in the selected communities. Local Development Committees and Municipal Councils will participate planning to ensuring coherence and compatibility with Local/Communal Development Plans.

It is envisioned that approximate four gender balanced steering committees and twelve professional user groups will be established. These community-based governance bodies will directly involve several hundred private livestock and farming stakeholders as community leaders. The groups will specifically include identified women and women-based associations. The project will build the capacities of at least 40 local government and technical staff to support the implementation of community-based management agreements required to establish the foundation for comprehensive land and resource use planning.

#### Output 1.2 Land and resource use resilience planning operationalized

Utilizing the established and capacitated governance bodies, the project will set in place and operationalize community-based land and resource planning designed to identify and prioritize innovations and strategically address vulnerability and resilience issues. The planning tools will address issues specific to each agro-ecological zone. Each land and resource use plan will be applied to comprehensively cover pastoral, agriculture, water, and forest resources. This watershed based methodology to resource management will support Mauritania in its current efforts to shift towards a territorial approach that embraces multi-sectoral, bottom-up and place-based interventions.

Using regional and global lessons, the strategies will be designed as dynamic tool for private sector producers and government agencies to coordinate their efforts to address emerging climate change challenges. Each community strategy will be evaluated and updated annually. This will include an evaluation of current resource management trends and emerging climate change impacts. In this way, the management strategies will create a framework whereby producers have an increased ability to identify and adopt actions designed to address adaptation and resilience challenges. This will assist stakeholders to identify emerging climate related impacts and provide for community-wide early warning systems using tools that are appropriately scaled to local conditions. The strategies will help to inform specific technical interventions to be supported through project effort.

The planning tools, in itself innovative (through the deployment of open source and free mobile applications such as Collect Mobile that allow of easy, quick and burden-free data collection that is geo-referenced and related to environmental monitoring), will identify and prioritize a suite of technical innovations to be applied at each target site to address climate impacts. This will include best international principles and practices related to Sustainable Land Management (SLM) and Sustainable Production Intensification (SPI) designed to increase resilience and promote strategic climate adaptation approaches. Additionally, the reforms promoted through the planning process will integrate tools generated through programs such as TerrAfrica and WOCAT. These have generated/documented/assessed a suite of innovations that may easily be upscaled and adapted to the local conditions.

Examples of such innovative practices and technologies range from packages of innovations for manuring/composting (zai or planting pits, improved trash lines), vegetative strips, water harvesting (dredging of oueds, containment basins, protection of banks, levees, filter dams and stonelines), gully rehabilitation and dune stabilization (demi-lunes, checkdams, trenches, levees, area closure+palisades+ vegetation cover), and grazing land management (area closure with earth and stone bunds, improved local fodder species/varieties and management) . They will be selected through consultative processes that are part of the APFS approach.

Improved understanding on climate risks and on the importance and operational practicability of SLM and SPI tools and practices as a means to adapt to climate change. Implementation will be adaptive and informed by on-going monitoring. This will include setting in place specific success indicators that will be monitored annually by the user groups to make certain actions and planning are successfully addressing existing and emerging challenges. assisting local stakeholders to properly monitor implementation.

Plan implementation will be supported and informed by long term weather and ecology monitoring. These tools will be informed by reporting by private commercial stakeholders as well as government staff. The observation tools will be linked with meteorological services. This will assist to generate both information regarding the results of implemented planning activities and serve as an early warning system to inform strategic and adaptive approaches.

Approximately four land and resource management plans will be generated on a basin level. These four plans will then feed-into a broader municipal plan encompassing the entire catchment. Each land and resource use plans will direct and improve the management of several thousands of hectares of currently degraded and vulnerable lands. Results will be integrated within Local Development Plans at municipal and regional levels to strengthen climate change adaptation and resilience at a wider scale.

## Component 2: Innovations applied and supporting uptake of resilience measures by vulnerable communities

### Output 2.1 Climate change resilient and adaptive investments identified and prioritized to strengthen private sector production resilience

The project will utilize Agro-pastoral Field Schools (APFS) to transfer technologies and build producer capacity to implement innovative practices. The APFS will link with the activities and outputs generated under Component 1, including VGGT and land-use management strategies. Each school will specifically build the capacities of private enterprise to implement innovations prioritized and compatible with the achievement of Component 1's strategic planning.

The project will support the establishment of farmer field school approaches at each of the target areas. These programs will be based upon FAO's global experience and expertise. The school curriculum will benefit from the technical inputs of FAO. The APFS will be based upon FAO's global practices and adapted to the particular requirements of the target areas. The APFS will be used as a capacity building tool designed to complement and strengthen existing extension services. APFS will target each of the main user groups using programs tailored specifically to individual user group requirements.

The schools established in each of the target areas will be focused upon issues related to building community-based capacity to identify and implement production improvement practices designed to increase resilience and strengthen adaptation capacity. The schools will be designed to support the implementation of the land and resource use plans and planning process. This will include building the capacities of private enterprise stakeholders to identify and innovative more climate appropriate production practices.

Training materials will focus upon climate change adaptation issues relevant to the target regions. The programs will provide a basis for improving the resilience and reducing risks faced by vulnerable communities. A specific cohort will be designed to target women to support gender-specific capacity improvements. The schools will be co-

implemented by Ministry of Environment and Sustainable Development and Ministry of Agriculture staff. This will include a comprehensive training program to build the capacity of these staff to effectively implement required programming.

The project will have established several dozen APFS engaging thousands of stakeholders. The schools will be designed with women and youth specific cohorts, making certain that at least 50% female stakeholders and engaged and benefitting from capacity building improvements.

#### Output 2.2 Strategic private sector implementation of proven climate change coping practices

The project will provide technical support and venture capital required for APFS participants to implement prioritized innovations. Applied innovations will be linked to priorities identified through the Component 1 planning process and applying technical capacities improved through Output 2.1 training programs. Again, all efforts will be designed to introduce strategic production innovations that target vulnerability and improve livelihoods.

The APFS will serve as a conduit to provide venture capital necessary to implement and test identified infrastructural and production improvements. This will help to make certain these LDCF investments are strategic and monitored to determine which practices are the most cost-efficient and effective at addressing climate change related issues. Funding will be applied using the Caisses de résilience (CdR) approach. This tool revolves around farming and pastoralist communities – both men and women – connecting and integrating productive, financial and social activities. This approach has been applied successfully by FAO in several African nations. In selected project sites, the APFS will be coupled with a ‘Caisse de Résilience’. Financial inclusion mechanisms will be promoted within the APFS groups to promote income generating activities. APFS group members will contribute in cash to a fund and buy shares; they will benefit on a rotational basis, individually or in pair, from micro-credit. The amount provided depends on the group’s member contribution to the fund. At the same time, listeners’ groups are formed within the APFS for knowledge sharing but also for conflict management and resilience enhancement.

