GEF-8 REQUEST FOR CEO CHILD ENDORSEMENT/APPROVAL

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General Child Project Information

Child Project Title
Strengthening the climate resilience of vulnerable communities and ecosystems through Ecosystem-based Adaptation (EbA) in Mauritania's Great Green Wall

Region	GEF Project ID
Africa	11457
Country(ies)	Type of Project
Mauritania	FSP
GEF Agency(ies)	GEF Agency Project ID
UNEP	
Project Executing Entity(s)	Project Executing Type
National Agency for the Great Green Wall (ANGMV)	Government
GEF Focal Area (s)	Submission Date
Climate Change	8/20/2025
Type of Trust Fund	Project Duration (Months)
LDCF	66
GEF Project Grant: (a)	Agency Fee(s) Grant: (b)
18,048,624.00	1,624,376.00
PPG Amount: (c)	PPG Agency Fee(s): (d)
300,000.00	27,000.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
20000000	46,552,040.00
Project Sector (CCM Only)	
Climate Change Adaptation Sector	

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	Principal Objective 2	Significant Objective 1	No Contribution 0

Project Summary

Provide a brief summary description of the project, to offer a snapshot of what is being proposed. The summary should include: (i) what is the problem and issues to be addressed? ii) as a child project under a program, explain how the description fits in the broader context of the specific program; (iii) what are the project objectives, and if the project is intended to be transformative,

how will this be achieved? and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. (max. 250 words, approximately 1/2 page)

1. Mauritania straddles the Sahel and the Sahara, an area which is set to be greatly impacted by climate change, with temperatures projected to increase by 2-6ºC by 2100 (RCP 8.5), annual precipitation to decrease by up to 40mm (RCP 8.5, 2080) and noted changes in intensity and frequency of winds and extreme weather events. As such, climate change will increase the rate of desertification and dune encroachment, as well as further reduce access to reliable water sources. As Mauritania's population is highly reliant on natural resources - over 60% of population engaged in agriculture, pastoralism and fishing, climate change will directly impact the livelihoods of rural communities. Unfortunately, these same populations live in multidimensional poverty, driven by poor living conditions including food insecurity, poor water access and limited economic opportunities. Continuous anthropogenic pressure on the ecosystems coupled with the stressors of climate change continue to decrease the health and overall productivity of the ecosystems, which further exacerbates the vulnerability of the populations to the impacts of climate change. As such, providing vulnerable populations with ecosystem-based adaptation solutions is an opportunity to help them adapt to climate change, while providing sustainable economic opportunities.

2. The project will therefore aim to strengthen the climate resilience of vulnerable communities and ecosystems in five agrosilvopastoral wilayas in Mauritania's Great Green Wall (GGW) area through Ecosystem-based Adaptation (EbA) approaches. The project will be structured around four components: (i) strengthening the technical and institutional capacity of stakeholders at local, regional and national levels, (ii) supporting climate change resilience in landscapes and communities with landscape and ecosystem restoration, (iii) promoting climate-resilient, sustainable Income-Generating Activities (IGAs), as well as (iv) boosting communication, knowledge exchanges and wider collaboration amongst local and national stakeholders.

3. Through these four components, the project will look to build the capacity of stakeholders in government, civil society, and local communities in matters of climate change adaptation and EbA approaches, from planning to implementation and monitoring. It will also directly set up ecosystem restoration and sustainable management activities in various landscapes. This will be coupled with support for ecosystem-based, climate-resilient and sustainable IGAs, based on a comprehensive assessment of ecosystem-specific options. The project not only will identify and train local communities in specific IGAs, but also support the development and uptake of formal microfinance offers in the area to provide long-term opportunities for accessing finance. Finally, the project will include wide-ranging activities for knowledge management, as well as enhancing rural and vulnerable populations' awareness on climate change and adaptation options.

4. The project recognizes that climate impacts affect women disproportionately, given their central roles in securing water, food, and household energy, and their limited access to land, finance, and decision-making. Gender considerations will be embedded across all components, ensuring that women's priorities inform planning and implementation. Targeted capacity building, support for women-led climate-resilient livelihoods, and improved access to resources and markets will strengthen women's adaptive capacity, while sex-disaggregated monitoring will track equitable benefits and guide responsive adjustments.

5. The project will deliver a range of adaptation benefits, namely increasing the resilience of people and ecosystems to the adverse impacts of climate change in various ecosystems in Mauritania Great Green Wall area. Additional global environmental co-benefits include improved provision of agro-ecosystem goods and services and the conservation and sustainable use of biodiversity in productive landscapes. Finally, as a child project to a wider UNEP-coordinated GEF-8 Regional Program in the Great Green Wall Region, the project will contribute to a larger restoration and resilience effort, as well as provide and exchange knowledge products and lessons learned with the wider Great Green Wall network.

Child Project Description Overview

Project Objective

To strengthen the climate resilience of vulnerable communities and ecosystems in five wilayas in Mauritania's Great Green Wall area through Ecosystem-based Adaptation (EbA) approaches

Project Components

1. Technical and institutional capacity strengthening

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
1,228,708.33	4,386,581.00

Outcome:

1.1: Improved institutional and technical capacity of local, regional and national stakeholders (with due consideration of gender) to plan, implement and monitor Ecosystem-based Adaptation (EbA) measures to address climate risks in agrosilvopastoral systems

Output:

1.1.1: 250 individuals from governmental institutions at local, regional and national level trained in the planning, implementation and monitoring of EbA measures

1.1.2: 1,600 individuals from rural communities trained in the planning, implementation and monitoring of EbA measures adapted to their ecosystems

1.1.3: 11 gender-responsive Local Development Plans (PDC) taking into account climate change adaptation and EbA approaches developed

2. Restoration and sustainable management of ecosystems

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing ($)	Co-financing ($)
10,490,108.33	21,992,153.00

Outcome:

2.1: Strengthened climate change resilience of vulnerable communities in the five wilayas through the adoption of gender-responsive EbA approaches

Output:

2.1.1: 3,520 ha of degraded ecosystems restored and sustainably managed using EbA approaches

2.1.2: Water and soil retention practices implemented in 11 communities, promoting 480 ha of agricultural land restoration

2.1.3: 1,000 ha of gender-responsive agroforestry established

2.1.4: 500 ha of eco-pastoral reserves created

3. Sustainable, ecosystem-based income-generating activities

Component Type	Trust Fund
Investment	LDCF
GEF Project Financing ($)	Co-financing ($)
3,649,557.34	15,090,896.00

Outcome:

3.1: Strengthened climate-resilient livelihoods and income sources in the five wilayas through diversified, gender-responsive, climate-resilient and ecosystem-based income-generating activities (IGAs)

Output:

3.1.1: Comprehensive gender-responsive assessment of ecosystem-based IGA options, including economic analysis, undertaken in each wilaya, taking into consideration previous experiences

3.1.2: 50 new or existing Integrated Community Agricultural Farms (FACI) supported

3.1.3: 500 CBO members trained in business strategy development, financial planning, and leadership skills

3.1.4: 600 community-run sustainable ecosystem-based IGAs supported through microfinance

4. Communication, knowledge management and learning

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
1,267,700.00	1,492,718.00

Outcome:

4.1: Increased knowledge of EbA practices through the gender-responsive collection and dissemination of lessons learned for scaling up results

4.2: Enhanced awareness of climate change impacts, and institutions and support available for EbA approaches amongst local stakeholders

Output:

4.1.1: Gender-responsive knowledge management products developed and disseminated at national and regional levels

4.1.2: Bi-annual roundtables/meetings of people and organizations engaged in EbA approaches in Mauritania organized to promote knowledge sharing and networking

4.2.1: Gender-responsive awareness campaigns on climate change adaptation, and key institutions and stakeholders engaged in EbA rolled out

M&E

Component Type	Trust Fund
Technical Assistance	LDCF
GEF Project Financing ($)	Co-financing ($)
556,750.00	500,000.00

Outcome:

Complete and accurate Monitoring and Evaluation information for adaptive management and lessons learnt

Output:

Monitoring and Evaluation Framework developed and implemented

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
1. Technical and institutional capacity strengthening	1,228,708.33	4,386,581.00
2. Restoration and sustainable management of ecosystems	10,490,108.33	21,992,153.00
3. Sustainable, ecosystem-based income-generating activities	3,649,557.34	15,090,896.00
4. Communication, knowledge management and learning	1,267,700.00	1,492,718.00
M&E	556,750.00	500,000.00

Subtotal	**17,192,824.00**	**43,462,348.00**
Project Management Cost	855,800.00	3,089,692.00
Total Project Cost ($)	**18,048,624.00**	**46,552,040.00**

Please provide Justification

CHILD PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Since this is a child project under a program, please include an explanation of how the context fits within the specific program agenda. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

INTRODUCTION

6. The Islamic Republic of Mauritania is a vast country located in West Africa, covering approximately 1,030,700 km² and bordering Western Sahara, Algeria, Mali, Senegal, and the Atlantic Ocean. It is characterized by an arid and semi-arid climate, with desert covering nearly 90% of its territory. The southern fringe, known as the Sahelian zone, receives more rainfall and supports most of the country's agricultural and pastoral activities. Rainfall is highly erratic and seasonal, concentrated in a short wet season from July to September. Northern areas may receive as little as 50 mm of rain annually, while southern regions can receive 300–500 mm, although this has declined over time.

7. With a population of just under 5 million (2023), Mauritania has one of the lowest population densities in Africa — about 5 people per km². Roughly 61% of the population is urbanized, concentrated mainly in the capital Nouakchott and a few regional centers. Socio-economic indicators remain low: the Human Development Index (HDI) was 0.56 in 2021, ranking Mauritania in the low development category. Livelihoods in rural areas depend heavily on natural resources, with rainfed agriculture, livestock rearing, and fishing representing 60% of activities. Nationally, poverty affects around 32% of the population, but rural poverty is far higher, affecting nearly 77% of rural inhabitants.

8. Mauritania is extremely vulnerable to climate change: temperatures are projected to increase by 2-6ºC by 2100 (RCP 8.5), annual precipitation to decrease by up to 40mm (RCP 8.5, 2080) and sea levels to rise by up to a meter by 2100. This directly affects water availability and promotes desertification, and extreme events are predicted to increase at both extremes, resulting in longer and more frequent droughts and flooding. In addition, these impacts are further exacerbated by anthropogenic pressures, further deteriorating ecosystems and associated services, and heightening the vulnerability of populations to climate change.

The Great Green Wall in Mauritania

9. Launched in 2007 by the African Union, the Great Green Wall (GGW) is a pan-African initiative involving over 11 countries in the Sahel region. Its overarching goal is to combat desertification and land degradation while strengthening community resilience to climate change. Rather than a literal wall, the initiative envisions a mosaic of sustainable land use systems and restored ecosystems stretching from Senegal in the west to Djibouti in the east. In Mauritania, the National Agency for the Great Green Wall (ANGMV) leads GGW implementation, focusing on land restoration, reforestation, water resource development, and rural livelihoods improvement in a designated GGW corridor. This area runs across the country's southern and central wilayas – including those of Assaba, Brakna, Hodh El Chargui, Hodh El Gharbi and Tagant, which are targeted by this LDCF project.

10. The GGW initiative in Mauritania aligns with national priorities for sustainable development and natural resource management. It includes diverse activities: mechanical and biological dune fixation, development of agroforestry systems, establishment of greenbelts around villages, support for women-led cooperatives, and rehabilitation of wetlands. These interventions aim to both restore degraded ecosystems and offer alternative income sources to reduce rural poverty and environmental vulnerability.
11. The wilayas of Assaba, Brakna, Hodh El Chargui, Hodh El Gharbi and Tagant are 5 of the wilayas crossed by the GGW. These regions span arid to semi-arid zones, with low and erratic rainfall, high poverty, and land degradation. Due to their geographical location, these wilayas are sensitive to climatic variations, particularly droughts and increasingly, flooding episodes (World Bank Group, 2022). Unlike their southernly neighbors, they do not have access to the Senegal River, considered the productive zone of the country; they are also the five furthest wilayas from the capital, adding to their geographic isolation.

Brakna
12. Brakna is home to roughly 376,000 inhabitants (51.9% women). The region's economy is based on rainfed agriculture (e.g. sorghum, millet and cowpeas), livestock (e.g. cattle, goats, sheep), and seasonal fishing around Lake Aleg. There is also exploitation of non-timber forest products, such as Balanites aegyptiaca. Communities in Brakna face severe degradation of pastureland, sand encroachment on villages and infrastructure, and recurrent droughts. In many areas, men are increasingly migrating from their rural communities to seek economic opportunities in urban centers. While irrigated agriculture is found along the Senegal river, areas in the north are reliant on seasonal water sites, which are increasingly silted and dry due to decreased precipitation, dune encroachment, and land degradation.

Assaba
13. Assaba, in south-central Mauritania, includes a mix of plateau and lowland ecosystems. Its population is roughly 382,000 (52.8% women). Rural livelihoods depend on agropastoralism (mostly small livestock – goats, sheep and poultry), small-scale crop production (mainly millet and sorghum, with some market gardening), and non-timber forest products (NTFPs) (Ziziphus mauritiana – jujube, Hyphaene thaebaica – doum palm, and Acacia senegal). Localities such as Boumdeid and Levtah face serious water shortages, and traditional agriculture is under increasing pressure from irregular rainfall and land degradation. The water resources in the area are mostly temporary watercourses formed around wadis and tamourts. Although groundwater resources are available (if not easily accessible), surface water is increasingly scarce with changing rainfall. Dune encroachment is a significant challenge, as it not only affects agricultural lands but also leads to damage and obstruction of vital infrastructure such as roads and buildings.

Hodh El Chargui
14. This easternmost wilaya borders Mali and is the second most populous of Mauritania, with a population estimated at 487,000 (52.2% women). It is also a zone which includes key transhumance corridors, and faces increasing regional migration from Mali. Hodh El Chargui is one of the most vulnerable regions due to limited rainfall, high poverty, and significant environmental degradation including pasture degradation, hydric stress and dune encroachment. The town of Néma serves as the regional hub, but many smaller communities depend on seasonal agriculture (millet and sorghum) and pastoralism (camels, goats and sheep). In addition, NTFPs are produced, including Acacia nilotica (for gum and fodder) and doum palm. However, resources such as water and land are under pressure, namely due to regional migration triggered by insecurity.

Hodh El Gharbi
15. Hodh El Gharbi lies west of Hodh El Chargui and faces similar challenges. The region has a population of approximately 381,000 (51.8% women), with a significant portion engaged in pastoralism (goats, sheep, donkeys, and camels in the north) and seasonal rainfed farming (millet, wild fonio (Digitaria exilis), cowpeas). The main town, Aioun, and villages like Doueirare and Mabrouk report serious problems

with water availability, degraded vegetation cover, and declining agricultural productivity. Many communities are isolated, with poor road access which is made even more difficult due to dune encroachment.

Tagant

16. Tagant is an arid plateau region in central Mauritania with a notably smaller population – roughly 119,000 (53.3% women). Its landscapes are dominated by rocky terrain and sandy basins. Pastoralism – mainly goats, camel and sheep – is one of the most common practices, with some activities linked to NTFPs, mainly in oases. This is an area that is prone to dune encroachment, declining rangeland productivity, as well as low accessibility to (or saline) water resources. Migration is common, especially among young men, and access to services is limited.

17. Across all five wilayas, the combination of poverty, isolation, poor infrastructure, limited access to water, and declining natural resources contributes to high climate vulnerability. Women, youth, and pastoralist groups are particularly exposed, and many communities lack the capacity or resources to implement effective adaptation strategies on their own.

CLIMATE CHANGE – HISTORICAL TRENDS AND PROJECTED IMPACTS

Historical trends

18. Mauritania is largely an arid country. 75% of its territory is classified as desert, with vast expanses of pastoral land and 0.5% of arable land (World Bank, 2023). Annual rainfall is low, with a single rainy season. The country experiences extreme climatic variability and has been affected by recurrent drought and episodic alternation of intense rainfall, in recent years leading to devastating floods.

19. The target wilayas of Assaba, Brakna, Hodh El Gharbi, Hodh El Chargui and Tagant share an arid (Saharan) or semi-arid (Sahelian) climate characterized by hot, dry conditions. They are largely classified as hot desert (BWh) climates, with limited areas in the extreme south classified as hot steppe (BSh) according to the Köppen-Geiger climate classes system (Beck, et al., 2023). Due to their geographical location, these wilayas are sensitive to climatic variation, particularly droughts and increasingly, flooding episodes (World Bank Group, 2022). These regions are also often subject to strong winds, notably the harmattan desert wind, which carries dust and sand.

Temperature

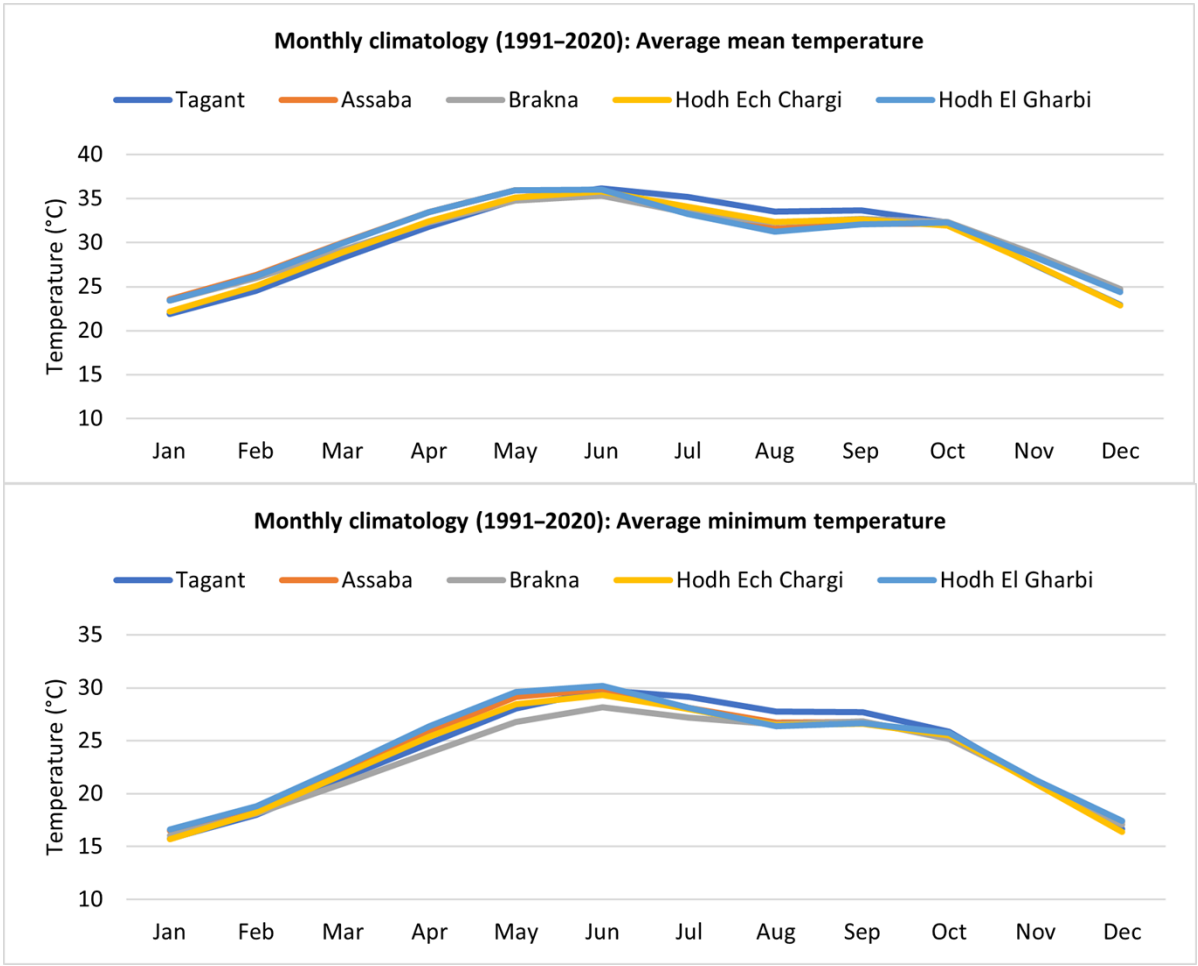
20. Assaba, Brakna, Hodh El Gharbi, Hodh El Chargui and Tagant all experience high temperatures throughout the year, with maximum temperatures often exceeding 40°C in the hottest months (see Figure 1 and Table 1 below). Temperatures have been rising across Mauritania in the last few decades (MEDD, 2021), a trend which has been observed across all Sahelian countries. Temperatures in the target wilayas have demonstrated a significant increasing trend in past decades, averaging 0.3°C/year since the 1950s as shown in Table 1 below (WB CCKP, 2025). In addition, the number of days per year with a heat index exceeding 35°C has continued to increase – particularly in Assaba, Brakna and Hodh El Gharbi where more than 15 additional days per year were observed as compared to 1991 (Table 1) (WB CCKP, 2025).

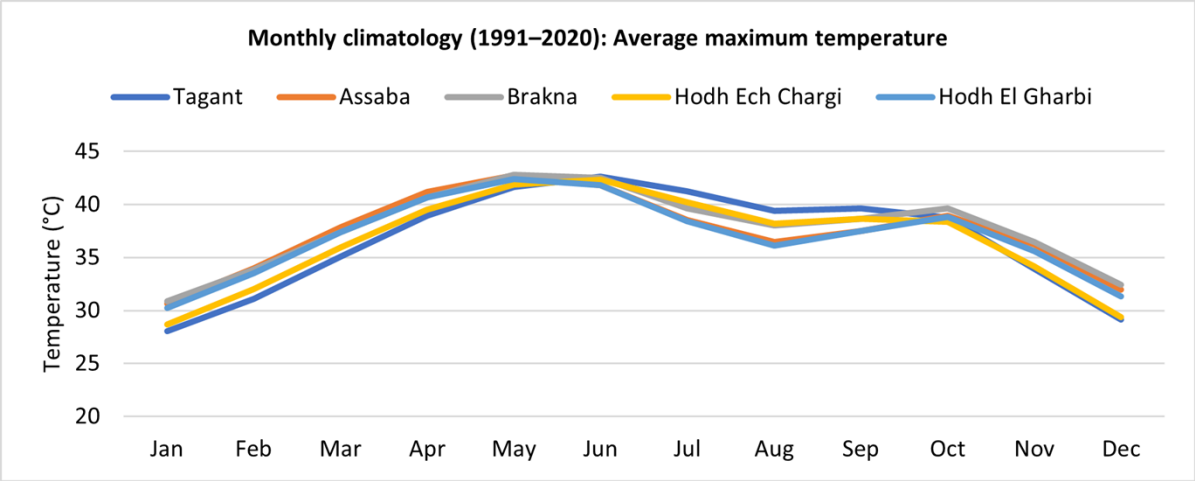
Table 1. Historical climatology for target wilayas in southern Mauritania (WB CCKP, 2025)

Historical climate (1991–2020)			**Assaba**	**Brakna**	**Hodh El Gharbi**	**Hodh El Chargui**	**Tagant**
Mean surface temperature (Tmean)	**Average**	**°C**	**30.7**	**30.4**	**30.5**	**30.1**	**30.3**
	Trend 1951–2020	°C per year	+ 0.4	+ 0.3	+ 0.4	+ 0.3	+ 0.3
	Trend 1971–2020		+ 0.3	+ 0.3	+ 0.3	+ 0.3	+ 0.3
	Trend 1991–2020		+ 0.2	+ 0.3	+ 0.3	+ 0.3	+ 0.4
Maximum surface temperature (Tmax)	**Average**	**°C**	**37.4**	**37.8**	**37.0**	**36.6**	**36.7**
	Trend 1951–2020	°C per year	+ 0.3	+ 0.3	+ 0.3	+ 0.3	+ 0.3
	Trend 1971–2020		+ 0.3	+ 0.3	+ 0.3	+ 0.3	+ 0.3
	Trend 1991–2020		+ 0.3	+ 0.4	+ 0.3	+ 0.4	+ 0.3
Minimum surface	**Average**	**°C**	**24.0**	**23.2**	**24.1**	**23.6**	**23.9**
	Trend 1951–2020		+ 0.4	+ 0.3	+ 0.4	+ 0.4	+ 0.4

Historical climate (1991–2020)			Assaba	Brakna	Hodh El Gharbi	Hodh El Chargui	Tagant
temperature (Tmin)	Trend 1971–2020	°C per year	+ 0.3	+ 0.2	+ 0.3	+ 0.3	+ 0.3
	Trend 1991–2020		+ 0.2	+ 0.1	+ 0.2	+ 0.1	+ 0.2
Days with heat index >35°C	Trend 1951–2020	Days per year	+ 13.6	+ 12.7	+ 12.0	+ 4.6	+ 3.1
	Trend 1971–2020		+ 14.4	+ 13.3	+ 13.3	+ 6.2	+ 4.0
	Trend 1991–2020		+ 17.1	+ 15.9	+ 17.1	+ 8.6	+ 5.1
Precipitation	**Average**	**mm**	**296**	**229**	**275**	**153**	**111**
	Trend 1951–2020	mm per year	- 18.2	- 11.0	- 13.0	- 6.6	- 4.4
	Trend 1971–2020		*- 5.0*	*- 2.1*	*- 0.7*	*- 3.1*	*- 0.2*
	Trend 1991–2020		*- 1.5*	*- 9.7*	*- 4.0*	*- 3.8*	*- 6.6*

Figure 1. Monthly climatology of (a) mean, (b) minimum and (c) maximum temperatures for target wilayas (WB CCKP, 2025)

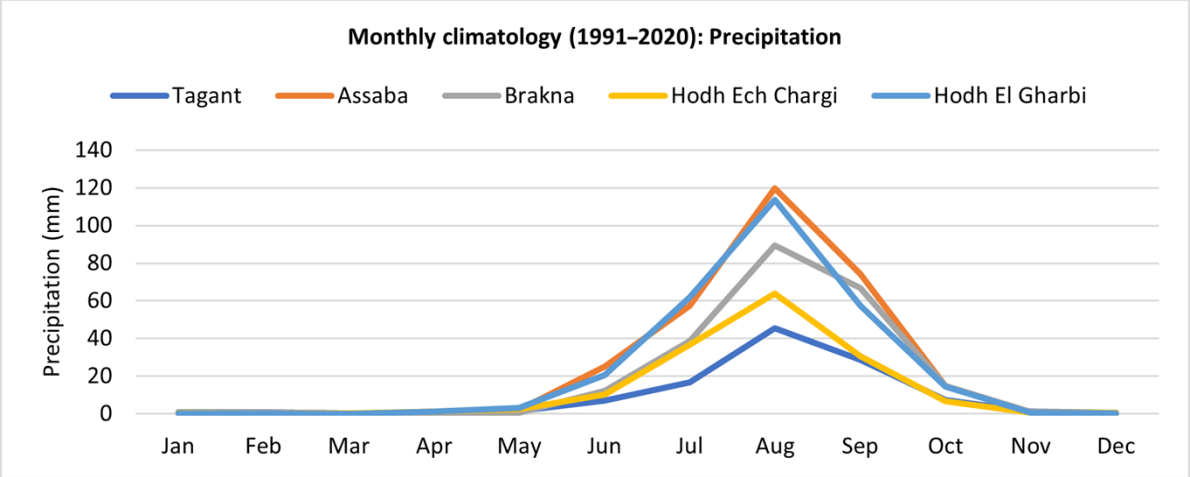




Precipitation

21. Precipitation patterns across the target wilayas are characterized by generally low and irregular rainfall, with strong variation from year to year. From November to May, these areas receive little to no rainfall (< 2 mm/month) while experiencing high temperatures (Figure 1). Onset of the rainy season typically begins in June, peaking in August, before tailing off in October (Figure 2). Interannual differences in rainfall patterns and the lack of consistent observational data make it difficult to discern annual variations in rainfall at the site level, but generally the area has experienced an overall decline in rainfall since the 1960s, as shown in Table 1 above (Zwarts, 2009; WB CCKP, 2025).

Figure 2. Monthly climatology of precipitation for target wilayas (WB CCKP, 2025)



Wind

22. Wind plays a central role in the climate dynamics of arid and semi-arid regions like Mauritania. Historically, the target area has been characterized by moderate to strong wind activity, especially during the dry season (February to June). Dominant northeasterly Harmattan winds have contributed to widespread wind erosion, dune encroachment, and dust transport, particularly in eastern and central regions such as Tagant and Hodh El Chargui. Long-term datasets from NASA POWER and MERRA-2 confirm that average wind speeds in the corridor have ranged between 3.5 to 5.0 m/s, with peak erosion risks occurring in the pre-rainy season (April–June) when vegetation cover is lowest (NASA, 2024; FAO and OSS, 2018).

Hazards

23. A number of climate hazards occur in the target wilayas, with the risks for extreme heat, wildfire and flooding being high across most areas (Table 2) (ThinkHazard!, 2025). The historical trends of increasing temperatures and decreasing rainfall have contributed to longer drought events and temporal desertification

(Yacoub & Tayfur, 2020). Changes in the timing of rainfall and an increase in the intensity of rainfall events has been observed in recent years, with many areas experiencing recurrent droughts and episodic alternation of intense rainfall events, leading to devastating floods (MEDD, 2021; WB CCKP, 2025; Neya, et al., 2023).

24. During the consultations in the target wilayas, communities cited the extreme heat and decreasing and unpredictable rainfall as their primary concerns, as well as high winds. Within the sites visited, flooding was not systematically highlighted, bar in the Kiffa and Leftah areas (Assaba) and in the Tintane moughataa (Hodh El Gharbi).

Table 2. Current ratings for climate hazards in target wilayas (ThinkHazard!, 2025)

Wilaya	Extreme heat	Wildfire	River flood	Urban flood	Water scarcity
Assaba	High	High	Medium	Medium	Medium
Brakna	High	High	High	High	Medium
Hodh El Gharbi	High	High	High	Low	Medium
Hodh Ech Chargi	High	High	Medium	Low	High
Tagant	High	High	Low	Medium	Medium

Extreme heat

25. While high temperatures are ubiquitous in Mauritania, extreme high temperatures are occurring more frequently as a result of human-mediated climate change (IFRC, 2024). Heatwaves have become longer and more intense across the Sudan-Sahel zone, which includes the southern regions of Mauritania (Adolphus, Ifeoluwa, Ademola, & Richard, 2021), with negative impacts on human health and the economy (Global Voices, 2013; UNICEF, 2022; MEM, 2020).

Floods

26. Mauritania has experienced a number of flood events that have resulted in economic losses and internal displacements within the target wilayas (Table 3). Analysis of 15 flood events in the period 1984 to 2020 has shown that Assaba and Brakna are among the wilayas with high exposure to these events in this period, with events occurring every ~2.5 years (Neya, et al., 2023). Between 2010 and 2020, Tagant was also highly affected by floods (Neya, et al., 2023).

Table 3. Internal displacements as a result of flood events (2010-2024) (IDMC, 2023)

Year	Event Name	Disaster Internal Displacements
2010	Mauritania: Flood - 01/01/2010	5 000
2013	Tourougueline flood	620
2013	Mauritania: Flood - 15/08/2013	4 000
2018	Mauritania: Flood - Hodh El Chargui - 14/09/2018	440
2020	Mauritania: Floods - Hodh El Chargui (Bassikounou) - 30/08/2020	1 600
2022	Mauritania: Floods - Southern, Central region - 25/072022	23 000
2023	Mauritania: Flood - Brakna (Bogué) - 31/07/2023	1 100
2024	Mauritania: Flood - Guidimakha, Gorgol, Brakna, & Trarza- 01/09/2024 Rain/Flash Flood	12 500

Droughts

27. Severe droughts occurred in Mauritania during the 20th century, including events in the 1910s, 1940s, 1968, 1970s and 1980s, with severe ecological, economic, social, and cultural consequences (Ministry of Rural Development and Environment, 2004; FAO, Drought characteristics and management in North Africa and the Near East, 2018). Of the target wilayas, Assaba and Brakna are the most exposed to the impacts of drought, with seven of 13 recorded drought events between 1965 and 2020 affecting these areas. The majority of these events in that period were meteorological and agricultural droughts with a return period of ~4 years (Neya, et al., 2023). Drought events have severe consequences for food security, health and safety in Mauritania (FAO, 2018). For example, the 2017 drought in Mauritania affected 91% of the population and the 2021 drought led to 20% of the population impacted by acute food insecurity; in 2022, low rainfall during the winter season resulted in a severe drought which resulted in rapid inflation, a rise in poverty, internal displacements and a deepening of the existing widespread food crisis, including in the target wilayas (ReliefWeb, 2022; WFP, Global Report on Food Crises (GRFC) 2023, 2023).

