Part I: Project Information

GEF ID
11000

Project Type
FSP

Type of Trust Fund
LDCF

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Great Green Wall Climate Change Adaptation Regional Support Project

Countries
Regional, Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Senegal, Sudan

Agency(ies)
IFAD

Other Executing Partner(s)
IFAD, Observatoire du Sahara et du Sahel (OSS)

Executing Partner Type
GEF Agency

GEF Focal Area
Climate Change

Sector
AFOLU

Taxonomy

Focal Areas, Stakeholders, Climate Change, Climate Change Adaptation, Innovation, Least Developed Countries, Climate finance, Community-based adaptation, Climate resilience, Influencing models, Demonstrate innovative approache, Convene multi-stakeholder alliances, Civil Society, Academia, Community Based Organization, Non-Governmental Organization, Communications, Awareness Raising, Type of Engagement, Information Dissemination, Consultation, Private Sector, Individuals/Entrepreneurs, Beneficiaries, Local Communities, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Women groups, Gender results areas, Knowledge Generation and Exchange, Capacity, Knowledge and Research, Knowledge Exchange, Knowledge Generation, Capacity Development

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

Principal Objective 2

Biodiversity

Land Degradation

Submission Date

6/23/2023

Expected Implementation Start

1/1/2024

Expected Completion Date

12/31/2029

Duration

72In Months

Agency Fee($)

848,580.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CCA-1	Objective 1: Reduce Vulnerability and Increase Resilience through Innovation and Technology Transfer for Climate Change Adaptation.	LDCF	8,932,420.00	29,878,600.00
		Total Project Cost($)	**8,932,420.00**	**29,878,600.00**

B. Project description summary

Project Objective

To improve access to best practices, foster innovation and digital transformation and facilitate cross-learning across Great Green Wall countries for enhanced sustainability and resilience to climate change impacts.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 1.Knowledge management, coordination & project M&E	Technical Assistance	1.1 An enhanced network of knowledge management, knowledge sharing and coordination on climate change adaptation in GGW countries *Indicators & targets* (i) Collaborative KM approach adopted by GGW countries (ii) Collaborative KM platform is being used. (iii) Number of GGW national strategies updated on the basis of knowledge produced. 1.2 Project M&E contributes to efficient decision-making and adaptive management.	1.1.1 Climate adaptation and resilience knowledge products on lessons learned, best practices, innovations, and policy recommendations from adaptation projects systematically assessed and documented, shared, summarized and integrated in a dashboard 1.1.2 Capacity building on communication skills and knowledge management for field agents, academics, and scientists 1.1.3 Peer-based knowledge exchanges on climate adaptation among the GGW countries, etc. 1.1.4 Coordination improved on NDC/NAP programming and	LDCF	2,157,067.00	9,578,600.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
		Indicator & targets: (i) Operational M&E system established	implementation of adaptation actions at country level (for GEF-8 LDCF projects, GCF and other relevant projects) 1.2.1 An efficient M&E system designed to evaluate project progress, including the three project components. 1.2.2 Annual reports on project progress 1.2.3 Development of an exit scaling strategy to sustain the scaling of innovative adaptation and resilience measures in the GGW countries and national environmental and development strategies			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 2. Identification of innovative practices and digital transformation pathways	Technical Assistance	2.1 Identified climate adaptation innovation in digital transformation technologies in GGW countries. *Indicators and targets*: (i) Informative database on climate adaptation innovative practices & digital technologies established.	2.1.1 Stock-taking and promotion of digital transformation technologies for adaptation 2.1.2 Stock taking of and promotion of social innovation for adaptation. 2.1.3 Stock taking of and promotion of financial innovation and value chains for adaptation. 2.1.4 Identify new gender-responsive opportunities for investing in climate adaptation innovations in the GGW.	LDCF	1,431,000.00	4,000,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 3. Innovation grants and capacity building	Investment	3.1 Climate adaptation innovations grants, and capacity building provided in GGW countries. *Indicators & targets:* (i)17,000 ha of land with improved climate adaptation and resilience measures (ii) 50,000 male and 50,000 female beneficiaries with enhanced capacity to adopt and implement adaptation innovations and resilience measures.	3.1.1 Small grants provided for climate adaptation and resilience measures through sustainable natural resources management and climate smart agriculture. 3.1.2 Monitoring and evaluation system for the small grants established.	LDCF	4,919,000.00	15,000,000.00
			Sub Total ($)		**8,507,067.00**	**28,578,600.00**
Project Management Cost (PMC)						
	LDCF		425,353.00		1,300,000.00	

Project Management Cost (PMC)		
Sub Total($)	**425,353.00**	**1,300,000.00**
Total Project Cost($)	**8,932,420.00**	**29,878,600.00**

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	IFAD	Grant	Investment mobilized	14,878,600.00
GEF Agency	IFAD	Loans	Investment mobilized	15,000,000.00
			Total Co-Financing($)	**29,878,600.00**

Describe how any "Investment Mobilized" was identified

Based on project preparation grant (PPG) consultations with project teams and institutional partners, the following sources were identified as investment mobilized: IFAD: GCF funded ?Inclusive Green Financing Initiative? (IGREENFIN, 2023-2029): (i) Grants ($14,878,600) from IGREEFIN Component 3 GGW regional support program; (ii) a selection of IGREEFIN Component 1 and Component 2 loan activities ($15,000,000).

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
IFAD	LDCF	Regional	Climate Change	NA	8,932,420	848,580	9,781,000.00
			Total Grant Resources($)		**8,932,420.00**	**848,580.00**	**9,781,000.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

200,000

PPG Agency Fee ($)

19,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
IFAD	LDCF	Regional	Climate Change	NA	200,000	19,000	**219,000.00**
			Total Project Costs($)		**200,000.00**	**19,000.00**	**219,000.00**

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. true

This Project will provide direct adaptation benefits to the private sector. true

This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs). true

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This Project has an urban focus. false

This Project covers the following sector(s)[the total should be 100%]:*

Agriculture	**40.00%**
Natural resources management	**30.00%**
Climate information services	**30.00%**
Coastal zone management	**0.00%**
Water resources management	**0.00%**
Disaster risk management	**0.00%**
Other infrastructure	**0.00%**
Health	**0.00%**
Other (Please specify:)	**0.00%**
Total	**100%**

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

Sea level rise false

Change in mean temperature false

Increased climatic variability true

Natural hazards false

Land degradation true

Coastal and/or Coral reef degradation false

Groundwater quality/quantity false

Core Indicators - LDCF

CORE INDICATOR 1

Total

Male

Female

% for Women

Total number of direct beneficiaries

100,000

50,000

50,000

50.00%

CORE INDICATOR 2

Area of land managed for climate resilience (ha)

0.00

CORE INDICATOR 3

Total no. of policies/plans that will mainstream climate resilience

0

CORE INDICATOR 4

Male

Female

% for Women

Total number of people trained

3,000

1,500

1,500

50.00%

To calculate the core indicators, please refer to Results Guidance

OBJECTIVE 1

Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaption

OUTCOME 1.1

Technologies and innovative solutions piloted or deployed to reduce climate-related risks and / or enhance resilience

View

OUTCOME 1.2

Innovative financial instruments and investment models enabled or introduced to enhance climate resilience

View

OBJECTIVE 2

Mainstream climate change adaption and resilience for systemic impact

OUTCOME 2.1

Strengthened cross-sectoral mechanisms to mainstream climate adaption and resilience

View

OUTCOME 2.2

Adaptation considerations mainstreamed into investments

View

OUTCOME 2.3

Institutional and human capacities strengthened to identify and implement adaptation measures

View

OBJECTIVE 3

Foster enabling conditions for effective and integrated climate change adaption

OUTCOME 3.1

Climate-resilient planning enabled by stronger climate information decision-support services, and other relevant analysis, as a support to NAP process and/or for enabling activities in response to COP guidance

View

OUTCOME 3.2

Increased ability of country to access and/or manage climate finance or other relevant, largescale, pragmatic investment, as a support to NAP process and/or for enabling activities in response to COP guidance

View

OUTCOME 3.3

Institutional and human capacities strengthened to identify and implement adaptation measures as a support to NAP process and/or for enabling activities in response to COP guidance

View

Part II. Project Justification

1a. Project Description

describe any changes in alignment with the project design with the original pif

Few changes were made between the PIF and the CER, concerning the project structure, as discussed and recommended during the stakeholders consultations workshop:

Changes from the PIF to the CER	
#1 An additional outcome was created on the M&E of the overall project under Component 1, which includes three outputs.	1.2 Project M&E contributes to efficient decision-making and adaptive management. 1.2.1 An efficient M&E system designed to evaluate project progress, including the three project components. 1.2.2 Annual reports on project progress 1.2.3 Development of an exit scaling strategy to sustain the scaling of innovative adaptation and resilience measures in the GGW countries and national environmental and development strategies
#2 The stocktaking output has been split in three outputs, as discussed during the stakeholders consultations workshop, as proposed by the participants to ensure all categories are covered.	2.1.1 Stock-taking and promotion of digital transformation technologies for adaptation 2.1.2 Stock taking of and promotion of social innovation for adaptation. 2.1.3 Stock taking of and promotion of financial innovation and value chains for

#3 Project M&E is now part of Component 1 and has been removed from Component 3. The M&E output was for the whole project is now for the component 3 on small grants.	3.1.2 Monitoring and evaluation system for the small grants established.

PROJECT DESCRIPTION

1) Adaptation problem, root causes and barriers that need to be addressed

1. The GEF LDCF programme supporting the Great Green Wall will be implemented hand in hand with the GCF GGW RSP led by IFAD. This will ensure that the GEF network (projects, OFP, experts) are fully involved in the GCF GGW RSP, and that the depth of GEF knowledge, lessons learned, best practices and policy recommendations are promoted and used to inform the climate adaptation investments in GGW, including those under GEF-8/LDCF. This complementary GGW programme funded by GEF will be efficient, as it will use the platform, community of practices established, and events organized by the GCF GGW RSP. Moreover, it will contribute to concretely implement the GEF-GCF long-term vision on complementarity through coordination and joint implementation. All proposed activities are aligned with the objectives of the Long-Term Vision on Complementarity, Coherence, and Collaboration between the GEF and GCF, (1) Coordinated support for major initiative and programming, (2) Sharing information, lessons learned and knowledge and (3) Communication and Outreach.

2. The eleven countries[1]1 of the Great Green Wall (GGW)[2]2, are among the world's poorest and most vulnerable countries to climate change[3]3. They ranked at the bottom of the Human Development Index in 2020[4]4 and a large majority of their population lacks access to employment, basic healthcare and education and natural resources, which contributes to food insecurity, youth migration and conflict[5]5. Agriculture, livestock, and forestry activities are the foundations of their economies and more than 70 per cent of rural communities depend directly on rainfed agriculture (crops, livestock, fishery and forestry)[6]6. The agricultural sector is extremely vulnerable to climate change and climate variability due to these countries? geographical location and their socioeconomic and technological characteristics. Over recent decades, climate change has increased the frequency, intensity and duration of droughts and floods, temperatures, desertification, water stress and soil erosion, all of which reduce agricultural productivity and food security. Shocks from climate change and adverse weather conditions

? resulting in the loss of assets, crops and livestock, disruptions in value chains and soaring food prices ? and COVID-19 are pushing millions of smallholder farmers further into poverty.

3. Climate projections indicate that precipitation levels will continue to decrease, while temperatures are expected to increase between 1 and 1.72?C for the 2031-2050 period compared to the 1986-2005 reference period in the Sahelian countries. According to these projections, agricultural production is expected to drop by at least 20 per cent in the region, which will reduce food availability and farmers' incomes and fuel competition over diminishing natural capital, greater instability, and migration, especially of rural youth. The climate models produced using the IFAD Climate Adaptation in Rural Development Assessment Tool indicated that the production of the main crops in the targeted countries will be severely affected by future climate change: average millet production is predicted to decrease by 10 percent, groundnut by 11 percent, and rice by 8 percent over the next 20 years. This will have negative impacts on the 50 million people in the region, including smallholders who already experience high levels of food insecurity and poverty. It will also augment these countries? dependence on grain imports, which has been growing over the past three decades, placing a heavy burden on government resources. According to the Ecological Threat Report 2021, climate change also has far-reaching implications for national and regional economic, political, and social stability and security in the GGW area, which will increasingly transcend the capacity of each country to manage these issues alone. Hence, the urgent need for a regional approach that integrates and coordinates the efforts of multiple stakeholders, including governments, private investors, public and private banks, insurance companies, project developers, cooperatives, producers? organizations, technical institutions, and international and regional organizations.

4. The Sahel stretches from the Atlantic Ocean to the Horn of Africa across all eleven countries of the Great Green Wall and the northern part of coastal countries such as Benin, Cameroon, C?te d?Ivoire, Ghana, Guinea and Togo. One of the largest semi-arid and arid areas in the world, it is wedged between the Sudanian Savannah to the south and the Sahara Desert to the north. It is considered one of the poorest and most environmentally degraded regions in the world and therefore, one of the most vulnerable to climate change, as the increase in temperatures, rainfall variability and the frequency of extreme weather events will only worsen the already harsh living and growing conditions. According to the IPCC 6th Assessment Report, monsoon precipitation is projected to increase over the central Sahel and decrease over the far western Sahel, and the monsoon season is expected to have a delayed onset and retreat. The IPCC also reported an observed increase in river flooding, drying and agricultural and ecological droughts, and projected increases in meteorological droughts at GWL 4? (mostly in seasonal timescales), as well as mean wind speed, heavy precipitation, and pluvial flooding.

5. The Sahel is home to over 500 million people and its population is expected to double by 2040. The region harbours a range of ecosystems and agricultural zones, such as savannas and steppes, semi-arid and sub-humid areas, as well as extensive coastal areas. Farmers in the Sahel produce various

tradable commodities such as maize, soybean, dairy and livestock across the Guinea Savanna; rice and cassava in humid and sub-humid zones; and tree crops (cocoa, coffee, cashew, mango and palm oil), horticulture and fish in other regions. The region is endowed with great potential for renewable energy sources, primarily solar, which can be used to power the agricultural sector and accelerate its industrialization. It has one of the most diverse cultural bases in the world and a large, vibrant, and creative youth population. The countries of the GGW are committed to achieving the goals of the Paris Climate Agreement, as expressed in their INDCs (conditional and unconditional), by strengthening the mitigation and adaptation capacity of the agricultural sector.

Climate Change in the Sahel: Observed trends and projected impacts

6. Rising temperatures: As GHG emissions warm the Earth?s surface around the world, the impacts of this human-influenced driver of climate change are already visible in the Sahel. Temperatures have increased by nearly 1?C since 1970, at a rate twice the global average. In West Africa and the Sahel, 2019 and 2020 were the seventh warmest years on record. According to the IPCC?s 6th Report, near surface temperatures have increased over the last 50 years for the 11 countries of the GGW. Statistically significant warming of between 0.5?C and 0.8?C has occurred between 1970 and 2010 over the Sahel region, with a greater magnitude of change in the last 20 years. According to climate projections, average temperature increases in the Sahel region are projected to be high, directly affecting soils and ecosystems due to a higher level of evapotranspiration. By mid-century (2031-2050), temperatures are expected to rise between 1 and 1.72?C above those of the reference period 1986-2005. Projections for the Sahel at the end of the 21st century from both the CMIP3 GCMs (SRES A2 and A1B emission scenarios) and CMIP5 GCMs (RCP4.5 scenarios) show temperatures that are 3?C above the late 20th century baseline. It is estimated that temperature increases of more than 2?C will cause millet and sorghum yields to decrease by 15-25 per cent by 2080 under RCP8.5, with substantially higher impacts on sorghum yields. The highest increase in the daily maximum temperature is expected over southern Mali and western Burkina Faso, where it is projected to reach >5?C above current temperatures by the end of the century under the RCP8.5 scenario.

7. Shift in precipitation patterns: In the 1970s and 1980s, the region experienced one of the most severe multi-year droughts in the last hundred years, resulting in a 30 per cent decrease in rainfall. Since the 1980s, rainfall has not returned yet to pre-1960s levels and droughts have become more frequent. The lengthening of the dry season and more frequent dry spells combined with less frequent and more intense rainfall over shorter wet seasons have affected the balance of the water cycle, resulting in a greater frequency of extreme rainfall events and severe floods.