Interventions will be closely monitored with best practices captured for replication and upscale. Implemented activities will include SLM and SPI practices targeting agriculture, forestry and pastoral production. A detailed and prioritized set of interventions will be identified and costed during the PPG phase. This suite of innovations and technologies to be transferred will be reflected within Component 1 planning and further defined through APFS training. Potential innovations will likely include:

- Establishment of nurseries for high value marketable indigenous species and the exploitation of non-wood forest products.
- Regeneration of degraded forest lands
- Setting aside degraded agricultural/forest/rangeland
- Stabilization of dunes
- Improved management of rainfed agriculture lands
- Improved management of irrigated agricultural lands
- Diversified agricultural production
- Improved management of pasture lands
- Improved management of water systems, including stone barriers, demi-lunes, trenches, levees, dredging of oueds, protection of banks, containment basins

By project close, at least 10,000 private and highly vulnerable farmers and livestock producers, including women and youth, will have benefit from innovations and technology transfer. They will have successfully adopted and implemented innovative, climate resilient practices. This will increase the sustainable management of tens of thousands of hectares of currently vulnerable lands.

Component 3: Monitoring, evaluation, and capture of lessons learned to informed decision-making and upscale of resilience improvements

Output 3.1 Results strengthen national level resilience and adaptation policies

The project will provide the technical inputs required for project results to be fully integrated within relevant National, Regional, and Commune level policies. Several national initiatives exist which may be able to support replication and sustainability of the Project's impact. National, Regional, and Commune level policy and plans related to land tenure, pastoralism, agriculture, social protection, food security, nutrition and climate change will be amended to better climate change issues based upon project findings and on-going results. Plans and policies related to land tenure, pastoralism, agriculture, food security, nutrition and climate change will be assessed and gaps and weaknesses identified. This will include making certain that national and sub-national/regional decision-makers are trained and engaged in order to facilitate further mainstreaming of climate change adaptation considerations into national policies and plans. Specific policies and regulatory instruments to be targeted will be identified during the PPG phase.



### Output 3.2 Project lessons captured, mainstreamed and disseminated

Applying an innovative communications strategy, best practices and lessons learnt from project implementation will be translated into knowledge products and communication outputs. Several national initiatives exist which may be able to support replication and sustainability of the Project's impact. During the PPG, a project communications strategy will be developed. This strategy will aim at capturing best practices generated. The effort will focus upon target communities as well as making certain lessons learned are captured for upscale across a larger geographic region incorporating a wider group of private producers. This may make use of existing tools such as APFS and Dimitra Listeners' Groups. Stakeholders will be presented in a series of communication methodologies scaled to local producers, extension workers, government decision-makers and other key stakeholders. The aim will be to make certain lessons gleaned from project activities are fully-unscalable by a larger audience across larger geographic areas. Communication approaches will include development of awareness building materials, generation of electronic and print media publications, and a series of awareness building workshops and other out-reach programs to be implemented regularly throughout the project period.

### Output 3.3 Effective Monitoring and Evaluation implemented

Project activity will be comprehensively monitored and evaluated to help guide adaptive management, and promote the uptake of knowledge, good practices and successful approaches, including gender mainstreaming. This will be achieved in part through the project's Monitoring and Evaluation efforts. Based on the gender analysis and action plans that will be developed during the PPG, the project will ensure that decisions made, and interventions proposed for implementation, consider the potential impacts and outcomes for different groups within society, with particular focus on the roles played by men, women and youth. In line with the principles of integrated natural resource management, the project will promote a participatory approach to monitoring, evaluation and learning, involving all relevant stakeholders, including local communities. The focus will include project level monitoring, to feed into FAO's global monitoring of its GEF and LDCF portfolio, and to contribute to GEF/LDCF's global monitoring system.

## **1.4 Additional cost reasoning**

There are several efforts underway in Mauritania designed to address issues related to poverty, conflict and degradation. The project will build upon these efforts. However, under the existing scenario, most of these programs do not work cohesively to address the root causes by integrating resource use planning, practice innovation, and improved policy approaches to alleviate climate change risks and reduce related resource-based conflicts.

This LDCF investment will promote innovative approaches fundamentally aligned with LDCF's programming and strategic operational policies. The project will set in place innovative tools to manage risks, take an ecosystem-based approach, and implement land-based measures. Project improvements will be integrated with policies and strategies to generate outsized impacts. The project will support and build incentives to encourage private sector engagement based upon immediate national priorities. Technology transfer financed through LDCF additionality will be key to this effort. FAO has a strong track record in this regard, particularly with building capacity of small-scale pastoralists and agrarians to identify and adopt production approaches designed to enhance livelihoods while reducing exposure to climate change risks. As noted, this project will link with a parallel project proposed for the North Darfur, further reflecting an approach designed to enhance additionality.

LDCF funds at roughly USD 4.5 million are less than 23% of the entire budget estimated at over USD 19.4 million. LDCF investment will build upon and complement the baseline by providing the additional costs required to ensure that climate variability and climate change resilience is mainstreamed into development processes in the following ways:

*Component 1* - Financing of this component is as follows: USD1,338,735 from component 1 of the GCF project, USD428,570 from the FAO-TCP project, and USD650,000 from LDCF.

Investments from the LDCF focus mainly on capacity building to engage communities and different stakeholders into land use and management planning processes, therefore working directly with different land and NR users, and deploying tools (VGGT, Dimitra Clubs) that support conflict resolution and joint planning for system resiliency.

This work is complemented by and dependent upon well-equipped and functional extension services, able to provide technical inputs, data, institutional support and a financial, legal and strategic framework and identity. The GCF project will provide such strengthened capacity of government institutions and in particular its extension services, on how to monitor climate change adaptation progress at the national, regional and local levels. This includes for instance the organisation of regular meetings between different groups of NR users and government representatives to improve communication and negotiation channels at the Wilaya and local community levels. The FAO-TCP project is being designed to complement LDCF investments with a focus on climate risks and the uptake of early response to such risks by the governance structure put in place under component 1.

*Component 2* - It has been emphasized before that technologies and innovations will be selected through participatory processes during project implementation, an approach that is part and parcel of the APFS approach deployed through this LDCF project. The LDCF project will build on the results of the projects considered as baseline projects, and in particular the following: GCF (USD7,658,320), BRIDGES (USD1,000,000), Resilience of food insecurity and nutrition in the Sahel of Mauritania (USD1,000,000) and AMCC-2 (USD1,000,000).