Projected climate change

28. Mauritania is projected to experience an increase in temperature and decrease in precipitation over the course of the 21st century, continuing and accelerating the historical trends discussed above. Temperature increases will be most evident to the east of the country, and precipitation decreases will be greatest in the southernmost wilayas (MEDD, CCPNCC, 2019). In addition, climate variability is likely to increase, contributing to more frequent and intense extreme weather events. These will include longer droughts, and longer and more frequent heatwaves. While there are no wilaya level projections available, some projections can be refined based on downscaled approximations using ecological zones.

Temperature

29. At a national level, temperatures are set to rise by mid-century (Figure 3). Downscaled projections for the target wilayas indicate a warming trend, aligned with the overall warming trend observed for the country (MEDD, CCPNCC, 2019) (Table 4). By mid-century (2040–2059), mean and maximum temperatures in the target wilayas are projected to increase by ~1.5–1.7°C and minimum temperatures by 1.0–2.0°C under SSP2-4.5. Under SSP5-8.5, mean, maximum and minimum temperatures will increase by ~1.9–2.2°C by mid-century – with the largest increases in the March to May and October to November periods (WB CCKP, 2025). The number of days with a heat index exceeding 35°C is projected to increase significantly, by ~52–65 days under SSP2-4.5 and ~67–79 days under SSP5-8.5, peaking in July and August. The duration of warm spells could increase by ~44–58 days under SSP2-4.5 and ~62–83 days under SSP5-8.5 (WB CCKP, 2025).

Table 4: Downscaled temperature projections for the target wilayas, using the 1986–2005 period as baseline (data from WBCCP).

Wilaya	Mean Temp (°C)	Min Annual Temp (°C)	Max Annual Temp (°C)	Days >35°C (annual avg)
SSP2-4.5				
Brakna (Aleg)	31.4	30.8	32	102
Assaba (Kiffa)	31.2	30.6	31.8	98
Hodh El Gharbi (Aioun)	32.1	31.5	32.9	145
Hodh El Chargui (Néma)	32.5	31.8	33.4	162
Tagant (Tidjikja)	32	31.3	32.6	138
SSP5-8.5				
Brakna (Aleg)	32.8	32.2	33.5	172
Assaba (Kiffa)	32.6	31.9	33.2	165
Hodh El Gharbi (Aioun)	33.4	32.8	34.3	189
Hodh El Chargui (Néma)	34	33.3	34.8	207

Wilaya	Mean Temp (°C)	Min Annual Temp (°C)	Max Annual Temp (°C)	Days >35°C (annual avg)
Tagant (Tidjikja)	33.7	32.9	34.5	194

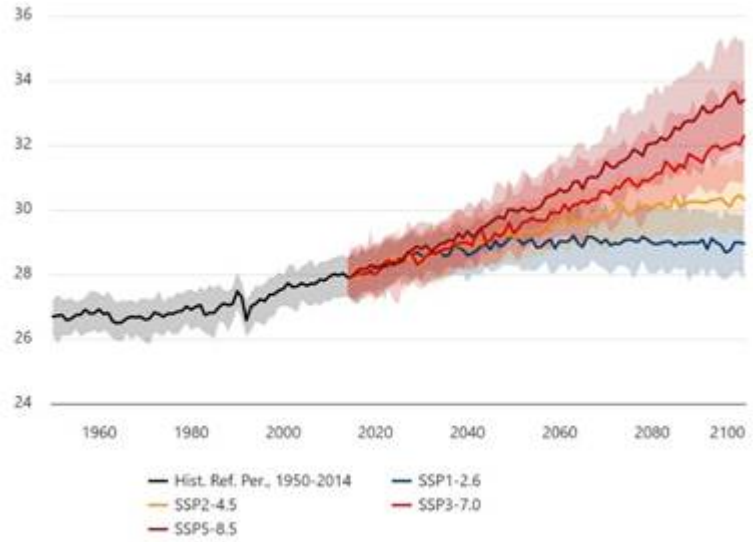


Figure 3: Projected average mean surface air temperature in Mauritania (reference period 1995-2014), multimodel ensemble (CCKP 2025).

Precipitation

30. Studies have suggested that rainfall across Mauritania may be reduced by up to 25% and evapotranspiration increased by 5% under 1.5°C warming – resulting in an overall drier climate (Hamed, Sobh, Ali, Nashwan, & Shadid, 2024). Projections related to precipitation nationally, and within the target wilayas, have greater inherent uncertainty than those for temperature. By mid-century under SSP2-4.5, projections for annual precipitation range from a decrease of 13–36 mm to an increase of 24–63 mm across the target wilayas. Under SSP5-8.5, projections range from a decrease of 14–57 mm to an increase of 61–95 mm (WB CCKP, 2025), however specific data for the target wilayas are not available (Figure 4). However, it is worth noting that regardless of the increase or decrease of precipitation, the overall availability of water will decrease due to increased evapotranspiration resulting from increased temperatures.

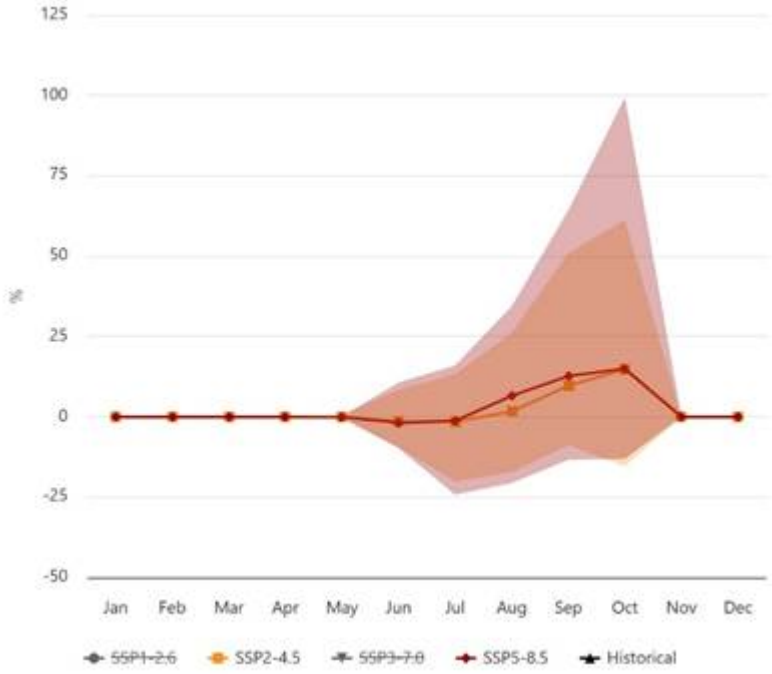


Figure 4: Projected precipitation percent change anomaly for 2040-2059 (ref period: 1950-2014), for SSPé-4.5 and SSP5-8.5, multimodel ensemble (CCKP 2025).

Wind

31. Looking forward, climate models suggest that wind behavior is likely to become more variable and, in some zones, more intense. CMIP6-based regional studies project a slight increase in mean wind speeds under high-emission scenarios such as SSP5-8.5, especially during the dry months and in open rangeland areas as those found in the target wilayas (Monerie et al., 2022; IPCC, 2021). This increase is driven by changes in thermal contrasts between land and ocean surfaces and could exacerbate wind-driven desertification and vegetation loss in poorly vegetated zones. Moreover, stronger or more variable winds could increase the frequency of dust storms and the extent of aeolian soil erosion, compounding the effects of declining rainfall and higher temperatures (FAO/ESA, 2020; IPCC, 2021).

Hazards

32. According to the National Adaptation Program of Action to Climate Change (2004) expected climate changes would be accompanied by greater climate variability, resulting in a higher frequency of extreme weather events and an exacerbation of their intensity (Ministry of Rural Development and Environment, 2004).

Extreme heat

33. Longer and more frequent heatwaves would occur, particularly during the months of November to February and July and August. There would be an increase of 2 to 6 days of hot days (in the RCP4.5 scenario), potentially exceeding 8 days (in the RCP8.5 scenario) by as early as 2050 (Ministry of Rural Development and Environment, 2004). Projections to mid century (2040 and 2060) under the RCP4.5 and RCP8.5 scenarios indicate significant increases in the exposure of the populations of the target wilayas to heatwaves, as shown in Table 5 below.

Table 5. Change in population fraction annually exposed to heatwaves (CIE, 2024)

Wilaya	Year	RCP4.5	RCP8.5
Assaba	2040	+ 18.6% (-2.4 to +42.6%)	+ 25.2% (-3.6 to +45.8%)
	2060	+ 26.6% (-20.0 to +42.6%)	+ 21.2% (-20.9 to 45.1%)
Brakna	2040	+ 30.2% (+10.7 to +66.6%)	+ 40.1% (+8.6 to +68.1%)
	2060	+ 44.6% (+9.9 to +67.9%)	+ 47.3% (+25.6 to +92.7%)
Hodh El Chargui	2040	+ 18.3% (-8.1 to +53.6%)	+ 24.3% (-8.1 to +55.4%)

	2060	+ 29.2% (-28.3 to +53.6%)	+ 20.6% (-24.6 to +66.5%)
Hodh El Gharbi	2040	+ 14.1% (-3.1 to +31.4%)	+ 19.7% (-5.5 to +32.1%)
	2060	+ 20.5% (-13.4 to +31.4%)	+ 18.2% (-23.2% to +33.4%)
Tagant	2040	+ 21.6% (-3.3 to +70.1%)	+ 23.6% (-4.2 to +78.5%)
	2060	+ 27.6% (-2.8 to +91.1%)	+ 31.8% (-4.6 to +142.3%)

Floods and Drought

34. Wilaya-level predictions for floods and droughts are difficult to ascertain due to lack of and uncertainty of data. Nevertheless, it is possible to cite a decrease in the Standardized Precipitation Evaporation Index (SPEI) of approximately (-0.5) in 2004, and this decrease continues to intensify over time (Ministry of Rural Development and Environment, 2004). This suggests an increased likelihood of droughts, with more pronounced impacts.

35. In addition, while there are few perennial water sources in the target wilayas, longer periods of drought, coupled with more intense rain events, can lead to increased flash floods, as is already observed. Longer periods of drought will also render the ground less permeable to water infiltration; this is only compounded by land degradation, in particular in hilly areas, further increasing the severity and longevity of such flooding events.

36. The consultations undertaken in the target wilayas during project preparation confirm these trends. Communities cited extreme heat as their primary concern, as well as decreasing and unpredictable rainfall, and increasing wind speed and frequency. Women – as the main providers of food and water at domestic levels – are particularly concerned regarding access to water for both domestic and agricultural purposes, with dune encroachment (exacerbated by changes in rainfall) cited by both men and women equally.

IMPACTS ON KEY SECTORS, ECOSYSTEMS AND LIVELIHOODS

37. As of 2022, Mauritania was ranked as one of the most vulnerable countries to climate change (12th out of 192) and yet only 118th most ready country (ND-GAIN, 2022). The climate change described is already impacting the communities living in rural Mauritania, and will continue to do so. Between 2000 and 2020, on average, almost 10% of the population has been impacted by climate hazards; the consequences are likely to be more pronounced for low-income households and women (IMF, 2023). The sections below describe the main impacts of climate change on key sectors and livelihoods in the project areas.

Agriculture and crop production

38. The agricultural sector plays a crucial role in the national economy, contributing to the GDP and providing a large portion of employment, particularly in rural areas (ONS, 2017). Despite its importance, the sector faces challenges as a result of ecosystem degradation and widespread depletion of available natural resources, leading to extensive deforestation, severe soil fertility decline, alterations in hydrological cycles and the proliferation of pests.

39. Projections suggest that the national crop land area exposed to at least one period of drought per year will increase from 6% in 2000 to 10% in 2080 under RCP6.0 and decrease to 5% under RCP2.6. Models vary in their outputs, but some project a doubling of drought exposure by 2080 (PIK, n.d.). The impact of climate change on crop production is highly uncertain, with both increases and decreases predicted for cow peas, maize, millet and sorghum and rice under various climate models.

40. However, in the target wilayas, where rainfed farming is the main agricultural activity, and one heavily involving women, both observed and projected variation in rainfall patterns result in negative consequences for production. Furthermore, increasing temperatures affect crop productivity, and accelerating desertification and dune encroachment threaten productive areas. Overall, the area under cultivation is

reducing, with consequences for the livelihoods of local populations, with reduced food security, lower income from productive activities, abandonment of productive activities, and rural exodus (especially for men and youth).

Pastoralism

41. In the case of pastoralism, climate change and the associated drying up of water sources are expected to make the provisioning of water more difficult and costly. In addition, changes in rainfall may affect the distribution and productivity of pastureland, as well as the productivity of fodder. These changes, when combined with the risk of elevated levels of mortality due to severe weather events, have the potential to drive livestock and meat prices higher and contribute to declining incomes for pastoralists. This will place increased pressure on remaining productive areas, which are already suffering from unsustainable practices, including overgrazing and inadequate pasture management. Together with the impacts of climate change, these will lead to increased continued degradation of soils and natural resources, placing even further pressure on pastoral resources.

42. While pastoralists in the target wilayas tend to focus primarily caprinae and camelids, which are more adapted to arid environments, they may also suffer from a decline in the productivity of pastures (trees/shrubs), with consequences for herders who may have to concentrate in areas that are already heavily impacted by humans (with potential resource-use conflicts) or to abandon their livelihood and move to urban centers. There is also the potential that livestock rearing will increase in semi-arid areas as these areas become more marginal for agriculture (Niang, 2014), further exacerbating water user conflict and health risks (as increased concentration of livestock around water sources tends to promote disease) (Ministry of Rural Development and Environment, 2004). All in all, in order to prevent either extreme, there is a need to better manage pastoral practices in order to adapt to changing climate.

Water resources

43. Water resources in Mauritania are divided between groundwater (3%) and surface water (97%) resources. The country has large groundwater reserves estimated at 0.3 billion m3 (Noureddine, Eslamian, & Katlane, 2021), but these vary geographically across the country, and are generally understudied. Surface water resources – estimated at 11.1 billion m3 – largely consist of the Senegal River, which forms the southern border of Mauritania is the only perennial river in the country, with other rivers being generally ephemeral and short. Other water sources include wadis (smaller ephemeral tributary rivers), two primary lakes and several sebkhas (ephemeral lakes), as well as a few small dams and perennial springs (Noureddine, Eslamian, & Katlane, 2021).

44. Increased temperatures, decreased precipitation and increased evapotranspiration have a direct impact on the accessibility of water resources. In many areas, water tables are declining, and groundwater is being depleted, whilst in others, it is a poorly accessed and/or managed opportunity. The monitoring of water levels in almost all of the country's aquifers reveals a continuous decline. This decline, resulting from the combined effects of drought and overexploitation, has led to a significant reduction in base flows in rivers and lakes. In drier areas, ephemeral water sources are drying up quicker and face tarnishing with increased rates of desertification and dune encroachment. The consequences of all these impacts, alone and in conjunction, include reduced pressure in aquifers, a need for higher pumping heights, and the deterioration in water quality.

45. These impacts will only worsen in the future in the face of the projected changes in climate, with a further reduction in potential water reserves, a decline in groundwater levels, drying up of shallow wells and a decrease in the area of wetlands. This in turn impacts the accessibility of drinking water sources, but also water required for agricultural and pastoral purposes, which remain the main socio-economic activities in rural areas, and particularly for women. Reduced water sources also exacerbate social tensions, namely between farmers and pastoralists.

46. Projections for climate change impacts on water availability are highly uncertain in Mauritania, as are those for precipitation. However, studies have suggested that per capita water availability could decline by 71% under RCP2.6 and 77% under RCP6.0 by 2080 relative to the year 2000 once population growth is

accounted for (PIK, n.d.). These changes are particularly stark in the extreme north and southern regions of the country and include the target wilayas (PIK, n.d.).

47. The vulnerability of the water sector is exacerbated by various socio-economic, institutional, legislative, and political factors. However, compared to urban environments and the Senegal River Basin, the target wilayas have small water budget and few water infrastructure. While there are sites which are facing degraded or overused groundwater sources, many others require more consistent water access through the creation of simple water infrastructure, coupled with improved management.

Ecosystems and biodiversity

48. As ecosystems deteriorate and habitats are disrupted, many plant and animal species are at risk of extinction. The loss of biodiversity not only affects the natural balance of ecosystems but can also have negative consequences for human livelihoods, as many communities in Mauritania rely on these ecosystems for their food, water, and income generation. In particular in the target wilayas, the impact of climate change on vegetation – whether in the savannas or shrubland – combined with human pressures such as deforestation, wood energy exploitation, and grazing, leads to massive tree and shrub (and wildlife) mortality and a lack of natural regeneration. Woody vegetation represents the primary source of firewood in rural areas, but its potential is steadily diminishing. The combined effects of chronic droughts and human activities – including use of woody and non-woody products like firewood and charcoal, medicinal plants, forage, other edible products – are resulting in the disappearance of forest and biological species. This, in turn, reduces pastoral potential and triggers significant rural-to-urban migration.

NON-CLIMATIC DRIVERS AND ROOT CAUSES

49. The following section outlines in more detail the non-climate drivers and their root causes, that increase the vulnerability of the project target areas and populations to climate change, and exacerbate the impacts outlined in the previous section. Direct non-climate drivers of vulnerability are presented first, followed by their main root causes (or underlying drivers). The interaction of the non-climate drivers, root causes and climate change are illustrated in the Problem Tree that follows (Figure 6).

Direct non-climate drivers

Unsustainable use of natural resources

50. The main non-climatic driver exacerbating communities' vulnerability to climate impacts is the overreliance on and unsustainable use of natural resources. In the project target areas, this mainly includes overgrazing and water mismanagement (including unsustainable irrigation practices and groundwater overextraction). Overreliance on wood fuel for domestic energy also results in a reduced vegetation cover, which further exposes soils to erosion and degradation. The overexploitation of natural resources adds pressure on ecosystems disrupted by climate change, resulting in a negative feedback cycle of degradation of ecosystems and their associated services (see the sections on impacts of climate on agriculture, crop production, pastoralism and water resources). This causes a direct negative feedback cycle on food and water insecurity, especially for women who are responsible for both at household level. It also has a negative feedback on infrastructure as it also speeds up the desertification process, ultimately further increasing the vulnerability of the populations; women and youth in particular.

Limited livelihood options

51. Income-generating activities in the target wilayas tend to focus on a small range of activities, which are typically male-dominated and strongly reliant on natural resources – such as date production and livestock herding. This said, alternative livelihoods such as horticulture, small animal farming (chicken, goat), and development of gum Arabic and other non-timber forest product (NTFP) value chains, are beginning to gain popularity in particular with women (including through interventions funded by the GEF and other donors). However, they still lack the technical and commercial support needed to become viable and competitive

sectors, as well as expertise to ensure their use and management is adapted to the changing climate. There is limited value addition taking place and the opportunities offered by proximity of urban areas are often under-utilized. Limited livelihood diversification and the high reliance on climate-sensitive natural resources contributes to the climate change vulnerability of rural populations.

Root causes

52. Climate predictions and associated climate impacts described above depict specific pressures to which ecosystems and communities depending on them will have to adapt. However, these are only further exacerbated due to anthropogenic pressure, namely the overuse of natural resources. This is in turn influenced by socio-economic drivers - in particular, multi-dimensional poverty and demographic shifts. Table 6 outlines some of the key socio-economic indicators, which are discussed in more detail below.

Table 6: Key socio-economic indicators for Mauritania.

Measure	Current rating	Reference
GINI coefficient (2023)	0.32	
ND-Gain Index ranking	157	(ND-GAIN, 2022)
Fertility rates (births/woman, 2022)	4.3	(World Bank Group, 2022)
Population below national poverty line (%)	31.0	(World Bank Group, 2024; World Bank Group, 2019)
Extreme poverty (%)	6.5	(WFP, 2024; ISS African Futures, 2025; OPHI, 2023)
Access to rural improved drinking water services (%)	56	(WHO & UNICEF, 2022)
Human Development Index (HDI) ranking (2022)	164 (low)	
Global Gender Gap Index ranking	107	(World Economic Forum, 2024)
Gender Inequality Index (GII)	0.603	(UNDP, 2022)

Poverty and lack of economic opportunities

53. Despite recent progress towards poverty reduction, many households show deficits to human capital accumulation and face limited access to basic infrastructure (see Table 7). The national Multidimensional Poverty Index (Indice de Pauvreté Multidimensionnelle de la Mauritanie, IPM-M) shows that 2.3 million people (~57% of the population) live in multidimensional poverty. The case is particularly acute in rural areas: here ~77% of the population lives in multidimensional poverty (MPPN, 2023). This is mirrored in the five targeted wilayas, with three of the five having more than 39% of their populations in moderate or acute economic poverty (see Figure 5) (ANSADE, UNICEF, & OPHI, 2022).

54. These five wilayas also all have low activity rate levels, in particular Brakna and Tagant, and women (Table 7). In Tagant, for instance, only 8% of working-age women were active, compared to 52% of men. This disparity between men and women is consistent in all of the target wilayas. This is particularly worrying, as there is a high prevalence of female-headed households in all five of the wilayas (~22-30%, based on EPCV results), which is an increasing trend due to seasonal male migration (see below). Young people (15-24 year olds) are also prone to high levels of migration; representing roughly 22% of the population in the target wilayas, they are often left with few economic opportunities, especially with increasingly difficult environmental conditions, and low educational opportunity for women (Citoyenneté, 2025).

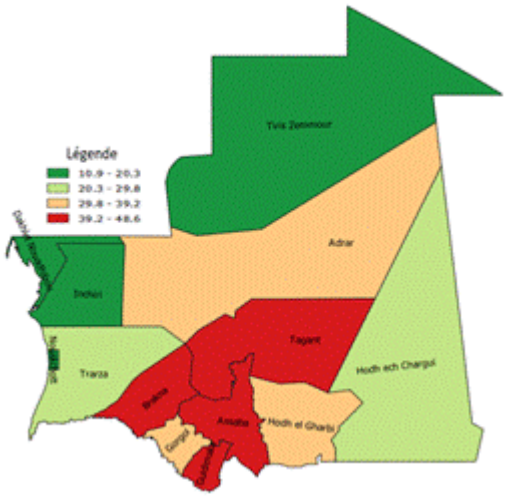


Figure 5: Prevalence of economic poverty in Mauritania, with Tagant (45%), Brakna (41%), Assaba (39%), Hodh El Gharbi (34%) and Hodh El Chargui (25%), based on the 2019 Permanent survey on Living Conditions in Mauritania.

Table 7: Percentage of working age population which is active by sex and wilaya (EPCV 2019). In italics, rates which are lower than the national average.

Wilaya	% men	% women	Total %
Hodh El Chargui	72.5	*25.7*	46.2
Hodh El Gharbi	70.9	38.5	51.6
Assaba	64.7	*29.9*	49
Brakna	*59.7*	*29.1*	*41.2*
Tagant	*52*	*8*	*27*
National	**63.8**	**30.8**	**45.8**

Demographic shifts

55. Climate change impacts will also compound demographic issues. The target wilayas have some of the highest birth rates in Mauritania (6.0 and more for all, except Asaba at 5.7 children per woman), as well as important demographic shifts due to rural exodus and incoming refugees from neighboring countries (in particular Mali) due to insecurity. The high birth rates have much to answer for the high proportion of youth in the population, while the rural exodus – mainly of men – shifts the composition of rural villages to a female bias. As noted above, this has implications in terms of economic output for communities, as the educational and economic opportunities for women are not the same as for men, as well as the roles and responsibilities within and around communities.

56. Increased regional migration further disrupts the demographic balance as it can mean more pressure on natural resources as well as shifts in roles and responsibilities, namely around the exploitation of said natural resources. This can lead to increased conflicts over natural resources, or unbalanced urban migration, with additional socio-economic, health and infrastructure impacts. With several of the target wilayas – Assaba, Hodh El Gharbi and Tagant in particular – already most prone to frequent natural shocks and food insecurity (World Bank Group, 2022), climate change will only continue to negatively impact the socio-economic opportunity of the populations of southern Mauritania.

57. Finally, it should also be noted that nomadic pastoralism, once a central aspect to life in Mauritania, has declined significantly since Mauritanian independence in 1960. In 1965 it is estimated that nomads accounted for 75% of the total population, but this dropped to 6% by 2000 (El Vilaly, El Vilaly, & Mahe , 2017). This change was largely driven by climatic factors, including severe droughts in the 1970s and 1980s, and the transformation of the country's political economy. Sedentarization is one of the main adaptation strategies of the populations in the arid regions of Mauritania – including the five target wilayas. However, the downside is that more people exploit the same ecosystems for services and goods. While this can and has led to environmental degradation and resource user conflict in certain areas, there are also examples of positive integration and shared management of resources.

PROBLEM STATEMENT

58. Mauritania faces an increasingly challenging climate future as observed climate change trends intensify, resulting in higher temperatures, more variable rainfall and an increase in the frequency and intensity of extreme events. The largely rural population of the target wilayas is highly vulnerable to the negative impacts of climate change. Natural resources underpin livelihoods and food security in these regions, with ~60% of the population engaged in agriculture, pastoralism or fisheries. In addition, these populations live in multidimensional poverty, driven by poor living conditions including food insecurity and poor water access. Continuous anthropogenic pressure on ecosystems, coupled with the stressors of climate change, continue to decrease the health and overall productivity of the natural resources upon which they rely.

59. Climate change impacts will exacerbate the existing challenges of extreme poverty, low natural resource management capacity and lack of access to information. These factors, together with shifting population dynamics (e.g. male exodus), have compounded the unsustainable use of natural resources (including unmanaged exploitation of water resources, uncontrolled grazing, unsustainable fuelwood use, and inefficient irrigation systems) and the widespread degradation of local ecosystems. The degradation of ecosystems and the natural resource base further exacerbate the vulnerability of populations to the impacts of climate change. These impacts include reduced agricultural and livestock productivity (resulting in reduced food security and income), reduced access to and quality of water (with negative impacts on productive sectors and health), and damage to infrastructure and productive areas.

60. The interactions between climate and non-climate drivers of vulnerability in the project areas, and their impacts, are illustrated in the Problem Tree, in Figure 6.

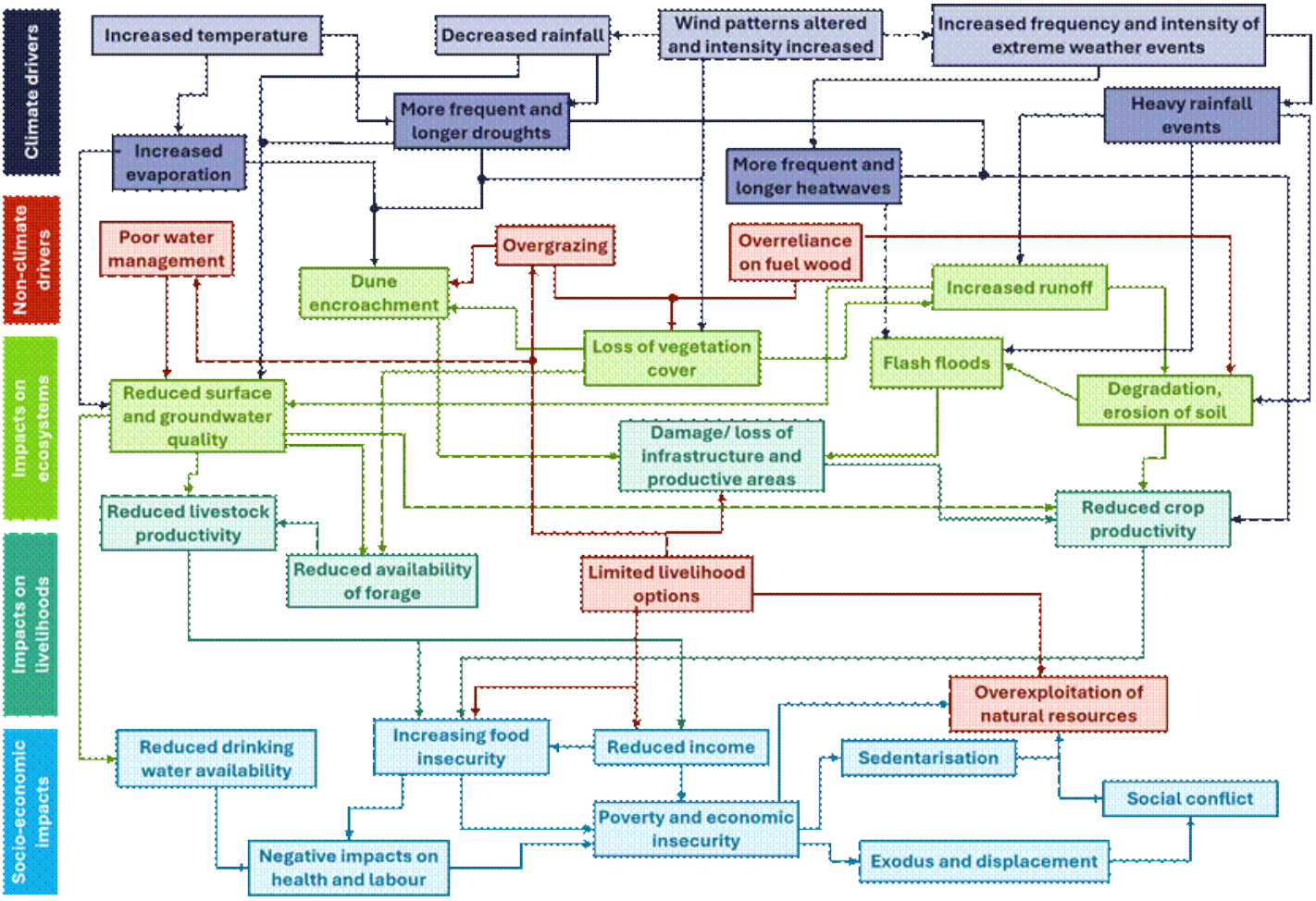


Figure 6: Problem tree, identifying climate and non-climatic drivers, and their impacts on rural communities and ecosystems. Solid lines are direct impacts, while dotted are indirect, with circular nodes representing combined effects.

Simple futures narratives

Summary of drivers:

61. **Climate change**: climate change models are somewhat uncertain in the Sahel region, but all point to an overall increase in temperatures, increased hot days between March and October, and more erratic rainfall pattern (including longer dry spells and more intense episodes). Under scenario SSP2-4.4, temperatures are set to increase between 2° and 2.8°C by 2075, with high variability (uncertain direction) of rainfall, leading to more frequent flooding in low-lying areas and less predictable annual patterns. Under scenario SSP5-8.5, temperatures are to increase between 3.5°C and 5.0°C by 2075, with higher interannual variability, leading to more arid conditions and more violent precipitation events.

62. **Regional insecurity**: the target area is bordered to its south by Mali. Historically, this southern border would have been used seasonally by nomadic herders; however, increasingly today, there are refugees coming through as the security situation in northern Mali has been fraught for years. The influx of migrants causes additional pressure on natural resources, causing user conflict, but also create new pressure on previously underused resources such as fish.

63. **National population dynamics:** Population growth in Mauritania is high for the area (2.5% annual growth) but is projected to drop over time. However, internal population dynamics are also more changing, with an influx of men to urban centers, mostly due to lack of economic opportunities in rural zones. This puts women at the forefront in rural areas, in all age groups, including youth. This will continue being influenced through external factors, such as immigration from neighboring countries.

64. **Decentralized governance**: the Mauritanian decentralization has been ongoing since the late 1990s, with variable success. While there is a clear administrative and legal structure and efforts on the strategic side of things, rural populations remain isolated and poorly supported, particularly in the East and North of the country.

65. To determine the robustness of the preferred scenario to answer the overall problem statement, four scenarios are presented below, presenting climate change projections based on the SSP 2-4.5 versus SSP 5-8.5 and for regional security. For the latter, on one side there is a well-managed security situation at national and regional level, with a limited influx of refugees. In the other scenario, insecurity in the region increases, with poor management of the subsequent displaced populations at national and regional levels, resulting in unregulated and variable demographic patterns in the target wilayas.

