

Global Environment facility

Supporting the Great Green Wall Initiative and Lake Chad Basin:

Global Environmental and Adaptation Benefits through Sustainable Rural Development and Food Security in the Sahel

Background

Sahelian Africa faces a persistent problem of variability in rainfall, which is the major driver of vulnerability in the region. Populations in the Sahel are among the poorest and most vulnerable to climatic variability and land degradation. They depend heavily on healthy ecosystems for rain-fed agriculture, fisheries, and livestock management to sustain their livelihoods. These constitute the primary sectors of employment in the region and they generate at least 40 percent of the Gross Domestic Product in most of the countries. Furthermore, ecosystem services provide much needed livelihood products, such as fuelwood and bushmeat, among others. Unfortunately, increasing population pressures on food, fodder and fuelwood in a vulnerable environment have deteriorating impacts on natural resources, notably the vegetation cover. Climate variability with frequent droughts and poorly managed land and water resources (surface and underground) have caused rivers and lakes to dry up and contributes to increased soil erosion.

Since the severe droughts of the 70s and 80s that caused the loss of thousands of lives and forced hundreds of thousands to migrate, much knowledge has been gained by the communities and nations on strategies to cope with and mitigate environmental degradation and climate change. Although climate vulnerability is exacerbating land degradation trends, there is growing evidence across the region of successful sustainable land management innovations that protect fragile soils, improve productivity, and create income opportunities for the vast rural population. The challenge facing Sahelian countries now is to harness these modest successes by working together to expand opportunities for the rural population in the context of sustainable development and food security. By linking national level efforts across borders, countries will tackle policy, investment, and institutional barriers that exacerbate the effects of climate change and variability, leading to desertification and deterioration of the environment and natural resources, and risk of conflicts between communities.

This is the vision of expressed by 11 countries in the Sahel, who have collectively embraced the Great Green Wall of Sahel and Sahara Initiative as a platform to mobilize partnerships with the international community. Leaders of the 11 countries have committed to an environmental and development transformation in the region that will mitigate the risk of desertification while at the same alleviating poverty. This vision is fully endorsed by the African Union, with an Action Plan for implementation. During several high level events over the last year, Ministers from the 11 countries have reaffirmed their commitment to this vision and repeatedly called for support and engagement by the international donor community, including the GEF.

At a high level Ministerial Conference in Bonn in February 2011, the Ministers once again reaffirmed their commitment and secured support of several major partners including the GEF, and bilateral and multilateral donors for targeted investments toward translating the vision into reality.

The GEF aims to support an integrated approach in the Sahel zone from Senegal to Djibouti, including the Lake Chad Basin. This area stretches between the arid Sahara desert and the wetter regions in the South. This zone is characterized by high rainfall variability patterns. This variability is expected to increase, impacting the ability of soil and water resources to provide the ecosystem services necessary for food security, poverty alleviation, economic development and groundwater recharge. The GEF Support will address the environmental insecurity that affects people and ecosystems.

Overarching principles of the GEF Umbrella Support

The GEF support to the Great Green Wall Initiative and Lake Chad is based on two overarching principles: environmental security and food security for peace in a fragile region.

Environmental degradation is one of the greatest risks to local communities that depend on natural resources for their livelihoods. National level environmental challenges can lead to instability and conflict that threaten the security of other countries because of migration. Environmental security includes maintaining services provided by ecosystems and their impacts on livelihood conditions. Conservation of the natural environment and diversification of income sources improve the well-being of communities and contribute to reversing migration patterns towards urban areas and abroad. The improvement of land management in large areas contributes to reduced tensions between farmers and pastoralist communities. In such conditions as the Lake Chad, wetlands are key to sustaining biodiversity and ecosystem services that underpin fisheries and agricultural production. The degradation of wetlands and their surroundings will dramatically affect local communities who depend on natural resources for their livelihoods. The degradation of soils and water resources impacts biodiversity and threatens ecosystem capacities to provide livelihoods and resources for local communities. In many situations, people have no choice other than to implement unsustainable practices because of their urgent needs. It is then a dangerous spiral where practices may aggravate existing scarcities of land, water, and natural resources, and reduce adaptation opportunities.

Scaling up success stories for the poorest countries of the world. There are intimate links between food security, poverty, agriculture and human-induced dryland degradation. More than 90 percent of rural people in drylands depend on agricultural production, including pastoralism. Reducing the degradation of dryland ecosystems is an environmental, human and a development challenge. The GEF Support will be built on success stories, such as that of Niger where the restoration of large areas of agroforestry parklands has improved the resilience of ecosystems and local communities with multiple benefits: greater yields, improved soil fertility, reduced erosion, increased fodder availability, income diversification, shorter wood collection time for women, greater resilience to climate change, greater biodiversity, and fewer conflicts between communities over scarce resources.

Dealing with environmental and food security issues is an important contribution from the GEF to the fight against poverty and to maintain sustainable peace in the region. The enhancement of ecosystem services and the improvement of standards of living in poor communities are ways to reduce migration towards urban areas and abroad.

Framework for GEF Support

The support is focused on eleven countries bordering the Southern Sahara zone that are partners of the Great Green Wall Initiative: *Burkina Faso, Chad, Djibouti, Ethiopia, Eritrea, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan*. Other countries have requested to participate in the programmatic approach

to apply the same tools on their Sahelian drylands (Ghana, Togo, and Benin). The GEF support to the Great Green Wall Initiative will be pursued through three major partnership frameworks:

- 1. The GEF/WB Sahel and West Africa Program in support of the Great Green Wall Initiative –**
This program supports the implementation of a country-driven vision for integrated natural resource management for sustainable and climate-resilient development in the Sahel region. The grant includes \$80,444,446 from the GEF Trust Fund, \$20,370,369 from the Least Developed Countries Fund (LDCF) and \$4,629.629 from the Special Climate Change Fund (SCCF). The program builds on a series of planned baseline investments amounting to \$1.8 billion in co-financing in 12 countries. The investments cover agriculture, food security, disaster risk management, rural development, and watershed management. The program leverages GEF resources under the STAR according to country allocations, as well as resources from the LDCF and the SCCF based on eligibilities and the principle of equitable access under the LDCF. Each country will design a GEF project based on national level priorities for STAR resources and, where LDCF and SCCF are utilized, in accordance with NAPA priorities and National Communications. The discrete projects will directly address the priorities of the Climate Change Adaptation Program for LDCF and SCCF as well as the GEF Land Degradation, Biodiversity, and Climate Change focal areas. The program will also leverage incentive financing from the SFM/REDD+ Program to increase focus on forest landscapes. The Initiative is expected to lead to the sustainable management of land, water and vegetation on up to 2 million hectares of cropland, rangelands, and dryland forest ecosystems per country, as well as to sequester 0.5 to 3.1 million tons of carbon per year.

The Program has been endorsed by countries at the Bonn meeting and letters of endorsements will be delivered after the national portfolio exercises. In the meantime, countries have been submitting "Letters of Intent" on a rolling basis, and as of April 25, five have already done so. We expect every country to have sent a Letter of Intent by the May Council meeting."
- 2. Lake Chad Basin Initiative** - This is envisaged as a Regional Program to be developed by the African Development Bank with five Lake Basin countries – *Cameroon, Central Africa Republic, Chad, Niger, and Nigeria* - and the Lake Chad Basin Commission. A GEF grant of \$8-10 million from the International Waters Focal Area is planned, to be complemented by country-specific priorities identified for investment under the STAR allocations. The GEF grant will leverage baseline investments by the AfDB as well as counterpart funding in the countries, with the potential to generate up to \$400 million in co-financing. This GEF/AfDB investment will implement parts of the Strategic Action Programme (SAP) developed under a GEF-3 WB/UNDP project (\$9.6 million from the GEF and \$9.3 million from cofinancing) financing with the countries sharing Lake Chad (Chad, Niger, Nigeria, and Cameroon). The SAP developed demonstration activities on the sustainable use of surface and ground water, wetlands. Operational capacities in the Lake Chad sub-basins were also reinforced.
- 3. National projects** to be further developed by the International Fund for Agricultural Development (IFAD) and linked to baseline projects dealing with agriculture and rural development. Baseline projects are under preparation in many countries, including Chad, Djibouti, Eritrea, and Sudan. The baseline financing is estimated at \$157 million.

During the Bonn meeting in the UNCCD Headquarters held on February 18-19, 2011, other GEF Agencies (UNEP and UNDP) and partners also expressed support and possible cofinancing for some of the activities (Germany, US, France, OSS, IUCN, WWF, etc.). All statements were included in the Ministerial Declaration, and will be used during project development and implementation. Other GEF efforts will reinforce the whole initiative. For instance, the Small Grant Program will finance communities, CSO and NGOs for \$10 million. The Adaptation Fund will also support projects linked to food security and agriculture (Djibouti, Mali).

Timeline

The Sahel and West Africa Program to support the Great Green Wall Initiative is the first benchmark of the GEF Umbrella Support in the Great Green Wall Initiative and the Lake Chad. This GEF/WB program is included in the May 2011 work program, and is addressing agriculture, natural resource management, food security, forest and biodiversity conservation, environmental security, ecosystem resilience, as well as other urgent and immediate needs for adaptation to climate change, including variability.

The GEF/AfDB will be submitted in the November 2011 Work Program, and will focus on generating global environmental benefits through multi-sectoral activities – agriculture, fisheries, wetland management, and renewable energy - in and around the Lake Chad Basin.

The projects to developed by the IFAD and other GEF Agencies (UNEP and UNDP) are envisaged during the November 2011 and the May 2012 Work Program. IFAD's comparative advantage is in food security linked to agriculture and rural development issues. The experiences of bilaterals in the region will notably serve to scale up successful experiences.



PROGRAM FRAMEWORK DOCUMENT (PFD)

TYPE OF TRUST FUND: MULTI-TRUST FUND

TYPE OF AGENCY: Qualifying GEF Agency

PART I: PROGRAM IDENTIFICATION

Program Title:	Sahel and West Africa Program in support of the Great Green Wall Initiative		
Country(ies):	Benin, Burkina Faso, Chad, Ethiopia, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal, Sudan and Togo	GEF Program ID: ¹	
Lead GEF Agency:	WB	GEF Agency Program ID:	P125210
Other GEF Agency(ies):	(select) (select) (select)	Submission Date:	April 14 2011
Other Executing Partner(s):	Governments of participant countries, Regional Centers of Excellence	Program Duration(Months)	96
GEF Focal Area (s):	MULTI FOCAL AREA	Agency Fee (\$):	8,435,556

A. FOCAL AREA STRATEGY FRAMEWORK²:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Type of Trust Fund	Indicative Financing (\$)	Indicative Cofinancing (\$)
LD-3	Enhanced cross-sector enabling environment for integrated landscape management	Integrated land management plans developed and implemented	GEF	12,166,667	250,000,000
LD-3	Integrated landscape management practices adopted by local communities	Information on INRM technologies and good practice guidelines disseminated	GEF	18,250,000	570,000,000
CCA-1 (select)	Reduced vulnerability to climate change in development sectors	Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability	LDCF	9,166,667	93,000,000
CCA-1	Reduced vulnerability to climate change in development sectors	Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability	SCCF	2,083,333	7,000,000
CCA-2 (select)	Strengthening adaptive capacity to reduce risks to climate-induced economic losses	Adaptive capacity of national and regional centers and networks strengthened to rapidly respond to extreme weather events	LDCF	9,166,667	168,000,000
CCA-2 (select)	Strengthening adaptive capacity to reduce risks to climate-induced economic losses	Adaptive capacity of national and regional centers and networks strengthened to rapidly respond to extreme weather events	SCCF (Select)	2,083,333	7,000,000
CCM-3	Investment in renewable energy technologies increased	Electricity and heat produced from renewable sources	GEF	2,133,333	4,000,000
CCM-5	Restoration and	Forest and non-forest lands	GEF	6,916,667	84,000,000

¹ Program ID number will be assigned by GEFSEC.