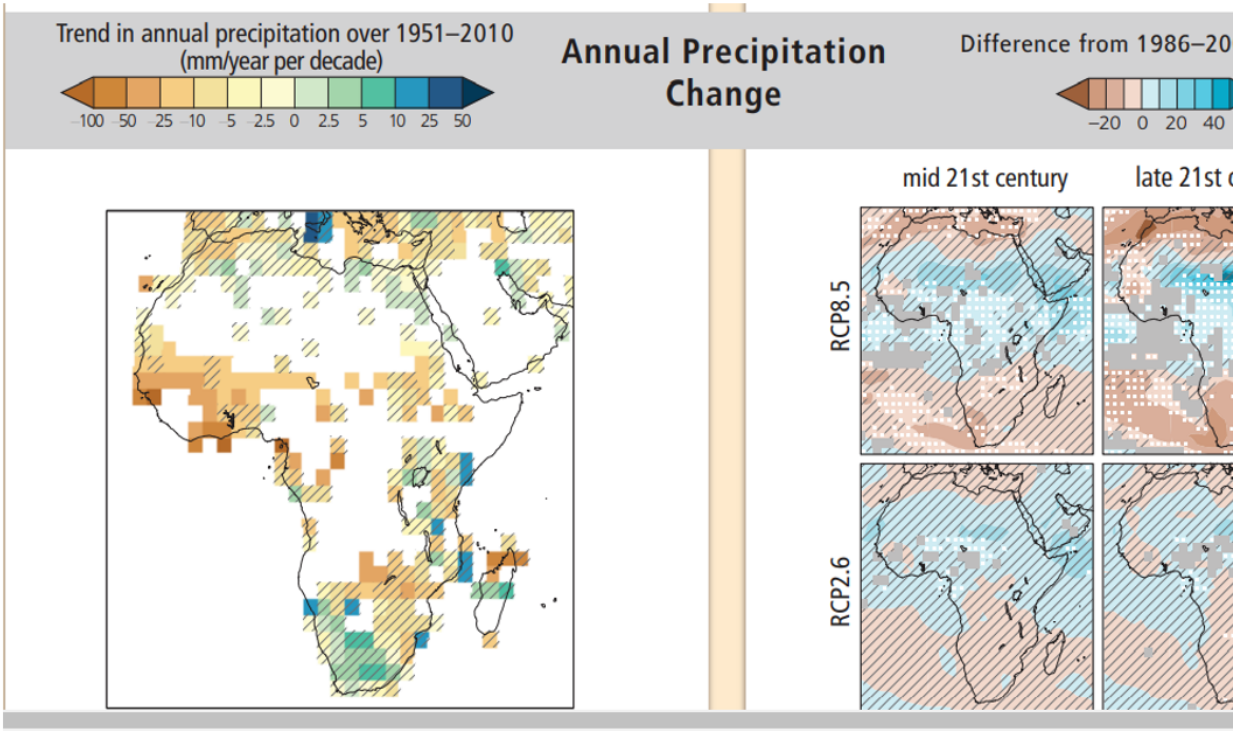

Figure 1. Trends in annual precipitation levels from 1951-2010[7]7.

8. Extremes changes in Precipitation: Drastic shifts in precipitation patterns lie ahead for this region that already has been battered by severe droughts over the past half-century. Already, the region?s disrupted water cycle has fueled a rising frequency of extreme rainfall events and severe floods.[8]8 Current projections show massive variations in rainfall and extreme weather events are expected across the region, with steeply increased fluctuation from season to season and from one geographic area to the next. This will force farmers to deal either with far more rain, or far less, or a rapid and unpredictable alternation between the two.[9]9 According to the Intergovernmental Panel on Climate Change (IPCC) 6th Assessment Report, monsoon precipitation is projected to increase over the central Sahel but decrease over the far western Sahel, with delayed onset and retreat of monsoon season across the board and rises both in river flooding and in droughts.

9. Shift of agro-climatic zones due to climate change: The combined effect of changes in precipitation and temperature will strongly affect the state of agro-climatic zones. Prevailing warmer and drier conditions will lead to a shift in the agro-climatic zone from dry-sub-humid to semi-arid zones in parts of the target region, which will have major implications for the native vegetation and farming. A recent study (OXFAM, 2017)[10]10 found that one in six trees in the region has died since the 1950s and a fifth of all species has disappeared locally because of rising temperatures and lower rainfall linked to climate change. It also found that in some sites in the Sahel, average temperatures rose by 0.8?C and rainfall decreased by 48 per cent and, as a result, trees have shifted southward towards wetter areas, which could affect rural communities engaged in the extraction of Non-Timber Forest Products (NTFPs).

10. Land degradation in in arid, semi-arid and dry sub-humid areas, known as desertification, is a process by which land becomes progressively degraded, until, in extreme cases, vegetation is no longer able to grow as biological productivity is lost. Both human impact and natural factors can cause and worsen desertification. Some scientists argue that by increasing global temperatures and altering rainfall patterns, climate change is lengthening the naturally occurring droughts in the Sahel. Extended droughts can turn naturally arid, low-yield land into areas unsuited for agricultural production. While climate change may be partly to blame for this, human activity ? primarily deforestation (firewood and clearing land for farming), overgrazing, and other forms of unsustainable land management ? has also contributed significantly. Without trees and other vegetation to protect the soil, soil erosion by wind and water accelerates leading to massive topsoil losses and to a loss of soil carbon and soil nutrients that is hard to reverse. This in some cases also leads to the formation of impermeable crusts and, increasingly, to the generation of sand and dust storms (SDS) [11]11.

In recent years, vast areas of the Sahel have succumbed to desertification. After setting Land Degradation Neutrality (LDN) nationally set targets, Sahel countries need urgent support to develop and implement transformative programs tackling land degradation and climate adaptation with relevant policies and strategies. As a result of climate change, land degradation, and increased human use surface water is becoming increasingly scarce for people, animals, and plants in the region. Without water and productive land, farmers and herders are unable to sustain their traditional livelihoods. As many lack training for other types of work, they face poverty and have little choice except to migrate elsewhere to survive.

Climate change impact on key sectors

11. Agriculture and food security: Agricultural production and productivity levels in the region are already low by global standards and they are expected to decline even further due to the impacts of climate change and COVID-19. The causes are not only biophysical changes but are also related to the

GGW countries limited economic, financial and institutional capacity to cope with key risks (climate, biological, price, labour/health, policy and political).

? Agriculture in the West Sahel is almost entirely rainfed and reliant on three to four months of variable summer rainfall (June-September; annual precipitation between 200 mm to 1200 mm), making it highly vulnerable to increasing climate variability and putting the large percentage of the region?s people who depend on agriculture at risk. FAO estimates that 20-80 per cent of the inter-annual variability of crop yields is associated with weather phenomena and 5-10 per cent of national agricultural production losses is associated with climate variability. In addition, agriculture suffers 26 per cent of damages and losses caused by climate-related disasters. In the Sahel, dry spells and droughts lead to increased evaporation, which can reduce water resources and diminish soil moisture and fertility, with negative implications for agricultural yields. The frequently nutrient-limited soils in the region, degraded by overgrazing, continuous cropping, and deforestation, will be further threatened by desertification due to the projected reduced precipitation and higher temperatures. This will lead to increased food prices and food insecurity.

- ? In Chad, Djibouti, and Sudan, the agriculture sector is heavily dependent on rainfall, and changes in precipitation patterns have led to crop failures and reduced yields. In Chad, the frequency and severity of droughts have increased, leading to reduced crop yields and increased food insecurity. In Djibouti, a decrease in rainfall and an increase in average temperatures has similarly led to reduced crop yields and increased water scarcity. In Sudan, decreased rainfall has led to reduced crop yields and increased food insecurity.

- ? In Nigeria, Mauritania, Ethiopia and Eritrea, the agriculture sector is also dependent on rainfall, and changes in precipitation patterns have also led to reduced crop yields and increased food insecurity.

- ? Also in Ethiopia, where the agriculture sector is dependent on both rainfall and irrigation, changes in precipitation have reduced the availability of water from rivers and adversely affected the hydrological cycle in many regions, thus adding to the reduction in crop yields.

Within the agricultural sector, there are also several transboundary issues that may be intensified by climate change such as the spread of animal diseases, pollution by dust-advected pollutants, and food contamination.

12. Water resources and scarcity: Climate change will significantly affect water resources and therefore, it is crucial to ensure that agricultural production and irrigation systems are better adapted to shorter rainy seasons. Climate models also project large declines in the flows of certain transboundary rivers in West

African countries ? a major issue, as 40 per cent of these countries? surface water resources originates outside their borders. Declines in rainfall, rising temperatures and more frequent droughts contribute to a decrease in surface and groundwater availability and accessibility. Total renewable water resources per capita range from 745,600 m3/year in Burkina Faso to 6,818,000 m3/year in Mali. As rains are often seasonal, groundwater is a primary source of water for many people in the region. As a result, disputes over access to water, fish catches and ownership of land exposed by receding waters have increased dramatically. Climate variability and change, together with non-climate stressors such as population and economic growth, inefficient water management and infrastructure, failure to jointly manage basin resources, fall in groundwater levels and land use/land cover changes, are expected to further reduce river basin water supplies in the future. All the above indicate that the implementation of sustainable practices such as low emission, climate-resilient agriculture that utilizes water in a sustainable manner is urgently required to mitigate the effects of climate change.

13. Climate change and conflict: According to the Global Peace Index 2021 report, sub-Saharan Africa experienced a slight fall in peacefulness, with the average country score declining by 0.5 percent. Changes in the regional climate are fueling conflicts related to the availability of natural resources and food insecurity, which can lead to migration, more conflict, or a combination of the two. Climate change affects livelihoods that are directly dependent on natural resources the most - for example, by causing agricultural yields to decrease, gradually contributing to the unsuitability of traditional grazing grounds, or drying up important water bodies. Furthermore, incomplete institutionalization of land tenure and governance have allowed many natural resource conflicts to go on unabated. In some cases, this absence of clear, commonly accepted rules has added to the confusion over who owns and has access to these limited, but essential, natural resources. Demographic and climatic pressures are pushing the frontier of crop cultivation progressively northward in Burkina Faso, C?te d?Ivoire, and Ghana, where it is increasingly encroaching on traditional pastoralist zones and transit routes. Pastoralists and their animals, who are also affected by changes in climate, are forced to travel through these areas of cultivation, damaging crops and possibly triggering conflict. In Burkina Faso, climate-linked internal migration has flowed from the central plateau to the more economically dynamic south-southwest and the more land-abundant east. It is probable that conflicts over scarce natural resources will continue to develop in these areas, especially those involving access to water and arable land. According to FAO, in northern Burkina Faso and Mali, the effects of climate change, combined with unresolved grievances of the pastoralist Tuareg population, have the potential to erupt into more intense violence and conflicts.

Table 1. Summary climate trends and impacts

Climate Trends	**Impacts**

Increased temperature	Shifts in precipitation patterns	Extreme weather events	Agricultural and food security	Water	Financial system	Energy resources
Temperatures are expected to increase by between 1 and 1.72?C for 2031-2050 compared to 1986-2005. Temperature increases higher than 2?C are projected to decrease millet and sorghum yields by 15-25% by 2080[12]12	Precipitation is projected to decline by as much as 30% by the end of the century (RCP8.5). R CP 2.6; RCP 4.5, RCP 6.0 indicated a general trend of decline in precipitation between 30 to 40% by 2100[13]13. Greater frequency and intensity of heavy rains that produce floods. In northern Senegal, Mali, and Burkina Faso, decline in intensity and frequency of heavy precipitation events is accompanied by an increase in dry spell length (CDD)[14]14	Higher temperatures will increase the frequency of floods, droughts, heatwaves, locust outbreaks, desertification, and sandstorms[15]15	One in 6 trees in the region has died since the 1950s and 1/5 of all species has disappeared locally due to rising temperatures and lower rainfall. At some sites in the Sahel, temperatures rose 0.8 ?C and rainfall decreased 48%. Trees shifted southward towards wetter areas[16]16 c ontributing to desertification. CC projected to reduce yields and livestock growth.	Increase in temperature and intensification of hydrological cycles is expected to result in water stress, affecting supply of ground and surface water. Further, climate change is expected to impact water quantity and increase rainfall variability	Risks for financial institutions are higher, as climate change impacts can increase the number of defaults on loans; reluctance of farmers and MSMEs to borrow[17]17	Hotter temperatures are likely to increase energy demand for cooling and food storage, consequently, increase GHG emission and use of fossil fuel[18]18

14. Non-climate stressors and impacts: Livelihood vulnerability in the GGW countries is also linked to many non-climatic factors, such as unequal land distribution, insecure land tenure, poorly developed markets, existing trade barriers and inadequate infrastructure. Political instability, urbanization and pollution contribute to the degradation of land, forests and water and the destruction of biodiversity; these processes are likely to become more marked as climate change progresses. Tensions from increased competition over diminishing natural capital add fuel to existing conflicts, which exacerbate poverty and hunger, undermine human rights and fuel migration, especially of rural youth. These negative impacts are exacerbated when smallholders have low adaptive capacity and limited financial resources to withstand disasters and losses. According to UNEP, migration, competition over natural resources and other coping responses of households and communities faced with climate-related threats could increase the risk of domestic conflict and have regional and international repercussions.

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Barriers to scaling up of innovative climate adaptation and climate resilience measures.

15. Against this background, the proposed GGW Regional Support Project will address the major barriers to exchange of experiences, knowledge and lessons learned between existing programs, projects and GGW partners that hinder the uptake and scaling up of climate adaptation and resilience measures related to natural resources management. These barriers, all highlighted in the Great Green Wall: Implementation Status and Way Ahead to 2030, published in September 2020 underlined include:

? **Lack of analysis and sharing of lessons and experiences across projects and partners in the GGW**, including those of the GEF and the GCF, which risks leading to inefficiencies and poorly coordinated duplication of activities (and potential mistakes) by partner agencies due to limited awareness of similar topics or activities being implemented in different countries by the GEF and the GCF, as well as other projects, and loss of opportunities for synergies. The lack of managed knowledge, information sharing and coordination at the regional level leads to insufficient collaboration between GGW countries, project developers and donors. This is especially important for taking advantage of lessons learned, innovations and success stories, whose replication and scaling up could accelerate and ensure an efficient expansion of the GGWI?s activities.

? **Limited evidence-based knowledge generated and tailored to specific audience to inform GEF and GCF project development** on innovative climate adaptation and climate resilient measures related to natural resources management in the GGW. This also leads to inefficient planning and use of resources, due to limited exchange of experiences and lessons learned on project implementation as well as on available studies (e.g., climate analysis, gender assessments, etc.). Another fundamental challenge

is the lack of, and limited access to, systematic assessment, monitoring and evaluation, and documentation of project outputs and particularly of good adaptation and resilience building practices that hinders the sharing of lessons learned, key to avoid negative developments and to capitalize on positive results achieved by the projects under the GGW.

? **Lack of engagement of sectoral ministries/departments/agencies and governments in climate financed projects**, as well as limited coordination at the country level to strategically plan the allocation of GEF, GCF and other climate resources that can contribute to the achievement of the GGW objectives resulting in a duplication of projects and activities. GEF OFPs and GCF NDAs, Rio conventions NFPs, GGW National are not necessarily aware of the outputs achieved by projects and of lessons learnt, best practices or innovation from other countries or other GEF and GCF projects, which could help them to better plan their respective Country Pipeline and Work Plan to the GEF and GCF, as well as project designs, and updating of NDCs or NAPs.

? **Lack of coordination, exchange and flow of information and knowledge at the regional and national levels and between the respective GGW structures** as there are no proper and managed knowledge/information sharing and coordination mechanisms at the national and regional levels, which results in insufficient coordination and collaboration between GGW countries as well as between project developers at the national level and cross border.

? **Innovative climate adaptation solutions are not widely available and spread across climate adaptation project portfolios**, in particular digital solutions, and infrastructure, in addressing climate change in natural resources management and landscape restoration developed by GCF, GEF as well as other projects. While innovation and digital solutions are increasingly recognized as a strategic path for addressing climate change impacts, the ecosystem to support innovation and digital solutions development and uptake is in its very early stage of development, meaning missed opportunities for replication and scaling up.

16. Implementation of the knowledge management and innovation activities will create a transparent and collaborative environment for knowledge generation at the country level and across adaptation projects, including those funded by the GEF and the GCF. Knowledge generated by adaptation projects will be captured, analyzed, and shared with specific audiences to improve the efficiency and effectiveness of GGW projects. Similarly, the collaborative environment created by the GGW RSP to foster innovation will increase stakeholders? capacities across the region to adopt and scale up innovative and digital solutions through coalitions. Increased access of GGW lead ministries, GGW national coalitions, local governments at GGW sites, GEF OFPs, GCF NDAs, and AF focal points, AEs and DAEs to knowledge and innovation will increase their capacities to replicate, streamline and scale up innovative climate adaptation and resilience measures that have proven effective in similar contexts.

2) The baseline scenario and any associated baseline projects

17. To address the complex and interrelated challenges and support the transition towards climate resilient, low emission agriculture, **the Great Green Wall Initiative (GGWI)** was launched in 2007 by the African Union. The GGWI?s initial objectives were to address land degradation, climate change adaptation and mitigation, and protect biodiversity and forests. Under the GGWI, environmental aspects and natural capital have been integrated into the development agenda and a multi-stakeholder dialogue has been established to ensure country ownership. It has also created opportunities for the deployment of scaled-up investments based on successful experiences on the ground. There is a need to accelerate investment in the region to address these issues, especially since the onset of the Covid-19 pandemic, which has had severe impacts on the region?s economic development. In a post-Covid-19 context, the ambition of the GGWI is to pursue a green growth recovery by restoring 100 million ha of currently degraded land, sequestering 250 million tons of carbon, and creating 10 million green jobs by 2030. It will support communities along the GGW to: i) increase the fertility of the land, one of humanity?s most precious natural assets; ii) create economic opportunities for the world?s youngest population; iii) build food security for the millions that go hungry every day; iv) build climate resilience in a region where temperatures are rising faster than anywhere else on Earth, and v) grow a mosaic of different land use and production systems spanning close to 8,000 km across Africa. Following the last the Great Green Wall: Implementation Status and Way Ahead to 2030 report published in September 2020 and the call for action of GGW Environment Ministers and the Pan-African GGW Agency?s , the GGW accelerator was created at the One planet summit in Paris to **ensure a more coordinated support to GGW Member States**, structures and institutions and support the implementation of the Initiative ,with **financial commitments of about US $19 billion** were pledged by different donors : World Bank Group, African development Bank, European Commission, European Investment Bank, Green Climate Fund, International Fund for Agricultural Development, Global environment Facility, Food and Agriculture Organization, French Development Agency.