66. Scenario 1 – SSP 2-4.5, with managed or reduced regional insecurity

Climate change is happening, but at a rate which allows populations to naturally attempt to adapt to the situation. The pressures on regional extension services remain manageable, though with the lack of pressure, may not take as much precedence as expected. Nevertheless, there is sufficient input in target communities to allow small initiatives to blossom, though not necessarily in a coordinated or systematic way. With little insecurity, there is little external demographic pressure on these communities, which reduces the burden on natural resources and the overall cohesion of society.

67. Scenario 2: SSP 2-4.5, with high regional insecurity

Climate change is happening at a rate which allows populations to naturally attempt to adapt to the situation. However, due to high regional insecurity, there are increasing pressures on rural resources, whether natural

resources, or extension services, which lead to poor planning and cooperation, let alone adaptation. Conflicts between users increase, with little input from

68. Scenario 3: SSP 5-8.5 with managed or reduced regional insecurity

Temperatures in the Great Green Wall have increased by +3.5C, putting significant pressure on natural resources, specifically water, and highly unpredictable growing seasons. This leads rural populations to search for rapid measures to alleviate climate impacts, and increased demand on government resources. Solutions found are often "quick fixes" and maladapted, leading to further environmental degradation, user conflict and rural exodus.

69. Scenario 4: SSP 5-8.5, with high regional insecurity

Temperatures in the Great Green Wall have increased by +3.5C, putting significant pressure on natural resources, specifically water, and highly unpredictable growing seasons. This leads rural populations to search for rapid measures to alleviate climate impacts. In addition, regional insecurity means that there is increased human pressure on already scarce resources, fueling user conflict and little effort into the development of long-term sustainable solutions. Internal migration increases, which further decreases the ability to plan, manage and monitor ecosystem management.

70. Based on these scenarios, there are important points that need to be addressed in order to ensure the robustness of the interventions and sustainability of the proposed project objective.

- Climate change impacts: the region is under quite a bit of uncertainty, but temperatures and precipitation variability will increase under all scenarios; only the amplitude of the hazards vary with the SSP projections.

- Ecosystem-based adaptation: rural populations are highly dependent on their environments, and as such environmental degradation is a significant driver of their climate vulnerability. Adaptation solutions must consider this, as well as the differing use by men and women. Due to the scale of Mauritanian GGW and isolation, it is also important to find cost-efficient, low input methods to ensure their adaptation and the continued coexistence of rural populations with their environment.

- Community-based approach for resource management: the scenarios all highlight the importance of providing rural communities (men, women and youth) with their own tools and practices in order to be more self-reliant. This not only includes technical skills but also planning and monitoring. This relieves pressure on institutions and creates cohesion and more resilience for said communities. It also, by association, promotes vertical integration of systems, techniques and data.

- Capacity building and engagement at all levels: alongside the above point, all scenarios require that stakeholders – from national to local levels - have the tools necessary to understand climate risks and corresponding adaptation options and measures to mitigate risk.

PREFERRED SOLUTION

71. The preferred solution to address the challenges outlined above is to strengthen the climate resilience of vulnerable communities and ecosystems in wilayas in Mauritania's Great Green Wall area through Ecosystem-based Adaptation (EbA) approaches. While the current climate change projections will result in more arid conditions, with higher frequency and intensity of extreme weather events, there is an opportunity to provide rural populations with tools which not only allow to restore their ecosystems, rendering them more resilient to the changing climate, but also providing opportunities to tackle underlying socio-economic issues and changes. Ecosystem-based adaptation (EbA) approaches offer cost-effective, community-based methods to help reduce the anthropogenic stressors fueling ecosystem degradation, all while building medium to long-term resilience of ecosystems and communities in the face of climate change. The table below (Table 8)

highlights some of the solutions identified through the PPG consultations to tackle specific climate change impacts in the project areas. The proposed solutions are further illustrated in the Solutions Tree, in Figure 7.

Table 8: Main climate change impacts identified and solutions to be employed in the project to address them.

Climate change impacts	**Project intervention/solution to address the impact**
Loss and damage to productive areas and infrastructure from (i) increased dune encroachment (due to higher temperatures and evaporation, increases in droughts, and changes in wind patterns, exacerbated by loss of vegetation cover) and (ii) floods (due to heavy rainfall events, exacerbated by loss of vegetation and soil erosion and degradation	- Biological and mechanical dune restoration, using tried and tested methods, as well as the development of more innovative practices - Ecosystem restoration, including through agroforestry and pasture set-aside - Alternative gender-responsive, income-generating activities – including linked to agroforestry and FACI – to encourage long-term ecosystem maintenance and benefits (socioeconomic and ecosystem services) - Water and soil retention practices
Decrease in water availability (due to decreased overall precipitation and increased temperatures, exacerbated by poor water management practices)	- Ecosystem and land restoration which will help reduce runoff and improve infiltration - Community-based water retention practices (earth dams, contours…) - Establishment and/or repair of agriculture and pasture-related small water infrastructure - Promotion of climate-smart agricultural practices for rainfed crops
Reduced crop and livestock productivity (due to changes in rainfall, increased temperatures and droughts, as well as other extreme weather (e.g. floods), exacerbated by soil erosion and degradation, and unsustainable agricultural and grazing practices)	- Water and soil conservation and soil defense and restoration practices, to support the infiltration processes. - Climate-smart agricultural practices and improved pasture management in communities - Ecosystem restoration, including through agroforestry and pasture set-aside - Climate resilient and ecosystem-based, gender-responsive income generating activities and diversified livelihoods

72. In addition to the specific actions listed in the table above, the project will also support enhancing awareness and knowledge of climate change impacts and ecosystem-based adaptation approaches to ensure the further anchoring of these concepts in communities. This means recognizing the shifting demographic profile of rural communities, providing opportunities to the most vulnerable yet demographically important groups: women and youth. It also includes improving awareness raising and knowledge sharing, ensuring that there is a wider engagement of society, which helps to anchor behavioral and transformational change. This means working on both vertical and horizontal communication and integration: vertically, between communities, local and regional governance, and horizontally, focusing on cross-cutting themes and integrating new stakeholders (for instance, researchers and private sector actors).

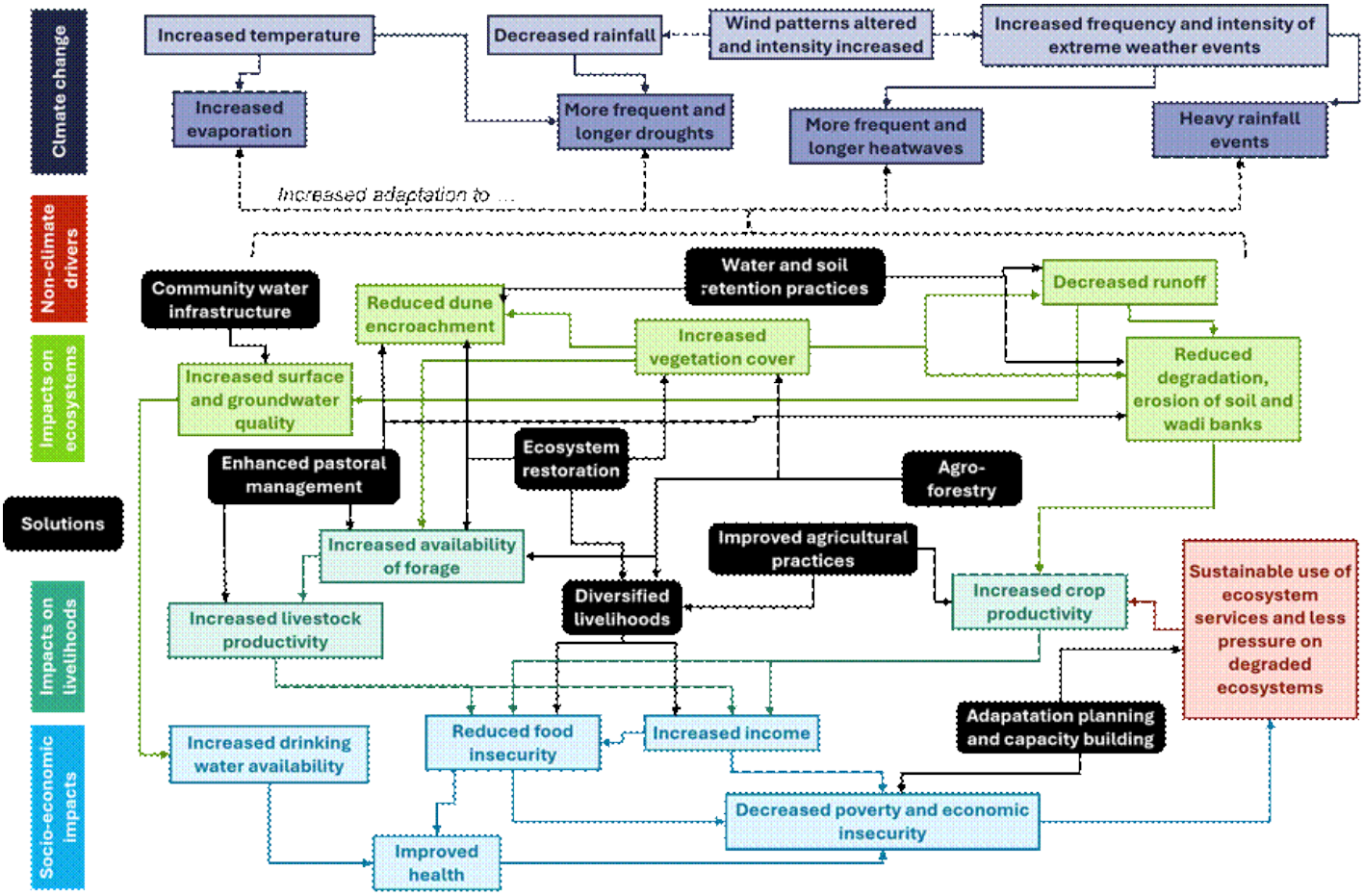


Figure 7: Proposed solution tree.

73. There are certain barriers to delivering the overall objective and elements of the preferred solution:

74. ***Barrier 1 – Lack of technical capacity of institutions from local to national level to plan and implement climate change adaptation using ecosystem-based adaptation approaches***: The Mauritanian government is aware of the challenges posed by climate change and is taking steps to address them. However, previous and current projects have highlighted the lack of technical capacity at different levels. Mauritania's institutional capacity to implement climate change policies and programs remains weak, due to several factors, including a lack of trained personnel. At national level, there is a need for more consistency in the institutional framework and cooperation between and within ministries, in particular the National Agency for the Great Green Wall (ANGMV – *Agence Nationale de la Grande Muraille Verte*) and the Ministry of Environment and Sustainable Development (MEDD – *Ministère de l'Environnement et du Développement Durable*), but also between MEDD and the Ministry of Agriculture or the Ministry of Livestock, for example.

75. At regional (wilaya) level, while there are strides in the decentralization process, and an investment by members of regional councils (*conseil de wilaya*) and mayoral councils, there is a need to ensure that all regional and local stakeholders have a similar understanding and consistent capacity to assist with the adoption of climate change adaptation approaches, as per national policies and guidelines, and local needs. Furthermore, during the consultations at wilaya level, communities bemoaned the inconsistency in support by regional MEDD and ANGMV staff, in particular in terms of alignment with the expectations and specific needs of each wilaya.

76. Furthermore, the ANGMV, which oversees the implementation of activities related to the Great Green Wall (GGW), still struggles to achieve its goals. Some of the main issues include the lack of technical and

financial capacity to undertake its missions, namely at wilaya-level, poor participation and ownership of activities by local communities (partially due to lack of relationship between the institutions and the communities; see also Barrier 4), and lack of sustainable and replicable actions.

77. ***Barrier 2 – Insufficient financial and material support for ecosystem-based adaptation (EbA), including viable sustainable alternative income generating activities for rural populations:*** Alongside technical capacity building, there is a need to invest capital into communities, providing the catalyst for the piloting, implementation and eventual spread of best practices for ecosystem-based adaptation approaches and livelihood diversification. As noted above, poverty, whether economic or multidimensional, is much higher in rural Mauritania than urban centers, and also touches female-headed households more. This has only been compounded with the COVID-19 pandemic and global economic crisis, which translated into inflation tripling from 2021 to 2022 (3.6% to 9.5%), with early analysis indicating that rural populations were the worst hit. Simultaneously, government budgeting is being hard-hit by extreme events, such as the 2022 floods (specifically in Hodh El Gharbi, Assaba and Tagant), requiring reallocation of budget into emergency relief. This can cause delays in other investments, leaving communities unable to fully commit to alternative solutions.

78. Additionally, where community-based initiatives and cooperatives exist, there is often a lack of resources to tackle emerging issues or to grow the associations or business. While there are systems of private lenders and microfinance, there are few which offer products that are aligned with the risks and realities of agropastoral activities. Instead, private lenders operate with no real oversight or regulation, and at high interest rates. Recently, the EU-funded *Promoting the development of sustainable agricultural and pastoral sectors* (RIMFIL) supported the development of the national microfinancing strategy, as well as successfully partnering with two microfinance institutions (MFIs) in the provision of microfinancing opportunities for agropastoral activities in three wilayas. This will be furthered under new investments, but there is clearly scope to further build on these efforts and provide more linkages between cooperatives and MFIs as well as to support the creation of blended finance credit lines to incentivize and support the transition to such systems. Other mechanisms, such as village savings and loans associations or competitive microgrants, should also be investigated or furthered, to provide more varied, gender-responsive financing opportunities.

79. ***Barrier 3 – Limited awareness and access to evidence-based knowledge on EbA practices at the ground level***: While the importance of EbA approaches is present in the national strategic framework, there is still limited implementation of EbA approaches at local level, despite government and donor-led initiatives. While ANGMV activities have been underway for a decade, the dissemination of information and communication about these activities are lacking, both within rural communities as well as within the environmental stakeholder landscape (e.g. other agencies, research actors, etc.). During the PPG consultations, the lack of communication, awareness raising and information dissemination regarding the activities in the GGW was highlighted by stakeholders from communities, and in particular women, and national agencies.

80. Furthermore, during the consultations, it was also highlighted that there is little homogeneity and accessibility to data on the implementation and success of EbA approaches. This includes issues on how the data is collected (e.g. lack of standardized protocols among agencies, irregular or partial sharing between projects/departments), and where data is stored and accessed (in theory a central database at the MEDD, but that requires credentials to access).

81. As such, getting data-rich, targeted information is difficult at best. This reduces the awareness and adoption of practices in beneficiary communities, but also reduces the innovation and sharing of best practices amongst technical stakeholders. Addressing this may include interventions as simple as promoting the vocabulary associated with EbA activities to promote synchronization of actions between stakeholders, common actions and objectives, as well improving the channels of communication to promote EbA successes to both beneficiaries and technical partners.

82. ***Barrier 4 – Limited advocacy and planning capacity in rural communities:*** The overall structure of rural communities has shifted in rural Mauritania, resulting in communities with less capacity (or perceived capacity) to take action on issues, including addressing or preparing for the impacts of climate change. On one part, many rural communities are becoming increasingly dominated by permanent female residents as men seek economic opportunities – either permanently or seasonally – in urban centers. While this does not take away from the functioning of the communities, female voices tend to not be as strongly represented in formal decision-making instances, which remain dominated by men (e.g. mayoral councils, wilaya councils), nor do they have access to the same formal and/or technical training as men.

83. Additionally, while there has been a decentralization effort, it remains a heterogenous process, with remote areas often having less opportunities or connections with institutions. For instance, the local development plans, while required, are not available in every municipality. Simultaneously, even when they are available, they do not reflect the national and regional development frameworks due to a lack of concertation or understanding, in particular when considering cross-cutting issues such as climate change impacts and adaptation. Similarly, during the PPG phase, a common comment from communities in the Great Green Wall, especially those which are geographically far from the capital, was that they did not feel adequately supported by the ANGMV and other partners (e.g. DREDD), not having enough opportunities to communicate, nor tools and/or skills to advocate for additional support.

84. The project intervention strategy includes interventions that are tailored specifically to help address and lower the barriers to adaptation identified above and thus support the achievement of the project outcomes and objective. These interventions are summarized in the table below (Table 9).

Table 9: Identified barriers and solutions identified to support the achievement of the project objective.

Barrier	Solutions Identified
1: Lack of technical capacity of institutions from local to national level to plan and implement climate change adaptation using ecosystem-based adaptation approaches	• Training for stakeholders in climate change risk and adaptation solutions, from local to national level • Integration of adaptation considerations into existing planning tools • A shared protocol for government agencies to monitor and collect sex-disaggregated data on EbA adaptation measures
2: Insufficient financial and material support for ecosystem-based adaptation (EbA), including viable sustainable alternative income generating activities for rural populations	• Direct investment into dune restoration, pasture management and agroforestry • Great Green Wall wide assessment of durable, climate resilient, gender-responsive income-generating activities, including value chain analysis • Introducing CBOs to alternative funding solutions – including microfinance solutions tailored to climate-resilient agropastoral activities • Support to new and existing integrated communal agricultural farms (FACI)
3: Limited awareness and access to evidence-based knowledge on EbA practices at the ground level	• Beneficiary exchanges amongst communities • Research grants for pioneering practices in the Mauritanian context • Development and training on gender-responsive EbA approaches monitoring and data collection

Barrier	Solutions Identified
	• Biannual roundtables for technical partners on EbA approaches in Mauritanian context • Gender-responsive communication plan for project and general ANGMV activities
4: Limited advocacy and planning capacity in rural communities	• Gender-responsive capacity building in rural communities, including technical (e.g. agriculture) and non-technical (e.g. development planning, financial and business planning, etc.) skills • Development of gender-responsive local development plans through participatory planning, with a focus on climate change adaptation • Community exchanges (among CBOs and FACI in particular), as well as improved relationship between technical ANGMV and DREDD officers

Cost Effectiveness

85. The project is designed to increase the deployment of EbA approaches in the Great Green Wall in Mauritania, as well as to strengthen local communities' ability to execute and further replicate these measures. The project takes on the capacity building of national, regional and local stakeholders in order to strengthen the governance over the approaches, ensuring that there is multilevel ownership.

86. Considering the budget of the project, there was a deliberate choice to limit the number of investment sites, in order to ensure consistent and thorough support throughout the project. While more resource-heavy, this approach should allow to better anchor the practices – many of which require long-term investment of the populations to realize full benefits from them. It also answers one of the concerns from local stakeholders, which relates to the relative lack of technical, material and financial support to undertake adaptation measures. The project will support repeat and follow-up visits from project staff, but also ANGMV and other regional support officers, to foster the relationship between communities and these support systems, as well as offer opportunities to troubleshoot and adapt practices to local conditions over time.

87. In addition to the investment sites, the project supports institutional capacity building and planning at a larger scale – the municipalities and wilayas. By integrating stakeholders from the entirety of the municipalities as well as regional level, the plans that are developed will be implementable at a larger scale, all while benefiting from the experience from the target sites. Ultimately, the project is designed so that the institutional support directly and indirectly impacts the site intervention investments: the investments under Component 2 and 3 rely on capacitated governance at the regional and local levels, which will have benefited from trainings under Component 1. This increases the scalability of the project interventions. In addition, the project directly contributes to the rolling out and adoption of climate-resilience aligned microfinancing options, which will improve the options for longer-term financial support of small enterprises and CBOs.

88. The project also uses an approach that documents and learns from previous interventions, as well as supporting novel approaches (e.g. drones and seedballs for revegetation, agropastoral adapted MFI products,…). This dual approach ensures that successful approaches are reproduced, all while supporting further innovation; this will lead to lower risk of failure or duplication. The project allocates a high percentage of its funds to direct investments, recognizing the higher cost which can be associated with trial of new approaches, due to safeguards concerns, community engagement and materials (specifically in remote environments). By ensuring a clear connection to knowledge management and learning at project level (Component 4) as well as through regional efforts (such the GEF-8 Great Green Wall Regional Program

(TALSISI-GGWI) and the GCF-funded Scaling Up Resilience in Africa's Great Green Wall (SURAGGWA), to name a few), these investments are made in a cohesive and integrated environment across the Great Green Wall.

B. CHILD PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole, including how it addresses priorities related to the specific program, and how it will benefit from the coordination platform. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

89. The proposed project looks to strengthen the climate resilience of vulnerable communities and ecosystems in five agrosilvopastoral regions in Mauritania's Great Green Wall through Ecosystem-based Adaptation (EbA) approaches. The five wilayas that will be targeted are Assaba, Brakna, Hodh El Chargui, Hodh El Gharbi, and Tagant.

90. The project is a child project to the UNEP-led GEF-8 Great Green Wall Regional Program (TALSISI-GGW), whose objective is to restore landscapes and ecosystem services and strengthen the climate resilience of communities living in arid and semi-arid environments across the GGW region through a transnational and coordinated approach, supported by strengthened local and regional capacity for sustainable land management, natural resource management, climate change adaptation and knowledge-sharing. This program is undertaken in 9 countries along the GGW and has three main pillars:

- Enhancing policy and institutional capacity, while including gender mainstreaming and knowledge management;
- Promotion of equitable and diversified climate-resilient livelihood opportunities;
- The application of integrated natural resources practices to restore degraded land and forests while sustainably managing the limited water resources.

91. As the child project in Mauritania, the LDCF project will fit within and contribute to this framework, working on local level stakeholder participation, engagement and capacity development that will be mirrored at the regional level. This latter step will be further facilitated thanks to the UNEP-led Regional Coordination Project under the Regional Program, which focuses on the dispersion of national level lessons and experiences onto the regional stage. This LDCF project will include representation of the Regional Program and the Coordination Project at the Project Steering Committee (PSC) level, as well as allocating funds for participation to regional events.

THEORY OF CHANGE

92. Mauritania's Great Green Wall is an area facing several direct and indirect climate change impacts. Rural communities, who rely heavily on their natural environment, are faced with increasing temperatures, decreased and annually variable precipitation and changing wind and extreme weather patterns and intensity. These also heavily impact the ecosystems and associated services on which these communities rely, included but not limited to accelerated dune encroachment, decreased water supply, decreased vegetation cover and declining biodiversity. These impacts are only amplified by the unsustainable use and management of these

natural resources, which are in part driven by external socio-economic pressures, such as demographic patterns and economic opportunities.

93. The project's Theory of Change, illustrated in Figure 8 below, is premised on the fact that the climate change vulnerability of rural communities in the GGW can be reduced through climate-smart restoration and sustainable management of ecosystems and landscapes, which also promotes equitable and diversified climate-resilient livelihood opportunities, in a gender-responsive manner. Furthermore, to achieve this in the context of the Mauritanian GGW, capacity building and knowledge management need to be built from a community standpoint, as well as at the institutional level, with sustainable integration of the two. In particular, the project will ensure the inclusion of some of the more vulnerable groups – women and youth – and will interface with key regional support stakeholders, namely the ANGMV and Ministry support services (e.g. Ministry of Environment and Sustainable Development, Ministry of Agriculture and Food Sovereignty, Ministry of Livestock…).

94. The project objective is to strengthen the climate resilience of vulnerable communities in five wilayas in Mauritania's Great Green Wall area through Ecosystem-based Adaptation (EbA) approaches. To achieve this, the project will therefore rely on five following outcomes, addressing both the drivers of climate vulnerability (see Table 8) as well as the barriers to the implementation of adaptation solutions (see Table 9):
• Outcome 1.1 Improved institutional and technical knowledge and capacity of local, regional and national stakeholders (with due consideration of gender) to plan, implement and monitor Ecosystem-based Adaptation (EbA) measures to address climate risks in agrosilvopastoral systems
• Outcome 2.1 Strengthened climate change resilience of vulnerable communities in the five wilayas through the adoption of gender-responsive EbA approaches
• Outcome 3.1 Strengthened climate-resilient livelihoods and income sources in the five target wilayas through diversified, gender-responsive, climate-resilient and ecosystem-based income-generating activities (IGA)
• Outcome 4.1 Increased knowledge of EbA practices through the gender-responsive collection and dissemination of lessons learned for scaling up results
• Outcome 4.2 Enhanced awareness of climate change impacts, and institutions and support available for EbA approaches amongst local stakeholders.

95. These outcomes will be achieved through outputs, which have been developed around the solutions identified as best-suited for addressing the drivers of climate vulnerability, as summarized in the Problem and Solutions Trees (Figure 6 and Figure 7) in Section A. Furthermore, the outputs and interventions have been designed to also help address the barriers identified, as summarized in Table 9 in Section A.

96. The project will also contribute directly to wider medium-term outcomes (MTOs), alongside other projects and initiatives that are being undertaken concurrently – including the other child projects under the TALSISI-GGWI Regional Program. These medium-term outcomes are defined as follows:
• MTO 1 – Institutions at local and national level are effectively working to deliver EbA approaches from planning through implementation and monitoring
• MTO 2 – Communities in the Great Green Wall region are actively engaged EbA approaches, resulting in socio-economic gains and food security
• MTO 3 – Great Green Wall degradation in Mauritania is reversed, with national efforts and knowledge positively contributing to the regional.

97. These medium-term outcomes further contribute towards a wider transformational change, helping to achieve Mauritania's Nationally Determined Contribution (NDC), contributing to the achievement of the overall objectives of the Great Green Wall, as well as working towards achieving Sustainable Development Goals 1, 2, 5, 6,13, 15 and 17.

Assumptions/risks underlying the project ToC

98. The ToC recognizes that there are several assumptions, external to the project sphere of control, which underlie the success of the outputs and achievement of the project outcomes. These include:
• A1 – National and regional-level governance are interested in backing and integrating EbA approaches in development policy, planning and budgeting processes.
• A2 – Communities are organized, willing to participate and take the lead in project implementation in a gender-responsive manner.
• A3 – Other regional and national Great Green Wall projects and initiatives are in place and lessons learned are shared for wider dissemination and adoption of best practices.
• A4 – The wider civil society and implementing partners are active, willing and able to take the lead in project implementation

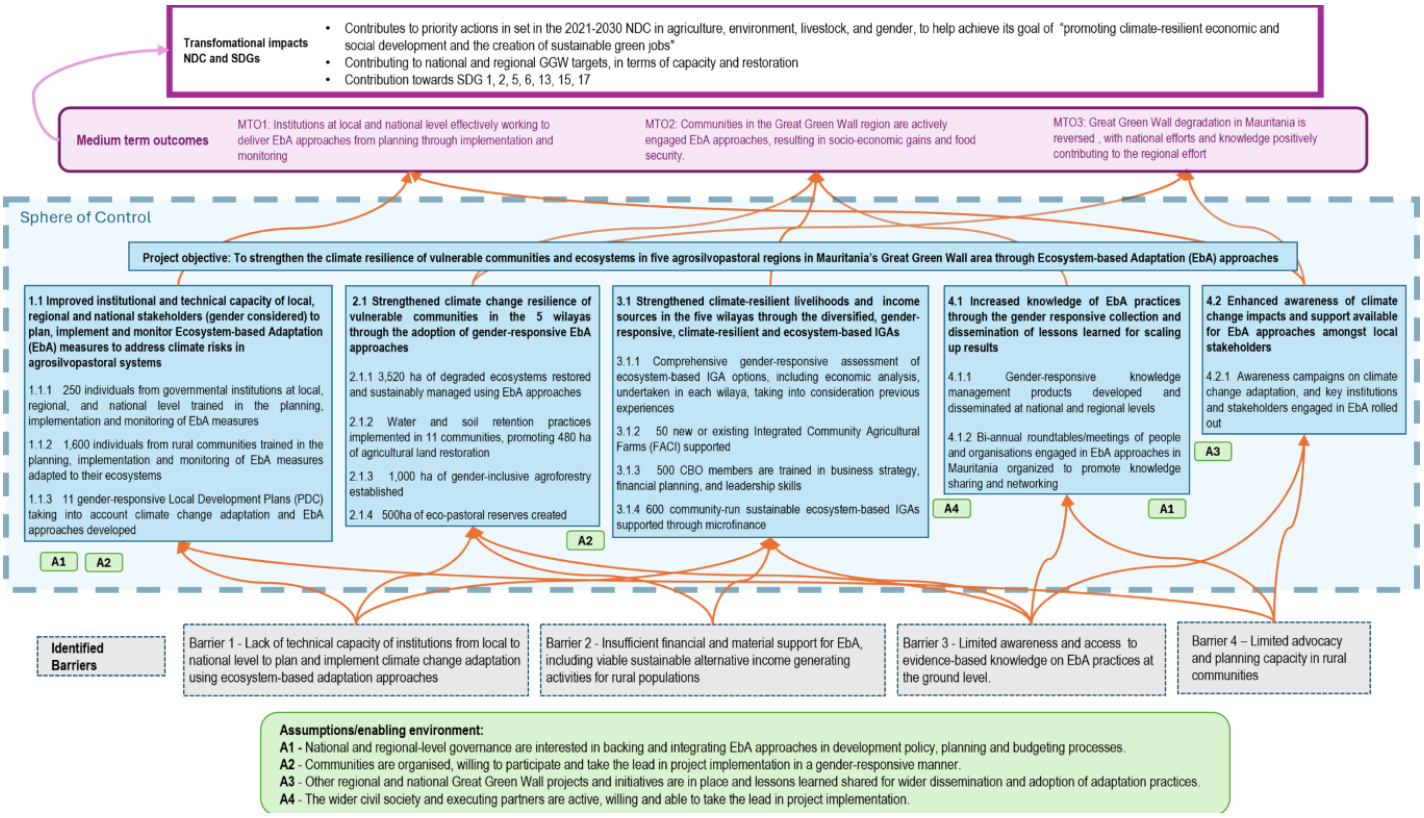


Figure 8: Theory of Change

Changes between PIF and PPG phases

99. The table below summarizes the changes made in the project framework (outcome and output structure) between the PIF and PPG phases, as well as the justifications for the changes made.

100. In addition, the total co-finance amount for the project has been reduced from USD 78,745,053 to USD 46,552,040. The main changes are due to previously-identified projects having ended: PRODEFI was concluded in 2024, while the AfDB-funded PCVASG-PATAM will be ending in 2025; together, these represented USD 33,500,000. While a PRODEFI phase II is in the works, there is not sufficient information available for now for it to be considered as co-financing.

PIF project framework	PPG project framework	Justification
To strengthen the climate resilience of vulnerable communities and ecosystems in nine agrosilvopastoral regions in and adjacent to Mauritania's Great Green Wall and in Baie de l'étoile area through Ecosystem-based Adaptation (EbA) approaches	To strengthen the climate resilience of vulnerable communities in five agrosilvopastoral regions in Mauritania's Great Green Wall area through Ecosystem-based Adaptation (EbA) approaches	In order to remain complementary to other investments and programs and to better focus its impact, the project has reduced its geographical scope requiring a re-wording of the objective.
Component 1 **Technical and institutional capacity strengthening**	**[unchanged]**	/
Outcome 1.1 *Improved institutional and technical knowledge and capacity of local, regional and national stakeholders to plan, implement and monitor Ecosystem-based Adaptation (EbA) measures to address climate risks in agrosilvopastoral systems*	*Outcome 1.1* *Improved institutional and technical capacity of local, regional and national stakeholders (with due consideration of gender) to plan, implement and monitor Ecosystem-based Adaptation (EbA) measures to address climate risks in agrosilvopastoral systems*	*usion of women.*
Output 1.1.1 450 individuals from governmental institutions at national, regional and local level trained in the planning, implementation and monitoring of EbA measures	Output 1.1.1 250 individuals from governmental institutions at local, regional, and national level trained in the planning, implementation and monitoring of EbA measures	The target was recalculated based on the information gathered during the PPG consultations and includes ministry staff (at national and wilaya level), as well as wilaya and municipality level administrations.
Output 1.1.2 1,350 individuals from community-based groups and private sector trained in the planning, implementation and monitoring of EbA measures adapted to their ecosystems	Output 1.1.2 1,600 individuals from rural communities trained in the planning, implementation and monitoring of EbA measures adapted to their ecosystems	The target was recalculated based on the information gathered during the PPG consultations and the reduction of wilayas targeted. It includes stakeholders of villages (515) found within each target municipality (20) but which may not be included under Components 2 and 3.
Output 1.1.3 22 Regional and/or Local Development Plans taking into account climate change adaptation and EbA approaches developed and shared	Output 1.1.3 11 gender-responsive Local Development Plans (PDC) taking into account climate change adaptation and EbA approaches developed	The target was recalculated based on the information gathered during the PPG consultations and the reduction of wilayas targeted. Out of the 20 targeted municipalities, 11 will not have a current or planned PDC during project implementation.