² Refer to GEF-5 Template Reference Guide posted on the GEF website for description of the FA Results Framework when filling in Table A.

Note: Multitrust fund for CCA-1 and CCA-2 refers to LDCF and SCCF.

	enhancement of carbon stocks in forests and non-forest lands, including peatland (hectares)	under good management practices			
BD-1	Improved management effectiveness of existing and new protected areas	New protected areas (number) and coverage (hectares) of unprotected ecosystems	GEF	6,133,333	55,000,000
BD-2	Increase in sustainably managed landscapes and seascapes that integrate biodiversity conservation	National and sub-national land-use plans (number) that incorporate biodiversity and ecosystem service valuation	GEF	12,633,333	190,000,000
SFM/REDD-1	Good management practices applied in existing forests	Forest area (hectares) under sustainable management, separated by forest type	GEF	14,166,667	312,000,000
(select) (select)	Others		(Select)		
Subtotal:				94,900,000	1,740,000,000
Program Management Cost ³				10,544,444	70,000,000
Total Program Costs				105,444,444	1,810,000,000

B. PROGRAM RESULT FRAMEWORK

Program Goal: Program aims at expanding sustainable land and water management (SLWM) in targeted landscapes and in climate vulnerable areas in Sahel and in West Africa.

Program Component	Grant Type	Expected Outcomes	Expected Outputs	Type of Trust Fund	Indicative Financing (\$)	Indicative Cofinancing (\$)
1. Institutions, Information, and Policy	TA	Policies, institutions, and financing for scaling up SLWM and other adaptive responses improved by countries and regional level	<p>Basin, watershed and/or land use plans developed (including production lands and/or protected areas) (number) (BD-1, BD-2, CCM-5, SFM-1, LD-3)</p> <p>Capacity development programs and training events developed and delivered (number) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1)</p> <p>Country level sector, national plans or frameworks including SLWM and adaptation measures (number) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1, CCA-1, CCA-2)</p> <p>Country SLM Investment Frameworks (being updated or under implementation) (number) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1, CCA-1, CCA-2)</p> <p>Participating countries with improved scores on the survey: Composite Index for the SLWM Enabling Environment (number) (BD-1, BD-2, CCM-5, LD-3, SFM-1)</p>	GEF	15,184,000	261,000,000

³ This is the cost associated with the unit executing the project on the ground and could be financed out of trust fund or co-financing sources.

		<p>Knowledge generated and disseminated in countries on SLWM and other adaptive responses</p>	<p>Capacity support programs and events developed and delivered (country, regional) (number) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1, CCA-1, CCA-2)</p> <p>Knowledge products developed and disseminated (country, regional) (number by targeted population) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1, CCA-1, CCA-2)</p> <p>Country level comprehensive SLWM information systems operational for monitoring landscape mosaics (remote sensing, ICT, databases, knowledge bases, etc) (number) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1)</p> <p>1 regional comprehensive SLWM information system operational for monitoring landscape mosaics (remote sensing, ICT, databases, knowledge bases, etc.) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1)</p> <p>Cost effective -regional and project level-M&E systems operational (including development benchmarks among country projects) (number) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1, CCA-1, CCA-2)</p> <p>Countries with improved score on GEF-5 focal area tracking tools (when finalized) (number) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1)</p> <p>Projects in the program portfolio with satisfactory supervision reports (percentage) (BD-1, BD-2, CCM-3, CCM-5, LD-3, SFM-1, CCA-1, CCA-2)</p>			
2. Investment in SLWM and Biodiversity	Inv	<p>More secure provision of services from the landscape mosaic in targeted areas, including livelihoods, genetic resources, soil health and water resources</p>	<p>Hectares with SLWM practices (reported by land use: crop, range, forest, protected areas) (BD-1, BD-2, CCM-5, LD-3, SFM-1)</p> <p>Land users adopting SLWM practices (numbers reported by land use: crop, range, forest, protected areas, and by gender) (BD-1, BD-2, CCM-5, LD-3, SFM-1)</p>	GEF	37,960,000	870,000,000

		Biodiversity conservation integrated into landscape management	<p>Land users receiving advisory services on SLWM practices (numbers reported by land use: crop, range, forest, protected areas, and by gender) (BD-1, BD-2, CCM-5, LD-3, SFM-1)</p> <p>Landscape management plans incorporating biodiversity conservation measures (number and by type of landscape: productive landscape, protected area, etc) (BD-1, BD-2)</p> <p>Conservation set asides along vulnerable areas (BD-1, BD-2)</p> <p>SLWM activities integrating biodiversity conservation (habitat rehabilitation, crop diversity, preservation breeding grounds, protection migration corridors, etc) (BD-1, BD-2)</p>			
3. Innovations and Economics	Inv	<p>Payment for Ecosystem Services adopted as an incentive mechanism to implement SLWM</p> <p>Increase in community based ecotourism activities.</p>	<p>Land users receiving advisory services on PES schemes, including capacity to value and market environmental services (number reported by gender) (BD-1, BD-2, LD-3, SFM-1)</p> <p>Decision- makers and technical staff trained on PES including methods of valuation, as well as implications of different payment schemes (BD-1, BD-2, LD-3, SFM-1)</p> <p>Areas under Payment for ecosystem services schemes (hectares) (BD-1, BD-2, LD-3, SFM-1)</p> <p>Community organizations trained in public use management and ecotourism good practices (number) (BD-1, BD-2, LD-3, SFM-1)</p> <p>Targeted areas with ecotourism facilities constructed and in operation by local communities. (number) (BD-1, BD-2, LD-3, SFM-1)</p>	GEF	10,439,000	174,000,000
4. Mitigation and Adaptation to Climate Change						
4.1 Adaptation to Climate Change	Inv	Strengthened adaptive capacity to actual or potential climate change risks	<p>Participating countries with plans and strategic interventions to manage climate risks to SLWM (number) (CCA-1, CCA-2)</p> <p>National and local officers trained on integration of climate change adaptation into sectoral planning (number by gender)</p>	LDCF	18,333,333	261,000,000

			(CCA-1, CCA-2) Technology based adaptation options tested (number) (CCA-1, CCA-2) Traditional SLWM knowledge suitable for climate change adaptation strengthened/ restored (CCA-1, CCA-2) Early warning and disaster preparedness systems in target vulnerable areas established (number) (CCA-1, CCA-2) Capacity support programs and events to implement disaster response plans (number) (CCA-1, CCA-2)			
4.2. Adaptation to Climate Change	Inv/TA	Strengthened adaptive capacity to actual or potential climate change risks	National and local officers trained on integration of climate change adaptation into sectoral planning (number by gender) (CCA-1, CCA-2) Technology based adaptation options tested (number) (CCA-1, CCA-2)	SCCF	4,166,667	14,000,000
4.3 Mitigation	Inv /TA	Mitigation opportunities identified and implemented	Forest lands under SLWM practices (hectares by forest type) (BD-1, BD-2, CCM-5, LD-3, SFM-1) Households incorporating renewable energy alternatives to traditional approaches (number by country) (CCM-3) Households receiving advisory services on renewable energy alternatives to traditional approaches (number by gender) (CCM-3)	GEF	8,817,000	160,000,000
	(select)			(Select)		
Subtotal:					94,900,000	1,740,000,000
Program Management Cost ⁴					10,544,444	70,000,000
Total Program Costs					105,444,444	1,810,000,000

NOTE: FOR EACH EXPECTED OUTPUTS, A REFERENCE TO THE FOCAL AREA OBJECTIVES THAT IT CONTRIBUTES TO HAS BEEN INCLUDED.

⁴ Same as footnote #3.

C. INDICATIVE CO-FINANCING FOR THE PROGRAM BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier (if known)	Type of Cofinancing	Amount (\$)
GEF Agency	The World Bank	Soft Loan	1,735,000,000
National Government	Government of participating countries	In-kind	60,000,000
Other Multilateral Agency (ies)	European Union	Grant	15,000,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			1,810,000,000

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Program Amount (a)	Agency Fee (b)2	Total c=a+b
WB	GEF	Land Degradation	Benin	\$3,240,741	\$259,259	\$3,500,000
WB	GEF	Biodiversity	Benin	\$1,388,889	\$111,111	\$1,500,000
WB	GEF	SFM - Multifocal	Benin	\$925,926	\$74,074	\$1,000,000
WB	GEF	Land Degradation	Burkina Faso	\$2,777,778	\$222,222	\$3,000,000
WB	GEF	Biodiversity	Burkina Faso	\$1,388,889	\$111,111	\$1,500,000
WB	GEF	Climate Change	Burkina Faso	\$1,388,889	\$111,111	\$1,500,000
WB	GEF	SFM - Multifocal	Burkina Faso	\$1,851,852	\$148,148	\$2,000,000
WB	GEF	Land Degradation	Chad	\$2,314,815	\$185,185	\$2,500,000
WB	GEF	Biodiversity	Chad	\$1,388,889	\$111,111	\$1,500,000
WB	GEF	SFM - Multifocal	Chad	\$925,926	\$74,074	\$1,000,000
WB	LDCF		Chad	\$4,629,629	\$370,371	\$5,000,000
WB	GEF	Land Degradation	Ethiopia	\$2,777,778	\$222,222	\$3,000,000
WB	GEF	Biodiversity	Ethiopia	\$2,777,778	\$222,222	\$3,000,000
WB	GEF	Climate Change	Ethiopia	\$925,926	\$74,074	\$1,000,000
WB	GEF	SFM - Multifocal	Ethiopia	\$1,851,852	\$148,148	\$2,000,000
WB	LDCF		Ethiopia	\$4,629,629	\$370,371	\$5,000,000
WB	GEF	Land Degradation	Ghana	\$2,777,778	\$222,222	\$3,000,000
WB	GEF	Biodiversity	Ghana	\$1,851,852	\$148,148	\$2,000,000
WB	GEF	Climate Change	Ghana	\$2,268,518	\$181,482	\$2,450,000
WB	GEF	SFM - Multifocal	Ghana	\$1,851,852	\$148,148	\$2,000,000
WB	GEF	Land Degradation	Mali	\$2,814,815	\$225,185	\$3,040,000
WB	GEF	Biodiversity	Mali	\$1,814,815	\$145,185	\$1,960,000
WB	GEF	Climate Change	Mali	\$1,851,852	\$148,148	\$2,000,000
WB	GEF	SFM - Multifocal	Mali	\$1,851,852	\$148,148	\$2,000,000
WB	LDCF		Mali	\$4,629,629	\$370,371	\$5,000,000
WB	GEF	Land Degradation	Mauritania	\$2,222,222	\$177,778	\$2,400,000
WB	GEF	Biodiversity	Mauritania	\$1,388,889	\$111,111	\$1,500,000
WB	GEF	SFM - Multifocal	Mauritania	\$925,926	\$74,074	\$1,000,000
WB	LDCF		Mauritania	\$2,777,778	\$222,222	\$3,000,000
WB	GEF	Land Degradation	Niger	\$1,851,852	\$148,148	\$2,000,000
WB	GEF	Biodiversity	Niger	\$925,926	\$74,074	\$1,000,000