These baseline projects will complement the APFS work under output 2.1, by supporting complementary agro-sylvo-pastoral system/landscape resilience actions such as rehabilitation of rangelands, land use and infrastructure maintenance plans for livestock corridors, sustainable charcoal production reducing tree logging and associated land degradation. These activities complement the innovative SLM and SPI practices and technologies promoted through APFS in the target areas, therefore more comprehensively and at larger scale securing system resiliency.

Under output 2.2, baseline projects will focus on providing inputs and technical support for production, processing and marketing of priority NTFPs (gum Arabic, desert date, among others) and agro-pastoral products in support of income diversification, while also supporting the development of climate resilient and sustainable value chains for these

priority products. The LDCF project can learn from these processes, and through the *Caisses de résilience* replicate successes in other geographies and/or for other products, involving private producers that have benefited from APFS training. Baseline investments and LDCF investments together assure a broader diversification of income and as a result more resilient livelihoods of vulnerable NR users in Southern Wilayas of Mauritania.

Component 3 – This component is being co-financed by the GCF (USD1,002,945) and CNOEZA (USD1,000,000). The LDCF investment will complement work to be delivered through component 1 of the GCF project, which aims at building the national capacity for future climate impact and vulnerability assessment in order to integrate CCA - in an informed fashion and based on updated and reliable data – into sector policies and programmes focusing particularly on agro-sylvo-pastoral systems. It therefore helps provide climate relevant data and information that inform policy design and planning. It furthermore connects the national context to the regional one, facilitating knowledge exchange and lessons learning amongst GGW countries. The LDCF project complements these investments that aim at mainstreaming climate change adaptation into policies and plans focusing particularly on the commune and sub-commune levels. LDCF funds will support comprehensive assessment of land tenure, social protection, nutrition and other policies and plans that are not considered systematically in other investments. Therefore, there are geographic (scale) and thematic complementarities between the investments.

Monitoring efforts will be supported by the CNOEZA recurrent investments put in place to collect data and analyse data on the status of NR. Its mandate includes institutional capacity development and improvement of knowledge and understanding of environmental issues. The LDCF investment will facilitate the knowledge exchange and access to data and information for participatory monitoring, evaluation and learning. This latter is believed to sensibly contribute to the sustainability of project results achieved under components 1 and 2.

The following table summarises baseline investments and LDCF additionality:

Co-financing	Specific deliverable	LDCF additionality	Comp 1	Comp 2	Comp 3	PM
GCF comp 1	This component of the GCF project will provide support to capacity development of the extension services for climate change impact and vulnerability assessments and facilitated knowledge exchange between national and regional levels.	Further link the national and regional level to the local context, with participation in decision making, planning, implementation and monitoring facilitated through appropriate and innovative tools and approaches.	\$ 1,338,735		\$ 1,002,945	

GCF comp 2	GCF project component 2 will help rehabilitate rangelands, introduce land use and infrastructure maintenance plans for livestock corridors, sustainable charcoal production reducing tree logging and associated land degradation, etc.	Innovations introduced by the LDCF project, such as the Caisses de Résilience, eventually will be upscaled by the GCF project.		\$ 7,658,320		
Resilience of food insecurity and nutrition P2RS (MRD)	This project provides inputs and technical support for production, processing and marketing of priority agro-pastoral products in support of income diversification. Furthermore, investments are made in infrastructure development and development/integration into regional markets.	LDCF investments enhance the natural resource governance models by introducing tools and approaches that facilitate conflict resolution and participation, and offer concrete ways to replicate successes. Furthermore, introduce the landscape dimension for system resiliency.		\$ 1,000,000		
BRIDGES (MEDD)	The baseline project restores 5,000 ha of dryland forests and landscapes in the pilot areas using tried and tested approaches, strengthening seed centres and programmes and establishing networks of village-level technicians, while it also reinforces value chains of NTFP.	The LDCF project ensures climate resiliency is fully embedded in development efforts of vulnerable dryland forests and agro-silvo-pastoral systems such as the ones of the Mauritanian Sahel. Furthermore, the LDCF connects the grassroots to the regional and national level, where BRIDGES also successfully brings in lessons from other but similar dryland regions through improved South-South cooperation.		\$ 1,000,000		

AMCC-2 (MEDD)	In addition to the support provided to SLM and climate smart agro-silvo-pastoral production practices, the project also looks into tenure issues, and in particular barriers faced by women.	LDCF capitalises and disseminates successful practices and approaches using APFS, creating a network that eventually extends beyond the project pilot areas. In terms of conflict resolution, re-use of abandoned land and tenure issues, the LDCF project introduced VGGT as a successful approach, complementing AMCC-2 work thematically and geographically, and building upon study findings.		\$ 1,000,000		
FAO-TCP	Where the LDCF and baseline projects provide ecosystem and livelihood resiliency answers at the system level to predicted climate change trends, the TCP will carve out a space for, attention to and action on climate risk management, effectively engaging the governance structure and tools put in place by the LDCF project.	The LDCF project outputs 1.1 and 1.2 provide the basis to successfully apply multi-sectoral, bottom-up and place-based interventions.	\$ 428,570			\$ 71,430
CNOEZA	Data collection and analysis on status of natural resource base, improving understanding of environment issues. And contribute to capacity development of national and regional institutions to integrate NR and climate change adaptation into policies, plans and strategies.	Facilitate knowledge exchange and access to data and information for participatory monitoring, evaluation and learning, therefore linking the national, regional level to the local context.			\$ 1,000,000	\$ 500,000

<b>TOTAL</b>			<b>\$ 1,767,305</b>	<b>\$ 10,658,320</b>	<b>\$ 2,002,945</b>	<b>\$ 571,430</b>
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### 1.5 Adaptation benefits

Direct and immediate beneficiaries of this project will include several thousand households in dozens of villages. These households or approximately **45,000 direct beneficiaries** – male and female – are currently some of the most vulnerable in Mauritania. As noted, they rely upon agriculture and livestock production for all aspects of their well-being. The project will upscale benefits to improve management of three of Mauritania’s regions and some of the nation’s most vulnerable populations.

Currently, these persons reside in an area where resources are becoming increasingly scarce and competition for these resources is becoming increasingly fierce. With the additionality provided by LDCF investment, vulnerabilities will be alleviated through more structured resource management and increased capacity to identify and invest in production methods that are better aligned to deliver climate change adaptation benefits.