PIF project framework	PPG project framework	Justification
Component 2: Climate change resilient landscapes through restoration and sustainable management of ecosystems	**[unchanged]**	/
Outcome 2.1 *Strengthened climate change resilience of vulnerable communities in the 9 wilayas through the adoption of EbA approaches*	*Outcome 2.1* *Strengthened climate change resilience of vulnerable communities in the 5 wilayas through the adoption of gender-responsive EbA approaches*	*The number of wilayas has been reduced to reflect the reduction in scope, and "gender-responsive" included to highlight focus on women's needs and participation.*
Output 2.1.1 2,500 ha of degraded ecosystems restored and sustainably managed using EbA approaches	Output 2.1.1 3,520 ha of degraded ecosystems restored and sustainably managed using EbA approaches	Target was changed to accommodate the reduced scale of project (9 to 5 wilayas), and the integration of all the different methods.
Output 2.1.2 Water and soil retention practices promoted and implemented in 40 communities	Output 2.1.2 Water and soil retention practices implemented in 11 communities, promoting 480 ha of agricultural land restoration	The target was recalculated and clarified during PPG, based on the information gathered during the consultations and the reduction of wilayas targeted.
Output 2.1.3 1,500 ha of gender-inclusive agroforestry established	Output 2.1.3 1,000 ha of gender-responsive agroforestry established	The number of hectares of agroforestry has been reduced based on the consultations and site visits during the PPG phase.
Output 2.1.4 80 hectares of degraded coastal ecosystems (seagrass and algae) restored using an EbA approach	Output 2.1.4 500 ha of eco-pastoral reserves created	The output was revised to remove the reference to coastal ecosystems (as the coastal site is no longer relevant), and to instead introduce the eco-pastoral reserves.
Component 3 **Climate change resilient communities through sustainable, ecosystem-based income-generating activities**	**[unchanged]**	/
Outcome 3.1 *Diversified climate-resilient ecosystem-based livelihoods and income-generating activities (IGAs) promoted in the 9 target wilayas*	*Outcome 3.1* *Strengthened climate-resilient livelihoods and income sources in the five wilayas through diversified, gender-responsive climate-resilient and ecosystem-based income-generating activities (IGAs)*	*The number of wilayas has been reduced to reflect the reduction in scope.* *Reworded for clarity.*
Output 3.1.1	Output 3.1.1	Inclusion of gender-responsiveness, to highlight the

PIF project framework	PPG project framework	Justification
Comprehensive assessment of ecosystem-based IGA options, including economic analysis, undertaken in each wilaya, taking into consideration previous experiences Output 3.1.4 80 Integrated Community Agricultural Farms (FACI) created	Comprehensive gender-responsive assessment of ecosystem-based IGA options, including economic analysis, undertaken in each wilaya, taking into consideration previous experiences Output 3.1.2 50 new or existing Integrated Community Agricultural Farms (FACI) supported	inclusion of gender considerations. Output numbering changed (originally Output 3.1.4) Number of FACI was reduced, based on analysis of target sites and field consultations. At least 30 existing and 20 new FACI will be supported.
Output 3.1.3 300 CBO members trained in strategy building, financial planning, and leadership skills Output 3.1.2 90 community run sustainable ecosystem-based IGAs supported in 9 wilayas	Output 3.1.3 500 CBO members trained in business strategy development, financial planning, and leadership skills Output 3.1.4 600 community-run sustainable ecosystem-based IGAs supported through microfinance	Re-worded for clarity. Number of CBO members was recalculated based on the field consultations. Output numbering changed (originally output 3.1.2) Reworded to clarify the type of support provided by the project, with target recalculated.
Component 4 **Knowledge Management and Learning**	**Component 4** **Communication, Knowledge Management and Learning**	**Reworded to highlight communication**
Outcome 4.1 *Increased knowledge of EbA practices through the dissemination of lessons learned for scaling up results*	*Outcome 4.1* *Increased knowledge of EbA practices through the gender-responsive collection and dissemination of lessons learned for scaling up results*	Re-worded for clarity and to ensure the scope of the outputs is reflected in the outcome, as well as to highlight the inclusion of gender.
Output 4.1.1 Knowledge management products developed and disseminated at national and regional scale	Output 4.1.1 Gender-responsive knowledge management products	Re-worded for clarity

PIF project framework	PPG project framework	Justification
	developed and disseminated at national and regional levels	
Output 4.1.2 Awareness of EbA practices and climate change adaptation integrated into youth programs and curricula	[removed]	Integrated under Outcome 4.2 rather than a specific output, in order to better streamline the project's communication and awareness interventions.
Output 4.1.3 Bi-annual roundtables/meetings of people and organizations engaged in EbA approaches in Mauritania organized to promote knowledge sharing and networking	[Numbering changed]	Has become Output 4.1.2 to reflect removal of another output.
Outcome 4.2 *Enhanced awareness of relevant institutions and support available for EbA approaches increased amongst local stakeholders*	*Outcome 4.2* *Enhanced awareness of climate change impacts, and institutions and support available for EbA approaches amongst local stakeholders*	*Wording changed to better capture the scope of the outcome*
Output 4.2.1 Awareness campaigns on key institutions and stakeholders engaged in climate change adaptation and EbA rolled out	Output 4.2.1 Gender-responsive awareness campaigns on climate change impacts and support available for EbA approaches amongst local stakeholders	Wording changed for clarity and to reflect overall scope of activities, as well as gender-responsiveness

There has been a reduction in the number of direct project beneficiaries and in the number of people trained from the PIF to the PPG phase. This is because 4 wilayas have been removed from the project scope at the request of the Minister to reduce dispersion of efforts. As a result, the number of wilayas has been reduced from 9 to 5.

COMPONENT 1 TECHNICAL AND INSTITUTIONAL CAPACITY STRENGTHENING

Outcome 1.1 Improved institutional and technical knowledge and capacity of local, regional and national stakeholders (with due consideration of gender) to plan, implement and monitor Ecosystem-based Adaptation (EbA) measures to address climate risks in agrosilvopastoral systems

102. This Outcome will enhance technical knowledge and capacity of stakeholders from all levels on what EbA approaches are, and how to plan, implement and monitor them. The vertical (local to national) and horizontal (government across sectors, CBOs and communities) integration is necessary for the sustainability of EbA actions. Simultaneously, to build on the achievements of prior initiatives, this outcome will look to extend training past simple implementation of EbA, by including the planning and monitoring of EbA measures as well. This component also supports the percolation of national level policy to the local level, by supporting the integration of EbA approaches into local and regional planning tools, therefore offering a clear roadmap to mainstreaming and replicating these approaches. This outcome directly responds to Barrier 1 by building technical capacity "horizontally" and "vertically"; it also provides the foundation to increase

institutional involvement and planning ability of local stakeholders in a gender-responsive manner, responding to Barrier 4.

103. With regards to gender, this component will not only look to improve gender mainstreaming in the trainings, but also to provide gender-responsive targets and incorporate gender-transformative opportunities whenever possible. At higher institutional and technical levels (ministries, regional councils) the current presence of women will have to be taken into consideration (e.g. elected and appointed officials, as well as current employees), while more transformative targets can be included at community level. This is particularly pertinent as woman are key players within rural communities, though not always fully integrated into the planning and decision-making aspects. Logistics will need to be prioritized to facilitate women's participation, which is often limited by the challenges associated with long travel distances, household duties, and times (see Gender Analysis and Gender Action Plan – Appendices 5a and 5b – for further information).

Output 1.1.1 250 individuals from governmental institutions at local, regional and national level are trained in the planning, implementation and monitoring of Ecosystem based Adaptation (EbA) measures

104. Coordination of the development and implementation of national strategies, policies and plans is undertaken at the governmental level. To support the planning, implementation and monitoring of EbA measures, it is vital for the responsible institutions to have the necessary understanding and technical expertise at all levels, from national to regional and local representation. While the focus should be on the institutions that are directly responsible for the implementation and monitoring of EbA approaches (e.g. ANGMV, MEDD and its departments), the inclusion of members of other ministries (e.g. agriculture, water resources, rural development and gender) is necessary in line with the integrated nature of the approach. Similarly, it is also important to ensure that both technical and political stakeholders are equipped with knowledge, understanding and relevant tools to facilitate gender-responsive EbA planning, implementation and monitoring.

105. The training on EbA monitoring will build on previous and current efforts and promote the appropriation of the practices with a focus on gender mainstreaming to better answer the community needs. Monitoring represents the next step of adoption of EbA initiatives, as it provides the data from which lessons can be learned and approaches refined to specific situations, systems and/or beneficiaries. It helps to build ownership of the approaches, namely by focusing on participatory systems, and it can also increase interest and long-term adoption. As such, a focus on monitoring can be viewed as an incremental step to developing and adopting EbA approaches in the long-term.

106. Employees from the following institutions will be considered as the target audiences for the capacity building interventions under this output:

- National Agency for the Great Green Wall (ANGMV), national and regional staff.

- Ministry of Environment and Sustainable Development (MEDD), in particular from the following directorates:

  - Department for the Protection of Species and Land Restoration (DiPERS);

  - Department for Climate Change and Green Economy (DiCCEV);

  - Department for Planning, Coordination and Monitoring (DiPCS);

  - Department for Environmental Assessment and Control (DiECE) .

- Ministry of Agriculture and Food Sovereignty (MASA), Ministry of Water and Sanitation (MHA), Ministry of Livestock, Ministry of Fisheries and Maritime and Port Infrastructures (MPIMP), Ministry of the Interior, Decentralization and Local Development (MIPDDL), and Ministry of Social Action (specifically, the Department of the Family, Promotion of Women and Gender).

• Regional Delegations for environment and sustainable development (DREDD) and other ministries as relevant (in particular, Agriculture, Livestock, Water, Gender…).

• Members of regional councils (members from the Conseils Régionaux) and prefects from the targeted moughataa (Hakems), and mayors and municipal council members (conseillers communaux) from the target municipalities (communes).

107. Activity 1.1.1.1 Assessment of the current knowledge and capacity to implement EbA approaches at national, regional and local level

108. As a first step, this assessment undertaken by a consultant will provide an evaluation of the current knowledge and capacity of key stakeholders, to fully understand the background and needs for the various stakeholders – including women and youth at local levels - and the priorities for capacity reinforcement. This includes the stakeholders under Output 1.1.1 as well as Output 1.1.2 (local communities). This assessment will include a review of current strategies and project reports, and consultations with relevant ministries and delegations. A particular focus on gender mainstreaming and gender considerations should be included, in order to better inform the project on gender-responsive approaches that should be included. The resulting assessment will provide the baseline information for the design of the capacity building workshops under this output and Output 1.1.2.

109. Activity 1.1.1.2 Multi-day workshops for national stakeholders

It is proposed to have two capacity building workshops at the national level, which will take place at the beginning and end of the project, with the second being focused on the participants' feedback and lessons learned. These workshops will be animated by an implementing partner with experience in climate change adaptation, EbA approaches, and rural development and gender. The materials covered will be based on the findings from Activity 1.1.1.1. It is estimated that up to 50 participants from the identified ministries and departments, with a proposed 25% female-target , will be targeted.

110. Activity 1.1.1.3 Multi-day workshops in wilayas

For regional and local stakeholders, a similar schedule and format will be considered. However, to recognize the differing roles and capacities, technical stakeholders (e.g. DREDD, ANGMV) will be targeted separately from the local authorities (e.g. regional councils, mayoral councils, etc.), to provide more relevant information. The workshops will be carried out by the same partner as for the workshops under Activity 1.1.1.2 if possible, to ensure consistency and vertical follow-through between the different stakeholders. Again, the materials covered will be based on the original assessment (Activity 1.1.1.1), with an additional focus on feedback and lessons learned during the latter workshop (end of Y4/first half Y5). As with the previous activity, women's participation is targeted at 25% to reflect the current make-up of the targeted institutions.

Output 1.1.2 1,600 individuals from rural communities trained in the planning, implementation and monitoring of EbA measures adapted to their ecosystems

111. At community level, there is also a need to ensure that the full cycle for the adoption of ecosystem-based adaptation (EbA) practices is better understood and appropriated. This is particularly important in the more remote areas of the Great Green Wall, which do not benefit from easy access to extension or support services. As such, it is important for the members of these communities to be not only aware of adaptation options, but also how to plan, organize and monitor their undertaking. As such, this output will look at increasing the capacity for communities to do this, within the context of their own villages, but taking into consideration the larger planning and development framework of Mauritania.

112. The key to this output is to involve not only representatives from the communities which will be targeted by investment activities under Component 2 and 3, but also those from the wider municipality (commune). In essence, this is an arrangement to ensure that the planning work which will take place under Output 1.1.3 has the informed participation of representatives from the entire municipality, as this is the administrative level of the planning documents. The table below outlines the overall number of villages for

this output, as compared to that targeted by the investments under Components 2 and 3. Under this output, the gender targets will be increased, to reflect the demographic composition of rural communities, and to help build women's agency.

Table 10: Number of moughataa and municipalities targeted by the project, with villages targeted under Outputs 1.1.2 and 1.1.3 and under investment activities for Components 2 and 3.

Wilaya	Assaba	Brakna	Hodh El Chargui	Hodh El Gharbi	Tagant	**Total**
Number of targeted moughataa (project)	2	3	1	3	1	**10**
Number of targeted municipalities (project)	5	7	2	4	2	**20**
Number of villages considered under Component 1	107	145	126	92	65	**535**
Number of villages targeted under Components 2 and 3	7	11	4	5	4	**31**

113. Activity 1.1.2.1 Development of tailored EbA training workshops based on current planning and implementation

The first activity will be to design a series of workshops to present the concepts of climate change adaptation, and namely ecosystem-based adaptation, within the wider context of community planning, in a gender-responsive manner. It is expected that these workshops will use as their basis the assessment from activity 1.1.1.1, as well as be coherent with the capacity building undertaken under activities 1.1.1.2 and 1.1.1.3.

114. Activity 1.1.2.2 Training for local stakeholders (local government, CBOs, associations) in planning, strategy building and financing

The second activity for this output will be to deliver said workshops in each municipality, with representatives from all the municipalities targeted. Male and female representatives from each village will be the minimum requirement, with additional representatives from the 31 investment sites: members from local natural resource management associations (ALGNR - Association Local de la Gestion des Resources Naturelles), cooperatives, livestock associations (associations pastorales), youth groups, as well as members of the Great Green Wall National Platform for Women. The workshops will need to be delivered in local languages, and in a manner which is accessible to the wider community base, as well as scheduled in a manner that encourages participation of women and youth (taking into consideration personal responsibilities and seasonality of activities).

Output 1.1.3 11 gender-responsive Local Development Plans (PDC) taking into account climate change adaptation and EbA approaches developed

115. The National Strategy for Accelerated Growth and Shared Prosperity (SCAPP 2016-2030) highlights the importance of preserving and valorizing natural resources, in particular in the light of climate change impacts. In order to ensure coherence in the decentralized approach, it is necessary to ensure that both regions and municipalities have their own development plans which are aligned. The planning tools which are of interest are the Regional Strategies for Accelerated Growth and Shared Prosperity (rolled out in 5 year plans) and the local development plans (PDC - plan de développement communal). However, the existence and usability of these documents is not guaranteed everywhere in Mauritania, nor is their full alignment with national priorities, including climate change adaptation.

116. To support the integration of climate change and adaptation considerations in local development planning, the project will invest into the development of PDCs for the project municipalities which do not have one (11 out of the 20 target municipalities). This will be undertaken by an implementing partner (or partners) with relevant territorial planning experience. These partners will benefit from support from the project's

Regional Offices (ROs), but also, critically, will coordinate with the ministry responsible for the relevant ministerial representatives (namely from the Ministry of the Interior, Decentralization and Local Development), and regional extension officers (namely those having benefited from capacity building activities under Output 1.1.1). In the target municipalities that do have PDCs, there will also be engagement in the form of workshops that draw on the existing PDCs (and SCRAPPs) to identify priority areas and actions that relate to climate change adaptation and EbA approaches, as well as highlighting the cross-cutting nature of these themes. A similar exercise will be done at wilaya-level, focusing on the Regional Strategies for Accelerated Growth and Shared Prosperity (SCRAPP – Stratégie de Croissance Régionale Accélérée et de Prospérité Partagée).

117. Similarly, the project will also support the review and updating of the ANGMV Strategy and Action Plan for the next five-year period (2026-2030), to further increase the coherence of the ANGMV efforts within the local development framework. This exercise, done at the beginning of the project, will ensure alignment with national priorities and will focus on the full integration of climate change adaptation and EbA approaches. This, along with the capacity building under Output 1.1.1, will provide the necessary human and institutional framework to direct not only the project, but all activities overseen by the ANGMV, within the wider framework of climate adaptation, sustainable development and EbA approaches.

118. Activity 1.1.3.1: National inception workshop for local and regional planning development

The first activity will be to undertake a national workshop to present the objective of the output, the methodology, partners (e.g. the implementing partner (see below), the relevant ministries, etc) and overall process. The workshop will be organized in Nouakchott and will include representatives from all the target regions and municipalities.

119. Activity 1.1.3.2: Review and updating of the ANGMV Strategy and Action Plan

In parallel with the subsequent activity, the project will facilitate the review and updating of the ANGMV Strategy and Action Plan, with a focus on strengthening the integration of climate change considerations and EbA approaches. This document will help reframe the activities and initiatives undertaken by the ANGMV within the climate change adaptation and EbA framework, ensuring full alignment with national priorities, and further cementing the understanding of stakeholders on the objectives of the ANGMV.

120. Activity 1.1.3.3: Identification of climate change adaptation activities and elaboration of PDC through planning workshops and consultations

This activity will be undertaken by an implementing partner with relevant experience in rural development planning, climate change adaptation and EbA. The process will be heavily centered on the consultative process, and organized in cooperation with the Ministry of the Interior, Promotion of Decentralization and of Local Development (MICDL). The process should be aligned with best practices, identified in guides (e.g. Guide d'accompagnement des acteurs chargés de l'élaboration d'un Plan de chargés de l'élaboration d'un Plan de Développement Communal (PDC) (2011); Guide d'élaboration du plan de développement communal) (PDC) (2012)), as well as from lessons learned from recent projects (e.g. AFD-funded DECLIC 2 Hodhs (2020-2025); World Bank-funded Decentralization and Productive Intermediate Cities Support Project (2020-2027); and the GEF-funded Climate Change Adaptation and Livelihoods in Three Arid Regions of Mauritania (2021-2025)).

121. Prior to working at the municipal (commune) level, the implementing partner will undertake multi-day workshops at the wilaya level with leaders and communities from each wilaya, to review the SCRAPP and outline priority actions within the documents that are aligned with EbA approaches. Having this knowledge and insight on the SCRAPP, the municipal level consultations will then ensue, with multiple consultative phases in each municipality. In the municipalities where current PDCs are available (Assaba – Nouamlein, Kiffa, Boumdeid, Hssey Tine, Leftah; Brakna – Aleg; Hodh El Chargui – Doueirare, Tamchekett, Eddveaa), the exercise will be limited in scope, simply identifying priority areas and ensuring the understanding of climate change adaptation and EbA approaches as cross-cutting themes, as well as focusing on gender mainstreaming and overall inclusivity of actions and approaches.

122. For the 11 other municipalities (Brakna - Agchorguitt, Chegar, Maal, Dionaba, Magta Lahjar, Sangrave; Hodh El Chargui – Biribava, Oum Avnadech; Hodh El Gharbi – Mabrouk; Tagant – Moudjeria, Soudoud), the consultative process will be more extensive, and follow the recommendations of the MICDL, resulting in the creation of 11 PDCs, which consider climate change impacts and integrate EbA approaches. Specific attention should be given to budgeting and financial realism, while including local and regional governance, in order to promote long-term viability. Representation from all the villages targeted under Output 1.1.2 will be included, with a specific focus women and youth, as they are typically absent from such settings, but are key stakeholders in their communities, allowing to adopt more gender-transformative approaches to development planning. Validation workshops will also be held in each municipality.

123. Activity 1.1.3.3: National workshop for the validation of the PDCs

The final activity will be a national workshop in Nouakchott, where each of the new PDCs will be presented, as well as a session on the SCRAPP.

COMPONENT 2 RESTORATION AND SUSTAINABLE MANAGEMENT OF ECOSYSTEMS

124. This component is the first of the two investment elements of the project. It specifically focuses on providing direct support to building climate change resilient landscapes with gender-responsive ecosystem-based adaptation approaches, that will strengthen vulnerable communities' resilience to climate change impacts. These will be part of the bases for the investments under Component 3 (sustainable income-generating activities for the communities) and help sustain ecosystem services that reduce communities' vulnerability. This component directly responds to Barrier 2, providing the financial and technical capacity to restore landscapes throughout Mauritania.

Outcome 2.1: Strengthened climate change resilience of vulnerable communities in the five wilayas through the adoption of gender-responsive EbA approaches

125. Under this outcome, there will be a focus on creating more evidence-based examples of successful EbA approaches in all the target wilayas, that can be replicated and scaled up beyond the project. The EbA approaches will be focused on restoring and sustainably managing environments in a changing climate, resulting in healthier ecosystems, providing key ecosystem services, including buffering against climate change, such as water retention in the soil and protection against soil erosion. A critical aspect for this outcome is to communicate with other national efforts (e.g. the AFD-funded Support to Great Green Wall), as well as with regional efforts – namely partner Child Projects under the Great Green Wall Regional Program – to ensure consistency amongst initiatives, cross-learning processes, and best practices being disseminated (which will also be facilitated through activities under Component 4). It also offers the opportunity to expand on approaches, trialing new methods and tools. Furthermore, the EbA approaches will be centered on participatory planning, in particular focusing on the needs and opportunities of women and youth.

126. This Outcome will also capitalize on the planning and monitoring skills and products from Component 1, whereby the restoration actions will be direct investments towards the adaptation targets in the development plans created under Output 1.1.3. Furthermore, local stakeholders will be able to use the learnings from the capacity building workshops, simultaneously offering them leadership training and a consolidation of knowledge. Technical oversight for the activities will be ensured by a project-funded ecosystem restoration expert, who will also provide feedback and advice to the ANGMV (national and regional) and DREDDs, to further improve capacity of the key stakeholders in aspects directly related to ecosystem restoration. The identification of 31 sites was undertaken at the PPG phase, and is detailed in the table below, with early indication of the preferred restoration method and surface area that will be targeted.

Table 11: Preidentified sites for landscape restoration investments. All areas in ha

Moughataa	Municipality	Site	Area to restore	Method identified[1]	Agroforestry area[2]	Ecopastoral reserve area[3]
Wilaya - ASSABA						
Kiffa	Nouamlein	Nouamlein	150	Dune fixation	40	-
	Kiffa	Bellemtar	40	WSC/SDR	40	-
		Oum acheich	30	WSC/SDR	-	-
Boumdeid	Boumdeid	Boumdeid	100	Dune fixation	80	100
	Hssey Tine	Hssey Tine	80	Dune fixation	40	
		Broude	40	WSC/SDR	40	
	Leftah	Leftah	100	Dune fixation	40	
Wilaya - BRAKNA						
Aleg	Aghchorguit	Beled Tayib	80	Fallow/pastoral fencing	40	
		Baghdad	50	Fallow/pastoral fencing	40	
	Chegar	Chegar	50	Fallow/pastoral fencing	-	
Maal	Maal	Tembare	50	Dune fixation	50	
		Benar	50	WSC/SDR	50	100
		Sag Elmouhr	50	WSC/SDR		
Magta Lahjar	Dionaba	Dionaba	100	Dune fixation		
	Magta Lahjar	El Karama	60	Dune fixation		
		Magtae Lahjar	100	WSC/SDR	80	
		Guimi	50	Fallow/pastoral fencing		
	Sangrave	Sangrava	200	Dune fixation		
Wilaya - HODH EL CHARGUI						
Néma	Biribava	Souleimaniya	40	Dune fixation		
	Oum Avnadech	Bir legwatitt	40	Dune fixation		
		Bir Ehel beyrkatt	50	Dune fixation	50	100
		Oum Avnadech	40	Dune fixation	50	
Wilaya - HODH EL GHARBI						
Aioun	Doueirare	Doueirare	50	WSC/SDR	50	
Tamchekett	Tamchekett	Tamchekett	100	Dune fixation	50	100
	Mabrouk	El Mabrouk	40	Dune fixation		
Tintane	Eddveaa	Zravia	30	WSC/SDR	50	

[1] Dune fixation is subject to Activity 2.1.1.2 through mechanical and biological stabilization, WSC/SDR refers to water and soil conservation and soil defense and restoration activities under Output 2.1.1, while fallow/pastoral fencing refers to Activity 2.1.1.3.
[2] Refers to Output 2.1.3.
[3] Refers to Output 2.1.4.

Output 2.1.1 3,520 ha of degraded ecosystems restored and sustainably managed using EbA approaches.

127. Support for sand dune stabilization and restoration (to manage encroachment of key infrastructure and productive areas), and for degraded pasture regeneration will provide short-term evidence of EbA in action. Considering the geographical scope of the project, the project will need to focus on site-specific drivers of degradation and ecosystem-appropriate and community approved approaches. Based on the pre-identified sites (Table 11), the two main practices to be employed are dune stabilization and set-aside / fallow zones for pastures (mise en défens), which will be spread along 20 of the target sites. In addition, to supplement these well-established methods, an additional 2,000 ha of degraded land will be re-vegetated using innovative technologies, to prove further resilience against droughts and erosion.

128. Activity 2.1.1.1 Site-specific participatory rapid assessments to validate area specific interventions

The first activity will be rapid site assessments to identify and/or validate the key approaches in each community, including the materials and species to be used. This will be a participatory assessment, engaging community members, local representatives of the ANGMV and regional MEDD representatives (DREDDs), organized by an implementing partner. Importantly, the areas and techniques should also align with the PDCs, ANGMV strategies and community needs. Importantly, if any self-identifying indigenous group are present at the concerned sites, the project's free, prior, informed consent processes would be put in place and implemented throughout project duration. The two main ecosystem restoration methods to be implemented will be dune stabilization (either through planting or assisted natural regeneration, combined with mechanical stabilization methods) and fallow or pasture protection (see respective activities for further details). New and innovative implementation approaches – in particular drone planting and seedballs – will need to be considered as well; the assessment for the yearly 400 ha (see activity 2.1.1.4) reseeded using these innovative technologies will be done at this point, to ensure complementarity with the other efforts.

129. Activity 2.1.1.2 1,290 ha of dunes restored through mechanical and biological stabilization

Dune stabilization is a vital effort in Mauritania to combat the advancement of sand and wind erosion, which threatens vast areas including villages, infrastructure, and agricultural lands. The process is traditionally a two-step one, requiring mechanical stabilization and fencing of the identified plots, prior to biological fixation, which will include community-led planting. The selection of species will be determined site by site, based on availability and ecologically-based criteria (e.g. vigorous root growth, resistance to arid conditions, non-invasiveness), as well as ability to provide wind protection, and ease of propagation and maintenance. This will have been done in the previous activity (2.1.1.1)

130. For the mechanical stabilization, palisades will be installed using materials like date palm foliage or plastic fencing. The specific methods will be site-specific and determined under Activity 2.1.1.1. In addition, each zone will be fenced; while an onerous task, this has proved to be highly effective for long-term success of the stabilization as it provides protection from animals and avoids confusion around boundaries. The labor will be organized through remunerated community labor (minimum 50% women), and/or hiring of an external contractor, depending on the specific sites and tasks.

131. Biological fixation is aimed at long-term resilience and focuses on planting resilient trees and shrubs. For the biological restoration, various methods will be supported, including using seedlings from the local FACI and nurseries, direct sowing of seeds, or if relevant, the use of drone technology (with in-kind cofinancing from the ANGMV). Key species to be considered for biological fixation include Leptadenia pyrotechnica, Euphorbia balsamifera, Senegalia Senegal, Balanites aegyptiaca, Panicum turgidum, and Vachellia tortilis, though others will be considered if they fulfill the criteria set above. The project will cover

the costs related to labor (whether community or private) and small equipment, as well as watering campaigns, if required.

132. In addition, this activity will also include the financing of community meetings to ensure the community follow-up of the reclaimed dunes, management of any arising issues or conflict, and provision of technical support as and when needed. These will be organized on an ad-hoc basis, based on the needs of each site, but with at least one annual visit from year 3. They will be undertaken by the project RO staff, with support or lead from regional ANGMV and DREDD staff, if and as required.

133. Activity 2.1.1.3 230 ha of degraded land set aside

In addition to dune stabilization, the project will provide support for the fencing and management of four pastoral exclusion or set-aside zones (mise en défens) (no smaller than 50 ha, no larger than 80 ha), to prevent further degradation (e.g. overgrazing) and encourage regeneration. These areas will require fencing and management, with the fencing to be done through community-contracted labor (50% women min.) or private contractor. For the management of the sites, two site managers will be trained and remunerated to oversee the plots, and to identify necessary maintenance interventions.

134. While natural regeneration is the main method of regeneration, there will also be funds allocated for annual planting efforts to supplement the passive regeneration. Species to be utilized will need to fill the same requirements as those under Activity 2.1.1.2, and remunerated community labor will be prioritized (50% women minimum) whenever possible, to ensure community involvement in the restoration efforts.

135. Activity 2.1.1.4 2,000 ha of degraded land revegetated using innovative technologies

The project will also undertake the revegetation of 400 ha / year of degraded land using drones and seedballs (2,000 ha over the course of the project), which are less labor intensive and target more remote areas. This method promotes reforestation and increases vegetation index of areas which are degraded and further removed from populated areas; ecologically speaking, this allows to create a more efficient buffer for communities, in particular to wind erosion. This will therefore encourage the success of the EbA actions that will be undertaken by target communities, increasing their long-term success and durability.

This method is new and currently under pilot phase through ANGMV, with support from Sinoway Forest Technologies, Ltd. In their 2024 trial, pilot sites 100km east of Nouakchott (within the GGW) were seeded using said technology, with a 60% germination success. This project will therefore allow to increase hectarage and data for the further use of this technology, based on 400 ha per year. Appropriate sites for this intervention will be determined through the assessment in Activity 1.1.1.1, and data from pilot sites. This activity will benefit from the use of ANGMV's drones.

136. Activity 2.1.1.5 Recurrent technical support (once a year – every 6 months) to get feedback, refine practices and troubleshoot

The final activity is recurrent technical support from the ANGMV and DREDD staff during the second half of the project to provide communities with opportunities to problem-solve arising issues, correct any maladaptation practices, as well as investigate cases of non-adoption of proposed practices. These sessions will look to incorporate a 50% women's participation rate, and to integrate sex-disaggregated reporting on lessons learned and issues encountered.

<u>Output 2.1.2 Water and soil retention practices promoted and implemented in 11 communities, promoting 480 ha of agricultural land restoration</u>

137. Water availability and retention as well as soil erosion are widespread challenges throughout all the target wilayas and will be increasingly so based on climate projections. As such, the project will directly invest into the establishment of small-scale infrastructure (such as community built dams and dykes) to contribute to increased access to water, and/or Soil and Water Conservation/Defense and Restoration of Soils (SWC/DRS) interventions which aid infiltration and reduce erosion and flooding, in line with the priorities identified in local development planning (Output 1.1.3). This output will include 11 communities and will help to restore 480 ha of degraded agricultural land.

138. Activity 2.1.2.1 Site-specific participatory rapid assessments to identify adapted WSC opportunities

To determine the preferred methods, a first assessment will be undertaken in the eleven sites to identify the main opportunities, taking into consideration potential differing needs of women and men. Importantly, if any self-identifying indigenous group are present at the concerned sites, the project's free, prior, informed consent processes would be put in place and implemented throughout project duration. Methods to be promoted include contour bunds, drystone barriers, earth embankments, water retention barriers, etc, and should be informed both by community preference and technical feasibility. This assessment will be based on field consultations, cross-referenced with planning documents and other initiatives and can be done simultaneously to Activity 2.1.1.1, and will include community validation.

139. Activity 2.1.2.2 Small community water infrastructure works - dams and earth embankments

This second activity will focus on supporting the implementation of the agreed community water infrastructure, as identified under Activity 2.1.2.1. The budget will support the high intensity labor compensation, with a focus on women and youth (75% women, with at least 30% youth).