WB	GEF	Climate Change	Niger	\$925,926	\$74,074	\$1,000,000
WB	GEF	SFM - Multifocal	Niger	\$925,926	\$74,074	\$1,000,000
WB	GEF	Land Degradation	Nigeria	\$555,555	\$44,445	\$600,000
WB	GEF	Biodiversity	Nigeria	\$2,481,481	\$198,519	\$2,680,000
WB	GEF	SFM - Multifocal	Nigeria	\$925,926	\$74,074	\$1,000,000
WB	SCCF		Nigeria	\$4,629,629	\$370,371	\$5,000,000
WB	GEF	Land Degradation	Senegal	\$3,611,111	\$288,889	\$3,900,000
WB	GEF	Biodiversity	Senegal	\$1,111,111	\$88,889	\$1,200,000
WB	GEF	Climate Change	Senegal	\$842,592	\$67,408	\$910,000
WB	GEF	SFM - Multifocal	Senegal	\$1,851,852	\$148,148	\$2,000,000
WB	GEF	Land Degradation	Sudan	\$2,472,222	\$197,778	\$2,670,000
WB	GEF	Biodiversity	Sudan	\$3,407,407	\$272,593	\$3,680,000
WB	GEF	SFM - Multifocal	Sudan	\$925,926	\$74,074	\$1,000,000
WB	GEF	Land Degradation	Togo	\$3,601,852	\$288,148	\$3,890,000
WB	GEF	Biodiversity	Togo	\$925,926	\$74,074	\$1,000,000
WB	GEF	SFM - Multifocal	Togo	\$925,926	\$74,074	\$1,000,000
WB	LDCF		Togo	\$3,703,704	\$296,296	\$4,000,000
WB	GEF	Land Degradation (FAS)	Regional	\$2,777,778	\$222,222	\$3,000,000
WB	GEF	Climate Change (FAS)	Regional	\$1,851,852	\$148,148	\$2,000,000
Total Grant Resources				\$105,444,444	\$8,435,556	\$113,880,000

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

Note: For Chad and Togo, considering these countries are STAR flexible, resources were moved from the CC focal area to the BD and LD focal area and to the LD focal area, respectively.

PART II: PROGRAMATIC JUSTIFICATION

A. GOAL OF THE PROGRAM:

Sahelian economies and livelihoods heavily depend on the soil, water and vegetation resources. The state of these resources has been steadily deteriorating as a result of expanding human settlement and demand for more food, fodder, fuel wood, and water. Frequent droughts accompanied by unplanned, unsustainable and poorly managed use of land and water have, along with natural climate variability, caused the drying up of national and transboundary rivers and lakes, while wind and water erosion have removed valuable top soil.

Southern systems are connected across borders through migration, transhumance, and land use change (e.g., forest depletion in coastal West Africa affects rainfall in the Savannah and Sahel). Throughout the region, there is increasing understanding that degradation of land and water resources, as well as climate variability and change, transcend institutional and geographic boundaries. Certainly countries face shared challenges and can gain from a shared response. An umbrella program allows encompassing some level of interconnectivity across countries that could not be achieved through small isolated projects.

Goal of the program:

The goal of the program is to expand Sustainable Land and Water Management (SLWM)⁵ in targeted landscapes and in climate vulnerable areas in West African and Sahelian countries.

Key performance indicators for the Program are:

KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas)

KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (hectares) ⁶

KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and response to climate variability, compared to baseline (#)

KPI 4. Change in carbon accumulation rates in biomass and soil, compared to baseline (tC/ha)

The Program will support the following activities:

- Expand investment in sustainable land and water management technologies (see Annex F on list and definition). This would help communities adapt production systems to climate variability and change, generate income and livelihoods, and secure global public goods such as retention of greenhouse gases, nitrogen fixation, groundwater recharge, and biodiversity, and reduce impacts from erosion, drought and flooding.
- Improve land use planning, such as at watershed scale (e.g., Nigeria) or local levels (e.g., grazing reserves, conservation areas, etc.). This would help manage trade-offs that occur between multiple uses such as demand for rich floodplains for grazing or crops, or woodlands' value for fuelwood versus watershed function and protected areas.
- Improve and apply the information base: climate and water monitoring network improvements, ICT innovations, institutional cooperation within and across countries, and evidence-based policy development.

This Program comes as one of the contributions to the Great Green Wall Initiative. The vision of a great green wall was originally conceived by the former President of the Federal Republic of Nigeria, Chief Olusegun Obasanjo and was then strongly supported by the President of Senegal, Abdoulaye Wade, initially with a limited vision related to tree planting. The vision has then evolved into an integrated ecosystem management approach. Through efforts of several other leaders in the region, the new approach has been embraced by the Africa Union following adoption of the “Decision on the implementation of the Green Wall for the Sahara Initiative” by the Assembly of the AU in January 2007. In June 2010, eleven countries signed a convention in Ndjamena, Chad, to create the Great Green Wall Agency and nominate a Secretary to further develop the initiative. In February 2011, the GEF organized a Ministerial consultation in Bonn to agree on guidance on the priority area to be addressed with the GEF resources. The African initiative is envisioned as a mosaic of land uses that are consistent with GEF’s mandate under the focal areas on land degradation, climate change mitigation, biodiversity, and international waters as defined by the GEF⁷ itself.

⁵ The definition of Sustainable Land and Water Management (SLWM) adopted in this proposal is based on Terrafrica’s definition: the adoption of land use systems that, through appropriate management practices, enables land users to maximise the economic and social benefits from the land while maintaining or enhancing the ecological support functions of the land resources. SLWM includes management of soil, water, vegetation and animal resources. It involves a holistic approach that integrates social, economic, physical and biological assets. For the purposes of this proposal, this definition will encompass other approaches such as integrated natural resources management (INRM), integrated water resources management (IWRM), integrated ecosystem management (IEM), eco-agriculture and sustainable forest management (SFM), and many facets of sustainable agriculture, agriculture water management (AWM), biodiversity conservation and climate change adaptation, such as agroforestry.

⁶ Vegetation cover is considered as a proxy for terrestrial ecosystem health including cropland, rangeland, forest/woodlands and hydrological flows.

⁷ Draft Concept Note for the Expert Meeting and Ministerial Consultation on the Great Green Wall Initiative and Lake Chad: Strategic directions for the GEF investment. February 2011

B. DESCRIPTION OF THE CONSISTENCY OF THE PROGRAM WITH:

B.1.1 The [GEF/LDCF/SCCF focal area strategies](#):

The Program will be developed using a multi-focal area strategy to help ensure good integrated ecosystem management approaches that can help secure a robust mix of primary and secondary ecosystem services from the landscape mosaic while adapting to climate change and variability. It will address several of the GEF strategic goals, by supporting countries to:

- Conserve, sustainably use, and manage biodiversity, ecosystems and natural resources globally, taking into account the anticipated impacts of climate change;
- Reduce climate risks via adapting to future climate change and current variability;
- Build national and regional capacities and enabling conditions for intertwined global environmental protection and sustainable development

The Program is consistent with the GEF strategies for the following focal areas: Land Degradation, Climate Change Mitigation, Biodiversity and Sustainable Forest Management.

The Program will directly address land degradation challenges in the region by promoting community-based SLWM practices and building/supporting existent and effective enabling environments for SLWM so to reduce pressure on natural resources from competing land uses (LD-3). In addition, by supporting low carbon technologies, the Program will support activities that will allow countries to follow a low-carbon development path particularly in relation to alternatives to renewable household energy alternatives to traditional approaches (CCM-3). Through several of its components related to land use and land use change, the Program will also promote restoration and enhancement of carbon stocks (CCM-5). The Program will also aim at reducing pressures on forest resources through SLWM, generating sustainable flows of forest ecosystem services (SFM/REDD+ - 1). The Program will be implemented following the landscape approach (promoted through the SFM strategy) which integrates people's livelihood objectives in the management of the different ecosystems within the landscape.

To improve ecosystem function and increase opportunities for improving livelihoods, the Program will also contribute to the conservation of biodiversity in both national protected area systems as well as production landscapes (BD-1 and BD-2). The biodiversity related activities are aiming at supporting countries to mainstream biodiversity conservation and sustainable use into the key production sectors within the larger productive landscape (BD-2), often in association with agricultural project baselines. The Program will also seek to improve sustainability of Protected Areas Systems (BD-1) through expansion or rehabilitation of existing protected areas, development of biological corridors, support to PA management as applicable and development of close linkages between economic sectors and protected areas.

The program has been designed to achieve synergies between focal areas and it is likely to create precedence on how activities will be cross cutting across focal areas. The program integrates focal areas and adaptation windows to deliver a range of global benefits from landscapes, the focus in most cases being production landscapes. Key performance indicators mentioned in point A above are likewise integrated, borrowing from each FA, the SFM and the adaptation windows⁸. Key performance indicators 1 (area change in improved technology), 2 (area change in vegetation cover) and 4 (tC/ha) have relevance for the LD, SFM, BD and CCM focal areas. Discrete projects under the umbrella will report on all or a subset of these as well as other lower-level indicators.

⁸ The indicators were also selected considering World Bank corporate guidance on remaining within a given project's "sphere of influence" -- e.g. only reporting on what the project can reasonably control.

Finally, the Program will include country-level projects that will incorporate activities to reduce vulnerability and increase capacity to adapt to actual or potential impacts of climate variability. By doing so, it will contribute to meet the following LDCF/SCCF objectives:

CCA-1: Reducing vulnerability (Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level)

CCA- 2: Increasing adaptive capacity (Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level)

LDCF/SCCF resources will support countries to become climate resilient by promoting both immediate and longer term adaptation measures in development policies, plans, programs, projects and actions.

B.1.2. For programs funded from LDCF/SCCF: the LDCF/SCCF [eligibility criteria and priorities](#):

The Program fulfills the criteria and priorities required to obtain financing from the LDCF/SCCF. The strategy adopted for the Program consists of a set of interrelated components plus additional adaptation measures (investments, institutional development and information) that are needed to support the baseline projects given the presence of the challenges related to climate change. This design is thus consistent with the additional cost principle.

By using LDCF/SCCF funds to mainstream adaptation, the Program will have a greater impact, take advantage of synergies and achieve economies of scale. This proposal is consistent with the following eligibility criteria:

- *Country ownership*: All least developed countries included in the program that will receive funds from the LDCF have submitted the NAPAs. See Annex B with information for each of the participant countries. Projects submitted by Ghana and Nigeria – parties to the UNFCCC- will qualify for SCCF aiming to implement adaptation measures that increase resilience to climate change in a particular sector. Projects within the Program are country driven, based on the NAPA process and prepared with full involvement of relevant stakeholders.

- *Program and policy conformity*: national and regional projects included in the Program will offer cross-sectoral solutions to urgent and immediate adaptation needs (*program conformity*) without replicating existent initiatives. They will be designed to address the additional costs of priority adaptation measures identified in the NAPAs (*program design*), and they will also promote the required capacity to continue with such solutions after project completion (*sustainability*).

- *Financing*: Proposed interventions within the Program will need to ensure they are the cheapest and most effective way to achieve the intended results.