The vulnerable communities in the intervention areas face a series of challenges including climate change. Climate change has considerably compounded natural resource degradation and has raised uncertainty and risk. The complex situation demands cross-cutting and innovative approaches.

The investment will be defined by a participatory and integrated territorial development approach. This will develop climate change adaptation measures and coping strategies that are both innovative and capitalize on previous experiences and impacts. Communities will increase their awareness of climate change and strengthen their skills to effectively identify and adopt coping strategies. The results should include socio-economic developments associated with improved pasture land, better agricultural and livestock productivity, and diversified and resilient livelihoods.

The project will have outsized impacts in that these target communities are representative of only a small percentage of the total population facing similar challenges. If this project is successfully implemented, lessons-learned and models established will be easily replicable across a much larger geographic area in order to benefit a much larger segment of at-risk or vulnerable society. This will be achieved and enhanced through the project’s consolidated efforts to make certain lesson-learned are systematically captured for upscale and capacities are strongly built within relevant government and community institutions to carry forward best practices.

Target beneficiaries will become more resilient to climate change because alternative livelihoods will be promoted. Further investment in livestock or diversification of cropping systems including the adoption of drought resistant species or appropriate cropping patterns will contribute to more resilience to climate change. At the same time, technical and financial innovations that will be promoted in APFS and 'Caisses de Résilience' will contribute to reduce the vulnerability of ecosystems to climate change. The LDCF project is about promoting innovations in a specific context that will be upscaled in larger operations.

### **1.6 Innovation, sustainability and potential for scaling up**

**Innovation:** Although the project will build upon well-proven models such as agro-pastoral fields schools, the project will also be on the vanguard in terms of identifying appropriate interventions best suited to assist vulnerable communities to address climate change related issues within the livestock and farming sectors at a watershed level. The project will deploy innovative technologies and approaches in order to support climate resilient agro-silvo-pastoral production and livelihoods options (see lists above). Also innovations will be introduced in the land use planning, management and monitoring, not only when it comes to tools and technologies, but also with respect to scale (landscape versus plot), and approach (multi-actor and participatory).

**Sustainability:** The project will ensure sustainability through capacity building and mainstreaming of best practices within government and community institutions. The project will also be certain to monitor and capture best practices through a rigorous system to be fully designed during the PPG and executed during project implementation. The final project design will include the generation of a sustainability plan that is linked to the project's capacity building and communications strategy. This will go beyond simply assisting with making certain information is capture and disseminated. The sustainability plan will make certain that capacity and financial resources exist to carry forward project emplaced practices. The sustainability plan will also clearly identify and make certain that government and institutional policies and plans fully integrate project results. This will include budgeting and recommendations for regular awareness building and stakeholder engagement workshops and seminars to make certain government actors and decision-makers are consistently made aware of project challenges and advances.

**Up-Scaling:** The project will make strenuous efforts to make certain best practices are upscaled locally, regionally, nationally and globally. FAO has global practices that will help to inform project effort and implementation while promoting best practices and lessons learned for global upscale through a number of FAO’s visibility and marketing tools. This will include the twinning of this project with similar regional efforts, e.g., Darfur LDCF investment.

**Competencies and Lessons Applied:** FAO has significant experience it can bring to this Project. Over the past decade – in partnership with government agencies and institutions and civil society organizations – FAO has implemented a series of national, regional and global humanitarian relief, livelihood protection/recovery and agricultural development programmes and projects.

[1] <http://www.ruralpovertyportal.org/country/home/tags/mauritania>

[2] FAO, Resilience Analysis in the Triangle of Hope, 2016, <http://www.fao.org/3/a-i5808e.pdf>

**1b. Project Map and Coordinates**

**Please provide geo-referenced information and map where the project interventions will take place.**

Regional Center	Latitude	Longitude
Hodh El Gharbi	N 16° 16' 48"	W 8° 20' 57"
Guidimakha	N 15° 15' 20"	W 12° 15' 17"
Assaba	N 16° 46' 33"	W 11° 31' 30"

**2. Stakeholders**

Select the stakeholders that have participated in consultations during the project identification phase:

**Indigenous Peoples and Local Communities**

**Civil Society Organizations** Yes



## Private Sector Entities

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

The following stakeholder table reflects those identified for consultation during the project development phase. A full stakeholder engagement plan will be developed during the PPG phase.

Stakeholder	Mandate	Role and Means of Engagement
<b>National</b>		
Ministère de l'Environnement et du Développement Durable (MEDD)	Responsible for the development, implementation, and monitoring and evaluation of policies, strategies, initiatives and sustainable management of natural resources. The MEDD helps to oversee issues related to climate change, desertification and biodiversity conservation. MEDD is responsible for monitoring and implementation of the UNFCCC, the UNCCD and the CBD in the country.	The MEDD will serve as one of two project executing entities. As such, the MEDD will be involved with all aspects of project implementation and support, including through field services.
National Observatory of Arid Regions (CNOEZA)	Working under the tutelage of the Ministry of Environment and Sustainable Development, the observatory was created in order to build capacity and knowledge on environmental issues, as well as collect and analyse data relevant to the status of natural resources.	The CNOEZA will serve as one of two project executing entities. As such, the MEDD will be involved with all aspects of project implementation and support, including through field services.

Ministry of Agriculture (MDA)	The MDA oversees agricultural development, including relevant policy and technical support.	As a member of the Steering Committee, the MDA will be able to contribute agricultural data, advice for producer groups, assistance in the organization of smallholder groups, guidance towards the deployment of farmer field schools, and support to the development of value chains. Its regional antennas which will contribute to the implementation in addition to its national center of agronomic research.
Ministry of Livestock	The Ministry of Livestock is in charge of support to livestock producers, promotion of pastoralism and support for animal health. It is governed by Decree 65.153 from 1965. It also upholds the Pastoral Code and oversees all activities related to livestock raising, management, pasture development, sales, slaughtering, and sales, including meat inspection and sanitary conditions.	The MDE will also be a member of the Steering committee. Among other contributions the MDE will contribute advice on the links between the pastoral code and the land use planning processes foreseen by the project.
Ministry of Water Resources and Sanitation	Its principal role is to ensure potable water supply to the landscapes covered by the project. It oversees all investments related to mobilization of potable water, irrigation water and sanitation	Its participation in the project, including the Project Steering Committee, will largely be covered by its regional antennas. The MoWS will contribute technical advice and logistical support for water related activities.
Agence Grande muraille verte (AGMV)	Responsible to take effective and urgent measures in the drylands of Africa, halt/reverse the land degradation, support conservation of biological diversity, build ecosystem resilience, contribute to human well-being and support poverty eradication.	The AGMV will be engaged to support relevant SLM and production enhancement improvements.
Ministère de l'Intérieur et de la Décentralisation (MIDEC)	Responsible for territorial administration and municipalities.	The Walis and the Hakems will provide support to the creation or the revitalization of community associations. The municipalities will contribute to the dissemination of the project's results while helping their ownership by the beneficiary communities.