140. Activity 2.1.2.3 Training and material input for climate-smart rain-fed agricultural practices (millet and sorghum and legumes)

In addition to the SWC/DRS works, the project will also provide training and supplies for the adoption of climate-smart, rain-fed agricultural practices. While rain-fed agriculture is widespread, it often suffers from low yields in part due to insufficient and irregular rainfall, lack of inputs, and pests. Farmers, focusing on female-headed, single households (which are increasing and more prone to hardship) will be trained in climate-smart agricultural practices, which will be complementary to the small community water infrastructure, as well as be introduced to early-maturing crop varieties, such as niébé, sorghum and millet. Material input will also be provided, including seeds and tools/equipment.

141. The training will be undertaken by an implementing partner, and the workshops will take part in the communities themselves and include a training-of-trainers approach. The partner(s) will also provide follow-up visits (at least once a year) for the duration of the project, in order to provide feedback, train on emerging issues and investigate cases of non-adoption of practices. As above, the reporting on these matters should be done in a sex disaggregated manner to better document gender-specific considerations.

142. Activity 2.1.2.4 Beneficiary exchanges among communities

In order to capitalize on project-funded and previous training, exchanges between communities will be organized, to encourage peer-to-peer support and learning. Community members experienced in SWC/DRS techniques will be identified, including from newly targeted zones and from sites with more experience, to demonstrate and lead additional practical demonstrations, providing them with invaluable training experience, and promoting the adoption of the practices through horizontal knowledge transfer. These exchanges will target women as well as men, with a 75% target of women participants. This in particular, helps further opportunities of networking and building agency of rural women.

Output 2.1.3 1,000 ha of gender-responsive agroforestry established

143. Agroforestry is an integrated resource management system for rural areas, allowing to benefit from both the natural environment and agronomic investments. It is also identified as a key climate-smart agricultural practice, associating trees and cultures on the same parcels, deriving benefits from the properties of the different species in complementarity. In addition to the restoration practices and activities supported in Outputs 2.1.1 and 2.1.2, the project will specifically support the development of 1,000 ha of gender-responsive agroforestry in 21 communities, which will complement the efforts of other outputs in this component as well as provide opportunities to upscale IGAs that will be promoted under Component 3 (for instance, NTFPs). In addition, this effort provides support to other initiatives, including GEF funded 11551 "Rehabilitation and restoration of ecosystems in the Gum Arabic belt and sustainable use of forest resources in Mauritania", which is specifically targeting Arabic Gum production in Assaba and Trarza.

144. Activity 2.1.3.1 Site specific rapid assessments (participatory) in preidentified sites to identify opportunities

With sites pre-identified at PPG phase (with a particular emphasis on Hodh El Chargui and Tagant – see Table 8), this first activity will finalize the identification of options, based on specific sites and opportunities. Importantly, if any self-identifying indigenous group are present at the concerned sites, the project's free, prior, informed consent processes would be put in place, and implemented throughout project duration. The identification of agroforestry options will be led by an implementing partner specialized in agroforestry, and will include consideration of the PDCs, complementary practices and initiatives, as well as opportunities for economic development (i.e. expansion into IGA), and will be validated at community level.
While the specifics will need to be defined in consultation with the communities and with consideration to the site characteristics, various species of trees can be proposed for the project's agroforestry interventions:

- Fruit producing trees such as Tamarind (Tamarindus indica), Grenadier (Punica granatum L.), Baobab (Adansonia digitata), and Lemon (Citrus limon (L.) Burm.f.)
- Drought-resistant woody species such as Jujube (Ziziphus mauritiana), Balanites (Balanites aegyptiaca), and Acacia (Senegalia senegal, Vachellia tortilis, Acacia nilotica, Acacia seyal)

Similarly, other interventions from the previous outputs can be associated with the project's agroforestry sites, such early maturing crops (e.g. millet, sorghum) and SWC/DRS techniques (e.g. zai, stone cordons). These can be integrated as long as they are relevant to the sites, and are in support of the development of the agroforestry practices.

145. Activity 2.1.3.2 Multi-day training, technical and material support to launch agroforestry activities

Based on the agreed approaches identified in 2.1.3.1, this second activity will provide the required training, materials and technical support, with a target of 420 community members (75% women, 25% youth), accompanied by both ANGMV technical personnel and an implementing partner (e.g. an NGO with community capacity building and agroforestry experience). In addition, there is provision for the installation or repairs of water sources (e.g. solar pumps, small irrigation systems, etc.) in order to ensure that there is no direct limitation from water availability. However, it should also be noted that in some sites, the agroforestry will also be paired with activities under Output 2.1.2 – water and soil conservation. A cross-referencing of activities and resources will therefore be undertaken to ensure the complementarity of approaches and the efficient management of resources.

146. Activity 2.1.3.3 Annual support for maintenance and appropriation by local communities

Finally, as with the other outputs under this outcome, an activity is planned for recurrent technical support in the form of biannual visits during the second half of the project to provide communities with opportunities to

problem-solve arising issues, correct any maladaptation practices, as well as investigate cases of non-adoption. As above, the reporting on these matters should be done in a sex disaggregated manner to better document gender-specific considerations. This final activity will be managed by the same implementing partner as the training activity for continuity purposes, with the support of regional ANGMV officers and relevant extension officers.

Output 2.1.4 500 ha of eco-pastoral reserves created

147. The project will put into place eco-pastoral reserves, or large sustainably-managed pastoral zones, which serve a dual purpose of maintaining vegetation and dunes and providing safe and communally-managed grazing lands. These new pastures will be established with and by the community, and be managed on the principle of leaving a fallow time every year, while allowing access to the zone to livestock at other times. In order to ensure the viability of these zones, both in terms of the vegetation and the livestock, water infrastructure rehabilitation or provision needs will be identified in each reserve.

148. The five areas proposed will be 100 ha each and located in each of the five target wilayas (proposed villages: Assaba – Boumdeid; Brakna – Benar; Hodh El Chargui - Bir Ehel beyrkatt; Hodh El Gharbi – Tamchekett; Tagant – Letfetar). The criteria by which they have been identified include:

- Accessibility to water resources (possibility of solar water pumping, with the existence of water tables, rainwater collection).
- Potential for natural regeneration of plant cover and fodder productivity.
- Low level of human-induced degradation and distance from intensive agricultural areas.
- Potential for ecological connectivity with other natural or restored areas.
- Integration of local knowledge and community governance.

These plots will be equipped with the necessary fencing and water infrastructure to ensure that vegetation and livestock can be maintained during the dry season, all while promoting natural regeneration and fallow during the rainy season.

149. Activity 2.1.4.1 Site feasibility studies and community engagement (including hydrological studies)

The first activity will be a feasibility study in each of the sites (Assaba - Boumdeid; Brakna- Benar; Hodh El Chargui - Bir Ehel beyrkatt; Hodh El Gharbi - Tamchekett; Tagant - Letfetar), which will include hydrological studies (ground and surface water), environmental and social assessments, and community engagement. Importantly, if any self-identifying indigenous group are present at the concerned sites, the project's free, prior, informed consent processes would be put in place, and implemented throughout project duration. The site feasibility studies will be undertaken by an implementing partner, with support from the project's Regional Offices (ROs) and the regional ANGMV offices. The community engagement will include determining the overall management rules, in line with relevant agropastoral agreements (e.g. agropastoral charters), regional and national legislation, and best practices.

150. Activity 2.1.4.2 Establishment of the eco-pastoral reserves

This second activity will see all the works associated with the eco-pastoral reserves undertaken: fencing, water infrastructure (boreholes, water storage and drinking points, light irrigation, if and when relevant), and surveillance infrastructure (e.g. watchtower). The specifics for each reserve will be informed through activity 2.1.4.1 but can include a private contractor as well as regional or community labor contracting. Community meetings will also be undertaken, to ensure that the specific management process for each zone is fully established and communicated to all local stakeholders.

151. Activity 2.1.4.3 Annual support for maintenance and appropriation by local communities

The final activity is continued material and technical support throughout the duration of the project, which will help anchor the eco-pastoral reserves within the communities. This activity will allow to organize community meetings to raise awareness, explore post-project economic viability, resolve any emerging conflicts or issues, as well as support the follow-up by ANGMV and DREDD agents.

COMPONENT 3: SUSTAINABLE, ECOSYSTEM-BASED INCOME GENERATING ACTIVITIES

152. The degradation of the landscapes in the target wilayas is partially driven by the unsustainable use of various natural resources by a rural population. To support and incentivize the maintenance and upscaling of the EbA restoration and management practices that will be implemented under Component 2, as well as to directly build the economic resilience of the populations, the project will promote economically viable, sustainable, climate-resilient and landscape-adapted income generating activities (IGAs). Activities and initiatives will rely on inclusive and participatory approaches, as well as promoting peer-to-peer learning to encourage ownership and initiative at the community level and beyond.

Outcome 3.1: Strengthened climate-resilient livelihoods and income sources in the five wilayas through diversified, gender-responsive, climate-resilient and ecosystem-based income-generating activities (IGAs)

153. The focus of this outcome is to support populations, particularly women and youth – who represent the majority of rural communities – in unlocking economic opportunities for climate-resilient development in a sustainable manner. The sustainability aspect is considered in both the environmental and economic way. Firstly, by focusing on climate-resilient, ecosystem-based income-generating activity (IGA) options, there will be further incentive for local populations to protect and manage ecosystems, to further support action undertaken in Component 2 and under the leadership of the various institutions and individuals trained under Component 1.

154. Secondly, to enhance economic opportunity, the project will focus on providing technical and financial support for community-based organizations (CBOs) and micro, small and medium sized enterprises (MSMEs). In particular, the project will invest in Integrated Community Agricultural Farms (FACI), providing hubs for training, demonstration and marketing opportunities. Simultaneously, it will provide opportunities for upskilling in non-technical skills associated with business, leadership and training, as well as basic skills, to promote the growth of such activities in the long-run, namely in ventures or cooperatives with a successful track-record. Finally, through partnerships with the burgeoning microfinance landscape, the project will provide clear opportunities to ensure sustained access to capital for climate resilient IGAs, all while developing the local market for upskilled CBOs/MSMEs. This will also help narrow the capacity gap for the most vulnerable community members—particularly women, who often have limited access to formal education and fewer opportunities to engage in financial enterprises. Finding ways to network rural communities with private sector opportunities will also help increase the economic opportunities and long-term sustainability of the proposed IGAs.

155. These actions together will increase the economic opportunities of the communities and support the restoration and resilience of the ecosystems, increasing ecosystem services and the overall climate resilience of the populations. These actions directly help lower both Barriers 2 and 3, by providing economic opportunity and clear, evidence-based examples of EbA approaches.

156. Based on the scale and scope of this outcome, long-term technical assistance will be required to assist with technical oversight. The project will therefore hire an agronomy/rural development expert, based in Nouakchott, who will be technically responsible for all the activities under Component 3.

Output 3.1.1 Comprehensive assessment of ecosystem-based IGA options, including economic analysis, undertaken in each wilaya, taking into consideration previous experiences

157. Activity 3.1.1.1 IGA assessment, using literature and field consultations in all 5 wilayas (associations, CBOs, and private sector), including value chain analyses

A comprehensive, gender-responsive assessment will provide insights into IGAs which have been introduced and trialed in GGW wilayas and ecosystems (with a focus on ecosystem-based options). This includes activities such as market gardening, beekeeping, LPG gas depots, couscous milling and preparation, and dairy value chains, to name a few. In addition, the potential for introducing new IGAs will be investigated. Some activities identified during project development include biogas feed waste (to utilize organic waste – mainly dung), small-scale aquaculture (focusing on native species and fishponds), and the use of byproducts from NTFPs (for instance, Balanites husks for fodder). Particular attention will be given to the accessibility of opportunities for women and youth, as they are the main demographic in rural areas, and most stable residents. Within this assessment, economic feasibility studies should be included, to determine the opportunities and risks of specific value chains, with a focus on the post-project phase. This information will also be utilized under Output 3.1.4 to help guide the microfinance institutions (MFIs) as they expand their offers into the target wilayas.

158. This independent consultancy will use previous reports and experiences, as well as consultations, to investigate overall success, and provide recommendations on best options according to specific community or ecosystem characteristics (including socio-economic or cultural). In many of the wilayas, previous efforts have taken place, which will need to be accounted for, especially to monitor long-term viability. Consultations will therefore include beneficiaries from previous as well as synchronous initiatives (e.g. PARSACC, SécurAlim, GEF 11551), and importantly, private sector stakeholders (including microfinance institutions -- particularly the ones which will participate under Output 3.1.4 --, distributers/retailers, etc), to understand the market and support opportunities.

159. While the focus of the assessment will be to provide wilaya-specific baselines and recommendations, it will also serve as the basis for knowledge products to be disseminated under Outcome 4.1 and shared with the regional GGW community through the GGW Regional Program.

Output 3.1.2 50 new or existing Integrated Community Agricultural Farms (FACI) supported

160. The Integrated Community Agricultural Farm (FACI) is a multi-purpose agricultural production and processing system based on sustainable land management practices, used throughout the Great Green Wall. They are functional community platforms that integrate crop, livestock and forestry production activities, as well as income-generating activities, with the aim of helping to boost production and diversify the incomes of the beneficiary populations, particularly women. This support for traditional community activities in agriculture, market gardening animal husbandry and small-scale trade is expected to have a positive impact on the communities' potential to strengthen the implementation, preservation and sustainability of the results achieved through the implementation of the national Great Green Wall strategy. It is an approach that has been championed in the Sahel, specifically by the Pan-African Great Green Wall Agency (PAGGWA) and its national counterparts (including the Mauritanian ANGMV), with the support of multiple donors (including the FAO).

161. The development of FACI is seen as the starting point for ecosystem-based sustainable development, and is part of a wider strategy for rural development. With the growth of FACI, Integrated Community Agricultural Domains will emerge in specific areas, strengthen agricultural production and processing capacities and generate stable incomes. In the medium-term, they encourage private sector involvement and the creation of Rural Agropoles (AgropoR). The training and processes undertaken under Outcome 1.1 and

Outcome 2.1 will directly feed into the development of the FACI, by providing the skills necessary to operationalize FACI.

162. There are currently 114 FACI which have been created in Mauritania, with just under half (60) fully functional. As such, the project proposes to support existing FACI (30), as well as to put in place new FACI (20), using past experiences and feedback. These include promotion of community-led initiatives, improving on technical training (especially in terms of repairs and maintenance), and consistent follow-up by technical experts. This will be done in close partnership with the cooperatives of existing FACIs, both as beneficiaries, but also as partners in implementation, by supporting exchanges between "successful" FACIs and new or developing ones.

163. Activity 3.1.2.1 Participatory assessment and design of proposed FACI or upgrades

All FACI establishments or "upgrades" will be initiated by community consultations, to identify the key barriers and needs for each specific site and the specific stakeholder groups (focusing on women's needs). This will be led by an implementing partner, with support and oversight from the ANGMV and project staff. These plans will be aligned with the overall PDC as developed in Output 1.1.3 and be complementary with the restoration activities of Component 2.

164. For new FACIs, only sites under 3 ha will be considered. These will require community consultation regarding the types of activities to be prioritized, materials and equipment required (including small infrastructure like storage rooms), analysis of water access points, community management and participation, as well as partnership with the ANGMV, namely for the production of nurseries. In particular, the funds allocated for each new FACI include fencing, wind-breaks, solar pumps (or alternative water access such as well rehabilitation/deepening), and agricultural inputs. For the FACIs to be supported, improvements/repairs which could be considered include repairs to fences, small infrastructure or equipment, repairs or expansion of water infrastructure (well rehabilitation/deepening, solar pumps), agricultural inputs/fertilizers or new capacity building. Any environmental and social safeguards management will need to be undertaken, and the plans communally validated, with oversight from the ANGMV and representatives from municipalities and regional councils.

165. Activity 3.1.2.2 Provision of works and infrastructure upgrades

All the works associated with FACI establishment and improvement will be based on the validated plans from the previous activity (e.g. fencing, solar water pumps, agricultural input, etc.). In terms of financial support, this will amount to approximately 30,000 USD for new small FACI (<3 ha), and up to 25,000 USD for additional support to existing FACIs. These funds will be managed directly by the project teams.

166. Activity 3.1.2.3 Training and troubleshooting workshops for FACI beneficiaries

This activity will provide the associated training for FACI users, which will include initial training on the upkeep of FACI and technical training for IGA (as required), and regular follow-up visits from both ANGMV and DREDD staff, as well as externally contracted partners, to improve on the troubleshooting and adaptive management of individual sites, with a particular focus on financial stability and opportunities at the end of the project.

167. Activity 3.1.2.4 Support to FACI nurseries for production of plants for landscape restoration Finally, one of the activities of all FACIs is to provide a space for nurseries. FACI nurseries have a dual purpose of providing plant propagules for ANGMV restoration activities, as well as being an option for IGA or spontaneous community restoration opportunities. As such, the project will keep an annual fund to ensure that these nurseries are fully functional, with a target of producing 200,000 plants over the course of the project. It

is expected that these nurseries will help provide seedlings for the restoration efforts under Component 2 and other ANGMV restoration efforts, as well as be available as an income generating activity, if deemed pertinent through the IGA assessment (Output 3.1.1).

Output 3.1.3 500 CBO members trained in business strategy development, financial planning, and leadership skills

168. The durability of changed practices is directly linked to being able to grow and troubleshoot. Alongside the technical knowledge, there is an opportunity to help build the non-technical skills of CBOs, associations, and cooperatives. These skills help empower CBOs, enhance the financial sustainability of the IGAs established, increase advocacy and mentorship potential, and in the long run, benefit their wider communities. As these skills are often lacking or underdeveloped, opportunities are missed – personally but also for communities at large. This is of particular importance for women and women-led CBOs.

169. This output will focus on developing non-technical skills linked to entrepreneurship – such as business and financial planning and leadership (including training of trainers) to empower local groups to build on their initiatives, as well as to provide these skills within their communities. Depending on the identified capacity gap, elemental skills such as literacy and numeracy can also be integrated, if needed. Importantly, this should be an initiative that provides regular support to help build confidence in the newly acquired skills, as well as to adapt and develop them as novel situations or obstacles arise. The target for these workshops includes the FACI members supported under Output 3.1.2, as well as other CBOs and/or MSMEs identified in the target zones, and engaged in sustainable, climate-resilient IGAs (as identified in Output 3.1.1). This output looks to ensure that the most vulnerable are provided the skills to help equalize the baseline, namely for developing their economic potential and accessing all the tools available (including microfinance).

170. Activity 3.1.3.1 Identification of main gaps and development of workshops/curricula, based on Outputs 3.1.1 and 3.1.2
The first activity will be the identification of skills to be strengthened. This will be done in conjunction with feedback from extension services and NGOs, as well as feedback from project activities – namely under Outputs 3.1.1 and 3.1.2. It is expected to be undertaken by an implementing partner who will present the results to the PMU, as well as include a list of proposed workshops to address these gaps, which they will be responsible for undertaking under Activity 3.1.3.2.

171. Activity 3.1.3.2 Regular training and feedback workshops (at least 2 per year) on specific skills linked to business strategy development, financial planning, and leadership skills (training of trainers)

For the training, priority will be given to members of the FACIs under Output 3.1.2, but can be extended to other CBOs, as long as they are within the target municipalities (see Table 8), and are engaged in sustainable, EbA compatible activities that could be eligible for financing under Output 3.1.4– in particular to help address the widespread capacity gap affecting majority of women or women-led CBOs. Priority will be given to women, who have less opportunity for formal training (80% of beneficiaries).

Output 3.1.4 600 community-run sustainable ecosystem-based IGAs supported through microfinance

172. Economic opportunities are lacking in the Great Green Wall. Access to formal credit remains low in rural areas, with many transactions still heavily cash based or linked to informal, high interest credit networks. In recent years, EU-funded programmes implemented by Enabel have been promoting the relationship between MFIs and small producers in the Great Green Wall corridor (Hodh El Chargui/Hodh El Gharbi, Assaba, Guidimaka, Brakna, Gorgol, Trarza). The RIMFIL project backed Al-IBDAA Bank and the Djikké cooperative to open rural outlets (e.g. in Barkéol, Kankossa, Tintane), develop agri-pastoral credit products, and scale lending—reporting 10 new branches/points, 2,377 new members and 1,877 loans. Under

SECURALIM, Enabel and the EU are coupling production support with financial access tools tailored to seasonality and climate risk — most notably "warrantage" (inventory-backed seasonal credit) now piloted with Al-IBDAA (training of loan officers and branch heads, policy and toolkit design, and first cohorts of clients; with 104 farms already financed in Sélibaby). These frameworks explicitly target local service access for family farms and value-chain structuring in these zones, reinforcing MFIs' role in climate-resilient, small-scale production systems.

173. The current project proposes to support this effort, by strengthening the capacity of the microfinance sector to respond effectively to the growing demand for green financial products, scaling up the efforts currently underway. The project will collaborate with MFIs: it will offer capacity building linked to EbA approaches and climate-resilient IGAs, as well as provide funding to specific credit lines, which will lower the risk for both the MFIs and CBOs/MSMEs in the target areas. Finally, it will also provide technical and financial follow-up for the loan recipients, in order to troubleshoot throughout the loan process, and provide important feedback on the suitability and success of microfinance approaches for the GGW.

174. Activity 3.1.4.1 Establishment of a partnership with FOREMI and MFIs

The project will work with the national Microfinance Refinancing Fund (FOREMI – Fond de refinancement de la microfinance), which is a dedicated refinancing vehicle housed under the Deposit and Development Fund (CDD - Caisse des Dépôts et de Développement) created in 2016 to channel funding to MFIs. FOREMI's role is to refinance and professionalize the microfinance sector — strengthening MFIs' technical capacity and liquidity so they can expand lending in underserved (rural) areas, with ongoing support plans to consolidate its governance and operations. This phase will allow to formalize the partnership arrangement between the ANGMV, the implementing partner (Enabel), FOREMI and the MFIs, ironing out details based on previous experiences.

175. The mechanism proposed involves the project guaranteeing a portion (previous experience of 30%) of the loan amount, while the loan taker carries the rest of the loan according to the typical microcredit institution conditions. The specifics of the arrangement (percentage and conditions) will be agreed and contractualized between the PMU, FOREMI and the MFI.

176. The implementing partner (identified at PPG as Enabel), will be responsible for the administrative and technical management of the overall output, with specific tasks outlined in an MoU with ANGMV. The required tasks will include the development of ToR for the MFIs, liaising with FOREMI, providing technical expertise to MFIs and contractual partners (e.g. NGOs), reporting to the PMU and liaising with ANGMV.

177. At PPG phase, two MFIs were identified for possible partnerships (Al-IBDAA and Djikké), which have both partnered under the RIMFIL initiative (EU funding, Enabel executing agency) to improve their market offers for agricultural and pastoral sectors. The final choice of MFIs will depend on their location, staff capacity, available products and previous experience (based on KPI such as loan repayment rate, average loan size, portfolio growth rate, number and profile of active borrowers, repeat borrower rate, loan processing time, change in household income,…).

178. Activity 3.1.4.2 Preparation and training of MFIs

The choice of the MFIs will include the existence of suitable products for climate-resilient IGAs and previous experience. However, this does not preclude the need for further training and awareness raising on climate change adaptation, climate risks and other cross-cutting themes that can improve the relationship between CBO/MSME and the MFI, as well as their ability to develop further microfinance offers based on emerging data and trends (from concurrent projects – e.g. Securalim – or the information from the project itself – e.g. the IGA assessment).

As such, training opportunities will be offered for MFI staff on such measures; the capacity gap will be assessed during Activity 3.1.4.1, and the relevant training could include:

- Introduction to wilaya-specific IGAs, as identified during under Output 3.1.1;
- Introduction to the GGW, climate vulnerability and landscape restoration;
- Training of branch staff on MFI products and associated risks;
- Gender mainstreaming.

179. This technical assistance will be supervised and managed by the implementing partner (Enabel) who have previous experience with MFIs within the GGW context. Depending on the subject matter, specific trainings will be conducted by in-house expertise, MFI staff, or external contractors. While a large part of this activity will be implemented at the start of the project, prior to the rolling out of the loans, there should be an option to allow for addressing emerging capacity gaps during the second half of the project.

180. Activity 3.1.4.3 Preparation and implementation of MSME and CBO support and mentoring

To support MSMEs and CBOs, the project will also fund technical assistance. This assistance will include both support on the technical aspects of their IGA, as well as technical aspects linked to the loan. This will be led by one or multiple non-governmental organizations with previous experience in capacity building and preferably established relationships with the target communities. The recruitment of the support NGO(s) will include a period before the loan, shouldering the applicants in their activities as well as business plan development, through the repayment of their loans (it is expected that most loans will be 12 months). Importantly, these partners will have a close relationship with the staff at the relevant MFI, and work not to replace their presence, but rather facilitate the relationship between the MFI and borrowers.

181. Activity 3.1.4.4 Opening of credit lines for MSMEs and CBOs

The final activity will be the funding of the credit lines, based on the agreement established under Activity 3.1.1.1. It is expected that a minimum of 600 loans will be made during the duration of the project, with activities being in line with the IGAs identified under Output 3.1.1.

The procedure for the loan will be set by the MFI, where the application will need to provide sufficient documentation of estimated costs and repayment possibility (specifics will need to be in line with typical standards for the institution and agreed to in the MoU under Activity 3.1.1.1). Typical interest rates and repayment schedules will be determined in the MoU, and proposals from project carriers will need to be in line with these. The microcredit institution will be responsible for semestrial reporting of performance and a final report summarizing the key figures, successes and failures of the scheme, with the final reporting being under the responsibility of the output implementing partner.

COMPONENT 4: COMMUNICATION, KNOWLEDGE MANAGEMENT AND LEARNING

182. In line with the GEF Communication and Visibility Policy (Council decision GEF/C.64/11, Improving the Visibility of the GEF), the project will be identified as “UNEP-GEF-funded” or “implemented by UNEP and supported by the Global Environment Facility” in all external communications, including articles, video scripts, and social media posts. All such materials will display the GEF logo in accordance with the GEF Branding Guidelines and the UNEP logo as per the UNEP Branding Guidelines.

183. This project sits within an established landscape of projects and other initiatives looking to build climate resilience in one of regions of the world most affected by the climate change crisis. In addition, it also sits within a landscape of initiatives looking to facilitate the dissemination of lessons learned, best practices and data, at national and regional scale (e.g. TALSISI-GGWI, SURAGGWA) As such, the project will focus

on the creation of gender-responsive knowledge and lessons learned that can inform future initiatives, and be diffused within the GGW region. Specifically, lessons learnt and best practices from the implementation of the project and previous initiatives will be compiled and disseminated, to facilitate learning and upscaling of EbA approaches in similar ecosystems in Mauritania and beyond.

184. At the national level, the project will focus on cementing the wider population's awareness and understanding of climate change impacts and adaptation options, with a particular focus on gender-responsive EbA approaches, as well as building wider recognition of Great Green Wall activities and initiatives. As such, this component specifically addresses Barriers 3 and 4. All activities under Component 4 will be technically supervised by a long-term communications consultant, who will be based in Nouakchott.

Outcome 4.1: Increased knowledge of EbA practices through the gender-responsive collection and dissemination of lessons learned for scaling up results

Output 4.1.1 Gender-responsive knowledge management products developed and disseminated at national and regional level

185. This output will ensure the active, ongoing assimilation of lessons learned and the production of high-quality, data-driven knowledge materials, incorporating gender-specific insights, data, and examples. These resources will disseminate best practices and lessons to decision-makers, technical stakeholders, research institutions, the private sector, and funders. While the focus will remain on the national stage, efforts from this output will also be shared at the regional level, in particular through the TALSISI-GGWI regional program.

186. Activity 4.1.1.1 Protocol development and capacity building for monitoring of EbA approaches across ANGMV and MEDD

This activity is proposed to further the sex-disaggregated data collection procedures of ANGMV and MEDD, in order to ensure that there is coherence and understanding amongst the different government institutions of the type of qualitative and quantitative data needed on EbA, and on the protocols for its harmonized collection and storage. It builds on the capacity building from Output 1.1.1. The protocol development and capacity building workshops will be delivered by an EbA monitoring expert, and involve the active participation of the ANGMV, the Department for Planning, Coordination and Monitoring (MEDD) and other M&E staff from the MEDD, as well as academics.

187. Activity 4.1.1.2 Research on innovative project activities to generate data-driven lessons learned and best practices

This activity offers an opportunity to capitalize on the more innovative aspects of the project – namely the eco-pastoral reserves (Output 2.1.4), the IGA grant scheme (Output 3.1.2), and the FACI (Output 3.1.3), as well as to foster relationships between the ANGMV and research institutions. The project will support three 2-year research grants in association with national research institutions. The grants, valued at 20,000 USD, are to be used for data collection and student support (no financing of schooling fees). These will be granted competitively on the three subject matters listed above, with at least one grant subject focused specifically on women. The specifics of the criteria will be set by the ANGMV, PMU and participating academic institutions.

188. Activity 4.1.1.3 Compilation and dissemination of knowledge products from Component 2 and 3 at national and regional level

This activity will focus on the compilation and dissemination of gender-responsive knowledge products from project Components 2 and 3. In particular, knowledge products will be developed to capture gender-

responsive information and recommendations from the various assessments undertaken under other project components (on e.g. EbA knowledge, IGA opportunities and CBO capacity), and feedback arising from them. Reports from the follow-up on capacity building workshops will also be developed. This activity will be supported with the hiring of technical expertise in knowledge management, to help coordinate and develop products, as well as to train project and ANGMV staff.

189. Activity 4.1.1.4 Participation of PMU in regional GGW events / knowledge exchange

A number of regional and international events will be organized during the course of the project. Some of these events will take place under the GEF-funded Regional Coordination project (under the GEF-8 TALSISI-GGWI Regional Program), while others will be associated with other regional projects such as the GCF-funded Inclusive Green Financing Initiative (IGREENFIN I), or Scaling Up Resilience in Africa's Great Green Wall (SURAGGWA).
As such, the project will support the PMU and RO staff to participate and contribute to regional or international knowledge events, with a clear focus on the Great Green Wall – in particular meetings or conferences organized through the GGW Regional Coordination project.

Output 4.1.2 Bi-annual roundtables/meetings of people and organizations engaged in EbA approaches in Mauritania organized to promote knowledge sharing and networking

190. The overall sustainability of the actions of this project, as well as other initiatives, is largely reliant on learning and adapting best practices to specific ecosystems, landscapes, and communities. In order to foster innovation, partnerships and grassroots appropriation of the approaches, the project proposes to fund a series of roundtables for national technical partners and beneficiaries. The objective of these will be to create opportunities for different types of stakeholders to meet and showcase best practices and success stories from their own activities, with the aim of fostering discussions, partnerships and innovation. While there will be opportunities for vertical integration of stakeholders, there is a focus on horizontal integration, through the targeting of research institutions, private sector and civil society.

191. Activity 4.1.2.1 Stakeholder analysis and development of action plan for the roundtables

The organization of the roundtables will require a first formal identification of the stakeholders, key themes and format for the biannual roundtables. This will be done through a consultant, with close cooperation with the PMU and the ANGMV. The final plan will be validated by the PMU and presented to the Project Steering Committee, and appended to the project Communication Plan (see Output 4.2.1). Among the themes to be considered, the following should be included: private sector engagement opportunities (e.g. scaling up of value chains, microfinancing), women's involvement (including in decision making, resource management), and regional cooperation and collaboration (in association with the TALSISI-GGWI Regional Program) to help crosspollinate and cooperate outside national borders. At least one of the roundtables should have a specific focus on women, but gender considerations should be mainstreamed throughout.

192. Activity 4.1.2.2 Organization of a minimum of 8 national events

The action plan for the roundtables will be implemented under this activity, with the help of the project's long-term communication consultant, the consultant who helped develop the plan, and relevant PMU and ANGMV staff. It is suggested that the first event should take place by the end of year 1, and the final event during the first half of year 5. Sex-disaggregated data on attendance should be collected, and gender-balance in attendance encouraged.

Outcome 4.2: Enhanced awareness of climate change impacts, and institutions and support available for EbA approaches amongst local stakeholders

193. While Outcome 4.1 focuses on knowledge management, this outcome is aiming to build climate change and EbA awareness in the wider population, including about the key institutions and stakeholders engaged in climate change adaptation. This is a vital step to increase the effectiveness and impact of institutions at the national and local levels and to facilitate the upscaling of initiatives. Regardless of the efforts and success of the present project and other time-bound initiatives, local communities need to continue being sensitized to the impacts of climate change and on adaptation practices, as well as be aware of the human and technical resources available outside of the time constraints of projects.