- *Institutional coordination and support*: As the projects to be financed are part of a programmatic approach this will facilitate that they will be linked with other similar projects within the Program. Special attention will be given so that the Program will include projects that continue or upscale existent processes, implement priority activities that have not been sufficiently addresses before and do not duplicate existent efforts.

- *Monitoring and evaluation*: projects supported financially by the LDCF/SCCF funds will follow the Program's overall M&E procedures.

B.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The Program will reinforce the commitment of each of the participant countries to implement global and regional frameworks, such as the United Nations Convention to Combat Desertification (UNCCD), United Nations Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity, the Africa Union's New Partnership for Africa's Development's Environment Action Plan (EAP) and its Comprehensive African Agricultural Development Program (CAADP). The Program is consistent with the UNCCD 10-year strategic plan and framework for the implementation of the Convention (2008-2018), contributing to each of its four strategic objectives: (i) to improve the living conditions of affected populations; (ii) to improve the condition of affected ecosystems; (iii) to generate global benefits through effective implementation of the UNCCD; and, (iv) to mobilize resources to support implementation of the Convention through building effective partnerships between national and international actors. The program's components also align to the strategic plan's operational objectives: (i) advocacy,

awareness raising and education; (ii) policy framework; (iii) science, technology and knowledge; (iv) capacity-building; and (v) financing and technology transfer.

National and regional projects will be consistent with the Regional, Sub-Regional and National Action Plans to combat desertification (RAP, SRAPs and NAPs). Also, in relation to climate change, projects will address priority actions identified in the country's NAPAs. Regarding the CAADP, the Program is particularly consistent and will support implementation of Pillar on *Sustainable Land and Water Management* and the closely related TerrAfrica program, both of which aim to scale up SLM.

The Program is building on the knowledge generated by renowned regional organizations such as the permanent Interstate Committee for drought control in the Sahel (CILSS), Agro-Hydro-Météorological Center of the CILSS (AGRHYMET) and Sahara and Sahel Observatory (OSS) that have decades of data and knowledge on the ecosystems covers by the Program. These organizations will be associated to the implementation of the Program through a specific project.

The Program will strengthen the implementation of existing continental frameworks and plans addressing land degradation and desertification as outlined in the Great Green Wall Initiative (GGWI) Action Plan developed in 2009. The proposed program is contributing to the priority areas of intervention included in the GGWI Action Plan. Aiming at continuing processes started with the TerrAfrica's multiagency/GEF Strategic Investment Program for SLM in Sub-Saharan Africa (GEF-SIP), the proposed Program is fully consistent with the GEF-SIP's goal of supporting sub-Saharan countries in improving natural resource-based livelihoods by reducing land degradation.

The program is also consistent with the Africa Water Vision for 2025, which calls for “an Africa where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation, and the environment”.

At the regional level, the Program will also consider the regional sectoral policies and strategies. For example, activities in West African countries will be consistent with the Regional Agricultural Policy developed by the Economic Community of West African States (ECOWAP- ECOWAS), the Regional Water Policy called “West Africa Water Resources Policy” and the Regional Action Plan for Integrated Water Resources Management in West Africa.

Country-level projects will also be in line with strategies and priority activities and needs identified in country driven exercises such as action plans related to the UN Conventions. In addition, under TerrAfrica and often with GEF-SIP financing, several countries have already prepared or are in the process of preparing Country Sustainable Land Management (SLM) Investment Frameworks to identify priority investments across sectors that will need additional support for continued implementation. The proposed Program will not only be consistent, but will support the implementation of the priorities identified in the SLM Investment Frameworks.

C. Rationale of the program and description of strategic approach (including description of current barriers to achieve the stated objectives):

The region and its challenges

The Sahel is the semi-arid transition region that lies between the arid Sahara desert and wetter regions of equatorial Africa. It extends from the Atlantic in the west to the Indian Ocean in the east. The Sahel's latitudinal limits fluctuate with rainfall patterns. Its vegetation cover is composed of bushes, grasses and stunted trees that increase in density as one moves southward. Historically, it has had high rainfall variability and this is expected to amplify, affecting the ability of its already stressed land and water resources to provide a secure stream of ecosystem services necessary for poverty alleviation, economic growth, and regional and global public environmental goods such as carbon accumulation in soil and biomass, groundwater recharge, the Eurasian-African flyway, and so on.

The Sahel is highly vulnerable to climate change due to its geographic location and the dependence of its population on rain-fed agriculture⁹ and transhumance systems. The agricultural sector employs more than 60 percent of the active population and contributes 40 percent of the Gross Domestic Product (GDP) of the region. Main livelihood strategies in the region center on secondary services from land and water resources (food, fuel, fiber). Rainfall variability¹⁰, land degradation (deforestation, continuous cropping and overgrazing) and desertification are some of the factors that combine to make it one of the poorest and most environmentally insecure areas in the world (Kandji, Verchot and Mackensen, 2006)¹¹.

The interrelated set of problems associated with land degradation and climate variability facing the Sahel are well known. Livelihoods in the Sahel countries heavily depend on the soil, water and vegetation resources. The state of these resources has been steadily deteriorating as a result of expanding human settlement and demand for more food and fuel wood. Frequent droughts accompanied by unplanned, unsustainable and poorly managed use of land and water (surface and groundwater) have, along with natural variability, caused the drying up of national and transboundary rivers and lakes, while wind erosion has removed valuable top soil¹².

As a result, the natural vegetation of most of the Sahel has been dramatically altered and the ecosystem degraded. Despite isolated land management bright spots in places such as Maradi, Niger, the net result has been less annual rainfall¹³, more soil degradation, increased desertification, frequent crop failures and low production of fodder and woodfuel. Many countries often see water availability as the most limiting development factor in the zone.

These challenges are set to become more entrenched with climate change. The Sahel's historical high degree of climate variability could amplify. Higher and more variable temperatures can lead to higher land degradation rates, more frequent droughts and floods¹⁴, changes in the pattern of seasonal wetlands, greater heat stress on livestock, changes in the length and duration of the growing season, and in crop quality and yields¹⁵. Climate change will generally increase disaster risks, not only through increases in extreme weather events and sea-level rise, but also through increases in societal vulnerabilities to hazards arising from stresses on water availability, agriculture and degrading ecosystems. Inadequate early warning systems and preparedness and inadequate land use planning have contributed to magnify hazard levels.

Ecosystem interconnectivity and link with southern systems

⁹ Farming in this region is almost entirely reliant on three to four months of summer rainfall, except along the banks of the major rivers, lakes, and other seasonal water courses, where some irrigation activities are undertaken.

¹⁰ Rainfall variability ranges between 200 mm and 600 mm with coefficients of variation ranging from 15 to 30 percent. In Benin for example, a reduced precipitation on the order of 20-30 percent at the national level, translates into a 40-60 percent reduction in the availability of water resources.

¹¹ Climate Change and Variability in the Sahel Region: Impacts and Adaptation Strategies in the Agricultural Sector. Serigne Tacko Kandji, Louis Verchot, Jens Mackensen. World Agroforestry Centre. United Nations Environment Programme. 2006.

¹² Erosion is an important mechanism of degradation with annual soil losses of up to 100 tons per hectare per year. In some areas and because of the absence of trees, wind erosion can induce an additional annual soil loss of more than 150 tons per hectare. The loss of the topsoil (which contains most of the plant nutrients) through water and wind erosion is a major setback to agricultural sustainability and food security in the Sahel (Kandji, Verchot and Mackensen, 2006).

¹³ It has estimated that Burkina Faso will suffer from a reduction of annual rainfall by -3.4% (2025) to -7.3% (2050). Also, considering climate scenarios precipitation will be reduced in Benin on the order of 20-30% which then translates into 40-60% reduction in the availability of water resources.

¹⁴ In Burkina Faso, droughts and floods are the most serious constraints due to their frequency and their impact on the living conditions of the populations. Indeed, between 1991 and 2009, the country has experienced eleven (11) major floods which have affected 383,203 people and claimed 93 lives, three (3) major droughts which have affected 96,290 people, an invasion of locusts and many episodes of epidemic diseases.

¹⁵ A simulation exercise in Mali (assuming a temperature rise of between 1 and 2.75 degree C and no adaptation measures applied) suggests that, by the year 2030, reduced precipitation will induce a decline in cereal harvest of 15-19 percent causing a doubling of food prices (Butt et al., 2003 *Food security implication of climate change in developing countries: findings from a case study in Mali* at Kandji, Verchot and Mackensen, 2006).

The proposed Program will not only address the above mentioned challenges that affect the countries with Sahelian ecosystems that are part of the official Great Green Wall Initiative (Burkina Faso, Chad, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan) but also challenges related to southern states of Nigeria and three additional West African countries (Benin, Togo and Ghana) with important savannah and forest systems linked to the Sahel. The expansion of the area of intervention will not only allow sharing of knowledge among countries that share very similar issues but will also consolidate and add value to the Program, since northern and southern ecosystems are interrelated. See map below.



Source: WB, 2011.

The Sahelian belt has important social, economic and environmental links with systems to its south including savannah, derived savannah, and forested systems.

For example, the Niger and Volta basins are affected by actions in the Sahel, including siltation, transhumance, and outmigration, and by the Sahel's natural variability including periodic drought that is correlated with the southern El Niño Oscillation (implying that improved informatics supported by this Program can make a difference). In southeastern Nigeria, Anambra state – the self-proclaimed erosion capital of the country – emergency erosion management measures are being taken but the scale of the problem overwhelms the efforts. To the west, the Black, White and Red Volta rivers feed eventually into the world's largest reservoir in southern Ghana, inexorably linking the fates of people in Ghana with their neighbors in Burkina Faso, Togo, and Benin.

Wetlands in particular provide important biodiversity services, and these are linked across the Sahel, Savannah, and coastal forest systems in West Africa. Most African wetlands display both richness in number of species and endemism. It is believed by some authorities that wetland areas of highest endemism and of international significance in Africa are the Inner Niger Delta in Mali, the seasonally inundated floodplain of southern Chad and the northern Central African Republic, the Sudd region of southern Sudan, and coastal mangroves. A complex web of flyways connects these and other areas. The Sahel wetlands of western Africa are concentrated mainly in the Senegal River Basin in Senegal and Mauritania, the Niger River Basin in Mali, and Lake Chad and the Logone and Chari rivers in Cameroon, Nigeria and Chad. Because of their abundant food source and attractive habitats, they host numerous endemic and migratory waterfowl. The floodplains of the Senegal, Niger and Chad basins for example,

support over a million waterfowl while the Djoudj National Bird Park, Senegal, and Diawling National Park, Mauritania, are havens for migratory birds in West Africa, providing habitat for over three million birds belonging to nearly 400 species. Some wetland areas are experiencing immense pressure from human activities, the most important being drainage for agriculture and settlement, excessive exploitation by local communities and improperly planned or executed development activities.

Basin agencies, especially trans-boundary ones, have demonstrated capacity for innovation in Africa (e.g. joint asset development and management in the Senegal's OMVS, a shared sustainable development investment program in the Niger's NBA, partial cooperation on the Nile and Zambezi, etc.). However, technical and management capacity still requires considerable improvement, as in the case of individual country water-related agencies. Instruments such as water rights and insurance are still being established. Water investments are inadequate given the needs, resulting in significant social, environmental, and economic distress. The case of Darfur illustrates how issues of climate and conflict combine to create complexities in water and land resources management.