Ministère de l'Hydraulique et de l'Assainissement (MHA)	Manages water policy and water management. The National Water Resources Center (CNRE) is responsible for the knowledge and monitoring of water resources. The Department of Hydrology and Dams is a structure in charge of drinking water.	This agency will play an important role in water supply for people and infrastructure developments of wetlands and watersheds.
Ministère de l'Agriculture (MA)	Responsible for the development of facilities and production of vegetable crops. The Rural Development Directorate is responsible for the construction of retaining dams and structures for collecting water runoffs.	This agency will have a role to play in the management and use of water resources for irrigation.
Ministère de l'Élevage (ME)	Responsible to design, implement, monitor and evaluate government policies on the development of animal husbandry. This includes contributing to the technical support of the producers; promoting the structuring of the pastoral world; providing necessary support and technical advice on animal husbandry for the sustainable improvement of production and productivity.	MDE will assist with making certain that the pastoral code and the land use planning processes receive technical appropriate inputs. The MDE will likely serve on the Project Steering Committee.
Ministère des affaires sociales, de l'enfance et de la famille (MASEF)	Responsible to ensure inclusion of gender into sectorial policies and to work directly with communities. Its activities are transversal and diversified.	MASEF will play a key role in making certain issues of gender are prioritized within project actions.
Ministère de l'Habitat, de l'Urbanisme et de l'Aménagement du Territoire (MHUAT)	The Ministry of Habitat, Urbanism and Land Use planning is responsible for issues related to land tenure.	Will support the project's components related to land use planning and land tenure. Will serve on the Project Steering Committee.

Tadamoun	Responsible to address against the impacts of poverty through implementation of the Strategic Framework for the Fight against Poverty.	Tadamoun will cooperate with the project through the local committees and co-financing, including by providing advice on consultations with Haratins and local communities, as regards the development of income generating opportunities.
Agence nationale pour le développement des énergies renouvelables (ANADER)	Supervises major projects in the field of renewable energy. This includes access to functional energy systems in rural areas.	ANADER can share its expertise and lessons learned for the development promotion of renewable and improved energy sources to alleviate pressure on forests.
<b>State, Locality and Community Level</b>		
Willaya du Guidimakha Willaya de l'Assaba Willaye du Hodh El Gharbi	Responsible for local level policy and implementation.	Each of these local government bodies will be responsible to provide implementation support for project efforts. This includes engaging with both technical and policy innovations.
<b>CSO's and Academia</b>		
Centre National de Recherche Agronomique et de Développement Agricole (CNRADA)	Conducts science and technology and provides agricultural production expertise.	Will strengthen project outputs by engaging in various trainings and making available expertise.
Groupement National des Associations Pastorales (GNAP), la Fédération des Agriculteurs et Éleveurs de Mauritanie (FAEM), women cooperatives, AGLC, etc.	A wide variety of NGO's are active in the project region. A full assessment of activities, competencies, and potential coordination will be undertaken during the PPG phase.	Will strengthen producer capacity and stakeholder engagement.
<b>Donors and Development Agencies</b>		

FAO	To support members in their efforts to ensure that people have regular access to enough high-quality food in sustainable manner. FAO helps by supporting policies and political commitments that promote food security and good nutrition and by making sure that up-to-date information about hunger and malnutrition challenges and solutions is available and accessible.	FAO will serve as the EA and also be responsible for providing significant technical inputs to ensure that innovations reflect best international principles and practices and are upscaled to inform regional and global improvements.
<b>Private Sector</b>		
Livestock producers and agriculturalists	Small private enterprises responsible for agriculture and livestock production.	These persons are the direct beneficiary of project activities. They will be highly involved in all aspects of project activity.
Commercial Enterprises	Small and medium level enterprises responsible for selling and provisioning materials required to support private sector agriculture and livestock enterprises	Small and medium level enterprises associated with the agriculture and livestock industry will be key stakeholders for the project. They will be engaged throughout the project with their inputs secured to help make certain project activities are fundamentally supportive of long-term, stable economic development.

### 3. Gender Equality and Women's Empowerment

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

The project is designed to be consistent with the GEF “Policy on Gender Mainstreaming” and the GEF approach on gender mainstreaming and women’s empowerment.

Although women represent a large part of the full-time agricultural labor force (cash crops; vegetable cultivation destined for home consumption and sale; production and sale of livestock by-products – milk, butter, skin and leather, etc.) they have limited access to services for the popularization of agriculture, to training and to loans. They also often have less access to legal and financial assistance.

The social impact of this project is expected to be largely positive. The participating communities will significantly improve their climate resilience, their agricultural practices[1] as well as their use of natural resources for agricultural and pastoral production purposes. It will also contribute to improving living conditions in rural areas. Agricultural productivity and the income of beneficiaries will increase over time thanks to the introduction of improved production and processing techniques and practices. The project will bring better income and living conditions to a wide variety of beneficiaries, in particular the poor, women, and youths. Certainly, the impacts of climate change might force individuals or communities to move away and settle in less affected areas, but the project will reduce these negative impacts and relieve social pressures, which could encourage permanence or resettlement.

The project will place particular emphasis on income diversification by strengthening the productivity of traditional activities (agriculture, livestock rearing, non-wood products collection, etc.) and by promoting new income generation activities (vegetable growing, etc.).

This Project will acknowledge gender differences, it will assess and comprehensively understand them, and it will then design and implement activities that promote women's empowerment and gender equality. The Project will seek to lessen the impact of climate change on women and other particularly vulnerable groups and contribute to women's empowerment and gender equality.

The project will adopt a participatory approach for maximum impact through the inclusion of all relevant social groups, including marginalized people (e.g. unemployed youth), with attention to the participation and inclusion of women whilst respecting the norms, values and customs of targeted communities. A project specific gender mainstreaming plan will be developed during the project design (PPG) phase, with actions to be taken under each component and necessary budgetary provision as appropriate. The assessment will determine at the household and State levels: the number of female resource users; the number of women headed households; the differentiated impacts of climate change and drought on women; the different knowledge base of men and women; strategies for mainstreaming gender into natural resource management; strategies for optimizing the participation of women in natural resource management and optimizing their economic benefit.