Output 4.2.1 Gender-responsive awareness campaigns on climate change adaptation, and key institutions and stakeholders engaged in EbA rolled out

194. This output will see a project communication plan created and rolled out during the course of the project, which will not only focus on the project activities, but also target larger themes such as the overall Great Green Wall Initiative and the ANGMV. To ensure effective knowledge dissemination, the project will utilize both digital platforms and direct engagement methods. Communication outputs will include high-quality videos, photographs, learning briefs, and impact stories, distributed through online channels, knowledge-sharing networks, and stakeholder groups linked to the TALSISI-GGWI Regional Program. The project will also promote and disseminate knowledge products developed by the Regional Program's Thematic Working Groups. For broader public outreach during major events, the communications expert and consulting partners will prepare comprehensive press kits. These kits—containing press releases, data summaries, and other relevant materials—will be tailored for media representatives and shared via QR codes or email. All press materials will be reviewed and approved by the UNEP-GEF Communications Focal Point to ensure accuracy and consistency, including the integration of gender-related data and insights.

195. Websites and social media channels created under the project will require prior approval from UNEP's Communications Division. Approval will include the use of a standardized template, allocation of a maintenance budget, and regular compliance reviews throughout the project lifecycle. At project closure, all websites and social media channels that will not be maintained must be taken offline and archived in accordance with the GEF Visibility Policy. All publications will comply with UNEP Publication Guidelines in close consultation with the UNEP-GEF Communications Focal Point.

196. All knowledge materials will integrate gender considerations. Training and advocacy resources will be gender-responsive and avoid reinforcing stereotypes by, for example, portraying women only in traditional roles.

197. Activity 4.2.1.1 Validation of gender-responsive communication plan

Based on the Knowledge Management and Communication Strategy outline provided in Appendix 15 and the strategic project documents, the long-term communication consultant will draw up a comprehensive gender-responsive communication plan for the project. This plan should also be aligned with the overall ANGMV communication strategy, and include elements related to the broader communication at national level of the GGW effort and ANGMV. This activity will take place within the first 6 months of the project.

198. While the specifics will be refined during the inception phase of the project, some possible campaigns/events are listed below. A guiding table (Table 12) is also provided regarding media that could be used for various stakeholder groups that will be included.

- Awareness days and group discussions in communities in the target municipalities about the Great Green Wall, the ANGMV and its role in climate change adaptation.
- Social media campaigns once a year, targeting the youth audience, and highlighting specific IGA opportunities.

- Infographics/poster awareness campaigns, (which can also be disseminated on social media for higher visibility and a younger target audience), on successful approaches from Components 2 and 3. In particular, highlighting successive dune fixation and eco-pastoral reserves (with testimonies), agroforestry activities, and highlighting the involvement of women in EbA approaches.
- Single page pamphlets about the ANGMV, and best practices or success stories of EbA practices that can be distributed in government at national and regional level.
- Short high quality video documentary(ies) and photographs that can provide visual evidence of successful practices, which can be proposed to local networks, in particular for ANGMV-related events.

199. Specific attention will be given to ensure that specific targets within each group (for instance, women and men) are identified and represented in the products. This could include using gender-responsive language and gender-balanced images, as well as incorporating various age groups. Furthermore, specific efforts should be provided to ensure that the products or campaigns are inclusive – in terms of age, literacy and language.

Table 12: Overall project communication target audiences and examples of communication tools to be used.

Scale	Target audiences	Examples of communication tools
National	- Centralized government staff/agencies - Civil society, including notably national leaders, influencers, organizations active at the national scale - National & international NGOs - Other national level projects - National level professional/smallholder associations	- Publications, factsheets, leaflets, case studies, best practice and lessons learned documents - Videos, including participatory video or other media content (e.g., radio shows) - Dissemination of project datasets and/or communication materials on national monitoring and management platforms [linked to output 4.1.1] - Social networks - Awareness raising events
Wilayas	- Regional Councils and leaders - Decentralized government staff/agencies - Municipal employees and decision makers - Civil society, including notably leaders, influencers and organizations - Professional/smallholder associations (e.g. GNAP) - Other landscape projects - Private sector actors	- National and regional workshops - Exchange visits - Publications, leaflets, case studies, best practice and lessons learned documents - Videos, including participatory video or other media content (e.g., radio shows) - Local consultations, meetings, workshops - Project posters and signs - Social networks - Awareness raising events
Local	- Local administrative authorities - Local leaders and influencers - Community members, including vulnerable groups - Local CBOs – incl. cooperatives - Local projects and programs - Local private sector actors	- Publications, leaflets, case studies, best practice documents - Videos, including participatory videos or other media content (e.g., radio shows) - Local consultations, meetings, workshops - Trainings and learning visits - Project posters and signs

200. Activity 4.2.1.2 Rolling out of communication plan

The project will include the development and rolling out of targeted awareness campaigns. This will be supervised by the long-term communications consultant, in cooperation with the ANGMV and the PMU. The budget associated includes a fund for project signage, funds for contractors (content creators, graphic designers, translators, AV specialists) as well as funds for production costs (printing, editing, etc).

MONITORING AND EVALUATION

201. In order to ensure the effective, impactful and transparent implementation of the project, there will be a gender-sensitive monitoring and evaluation framework put in place. This M&E framework will form the basis for the monitoring of the project activity, output and outcome progress and the adaptive management of the project. It will provide critical data to the project management team and the Project Steering Committee, and information on key indicator progress for all stakeholders. The overall responsibility for the implementation of the M&E framework will rest with the Monitoring and Evaluation Officer, who will be based at the Project Management Unit (PMU) in Nouakchott.

202. The M&E framework will be validated during the project inception workshop and will be built based on the Monitoring and Evaluation Budget and Workplan presented in Appendix 6. This Workplan includes regular monitoring and evaluation missions by project staff, which will feed into regular progress reporting (every 6 months to UNEP, yearly Project Implementation Reports to GEF, etc…), as well as external and independent reviews (i.e. annual financial audits, and mid-term and terminal evaluations).

Upscaling and Sustainability Strategy

203. This project, as part of a Great Green Wall effort, is part of a longer-term effort which historically has been funded by the GEF. UNEP has also been a partner for this effort, in Mauritania, but also in other countries. As such, the project is placing itself as a significant effort to further anchor successes, providing support to communities to put in place tried and tested EbA solutions, all while including more innovative approaches to answer to a need to adapt to specific contexts and stakeholders. The project therefore couples strengthening previous efforts to increase the sustainability of the investments, with offering new ways to upscale efforts geographically.

204. Under Component 1, the project focuses on providing planning, implementation and monitoring tools for stakeholders at national, regional and local level. This is critical for the project effort, as the produced plans under Output 1.1.3 will be directly associated with investment efforts under Components 2 and 3. However, it also has a wider reach as the scope of these plans are larger than the project sites themselves, and creates therefore a plan as well as replicable examples of how to put them in place. Furthermore, the project also invests in the monitoring side of the planning, to help better generate data which can help design new opportunities.

205. In particular, the capacity building under this component not only focuses on direct beneficiaries of the project investments, but also in the whole administrative area, therefore investing in the EbA awareness and capacity at larger scale. This is a first step for upscaling EbA activities, as neighboring communities will already be primed, providing a clear pathway to upscale the investments in landscape restoration.

206. Under Components 2 and 3, the project will be investing directly in communities. The project looks to invest in new areas, as well in others which may require further support, providing opportunities for anchorage and upscaling. For instance, under Output 3.1.3, existing FACIs will be supported through additional investment and training, while new FACIs will be created. Similarly, cooperatives will be supported in technical skills to put in place sustainable, climate resilient IGAs, but also receive training in non-technical skills, which focus more on the upscaling of their activities, problem-solving and transfer of knowledge. In particular, the project is highlighting microfinancing options for CBOs, leaning on other success initiatives and furthering the reach of private sector involvement in the GGW.

207. Through these two components, the project relies heavily on community participation and planning, to create ownership. It also includes support visits from both implementing partners as well as regional

government staff, to ensure that there is adaptation and problem solving to site-specific challenges, building the confidence of the communities, and fostering their relationships with long-term partners. With inter-community exchanges also being promoted, new community-based networks will also emerge, as well as space for creative and community-inspired problem solving, which should increase ownership of activities by the communities.

208. Finally, Component 4 focuses on communication, knowledge sharing and learning, both in terms technical knowledge, as well as further working on raising awareness in the general Mauritanian population. For the former, the project will work in close collaboration with national level players – such as the other departments of the MEDD, private sector actors and research institutions – in order to catalyze innovation and partnerships. Secondly, a specific communication plan will be put in place to better publicize the successes of the project, as well as the Great Green Wall and ANGMV. This communication plan will focus on project activities, but also on the wider ANGMV successes, and will include specific awareness campaigns for youth and women, prioritizing popular media channels such as social media messaging services.

209. Within all four components, there is close consideration of post-project financial viability. Under Component 1, the creation of the PDCs will include budgeting exercises and reflections on financing options, in order to ensure that they are realizable and effective planning documents. Within Component 2, follow-up consultations and community meetings in the final 18-24 months of the project will include working sessions on financial viability and responsibility for maintenance of the efforts (in particular the ecopastoral zones). Under Component 3, all of the livelihoods trainings will include financial management, taking into account the abilities of the stakeholders. This topic is included under the grants scheme, with alternative financing training, under the non-technical CBO training, as well as in the FACI management training. Finally, under Component 4, the project focuses on utilizing existing knowledge platforms and dissemination channels to improve access to the data and lessons learned from the project, as well as investing into protocol development and training of civil servants and research institutions to improve the mainstreaming of the practices.

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this child project, including framework and mechanisms for coordination, governance, financial management and procurement. This should include consideration for linking with other relevant initiatives at country-level (if a country child project) or regional/global level (for coordination platform child project). If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

210. The project will be implemented over a five and a half year period (66 months) (see Appendix 8 for the Project Workplan and Timetable). The process of hiring project staff will begin shortly after the signing of the Project Cooperation Agreement (PCA) between UNEP and the National Agency for the Great Green Wall (ANGMV), and the internalization of the project.

211. UNEP will be the Implementing Agency for the project. It will oversee the project and provide the technical assistance required to achieve its objective, and to ensure consistency with GEF and UNEP policies and procedures. This supervision will be the responsibility of the Task Manager (TM), who will be appointed by UNEP. The TM will formally participate in the following:

- Project Steering Committee (PSC) meetings;
- Review of mid-term review and final evaluation;
- Clearance of Half Yearly Progress Reports and Project Implementation Reports (PIRs), expenditure reports, and budget revisions; and
- Technical review of project deliverables and outputs.

The TM will undertake at least one annual supervisory mission throughout the course of the project for oversight and adaptive management to ensure the achievement of project targets and objectives and to provide capacity building.

In addition to the main tasks above, UNEP will also support the ANGMV and the overall smooth implementation of the project by:

- Providing guidance and/or training to the project management unit (PMU) and ANGMV finance and administration staff on UNEP's project management systems, including financial management, procurement procedures and human resources; and
- Overseeing a results verification mission four months before mid-term review and four months before end of project Terminal Evaluation (on project funds, as outlined in Appendix 6 – M&E plan).

212. The Executing Agency will be National Agency for the Great Green Wall of Mauritania (ANGMV). This Agency, under the supervision of the Directorate for the Protection of Species and Land Restoration (DiPERS – Direction de la protection des espèces et restoration des sols) of the Ministry of Environment and Sustainable Development (MEDD), is in charge of coordinating the Great Green Wall effort for the Mauritanian government. A legal agreement (the PCA) will be signed between UNEP and ANGMV to regulate the flow of GEF funds from UNEP to ANGMV and to determine the obligations of the parties. UNEP will transfer funds directly to the main non-governmental implementing partner, Enabel (responsible for the oversight and management of microfinance-related activities under Output 3.1.4), with whom UNEP will enter into a legal agreement (Project Cooperation Agreement).

213. ANGMV will host and manage the Project Management Unit (PMU) and oversee the recruitment and contracting of the project personnel in collaboration with UNEP. ANGMV's Director General will take the role of Project Director, with general oversight of the project and promoting coordination with the rest of the ANGMV and MEDD portfolios. ANGMV will be responsible for the project direction and, as such, will facilitate PMU's implementation and partnership efforts, and support the scaling up of project results. The main responsibilities and activities led by the Executing Agency include:

- Supervise all technical and substantive issues of the project as well as providing guidance on all administrative issues.
- Recruit and oversee gender-balanced project staff (PMU and Regional Offices - ROs) (see below) and conduct regular performance reviews of project staff and take appropriate mitigating measures to improve the efficiency of the PMU and ROs.
- Provide office space for the PMU and ROs, as well as other logistical support as outlined in the cofinancing letter.
- Financial oversight and management of project budget and expenditures.
- Manage collaborative partnerships with other projects of ANGMV, MEDD, and other central Ministries, as well as facilitate procurement processes for acquisition of goods (equipment) and services (consultancies).
- Periodic reporting to UNEP, the Implementing Agency, as per schedules stated in the PCA.

Project Coordination and Management

214. The project management structure is presented in the diagram below (Figure 9). This structure includes:

- The Executing Agency (EA): ANGMV
- The Project Steering Committee (PSC), chaired by MEDD
- The Project Management Unit (PMU), housed within the ANGMV national offices
- Regional Offices (ROs), which will be the wilaya-level representatives for the project, and housed within the ANGMV regional offices

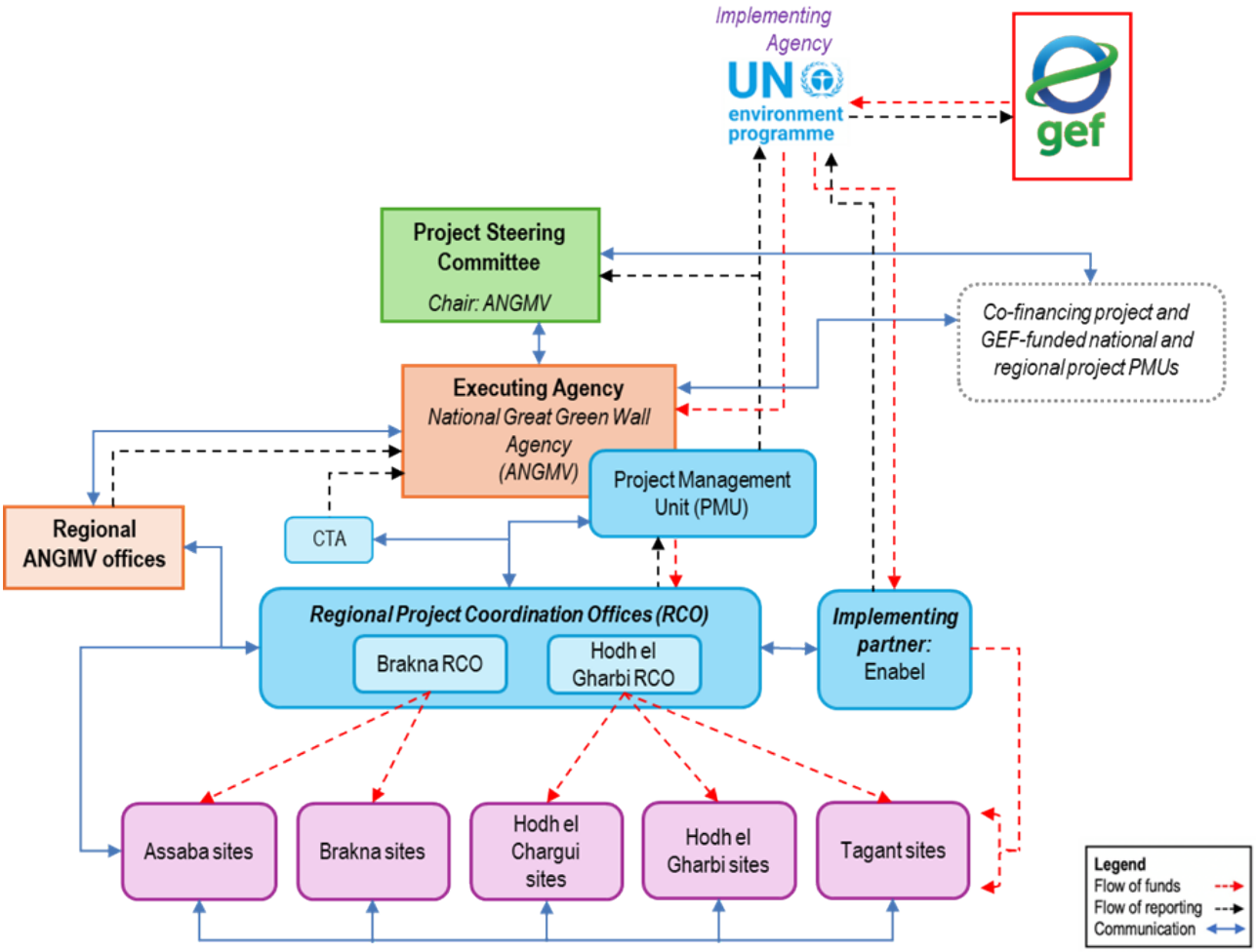


Figure 9: Proposed institutional set-up.

215. The Project Steering Committee will be chaired by ANGMV, with PMU acting as the Secretariat. It will include the following institutions, and will ensure gender balance in its institutional representation:

- National Agency for the Great Green Wall (ANGMV) (Chair)
- Ministry of Environment and Sustainable Development (MEDD), represented by its Secretary General
- The focal points for the MEDD of the following:
  - Desertification (from DiPERS)
  - GEF Operational Focal Point
- One focal point for each of the following ministries:
  - Ministry of the Interior, Decentralization and Local Development
  - Ministry of the Economy and Finance
  - Ministry of Agriculture and Food Sovereignty
  - Ministry of Livestock
  - Ministry of Water and Sanitation
  - Ministry of Fisheries and Maritime and Port Infrastructures
  - Ministry of Social Action (specifically, the Department of the Family, Promotion of Women and Gender)
- Two representatives from the regional councils
- Three mayoral representatives from the project sites

- The GEF-8 funded Regional Program "Transformation Approach to Large Scale Investment in Support of the Implementation of the Great Green Wall Initiative" (TALSISI-GGWI, GEF 11455)
- UNEP, represented by the project Task Manager
- Two representatives from the Great Green Wall Platform for Women

216. In order to promote equal representation and opportunity for all the 31 target sites, the regional and mayoral representatives will be rotational. This will allow each of the regional councils to participate 4 times, while each mayor will be present once. The Great Green Wall Platform for Women will allow to have representation of women's interests, as they are the key beneficiaries for the investment outputs. In addition, the PSC can invite representatives of other ANGMV-led projects (e.g. AFD Support to the Great Green Wall) or other cofinancing (e.g. EU-funded Sysalim) as observers, to strengthen coordination and synergies between projects engaged in adaptation and/or in the same project areas.

217. As the project is part of the wider regional effort, TALSISI-GGWI, a representative from the regional framework program will also be invited to participate in the PSC to ensure complementarity with its own efforts and other national projects. The project has allocated funding for one in-person meeting a year, with opportunities for ad hoc or partial meetings if the need arises.

218. The Project Management Unit (PMU) will be housed at the national ANGMV headquarters in Nouakchott. In the national office, the PMU will be staffed by:
- Project Coordinator (PC);
- Monitoring and Reporting Specialist (MRS);
- Gender and Safeguards Specialist (GSS);
- Administrative and Financial Officer (AFO); and
- Administrative Assistant (AA).

219. Whenever possible, a gender balance in the PMU post holders will be promoted. These PMU posts will be paid from the GEF budget. A Procurement Officer will be assigned to the project from ANGMV to work with the PMU on coordinating procurement of goods and services, as in-kind co-financing.

220. The full-time dedicated Project Coordinator (PC) will be hired by ANGMV to lead the PMU. The PC will be responsible for the day-to-day management of the project and its resources (human and financial). S/he will operate in a transparent and efficient manner, in line with approved budgets and work plans. In particular, and as detailed in the TORs (Appendix 5e), the PC will:
- lead the day-to-day planning and implementation of the project in close collaboration with ANGMV, regional ANGMV offices and implementing partners.
- report quarterly to ANGMV and UNEP on the progress and challenges encountered, and provide on-the-ground information for UNEP progress reports.
- engage with stakeholders.
- organize the PSC meetings and support ANGMV in secretariat responsibilities.
- provide managerial and technical support to the project, including measures to address potential external and internal project implementation issues.
- manage the project budget and resource allocation.
- participate in training activities, report writing, and facilitation of consultant activities related to his/her area of expertise.

221. To support the PC on the oversight of the project and targets, the PMU will also include a full time Monitoring and Reporting Specialist and a Gender and Safeguards Specialist, fully funded by the project. The Monitoring and Reporting Specialist's tasks will include:
- launching and overseeing the baseline study,

- establishing and applying a performance monitoring framework to set bi-annual and mid-term targets for the project to meet its outputs and outcomes targets as defined in the project's results framework by the end of the implementation phase,
- measuring project and GEF LCDF activity, output and outcome indicators in a regular manner and reporting at least twice per year to assess the project's progress in achieving its targets,
- reporting to the PMU and PSC on project performance, based on planned project outputs and outcomes, as well as the project indicators,
- liaising with the wider ANGMV and MEDD M&E staff.

222. The Monitoring and Reporting Specialist will also oversee the application of sex disaggregated indicators, together with the PMU's Gender and Safeguards Specialist.

223. The Gender and Safeguards Specialist will be responsible for developing (or revising), implementing and monitoring the ESS plans, including the Environment and Social Management Framework (ESMF), the Gender Action Plan (GAP) (Appendix 5a), the project Grievance Redress Mechanism (Appendix 5d), and the Stakeholder Engagement Plan (Appendix 5c). This specialist will also be responsible for internally validating any external ESS assessments undertaken, related to the small community works (e.g. water infrastructure, buildings, and CBO grants).

224. Finally, an Administrative and Financial Officer (AFO) will be recruited on a full-time basis as part of the PMU. The Administrative and Financial Officer will assist project staff in procuring equipment, logistics, and administration, manage the project's accounts and prepare expenditure reports to UNEP standards. The procurement of services, goods and works for the project will be done in accordance with Government of Mauritania / ANGMV procurement regulations. The ANGMV Procurement service will support the PMU in compliance of procurement documents and process. The PMU will also be supported by an administrative assistant who will facilitate administrative tasks (e.g. formal communications, internal and external bookings, etc.) with the ANGMV, the ROs or any other partner, as and when needed.

225. The PMU will support and work with two Regional Offices (ROs). These will be located in:
- The regional capital of Brakna, responsible for sites in Brakna and Assaba;
- The regional capital of Hodh El Gharbi, responsible for sites in Tagant, Hodh El Chargui and Hodh El Gharbi.

226. As with the PMU, these offices will be located within the regional ANGMV offices, as in-kind co-financing. However, the project funds will provide equipment and operational budgets for the ROs (including for the ANGMV offices), and recruit the permanent project staff for these offices: Regional Technical Officers (RTOs) and drivers.

227. The main task of the RO will be to provide a local base to coordinate, implement and report on project activities at wilaya level. Five Regional Technical Officers (RTOs) will be hired in order to liaise with and provide support to the intervention sites and stakeholders, and provide data and reports back to the PMU. Considering the geographic scope of the project, these five positions will allow to ensure that there is regular and equal support to and feedback from the entirety of the target wilayas. While there will be a limited amount of reporting required, the RTOs will be expected to spend most of their time in the communities. The RO offices and staff will also be supported in-kind by regional ANGMV staff, as and when needed. The full proposed Terms of Reference (ToR) for these are found in Appendix 5e.

228. A part-time Chief Technical Advisor (CTA) (international consultant) will support the Project Coordinator in the overall coordination, planning and execution of the project. The CTA will support the preparing of consultant and service provider Terms of Reference and undertaking a review of all draft project deliverables. The CTA will also support the PMU on overall project management – including workplans,

budgets, reporting requirements, ToRs, etc. This position will include at least one annual visit to Mauritania per year, which will include field visits.

229. In addition, implementation support by implementing partners and long-term technical assistance will be secured by the project, to provide support to the PMU in the successful implementation of the project. Outputs and corresponding deliverables and outcomes requiring technical assistance have been identified in the project document, with indications on requirements and experience and suggestions of entities which could be suitable. The ANGMV will procure goods and services from either for-profit service providers in accordance with national procurement procedures and as per the terms of the legal instrument signed between ANGMV and UNEP, or from non-profit civil society institutions according to UNEP's procedures on partners. The main implementing partner needs have been identified as:

- EbA knowledge and capacity training workshop development and animation under Outputs 1.1.1 and 1.1.2;
- PDC development and validation, including animation of consultation workshops under Output 1.1.3;
- Participatory assessment of sites for EbA approaches under Outputs 2.1.1, 2.1.2 and 2.1.3;
- Community EbA training for WSC practices (Output 2.1.2), agroforestry (Output 2.1.3), and FACI upkeep (Output 3.1.2);
- Long term follow- up technical skills training for WSC practices (Output 2.1.2), agroforestry (Output 2.1.3), and FACI upkeep (Output 3.1.2) (it is recommended to remain consistent in partner with previous bullet point);
- Feasibility studies for FACI, including ESS under Output 3.1.2;
- Non-technical training identification and training for CBOs under Output 3.1.3;
- Microfinance oversight and management under Output 3.1.4 (identified as Enabel at PPG phase);
- CBO/.MSME technical support for MFI loans under Output 3.1.4.

230. Three main long-term technical assistances have been identified:

- Landscape restoration specialist – an individual experienced in Sahelian landscape restoration, and in particular EbA approaches, will be hired to provide technical oversight of all activities under Component 2: dune stabilization, set-aside, establishment of eco-pastoral reserves and development of agroforestry. S/he will be based out of Nouakchott, working closely with the PMU, but also required to have frequent visits to the target sites in order to assess restoration activities.
- Agronomy / rural development specialist – an individual experienced in agronomy and rural development within the Great Green Wall context will be hired to provide technical oversight of activities under Component 3: climate resilient income generating activities and development of FACIs. S/he will be based out of Nouakchott, working closely with the PMU, but also required to have frequent visits to the various cooperatives and FACIs.
- Communication specialist – in order to coordinate the communication activities under Component 4, the project will hire a long-term communication specialist. S/he will be tasked with finalizing the Communication Plan and Knowledge Management Strategy, and then provide oversight of the implementation of these. S/he will also work closely with the ANGMV in order ensure that its communication is managed in a consistent way that showcases its various initiatives and projects.

231. In addition, during the inception phase, the PMU/ANGMV will sign MoUs with other co-financing projects and hold regular meetings with co-financing partners to strengthen synergies between projects and their activities, and to avoid duplication of effort, and collectively promote and integrate and implement ecosystem-based adaptation measures in their respective interventions.

Will the GEF Agency play an execution role on this child project?

If so, please describe that role here and the justification.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

Cooperation with ongoing initiatives and projects

232. This project comes with the specific objective to strengthen the climate resilience of vulnerable communities and ecosystems in five wilayas in Mauritania's Great Green Wall area through Ecosystem-based Adaptation (EbA) approaches. One of the key aspects of the project is its multiscale coordination with direct investments towards the climate resilience of communities and ecosystems in the Great Green Wall, as well as a contribution to the coordination of the GGW effort at a regional level. This is in part facilitated by its nesting under the TALSISI-GGW regional program (GEF ID 11445). Having a project that bridges the gap between site-specific investment and coordination and knowledge sharing at the regional level creates a unique space for this project within the landscapes of projects and initiatives of the Great Green Wall.

233. At a national level, the project exists within a landscape of projects executed by the National Great Green Wall Agency (ANGMV). ANGMV itself will support the project through in-kind support, while other projects under its supervision are identified as direct co-financing. One of these initiatives is the AFD-funded "Support to the Great Green Wall", which is financing restoration efforts and sustainable livelihood opportunities in the wilayas of Assaba, Hodh El Chargui and Hodh El Gharbi. With similar approaches - namely in climate smart land management and capacity building, the AFD-funded project and the LDCF-funded project will target complementary communities within GGW, supporting synchronous application of sustainable and climate smart practices, which will also be part of the wider planning effort supported by the project (Outcome 1.1).

234. Other ANGMV-led projects have other objectives – relating to various aspects of the regional Great Green Wall strategy - but together, work towards the overall integrated and inclusive effort of the Great Green Wall, which includes restoring degraded landscapes and improving the lives and resilience of communities. For instance, the project "Integrated Natural Resource Management of Three Wetlands Landscapes" (GEF ID 11128) is focused on wetland landscapes. it follows overall principles of community-based sustainable management of natural resources to promote climate resilience and socio-economic development. The adoption of EbA practices complements the dissemination of such approaches. The project "Rehabilitation and restoration of ecosystems in the Gum Arabic belt and the sustainable use of forest resources in Mauritania" (GEF ID 11551), with the DiPERS as an Executing Agency (the MEDD department under which ANGMV is located, and with representatives on the PSC), supports the development of agroforestry and climate-resilient, sustainable natural resource management.

235. Aside from ANGMV-linked projects, there are also a number of projects that are supporting related themes – such as water (e.g. The GCF-funded "Africa Integrated Climate Risk Management Programme: Building the resilience of smallholder farmers to climate change impacts in 7 Sahelian Countries of the Great Green Wall (GGW)"), value chains (e.g. the EU-funded Sysalim), and food insecurity or pastoralism (e.g. Sécuralim) in the Great Green Wall. The project, through its support of vulnerable rural communities, offers a wider landscape-based approach, which in turn can support the more targeted activities of the other projects. It also offers an opportunity to scale up efforts to other communities, such as extending the reach of microfinance institutions (MFIs) supported under the Sysalim project under Output 3.1.3. Similarly, there is a natural opening for experience and lesson sharing through Output 4.1.3 (the roundtables), especially considering that many of the aforementioned projects and partners are also part of the Sahel Alliance.[1][1]

[1] The Sahel Alliance is an international coalition of donors and partners created in 2017 to coordinate and accelerate development efforts promoting stability, resilience, and growth in the Sahel region. In particular, it focuses its efforts on six key sectors: education and youth employment, agriculture and rural development, energy and climate, governance, decentralization and basic services, internal security, and support for return and reintegration of vulnerable populations.

236. As noted above, the project also provides crucial input to the regional GGW effort. Firstly, as a child project under the GEF-8 GGW Regional Program (GEF ID 11445) (TALSISI-GGW), it is part of a wider effort to: i) build institutional capacities and ensure policy coherence across sectors; ii) rehabilitate degraded land and forest resources; iii) conserve biodiversity; and iv) support climate-resilient and gender-responsive livelihood opportunities all throughout the Great Green Wall. This program (and its regional cooperation child project), crucially builds on previous efforts to promote cooperation at regional scale, and benefits from the experience of the implementing agency (UNEP) (e.g. GEF 10634, 10103).

237. The project and ANGMV staff will be supported to participate in regional activities developed by TALSISI-GGW, presenting results and lessons learned from the project. The project will also focus on bringing forth the lessons learned in terms restoration efforts and supporting IGAs, including a focus on new research on specific approaches such as the eco-pastoral reserves, IGAs and FACIs (Output 4.1.2). The project will also contribute to knowledge sharing for the GCF-funded SURAGGWA ("Scaling Up Resilience in Africa's Great Green Wall") regional project, which is also focusing on the dissemination of national results and lessons learned to the wider GGW network.

238. Furthermore, for all the activities under Component 4, there will be a natural tie with the GCF-funded "Inclusive Green Financing Initiative (IGREENFIN I): Greening Agricultural Banks & the Financial Sector to Foster Climate Resilient, Low Emission Smallholder Agriculture in the Great Green Wall (GGW) countries - Phase I", which is funding a knowledge management expert for the GGW effort in Mauritania and the region, located in the ANGMV office.