18. IFAD investments entry in force in the GGW countries since January 2021 are about 600 million USD with 180 million disbursed in 2022. All IFAD investments are aligned with national strategies and are blended with co-funding from countries and/or regional/international partners.

19. For the last years and still now, several projects are directly targeted to reach the GGW goals and support local, national, regional coordination at all levels between all GGW stakeholders, providing tools, highlighting practices, creating enabling environment to implement projects. These include GEF funded initiatives such as: The closed project GEF-IUCN - Closing the Gaps in Great Green Wall: Linking sectors and stakeholders for increased synergy and scaling-up. Its main goal was a greater implementation of policies for sustainable land management in the Sahel and Great Green Wall

countries) through enhanced investment, intersectoral coordination, and engagement of marginalized groups.

20. The ongoing GEF- UNEP project - Harnessing the Great Green Wall Initiative (GGWI) for a Sustainable and Resilient Sahel. Its goal is a long-term vision for the GGW initiative, which takes stock of lessons learnt from past initiatives, developed leading to institutional strengthening of the GGWI and mobilization of adequate investments for a resilient and sustainable Sahel. Expect outcome is to create enabling environments to support scaling up and mainstreaming of SLM and UNCCD Land degradation neutrality strategies. The ongoing GEF-UNEP Large-scale assessment of land degradation to guide future investment in SLM in the Great Green Wall countries. Its goal is to assess available tools and methodology for scientific measurement of the ecological impacts of land degradation and SLM practices and develop platforms for coordinated monitoring of LD processes/trends.

21. Several studies, projects and activities have been conducted in GGW countries by different stakeholders: Baseline on environmental context, legal and socio-economic analysis, stock take of good practices. The project will consider and benefit of all the approaches and results of projects implemented by the partners below.

? The activities led by the ReSaD (Sahel Desertification Network) brings together national civil society platforms in Burkina Faso (SPONG[19][19]), France (GTD[20][20]), Mali (REFEDE[21][21]) and Niger (CNCOD[22][22]) and is coordinated by CARI[23][23]. Through 3 programmatic phases supported by various donors[24][24] (including AFD and GEF), the ReSaD has been structured as an innovative approach in aggregating the knowledge and actions of the local actors, thus improving their efficiency and their coordination. Three main programs are related to GGW and linked with Knowledge management The FLEUVE[25][25] project (2015-2018), funded by the European Union through the UNCCD GM and the Closing the Gaps in the GGW[26][26] project (2017-2021), funded by GEF and implemented by IUCN and the forthcoming for end 2023, the PASS-LCD (Program of structured actions of stakeholders combating desertification) project with the goal to strengthen collaboration

between state and non-state GGW stakeholders to address the challenges of drought and LDN. on GGW

? The UNCCD / GGW Accelerator 2023-2024 Work program with an improved coordination of efforts by **GGW** national coalition members through ONE programme, with enhancement of synergy among TFPs to co-finance activities, the Development of **GGW Multipurpose online platform** for all GWW national agencies to be able to report and communicate online, in a transparent open process. Activities related on financing innovators and community-led projects in the GGW, GGW Deforestation free value chains program and the GGW Sourcing challenge will be also taken in account.

? The interdisciplinary, inter-institutional and international research network IRN Reset_GMV - Research, scientific expertise and knowledge for land and territories sustainable management in the GGW areas, supported by The French National Research Institute for Sustainable Development (IRD), following long-term partnership with Africans institutions and research projects on Climate change, water, soil health, biodiversity, plant adaptation and ecosystem and populations resilience. The network aims to intelligently mobilize existing transdisciplinary expertise to support innovative implementation of the GGW. The scientific expertise brought together in the Reset_GMV network (more than 150 scientists) is committed to research, training and knowledge production activities for establishing the state of the art in the various scientific fields of interest to the GGW zone, to propose and strengthen integrated solutions for soil land management promoting interaction between different scientific fields, developing joint transdisciplinary research projects based on needs identified and expressed by non-academic players (NGOs, civil society, local players) and incorporating local knowledge. This network is also dedicated to create a science-policy interface to enlighten the vision and action of public development policies linked to the implementation of the Great Green Wall program, support the sharing and scaling-up of agro-ecological best practices for the restoration of GGW ecosystems, promote the emergence of tools for evaluating multi-actor, interdisciplinary and trans-disciplinary approaches, to train and build the capacity of local expertise in sustainable land.

? The NGO SOS SAHEL, which has been active in the Sahel for 45 years, with several innovative tools:

- The GMV Partners Platform to map non-state actors and their projects, favor dialogue and knowledge sharing, and more generally relay information on the GGW.
- A knowledge management platform (Sysalis) to disseminate best practices and knowledge acquired through our projects, by developing and give access to e-learning tools ? for dissemination of best practices and making project knowledge products available to larger audiences (training course, knowledge management approaches).

- An online monitoring and evaluation tool for Sahelian local authorities and stakeholders to track the implementation of their programmes and plans (such as communal development plans).

? The CGIAR Research Center CIFOR-ICRAF is deeply active in the restoration of degraded landscapes in cropping, with notably recent experience in the GGW countries with the EU-funded Regreening Africa initiative, which has restored nearly one million hectares in Senegal, Mali, Niger, Ghana, Ethiopia, Somalia, Kenya, Rwanda and Burkina Faso and the Dutch-funded DryDev programme, which has helped nearly 150,000 farming families in Burkina Faso, Mali, Niger, Ethiopia and Kenya adopt soil restoration and livelihood improvement practices.

CIFOR-ICRAF has also developed the land degradation surveillance framework, to measure soil carbon and around 30 other soil characteristics from remote sensing and specific and agricultural restoration options applicable from the humid to the arid tropics and to farms ranging in size from a fraction of a hectare to hundreds of hectares.

CIFOR ICRAF has also a deep involvement in gender with specific innovative training for female scientists in GGW countries and innovative citizen science component has recruited several hundreds of thousands of farmers and other land users in joint projects to record and monitor their land and tree management choices.

These different interventions are proposed in a number of programmes across the Great Green Wall region, notably in a soon-to-be-signed technical advisory effort financed by the European Union, a second iteration of the Regreening Africa project, and the proposed Mosaic initiative, which harnesses these tools and that experience to restore several million hectares across the great green wall area.

? The Drought Disaster Resilience and Sustainability Initiative (IDDRSI) developed by IGAD (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda) for its countries members and particularly their knowledge platform to provide easy access to knowledge and validated tools and information systems to support programming and implementation, investment tracking, project transparency and visibility. The regional platform gathers IGAD Member States, Development Partners and implementing Partners, including UN agencies, Civil Society Organisations and specialized research and training institutions.

? The CILSS/Agrhymet has develop several platforms to help improve the management of natural resources in 9 countries (Burkina Faso, Cape Verde, Chad, Gambia, Guinea-Bissau, Mali, Mauritania, Niger, and Senegal) of the Sahel region, by providing

information and training for development players and their partners in agro-ecology in the broadest sense (agro-climatology, hydrology, plant protection, etc.).

? The global conservation charity Birdlife International operates in seven countries of Great Green Wall (GGW) initiative and collaborates with other organizations in the other GGW countries. Birdlife directly works the Pan-African GGW Agency (PAGGW) to support biodiversity, habitat, and ecosystem services monitoring within the initiative and leads the establishment of national biodiversity monitoring working groups and framework indicators in each country connected to the national coalitions.

Birdlife leads several initiatives to enable conditions for sustainable landscape management and land restoration within some projects such as "Birds, Bees, and Business?? initiatives, focus on helping women enhance the quality and quantity of their shea production in Burkina Faso, combining biodiversity restoration with business activities in the shea value chain. BirdLife International is committed to developing capacities from government authorities to NGOs in the countries it operates in.

? The Intergovernmental organization Sahara and Sahel Observatory ? OSS develops concepts and methodologies for environmental monitoring, management of natural resources and adaptation to climate change to promote integrated and coordinated management of natural resources in Africa OSS is deeply involve in strengthening their technical and institutional capacities of the national and regional structures concerned as well as promoting coordination around initiatives such as the United Nations Decade for Ecosystem Restoration and the Great Green Wall, and sharing of good practices.

OSS is involved in setting up a data management system, strengthening the technical and institutional capacities of the national and regional structures, and assisting countries in formulating bankable projects. The various decision-making tools provided by OSS to decision-makers and development stakeholders, promote as well as land degradation prevention and restoration actions as well as natural capital and ecosystem services informing decision (COPERNICEA platform, BRICKS geoportal, etc.). These tools offer a valuable source of knowledge sharing for achieving the GGWI objectives through the development of harmonized indicators kit for monitoring biophysical and socioeconomic indicators, the production of information and data on the situation, and the evolution dynamic of natural resources for the benefit of decision-makers and Project Coordinator and the development of thematic studies highlighting the impact of SLWM actions in the GGW region (regional and national scales).

? The signing of a Memorandum of Understanding between the OSS, the PAAGGW, the CILSS and the UNCCD in June 2022. The MoU aims to promote the coordination and alignment of their development actions through the validation of a roadmap that defines the next stages of support for monitoring-evaluation and sharing of good practices for achieving the GGW initiative objectives.

22. **The Global Environment Facility (GEF)** has played a leading role in influencing a shift from the initial vision of a tree planting venture to one focused on integrated management of natural resources for improving livelihoods and landscapes. In response to demands of the countries in the region, the GEF has invested over US$800 million in grants and leveraged an additional US$6 billion from national governments, development partners and other multi-lateral donors for projects in the Sahel region. This financing has helped GGW member countries to boost their efforts to promote practices for improving crop and livestock productivity, restoring degraded parklands and strengthening resilience and adapting to climate change. Building on the GEF?s experience with programmes using an integrated landscape approach, the GEF 7 ?Harnessing the GGWI for a Sustainable and Resilient Sahel? project is currently being implemented by UNEP to engage with all GGW stakeholders in fostering dialogue with countries and fleshing out a longer-term vision. It will serve as the vehicle to design a program with potential to mobilize larger investments in GEF-8. GEF-8 resources to support the GGW will be determined upon completion of the replenishment process and discussion with beneficiary countries on the use of their STAR allocations.

23. **The Least Developed Countries Fund (LDCF)**, managed by the GEF has invested heavily in climate change adaptation and resilience in the GGW countries, from Senegal in the west to Djibouti in the east, with projects ranging from agriculture and livestock management, ecosystem-based adaptation, water supply, rural livelihoods adaptation and risk management. GEF-7 and still ongoing GEF-6 projects have invested almost USD100 million from the LDCF in grants and leveraged more than USD400 to adaptation in the Sahel region. These projects have all generated knowledge and experiences that need to be shared across the region. The projects include:

? Improving the climate resilience of agro-sylvo-pastoral production systems in Burkina Faso, FAO - 8,932,420 (LDCF), 42,424,707 (co-fin)

? Sustainable Natural Resource and Livelihood Adaptive Programme (SNRLAP), Sudan, IFAD - 2,000,000 (LDCF), 49,930,000 (co-fin)

? Planning and implementing Ecosystem based Adaptation (EbA) in Djibouti?s Dikhil and Tadjourah regions, UNEP - 8,925,000 (LDCF), 17,912,500 (co-fin)

? Enhancing the resilience of agriculture and livestock producers through improved watershed management and development of environmentally-positive value chains in South East Mauritania, FAO - 4,416,210 (LDCF), 15,071,430 (co-fin)

? Enhancing Adaptive Capacity of communities by up-scaling best practices and adopting an integrated approach in Ethiopia, UNDP - 8,932,420 (LDCF), 72,200,000 (co-fin)

? Resilience of Pastoral and Farming Communities to Climate Change in North Darfur, FAO - 2,429,680 (LDCF), 11,300,900 (co-fin)

? Climate change adaptation and livelihoods in three arid regions of Mauritania, UNEP - 4,416,210 (LDCF), 13,770,374 (co-fin)

? Strengthening rural and urban resilience to climate change and variability by the provision of water supply and sanitation in Chad, ADB - 8,700,000 (LDCF), 16,583,950 (co-fin)

? Rural Livelihoods' Adaptation to Climate Change in the Horn of Africa - Phase II (RLACC II), ADB - 7,082,407 (LDCF), 29,600,000 (co-fin)

? RLACC - Rural Livelihoods' Adaptation to Climate Change in the Horn of Africa (PROGRAM), ADB - 5,077,778 (LDCF), 34,051,500 (co-fin)

? Climate Resilience in the Nakambe Basin, UNDP - 4,416,210 (LDCF), 20,148,179 (co-fin)

? Climate Change Adaptation in the Lowland Ecosystems of Ethiopia, UNDP - 5,836,073 (LDCF), 10,450,000 (co-fin)

? Strengthening Agro-ecosystems? Adaptive Capacity to Climate Change in the Lake Chad Basin (Lac, Kanem, Bahr El Ghazal, and Part of the Hadjer-Lamis Region), FAO - 4,050,913 (LDCF), 18,585,000 (co-fin)

? Continental Wetlands Adaptation and Resilience to Climate Change, Mauritania, IUCN - 4,449,542 (LDCF), 7,057,990 (co-fin)

? Promoting Index-based Weather Insurance for Small Holder Farmers in Burkina Faso, UNDP - 4,466,175 (LDCF), 24,500,000 (co-fin)

? Planning and Financing Adaptation in Niger, UNDP - 8,925,000 (LDCF), 31,867,282 (co-fin)

? Community-based Climate Risks Management in Chad, UNDP - 5,250,000 (LDCF), 12,500,000 (co-fin)

24. As of October 2021, 29 projects had been approved by the **Green Climate Fund (GCF)** for the 11 GGW countries by 17 different Accredited Entities, amounting to a total funding of around USD 1 billion with more than twice as much leveraged. In response to the call for pledges during the One Planet Summit

in January 2021, the GCF invited IFAD to develop a Great Green Wall Regional Support Programme (GGW RSP). The objective of the GGW RSP is to enhance the collective impact of individual GCF projects and programmes which may otherwise be implemented in silos by facilitating knowledge exchange and innovation. The GCF GGW RSP forms part of IFAD/GCF Inclusive Green Financing Initiative (IGREENFIN I): Greening Agricultural Banks & the Financial Sector to Foster Climate Resilient, Low Emission Smallholder Agriculture in the Green Great Wall (GGW) countries with grant funding of USD 12, 222, 968 through its Component 3. It supports enhanced knowledge management and exchanges to accelerate the uptake of good practices, increase learning and inform policy and investments across GCF and other projects, and innovation and digital transformation technologies are mapped, and a digital and innovation ecosystem built.

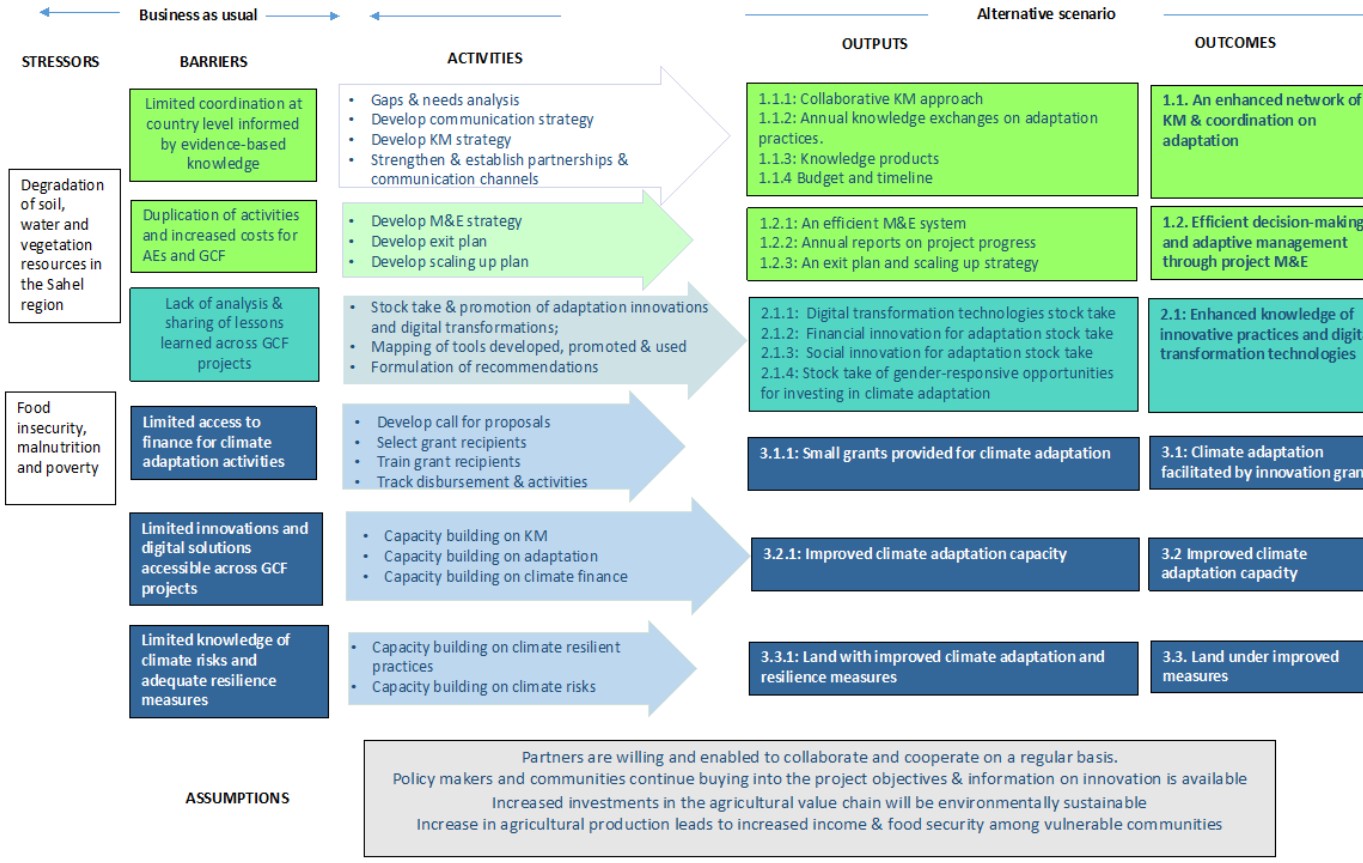
25. The Long-Term Vision on Complementarity, Coherence, and Collaboration between the GEF, LDCF and the GCF responds to the need to build on the experiences from ongoing collaboration between the GCF and the GEF and respond to developing countries? needs. Advancing the GGW vision will require an approach that is underpinned by holistic and systemic thinking to maximize potential for harnessing synergies at scale. In this context, the collaboration between the GEF and GCF and joint financing of the GGW Regional Support Programme will create an opportunity to implement this long-term vision and enhance complementarity and collaboration at the regional and country level through specific activities that foster the facilitation of national investment planning for the GGW countries and the sharing of information, lessons learned and knowledge on climate change adaptation and resilience measures related to natural resources management.