Specific targets will be set during project design (PPG phase) and reflected in the results framework to ensure inclusion and participation of women and girls both in site-based project activities (such as the development of alternative income generating activities, conservation actions, and activities aimed at capacity enhancement), as well as ensuring that opportunities are created for women to take up positions of leadership within the management hierarchy of the project governance structures. The initial gender target is that at least 40% of those directly benefitting from the project will be women.

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes**

**closing gender gaps in access to and control over natural resources;**

**improving women's participation and decision-making; and/or Yes**

**generating socio-economic benefits or services for women. Yes**

**Will the project's results framework or logical framework include gender-sensitive indicators?**

Yes

**4. Private sector engagement**

**Will there be private sector engagement in the project?**

Yes

**Please briefly explain the rationale behind your answer.**

As detailed in the project framework, the main beneficiaries are private sector pastoralists and farmers. Private sector entities are retailers, middlemen, small business and individual farmers: Venture capital will be provided by the project but the concept of Caisse de Résilience will be promoted. Producers/Women will buy capital shares : on a rotational basis, some members of the association will access to credit on the basis of their shares. Venture Capital will be then provided by producers/women.

## 5. Risks

**Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)**

The following risks have been identified with preliminary mitigation measures. Risks will be reviewed comprehensively, and mitigation measures will be strengthened during the PPG phase.

Risk	Impact/Probability Rating (Low: 1 to High: 5)	Management Strategy
Adaptation measures are inefficient at the community level, demotivating the beneficiaries	Impact: 4 Probability: 4	The choice of adaptation measures is made in a participative way with the beneficiaries themselves who will be trained before and along with the representatives of the Municipal Council and will be involved in deliberations at the Municipal Council, so as to engage both the beneficiaries and the Municipality.
The beneficiaries have work/time conflicts and do not have the time to implement the activities decided on with project's support, in particular women who are responsible for several household activities	Impact: 4 Probability: 3	The management structures of the communities and the beneficiaries will be identified, made aware and totally involved in the expected benefits and advantages. This will motivate them to plan their new activities supported by the project while taking into account their time constraints. The project will supervise this aspect through a qualitative criteria method, which will allow them to plan with a picture as full as possible.
The Municipalities of the intervention area are not interested in the project; in the adaptation measures recommended and hold beneficiary communities back from taking part.	Impact: 4 Probability: 3	The project will train the municipal councilors who will serve as representatives and focal points for the municipality as regards approach and plans made. MIDEDEC will be designated as a member of the pilot committee, and will be directly involved in the management of this kind of risk.
Interference from the hierarchy and/or from politicians in the selection of the sites and the activities supported by the project might compromise the results.	Impact: 4 Probability: 3	Objective criteria will be discussed and retained to ensure a correct prioritization of the selection and composition of project sites as well as the working of arbitration bodies (CNED, CREDD).



Climate Change impacts sustainability and effectiveness of project efforts	Impact: 4 Probability: 5	Although appreciable climatic changes are unlikely to occur over the course of implementation, on-going climatic trends are one of this project's primary inducements. The project will focus upon making certain that all aspects of implementation are informed by and respond to emerging climate change threats and trends.
Fiduciary risk	Impact: 2 Probability :2	Funds will be managed by FAO and FAO procedures will be applied. It will mitigate the risks. Procurement will be done by FAO.

## 6. Coordination

**Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.**

The project will actively coordinate with relevant Government Ministries, Departments and Agencies, UN Agencies, and other development partners as well as NGOs, private enterprises and research institutions to facilitate synergies and avoid duplication of efforts. Coordination will take place through established mechanisms including Project Steering Committee, sharing of reports and ad hoc meetings. During the PPG phase, further in-depth consultations will be undertaken to establish/strengthen partnerships and practical modalities for linking and collaborating with relevant ongoing and planned interventions

At the national level, the MEDD will be responsible for the overall coordination of the project, steering the multi-stakeholder project committee and securing complementarity with other MEDD projects and programmes. MEDD will also ensure coherence and coordination with strategies, plans and investments from the Ministry of Agriculture, Ministry of Livestock, Ministry of Rural Development and the Great Green Wall National Agency. The LDCF project is in strict adherence with the priorities of the SFCP III and the NAPE II; and, as a result, is fully in line with the initiatives taken by the Mauritanian Government in the field of natural resource management, management of pastures, agricultural land and forests and the improvement of local population's resilience to climate change.

The intended execution partner of the project is CNOEZA which works under the MEDD line of management. During PPG, the operational capacity of CNOEZA will be assessed per the UN's standard HACT methodology. If meeting all the fiduciary standards, it will become the Operational Partner managing the project funds under the supervision of the GEF Agency. If not and where possible, partial execution responsibility may be granted, and a capacity development plan developed for future execution responsibilities. In that case, selected project execution support services will be delegated to another execution partner, who fully meets technical and operational requirements for timely and quality project execution.

The GEF Implementing Agency for the proposed project is the Food and Agriculture Organization of the United Nations (FAO) and as such will oversee the project's implementation per GEF policy. FAO's comparative advantage in Mauritania lies not only in its historical support to national institutions, but also in its technical capacity and experience in food systems, land-use practices and restoration of ecosystem services. FAO's unique comparative advantages makes it able to deliver policy advice in the field of land and forest restoration effectively, as well as to nudge private investments across agricultural value chains. As a member of the project steering committee along a number of national and local partners, FAO will, among others, ensure coordination with other internationally supported initiatives, including those financed by GEF and implemented by FAO.

GEF Financed Projects

As noted, this project is designed to twin with the recently submitted Sudan LDCF project which targets agricultural and pastoral communities in the Darfur region. The situation in Mauritania and the challenges faced by vulnerable communities in the Darfur are very similar in terms of ecological and social settings. A full twinning and compatibility strategy will be generated and integrated within both project documents. This will ensure that lessons learned are shared. In addition, this will make certain that both projects are fully designed to be compatible and achieve higher economies of scale.

In addition, this LDCF project will be closely coordinated with the recently approved FAO/GEFTF project "Integrated ecosystem management project for the sustainable human development in Mauritania". The two projects are distinct in terms of their targets and approaches. However, initial complementarity has already been identified in terms of opportunities to share experiences regarding ecosystem management and monitoring. Again, a full strategy to ensure compatibility will be generated during the PPG phase.

The following table lists the most pertinent GEF and LDCF financed projects and briefly describes intended coordination arrangements.