Table On Core Indicators

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

META INFORMATION – LDCF

LDCF **true**	SCCF-B (Window B) on technology transfer **false**	SCCF-A (Window-A) on climate Change adaptation **false**

Is this project LDCF SCCF challenge program?

false

This Project involves at least one small island developing State(SIDS).

false

This Project involves at least one fragile and conflict affected state.

false

This Project will provide direct adaptation benefits to the private sector.
false
This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs).
false
This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below

Green Climate Fund	Adaptation Fund	Pilot Program for Climate Resilience (PPCR)
true	**false**	**false**

This Project has an urban focus.
false
This project will directly engage local communities in project design and implementation
true
This project will support South-South knowledge exchange
true

This Project covers the following sector(s)[the total should be 100%]: *	
Agriculture	30.00%
Nature-based management	50.00%
Climate information services	0.00%
Coastal zone management	0.00%
Water resources management	20.00%
Disaster risk management	0.00%
Other infrastructure	0.00%
Tourism	0.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise	Change in mean temperature	Increased climatic variability	Natural hazards
false	**true**	**true**	**true**

Land degradation	Coastal and/or Coral reef degradation	Groundwater quality/quantity
true	**false**	**true**

CORE INDICATORS – LDCF

	Total	Male	Female	% for Women
CORE INDICATOR 1 Total number of direct beneficiaries	70,215	31,759.00	38,456.00	54.77%
CORE INDICATOR 2 (a) Area of land managed for climate resilience (ha) (b) Coastal and marine area managed for climate resilience (ha)	5,540.00 0.00			
CORE INDICATOR 3 Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	12.00			
CORE INDICATOR 4				

Number of people trained or with awareness raised	50,000	23,000.00	27,000.00	54.00%
CORE INDICATOR 5 Number of private sector enterprises engaged in climate change adaptation and resilience	600.00			

SUB INDICATOR 1

	Total	Male	Female
1.1 Number of direct beneficiaries from more resilient physical and natural assets	0		
1.2 Number of direct beneficiaries with diversified and strengthened livelihoods and sources of income	0		
1.3 Number of direct beneficiaries from the new or improved climate information services including early warning systems	0		
1.4 Number of youth (15 to 24 years of age) benefiting from the project	0		
1.5 Number of elderly (over 60 years of age) benefiting from the project	0		
1.6 Increased income, or avoided decrease in income (per capita in $ across all relevant beneficiaries)			

SUB-INDICATOR 2

2.1 Hectares of agricultural land

1,520

2.2 Hectares of urban landscape

0

2.3 Hectares of rural landscape

4,020

2.4 Hectares of forests

0

2.5 Hectares of marine area

0

2.6 Hectares of freshwater area

0

2.7 Number of residential houses

0

2.8 Number of public buildings

0

2.9 Number of irrigation or water structures

0

2.10 Number of fishery or aquaculture ponds or cages

0

2.11 Number of ports or landing sites

0

2.12 Km of road

0

2.13 Km of riverbank

0

2.14 Km of coast

0

2.15 Km of stormwater drainage

0

2.16 Number of new adaptation technologies supported

0

SUB INDICATOR 3

3.1 Number of policies/plans developed and strengthened that will mainstream climate resilience

(regional, national, sub-national)

11

3.2 Number of systems and frameworks established for continuous monitoring, reporting and review of climate adaptation impacts

0

3.3 Number of national climate policies and plans enabled, including national adaptation planning processes

0

3.4 Number of institutional partnerships or coordination mechanisms established or strengthened

1

3.5 Number of institutions with increased capacity to plan, implement, monitor, and report for climate adaptation

0

3.6 Number of institutions with increased capacity to attract, and manage climate adaptation finance

7

3.7 Number of local community organizations benefitting from and/or engaged in institution strengthening, partnerships, or financing

600

3.8. Number of climate risk and vulnerability assessments conducted

0

SUB INDICATOR 4

4.1 Number of people trained or made aware of climate change impacts and appropriate adaptation responses	Total	Male	Female
a) National government	0	0	0
b) Local government	0	0	0
c) Local community organizations	0	0	0
d) Extension services	0	0	0
e) Hydromet and disaster risk management agencies	0	0	0
f) School children, university students, and teachers	0	0	0
g) Youth	0	0	0

SUB INDICATOR 5

	Total	Male	Female
5.1 Amount of investment mobilized (US$) from private sector sources	0		
5.2 Number of entrepreneurs supported for climate adaptation or resilience	0	0	0
5.3 Total financial value of lines of credit and/or investment funds	0		
5.4 Number of MSMEs incubated/accelerated with technical assistance, financial matchmaking, and/or direct financing	600		

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	The impacts of climate change, including droughts and extreme weather events, are already being felt in the region, and could compromise some of the ecosystem restoration and IGA activities, especially as their magnitude is not always well understood or predictable. As such, the project will actively consider the climatic conditions and forecasts, and adapt interventions accordingly (in time, scale, or nature). This is possible as the project includes several assessments prior to the rolling out of new activities (e.g. under

		Outputs 1.1.1, 2.1.1, 3.1.1), to take stock of activities already being undertaken and get recent feedback from communities, to complement other sources of data. This should help to get more site-specific and accurate understanding, and propose interventions that are in line with site- specific climatic risks. In addition, adaptive management and responsiveness training will be integrated into capacity-building activities for stakeholders (namely decision makers at national and local level), in order to perennialize these skills. However, the risk remains of an out of ordinary year which can alter conditions or slow the progress. To mitigate this, the project has integrated support by both government officers and implementing partners on a regular basis to ensure that communities can respond and adapt suitably.
Environmental and Social	Moderate	The project has considered UNEP and GEF ESS standards in its preparation, and provided an ESMF to direct the establishment of required ESS documents during project implementation – in particular for the provision of water infrastructure under Outputs 2.1.3, 2.1.4, and 3.1.2. Operational health hazards as well as community safety are also included, namely due to the involvement of communities in restoration activities, and IGAs. The most important residual risk remains with the specifics of the MSME and CBO microfinance support for IGAs, which will be determined during the project. IGAs will need to be appropriately screened to ensure that there are no ESS concerns, and this is included in the ESMF. In particular, no projects with a risk level over "moderate" should be financed (see ESMF).
Political and Governance	Low	Mauritania has a history of ministry-level reshuffles, which can disrupt the oversight of the project. However, the Executing Agency is somewhat immune, as it is not solely reliant on its parent ministry. The project is in line with national and international level strategies and policies, which will provide reliable justification to project implementation. In order to mitigate any issues at the wilaya-level, there is representation of local governance (mayors and regional councils) within the Project Steering Committee for transparency. Furthermore, capacity building under Outcome 1.1 includes all levels of governance, to ensure that all project actions are in line with plans and policies at all levels. On a wider scale, it should be noted that the political situation in the region is unstable, with diplomatic relations between various countries tenuous. This could affect the wider regional GGW effort, namely gatherings and partnerships. However, the project will rely more on the regional coordination project for such aspects.
INNOVATION		
Institutional and Policy	Low	The project will be basing itself on tools and institutions already in place – e.g. PDC, SCRAPP, ANGMV, DREDD, AGLC. This should reduce replication or confusion between roles. However, some of these tools – for instance the PDC – are not well mastered in certain sites, but the project will rely on past experiences, employ an experienced partner, and engage with the national authorities responsible for these.

Technological	Low	Most of the investment activities are reliant on tried and tested methods, and focus more on scaling up efforts. Other aspects of the project focus on newer methods and concepts – such as within the IGAs, the replanting (drones) and FACI. To manage risk and ensure that the proposed methods are adapted, site-specific assessments and participatory planning will be undertaken, and for larger works (water infrastructure for instance), feasibility studies.
Financial and Business Model	Moderate	The project will focus on small businesses, once again putting in place elements that have proved successful in similar environments (cooperatives), while focusing on sustainability (women and youth) and areas which can help further expand (non-technical skills). To provide sustainable and longer-term capital for sustainable climate-resilient IGAs, the project will engage MFIs, which is a burgeoning area for rural, arid Mauritania. However, the project will be utilizing a scaling up approach, supporting partners which already have experience in the target areas and have developed products which are tailored towards the targeted production systems. The project will also separately work towards improving soft skills for CBOs, further improving opportunities for the successful uptake of microfinancing after project closure. One of the remaining risks is too rapid expansion, namely due to the individual variables of each structure and loan, which the project will monitor and modify based on annual reviews.
EXECUTION		
Capacity	Moderate	The project implementation structure aims to both empower and strengthen the government institutions involved, in particular ANGMV, while providing the necessary oversight and accountability measures. It will draw on the experience of the UNEP LDCF projects GEF ID 5580 (completed) and GEF ID 10103 (underway), both of which were executed by MEDD. While the ANGMV is less experienced in its role of an Executing Agency, it benefits from past experience at the level of the Ministry (MEDD), and through other concurrent GEF-funded projects (GEF IDs 11551 and 11128). A micro-assessment of ANGMV has been initiated by UNEP and will be completed during the project review period. The findings of this assessment will help to identify any specific areas where capacity building or other support might be needed, in order to ensure that adequate processes and capacities are in place for ANGMV to successfully fulfil its Executing Agency role in the project.
Fiduciary	Low	The Executing Agency is relatively new to GEF procedures, but has experience dealing with large budgets and international donors. Simultaneously, the Implementing Agency has a long history of GEF-funded projects within the Mauritanian context. This complementarity should reduce the risk. Furthermore, the project will have its own administrative and finance officer, who will manage the project budget based on GEF, UNEP and national standards (as outlined in their ToR). Due to the large budget, the project has also allocated an additional administrative assistant.
Stakeholder	Low	Stakeholder involvement was central to the project design, and takes into consideration key elements raised during national and local consultations, as

		well as multiple levels of stakeholders – national and regional decision makers, but also communities and natural resource users. In addition, the Executing Agency has a presence throughout the project zone which will facilitate the rolling out of activities, and target sites all have a previous relationship with the ANGMV. All investment activities are related to community participatory processes in order to ensure community adherence and appropriation of project activities. The stakeholder engagement plan will continue to be reviewed and adapted throughout project implementation to ensure that the level of engagement is sustained and adequate to changing conditions, and certain outputs will require the undertaking of specific stakeholder analysis prior to implementation (e.g. Output 4.1.2). One of the risks, while relatively low based on engagement during the PPG phase, is the inclusion of self-identified indigenous groups. For this, the project will ensure that the safeguards officer ensures that FPIC procedures are developed and that training for project staff is available. In addition, if required, relevant implementing partners will need to prove capacity in including indigenous peoples, and adhering to project FPIC procedures.
Other		
Overall Risk Rating	Moderate	The risk rating is identified as moderate in alignment with the highest risk rating from the table – namely the climatic, environmental and social, financial and business models and capacity for implementation. Along with the identified mitigation measures, these will need to continue being measured during project implementation.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies, including the specific integrated program priorities, and country and regional priorities, Describe how these country strategies and plans relate to the multilateral environmental agreements, such as through NDCs, NBSAPs, etc.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

(max. 500 words, approximately 1 page)

240. The proposed project is in line with the GEF-8 Programming Strategy for Adaptation to Climate Change for the LDCF and SCCF. Three of the four main themes are present within the proposed project: Agriculture Food Security and Health (Theme 1), Water (Theme 2), and crucially, Nature based Solutions (Theme 3). Similarly, the project responds to the requested intervention scales, namely:

- ecosystem and nature-based adaptation approaches;
- landscape and value-chain based approaches;
- regional approaches focusing on rural, urban, and coastal areas.

241. Furthermore, the project touches upon all three Priority Areas.

- Priority Area 1: Scaling Up Finance. While it is not anticipated that there will be any direct development of local policy, the project will indirectly contribute to this by building awareness of the institutional framework surrounding the GGW and implementation of EbA approaches and strengthen capacity at local level (regional to community-level) to be able to take part in the development of policy and strategies.
- Priority Area 2: Strengthening Innovation and Private Sector Engagement. While the project focuses on anchoring best practices, it also includes scope for more innovative practices. In particular, under Component 2, the project will invest in large eco-pastoral reserves to promote sustainable pastoral management, a new approach for the ANGMV. Under Component 3, the project will support a first micro-granting scheme to allow CBOs to undertake or expand sustainable and climate resilient IGA (3.1.2) and provide networking links for microfinancing opportunities and successful CBOs. It also looks to promote innovation through roundtables (Component 4), integrating technical stakeholders from various areas, through research grants linked with its investment opportunities, and through the development of data collection protocols for the ANGMV and the MEDD, to bolster cooperation and data generation.
- Priority Area 3: Fostering Partnership for Inclusion and Whole-of-Society Approach. This is underlying to all of the project components. The capacity building under Component 1 includes individuals from national to local level, including government, CBOs, NGOs, and clearly ensuring that women are encouraged to participate. This component builds the base for promotion of horizontal transfer of knowledge and skills, through Output 1.1.3, at the local level. Under Components 2 and 3, there community-based training is undertaken in an inclusive manner, namely through targeting stakeholders who are particularly vulnerable to climate change (women and youth representing 80% of target beneficiaries)). Finally, under Component 4, there is a focus on knowledge transmission and communication, with a particular focus on building technical partnerships (output 4.1.2)

242. Furthermore, the outputs and activities on which these outcomes rely are built around the three key transformation levers identified in the LDCF and SCCF 2022-2026 Programming Strategy, namely:
- Policy coherence and mainstreaming of climate adaptation. The project supports the implementation of climate change adaptation actions defined in national, regional, and international level policy (Component 2). Furthermore, it also looks to help develop the skills to ensure that planning becomes more commonplace are developed at the local level, integrating EbA actions (Component 1).
- Strengthened governance for adaptation. The project works to provide stakeholders across all levels of governance the necessary skills for adaptation – whether it in planning, implementation, and monitoring of EbA actions (Components 1 and 2) or non-technical skillsets, such as business planning, and leadership (Component 3), which will help promote vertical and horizontal integration of stakeholders.
- Knowledge exchange and collaboration. While Component 4 is targeted to knowledge exchange and collaboration, there are elements found under Components 2 and 3 as well, for instance in the IGA assessment and use of peer-to-peer and exchange learning.

Alignment with regional strategies

243. The project falls directly within the framework of the Great Green Wall, and in particular its 2021-2030 Strategy, adopted after the 2021 One Planet Summit. In particular, the activities under Component 2 will directly contribute to the goal of restoring 100 million hectares of degraded land across the GGW, while Component 3 will help work towards the creation of 10 million green jobs in rural areas. Furthermore, the project Executing Agency is the National Great Green Wall Agency (ANGMV), which will help to ensure alignment with the regional effort, and in particular also assist in increasing the visibility of the agency at national level.

244. All the project actions are in line with the five core strategic pillars of the GGW 2021-2030 Strategy:
- Land restoration & climate-resilient agriculture
- Water resource management

- Green Economy and livelihoods, including the focus on women, youth and green value chains (in this case, also climate resilient)
- Biodiversity conservation
- Coordination, monitoring and partnerships.

245. Through its contribution to the GGW, and notably the focus on restoration and sustainable management of ecosystems (Component 2), the project aligns with the objectives of the UNCCD. Furthermore, while not a primary objective of the project, through the restoration of landscapes, the community-management of ecosystem, and the development of green, climate resilient value chains, the project will also contribute to several targets under the Kunming-Montreal Global Biodiversity Framework, namely:

- Target 2: Restore 30% of degraded ecosystems;
- Target 8: Minimize climate change impacts on biodiversity, enhancing nature-based solutions
- Target 10: Ensure sustainable management of agriculture, aquaculture and forestry
- Target 12: Increase benefits of biodiversity for people, especially through ecosystem services
- Target 21: Ensure participation of indigenous peoples and local communities
- Target 23: Enhance capacity-building, technology transfer and knowledge sharing.

Alignment with national strategies and priorities

246. At the national level, the proposed project is in line with key developmental and environmental policies and strategies.

- The National Strategy for Accelerated Growth and Increased Prosperity (SCAPP). The central focus areas are sustainable and inclusive growth (linked with project Component 3), strengthened human capital (Component 1), and improved governance in all sectors. The project champions such practices, as well as supports the devolvement into local plans.
- National Strategy for Environment and Sustainable Development (SNEDD) (2017). Created in 2017, the SNEDD is built around four pillars including integrated environmental governance adapted to the challenges, which includes the integrated and sustainable management of natural resources and terrestrial biodiversity (‘green’ environment). This is supported by all project components, but especially Components 2 and 3
- The National Environmental Action Plan (PANE), in place since 2007, includes the national program to combat desertification, which is supported by project Component 2.

247. Finally, the project also directly feeds into the priority actions listed under the Mauritania’s Nationally Determined Contributions (NDCs), updated in 2021, namely in the agricultural, livestock, and environmental sectors, as well as on gender. The National Adaptation Plan (NAP) is currently under elaboration, but at the time of writing, no draft was available for review; it should however largely be in line with the NAPA (2004) and the updated NDC (2021).

Alignment with UNEP Programme of Work and the UNSDCF

248. The proposed LDCF project contributes directly to the following 5 outcomes under the Climate action subprogramme of UNEP’s Programme of Work for 2022-2023: 1.1 Policy/decision-making for climate action is informed by the latest science-based analysis and data generation; 1.4 Sectoral partnerships and access to technologies and solutions for decarbonization, dematerialization and resilience are enhanced; 1.5 Private and public financial flows are aligned with the goals of the Paris Agreement; 1.6 The private sector and financial markets apply sustainability and climate-friendly standards and norms as core values of the economy; and 1.7 Public support and political engagement for climate action are catalysed and linked with other agendas (for example, restoration). In addition, the project contributes to 4 outcomes under the Nature action

subprogramme (Outcomes 2.1, 2.2, 2.3 and 2.7). The project is housed under the "Adaptation and Resilience" Programme Coordination Project (PCP).

249. UNEP's comparative advantage vis-à-vis the proposed LDCF project centres around its position as the lead agency for environmental issues within the UN family, with a mandate to provide guidance for the world on environmental issues and assist with environmental best practices in the UN. As such, it is well positioned to implement this project focusing on Ecosystem-based Adaptation (EbA) approaches. UNEP is currently supporting over 45 EbA-focused projects around the world. This extensive experience means that UNEP can effectively build on a wealth of lessons learned across its portfolio of projects, and continuously improve performance in its projects to bring greater efficiency and effectiveness in implementation.

250. The project will directly contribute to the United Nations Sustainable Development Cooperation Framework (UNSDCF) in Mauritania, and specifically its Outcome 1 (under Strategic Priority 1): "By 2027, the population of Mauritania, particularly the most vulnerable and marginalized, benefits from and actively participates in a national sustainable development process that is more diversified, more resilient to economic and environmental shocks, and promotes the reduction of inequalities'. UN Resident Coordinator (UNRC) and UN Country Team (UNCT) in Mauritania will be fully informed and consulted throughout the implementation of the project. This will aim to ensure continued alignment with the UNDAF, as well as enhance synergies with the activities of other UN agencies and programs in the country.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the child Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the child project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision-making; and/or

Generating socio-economic benefits or services for women.

Yes

2) Does the child project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Child Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement.

Yes

Select what role civil society will play in the Project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier; No

Member of project steering committee or equivalent decision-making body ; Yes

Executor or co-executor;

Other (Please explain)

Private Sector

Will there be private sector engagement in the Child project?

Yes

And if so, has its role been described and justified in section B "Child project description"?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed child project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs

has been provided. This includes budget for linking with and participation in knowledge exchange activities organized through the coordination platform.

Yes

Socio-economic Benefits

We confirm that the child project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNEP	LDCF	Mauritania	Climate Change	LDCF Country allocation	Grant	18,048,624.00	1,624,376.00	19,673,000.00
Total GEF Resources ($)						**18,048,624.00**	**1,624,376.00**	**19,673,000.00**

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested? true

PPG Amount ($) 300000

PPG Agency Fee ($) 27000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG($)	Agency Fee($)	Total PPG Funding($)
UNEP	LDCF	Mauritania	Climate Change	LDCF Country allocation	300,000.00	27,000.00	327,000.00
Total PPG Amount ($)					**300,000.00**	**27,000.00**	**327,000.00**

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CCA-1-1	LDCF	14,548,624.00	18083614
CCA-1-3	LDCF	2,000,000.00	24081845
CCA-1-4	LDCF	1,500,000.00	4386581
Total Project Cost		**18,048,624.00**	**46,552,040.00**

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Donor Agency	French Development Agency (AFD)	Grant	Investment mobilized	8349765
GEF Agency	UNEP	Grant	Investment mobilized	28202275
Recipient Country Government	ANGMV	In-kind	Recurrent expenditures	3000000
Recipient Country Government	ANGMV	Grant	Investment mobilized	6000000
Recipient Country Government	ANGMV	Grant	Investment mobilized	1000000
Total Co-financing				**46,552,040.00**

Please describe the investment mobilized portion of the co-financing

Investment mobilized were identified through the Executing Agency and PPG consultations. For the most part, the actions identified are geographically complementary to those undertaken by the project, and will help scale up and perennialize actions related to climate change adaptation and EbA approaches – specifically for the AFD, whose investment is linked to restoration of the GGW in a climate-resilient fashion.

The European Union funds are geared towards improving the socio-economic opportunities of rural populations, in similar areas to the proposed project. While some of the activities are linked to restoring landscapes in a climate-resilient manner, there is also a focus on ensuring that the economic opportunities linked to natural resources are undertaken sustainably, and in consideration of climate change impacts.

More details on co-financing are included in Appendix 14.

ANNEX B: ENDORSEMENT

GEF Agency(ies) Certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
GEF Agency Coordinator	8/20/2025	Ersin Esen	41229178196	ersin.esen@un.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
Lalya Aly Kamara	Minister	Ministry of Environment and Sustainable Development	10/17/2023

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document. For the Integrated Programs' global/regional coordination child project, please include the program-wide results framework, inclusive of results specific to the coordination child project. For any country child project, please ensure that relevant program level indicators are included.

Project objective: To strengthen the climate resilience of vulnerable communities and ecosystems in five wilayas in Mauritania's Great Green Wall area through Ecosystem-based Adaptation (EbA) approaches.

Indicator: Number of beneficiaries benefiting from more climate-resilient and productive landscapes **(Core indicator 1)**

Baseline: 0

End Target: 70,215 (38,456 women)

Project Outcome / output	Outcome /output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Component 1 **Technical and institutional capacity strengthening**					

Outcome 1.1: *Improved institutional and technical knowledge and capacity of local, regional and national stakeholders (with due consideration of gender) to plan, implement and monitor Ecosystem-based Adaptation (EbA) measures to address climate risks in agrosilvopastoral systems*	Level of stakeholders' capacity to mainstream ecosystem-based adaptation (EbA) in agrosilvopastoral planning processes[1][2] Number of people trained in climate change impacts and appropriate adaptation responses (sex disaggregated) (partial **Core indicator 4)**	1[2][3] 0	Mid-Term: 2 End: 3 Mid-Term: 2,850 (1,360 women) End: 2,850 (1,360 women)	Verified through a capacity assessment scoring methodology to be validated at Baseline Survey Project reports Surveys of project beneficiaries PDCs with evident climate change adaptation mainstreaming	A: Stakeholders are sufficiently motivated and knowledgeable to participate
Component 2 **Restoration and sustainable management of ecosystems**					
Outcome 2.1: *Strengthened climate change resilience of vulnerable communities in the five wilayas through the adoption of gender-responsive EbA approaches*	# of villages that have implemented gender-responsive ecosystem restoration actions linked to climate change adaptation and EbA, with gender equal participation	0	Mid-Term: 10 End: 31	Validated PDCs Project reports and M&E Annual reporting by municipalities	A: Appropriate techniques and expertise are available, and uptake is implemented at a sufficient scale to lead to

	Area of land managed for climate resilience (ha) (partial **Core indicator 2**)	0	Mid-Term: 2,500 End: 5,500		measurable changes R: Stakeholders are not sufficiently motivated and/or supported
Component 3 **Sustainable, ecosystem-based income-generating activities**					
Outcome 3.1: *Strengthened climate-resilient livelihoods and income sources in the five wilayas through diversified, gender-responsive, climate-resilient and ecosystem-based income-generating activities (IGAs)*	# of villages with cooperatives involved in climate-resilient IGAs Area of land under new FACI managed for climate resilience (ha) (partial **Core indicator 2**) Number of direct beneficiaries with diversified and strengthened livelihoods and source of income (sex disaggregated) (**Core indicator 1.2**)	0 0 0	Mid-Term: 10 End: 31 Mid-term: 15 End: 40 Mid-Term: 600 (450 women) End: 1,200 (960 women)	Project reports Validated PDCs Workshop attendance and feedback Cooperative books and registries	A: Communities are organised and willing to investigate new options R: Lack of options or capacity for IGA possible under project duration
Component 4 **Communication, knowledge management and learning**					
Outcome 4.1: *Increased knowledge of EbA practices through the gender-*	Level[3][4] of technical stakeholders'[4][5] confidence in understanding EbA	TBC through Baseli	Mid-Term: Same as	Verified through a capacity assessmen	A: Stakeholders have shared

responsive collection and dissemination of lessons learned for scaling up results	concepts and practices	ne survey	Baseline End: TBC based on baseline survey[5][6]	t scoring methodology to be validated at Baseline Survey Project reports Surveys of project	common interests in assuring an active dialogue on CC and EbA practices R: Unequal participation from various stakeholders and initiatives
Outcome 4.2: *Enhanced awareness of climate change impacts, and institutions and support available for EbA approaches amongst local stakeholders*	Level[6][7] of indirect stakeholders'[7][8] confidence in understanding EbA approaches # of people at national, wilaya and local level reached by communication and general awareness (activities (sex disaggregated) (**Core indicator 4**)	TBC through Baseline survey 0	End: TBC based on baseline survey[8][9] - - Mid-Term: 30,000 (16,200 women) End: 50,000 (27,000 women)[9][10]	Verified through a capacity assessment scoring methodology to be validated at Baseline Survey Project reports Communication plan Social media and traditional media statistics	A: Communication plan is validated and implemented, with support from regional framework project R: Heterogeneity in Mauritanian society

[1] (out of a maximum of 4: Low capacity = 1: climate change risk is understood as an independent issue, and no or few EbA examples can be provided; Basic Capacity= 2: climate change risk is understood and can be linked to specific planning issues, and less than two EbA examples can be provided; Moderate Capacity = 3: climate change risk is understood and linked to most planning issues, with two to four EbA examples provided; Strong Capacity = 4: climate change risk is understood and linked to planning issues, with more than four EbA examples provided. Sex disaggregated

[2] Based on consultations and assessment of available SCRAPP and PDC identified during PPG phase

[3] Proposed 5-point Likert scale, where the Likert scale is (1 = very unconfident, 2 = fairly unconfident, 3 = neutral, 4 = fairly confident, and 5 = very confident. Alternatively, provided with a list of examples of activities to categorize as EbA or not – out of five examples, number or right answers define the level: 1 or less = very unconfident, 2 = unconfident, 3 = confident,

[4] Project beneficiaries should be disaggregated by sex, as well as other defining factor as community level, political leaders, youth, etc.

[5] Different beneficiary groups will have different levels; certain sites may have various levels – this will be confirmed through the Baseline survey. Either increase in Likert scale (suggested 2 points increase), or increase in % of respondents rated as confident or more (suggested 30% increase).

[6] Proposed 5-point Likert scale, where the Likert scale is (1 = very unconfident, 2 = fairly unconfident, 3 = neutral, 4 = fairly confident, and 5 = very confident. Alternatively, provided with a list of examples of activities to categorize as EbA or not – out of five examples, number or right answers define the level: 1 or less = very unconfident, 2 = unconfident, 3 = confident,

[7] Indirect stakeholders should be disaggregated by sex, as well as other defining factor as community level, political leaders, youth, etc.

[8] Different beneficiary groups will have different levels; certain sites may have various levels – this will be confirmed through the Baseline survey. Either increase in Likert scale (suggested 2 points increase), or increase in % of respondents rated as confident or more (suggested 30% increase).

[9] To be confirmed by the validated communication plan as developed during the first 6 months of project implementation.

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

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

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($)		
	Budgeted Amount	Amount Spent To date	Amount Committed
Workshops and meetings (including PPG inception and validation workshops)	26,500.00	25,371.00	1,129.00
Local travel for national consultant team	19,000.00	8,065.00	10,935.00
Capacity assessment of ANGMV	4,000.00	0.00	4,000.00
International consultant team to lead on the development of the CEO Endorsement Request documentation (includes consultant time for stakeholder consultations, information collection, specialized studies and background reports, and drafting of project documentation)	171,000.00	106,400.00	64,600.00
International and local travel for international consultant team	15,000.00	0.00	15,000.00

National consultant team to undertake stakeholder consultations, information collection, and drafting of consultation and workshops reports (includes consultant time)	64,500.00	17,443.00	47,057.00
Total	300,000.00	**157,279.00**	**142,721.00**

ANNEX E: PROJECT MAP AND COORDINATES

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

Location Name	Latitude	Longitude	GeoName ID
Achram	17.36393	-12.43633	

Location Description:

Wilaya: Tagant

Activity Description:

Area to restore:40ha; WSC/SDR; 40 ha of agroforestry; 1 FACI

Location Name	Latitude	Longitude	GeoName ID
Baghdad	17.08978	-14.03803	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 50ha; Set-aside; 40ha of agroforesty; 2 FACI

Location Name	Latitude	Longitude	GeoName ID
Bellemar	16.64978	-11.40656	

Location Description:

Wilaya: Assaba

Activity Description:

Area to restore: 40ha; WSC/SDR; 40ha of agroforestry; 1 FACI

Location Name	Latitude	Longitude	GeoName ID
Benar	17.13271	-13.53409	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 150ha; WSC/SDR; Ecopastoral reserve; 1 FACI; 50 ha identified for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Bir Ehel Breykatt	16.0802	-7.52670	

Location Description:

Wilaya: Hodh El Chargui

Activity Description:

Area to restore: 150ha; Dune fixation; Ecopastoral reserve; No existing FACI; 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Bir Legwatitt	16.10863	-7.82692	

Location Description:

Wilaya: Hodh El Chargui

Activity Description:

Area to restore: 40ha; Dune fixation; no existing FACI

Location Name	Latitude	Longitude	GeoName ID
Boumdeid	17.46354	-11.33988	

Location Description:

Wilaya: Assaba

Activity Description:

Area to restore: 200ha; Dune fixation; Ecopastoral reserve; 3 FACI; 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Brouda	17.24955	-11.72632	

Location Description:

Wilaya: Assaba

Activity Description:

Area to restore: 40ha; No existing FACI

Location Name	Latitude	Longitude	GeoName ID

Chegar	17.32997	-13.66829	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 50ha; 4 existing FACI

Location Name	Latitude	Longitude	GeoName ID
Devaa	16.45058	-10.48724	

Location Description:

Wilaya: Hodh El Gharbi

Activity Description:

Area to restore: 25ha; No existing FACI; 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Dionaba	17.10125	-12.64160	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 120ha; No existing FACI

Location Name	Latitude	Longitude	GeoName ID
Dweirara	16.48376	-9.92806	

Location Description:

Wilaya: Hodh El Gharbi

Activity Description:

Area to restore: 50ha; 1 FACI, 50 ha identified for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Elbeled Etayib	17.26423	-14.26632	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 80ha; Also known as Beleb Tayib, 1 FACI, 50 ha identified for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Elkarama	17.49747	-13.17589	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 120ha; 1 FACI, 50 ha identified for agroforestry

Location Name	Latitude	Longitude	GeoName ID
El Mabrouk	17.37441	-10.31918	

Location Description:

Wilaya: Hodh El Gharbi

Activity Description:

Area to restore: 40 ha; No FACI

Location Name	Latitude	Longitude	GeoName ID
Guimi	17.47760	-13.23032	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 50ha; 1 FACI

Location Name	Latitude	Longitude	GeoName ID
Hsey Etine	17.18164	-11.53349	

Location Description:

Wilaya: Assaba

Activity Description:

Area to restore: 80ha; No existing FACI; 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Leftah	17.63774	-11.33356	

Location Description:

Wilaya: Assaba

Activity Description:

Area to restore: 100ha; No existing FACI

Location Name	Latitude	Longitude	GeoName ID
Magtae Lahjar	17.50426	-13.10309	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 80ha; 2 existing FACI

Location Name	Latitude	Longitude	GeoName ID
Moudjeria	17.87852	-12.33315	

Location Description:

Wilaya: Tagant

Activity Description:

Area to restore: 80ha; 1 existing FACI

Location Name	Latitude	Longitude	GeoName ID
Nouamleine	17.13192	-11.51079	

Location Description:

Wilaya: Assaba

Activity Description:

Area to restore: 150ha; Dune fixation; no existing FACI; 40 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Oum Avnadiche	16.19560	-7.57393	

Location Description:

Wilaya: Hodh El Chargui

Activity Description:

Area to restore: 40ha; No existing FACI; 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Oum Echegag	16.61175	-11.33448	

Location Description:

Wilaya: Assaba

Activity Description:

Area to restore: 25ha; Also spelled Oum Acheich; 1 existing FACI

Location Name	Latitude	Longitude	GeoName ID
Sag Elmouhr	17.14904	-13.18737	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 50ha; 1 existing FACI

Location Name	Latitude	Longitude	GeoName ID
Sangrava	17.59439	-12.83026	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 200ha; 1 existing FACI

Location Name	Latitude	Longitude	GeoName ID
Siyassa	17.27824	-12.33401	

Location Description:

Wilaya: Tagant

Activity Description:

Area to restore: 25ha; 1 existing FACI, 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Souleimaniya	16.44468	-7.75013	

Location Description:

Wilaya: Hodh El Chargui

Activity Description:

Area to restore: 40ha; 1 existing FACI

Location Name	Latitude	Longitude	GeoName ID
Tamchekett	17.24891	-10.66879	

Location Description:

Wilaya: Hodh El Gharbi

Activity Description:

Area to restore: 100ha; No existing FACI; 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Tembara	17.13578	-13.37122	

Location Description:

Wilaya: Brakna

Activity Description:

Area to restore: 50ha; 1 existing FACI, 50 ha for agroforestry

Location Name	Latitude	Longitude	GeoName ID
Zraviya	16.48723	-10.73168	

Location Description:

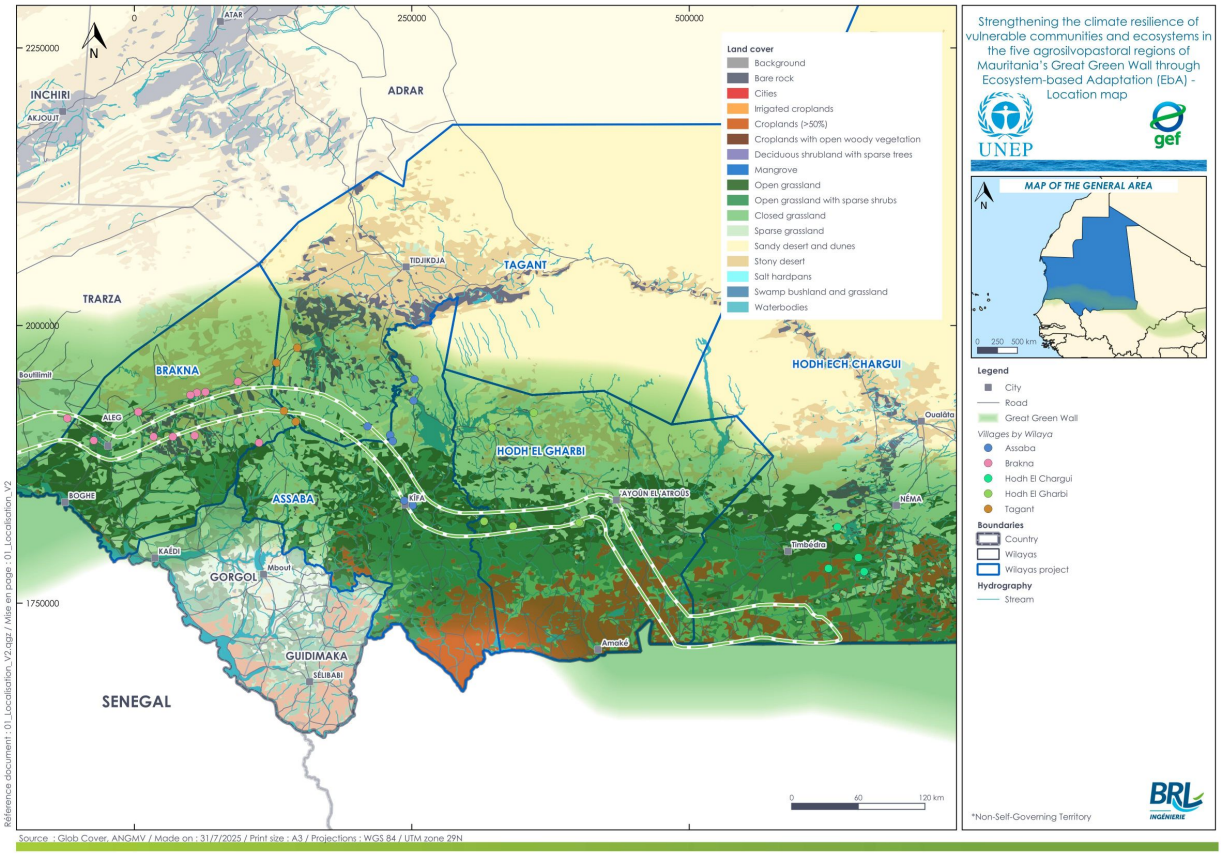
Wilaya: Hodh El Gharbi

Activity Description:

Area to restore: 30ha; 3 existing FACI, 50 ha for agroforestry

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.