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project

26. The Regional Support Project (RSP) will improve access to best practices for sustainable, climate smart and resilient agriculture, encourage learning and foster innovation and digital transformation across Great Green Wall countries so as to increase individual GCF, GEF and other adaptation projects? collective impact. The RSP?s added contribution is that its entire structure and all its actions are geared towards building the knowledge and systems necessary to identify transformational pathways for the GGW area. The RSP will not replace the knowledge management and innovation activities of each GCF and GEF project, nor take over the responsibilities of the corresponding agencies. It aims to create bridges through a structured framework to ensure that project specific information, knowledge and learning is properly captured and disseminated across GCF and GEF projects and other entities contributing to tackling climate change in the GGW. The GGW RSP will be uniquely placed as a facilitator between individual GCF and GEF projects to promote the scaling up of existing innovation in the GGW and to increase the uptake of innovations and digital solutions developed by other stakeholders in current and future GGW projects. The GGW RSP will promote and amplify action on the ground to bring it to scale

and generate spillover effects that positively affect other GGW initiatives and undertakings. The project?s theory of change and underlying assumptions are summarized below:

Figure 2. Project Theory of Change.



27. The Project will contribute to the effective management of the knowledge generated by GCF and GEF projects, providing faster and more effective access to relevant internal and external knowledge to maximize its impact in the GGW. The support for knowledge management and innovation provided by the GGW Regional Support Programme will not replace the KM strategy of each individual GGW project and the responsibilities of the implementing and executing agencies. On the contrary, it aims at creating bridges among the project-specific KM strategies and resources and create a structured framework to ensure that project specific information and knowledge is properly captured and shared with other GEF and GCF projects, agencies and GGW countries. The Project will be implemented through three interlinked components on (1) knowledge management and experience exchange; (2) identification of

innovations and digital transformations; and (3) innovation grants, capacity building and M&E. The excepted outcomes, outputs and activities of each component are described in detail below.

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28. **Component 1: Knowledge management and experience exchange.**

The Knowledge Management of the Project will promote and support an enhanced culture of systematic documentation of adaptation project outputs and impacts, best practices, innovations, lessons learnt and on how to build capacity on how to synthesize knowledge and upload this in the platform (i.e., technical) and create a culture of knowledge and information sharing, whose benefits include:

? **Easy access to information and resources** for GGW, GEF and AF focal points, as well as GCF NDAs and Rio conventions NFPs. With information easily available, these actors and entities will be better equipped to support countries in implementing their NDCs and NAPS through present and future GEF and GCF projects.

? **Increased pace of learning uptake**. Well-targeted learning events such as South-South exchanges have proven to be effective means of peer-to-peer learning among experts from different countries[27]27. Experiences from countries with a higher level of maturity in the project implementation will be able to support the acceleration of less mature projects, by sharing the good practices and approaches to the programme implementation.

? **Reusing knowledge**: Reusing ideas, documents, and expertise minimizes rework, prevents problems, avoids repeating mistakes, saves time, and accelerates progress by adapting and adopting successful experiences and good practices. For instance, some of the background climate change, adaptation, socio-economic and gender assessments could be updated and adapted by another field intervention.

? **Building on outputs and impacts from previous projects.**

? **Taking advantage of existing expertise and experience**: Mapping actors, who has done what, to valorize available competences?. The more complementary the expertise of the team members, the greater the power of the team.

? **Providing methods, tools, templates, techniques, practices, and examples as the building blocks for supporting processes and procedures and improve the culture of information-knowledge sharing.** Using these consistently streamlines work, improves quality, and enhances overall efficiency.

? **Enabling data and evidence-based decision-making** by GGW, GEF and AF focal points, as well as GCF NDAs:

o Using knowledge that relies on the analysis of data and evidence and directed to specific audiences allows decisions to be based on actual experience and lessons learned.

o Assess the needs of this specific audience.

? **Effective KM will promote operational excellence, dissemination and uptake of technical innovation and efficiency gains** for GEF Focal Points and GCF NDAs, as well as projects under design and or implementation. Innovations, particularly digital solutions, are shared systematically and timely among projects, countries, and entities, allowing for a faster uptake and scaling up[28][28].

29. The usefulness of synthesized knowledge from the GEF portfolio is exemplified by the GEF MSP on *?Large-scale Assessment of Land Degradation to guide future investment in SLM in the GGW countries?* that found that the success of GGW projects to a large extent builds on activities related to knowledge management, including not only knowledge generation, but knowledge and information sharing, as well as capacity building[29][29].

30. The knowledge management component is delivered through two outcomes and six outputs:

Outcome 1.1. An enhanced network of knowledge management, knowledge sharing and coordination on climate change adaptation in GGW countries.

This involves the 10 GGW countries exchanging experiences on best practices and innovations for a more sustainable, climate -adapted and -resilient agriculture, developing one GGW State of Adaptation Report, and engaging a number of projects in knowledge exchange with 50% participation of women. The project will also result in improved coordination at country level between GEF, GCF and other adaptation projects supporting NDC/NAP implementation. Number of youth and women involved in NDC/NAP and adaptation programming actions will be considered.

Output 1.1.1. Climate adaptation and resilience -related achievements (outputs and impacts achieved) and knowledge products (lessons learned, best practices, innovations, and policy recommendations) from adaptation projects systematically assessed and documented, shared, summarized, and integrated in a dashboard.

Activities include:

1. Stock take and synthesis of relevant regional knowledge and information products and platform developed under GEF funded projects, and the information on the network of actors involved.

2. Gaps and needs analysis of how the knowledge produced has been included in national plans (adaptation, LDN Transformative program, integrated land use and development plans, GGW strategies the need of relevant GGW stakeholders (OPs, ministries, local authorities) in terms of products to be developed.

3. Develop of a geolocalized data table (geoportal) that allows the traceability and a better evaluation of the use of Climate resilience and SLM practices and the sustainability of project effects.

4. Developing a structured framework to enable a more systematical documentation of project achievements and relevant knowledge products.

5. Adopting interoperable formats, procedures, and platforms to enable the standardized and friendly upload of the knowledge products by projects, such as those adopted by the MEL Platform of CGIAR[30][30], COPERNICEA Platform, LCD Portal, MISLAND and MISBAR platforms and of OSS[31][31] and MISLAND AFRICA platform (OSS) with its 1st protype already released and tested and the process of operalisation is in progress or others , to make it easier to summarize, compare and compile such information.

6. Mapping relevant adaptation information and performing an assessment of the state of adaptation in GGW countries, based on factual information made available by projects.

7. Update regularly and maintain the repository with new research findings, reports and data sets.

8. Developing a communication strategy that complements the GCF knowledge management and communication strategy.

9. Supporting the development of the GGW RSP platform initiated in the GCF Igreenfin RSP

10. Generating targeted knowledge products taking into account gender to showcase and disseminate emerging lessons learnt, scalable practices and innovations, particularly digital solutions, and inform evidence-based investment and policy-making. A ?GGW State of Adaptation? report and other specific knowledge products, issued with most effective frequency as agreed among projects and stakeholders, such as policy briefs, social media pages, monthly newsletters, internal bulletins and toolkits on methods, interactive tools, templates, techniques are examples of envisaged products

11. Develop case studies showcasing successful climate adaptation projects and initiatives.

12. Conduct training programs and capacity-building initiatives to enhance the understanding and the application of adaptation strategies.

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Output 1.1.2 Capacity building on communication skills and knowledge management for field agents, academics, and scientists.

The value of Knowledge and information Management relates directly to the effectiveness with which the managed knowledge enables the GGW stakeholders to deal with current political situations and effectively envision future land and climate policy. As there is very little awareness of the power and usefulness of Knowledge Management as a tool to improve organizational efficiency and to facilitate better and more informed decision-making in the region,

The project will seek to develop activities in order to increase the recognition of knowledge as a valuable resource for sound governance, local and national planning, socio-economic development in institutions and organizations involved in GGW initiatives.

This output intends to include the following activities:

1. Provision of trainings (online and in person) on Information and Knowledge Management to enhance skills on applying and facilitating effective knowledge management processes. (Collection, collation, and analysis; documenting and sharing; Generating Change? for different kind of GGW stakeholders.

2. Updating/producing Information and Knowledge Management modules for universities.

3. Training by knowledge management specialists of national GGW actors (strengthening their abilities to present and manage learning and knowledge sharing activities) to both diffuse the importance of knowledge management and innovation at local /landscape level, leverage new opportunities of knowledge mobilization and develop the skills of knowledge workers in GGW institutions Including women and youth in capacity-building and workshops.

4. Develop and/or strengthen online courses or modules (MOOC) that cover communication skills and knowledge management and develop a glossary of key words in local languages.

5. Develop training manuals, guides, and toolkits specifically designed for field agents, academics, and scientists working in climate adaptation and resilience.

6. Provide opportunities for participants to share their experiences, success stories, and challenges in climate adaptation and resilience.

Output 1.1.3. Peer-based knowledge exchanges on climate adaptation practices

Activities include:

1. Organize in GGW stakeholders peer-based knowledge exchanges and knowledge sharing activities initiated through GCF funding. Knowledge exchanges target specific audiences and be organized at different levels including:

a. Country-level workshops for information sharing and capacity building and training on thematic issues, particularly on how to best use and deploy on the ground the practices and innovations made available and on the possible approaches and tools to support land use planning and scaling of practices and innovations to enhance climate adaptation and achieve LDN. They will also serve the purpose to link different adaptation projects at the national level.

b. Thematic workshop

c. Multi partners Annual Regional Knowledge share fairs to bring together knowledge from APGMV CILSS, OSS, IUCN, ECOWAS, FAO, EU as well as other international partners such as UNCCD, UNEP, ICRAF, WOCAT, Youth organizations, Local authorities and the African Regreening Initiative, etc.

d. Arrangement of series of expert speaker sessions in which renowned climate adaptation practitioners and researchers share their knowledge and insights.

e. Exchange visits of GGW Stakeholders in order to propagate the lessons learnt.

f. Identify and invite women and youth for knowledge exchange.

2. Participate in and create new communities of practice, as required, to connect practitioners from GEF, GCF and other relevant projects and programmes in the GGW. Based on IFAD?s experience building communities of practices[32]32, the communities of practices will make available the best solutions based on evidence to foster the scaling-up of best practices and innovations and sharing of lessons for faster, more efficient delivery of GEF and other adaptation projects.

Output 1.1.4. Coordination enhanced on NDC/NAP and programming of adaptation actions at country level (for GEF-8 LDCF projects, GCF and other relevant projects).

Activities include:

1. Improve coordination and programming among GEF, AF and GGW national focal points, and GCF NDAs, through sharing of work programmes, information, knowledge and updates on portfolios both at the design and implementation stage, through the leadership of GGW national coalitions/agencies.

2. Advocacy to consider the KM in national strategies including the upcoming NBSAP, GGW National and regional plans /activities, and regional and international Funders.

3. Provide technical assistance to strengthen policy frameworks and institutional arrangements related to NDC/NAP programming and adaptation action involving women and youth.

Outcome 1.2 Project M&E contributes to efficient decision-making and adaptive management.

Output 1.2.1. An efficient M&E system designed to evaluate project progress, including the three project components. Activities include:

1. Development of an ambitious project M&E plan piloting the innovative structured frameworks and platforms developed by Component 1 and 2 for systematic documentation and mapping of project achievements, knowledge products, innovations, and digital transformations.

2. Annual results monitoring and GEF PIR reporting.

3. Project mid-term and final evaluations with sections reporting on the implementation of the Gender Action Plan (GAP) of the project.

Output 1.2.2: Annual reports on project progress:

1. 1 Baseline report

2. 6 PIRs

3. 10 Annual financial reports

4. 20 semi-annual financial reports

5. 1 Mid-Term Review

6. 1 Completion report

7. 1 Terminal Evaluation

Output 1.2.3 Development of an exit scaling strategy to sustain the scaling of innovative adaptation and resilience measures in the GGW countries and national environmental and development strategies. Activities include

1. Impact assessment of the project

2. Analysis if ownership/commitment from national and regional actors to continue program activities.

3. Assessment of institutional and human resource capacity and knowledge and skills needed to follow up the implementation of the program activities.

4. Development of a sustainability plan

Component 2: Identification of innovations and digital transformation pathways. Transformative climate solutions for technology, policy, finance, business models, leadership and capacity building are key to accelerate uptake and implementation of best practices to enhance climate-adaptation[33]33 and sustainability of agriculture. Innovations and digital transformation can break down silos and create more participatory and transparent decision-making processes supported by more timely, multidisciplinary, and objective data and information. Information and communication technologies offer solutions to monitor and adapt to the impacts of climate change, enhance preparedness and response capacity to extreme events, reduce exposure and risks. In the context of the GGW, innovation and digital solutions can contribute to promote best practices and bring new services at scale to sustainably increase food production, build resilience to climate change, and protect natural resources. Examples of the emerging innovations include:

? **Social enterprise innovations** that bridge service delivery gaps using Internet of Things (IoT) platforms. These solutions not only provide farmers with access to machinery, but also connect them to an ecosystem of partners who use the tractor's data to provide additional services such as financing and crop-specific weather information.

? **Climate technologies** such as early warning systems that can provide farmers with information and advice on when to plant crops or sell livestock.

? **Digital extension and advice** services to farmers?up to precision farming services.

? **Digital finance services** that can give access to credits to smallholder farmers who do not have access to traditional financial services. They can provide optimized bundled services for farmers that include credit financing, farming inputs, advisory and insurance.

? **Financial innovations** (e.g., crowdfunding, social impact bonds, mobile money). FSD Africa has develop an innovative approach to financing mechanisms that drive sustainability in conservation areas[34]34.

? **Open data and geo-mapping** for improving assessment and monitoring of natural resources and land use in countries. Tools such as CBD ENCA, Open Foris, SEPAL[35]35, Trends.earth[36]36 provide digital technology based on satellite imagery to support countries assess, monitor land resources and land use, including monitoring deforestation and desertification. The technology offers wide coverage, complement ground data reducing much the need for field assessment, and facilitates large scale and long-term monitoring.

? **Tools and toolboxes** developed or promoted by international organizations to support the identification of best practices as well as planning and scaling processes for climate adaptation, sustainability, and LDN.

? **Holistic adaptation approaches** that provide climate-smart services to villages. CGIAR climate-smart villages[37]37 bring a holistic approach to village development combining agroforestry, precision application of fertilizers and climate-smart services, such as tailored weather forecasts to plan planting, harvesting and other activities on the farm delivered through phones which are also used to enable farmers to buy index-based insurance that gives them a measure of protection in the event of extreme weather.

? Social innovation (products, services or models addressing needs) to improve social and trustful relationships and form new collaborations.

The component is delivered through one outcome and four outputs:

Outcome 2.1 Identified climate adaptation innovations in digital transformation technologies in GGW countries. Innovation and transformation technologies will be identified through stocktaking and mapping, as well as new investment opportunities that can be piloted by the private sector, MSMEs, cooperatives, etc.

Output 2.1.1 Stock-taking and promotion digital transformation technologies of different types (as listed above) that can enable/support/accelerate uptake and implementation of best practices by target communities in relevant adaptation projects. A structured framework will be developed to enable projects to systematically document innovations and digital transformation technologies to facilitate sharing and stock-taking. Digital outreach and communication adapted to existing infrastructure and platforms will be conducted at country level. Key activities include:

1. Development of a structured framework, procedures, and platforms to enable systematic documentation of innovations and digital transformation technologies by adaptation projects to facilitate sharing and stock-taking.

2. Stock-taking and mapping of existing innovations and digital transformation technologies, including services and digital platforms that provide extension and precision farming services, climate early warning, financial and insurance services, digital geo-mapping technologies to monitor natural resources and land use, and other services, including those promoted or implemented by GEF and GCF projects as well as by SMEs, entrepreneurs and academia and other players in the region. Mapping of tools and toolboxes developed or promoted by international organizations to support the identification of best practices as well as land use planning and scaling processes for adaptation and LDN, such as the Drought toolbox[38]38, the SDS Toolbox[39]39, other tools as reviewed by the UNCCD Science Policy Interface[40]40, like LUP4LDN (the tool-assisted land use planning procedure for LDN, prize-awarded by GEO-LDN Initiative[41]41 and recommended by UNCCD COP Decision), and others.