Meanwhile, Sahelian herders follow their animals, mostly cattle, south into greener pastures, leading to greater conflict among water and land users in savannah and derived savannah areas. Often conflict is over use of high-productive areas such as seasonal wetlands and floodplains. Human outmigration from the Sahel also can exacerbate resource use in southern zones; people continue to move into growing cities such as Dakar and Lagos as well as dense rural areas such as Nigeria's Anambra state that already face a land shortage and severe land degradation.

Notably, there is little awareness of the link that coastal forest has on the climate patterns and ultimately, the land and water productivity of West Africa's drier interior. The Center for Global Change Science at the Massachusetts Institute of Technology in the late 1990s carried out research showing that the series of droughts in the 1970s and 1980s in West Africa may have been caused by the destruction of moist forest systems in countries such as Nigeria and Ghana. Further deforestation could eventually lead to a collapse of the West Africa monsoon.¹⁶ Rainforests help to generate rainfall elsewhere. Half or more of the rain falling on the forest quickly evaporates from the forest canopy, providing moisture in the air to form clouds that produce rainfall further downwind. In this way, West African coastal rainforests, which receive copious amounts of rain from winds coming off the Atlantic Ocean, have helped to maintain rainfall in the drier lands of the interior. At the beginning of the 20th century, the West African coastal rainforests covered around 500,000 square kilometers. Since then, up to 90 per cent have disappeared to make way for human activity. Overgrazing, expansion of arable land and the substantial growth of the timber industry are the main drivers. As the forests are removed or degraded, evaporation is reduced, which affects rainfall in drought-prone interior areas. In addition, more of the rain falling on coastal regions percolates into soils – leading to greater water erosion in derived savannah and humid forest areas.

Although some of the problems are shared across Sahelian and Savannah systems, investment and policy solutions need to be reinforced by mutual learning, responsive institutions, and information tools across geographic, institutional, and disciplinary boundaries. Currently, these are in short supply. Examples of needs abound: hydromet networks that meet WMO density standards, drought early warning systems that inform community decisions, and other resource monitoring tools and geo-informatics to guide investment; robust farmer-to-farmer learning networks; extension and private service providers able to provide climate-resilient advice and inputs, and mechanisms for sector coordination.

Program Rationale – support and scaling up existing processes

The Program will address these challenges by supporting country, regional and sector plans for improving land productivity, ecosystem function and climate adaptation. The Program will support the implementation of the Great Green Wall Initiative (GGWI) that has been established to strengthen the implementation of existing continental frameworks and plans addressing land degradation in a region from Senegal on the Atlantic coast to Djibouti on the

¹⁶ The model confirms an old theory, first developed 30 years ago by MIT's Jule Charney, that the loss of vegetation on the edge of the Sahara Desert in the West African interior could reduce rainfall. But the authors say this effect is much smaller than that of coastal deforestation.

Red Sea. Originally the concept of the GGWI was limited to a tree planting initiative¹⁷, but it then evolved to the promotion of Sustainable Land Management (SLM), as a more ecologically appropriate, socio-economically sustainable, and holistic approach at the landscape level to directly benefit local land and water users (farmers, agro-pastoralists and mobile pastoralists). The GGWI aims at conducting in well-delineated regions of the Sahelian countries a set of inter-related interventions with the aim of achieving the following goals: 1. Natural resource conservation, development and management; 2. Strengthening infrastructure; 3. Improving the living conditions of the resident communities. The vision was originally conceived by the former President of the Federal Republic of Nigeria, Chief Olusegun Obasanjo, who proposed it to the Community of Sahel-Saharan States (CEN-SAD) Conference of Leaders and Heads of State of June 2005 in Ouagadougou, Burkina Faso and subsequently to the Fifth Ordinary Summit of the African Union in July 2005 in Sirte, Libya. It was then endorsed in 2007 by the African Union following adoption of a Plan of Action in 2009. Commitment towards the implementation of the GGWI was reconfirmed during the Expert and Ministerial Consultation on the Great Green Wall that was held in February, 2011 in Bonn, Germany. A declaration was signed at the ministerial level confirming the country priorities and partners strategic engagement (See Ministerial Declaration attached).

The proposed Program together with the GGWI establishes close links with the on-going TerrAfrica program, in which the Africa Union's NEPAD Planning and Coordination Agency (AU-NPCA), UNCCD bodies, World Bank, GEF, all Sahelian countries, and others are partners. In these countries, the TerrAfrica program and its Bank-led GEF-SIP umbrella for SLM are already providing financial and non-financial support to improve practice, policy and planning among sectors, stakeholders, and countries. The EU is likewise providing support to both the GGWI and TerrAfrica, and emphasizes, along with others, that it is important to ensure that all investments and programs are aligned to help address the already fragmented knowledge, institutions, and financing related to SLM in the countries.

The Program will develop activities in nine countries that are part of the GGWI: Burkina Faso, Chad, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan. In addition, considering the links described above, the similar interests, the World Bank's capacity to follow up the on-ground activities and the potential to consolidate and generate large scale sustainable transformations, the Program will expand its activities to other three countries: Benin, Togo and Ghana.

Individually, each of the countries in the region has achieved some policy and technical results from sustainable land and water management. These however are isolated and/or need continuance. For example, farmer-led agroforestry, water and soil management innovations in Burkina Faso and Niger have achieved a 're-greening' process that has reversed desertification and improved local livelihoods. This farmer-managed natural regeneration experience has been able to transform approximately 5 million hectares of land into productive agroforestry systems. Other positive experiences ready for upscaling are no tillage and agroforestry in Nigeria and gully remediation in Ethiopia. However, these experiences alone can not address the bigger picture of land degradation and climate variability. In relation to climate change, some of the countries are already implementing projects to enhance adaptive capacity and resilience to climate change in particular sectors like agriculture. In addition, some countries are already working across sectors to prioritize and implement investments in SLM. Under the TerrAfrica Platform and with support from the Bank-led GEF-SIP umbrella, enabling environments for SLM have begun to improve through the creation of national multi-sector investment platforms in countries such as Burkina Faso, Ethiopia, Mali, Mauritania, Niger and Nigeria. Several countries have already prepared or are in the process of preparing Country SLM Investment Frameworks¹⁸ to identify priority investments across sectors that need support for future implementation.

The Program will target some of the common barriers that have been identified for the implementation and scaling up of SLWM. These are commonly grouped in knowledge and technical barriers, policy and institutional barriers,

¹⁷ As originally envisaged, the Green Wall was defined as a strip of forest about 15 kilometers (nine miles) wide on average and more than 7,775 kilometers (4,831 miles) long. The purpose of the wall is to counter soil erosion, slow wind speeds and stop the encroaching desert. Most actors are now promoting a broader landscape approach.

¹⁸ Among the participant countries, Ethiopia, Ghana, Mali, Mauritania, Niger, Nigeria and Togo have or are preparing CSIFs. Burkina Faso and Senegal are involved in dialogue to prepare the CSIFs.

and economic and financial barriers.

Knowledge and technological barriers:

Although a wealth of information exists on successful SLWM technologies and approaches, and the TerrAfrica platform has accomplished important advances, there is insufficient sharing of knowledge and experiences at local, national and regional levels within West Africa and the Sahel region (including among researchers, project staff and policy makers). Knowledge regarding SLWM and adaptation to climate change is fragmented and generally insufficiently linked to the policy formulation and implementation process. Knowledge gaps are still present such as on methods for payment for environmental services (PES) and evidence-based adaptation options. In addition, knowledge bases are not readily accessible to all stakeholders. Finally, monitoring and evaluation systems of land degradation and its impacts are still weak.

At the local level (farmers, communities and local extension officers and NGOs), there is still lack of local-level capacities and experience with SLWM and adaptation to climate change. Whereas local resource users often have detailed knowledge of their resource including spatial variations, and understand well how their environment has changed over time, they often lack knowledge on strategies that would allow them to increase production and conserve their natural resource base considering increased population pressures, climate change, actual and potential impacts and increased land degradation. In addition, support and advisory services are largely ineffective due to a lack of financial resources, inadequate training and capacities at local levels, and insufficient access to new technologies and approaches.

Policy and institutional barriers:

While there are many achievements, climate change mitigation/adaptation issues still need to be mainstreamed in sectoral frameworks, plans and policies (agriculture, livestock, forestry, water, land), and budget processes of PRSPs. There is also weak institutional capacity to design and undertake policy development and subsequent implementation.

In addition, commitment, policies and action to combat land degradation are shown, with a varied degree of maturity, in national and regional strategies, action plans, post-Rio UN Conventions documents, and in the CAADP. In general, most countries have well analyzed and described the causes and impacts of land degradation, but they have often not succeeded in agreeing to the concrete actions to be taken to support the uptake of SLWM. Specifically, what is often lacking is: (i) promotion of well-tested SLWM techniques on a large scale; (ii) testing new techniques; and (iii) creation of an enabling environment in which resource users face the right incentives to adopt SLWM

Local governments, as well as communities, often lack capacities and resources and information access to manage their land resources, which severely restricts their effectiveness. In addition, land resource users do often not have enough long-term security over the resource they depend upon, nor do they have sufficient consultative mechanisms. This is restricting their feeling of ownership over the resource, and limiting their interest in investing in SLWM that would result in production increases in the medium or long-term.

Economic and financial barriers:

Financial resources available are not commensurate with the needs to address the multi-dimensional challenge of land degradation and climate change. In addition, still inappropriate economic and pricing policies have resulted in unsustainable pressures on natural resources while effective incentives for SLWM (return on investment; compensation for resource non-use; up-front investment support for returns deferred in the longer term) have not been developed and/or are very insufficiently applied.

Poverty is still forcing many resource users to embark on short-term coping strategies rather than long-term investment in land and resources. In addition, rapid population growth is forcing land and ecosystem users to

continuously increase pressure on local resources, at the expense of the regenerative capacities of vegetation and land resources. Because of poverty, many resource users have no means of investing in enhancing their natural resource base and increasing their income in a sustainable manner.

The following table includes a further description of the barriers highlighting examples of the significance to the Program, and examples of the links between such barriers and the GEF Focal Areas and adaptation windows.