Maps of the project sites by wilaya are provided in Appendix 13.



ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS DOCUMENTS INCLUDING RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title
Safeguard Risk Identification Form-29Oct2025-signed
Environmental and Social Management Framework-29Oct2025

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Expenditure Category	Detailed Description	Component (USDeq.)								Total (USDeq.)	Responsible Entity
		Component 1	*Component 2*	*Component 3*	*Component 4*		*Sub-Total*	*M&E*	*PMC*		(Executing Entity receiving funds from the GEF Agency)[1]
		Outcome 1.1	*Outcome 2.1*	*Outcome 3.1*	*Outcome 4.1*	*Outcome 4.2*					
Works	Mechanical fixation of dune Mechanical fixation of dune, either by High intensity manual labour (50% female participation minimum) or small local/CSO contract for mechanical support - includes material costs (fencing). Estimate provided from ANGMV experience.	-	4,515,000	-	-	-	4,515,000	-	-	**4,515,000**	ANGMV
	Biological fixation of dunes Biological fixation of dunes - includes labour (50% women) and small equipment (not fencing - nor plants - see C3 for nurseries)	-	580,500	-	-	-	580,500	-	-	**580,500**	ANGMV
	Seedball and drone fixation New technology planting -	-	1,240,000	-	-	-	1,240,000	-	-	**1,240,000**	ANGMV

	including drones and seedballs, for areas not directly adjacent to populated areas, allowing to improve reforestation and planting.										
	Fencing for pasture restoration Based on average cost for a 60ha parcel, with 15% contingency (to accommodate for varying sizes - 3x 50ha plots, and one 80ha). Fencing based on 6USD per linear metre, for a 1200x500m parcel	-	108,000	-	-	-	108,000	-	-	**108,000**	ANGMV
	Planting of pastures Small equipment and labour costs (50% female) - NOT PLANTS - based on plots of at least 50ha, but no bigger than 80 and for the entirety of project	-	56,000	-	-	-	56,000	-	-	**56,000**	ANGMV
	Labour costs for community water conservation labour (WSC/SDR) Average high intensity manual labour costs (min 50% female participation) for the creation of community works - includes fees for remunerating transport of local material (e.g. stones, earth). Estimate based on ANGMV experience.	-	720,000	-	-	-	720,000	-	-	**720,000**	ANGMV
	Building/repairs to water infrastructure Lumpsum per site estimated on simple repairs (deeping of wells,	-	210,000	-	-	-	210,000	-	-	**210,000**	ANGMV

	replacement of pump…)										
	Building of ecopastoral reserves Estimate based on fencing (USD 40,000 for 100ha), and realisation of works for water infrastructure (including any ESS measures that are needed.). For the latter, consideration of social safeguards may require gender, human rights and/or sexual exploitation, assault and harrassment).	-	480,000	-	-	-	480,000	-	-	**480,000**	ANGMV
Goods	Material input for rainfed agriculture Estimate for parcels of 30ha - 13,600 for fencing, 3,750 for seeds, and 1,000 for equipment	-	220,000	-	-	-	220,000	-	-	**220,000**	ANGMV
	Material to support agroforestry Based on estimate for material inputs including tools, seeds/seedlings and other agricultural inputs.	-	1,000,000	-	-	-	1,000,000	-	-	**1,000,000**	ANGMV
	Material for supporting maintenance of ecopastoral reserves Annual lumpsum to attend to contingencies with setting up of reserves - maintenance of fence or water infrastructure, plant/seedlings, etc.	-	100,000	-	-	-	100,000	-	-	**100,000**	ANGMV
	Plant material for nurseries Material inputs for nurseries at the FACI -	-	-	375,000	-	-	375,000	-	-	**375,000**	ANGMV

	includes seeds, potting soil, pots/sleeves, small material…										
Vehicles	Motorcycle One motorcycle for each wilaya to facility travel for the regional technical officers, in order to ensure consistent support and presence at the sites	8,333	8,333	8,333	-	-	25,000	-	-	**25,000**	ANGMV
Grants/ Sub-grants	Small FACI - new Grant to cover setting up costs for FACI - fencing, water infrastructure, small mateials and tools. Based on the participatory plans for each new FACI.	-	-	540,000	-	-	540,000	-	-	**540,000**	ANGMV
	Support for existing FACI Grant to cover material improvements for established FACI - can include reparations, new equipment or infrastructure (e.g. water or building),	-	-	645,000	-	-	645,000	-	-	**645,000**	ANGMV
	2 year research grant Grant for a masters level student at Mauritanian research institution or university - grant to cover costs related to field work (incl. Travel, subsistence), but will not cover enrolment fees. One of the projects should focus on gender, with gender considerations within the others.	-	-	-	75,000	-	75,000	-	-	**75,000**	ANGMV
Revolving funds/ Seed	MFI credit line Funds to feed into the credit line for MFI -	-	-	360,000	-	-	360,000	-	-	**360,000**	ANGMV

funds / Equity	based on previous data, and assuming to allow 600 loans of 600 USD. (1 year repayment)										
Sub-contract to executing partner/ entity	EbA knowledge and capacity training workshop development and animation Full contractual cost, incl. travel and per diems for consultants during animation. Tasks will include developing workshops (using information from the assessment in Activity 1.1.1.1 for Y1, and updating based on feedback and project results for Y5), and animating all related workshops based on these workplans, during year 1 and year 5. It does not include workshop logistics (e.g. rental, restauration, perdiems) which are included under separate budget lines. Gender consideration (in assessment and workshop preparation) to be included in contract.	60,000	-	-	-	-	60,000	-	-	**60,000**	ANGMV
	PDC development and validation contract Full contractual costs - includes the consultant fees (incl. planning expertise, gender expertise and EbA expertise), organisation of	200,000	-	-	-	-	200,000	-	-	**200,000**	ANGMV

	travel, organisation of workshops. Workshops, at a minimum, must include inception workshop at wilaya level, community level consultations (dependent on number communities/population - but at least 5 meetings per wilaya), and a restitution workshop in each wilaya. Only RTO and technical support DSA are not included. Gender consideration - both in consultation engagement as well as cross-cutting thematic - included in the contract ToR.										
	Participatory assessment of sites for EbA approaches Includes both costs for partner (travel, fees, material) as well as organisation of conusltations (meetings, community DSA, etc). Gender considerations - workshop logistics and content - to be included in ToR.	-	51,000	-	-	-	51,000	-	-	**51,000**	ANGMV
	Labour costs for fallow/pasture Annual cost for 2 people per site to esnure the integrity of fencing and follow up of pasture health	-	104,000	-	-	-	104,000	-	-	**104,000**	ANGMV
	Community level technical skills training - initial Fees and travel, as well as community workshop organisation costs (based on 20 3-day	-	55,000	27,500	-	-	82,500	-	-	**82,500**	ANGMV

	workshops, 10 days prep). Gender considerations - workshop logistics and content - to be included in ToR.										
	Community level technical skills training - followup Fees and travel for facilitators of land restoration, WCS and agroforestry, follow up sessions. Length and time of visits as well as number of sites visited will be agreed by RO and the implementing partner, based on beneficiary feedback. Gender considerations - workshop logistics and content - to be included in ToR.	-	108,000	54,000	-	-	162,000	-	-	**162,000**	ANGMV
	CBO/MSME support for MFI loans Full contractual cost for hiring of one or more NGO to assist the CBO/MSME taking out loans with the partner MFI. Includes staff costs, field costs to visit beneficiaries, any training material or associated costs. The exact geographic scope to cover to be determined during implementation based on MFI and Enabel capacity.	-	-	320,000	-	-	320,000	-	-	**320,000**	ANGMV
	Non-technical training identification and training for CBOs Full contractual costs, including	-	-	76,000	-	-	76,000	-	-	**76,000**	ANGMV

	travel for consultants and organisation of workshops; at PPG phase, this has been assumed to include 40,000 USD of staff costs, with the rest of the contract being for materials and organization of workshop over the course of 4 years (30 people per workship, 5 wilaysas, at least twice a year). Gender expertise to be included within the contract, both for workshop organisation as well as themes/skills to be broached.										
	Microfinance oversight and management Contract to permit executing partner (Enabel) to oversee and manage output 3.1.4 - including management of FOREMI, negotiation and identification of training needs at MFI, as well as technical assistance to the MFI (estimated at 45,000 USD, training included), managing of partner NGO (see CBO/MSME support for MFI loan enveloppe)	-	-	500,000	-	-	500,000	-	-	**500,000**	ANGMV
	Feasibility studies for FACI, incluiding ESS Full contractual costs for FACI site assessment and animation of participatory planning, as well as conducting baseline ESS	-	-	79,149	-	-	79,149	-	-	**79,149**	ANGMV

	screening for small infrastructure (such as irrigation or construction of storage rooms). Full contractual cost (estimated 100 field days and 20 preparation/restitution days) for 50 sites. Gender and human rights expertise required under contract, in order to underake consultations and identify social risks.										
Contractual Services – Individual	EbA knowledge and capacity assessment Full contractual cost, incl. travel for consultant / to be completed within first 6 months of project implementation. Gender expertise to be included in contract in order to identify the extent of gender mainstreaming and inclusion of women's needs.	25,000	-	-	-	-	25,000	-	-	**25,000**	ANGMV
Contractual Services – Company	Technical and social feasibility of ecopastoral reserves Full contractual cost to identify sites for ecopastorla reserves, including hydrological studies and social engagement (as per national and UNEP ESS requirements). Gender and human rights expertise to be included under contract.	-	100,000	-	-	-	100,000	-	-	**100,000**	ANGMV

	Strategy and AP for the roundtables Tasks include stakeholder analysis, identification of topis, development of materials and faciliation of roundtables - over the course of 4.5 years. Gender expertise to be included in ToR for integration of woman participation but also gender mainstreaming.	-	-	-	80,000	-	80,000	-	-	**80,000**	ANGMV
	ANGMV Strategy development and validation Full contractual cost, including fees for consultants (incl. Gender expertise, consultations, workshop animation), costs linked to workshop / meeting sessions.	50,000	-	-	-	-	50,000	-	-	**50,000**	ANGMV
	Awareness campaign contracts Funds available to allocate to individual companies to undertake specific awareness campaigns, based on ToR designed by PMU and Communication consultant, and described in the Communication Plan. Gender expertise/mainstreaming to be highlighted in each contract, with at least one provider	-	-	-	-	180,000	180,000	-	-	**180,000**	ANGMV
	Site pannelling Funds for design and production site identification	-	-	-	-	25,000	25,000	-	-	**25,000**	ANGMV

	display, according to project requirements										
	Communication tools - graphic designers, translators, etc. Funds allocated to contracts facilitating communication - including translations, illustrations, audio-visual, etc.	-	-	-	-	75,000	75,000	-	-	**75,000**	ANGMV
	Annual project audit Annual audit to be preformed by locally accredited company	-	-	-	-	-	-	-	50,000	**50,000**	ANGMV
	Baseline study Baseline study to be completed in first 6 montsh of project to update projcet baseline for M&E ; budget inclusive of fees, travel and perdiems	-	-	-	-	-	-	45,000	-	**45,000**	ANGMV
	External project evaluation Budget for MTR and TR - includes all costs associated to company (fees, travel, DSA).	-	-	-	-	-	-	100,000	-	**100,000**	ANGMV
	Results verification contract As part of external evaluations administered by UNEP - provisioned to be undertaken 4-6 months before Mid-term Evaluation and 4-6 months before Terminal Evaluation. Includes fees, travel and DSA.	-	-	-	-	-	-	80,000	-	**80,000**	ANGMV
International Consultants	IGA assessment Full contractual cost, including travel and fees for consultants, and organisation of consultation meetings and field work.	-	-	65,000	-	-	65,000	-	-	**65,000**	ANGMV

	Gender expertise to be included within the ToR.										
	Part-time Chief Technical Advisor Chief Technical Advisor to assist the PMU in product implementation, focusing on the overall project management and compliance to GEF and UNEP standards, as well as providing complementary technical input to PC. Only fees; in country visits under Travel budget.	59,400	59,400	59,400	29,700	29,700	237,600	-	-	**237,600**	ANGMV
Local Consultants	Ecosystem restoration expert Technical supervision for all landscape restoration activities under Component 2; based in Nouakchott, and does not include travel or DSA. (DSA level is Coordinator/Expert)	-	138,000	-	-	-	138,000	-	-	**138,000**	ANGMV
	Agronomy / rural development expert Technical supervisor for all activities under Component 3; based in Nouakchott - does not include DSA or travel fees. (DSA level is Coordinator/Expert)	-	-	138,000	-	-	138,000	-	-	**138,000**	ANGMV
	Communication specialist Communication specialist to help develop and implement the project communication plan, as well as support the	-	-	-	79,800	46,200	126,000	-	-	**126,000**	ANGMV

	development of knowledge products under output 4.1. (DSA level is national Coordinator/Expert)										
	EbA monitoring protocol expert Local consultant to pilot activity 4.1.1; tasks will include consultation with ANGMV and MEDD staff, development of protocol, and animation of workshops and training on said protocol.	-	-	-	25,000	-	25,000	-	-	**25,000**	ANGMV
	Technical and non-technical knowledge product editing Lumpsum to be allocated to local consultants to develop knowledge products, as identified by the Communication specialist and PMU.	-	-	-	74,000	-	74,000	-	-	**74,000**	ANGMV
Salary and benefits / Staff costs	Project Coordinator Project Coordinator based in Nouakchott; gross salary. (DSA level is Coordinator/Expert)	12,825	12,825	12,825	6,413	6,413	51,300	-	118,800	**170,100**	ANGMV
	Finance & Admin officer FAO based in Nouakchott; gross salary	-	-	-	-	-	-	-	144,900	**144,900**	ANGMV
	Gender and safeguards specialist Position based in Nouakchott at the PMU; covers gross salary. (DSA level is Coordinator/Expert)	29,150	22,550	20,350	11,275	9,075	92,400	-	39,600	**132,000**	ANGMV
	Drivers Driver for the Regional Offices (DSA technical/driver level)	12,375	12,375	12,375	6,188	6,188	49,500	4,500	-	**54,000**	ANGMV

	Monitoring and Reporting specialist Full time position, based in Nouakchott at the PMU. (DSA level is national Coordinator/Expert)	-	-	-	-	-	-	120,000	-	**120,000**	ANGMV
	GIS specialist Position to support in mapping needs of project and overall tracking of Great Green Wall activities (restoration)	11,500	11,500	11,500	5,750	5,750	46,000	60,000	-	**106,000**	ANGMV
	Regional Technical Officer 5 positions - one in each wilaya; covers gross salary (DSA technical/driver level)	91,667	91,667	91,667	-	-	275,000	-	55,000	**330,000**	ANGMV
	Administrative assistant Full time position, based in Nouakchott at the PMU. Position to ensure that the coordination and administrative burden is managed appropriately.	-	-	-	-	-	-	-	60,000	**60,000**	ANGMV
Trainings, Workshops, Meetings	EbA governance capacity building workshop - national 3 day workshop for training on EbA planning, implementation and monitoring in Nouakchott, for 50 participants - one for Y1 and one in the closing phase of the project (number of days can be distributed as needed)	25,000	-	-	-	-	25,000	-	-	**25,000**	ANGMV
	EbA governance capacity building workshop - technical in wilaya 3 day workshop for training on EbA planning,	60,000	-	-	-	-	60,000	-	-	**60,000**	ANGMV

	implementation and monitoring in either of the RO, for 50 participants - one for Y1 and one in the closing phase of the project (number of days can be distributed as needed)										
	EbA governance capacity building workshop - local governance (municipalities) 3 day workshop for training on EbA planning, implementation and monitoring in either of the ROs, for 50 participants - one for Y1 and one in the closing phase of the project (number of days can be distributed as needed)	60,000	-	-	-	-	60,000	-	-	**60,000**	ANGMV
	Local EbA governance capacity building workships 2 day workshop for training on EbA planning, implementation and monitoring in - approx. 74 participants per workshop (one per municipality) - once in Y1 once towards end of project Budget accounts for costs for participants (DSA, equipment and food), but not for the consultants leading workshops (under their contract -- "EbA knowledge..." under Contract to Executing PArtner)	250,000	-	-	-	-	250,000	-	-	**250,000**	ANGMV
	National validation or planning	60,000	-	-	20,000	20,000	100,000	-	-	**100,000**	ANGMV

	workshops 1 to 2 day workshops, in Nouakchott - includes rental of space, refreshments and DSA for participants. Up to 40 people.										
	EbA community meetings - management and follow-up For 20 participants, 2 days. Incl. materials, refreshment and DSA for participants.	-	123,500	-	-	-	123,500	-	-	**123,500**	ANGMV
	EbA monitoring protocols capacity building workshops 3 day workshop in Nouakchott, for development and training in EbA monitoring protocols - up to 30 people to be convened; includes material, space and DSA (if required - mostly Nouakchott based participants)	-	-	-	20,000	-	20,000	-	-	**20,000**	ANGMV
	Roundtable For 25 participants, 1 days, incl. Communtication material (before and during), refreshment, and DSA for participants (only national participants)	-	-	-	96,000	-	96,000	-	-	**96,000**	ANGMV
	Biannual Steering Committee Meeting Steering committee meeting costs - travel, DSA and meeting necessities	-	-	-	-	-	-	-	75,000	**75,000**	ANGMV
Travel	DSA for technicians/drivers Daily rate set by national legislation; for	70,667	90,667	70,667	-	-	232,000	56,000	-	**288,000**	ANGMV

	drivers and technical officers.										
	DSA for regional ANGMV and ministry staff DSA for ANGMV technical officers or regional ministry representatives, assisting in project implementation	-	105,000	40,000	-	-	145,000	50,000	-	**195,000**	ANGMV
	Exchange visit participants (travel+dsa) Average cost for a 5 day exchange - includes travel and DSA per participant.	-	24,000	-	-	-	24,000	-	-	**24,000**	ANGMV
	DSA for national ANGMV staff Technical personnel and M&E from ANGMV	1,667	1,667	1,667	-	-	5,000	7,500	-	**12,500**	ANGMV
	DSA for ANGMV Director General DG from ANGMV - international DSA double the national rate.	3,875	3,875	3,875	-	-	11,625	-	-	**11,625**	ANGMV
	International meeting / workshop Average based on roundtrip economy ticket + 10 days perdiem of Coordinator	-	-	-	200,000	-	200,000	-	-	**200,000**	ANGMV
	Travel contingency for local consultants, contractors, etc. Contingency to deal with issues linked to large geographical scope of the project and concurrent activities	-	-	-	-	-	-	-	30,000	**30,000**	ANGMV
	DSA for Project Coordinator and experts (PMU), Regional Office Managers Daily rate set by national legislation; for project coordinator, regional office	12,000	12,000	12,000	-	-	36,000	33,750	-	**69,750**	ANGMV

	managers, gender and safeguards expert and monitoring and learning expert.										
	CTA annual visits Round trip CTA visit, including PMU and RO	9,375	9,375	9,375	4,688	4,688	37,500	-	-	**37,500**	ANGMV
	Rental costs for cars to facilitate delivery of material, ME visits, and other field requirements Envelope to facilitate vehicle rental to ensure that project activities are not hindered by travel / accessibility barriers. ANGMV vehicle fleet will be used in priority, but in case of clashes with other programs/projects, this envelope will allow to rent vehicles (short or medium term, as required).	15,875	15,875	15,875	7,938	7,938	63,500	-	-	**63,500**	ANGMV
	Fuel costs for 4x4 Fuel costs based on 2000 USD per vehicle per month + contingency	60,000	60,000	60,000	30,000	30,000	240,000	-	-	**240,000**	ANGMV
	Fuel costs for motorcycles Based on 400 USD per month per motorcycle + contingency	40,000	40,000	40,000	-	-	120,000	-	-	**120,000**	ANGMV
Office Supplies	Software licensing Purchase /renewal of software during project duration for all staff	-	-	-	-	-	-	-	15,000	**15,000**	ANGMV
	Office material - furniture and IT equipment Purchase and maintenance of office materials during the course of the 5 years	-	-	-	-	-	-	-	45,000	**45,000**	ANGMV

Other Operating Costs	Printing and communication budget Funds to be allocated for printing (materials and service), AV fees or licensing, etc.	-	-	-	-	50,000	50,000	-	-	**50,000**	ANGMV
	4x4 upkeep Includes servicing, licensing and maintenance for ANGMV vehicles which are used for the project.	-	-	-	-	-	-	-	62,500	**62,500**	ANGMV
	Motorcycle upkeep Includes servicing and licensing for new vehicles, as well as maintenance for previously purchased vehicles used for project	-	-	-	-	-	-	-	50,000	**50,000**	ANGMV
	PMU running costs (stationary, phone credit, etc.) Funds for communication (phone and internet), stationary and other office consumables for the PMU (5 staff + 3 long-term consultants)	-	-	-	-	-	-	-	50,000	**50,000**	ANGMV
	RO running costs (stationary, phone credit, etc.) Funds for communication (phone and internet), stationary and other office consumables for the ROs (3-4 people - technical officers and drivers)	-	-	-	-	-	-	-	60,000	**60,000**	ANGMV
Grand Total		**1,228,708**	**10,490,108**	**3,649,557**	**771,750**	**495,950**	**16,636,074**	**556,750**	**855,800**	**18,048,624**	

Please explain any aspects of the budget as needed here

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

STAP Comments	Responses	Reference
Given the Sahel's vulnerability to climate change, economic instability, conflict, population growth, and possibly other key drivers, STAP highly recommends that each country project to develop simple future narratives that describe interactions between the key drivers and uncertainties, as well as response measures that ensure the proposed interventions are necessary and sufficient to achieve the proposed GEBs and climate adaptation benefits. This process is rooted in applying resilience thinking through project interventions to ensure they are robust to different plausible futures. STAP recommends its advice on future narratives as well as the World Bank's resilience methodology.	The comment is well noted. Simple futures narratives based on the guidance provided by the STAP in the Exploratory Futures Narrative Primer is provided, looking at the interaction of the key drivers and the two main uncertainties that are independent from project implementation to ascertain the robustness of the preferred solution: climate change and regional insecurity.	Paragraphs 60-69
The PFD lists several ongoing and past initiatives as part of the baseline. In each of the individual projects, STAP recommends that the appropriate links be made, demonstrating how learning will be leveraged between this project and ongoing, or past, initiatives.	Lessons learnt are integrated within the project: - *The importance of considering water input for success of landscape restoration* – specific budgets have been allocated for water infrastructure under outputs 2.1.3, 3.1.2 and 2.1.4, with hydrological studies for the latter considering the scale of the investment (100ha ecopastoral reserves) - *The continuous involvement of populations in development and implementation of solutions* – this was brought up as a critique of ANGMV interventions by numerous communities, and as such, integrated as a specific barrier. As a response, the project intervention strategy leans heavily on participatory assessments, follow up consultations, and a grants program which will help ensure a bottom-up approach and full ownership.	Current initiatives – paragraphs 215 to 219; Appendix 14

STAP Comments	Responses	Reference
	In terms of integration with ongoing projects, the section on coordination with current projects is completed in the CEO ER, as well as a complementarity table in Appendix 14.	
For each individual project, it is necessary for the theory of change to identify assumptions tied to each outcome, and which will be verified and tracked to ensure the GEBs and adaptation outcomes are realized. There are multiple assumptions made, including on farmers and communities changing mindsets to adopt new sustainable land management, or ecosystem-based management practices, which will need to be confirmed and monitored, potentially leading to adaptive management of the proposed interventions. This learning should be reflected in the overall Program's theory of change and knowledge management, as innovation and scaling are dependent on learning. STAP also recommends strengthening the narrative describing the theory of change, as this is currently weak. STAP's theory of change primer is a useful resource for project developers to use.	The comment and recommendation are well noted. A narrative has been provided that grounds the thinking behind the theory of change. Assumptions as well as risks have been identified for the theory of change. These are included in the theory of change for project but also the results framework.	Paragraphs 91-95
STAP encourages the project proponents to develop a separate theory of change on scaling. This process will provide close attention to changes and innovation in policies and governance arrangements (tied to component 1 and 2), changes in cultural norms and values (component 2 and 3), and other powerful levers for scaling and transformation. Furthermore, STAP encourages the adoption of steps similar to those in a policy cycle, outlined in STAP's policy coherence paper. These steps help with a policy analysis process (component 1), which can contribute to identifying coherence and incoherence between policies supporting climate resilience, sustainable land management and biodiversity conservation. For component 2 and 3, close monitoring of changes in land management practices and cultural values and norms, will be necessary. While STAP embraces innovative financing mechanisms, such as Payment for Ecosystem Services (PES), as incentives to adopt and scale a naturepositive practice, STAP recommends validating (test, monitor,	The project includes an upscaling and sustainability strategy under Section B of the CEO ER.	Paragraphs 187 to 192

STAP Comments	Responses	Reference
and learn for scaling purposes) key assumptions affiliated with PES adoption and GEB and climate adaptation impacts.		
To design and implement component 4, focused on the regional integrated knowledge management platform (IKMP), STAP recommends collaborating and coordinating with existing Pan-African openaccess platforms, such as Digital Earth Africa. A successful transformative approach goes beyond technological and financial innovation. This effort also requires partnerships of knowledge with local stakeholders such as African Universities of the Sahel. Scaling up, resilience and sustainability of outcomes could be further enhanced through partnerships with organisations such as the African Research Universities Alliance (ARUA). STAP agrees with the recommendations of a 2022 Danish report on The Great Green Wall: An Overview and Lessons Learnt that emphasizes "… Collaboration with national-level organisations that understand contextualised livelihood vulnerabilities is also recommended; …. promote improved coordination of activities and consistent monitoring across partner countries and subprojects; …More qualitative analyses of project site contexts should also be included among monitoring tools". STAP recommends that the proponent consult its 2022 document titled 'Understanding South–South Cooperation for Knowledge Exchange" and the recent paper of Goffner et al (2019), "The Great Green Wall for the Sahara and the Sahel Initiative", as sources for understanding how to create knowledge management and adaptive learning systems that enhance resilience in the Sahelian landscapes and livelihoods	The child project focuses on site-specific analysis prior to the rolling out of solutions (under Components 2 and 3), as well as fostering the networking of in-country organisations under outcome 4.1, which includes the development of data gathering protocols for EbA approaches in the GGW (activity 4.1.1.1), the funding of national research on project initiatives (e.g. eco-pastoral reserves, IGA grant schemes and FACI) (activity 4.1.1.2), and the development of roundtables which seek to improve the cooperation and collaboration of technical partners – incl. research, private sector - in Mauritania (Activity 4.1.1.3). In terms of knowledge sharing, the project will rely on regional projects – namely the tools provided by the GEF regional program, but also the GCF-funded SURAGGWA and GREENFIN I, as well as funding the participation of project staff to regional knowledge sharing events/exchanges (activity 4.1.1.4).	Paragraphs 173-178
STAP agrees the Program has substantial potential to generate socioeconomic co-benefits. Several of these benefits will be deemed as pre-requisites for achieving GEBs (e.g., improved food security through improved soil fertility as a result of improved sustainable land management) and climate adaptation benefits (e.g., increased resilience to climate change via mixed income sources that reduce	As an LDCF project, the identification of co-benefits is at the heart of the project, and recognized as such in the project document. In particular, at a local scale, the project looks to better involve the most vulnerable communities – and most numerically important – women and youth, into the decision making processes and economic opportunity. Due to the demographic profiling of the GGW in Mauritania, local co-benefits	Figures 7 and 8 Project description

STAP Comments	Responses	Reference
economic risks). STAP recommends thinking of potential co-benefits (both prerequisite and non-prerequisite) when designing the projects and their logic chains. STAP's advice on co-benefits can be a useful resource for the Program.	are critical to the realization of the overall global environment benefits – namely sustainably restoring and managing land. This is seen throughout the project activity description, as well as depicted in the solution tree (Figure 7).	