3. Formulating recommendations for opportunities in leveraging these technologies across the GGW pillars and for promoting promising solutions for scaling, for instance through GEF support.

4. Providing technical support for brokering the relationship between solution providers participating in the marketplace and GEF, GCF and other partners at country and regional level.

5. Development of / support to observatories sites to put in practice monitor, test, validate, innovation through notably with citizen science and participatory approach.

6. Facilitating a series of online events to showcase specific innovations and digital transformation technologies and share expertise across the region, accessible to GEF, GCF and other partners at country and regional level.

7. Participating in annual fairs where these innovations and technologies in the GGW region and beyond will be showcased focusing on specific thematic areas (e.g., extension and precision farming services technologies, digital geo-mapping solutions for monitoring, tools to support planning for

adaptation and LDN, access to financing, etc.) and sessions organized to address specific climate challenges.

8. Training GGW stakeholders at country and regional level on open innovations challenges (design, management, implementation of pilot, pilot at scale, monitoring...).

Output 2.1.2 Stock-taking and promotion of social innovations that can enable/support/accelerate uptake and implementation of best practices by target communities in relevant adaptation projects such as

- Means of empowerment of communities
- confidence-building efforts
- setting up and strengthening cooperatives and other producer groups.
- Political and administrative innovations (decentralization, community, and local governance)
- Innovations in land use/natural resource conflict management
- innovations in gender relations
- training tools (Serious games etc.)

Activities included:

1. Adaptation of the structured framework, procedures, and platforms to allow enable systematic documentation of social innovations to facilitate sharing and stock-taking in the platform.

2. Stock-taking and mapping of existing innovations (including youth and gender sensitive ones) through

- Desk study / Literature review, including grey literature (published reports, research results, webinar reports and various workshops)
- Field studies/visits
- Analysis and evaluation of tools identified.

3. Engagement with policymakers, local authorities and decision-makers to promote innovative approaches in land use planning, natural resource management and gender mainstreaming.

Output 2.1.3 Stock-taking and promotion of financial innovations that can enable/support/accelerate uptake and implementation of best practices by target communities in relevant adaptation projects such as online microfinance, financial inclusion, evolution of informal and formal agricultural markets.

Activities included:

1. Adaptation of the structured framework, procedures, and platforms to allow enable systematic documentation of social innovations to facilitate sharing and stock-taking in the platform.

2. Stock-taking and mapping of existing innovations (including youth and gender sensitive ones through

- Desk study / Literature review, including grey literature (published reports, research results, Webinar reports and various workshops)

- Field studies/visits

- Analysis and evaluation of tools identified.

Output 2.1.4 Identify new gender-responsive opportunities for investing in climate adaptation innovations in the GGW involving the private sector, MSMEs, cooperatives, etc. While some innovations are already being implemented on a small scale, their potential for upscaling in the GGW will be promoted through a digital marketplace funded by the GCF. An important focus will be on identifying ways of closing the gender gap related to innovations and digital transformations. This output will also build on the GEF MSP with UNEP on ?Harnessing the GGWI for a Sustainable and Resilient Sahel?.

1. Participate in the digital marketplace that provides services for value chain development, climate solutions and landscape restoration as a one-stop-shop available to across the region, with specific targeting of women and their different roles along the service provision chain for adaptation.

2. Identify new opportunities for investing in climate innovation and digital transformation in the GGW and collaborations between innovators, investors, and relevant stakeholders to support the implementation and scaling up of gender-responsive climate adaptation innovations While some innovations may be already implemented in other regions or at a small scale, their potential for being upscaled in the GGW still needs to be assessed.

3. A series of knowledge products and feasibility studies for specific innovation and digital technologies will be conducted to identify new opportunities for solutions that could be implemented in the region through future GEF and GCF investments.

4. consultations, focus group discussions, and participatory workshops to ensure the inclusion of diverse voices and perspectives, particularly those of women and marginalized groups.

31. **Component 3: Innovation grant**

The innovation grants under this output will support activities that enable/support/accelerate adoption of climate adaptation practices and technologies, including innovation and digital transformation technologies that can enable the provision of important supporting services, as addressed in Component 2. It will promote the adoption of best sustainable land management practices mapped and showcased by Component 1 such as intercropping cereals with legumes and fruit and other trees in agroforestry systems, best practices in NTFP (shea butter, cashew, etc.), efficient irrigation, soil conservation and improvement techniques, etc. Support will be provided to FOs, women and youth-led organizations, cooperatives and MSMEs as target groups Tried and tested practices will be monitored and evaluated ? and compiled in a catalogue of the best and most innovative adaptation and resilience solutions available across the region.

Outcome 3.1: Climate adaptation innovations grants and capacity building provided in GGW countries

Around 20 innovation grants (of 200 k each) will be approved on a competitive basis (or community originated approach) through 2 calls to pilot and test best practices and innovations to enhance the sustainability of land use and management and the adaptation and resilience to climate change.

The total number of beneficiaries of the innovation grants and associated co-financing will be 100,000 (50% women) and an estimated 17 000 ha of land will have improved climate adaptation measures and enhanced resilience.

Output 3.1.1 Small grants for climate adaptation and resilience measures for sustainable natural resources management

The small grants model will be based on IFAD experiences such as the IFAD CDI innovation challenges based on a stage-gated structure which selects ideas on a competitive basis to identify the best recipients of funding and coaching based while ensuring that teams receive support and training in

their innovation journey to enhance their results and scalability potential (https://www.ifad.org/innovation-challenge/) . The grant will be co-financed by loans and grants with a ratio of around 1:2 and this will be one of the selection criteria.

Key activities include:

1. Development of call for proposals of innovation grants, including selection of key thematic and innovation themes and eligibility and selection criteria for two major calls.

2. Establishment of a representative grant committee in charge of eligibility assessment and technical review (with representatives from regional technical organizations as well as the private sector).

3. Final selection of 10 grants per call by the GGW RSP of around 200k.

4. Development of a catalogue of the best and most innovative adaptation solutions available across the region based on monitoring and evaluation.

First thematic envisaged are:

1. Opportunities from tree crop value chains and agroforestry

2. Community-based natural resource management (CBNRM), including improved grazing management

3. Innovative and upscaling of SLM practices and local adaptation practices and farmers ?led innovation

4. Smart irrigation and integrated water management

5. Nexus Land-Water-Energy approaches

6. Entrepreneurships including technological innovations, monitoring and assessment tools, and branding of resilient crops.

Geographical approaches should either be at the farmer level, landscape, or value chain level.

Output 3.1.2 Monitoring and evaluation system for the small grants established.

Activities e.g.

- Set up a M&E system for the management of calls and monitoring of grants
- Develop feedback loops with components 1&2
- Develop reports on component 3

4) Alignment with GEF focal area and/or Impact Program strategies

32. The project is aligned with the LDCF GEF-7 Strategy and its Objective 1 to reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation with a focus on both technical, social, and institutional innovations in the GGW generated by the GCF and IFAD-funded baseline programmes, as well as GEF supported projects and programmes. The contribution of the project to LDCF objectives and outputs is summarized below.

Table 2. Alignment with LDCF expected outputs.

	LDCF outputs	**Project outputs contributing to LDCF outputs**
Objective 1. Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation	Output 1.1.4. Vulnerable ecosystem services and natural resources assets strengthened in response to climate change impacts.	Output 1.1.1, Output 1,1,2, Output 1.1.3 Output 3.1.1
	1.2.1. Innovation incubators and/or accelerators introduced	Output 2.1.1, Output 2.1.2, Output 3.1.1, Output 3.1.2, Output 3,1,3

5) Incremental/additional cost reasoning and expected contributions from the baseline, the LDCF and co-financing

33. The complementarity between the GEF funding and the GCF for the GGW Regional Support programme is outlined in the table below. GEF funding will be used to create additional benefits of the programme by integrating lessons learned and experiences from GEF projects into the GGW RSP, ensuring synergies between GEF and GCF projects and avoiding duplication in implementation of NDCs and NAPs, and promoting possible joint future programming. Joint knowledge products will be developed, and capacity built of GEF OFPs in adaptation and resilience measures. Building on IFAD?s baseline of relevant projects and investments in the GGW, the project will provide new and additional funding to small grants for innovative climate adaptation and resilience measures and capacity building that will be provided to groups of farmers, land users, cooperatives, MSMEs and private sector on a competitive basis to promote adoption and scaling up of innovative measures across the GGW region. The co-financing ratio of GEF grants to IFAD investments will be 1:3 across the selected innovation grants as well as for the project as a whole.

Table 3. Complementarity between GEF and GCF funding.

GEF		**Collaboration with GCF**	**GCF Activities**
Outputs	Activities		

Output 1.1. Enhanced knowledge management and exchanges on climate change adaptation in GGW countries	**Activity 1.1.1.** Produce climate adaptation knowledge products on lessons learned, good practices and policy recommendations (from GEF projects) **Activity 1.1.2.** Participate in peer-based knowledge exchanges on climate adaptation. **Activity 1.1.3**. Enhance coordination on NDC/NAP and programming of adaptation actions at country level (for GEF-8 LDCF projects)	KM will be disseminated through the knowledge platforms and communities of practice to be established by the GCF GGW regional support programme. Additional communities of practice relevant to the GEF will be established on a need?s basis. The GEF/LDCF project will develop its own communication strategy that complements the GCF strategy. The GEF project Coordinator and OPF will join the KM events.	**Activity** 1.1.1**:** Establish a knowledge baseline **Activity 1.1.2** Develop a knowledge and communication strategy and plan **Activity 1.1.3** Establish a knowledge platform by creating a knowledge center **Activity 1.1.4.** Create communities of practices: **Activity 1.1.5.** Produce knowledge products on lessons learned, scalable practices and policy recommendations **Activity 1.1.6.** Organize peer-based knowledge exchanges **Activity 1.1.7**. Enhance coordination and programming at the country level
Output 2.1. Identified climate adaptation innovation and digital transformation technologies in GGW countries	**Activity 2.1.1** Stock take on and promotion of adaptation innovation and digital transformation technologies (in GEF projects) **Activity 2.1.2** Identify new opportunities for investing in climate adaptation innovations in the GGW.	The annual fairs organized by the GCF GGW regional support programme will be open as well to innovators in GEF projects. These will be promoted through the digital marketplace created by the GCF programme.	**Activity 2.1.1** Build a digital and innovation ecosystem. **Activity 2.1.2** Create a digital marketplace. **Activity 2.1.3** Identify new opportunities for investing in climate innovation in the GGW

Output 3.1 Climate adaptation innovations grants, and capacity building provided in GGW countries	**Activity 3.1.1** Small grants for land restoration and capacity building provided to groups of farmers, land users, cooperatives, MSMEs and private sector (1:2 cofinancing ratio)	These grants would be provided through a competitive process.	

6) Adaptation benefits (LDCF/SCCF)

34. Adaptation benefits that will be generated by the GEF-supported alternative scenario will relate to increased climate adaptation and resilience in the GGW through support to innovation and technology transfer for climate change adaptation. This will be achieved through enhanced knowledge management and exchange at the regional level of systematic and structured information on project achievements and knowledge products such as lessons learned, policy recommendations, and experiences from GEF as well as GCF projects, publication of a GGW state-of-adaptation report, identification and testing of new opportunities for investment in climate adaptation innovations and resilience measures through small grants and capacity building of GGW countries.

35. The Project will directly build the resilience and adaptive capacity of 100,000 vulnerable people, of which at least 50% will be women, through training and capacity building, and awareness raising thanks to improved knowledge management and dissemination of experience and lessons from adaptation projects. Vulnerable ecosystem services and natural resources assets will also be strengthened and an estimated 17 000 ha of land in the GGW will have improved climate adaptation and resilience measures based on best sustainable land management practices, such as intercropping cereals with legumes and fruit and other trees in agroforestry systems, best practices in NTFP, efficient irrigation, soil conservation and improvement techniques, etc., also thanks to the introduction of an innovation incubator in the form of competitive innovation grants.

7) Innovation, sustainability, and potential for scaling up

36. Innovation: The GGW Regional Support Project represents an innovative collaboration between the GEF and the GCF to ensure that climate adaptation practices and innovations are captured and documented across the Sahelian region and shared and disseminated to ensure synergies and scaling up of good practices, while avoiding duplication of efforts in implementation of NDCs and NAPs. Innovative measures that will be promoted by the project include social enterprise innovations, climate technologies, digital innovations, open data and geo-mapping, financial innovations, and innovative adaptation approaches. Indeed, the GGW RSP is a very innovative endeavour which differs from the typical project-based approach. This effort is expected to harness the collective strength of all the agencies and entities involved in supporting the GGW objectives. It is also expected that this approach will foster complementarity between the GEF and GCF and will enhance private sector engagement.

37. Sustainability: More consistent and credible reporting of climate adaptation and resilience results of GEF and GCF-funded projects/programmes, which can be aggregated and reported as part of the interventions of the GGWI, will contribute to its sustainability. Moreover, the knowledge outputs from the GGW RSP will support the design of solutions to meet the climate adaptations needs of communities in the GGW countries in future GEF and GCF projects, as well as other adaptation projects, and contribute to enhanced implementation of the NDCs and NAPs. Capacity-building and training for FOs, women, and youth organizations, MSME, MFIs on green and resilient business plan development will ensure that appropriate measures are taken to guarantee sustainability of supported adaptation and resilience measures, including value chains and innovations, beyond the programme?s completion.

Potential for scaling up: Overall, the GGW RSP will support scaling up of efforts to investing in innovative adaptation and resilience measures by supporting pilots of innovations through small grants and capacity building of FOs, SMSEs and cooperatives and women and youth-led organizations. Moreover, as a program the GGW RSP has tremendous opportunity to scale up, not just organically but through strategic partnerships between the large number of GEF IAs and EAs that are already implementing stand-alone GEF projects in the GGW. In addition, the GGW RSP will share knowledge online through innovative digital solutions for easy access by adaptation entrepreneurs for further scaling up.

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[1] Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan.

[2] The Great Green Wall (GGW) is an African-led movement with an epic ambition to grow an 8,000 km natural wonder of the world across the entire width of Africa. The goal is to restore 100 million hectares of degraded land, sequester 250 million tonnes of carbon and create 10 million green jobs in rural areas across the Sahel by 2030. For more information, see: https://www.thegreatgreenwall.org/about-great-green-wall

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1.5?C above pre-industrial levels and related global greenhouse gas emission pathways, https://www.ipcc.ch/sr15/chapter/chapter-3/

[19] Permanent Secretariat of NGOs: https://spong.bf/

[20] Desertification Working Group: https://www.gtdesertification.org/

[21] Network of Women for Environmental Rights: https://www.facebook.com/refedemali

[22] National Coordination Committee of NGOs on Desertification

[23] Centre d?Actions et de R?alisations Internationales : https://www.cariassociation.org/

[24] ReSaD I (2010-2014): Support to civil society organizations in the field of sustainable land management and combating desertification / ReSaD II (2015-2018): Supporting an organized civil society in the field of combating desertification and land degradation / ReSaD III (2018-2021): Civil society support project for the deployment of sustainable land management in Sahelian territories.

[25] To carry out the regional component of the FLEUVE project, CARI and its partners from ReSaD, RADDO and Drynet proposed developing a pedagogical tool to build the capacity of local communities in sustainable land management. To do this, the member collectives chose to share experiences, exchange and capitalize on each other as principles of action.

The working process was based on the collective collection and analysis of experiences, practices and actions already implemented by NGOs and local authorities (e-forum, experience-sharing workshop, surveys). This process led to the development of a module on local authority action to set up sustainable land management projects, which was tested to ensure its adaptation to different Sahelian territorial contexts.

[26] In Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal, CARI and the Sahel Desertification Network contributed to the implementation of the Closing the Gap project through the capacity-building and knowledge management components, with: (1) a regional workshop on territorial planning including SLM, (2) two regional workshop for GGW national actors on cross-border pastoralism, and (3) national trainings for trainers in the use of a tool to support local communities in designing SLM project.