Barrier	Examples of significance to the program	Examples of links with FAs and adaptation windows
<p>Knowledge and information barriers</p>	<ul style="list-style-type: none"> • Informatics are weak or not often sufficiently informing investment and policy in the region, and are insufficient to fully underpin landscape planning. Hydromet networks are insufficiently dense, economics of NRM such as ecosystem valuation is rare, monitoring of the natural resource base is weak (with some exceptions such as Dakar’s Centre du Suivi Ecologique), dynamic watershed information systems are rare. A range of knowledge bases exist, but they are fragmented and insufficiently linked to the policy formulation and implementation process. Consequently, there is often insufficient consideration of past experiences in the formulation of projects, programmes and sector strategies. The fragmentation and isolation of knowledge bases has a number of causes. First, knowledge institutes are often faced with a shortage of funds that prevents them from maintaining and updating databases, and publishing the results. Second, there is a question of system design. Many systems follow a compartmental approach, covering specific sectors or areas. Third, databases and systems are not “live”: feedback to and from the lower level is not foreseen. Existing knowledge bases are generally fed in a unidirectional mode: grassroots and remote sensing information is expert analyzed, elaborated, and eventually stored. None of these systems have been engineered in a way that provide for updating protocols based on information that originates from local levels (FAO 2006). • Farmers themselves are repositories of information of which land management technologies work where and under what conditions, but this information is not often transferred to new settings (Critchley 2010). • Poor resource monitoring dominates the region: Although Terrastat provides a partial update, adequate, long-term data on natural resource status in SSA is missing (the current LADA project would partially fill this gap). With respect to forest resources, there is a lack of monitoring of the actual extent of forest degradation. The FAO Forest Resources Inventories are based on information submitted by countries themselves, which is often not accurate. For rangelands, there is still a controversy on how the impacts of overgrazing and climate variation can be separated and adequately monitored. Whereas reliable information is lacking at the regional scale, at the local scale the information shortage 	<ul style="list-style-type: none"> • Investments, policy, ecosystem management, and land use plans (priorities that cut across each FA and the adaptation windows) must be underpinned by targeted quantitative evidence that is generated and put into use by the participating countries themselves. The GEF climate change and SFM FAs, for example, prioritize carbon monitoring. The GEF biodiversity and land degradation FAs prioritize ecosystem monitoring, valuation tools, and landscape approaches. And the adaptation windows prioritize the ability monitor climate variables for impact. • Scaling up improved technology will improve ecosystem function, and deliver global and local benefits to all focal areas and adaptation windows. For example, locally appropriate agroforestry can provide biodiversity value, soil structure and carbon, biomass carbon, water retention and filtering, riverbank stabilization, income, food, fodder, medicine, pest control, and building materials. • All GEF focal areas and adaptation windows require robust monitoring arrangements on complex environmental impact indicators that can be difficult for sub-Saharan countries to follow through on, especially on the small M&E budgets often encountered in projects. The

	<p>is even higher. Monitoring of local resources is normally done on an ad-hoc base, usually with funding from specific projects or programmes of limited duration. In addition, the coverage is very limited. Furthermore, a sectoral approach prevails, while multi-disciplinary capacity is lacking or inadequate and the use of different scales, formats and mapping techniques makes it often difficult to compare or integrate results (FAO 2006).</p>	
<p>Policy and institutional barriers</p>	<ul style="list-style-type: none"> • Extension services in the participating countries are weak whether public or private sector. Rural people have limited access to information on natural resource management except from one another (World Bank 2009). • Regional institutions could add greater value to countries if more strongly equipped to respond to country demand for improved analytical and advisory services. • Lack of integration across sectors at national level. Lack of integration across GEF FAs and windows, as well as among the UNCCD, UNCBD and UNFCCC -- although the three Conventions do share some priority actions, especially on land use and management, which are fundamental core development issues for Africa. • Resource tenure policies are fragmented, weak, or missing. With weak tenure comes low levels of investment in the resource and a perverse incentive to exceed sustainable use. 	<ul style="list-style-type: none"> • Promotion of technology on the ground requires working through public and credible private institutions that can work with rural people on protecting natural resources and deploying improved technologies. This improves sustainability post-project. • All GEF FAs and adaptation windows emphasize the need for stronger institutions. Regional institutions are critical for facilitating multi-country efforts, and can lower transaction costs for individual countries to access information and advisory services. • Better integration of the GEF windows would have a greater transformative effect at country level and encourage improved landscape planning that would generate benefits across themes.
<p>Economic and financial barriers</p>	<ul style="list-style-type: none"> • There is insufficient understanding of the economic and financial aspects of SLWM. Whereas most agriculture-oriented SLWM techniques lead to enhanced crop production, farmers are not always convinced of the benefit-cost ratio of these techniques, which hampers the uptake of SLWM practices. In addition, governments are often uncertain about the economic implications of SLWM, which restricts their interest in supporting the large scale investments required to scale-up country-wide (FAO 2006). There have been a handful of economic analyses that have been filling this gap. • Where knowledge of costs and benefits exist, financial support and other complementary measures need to be put in place to promote greater adoption. For example, 2011 research by the World Bank in Nigeria shows that, while some integrated soil fertility approaches are both more profitable and have greater environmental benefits than inorganic fertilizer, adoption rates remain low, perhaps due to a policy that subsidizes only inorganic fertilizer. 	<ul style="list-style-type: none"> • The biodiversity FA clearly prioritizes economic valuation of ecosystems, while the STAP review highlighted the fact that rural people require additional financial resources to scale up improved landscape management technologies.

	<ul style="list-style-type: none"> • Part of the problem for poor natural resource management in Africa is poverty itself. Greater financial resources will be made available through farm credit, payments for environmental services, grants and trusts for parkland and community conservation areas, etc. 	
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Approach for the Program

The multi-dimensional challenge of land degradation and climate variability and change requires an integrated solution that is better tackled by several countries together. The proposed Program will contribute to this integrated solution by promoting, through individual but related projects, SLWM activities (see footnote 5 for definition) following an approach that takes into account social, economic, institutional and policy needs for sustainable ecosystem management at scale. This approach targets the mosaic of production systems, protected areas, habitats, and natural assets that together form the region’s rural landscape. This approach not only embraces ecosystem principles but also the connectivity between the ecosystems.

The program will use and adapt an approach incorporated under the GEF funded “Colombia National Protected Areas Trust Fund Project”, implemented by the World Bank, called the “mosaics approach” that links biodiversity with agriculture and development projects. The Program will also work on Agrobiodiversity learning lessons from a global project developed by UNEP called “In-situ Conservation of Wild Crop Relatives through Enhanced Information Management and Field Application” linking agriculture, food security and biodiversity; and in addition, it will build on the wealth of experiences of GEF project related to conservation trust funds¹⁹.

“The concept of “mosaic approach” encompasses a fluid and organic understanding of landscape-level ecosystem processes and management requirements within and beyond the protected areas themselves. In the context of this national project mosaics are defined as “networks of protected areas and complementary landscapes that include combinations of national parks or reserve, production landscapes, and collectively-owned community territories”. The mosaic approach builds upon existing social and institutional arrangements to ensure that conservation and local benefit objectives are both met in a way that can be socially sustained” (<http://www.thegef.org/gef/2010IYB>). Even though the interventions within the proposed Support Program will be not circumscribed to Protected Areas this definition can be incorporated for the wider landscape mosaic.

The approach -- based on time-honored traditions in the Sahel (such as transhumance or fallows) but informed by modern science and tools -- would address the above mentioned barriers and deliver intertwined local, regional and global economic, conservation and climate benefits from the region’s ecosystems. Supporting multi-sectoral activities in the landscape mosaics, located within one or more countries, will emphasize the need to integrate different management and conservation strategies while promoting sustainable use of natural resources, increasing opportunities for improvement in local livelihoods and adaptation to climate change. The geographical scope of the intervention can be national as an overall contribution to the greening of the country and to the GGWI.

Regarding interventions in Protected Areas and learning from the GEF project “Colombia National Protected Areas Trust Fund Project”, the Program “ will employ a novel approach to strengthen the management of protected areas from the “outside-in”. By recognizing the bio-physical and socio-economic milieu that protected areas are part of, the protected area administrations will turn a potential management problem into an opportunity to sustain protected areas for the long-term” (<http://www.thegef.org/gef/2010IYB>)²⁰

¹⁹ These approaches are described in the articles published as part of the celebration of the International Year of Biodiversity, in the following website, and will be adapted to the Sahel conditions: <http://www.thegef.org/gef/2010IYB>.

²⁰ “Protected areas around the world do not exist as isolated islands of tranquility where centuries of evolutionary processes continue uninterrupted by humans. Rather, they are often found in mixed-use landscapes where natural resources are intensively managed for satisfying human needs such as food, water, fuel, and wood. Protected area

In addition, the proposed Program will be broader in thematic and geographic scope than the Great Green Wall Initiative but by supporting it, it will reinforce the initiative and contribute to the expected effects and impacts defined in the 2009 action plan for the GGWI:

- Slowing soil erosion: the presence of vegetal cover slows winds speed and favors rain water infiltration;
- Degraded soil restructuring: an increase in organic matter of vegetal and animal origin entails soil restructuring;
- Higher reforestation rate in countries crossed by GGW: in order, among others, to restore eco-climatic balances and biodiversity;
- Revival, development and diversification of agriculture and stockbreeding, both in terms of vegetal and animal production volumes and size of the active population employed in these sub-sectors;
- Vegetal and animal biodiversity restoration, conservation and development, the deferred grazing and other privately-owned wooded areas contribute to natural vegetation regeneration and return of wildlife: birds, small game, snakes, etc.
- Increasing coverage of local needs in forest products, especially firewood, lumber and also ligneous and non-ligneous products: gum, resins, roots, leaves, barks, fruits, pharmacopeia etc.
- Improved living standard and health due to noticeable improvement in nutrition, living environment and more easily available household needs (water, energy, social infrastructures etc);
- Reversal of rural migration phenomenon, gradually, “ecological migrants” and the bones and sinews looking for employment will repopulate these zones that have been rehabilitated by GGW proximity.
- Control of water resources, through water retention pond, artificial lakes and hydraulic schemes that will contribute to enhanced production system

Besides the above effects and impacts the Program will also contribute to reducing emissions of carbon and other GHGs or enhancing sequestration for climate change mitigation.

At the institutional level, the Program will rely on the commitment for collaborative action that the participant countries have expressed for the GGWI. The Program is built based on TerrAfrica heritage and the GEF-SIP results and principles while also taking advantage of the collaborative approach and regional multi-sector partnership that is in place under the TerrAfrica platform and which all the participant countries are implementing. By building on this integrated programmatic approach, each country will benefit from lessons learned in various projects, programs, and countries and will also have the opportunity to put in place and scale up already identified priorities. The Program will become a key activity within the TerrAfrica multi-partner platform while being in support of the GGWI implementation.

In the program design the World Bank took into consideration the key technical comments that were provided in the Expert and Ministerial Consultation on the GGW that was held in Bonn in February, 2011. Some of these key considerations referred to: taking advantage of existing work and lessons learned in the region; addressing the land degradation and climate change challenges with an holistic approach; considering the pastoralist issues in the Sahel; the need for political and legislative framework to facilitate mainstreaming of successful interventions; following an integrated ecosystem management approach; and, the need for integration of interventions at regional scale (See Annex E).

administrations are thus challenged to manage protected areas to achieve their conservation objectives while land-use and management actions taken outside the park borders can often work at cross-purposes to their conservation goals” (<http://www.thegef.org/gef/2010IYB>).

Program design

The Program will offer a menu of interrelated activities included in the components described below. The participant countries will formulate projects (both at national and regional levels) that will include all or some of the components according to their particular conditions, previous experiences, identified priorities, and unique timeframes. As a result of on-going dialogues and preparation activities in countries, quantitative targets and spatial coverage will be defined for each project. Project designs under the Program will accommodate drier and wetter futures within project lifespans given this natural range of historic variability²¹.

The common goal of such projects would be the promotion of SLWM and biodiversity conservation practices in order to address land degradation and climate variability in their areas of intervention. The components and subcomponents are:

A. Institutions, Information, and Policy

Policy and institutional strengthening: Improving enabling environments to scale up sustainable land and water management in West Africa and the Sahelian belt and build national and local level capacities to implement, harmonize and coordinate investments, policies, and information.