Project	International partners and basic information	Project Objectives
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<p>Integrated ecosystem management project for the sustainable human development in Mauritania</p>	<ul style="list-style-type: none"> <li>· LDCF/FAO</li> <li>· Ministry of Environment and Sustainable Development (MEDD)</li> <li>· LDCF: US\$ 8.2 million</li> <li>· 2018 - 2023</li> </ul>	<p>This project focuses upon enhancing resilience in and around the new Biosphere Reserve El Atf. The project intends to apply an ecosystem-based approach to address degradation. The project will include an FFS and planning components.</p>
<p>Restauration et Amélioration de la résilience des écosystèmes des zones humides</p>	<ul style="list-style-type: none"> <li>· LDCF/UICN</li> <li>· Great Green Wall National Agency (GGWNA)</li> <li>· LDCF: US\$ 4.6 million</li> <li>· 2018 – 2023</li> </ul>	<p>This project uses the ecosystem-based approach to manage wetlands and enhance resilient of communities to face climate change effects. This project will provide important lessons in terms of decentralized resource management and the use of local conventions to support planning and use.</p>
<p>Building core capacity for the implementation, monitoring and reporting of multilateral environmental agreements (MEAs) in the context of the Sustainable Development Goals (SDGs) in Mauritania</p>	<ul style="list-style-type: none"> <li>· LDCF/UNEP</li> <li>· Ministry of Environment and Sustainable Development</li> <li>· US\$ 950,000</li> <li>· 2017 – (PIF approved)</li> </ul>	<p>The project objective is to strengthen national capacity for environmental information and knowledge management for the implementation, monitoring and reporting of multilateral environmental agreements and relevant sustainable development goals.</p>
<p>Improving climate resilience of water sector investments with appropriate climate adaptive activities for pastoral and forestry ressources in southern Mauritania</p> <p>Country(ies):                    Mauritania                    GEF Project ID:2</p>	<ul style="list-style-type: none"> <li>· LDCF/ADB</li> </ul> <p>USD</p> <p>6,350,000</p> <ul style="list-style-type: none"> <li>· Ministry of Agriculture</li> <li>· Project approved (Closed)?</li> </ul>	<p>Climate change proofing water sector investment by building appropriate climate resilience activities of pastoral and forestry resources in southern Mauritania</p>

<p>Support to the Adaptation of Vulnerable Agricultural Production Systems in Mauritania Poverty Reduction Project in Aftout South and Karakoro - Phase II</p>	<ul style="list-style-type: none"> <li>· LDCF/IFAD</li> <li>· Ministry of Agriculture</li> <li>· USD 3 ,500 ,000</li> <li>· Project approved (Closed?)</li> </ul>	<p>The objective of the project is to increase the resilience of rural communities to increased water stress and reduced productivity of agricultural and livestock sector as related to climate change impacts.</p>
<p>Development of an improved and innovative delivery system for climate resilient livelihoods in Mauritania.</p>	<ul style="list-style-type: none"> <li>· LDCF/UNEP</li> <li>· Ministry of Environment and Sustainable Development (MDEDD)</li> <li>· USD : 5,000,000</li> <li>· Project approved (Closed?)</li> </ul>	<p>The project objective is to increase the climate resilience of local communities in rangelands of the Sahelian Acacia Savannah Ecoregion by strengthening institutional and technical capacity within the national and local government to implement EbA measures (Trarza, Brackna, Assaba, Gorgol, Guidimaka, Assaba, Hodh I Gharbi)</p>

The following table lists relevant GCF projects in addition to the FAO carried GCF project from the baseline projects' list. Note for the latter that FAO will guarantee that a proper coordination mechanism is in place, and will consider the option of joint project management units in addition to the provisions mentioned above to coordinate investments into the target Wilayas.

Non-GEF Financed Projects carried by the MEDD

Project	International partners and basic information	Project Objectives
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<p>Building capacity to advance National Adaptation Plan Process in Mauritania</p>	<ul style="list-style-type: none"> <li>· GCF Readiness</li> <li>· Ministry of Environment and Sustainable Development (MEDD)</li> <li>· GCF Readiness: US\$ 2.67 million</li> <li>· 2018 – 2020</li> </ul>	<p>The proposed GCF readiness and preparatory support project implements activities according to four priority outcomes, namely:</p> <ul style="list-style-type: none"> <li>• strengthening the technical and institutional capacity of government institutions, vulnerable groups and relevant stakeholders to implement the NAP process;</li> <li>• enhancing the management, acquisition and dissemination of climate change data and information to inform priority adaptation interventions for the country;</li> <li>• developing an adaptation funding strategy to guide climate change financing in the medium and long-term; and</li> <li>• Establishing a monitoring and reviewing system for the NAP process at a national, Wilaya (regional) and local scale. (This includes the capacity development of the CNOEZA).</li> </ul> <p>For the NAP process, the MEDD requested line ministries to form and coordinate seven Thematic Working Groups (TWGs) and two Cross-cutting Working Groups (CWGs – on livelihoods and governance and on gender and social inclusion), building on the lessons learned and experiences from the NAPA preparation and implementation process. One such TWG is on climate-smart productive sources of subsistence like agriculture and pastoralism, engaging the institutions involved in the LDCF project. It is in part through this TWG that alignment and complementarity with the NAP process will be guaranteed. During PPG, detailed institutional arrangements will be proposed and negotiated. The project also contributes to a stronger CNOEZA, one of the co-financiers of the LDCF project.</p>
<p>Project to support the transition to a resilient, low-carbon agriculture in Mauritania (P-STRALAM)</p>	<ul style="list-style-type: none"> <li>· GCF pipeline (through AfDB)</li> <li>· Ministry of Environment and Sustainable Development (MEDD)</li> <li>· GCF: US\$ 10 million</li> <li>· 2018-2022</li> </ul>	<p>This project aims to (i) increase the adaptive capacity and build resilience to CC in the agricultural sector in the border area of the Senegal River; (ii) reduce exposure to climate change risks in order to reduce vulnerability and sustainably use agro-sylvo-pastoral resources, water and land. At the same time, the project will contribute to the mitigation of greenhouse gas (GHG) emissions.</p> <p>Executed by AfDB and implemented by the Ministry of Environment and Sustainable Development (MEDD), this pipeline project is technically and geographically (at least in part) connected to the LDCF funding, and therefore coordination is mandated in order to assure complementarity. This coordination is guaranteed through the MEDD, joint partner in both investments.</p>

**7. Consistency with National Priorities**

**Is the Project consistent with the National Strategies and plans or reports and assesments under relevant conventions**

Yes

**If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc**

Mauritania has ratified the following key conventions:

- United Nations Framework for Climate Change (UNFCCC) (1994)
- Convention on Biodiversity (1996)
- United Nations Convention to Combat Desertification (1996)
- Kyoto Protocol (2005)

The project is fully aligned with the following national policies and priorities:

- National Action Plan for the Environment (NAPE II, 2012): The proposed LDCF project focuses on agro-pastoral communities living in the intervention area and will promote adaptation options, while also building more climate resilient communities, fully aligned with priority adaptation options identified in the NAPA.
- National Adaptation Programme of Action (NAPA) (2004): Highlights that the most obvious effects of climate change on land ecosystem in Mauritania is desertification and its consequences. The project aims to implement the NAPA intervention strategy which is based on a participatory approach requiring all stakeholders to implement projects which are better suited to existing degraded conditions. The LDCF project is aligned with the NAPA priority actions that are :
  - o to reverse land degradation and erosion of natural resources, particularly due to wood and charcoal production, overgrazing and inappropriate agricultural production methods,
  - o to set up organizational structures, which ensure the sustainable management of different types of land ecosystems (humid areas, agricultural ecosystems, forests, pastoral ecosystems).
- National Strategy for Sustainable Development (NSSD) and its Action Plan (NAPE II), which emphasizes the conservation of natural ecosystems and the biodiversity that these areas possess as well as the prevention of risks related to natural disasters, including risks linked to climate change. The objectives of the project conform to the strategic orientation of national policies on water and rural planning which all aim to improve understanding of the national hydro geographical network. It aims to create and make available a full database and a GIS (Geographic Information System) on hydrological and hydro geographical information.
- National Accelerated Growth and Prosperity Sharing Strategy (“Stratégie de Croissance Accélérée et de Partage de Prospérité”) was adopted for the 2016-2030 period. The strategy sets forth a number of priorities, amongst which are (i) integrated management of natural resources and biodiversity, combating desertification, conservation and management of zones of ecological interest and protected areas; (ii) management of environmental impacts, pollution, climate and environmental emergencies, and (iii) the development of partnerships, inter-sectorial coordination, mobilization of financial resources and communication.
- Environmental and Sustainable Development Policy Declaration<sup>[1]</sup> (2011): Recognizes that the development of the country starts with environmental conservation.
- National Sustainable Development Strategy (Stratégie Nationale de développement durable (SNDD) (2006): The SNDD aims for integrated management and efficient use of natural resources, through local participatory management of natural resources, protected areas and wetlands, while encouraging linkages between development and local environmental protection.
- National Environment and Sustainable Development Strategy (NESDS) (2017-2021) and National Action Plan for Environment and Sustainable Development (PANEDD). The goal of the NESDS is to reduce the degradation of environment in 2030 and to turn degradation trends into a sustainable use of natural resources with aim to ensure green inclusive growth. Main strategic pillars are : Integrated Environment Governance, Integrated sustainable management of natural resources and earth biodiversity (green environment), sustainable management of coastal and marine ecosystems (Blue environment), strengthening of prevention of pollution management and anthropic threats (Gray environment).

· National Agricultural Development Plan (Plan National de Développement Agricole (PNDA) (2016): This 10-year plan adopted aims to develop the agriculture sector. Its global objective is to promote a modern, competitive and sustainable agricultural sector through the development of value chains with high growth potential. It is to be operationalized through four programmes: (i) intensification and diversification of agricultural production; (ii) promotion of competitive value chains; (iii) sustainable management of natural resources; and (iv) improvement of quality of extension services.

· Initial National Communication (INC) (2001); Second National Communication (SNC) (2008); Third National Communication (TNC) (2014): The recently submitted INDC from Mauritania reiterates the vulnerability of country's water resources as well as the increasing climate change impacts on natural resources (vegetation cover and forests) and livestock, among others. Main priorities include:

- (i) the coverage to food needs up to 117% for rice, 80% for wheat, 75% for local species of cereals, 160% for milk, 126% for poultry meat,
- (ii) annual restoration of 10 000 ha of degraded land to enhance the regeneration of the natural cover and,
- (iii) Restoration of rangelands (deferred grazing pastures and rangeland management within climate territorial plans) and,
- (iv) Creation of 300 boreholes for aquifers exploration that can be transformed in exploitable boreholes (NDC).

· Strategic Framework for Combating Poverty (SFCP III, 2011): Links to climate change and environmental degradation. The SFCP is the reference framework for the development policy of the country. The present project is in line with the SFCP as it aims to integrate natural resources into the productive fabric of the national economy, through, amongst others, the promotion of diversified ecosystem services, the promotion of SLM and the introduction of emerging financing mechanisms likely to make natural resources sustainable and thus contribute to mitigating the negative effects of climate change. In addition to climate change and managing the environment, the project fits in well with the other components of the SFCP, namely (i) agriculture and food security; (ii) village and pastoral waterworks; and (iii) the management of routes, and (iv) adding value to the livestock rearing industry as well as adding value to animal production.

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[1] République Islamique de Mauritanie. 2011. Déclaration de politique d'environnement et de développement durable. <http://aires-marines.uqar.ca/27/1/DPEDDRIM.pdf>

## 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, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.**

Knowledge management will be an integral part of the project, enabling institutional memory, promoting learning and continuous improvement, generating documents for up-scaling of lessons and best practices. Specific knowledge management activities are incorporated within the project's components and will be conducted in support of capacity building and training actions under the different components. The broader dissemination of experience and lessons learnt generated by the project will be also pursued through engaging national and regional technical and educational institutions, and regionally and internationally through South-South cooperation mechanisms. This is notably with alignment with a pending Sudan LDCF project.

The proposed project will adapt and build upon consolidated experience and lessons learned in SLM and SPI. The pilot adaptation measures which will be tested in the present project, will allow the communities involved to acquire experience, learn lessons and adopt and adjust the best practices identified. The phases of mobilization will offer community stakeholders, private sector actors, and government agencies the opportunity to acquire experience and knowledge climate change coping skills. The project has fully integrated tools for monitoring, identifying lessons learned, improving the action programs through the application of these lessons and reviewing the results and impacts obtained.

Results will be mainstreamed through a variety of government structures. This will include municipal level planning as well operational and policy planning by the Ministry of Environment and Sustainable Development, Ministry of Agriculture, and Ministry of Livestock.



**Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Dr. Mohamed Yahya LAFDAL CHAH	GEF Operational Focal Point	Ministry of Environment and Sustainable Development	4/3/2019

**ANNEX A: Project Map and Geographic Coordinates**

Please provide geo-referenced information and map where the project intervention takes place