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[35] https://www.fao.org/national-forest-monitoring/tools/en/

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[38] https://www.unccd.int/land-and-life/drought/toolbox

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[41] https://www.unccd.int/news-stories/stories/geo-ldn-competition-winner-announced

1b. Project Map and Coordinates

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

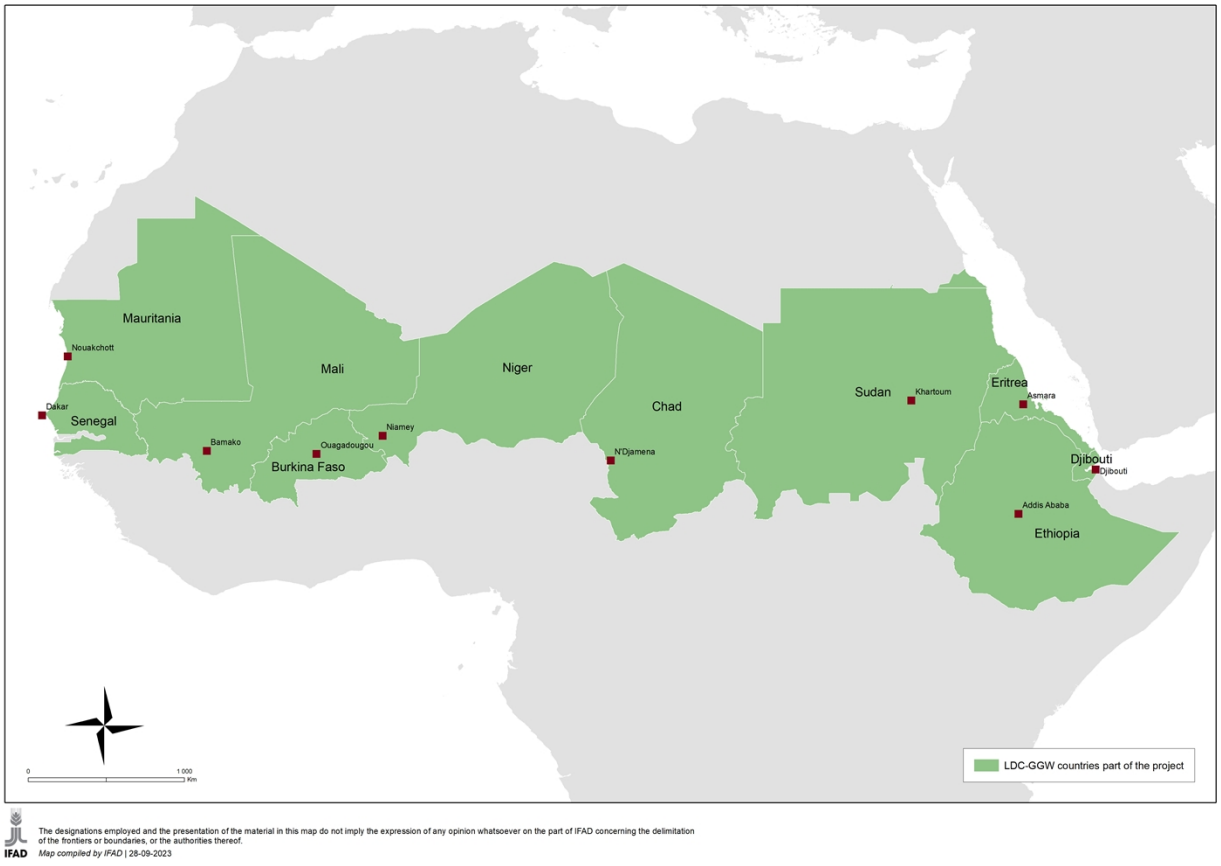

Figure 3. Project map with participating GGW countries ? Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Senegal, and Sudan.

1c. Child Project?

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

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities No

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

1.The direct beneficiaries of the Regional Support Programme include: GEF Operational Focal Points, GCF National Designated Authorities, GGW National Focal Points and regional entities, Accredited Entities, country project teams and key country stakeholders implementing GEF, GCF and other country projects under the GGW Regional Support Programme. Indirect beneficiaries include the total number of beneficiaries reached by each of the GEF and GCF projects linked to the GGW RSP.

2.The stakeholder consultation process started with a high-level political event (Sept 2020) for the launch of the UNCCD report on GGW, where the GGW regional support programme was requested by countries. During the elaboration of the GCF RSP (January-Oct 2021) the following partners involved in the GGW Initiative have been consulted through multiple meetings/calls: the national focal points of the GGW, the GCF NDAs, UNCCD, the GCF, the GEF Secretariat, the GGW agency, the African Union, and multiple GCF AEs and GEF agencies or partners (FAO, WB, UNDP, WFP, IUCN, AFD, OSS, CILSS, WMO, and the private sector (WEF). Moreover, the GEF MSP GGW project by UNEP was consulted. This project will build on these consultations and work jointly with the GCF to engage them on the topics identified in Table 4. The PPG phase of the project will consult further with all groups of stakeholders, but will have a strong focus on consulting with regional organisations, such as regional organisations, such as the Pan Africa Agency for the GGW (PAAGWW), CILSS and Agrhymet as well as the CGIARs to identify a suitable executing agency for Component 3 of the project.

Table 4. Key project stakeholders.

Stakeholder	Topics of engagement	Form and frequency of engagement
Finance system actors: Central banks, insurances, and regulators in each programme country	Project training and technical capacity	Technical capacity and business development trainings, round table, and events Semi-annual/As necessary
Attijariwafa bank, AfDB, Islamic Development Bank	Cofinancing and strategic partnership to crowd in resources	Strategic partnership and cofinancing
Farmer organisations	Project training and technical capacity	Technical training, loans administration Continuous
Cooperatives	Project training and technical capacity	Technical training, loans administration Continuous
Micro Small Medium Enterprises (MSMEs)	Project training and technical capacity	Technical training, loans administration Continuous
Women and youth organisations	Project training and technical capacity	Technical training, loans administration Continuous
UNCCD, UNFCCC, CBD & GGW FPs, and LDCF and GEF OFPs of participating GGW countries.	Policy dialogue and coordination	Policy dialogue and coordination Continuous
Regional organisations, such as the Pan Africa Agency for the GGW (PAAGWW), CILSS, Agrhymet, etc. as well as the CGIAR	Project training and technical capacity	Technical training, regional coordination, and knowledge exchange
Research institutions	Project training and technical capacity	Technical training, regional coordination, and knowledge exchange

The Stakeholder Engagement Plan is in Annex H

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

1. Women are increasingly and disproportionately affected by climate change. In the GGW countries, women play a central role in feeding their families and ensuring other basic needs (water, fuel for firewood, etc.). This responsibility has become harder to assume because of declining crop yields due to climate change (primarily higher temperatures and unpredictable rainfall patterns). The programme will increase opportunities for livelihood improvement and provide concrete benefits to smallholder farmers and pastoralists, both men and women through small innovation grants. The implementation of targeted activities can potentially offer an array of advantages to local communities, such as greater yields, improved soil fertility, fodder availability, as well as shorter wood and water collection time for women, freeing up their time so they may engage in other productive tasks.

2. Through its focus on knowledge sharing and capacity building, this programme will support the access to technology and information that hamper women?s capacity to manage current climate risks and adapt their livelihoods to long-term climate change trends. 50 per cent of small grants are to be granted to women-led MSMEs, cooperatives and FOs. The other 50 per cent will be dedicated to Men of which 50% will be youth-led MSMEs, cooperatives and FOs in which young women participate. Specific actions will be developed to strengthen the technical and managerial capacities of women aimed at providing them with appropriate tools for identifying and developing bankable business plans and improving their level of financial education. Gender-disaggregated data will be assessed against the appropriate indicator to measure women?s enhanced access to knowledge and innovation grants. The project intends to close the gender gap, as women represent 60 to 70 per cent of the work force and do not have access to knowledge and capacity.

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project?s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

1. Private sector organizations will be actively involved due to the strategic nature of their activities in relation to natural resources management and agriculture. The GGW RSP directly targets the private sector and will provide capacity building of smallholders, cooperatives, MSMEs to support technology transfer and adaptation The project is indeed a key opportunity to build the capacities of private sector actors and raise their awareness about innovative climate change adaptation and resilience measures.

The project will be also the opportunity to consider the knowledge and the expertise of the private sector as well as their challenges and needs, notably (1) in technology transfer and approaches to climate risk and climate resilience in their activities and (2) how better knowledge and innovations access and management could help to invest in crucial value chains that contribute to the vision and goals of the GGW.

Others key private sector actors or organizations such as La Banque Agricole du Senegal, the World economic Forum and the Alliance for the GGW[1], launched in Davos in January 2023 will be consulted, following notably contacts made during their PPG phase, to define their engagement in the governance of the project and in the execution of its activities.

Synergies will also be established with the GCF RSP and its digital marketplace.

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[1] https://www.regenopolis.com/great-green-wall/

5. Risks to Achieving Project Objectives

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

1. The risks to the GGW RSP are summarized in the table below:

Table 5. Risk analysis.

Risk	Level	Mitigation measure
Political conflict and insecurity in the Sahel	M	Digital transformation technologies will be identified by the project that will facilitate knowledge exchange and learning even in an insecure environment. Innovation grants will be selected based on a range of criteria, including the security at proposed field sites.
Limited capacity of national and regional institutions to engage, synthesize and share knowledge	L	The project aims to strengthen the capacities of national and regional institutions and staff in knowledge management through training.
Negative climate change impacts from increasing temperatures and decreasing rainfall in the GGW on agricultural productivity and livelihoods	M	Climate projections indicate that precipitation levels will continue to decrease, while temperatures are expected to increase between 1 and 1.72?C for the 2031-2050 period. The climate models produced using the IFAD Climate Adaptation in Rural Development Assessment Tool indicated that the production of the main crops in the targeted countries will be severely affected by future climate change: average millet production is predicted to decrease by 10 percent, groundnut by 11 percent, and rice by 8 percent over the next 20 years. Climate change also has far-reaching implications for national and regional economic, political, and social stability and security in the GGW area, which will increasingly transcend the capacity of each country to manage these issues alone. To mitigate these risks, this project will support exchange of knowledge and best practices on adaptation in the agricultural sector to reduce the vulnerability of the GGW population to impacts of climate change. It will give them access to new knowledge tools and technologies for climate-smart agriculture and other resilient practices and support implementation and scaling up of innovative practices through innovation grants that will strengthen the resilience of local livelihoods.

6. Institutional Arrangement and Coordination

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

IFAD ? GEF implementing Agency

1. IFAD will implement the project and will be responsible for overall project supervision to ensure consistency with GEF and IFAD policies and procedures. IFAD through its SKD department and ECG division will ensure synergy and complementarity with ongoing initiatives led by IFAD and particularly the GCF GGW regional support program.

IFAD will provide oversight and guidance and be responsible for all financial monitoring and reporting aspects to the GEF. IFAD will supervise the GGW CCA Regional Support Project using innovative and flexible supervision approaches. Depending on the prevailing conditions, IFAD may conduct field missions through third party arrangements and/or local consultants, supported by remote and off-site supervision through organizing meetings on a regular basis. Given the fragile situation in the GGW, IFAD will continuously monitor, follow-up and providing implementation support to effectively manage the Project, improve policy engagement, knowledge management and partnership building.

2. To support the program and ensure efficient delivery of projects, IFAD will locate in Senegal at the headquarters of IFAD regional hub a **Project Support Unit (PSU)** with Project Coordinator (PC) with 100% of his/her time devoted to this project and an Associate Project Officer (APO), national officer, or consultant based in Senegal. An M&E and Knowledge and Communication Officer will also be recruited by the project.

3. **The PSU** will be responsible. for: (i) overall management of the GEF Project; (ii) coordinating the project implementation; (iv) working to development of the annual work plan and budget (AWPB) and undertaking M&E and knowledge management Project activities; (vi) meeting all reporting obligations on the implementation progress and results of the Project to IFAD and to the RSC; and (vii) coordination with the IFAD Country Teams to ensure accountability for project coordination. The PSU forms the secretariat of the RSC chaired by IFAD, and reports to the RSC. The PSU will be responsible for the development of a strong cooperation and coordination with the relevant GEF/LDCF financed projects as well as the other development partners projects identified in the baseline.

Project Executing Partners

4. As identified during the PPG phase, the Sahara and Sahel Observatory (OSS) will be the GGW Project Executing Entity for component 3.

As such, OSS will perform the functions and responsibilities of the PSU for component 3 described above. Every position in the PSU, will be subject to IFAD non objection. Under the guidance of the RSC and the supervision of IFAD, and in close coordination with the GCF project, OSS will be responsible for the day-to-day implementation of component 3 on Innovation grant, capacity building and M&E. A MoU between IFAD and OSS will be established and will determine OSS?s role and responsibilities as Executing Entity for the implementation of the GEF GGW Support Project component 3.

GGW Regional Support Programme governance

5. IFAD will be the Executing Entity for the program and will implement the activities related to the Programme coordination, supervision and reporting. As in charge of the implementation of the GCF GGW regional support program, a joint governance to the two programs will be established with:

- Joint regional Advisory Committee:

It will provide overall advice on the Regional Support Programme components.

The Advisory Committee will meet twice a year to review and make recommendations on the project?s AWPBs, RSP direction and achievements through ongoing projects, linkages with relevant initiatives and processes such as the GGW Accelerator.

Foreseen composition: IFAD, UNCCD, GEF, African Union, PAAGGW, IGAD, ECOWAS representatives respectively of Farmers organizations, Civil society organizations, regional organizations, and Academics, and two rotating GGW countries representing the different geographical regions (East and West Africa) (e.g., on a yearly basis).

- Technical consultative group

This voluntary group gathering experts on knowledge management and innovation from national, regional, and international institutions. Members will serve in their personal capacity, as regional/international experts advising the RSP exclusively; and in that capacity they shall provide with the best possible technical and scientific advice when needed to ensure the implementation of the activities.

Members will meet annually in the margin of the PAAGGW instances and committee of experts.

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- Country Coordination Committees:

They will be composed of GEF Focal Points, Adaptation Fund Focal Points, NDAs, GGW national coalitions focal Points, UNCCD, CBD and UNFCCC Focal Points, relevant sectoral ministries and AEs.

Representatives respectively of Farmers organizations, Civil society organizations and Academics will be invited to participate to such committees.

Building on relevant platforms wherever possible, committees are responsible for coordinating the alignment of GCF work programmes, GEF STAR allocations and prioritizing GGW investments at the country level. The Country Coordination Committees will also be responsible for the coordination of the activities reported to the GGW Accelerator to ensure transparent and comprehensive exchange of information and reporting.

Countries may decide to invite additional stakeholders to take part in the country.

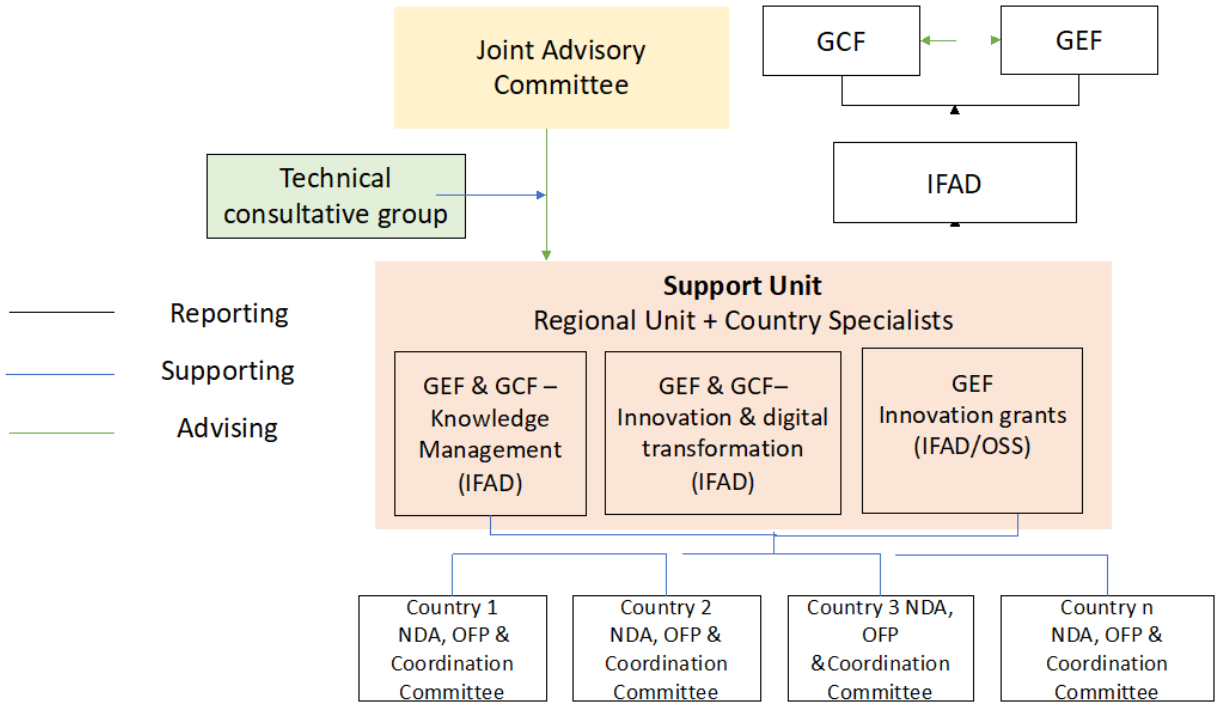


Figure 4. GGW Regional Support Programme governance structure, including GCF GGW RSP

6. The LDCF-funded GGW Climate Change Adaptation Regional Support Project governance structure is depicted in Figure 4. The Regional Support Unit will include a Regional Knowledge Management Specialist in charge of coordinating the activities at regional level funded by the GCF and GEF. Co-financing from the GCF to the RSP will provide for a Knowledge Management Specialist in each country to be hosted by the NDA. Coordination will take place with relevant adaptation projects in the GEF as well as GCF portfolios in the GGW, as discussed under the Baseline section, in particular the UNEP/GEF project on ?Harnessing the GGWI for a Sustainable and Resilient Sahel? that is developing a longer-term vision design a program with potential to mobilize larger investments in GEF-8.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

- National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC

- National Communications (NC) under UNFCCC

- Technology Needs Assessment (TNA) under UNFCCC

- National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD

- GGW national/regional strategies, from the countries and African Union

- Poverty Reduction Strategy Paper (PRSP)

- National Portfolio Formulation Exercise (NPFE) under GEFSEC

- Biennial Update Report (BUR) under UNFCCC

Others

1. The GGW participating countries are all parties to the UNFCCC and have signed and ratified the Kyoto Protocol. By ratifying the UNFCCC, these countries have committed to implementing measures to adapt to climate change and reporting on their NDCs. This programme will contribute to the implementation of objectives of the three Rio conventions ratified by all countries, including the UNFCCC, CBD and UNCCD, as well as the Paris Climate Agreement, the SDGs, and the Sendai Framework for Disaster Risk Reduction.

2. The GEF GGW RSP is fully aligned with the countries? national development plans and their national commitments on climate mitigation and adaptation included in their NAPAs, National Climate Change Policies and Strategies, NDCs, National Communications (NCs), SDGs and National Strategies for Disaster Risk Reduction.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

1. All GEF projects have KM strategies and activities in place and have allocated the financial and human resources to achieve the proposed results. The support for knowledge management provided by the Regional Support Programme aims at creating the necessary bridges between all these project-specific KM strategies and resources, and create a structured framework to ensure that project specific information and knowledge is properly captured and shared systematically with other GEF as well as GCF projects, IAs and GGW countries. The Regional Support Programme will provide support at two levels.

2. Regional level: structure, streamline, analyze and disseminate knowledge generated by adaptation projects across the GGW countries through a strategy, knowledge center, specific knowledge and communication products and the organization of events. In addition, synergies with the GGW Accelerator, GCF Regional Support Programme and AF will be created at regional level for specific activities.

3. Country level: facilitate and support GGW projects in sharing the knowledge generated by each project and fostering linkages and learning based on past and present projects in the country. GEF support will ensure the sharing of climate change adaptation knowledge through different channels, such as knowledge products and peer-based knowledge exchange.

4. The project?s knowledge management plan is summarized in Table 6 and comprises most of the activities under component 1 of the project on Knowledge Management and Exchange of Experiences, as well as capacity development support under component 3 and is therefore costed to around USD2.5 million.

Table 6. Knowledge management plan.

Deliverable	Timeline

	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Knowledge material on climate change adaptation												
Documentation of GGW projects? adaptation best practices		x	x	x	x							
Development of materials to support dissemination and exchange of adaptation practices in the GGW						x	x	x				
Publication of a GGW State of Adaptation report									x			
Capacity building												
Capacity building of groups of farmers, land users, cooperatives, MSMEs and the private sector		X	x	x								
Awareness raising												
Communications Strategy development		X										
Outreach campaigns targeting policy makers, including GEF OFPs			x				x				x	
Sharing of project results at events at annual share fairs				x				x				x

9. Monitoring and Evaluation

Describe the budgeted M and E plan

1. The project monitoring and evaluation plan has been developed in coordination with project stakeholders. The Project will be monitored through the Results Framework (see Annex A). The Results Framework includes 1-2 indicators per Outcome. Indicator targets are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART), and disaggregated by sex where applicable. Output 3.1.3 of the Results Framework is dedicated to project M&E.

2. The project will implement an effective monitoring and evaluation system that will support the project management unit, staff, stakeholders, and the beneficiaries to determine the extent to which the project is on track and to choose the needed corrections that will be undertaken. The M&E system is intended to provide reliable and timely data for informed decision-making regarding operations management and service delivery, ensure the most effective and efficient use of resources, and evaluate the extent to which the project has had the desired impact. The project will monitor and evaluate GEF Core key indicators to provide a portfolio level understanding of progress towards the GEF Global Environmental Benefits (GEBs). The Core indicators are namely: area of landscapes under improved practices (excluding protected areas), and number of direct beneficiaries disaggregated by gender.

3. To achieve this, the project will deploy an online monitoring and evaluation system (a web-based M&E system) for M&E reports, project management, and production of dashboards to streamline and optimize M&E processes with an easy-to-use interface and mobile platform. The M & E system will have a spatial component in which every location?s global positioning system (GPS) coordinates of activity implementation will be recorded. The GIS system will be linked with the project database to produce digital maps. Integrating the project M&E system with GIS adds the dimension of geographic spatial analysis by providing an interface between the data and a map.

4. Additionally, the project will undertake a yearly data quality audit (DQA) to ensure the validity, reliability, precision, integrity, and timeliness of monitoring data to determine if the monitoring data is reasonably meeting data quality standards to be useful for monitoring program performance, reliable for management decisions, and credible for reporting. As part of this process, the monitoring and evaluation team will be responsible for verifying the data with beneficiaries to ensure no manipulation and reduce any errors that may occur during collection. The project?s key strategies for enhancing the quality of data include regular training of all staff and partners, especially those who collect, analyze, and use data; quarterly data quality assessment on selected indicators; quarterly data reflections meetings; regular data verification and cross-checking by M&E Officers focused on reported data validation and verification; periodic internal data quality assessments as well as pre-testing of the data collection tools.

5. The project will produce reports to help the Project Coordinator and stakeholders detect potential or upcoming project risks, monitor and gauge progress, showcase success, and document lessons learned. The reporting system of the project will focus on results or outcomes to be achieved. The first project report is the inception report that will capture the understanding of the project strategies and objectives for the project staff and lay the ground for the project takeoff. During this period, the project staff will translate the project documents into an operational plan according to which the project will be operationalized. Other reports include a semi-annual that will be produced every six months to assess progress, the descriptions of activities performed, outcome and indicator results to date, upcoming activities, challenges, lessons learned, and corrective actions undertaken. An annual project progress report (PPR) will also be produced to assess progress against performance targets, performance indicators, lessons learned, challenges, coordination with external actors, and any corrective actions or strategic changes undertaken. The annual Project Progress Report (PPR) will be used as the baseline for the budget estimates and draft work plans for the next fiscal year.

6. Midterm evaluations (MTEs) report will document the continued relevance of the project intervention, the progress made towards achieving its planned objectives, and opportunities for modifications to ensure the achievement of the objectives within the lifetime of the project. Besides, a terminal evaluation (TE) will

be produced to provide a snapshot of the project performance (in terms of relevance, effectiveness, and efficiency) and determine the degree of achievement and likelihood of outcomes and impacts (actual and potential) stemming from the project, including their sustainability.

7. The annual ESMP report will outline the status of ESMP implementation, any progress made with the environmental management, environmental monitoring results, and other relevant issues such as grievance monitoring and public consultation. The report may also highlight any additional environmental or social risks that have emerged since the project started and the appropriate mitigation measures for any significant new risk.

8. The project will adopt a mixed-method evaluation approach involving key stakeholders in evaluation design to measure progress against the project?s theory of change, the performance of the key indicators, adaptation measures and resiliency of target landscapes, and project contribution to the targets of SDGs.

Table 7: Indicative Costed M&E Plan

Type of M&E activity	Responsible Parties	GEF Project Resources (US$)	GCF Co-financing (US$)	Total Budget (US$)	Time frame
Inception Workshop (IW) and Report	PCU	15,000		15,000	Within first 3 months of project start-up
Inception Report	PCU	None	None		Within two weeks of inception workshop
Project M&E staff	PCU	222,000		222,000	
Training of PCU on M&E			12,000	12,000	Training to be conducted after every two years
MIS for M&E, M&E Framework, standard monitoring templates		Covered by M&E project staff	10,000	10,000	Start/PY1
Project Progress Reports					Six-monthly
Financial reports					Quarterly

Project Implementation Report	PCU	None	None		Annually. Covered with GEF fees.
Supervision					At least once per year; covered with GEF fees
Steering Committee Meetings	PCU	60,000			At least once per year;
Mid-term GEF Tracking Tool	PCU/M&E project staff	Covered by M&E project staff	1,000	1,000	At mid-term.
Lessons learned and knowledge generation and dissemination	PCU/M&E project staff	Covered by M&E project staff	88,400	88,400	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	PCU/M&E project staff	Covered by M&E project staff	14,600	14,600	Annually
Stakeholder Engagement Plan	PCU	Covered by M&E project staff	5,000	5,000	Quarterly
Gender Action Plan	Gender specialist	15,000	5,000	20,000	Annually
Addressing environmental and social grievances	PCU		30,000	30,000	Annually
Independent Mid-term Review (MTR)	PCU and IFAD	45,000		45,000.	At project mid-term. Consultants recruited with project resources. IFAD?s oversight covered with GEF fees.
Terminal GEF Tracking Tool to be updated by IFAD	M&E Specialist	Covered by M&E project staff	2,000	2,000	Before terminal evaluation mission takes place

Independent Terminal Evaluation (TE)	PCU and IFAD	50,000		50,000	At least three months before operational closure
Financial Monitoring Reports	IFAD	39,567		39,567	At project disbursement to OSS.
TOTAL INDICATIVE COST		**446,567**	**153,400**	**599,967**	

10. Benefits

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

1. **Economic co-benefits**: The economic co-benefits of this programme are linked to its high potential to contribute to poverty reduction through identification and testing of adaptation and resilience measures that will increased productivity of key crops and livestock systems, as well as of other innovative income generation activities (IGA), and development of green and resilient business plans. The GGW implementation status report indicated that revenues from IGA since 2007 have amounted to approximately US$90 million across all 11 GGWI countries, with Burkina Faso being more successful in creating IGA opportunities than the others. A stable inflow of revenues from natural products and ecosystem services is important in terms of exit strategies that contribute to the sustainability of the project over time. By promoting innovations and IGA and opportunities for livelihood improvement, the programme will help better the living conditions in the GGW countries that are among the poorest and the most vulnerable to climate change in the world.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Low	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

1. Given the focus on knowledge management, the project is classified as a low/no risk project. Negligible or no environmental or social implications ? no further environmental and social analysis is required because the activities have positive environmental impacts, or negligible or minimally adverse environmental impacts: Activities generally focus on technical assistance grants for agricultural research and training; research; extension; health; nutrition; education; and capacity- and institution-building. For the small grants, we don?t know yet who and where but each grant would be max 150-200k. As part of the eligibility criteria in the calls, only adaptation activities with low risk will be eligible, and each proposal will be requested to include an ESS analysis, and the IFAD-OSS team reviewing the proposals will include an ESS expert.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
GEF_IFAD_FSP_GGW_ SECAP ESC Screening	Project PIF ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project Objective: To improve access to best practices, foster innovation and digital transformation and facilitate cross-learning across Great Green Wall countries for enhanced sustainability and resilience to climate change impacts.					
Core Indicator: Area of landscapes under improved practices (excluding protected areas) (Hectares) **Target:** 17,000 hectares					
Core Indicator: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment **Target:** 100,000					
Component 1 : Knowledge management, coordination & project M&E					
	Indicator	**Baseline**	**End of project target**	**Verification sources**	**Risks and assumptions**

Outcome 1.1: An enhanced network of knowledge management, knowledge sharing and coordination on climate change adaptation in GGW countries	? Collaborative KM approach adopted by GGW countries ? Collaborative KM platform is being used ? Number of GGW national strategies updated on the basis of knowledge produced.	No formal and regular exchanges on GGW projects and activities No regular documentation of processes and strategies shared amongst partners 0 open-access knowledge platform for GGW activities	? 1 Collaborative KM approach adopted by GGW countries ? At least 1 KM platform is being used ? At least 3 national strategies updated	Project progress reports; Stakeholder consultation reports; Evaluation report.	Partners are willing and enabled to collaborate and cooperate on a regular basis. No significant turnover of partners, putting the project at risk. Language barriers are overcome and adequately handled. Partners are willing and enabled to share information in a format that can be aggregated. Political will is maintained Policy makers and communities continue buying into the project objectives

Output 1.1.1: Climate adaptation and resilience knowledge products on lessons learned, best practices, innovations, and policy recommendations from adaptation projects systematically assessed and documented, shared, summarized and integrated in a dashboard	? Number of processes/strategies to capture, assess and document info, lessons, best practice & expertise ? Knowledge management platform (i.e dashboard) in place to systematize and share best practices and lessons learned.		? 1 strategy ? 1 platform	Project progress reports; Evaluation report; and field supervision mission reports	
Output 1.1.2 Capacity building on communication skills and knowledge management for field agents, academics, and scientists	? Number of capacity building events on communication skills & KM		? 20 capacity building events	Project progress reports; Evaluation report; and field supervision mission reports	
Output 1.1.3: Peer based knowledge exchanges on adaptation practices.	? Number of KM events ? Number of adaptation projects engaged in knowledge exchange and number of peer-based knowledge exchange events		? 3 publications ? 10 cross-country events ? 20 peer-based knowledge exchange events	Project progress reports; Evaluation report; and field supervision mission reports	

Output 1.1.4: Coordination improved on NDC/NAP programming and implementation of adaptation actions at country level (for GEF-8 LDCF projects, GCF and other relevant projects)	? Number of GGW national strategies updated on the basis of knowledge produced		? 6 national strategies	Project progress reports; Evaluation report; and field supervision mission reports	
Outcome 1.2 Project M&E contributes to efficient decision-making and adaptive management.	? Operational M&E system	No M&E system No knowledge management platforms are being used	? 1 operational project M&E system	Project progress reports; Evaluation report; and field supervision mission reports	
Output 1.2.1: An efficient M&E system designed to evaluate project progress, including the three project components.	? Number of M&E systems designed and validated to evaluate the project progress, including safeguards implementation in the three project components.		? 1 M&E system	Project progress reports; Evaluation report; and field supervision mission reports	

Output 1.2.2: Annual reports on project progress	? Number of reports produced and validated		? 1 Baseline report ? 6 PIRs ? 10 Annual financial reports ? 20 semi-annual financial reports ? 1 Mid-Term Review ? 1 Completion report ? 1 Terminal Evaluation	Project progress reports; Evaluation report; and field supervision mission reports	
Output 1.2.3: Development of an exit scaling strategy to sustain the scaling of innovative adaptation and resilience measures in the GGW countries and national environmental and development strategies	? Number of exit strategies developed		? 1 Exit Strategy ? 1 Scaling up Strategy	Evaluation report; and field supervision mission reports	
Component 2: Identification of innovative practices and digital transformation pathways					
	Indicator	**Baseline**	**End of project target**	**Verification sources**	**Risks and assumptions**

Outcome 2.1: Identified climate adaptation innovative practices and digital transformation technologies in GGW countries	? Number of data base viewings.	No (0) informative databases on existing technologies and innovations in the GGW countries	? Informative database on climate adaptation innovative practices & digital technologies established	Project progress reports; Evaluation report; and field supervision mission reports	Innovative practices and technologies exist
Output 2.1.1: Stock-taking and promotion of digital transformation technologies	? Number of stock takes on innovative practices on digital technologies identified		? 1 stocktake conducted per country (10)	Project progress reports; Evaluation report; and field supervision mission reports	
Output 2.1.2: Stock taking of and promotion of social innovation for adaptation	? Number of stock takes on new social innovation investment opportunities identified		1 stocktake conducted per country (10)	Project progress reports; Evaluation report; and field supervision mission reports	
Output 2.1.3: Stock taking of and promotion of financial innovation for adaptation; -	? Number of stock takes on new financial innovation investment opportunities identified		? 1 stocktake conducted per country (10)	Project progress reports; Evaluation report; and field supervision mission reports	
Output 2.1.4: Identify new gender-responsive opportunities for investing in climate adaptation innovations in the GGW involving the private sector, MSMEs, cooperatives, etc	? Number of stock takes on gender responsive innovation investment opportunities identified		? 1 stocktake conducted per country (10)	Project progress reports; Evaluation report; and field supervision mission reports	

Component 3: Innovation grants and capacity building					
	Indicator	**Baseline**	**End of project target**	**Verification sources**	**Risks and assumptions**
Outcome 3.1: Climate adaptation innovations grants, and capacity building provided in GGW countries	? ha of land with improved climate adaptation and resilience measures ? # of beneficiaries with enhanced capacity to adopt and implement adaptation innovations and resilience measures.		? 17,000 ha ? 50,000 male and 50,000 female	Project progress reports; Evaluation report; and field supervision mission reports	
Output 3.1: Small grants provided for climate adaptation and resilience measures for sustainable natural resources management and climate smart agriculture	? USD in grants		? 20 grants (of each 200,000 USD)	Project progress reports; Evaluation report; and field supervision mission reports	
Outcome 3.2: Climate adaptation capacity building	? Number of beneficiaries	Targeted beneficiaries have not yet received trainings on climate resilience and adaptive practices	? 100,000 beneficiaries	Project progress reports; Evaluation report; and field supervision mission reports	

Output 3.2: Capacity building provided to groups of farmers, land users, cooperatives, MSMEs and the private sector.	? Number of trainings conducted ? Number of beneficiaries indicating that their capacity has improved ? Number of beneficiaries indicating that their livelihoods have improved (in terms of income, resilience and food security)		? 20 trainings ? 3,000 beneficiaries trained on KM ? 100,000 beneficiaries indicating that their livelihoods have improved (in terms of income, resilience and food security)	Lists of participants; Follow up surveys; Project progress and Evaluation reports	Communities are willing and enabled to attend the trainings Trainings are provided in a format that is adequate to beneficiary profiles Beneficiaries are capacitated to put lessons in practice Farming households willing to participate in training sessions and COVID-19 does not prevent physical meetings

Outcome 3.3: Land with improved climate adaptation and resilience measures	? Number of ha of land with improved measures	Targeted areas of land are not yet under resilience measures	? 17,000ha	Project progress reports; GIS; Evaluation report; and field supervision mission reports	Communities are willing and enabled to put into practice improved agricultural measures Communities are sensitized, buy into and participate in land- use plans

ANNEX B: 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).

¤	GEF·Comments·¤	IFAD·responses¤
Part·I·–·Project·Information¶ **Focal·area·elements¶** ¶ 1.·Is·the·project/program·aligned·with·the·relevant·GEF·focal·area·elements·in·Table·A,·as·defined·by·the·GEF·7·Programming·Directions?¤	21·April·2022¶ ¶ Please·see·following·comments:·¶ ¶ -·In·terms·of·countries,·LDCF·can't·support·non-LDCs·i.e.·Nigeria·under·this·project.·Therefore,·please·consider·supporting·Nigeria·through·co-financing.·¶ ¶ -·The·CCA·Marker·should·be·revised·to·CCA·2·given·that·adaptation·is·a·Principal·objective·of·the·project.·¶ ¶ -·In·the·project·title,·please·consider·adding·climate·change·adaptation.·¶ ¶ -·Please·clarify·if·all·the·project·components·will·be·"Executed"·by·IFAD·only.·As·per·GEF·Policy,·GEF·Agencies·are·allowed·to·execute·projects·only·under·exceptional·circumstances.¤	¶ ¶ ¶ ¶ Nigeria·has·been·removed·from·the·PIF.¶ ¶ ¶ ¶ ¶ Revised.·¶ ¶ ¶ ¶ Added.·¶ ¶ ¶ IFAD·is·not·usually·executing·its·GEF·proj considering·the·linkage·with·the·GCF·GGW implemented·and·executed·by·IFAD,·and·t coordination·during·implementation,·we·su executes·also·components·1·and·2·of·this Component·3·could·be·executed·by·anoth as·ICRISAT·or·another·CGIAR·centre·with GGW·countries·This·will·be·assessed·in·th
¤	May·3,·2022¶ ¶ Thanks·for·the·adjustments.·Also,·thanks·for·clarifying·the·the·executing·role.·The·rationale·for·the·partial·execution·role·by·IFAD·is·fine.·Please·add·the·other·executing·agency·name·at·the·CEO·ER·stage.·Comment·cleared·for·now.¶ ¤	¤
Indicative·project/program·description·summary¶ ¶ 2.·Are·the·components·in·Table·B·and·as·described·in·the·PIF·sound,·appropriate,·and·sufficiently·clear·to·achieve·the·project/program·objectives·and·the·core·indicators?¤	21·April·2022¶ ¶ Please·see·below·comments:¶ -·In·the·project·objective,·please·make·explicit·reference·to·adaptation·or·climate·resilience.·Also,·it·is·not·necessary·to·have¤**"to·increase·individual·GCF·and·**	¶ ¶ ¶ ¶ ¶ ¶ Agree·and·changed·as·per·suggestion.·¶ ¶ ¶ ¶

	GEF·projects'·collective·impact",·in·the·objective.·The·project·isn't·just·meant·to·target·GEF·projects·in·GGW·countries.·It·aims·to·support·the·countries·more·holistically·including·their·own·adaptation·projects·and·other·climate·finance·projects·including·of·the·GCF.·An·objective·statement·for·your·consideration·is·below.·Please·revise/edit·as·appropriate·to·include·any·missing·element:¶ **To·improve·access·to·best·practices,·foster·innovation·and·digital·transformation·and·facilitate·cross-learning·across·Great·Green·Wall·countries·for·enhanced·resilience·to·climate·change·impacts.**¶ -·Please·clarify·what·is·meant·by·"GEF·Projects"·in·Table·B.·Are·these·past·and·existing·projects·or·does·it·mean·projects·which·will·be·supported·under·component·3?¶ -·The·project·design·will·benefit·from·clear·articulation·in·components/outcomes/outputs·regarding·the·GEF-GCF·collaborative·support·to·GGW·countries·on·topics·of·knowledge·sharing,·innovation,·coordination,·etc.·It·refers·only·to·GEF·projects·which·doesn't·clearly·imply·the·main·objective·around·this·project·aligned·with·GEF-GCF·LTV.·Please·add·this·aspect·as·appropriate·in·Table·B.¶ -·The·budget·distribution·across·the·components·is·recommended·to·be·revised.·For·example,·there·is·very·limited·resource·allocated·for·component·2,·whereas·a·large·amount·is·allocated·to·component·1.·The·allocation·for·Component·3·looks·fine.¶	¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ ¶ It·was·meant·for·past·and·existing·projects·future·projects·including·those·supported·u·3.·¶ ¶ ¶ ¶ Changed·to·reflect:·It·aims·to·support·the·c·holistically·including·their·own·adaptation·p·climate·finance·projects·including·of·the·GI ¶ ¶ ¶ ¶ ¶ ¶ ¶ We·have·revised·the·budget·and·moved·U·LDCF·funding·from·component·1·to·compo·strengthen·the·focus·on·innovations·and·di·transformations¶ ¶ ¶ ¤

	-·Comments·specific·to·components·are·provided·later.°↵ ¶ ¤	
¤	May·3,·2022¶ ¶ Thanks·for·the·adjustments.·Comment·cleared.¶ ¤	¤
Co-financing¶ ¶ 3.·Are·the·indicative·expected·amounts,·sources·and·types·of·co-financing·adequately·documented·and·consistent·with·the·requirements·of·the·Co-Financing·Policy·and·Guidelines,·with·a·description·on·how·the·breakdown·of·co-financing·was·identified·and·meets·the·definition·of·investment·mobilized?¤	21·April·2022¶ ¶ yes¤	¤
GEF·Resource·Availability¶ ¶ 4.·Is·the·proposed·GEF·financing·in·Table·D·(including·the·Agency·fee)·in·line·with·GEF·policies·and·guidelines?·Are·they·within·the·resources·available·from·(mark·all·that·apply):¤	21·April·2022¶ ¶ yes¤	¤
The·STAR·allocation?¤	N/A¤	¤
The·focal·area·allocation?¤	N/A¤	¤
The·LDCF·under·the·principle·of·equitable·access¤	21·April·2022¶ ¶ yes¤	¤
The·SCCF·(Adaptation·or·Technology·Transfer)?¤	N/A¤	¤
Focal·area·set-aside?¤	N/A¤	¤
Impact·Program·Incentive?¤	N/A¤	¤
Project·Preparation·Grant¶ ¶	21·April·2022¶ ¶ yes¤	¤

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)¤		
Core indicators¶ ¶ 6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)¤	21 April 2022¶ ¶ Please provide rationale behind 25% coverage of DRM. The project design doesn't indicate this clearly.¶ ¶ If there are potential interventions/innovations in sectors not listed e.g. alternate livelihoods, etc. please consider including them under "other".¶ ¶ The project also can potentially support creation of digital solutions and infrastructure. It is likely that they may be directed towards a specific sector e.g. agriculture. However, if there are generic digital solutions and related infrastructure, it could be included under "other infrastructure".¤	¶ ¶ This was a mistake and has been deleted. other infrastructure (i.e. digital solutions) ha instead. ¶ ¶ ¶ ¶ Ok done. ¶ ¶ ¶ ¶ ¶ Done.¶ ¶ ¶ ¶ ¶ ¶ ¤
¤	May 3, 2022¶ ¶ Thanks. Comment cleared.¤	¤
Project/Program taxonomy¶ ¶ 7. Is the project/ program properly tagged with the appropriate keywords as requested in Table G¤	21 April 2022¶ ¶ Yes¤	¤
Part II – Project Justification¶ ¶ 1. Has the project/program described the global environmental / adaptation problems, including the root causes and barriers that need to be addressed?¤	21 April 2022¶ ¶ Under barriers, the project should also consider lack of engagement of sectoral ministries/departments/agencies and local governments in climate financed projects. That is, going beyond the issue of OFP/NDA coordination only, to the issue of coordinating and involving such institutions in climate adaptation programming and	¶ ¶ Reflected. The barrier has been revised to: • → Lack of engagement of sectoral ministries/departments/agencies and g climate financed projects, as well as lim coordination at the country level to stra allocation of GEF, GCF and other clima that can contribute to the achievement

	implementation. ·Accordingly, ·the ·project· activities ·should ·focus ·on ·this ·aspect ·which· will ·lead ·to ·stronger ·ownership, ·effective· climate ·mainstreaming ·and ·broader· outreach ·to ·local ·communities.¤	objectives ·resulting ·in ·a ·duplication ·of ·p activities…..¤
¤	May ·3, ·2022¶ ¶ Thank ·you. ·As ·requested ·by ·email, ·please· provide ·a ·theory ·of ·change ·for ·the ·project.¶ ¤	May ·6, ·2022¶ ¶ A ·theory ·of ·change, ·including ·assumptions ·to ·the ·PIF ·in ·the ·beginning ·of ·the ·alternativ ¶ ¤
¤	May ·6, ·2022¶ ¶ Thanks. ·Comment ·cleared ·for ·now. ·The· ToC ·will ·be ·reviewed ·again ·at ·the ·CEO ·ER· stage ·once ·the ·project ·design ·is ·elaborated· more.¤	¤
2. ·Is ·the ·baseline ·scenario ·or· any ·associated ·baseline· projects ·appropriately· described?¤	21 ·April ·2022¶ ¶ Yes¤	¤
3. ·Does ·the ·proposed· alternative ·scenario ·describe· the ·expected ·outcomes ·and· components ·of ·the· project/program?¤	21 ·April ·2022¶ ¶ Please ·see ·comments ·below: ·¶ ¶ -· Under ·component ·1, ·please ·clarify ·how· the ·knowledge ·and ·coordination ·support· work ·can ·lead ·to ·benefiting ·103,000· beneficiaries ·directly. ·I ·think ·the ·component· 3 ·may ·lead ·to ·direct ·beneficiaries ·with· funding ·provided ·to ·specific ·innovative· projects. ·(ref: ·Table ·B)¶ ¶ -· Under ·1.1.1, ·thanks ·for ·including ·state ·of· adaptation ·report ·as ·a ·specific ·knowledge· product. ·at ·the ·CEO ·ER ·stage, ·we ·would· like ·to ·see ·a ·more ·detailed ·proposal ·of ·other· strategic ·knowledge ·products. ·¶ ¶ -· Under ·this ·component, ·as ·indicated· earlier, ·please ·also ·include ·coordination· with ·GCF ·supported ·projects ·to· operationalize ·the ·complementarity· proposed ·as ·a ·cross ·cutting ·priority ·of ·this· project. ·¶	¶ ¶ ¶ ¶ . ·The ·total ·number ·of ·direct ·beneficiaries ·is· to ·100,000 ·based ·on ·the ·number ·of ·innova· associated ·co-financing ·that ·will ·be ·launch· indicator ·has ·been ·moved ·to ·Component ·3· people ·that ·are ·going ·to ·be ·trained ·on ·adap· innovations ·are ·now ·included ·as ·a ·sub-set· number ·of ·beneficiaries. ¶ ¶ ¶ ¶ ¶ 1.1.1 ·now ·mentions ·that ·other ·specific ·kno· will ·be ·identified ·in ·the ·PPG ·phase, ·such ·as· social ·media ·pages, ·monthly ·newsletters, ·i· and ·toolkits ·on ·methods, ·tools, ·templates, ·t· good ·examples ·that ·will ·be ·identified ·in ·the· Coordination ·with ·GCF ·projects ·has ·been ·a· ¶ ¶ ¶

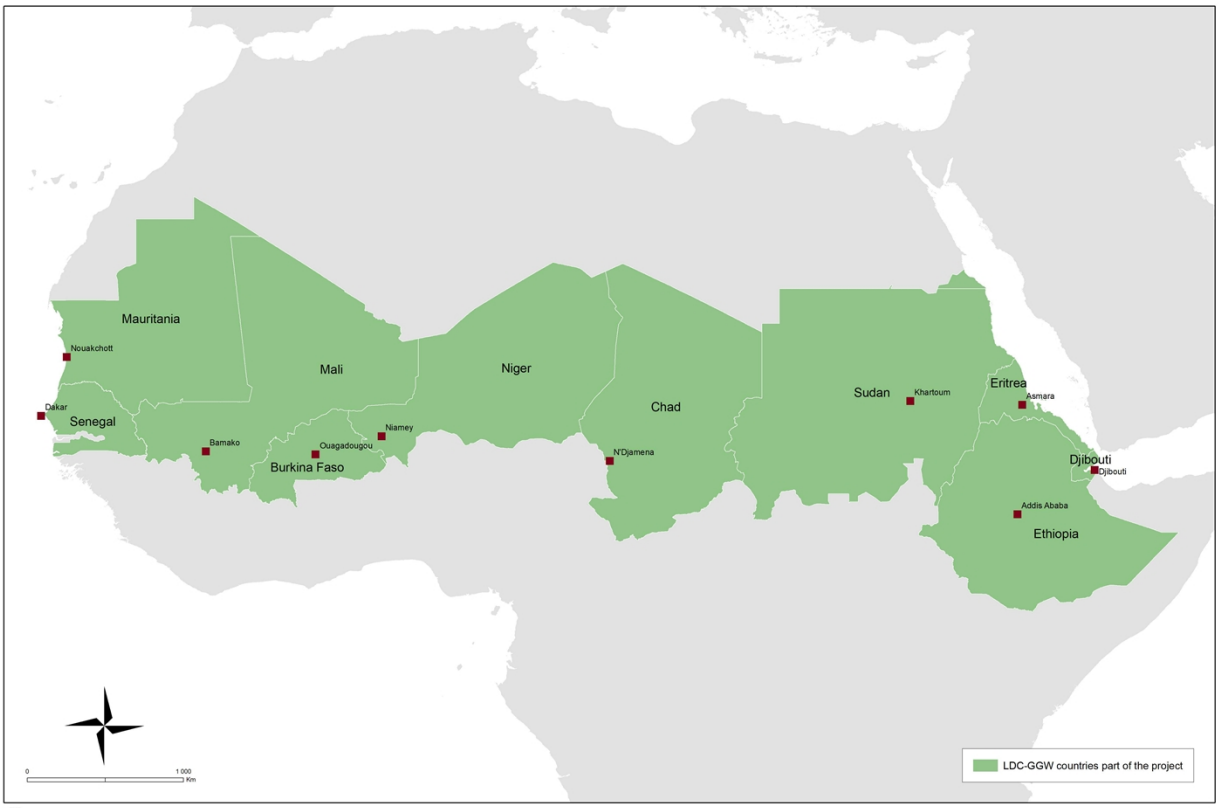
	¶ -·Component·2·seems·quite·strategic·but·comparatively·less·resources·have·been·allocated·to·this.·We·suggest·to·add·more·resources·to·this·by·drawing·from·component·1.·¶ ¶ -·Component·3-·at·the·CEO·ER·stage·we·would·like·to·see·more·details·of·the·innovation·grants·mechanism.·Direct·beneficiaries·can·be·supported·under·this·component.·At·this·stage,·please·clarify·if·there·can·be·a·possibility·of·co-financing·from·the·GCF·or·other·sources·for·the·innovation·grant.·¶ ¶ Under·Investment·mobilized,·output·3.2:·it's·mentioned·that·Innovation·and·digital·transformation·technologies·are·mapped,·and·a·digital·and·innovation·ecosystem·built.·Please·indicate·what·types·of·technologies·are·envisaged·and·how·these·will·be·deployed·in·the·context·of·this·project,·considering·that·the·countries·have·different·levels·of·IT·development·systems¤	¶ ¶ USD1·million·has·been·moved·from·compo·component·2·to·strengthen·the·focus·on·in·digital·transformations.¶ ¶ ¶ ¶ ¶ One·criteria·of·the·innovation·grants·will·be·and·it·could·be·from·the·GCF,·private·secto·government,·etc.·We·have·indicated·that·th·financing·ratio·should·be·around·1:3.¶ ¶ ¶ ¶ ¶ ¶ ¶ Output·2.2.2·now·indicates·that·digital·trans·technologies·include·e.g.·social·enterprise·climate·technologies,·remote·sensing·(usin·data,·such·as·trends.earth),·digital·finance·financial·innovations·and·other·innovative·a·approaches·that·are·further·elaborated·upo·alternative·scenario.·They·will·be·shared·th·outreach·and·communication·adapted·to·ex·infrastructure·and·platforms·at·country·leve
¤	May·3,·2022¶ ¶ All·the·responses·and·adjustments·are·fine·for·PIF·stage·and·will·be·reviewed·in·detail·at·the·CEO·ER·stage.·Comments·cleared.¶ ¤	¤
4.·Is·the·project/program·aligned·with·focal·area·and/or·Impact·Program·strategies?¤	21·April·2022¶ ¶ Yes¤	¤
5.·Is·the·incremental·/·additional·cost·reasoning·properly·described·as·per·the·Guidelines·provided·in·GEF/C.31/12?¤	21·April·2022¶ ¶ Yes¤	¤
6.·Are·the·project's/program's·indicative·targeted·contributions·to·global·environmental·benefits·	21·April·2022¶ ¶ Yes¤	¤

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **200,000**			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent Todate***	***Amount Committed***
International consultants fees	24,000	13,678	10,322
Institutional contract (Design activities - Stakeholder consultation)	55,000	16,511	38,489
Validation workshop	28,000	25,152	2,848
Travels costs	25,000	4,327	20,673
Pre-inception planning workshops	60,000		60,000
Commercial material	8,000		8,000
Total	**200,000**	**59,668**	**140,332**

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.



Project map with participating GGW countries ? Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Senegal, and Sudan

GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. These IDs are available on the GeoNames? geographical database containing millions of placenames and allowing to freely record new ones. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as:https://coordinates-converter.com Please see the Geocoding User Guide by clicking here.

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
The Great Green Wall of the Sahel - Senegal	14.25	-14.00		
The Great Green Wall of the Sahel - Djibouti	11.58	43.14		
The Great Green Wall of the Sahel - Chad	15.00	19.00		
The Great Green Wall of the Sahel - Niger	18.00	9.00		
The Great Green Wall of the Sahel - Mali	18.00	-2.00		
The Great Green Wall of the Sahel - Burkina Faso	12.5	-1.66667		
The Great Green Wall of the Sahel - Mauritania	20.25	-10.50		

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
The Great Green Wall of the Sahel - Sudan	16.00	30.00		
The Great Green Wall of the Sahel - Ethiopia	9.00	39.50		
The Great Green Wall of the Sahel - Eritrea	15.00	39.00		

ANNEX E: Project Budget Table

Please attach a project budget table.

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with

the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).