Knowledge management and monitoring: Generation and exchange of knowledge that is effectively used for policy formulation and enforcement, and technical implementation. Assessment of results and progress will be part of the information to be gathered in a timely manner and towards learning objectives. In addition, tools for monitoring landscape mosaics deployed such as remote sensing, ICT, and innovative data and information systems. The subcomponent will also include outreach and communications including creating public awareness for collective action as well as the creation of a program specific website to facilitate access and sharing of relevant information. Tools, documents and practical information will be shared to the TerrAfrica's regional SLM Knowledge Base. Regarding M&E, it will take place at three levels: (i) project level, (ii) the higher program level, and (iii) the still higher level of general government capacity to monitor natural assets. Since the program does not have a separate M&E or Project Management component, this first component includes M&E outputs that are intended to track the ability of the discrete projects in the program to deliver data and information up to program level reporting mechanisms. These activities will be carried out within each discrete project as well as through the Program's regional project, across the other program's components.

B. Investment in Sustainable Land and Water Management and Biodiversity Conservation

- *Sustainable Land and Water Management Practices:* scale up best-fit SLWM practices in degraded areas (agricultural zones, forests, pastoral areas and wetlands). These practices could include soil conservation techniques, cover crops and intercropping, grazing land rotations and corridors, water harvesting, small irrigation, and so on. Sustainable forest management activities at national and local level will include *inter alia*: forest regulatory frameworks; promotion good management practices in community and small-holder forestry; sustainable harvest technologies for timber and non-timber products; forest management planning; payment for environmental services and other market-based mechanisms using economic valuation tools, activities to increase ecological connectivity and improve forest biodiversity values at landscape level, including for agricultural activities (buffer zone management, corridors between protected areas), agricultural technologies to reduce pressure on forest resources). These practices would be based on participatory land and water use planning approaches to address specific livelihoods needs and priorities at the local level. This in turn could be accompanied by larger-scale planning (watersheds, basins, ecosystems) so to secure a range of ecosystem services in the landscape mosaic. Discrete projects will pin these activities down during their preparation so that technologies will be locally appropriate. Annex F summarizes a definition of SLWM practices and technologies to be promoted by the Program (Additional information about technologies to be promoted under the Program can be found in the recently published book, SLM in Practice (FAO, 2011))²².

²¹ In West Africa, Global Circulation Models are not in agreement if the Sahel will have a drier or wetter future. This uncertainty rises the farther north one travels from humid areas into the Sahel, which could experience a rise or a decline in rainfall of +/-50%. The countries will consider current observed range of rainfall variability until better science becomes available.

²² http://knowledgebase.terrafrica.org/fileadmin/user_upload/terrafrica/docs/topic_page/SLM_in_Practice_english.pdf. Also, pages 72-73 of TerrAfrica's Country Support Tool which defines SLWM technologies according to the WOCAT nomenclature

- *Biodiversity conservation measures*: support for biodiversity conservation in the landscape mosaic including (i) protected areas and (ii) production systems affected by land degradation and climate variability. Individual projects will develop biodiversity components detailing the areas covered, any policies supported, financing mechanisms developed, etc.

Recognizing that protected areas are important cornerstone for any landscape based approach, the project will seek to expand existing protected areas, develop biological corridors, support PA management as applicable and develop close linkages between economic sectors and protected areas. Additional biodiversity measures in productive landscapes will be addressed such as the establishing establish conservation set asides along erosion-prone waterways and vegetation corridors. The projects could also work on agrobiodiversity, and in particular in the conservation of crop wild relatives (CWR) that are described in the 2010 IYB GEF Article *Food for the Future: Conserving Crop Wild Relatives* as “key genetic material to improve the nutritional quality of crops, enhance productivity, and provide cultivated varieties with resistance to pests and diseases [...] the conservation of crop wild relatives has become even more critical during a period of climate change”. Experience was based on the UNEP project on CWR, and similar to some components of the Ghana NSBCP Project, implemented by the World Bank.

- *Alternative livelihoods in conservation mosaics*: Community based sustainable activities that shift productive practices leading to land degradation and desertification while generating alternative sources of income.

C. Innovations and Economics

- *Payment for ecosystem services (PES)*: Implementation of pilot PES schemes as an incentive mechanism to sustain SLWM implementation. PES is a tool that has proven to be very successful in Latin America for tipping the balance for the adoption of better SWLM practices, Natural Resource Management, Biodiversity Conservation and Carbon sequestration. The methodologies used will follow lesson learnt from many GEF projects in Latin America.

- *Ecotourism*: Development of eco-tourism and related activities that will generate both environmental benefits and contribute to local livelihoods

In line with the integrated ecosystem approach of the Program, aspects to support the creation of new financial mechanisms (especially under this component - Innovation and Economics) and a regional framework (especially under components 1 - Institution, Information and Policy) for managing the interconnections between conservation and productive economic sectors will also be looked into to ensure sustainability.

D. Mitigation and Adaptation to Climate Change

- *Adaptation*: Increase adaptive capacity and reduce vulnerability of rural communities by adjusting production practices. Activities will include capacity building to implement climate risk management responses, developing climate change vulnerability maps, incorporating climate parameters into civil works planning and design, agricultural measures to promote food security, insurance schemes to reduce climate induced damages as well as priority technical measures such as introducing heat-resistant plant varieties, improving small-scale climate-resilient irrigation techniques, improvement of food and seed storage capacities and developing livestock feed, among others.

- *Disaster risk management*: Support community based activities to mitigate and prevent impact of disasters, including reduction in vulnerability and community participation in flood management. Activities will include supporting early warning systems.

- *Mitigation*: Improve carbon accumulation in biomass and soil, and reduce unsustainable land use change that leads to emissions. This subcomponent also includes supporting the implementation of renewable household energy alternatives to traditional approaches, resulting in reduced GHG emissions from charcoal production and use. This support will include technical and institutional capacity building besides technology transfer. Low carbon technologies in the energy sector that are closely linked to land use decisions include, among others, efficient cook stoves, biogas digesters, and small/micro hydropower (as well as land degradation reduction measures to reduce sedimentation loading into reservoirs). These examples of energy technologies reduce pressure on forest and woodlands by reducing demand for fuelwood, and reduce GHG

and the book referenced above:

http://knowledgebase.terrafrica.org/fileadmin/user_upload/terrafrica/docs/topic_page/Country_Support_Tool_2_.pdf

emissions and indoor air pollution by fuel switching to cleaner options. □

Annex C includes a brief description of the preliminary projects determined by each of the participant countries at a conceptualization stage as well as regional projects. These priorities took into consideration the existing and planned investments, partnership framework for future support and existing implementing capacity.

In order to upscale SLWM and adaptation measures, the Program and its projects will follow the coherent theory of change (that defines how the change will occur, in what sequence and with what effects) adapted from the one developed by TerrAfrica:

- Partners support West Africa and the Sahel countries' leadership and actions to improve alliances and enabling environments for SLWM and adaptation (governance, institutions, policy, etc), which then...
- contributes to improved incentives and therefore more knowledge and financing are unlocked, which then...
- contributes to greater technology uptake and better land use planning, which then...
- contributes to drive SLWM and adaptation up-scaling beyond current isolated experiences, which then...
- contributes to sustainably secure ecosystem services (more food, more fiber, increased water flow, increased income and income sources, more carbon storage, greater biodiversity, less impact and vulnerability from climate risk/variability), while helping manage trade-offs between land uses (such as control agricultural extensification into woodlands).

D. Discuss the added value of the program vis-à-vis a project approach (including [cost effectiveness](#)):

A programmatic approach that addresses regional multi-sectoral challenges that affect national and transboundary ecosystems offers multiple benefits and added value compared to isolated projects. As mentioned in the GEF-5 Programming Document, programmatic approaches to natural resources would be the appropriate modality to trigger transformational changes and to stronger link GEF investments to large-scale impacts. Four main interrelated areas of added value have been identified.

Regional interconnectivity

As developed in section C on Rationale of the program, ecosystems are connected across borders through migration, transhumance, and land use change (e.g., forest depletion in coastal West Africa affects rainfall in the Savannah and Sahel). Throughout the region, there is increasing understanding that degradation of land and water resources, as well as climate variability and change, transcend institutional and geographic boundaries.

The Program and its related regional project will be instrumental in supporting the participating countries in strengthening their understanding of this interconnectivity. The regional project will also play a role in disseminating best practices and encouraging experience sharing.

More visibility and knowledge sharing

A programmatic approach will facilitate that each participating country/project will benefit –at formulation and implementation stages- from the knowledge and lessons learned that would be regularly disseminated among stakeholders. This will improve impact at the regional scale and increase possibilities for replication among and within countries. The Program will utilize and expand the knowledge base and network of experts created under the TerrAfrica platform. Also, the programmatic approach will provide an improved monitoring and benchmarking aligning key indicators and systems that will permit better comparison, evaluation and monitoring across countries as well as allowing countries to know better what works, where and why. The program would bring greater scope of action and visibility for West Africa and Sahelian countries and the GEF to catalyze action on the ground around a common front.

Strengthened institutions and policies

A programmatic approach will facilitate harmonization of policies and regulations across the region that also contributes to cost effectiveness. In addition, the approach will allow expanding and scaling up national interests to

regional ones considering land and water landscape mosaics that extend beyond borders and embrace different ecosystems. The approach will also improve opportunities to scale up global environmental benefits across the region. Finally, a programmatic approach will ensure greater coherence in the formulation of national and regional projects, promoting greater synergies in the implementation.

Lower costs, higher investment

A programmatic approach will ensure that transaction costs related to project approval could be centralized under the Program's umbrella. Also, a better alignment among stakeholders under an umbrella program reduces the drain on country resources and can increase the impact of each stakeholder's direct efforts. Offering a multifocal investment programming will allow countries to have a more predictable financing for SLWM and thus longer-term planning and consistency in implementation. A multi-sectoral program with enhanced accountability and oversight will be more attractive for potential additional donors; thus potentially increasing the availability of co-financing. Finally, a programmatic approach will facilitate to blend funding from different focal areas which in turn generates results at a larger scale.

E. Describe the baseline program and the problem that it seeks to address:

Annex C and D includes a description of the baseline projects that would be able to blend, partially blend or go in parallel with the Program. The baseline projects total an amount of US\$1,775M. These discrete projects are still scattered in different countries and address issues related to rural development, agriculture, economic growth, disaster risk management and rural livelihoods. While the baseline program will provide important socioeconomic benefits through development, agriculture and energy initiatives, there is considerable scope for further increasing the overall catalytic potential of the baseline through support from the GEF for the production of global public goods.

The program is using as baseline multiple projects that, only if considered all together, can form the puzzle of sustainable landscape management. Each baseline project is a piece of the puzzle; i.e. with agriculture projects working in the agricultural productive landscape; forest projects in the forested areas; watershed projects in the watershed, and the GEF in the interface of all this for the generation of global public goods.

Local, national and global benefits would be achieved if these projects are integrated and enhanced within a programmatic approach that will secure ecosystem services at different scales by establishing integrated natural resources management and adaptation to climate change.

In addition, the achievements made so far with GEF, WB and other agencies support to address the challenges regarding land degradation and climate change need to be further consolidated. The proposed Program offers the opportunity to do so within a multifocal perspective and under a regional umbrella. Some specific investment plans await implementation such as the national and regional action plans for the GGWI and the SLM investment frameworks. Integrating the baseline projects under a programmatic approach and supporting the implementation of key regional and national action plans will have a higher transformational impact, political visibility for the region as well as the integration of the GWW principles.

F. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The program is using as baseline multiple projects that only if considered all together, can build the puzzle of sustainable landscape management. Each baseline project is a piece of the puzzle, i.e. with agriculture projects working in the agriculture landscape; forest project in the forested areas; watershed projects in the watershed, and the

GEF in the interface of all this for the generation of global public goods.

Also, the business as usual scenario considers national and regional action plans that are consistent with the Program's goal but are in need of further implementation. Under this baseline scenario, the emerging momentum for the West Africa and Sahel countries to tackle the problem of land degradation and climate change and variability would probably be critically reduced, and the gap between the efforts to address the challenges and the scale of the problem would continue to exist. Single sector approaches, isolated projects, and individual institutions can not sufficiently address the multidisciplinary challenges posed by land degradation and climate change.

Incremental value added by GEF funding

The proposed Program is playing a role in the GEF longer-term programmatic effort on the highly vulnerable West Africa – Sahel region. As outline in previous sections, this Program is one of the numerous contributions to the implementation of the Great Green Wall Initiative. This effort will add to the overall financing picture for scaling up SLWM and adaptation measures so to deliver local, national, regional and global benefits across GEF focal areas. By pooling together diverse financial resources, plus those of the participant countries themselves, the Program through an integrated ecosystem approach will support countries for them to better integrate land, water, carbon, and adaptation management while creating opportunities to improve local livelihoods and secure ecosystem services at national, regional and global levels. The program takes a multi-focal integrated approach that is truly innovative from past GEF experiences perspective and from the experience of major environmental conventions.

The GEF increment would center on securing ecosystem services from the landscape mosaic, by promoting the uptake of sustainable land and water management practices and approaches that have global environmental benefits. These include soil and water conserving practices such as shelterbelts, multi-purpose trees on production land, small-scale irrigation, and water harvesting. Complementary approaches could include, among others, large-scale watershed planning or smaller-scale community land use planning to address open access of wood fuel and livestock, biological corridor development and management, and ecotourism development.

Global Environmental Benefits (GEB) delivered by the Program

A Program designed within the multiple interlinked GEF focal areas in a large geographical area is making a contribution to securing multiple global environmental benefits. The resulting global environmental benefits could include sustainable management of natural resources (land, water and vegetation) on up to 2 million hectares of croplands, rangelands, and dryland forest ecosystems per country, protection of threatened dryland biodiversity, protection against erosion and desertification, and the potential for sequestering 0.5 to 3.1 million tons of carbon per year. These benefits could also contribute to increased resilience of the regions' ecosystems and human livelihoods to climate change and variability.

Additional value and adaptation benefits generated by the Program

The Program will incorporate initiatives that have been identified as priority in country driven exercises such as the NAPA, given the presence of the challenges related to climate change and variability. These initiatives will aim at increasing adaptive capacity, increase resilience to climate change and reduce vulnerability.

LDCF and SCCF resources will address key vulnerabilities to be identified in the baseline projects, (which will generally coincide with what has been clarified in most of the country's NAPAs), and seek to bring substantial resilience and co-benefits. Key vulnerabilities include those with the largest negative potential for the countries' economies and the stability of its critical ecosystems. For example, impacts on agriculture have a significant weight as the sector's share in the countries' GDP, and relevance given the nature of the Program and the baseline projects. Some of the actions to address vulnerabilities in the countries would include: a) activities to reduce knowledge gaps, such as identification of implications of increased variability in rainfall, increases in soil temperatures and in evaporation rates on surface soil layer, better plan for responses, and identification of impacts on agriculture and forests; b) policy decisions (institutional gaps), such as the incorporation of adaptation issues in agricultural and forestry policies; and c) investments to reduce vulnerabilities in the relevant sectors (technical gaps).

The Program covers multiple adaptation benefits according to the specific particularities of its projects. Some of the benefits include: protection of livelihoods from the effects of climate change on water and land resources; improved adaptive response to water scarcity through irrigation and water-saving techniques; mainstreaming climate change considerations into sectoral investment plans and policies regarding water and land use management; enhanced disaster risk management capacity in a changing climate; improved understanding of climate change implications for different sectors; increased knowledge dissemination and awareness regarding the causes and impacts of climate change as well as suggested mitigation/adaptation measures; increased technical capacity to implement adaptation-oriented measures.

G. Describe the socioeconomic benefits to be delivered by the Program at the national and local levels, including [consideration of gender dimensions](#), and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF).

By promoting SLWM and providing opportunities for livelihood improvement, it is envisaged that the Program will contribute to alleviate living conditions of the inhabitants of this African region, which are among the poorest of the poor in the continent. Considering the population living in the Sahel-Saharan zone, it is estimated that over 30% of the population (the majority of which lives in rural areas) live in absolute poverty. The population in these areas is mostly subsistence farmers and herders and is highly vulnerable to shocks from diverse adverse events. Based on the 2010 UNDP Human Development Index (HDI) for 169 countries, the potential participant countries rank fairly low globally: Benin 134; Burkina Faso 161; Chad 163; Ethiopia 157; Ghana 130; Mali 160; Mauritania 136; Niger 167; Nigeria 142; Senegal 144; Sudan 154 and Togo 139. The Program is expected to make a positive impact in the agricultural sector by establishing SLWM practices. In average among the participant countries, agriculture contributes to 34 percent of the national GDP. The Program will make a contribution so countries advance towards achieving several of the MDGs. In general, offering options for improving livelihoods will contribute to breaking the vicious cycle of poverty and land degradation as the poor and hungry are forced to over-exploit natural resources to meet their immediate needs for survival.

The Program will increase opportunities for improving livelihoods and provide concrete benefits to smallholder farmers and pastoralists, both men and women. The implementation of SLWM practices have the potential of offering a series of advantages to local communities such as greater yields, improved soil fertility, fodder availability, as well as shorter wood collection time for women (walking longer distances to find wood, forces women to reallocate time from other productive tasks and child-rearing responsibilities). Local communities will benefit from an increased production and access of forest products especially firewood, lumber and ligneous and non-ligneous products such as gum, resins, roots, leaves, barks, fruits and pharmacopeia. In addition, the implementation of SLWM practices will enable farmers and communities to adapt, and become more resilient to climate change by increasing food production, enhancing food security and restoring productive natural resources.

Some of the Program's activities will also become new sources of employment and stable incomes for local communities including young people who are increasingly tempted by rural exodus and migration. In addition, the Program will include in its components activities towards building the capacity of rural local and community institutions including women and youth associations. Engaging local communities in the Program's on ground activities will also contribute to build social capital in the region and to increase communities' confidence that sustainable management of their natural resources is a long-term strategy for increasing options for livelihood improvement. Social capital will also be strengthened through the involvement of local, grassroot and traditional organizations as well as NGOs with expertise in the areas of intervention.

Projects to be included under the umbrella Program will be encouraged to reflect the needs and enhance both women's and men's contributions during the design, implementation and M&E. Women will be the main beneficiaries of several of the projects under the Umbrella program since they will involve initiatives and products that particularly concern women such as the use of non-timber forest products (for example wild plants for food and medicines as well as shea tree products for cosmetics), efficient cooking stoves (which have the potential of reducing work load and health hazards), and some income generating activities (especially if the income will help meet family

and household needs).

Several of the Program’s outcomes related to community based ecotourism, alternative livelihood options and payment for ecosystem services aim at offering new and sustainable sources of income for local communities. Aiming at facilitating conditions for gender equity, the outcomes related to information management, capacity building, technology transfer, financial assistance and policy development will promote whenever possible the participation of women and vulnerable groups. For this to be achieved the program will consider tools and mechanisms to access communities considering their high illiteracy rates (which is often higher for women). Also, for the design of incentive mechanisms towards the implementation of SLWM practices it will be necessary to consider the different needs and interests of women and men as well as securing short and longterm economic and social benefits for all participant groups.

H. Justify the type of financing support provided with the GEF/LDCF/SCCF resources:

The Program will receive support from multiple sources of financing including the GEF trust fund as well as the LDCF/SCCF funds. As indicated above, there is scope to fund additional activities beyond the baseline investments and while the GEF/LDCF/SCCF grant financing is small in comparison to the baseline program, they have the power to generate large scale impacts at local, national and global levels.

Each country will implement national projects using all or part of the focal area allocations as well as complementary approaches, such as the LDCF or SCCF for adaptation. In addition, some countries focusing on management of forests for multiple global benefits would take advantage of incentive financing under the GEF Sustainable Forest Management Program. For the regional Knowledge Management, Monitoring and Evaluation project (described in Annex C), funds will come from the Land Degradation and Climate Change Mitigation Set-asides, as the needs can not be met by country allocations alone. This project will contribute to knowledge transfer so to broaden GEF's catalytic role and maximize impacts of country projects.

Large scale transformative impacts will be possible by pooling together financial resources from different sources and strategically integrating them.

In order to implement the program components, the program will finance: minor works for watershed management and adaptation, goods as input for SLWM technologies implementation and for biodiversity conservation, technical assistance at ministerial and farmer levels, technical services to produce maps and to implement the M&E system, workshops for participation, consultations, and learning and Incremental Operational Costs.

I. Indicate risks, including climate change risks that might prevent the program objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the program design:

As the program will be one of the TerrAfrica Programs under GEF 5 some of the mitigation measures for potential risks are already in place. For example, by locating the Program within existing implementation structures, this reinforces African leadership and advocacy on the agenda. Also, coordination of national and regional activities will be facilitated by the collaborative approach and regional multi-sector partnership that the TerrAfrica Platform has set up. Despite the above, the program overall risk rating is Substantial but with the proposed measures such risk reduced to Moderate. A preliminary assessment of potential risks includes:

Critical risks	Risk Level	Proposed measures
Climate change may undermine the gains of management practices	S	The Program will include initiatives to mitigate and reduce vulnerability to the impacts of climate change in SLWM
Political instability	S	A regional program will be able to buffer impacts of political instability, as some shared initiatives would be able to continue to work from countries not suffering from such risk.

Overlapping mandates between government and regional institutions	S	The Program will work with individual governments under the TerrAfrica platform using the CSIF as tools for coordination. Also, a technical committee under the leadership of the AU will be established to facilitate coordination among stakeholders.
Insufficient alignment and mobilization of resources. Countries and donors may not sufficiently work together to ensure alignment and mobilized cofinancing.	M	The TerrAfrica platform, NEPAD/AU leadership, and convening power of the various partners will strengthen alignment. The existent high level of political commitment to implement the GWWI will also strengthen alignment.
Resource tenure policies are fragmented, weak, or missing. Weak tenure can lead to low levels of investment in the resource and a perverse incentive to exceed sustainable use.	S	The Program will develop a range of incentive mechanisms, delivered through community structures and consistent with traditional land tenure systems. The projects will pursue different design strategies such as working in areas with clear resource tenure, promoting community driven development, raising institutional and community capacity to carry out land capability mapping and land use planning, promoting natural resource rights, and so on. Lastly, the World Bank's social safeguards include tenure and land use issues, which will also help reduce risks. Each project will face unique circumstances that will inform the risk mitigation strategy. □
Inaccessible or inappropriate scientific methods and tools might lead to unsustainable outputs and outcome	M	The preparation of each discrete project will apply scientific methods and tools appropriate for project circumstances. Also, each project's M&E will, in line with World Bank policy, focus on the given project's direct sphere of control.
Weak local technical and management capacity to support projects' formulation and implementation	M	Regional projects will be open to build local capacities when required. Events for exchange of experiences among institutions will provide important input for those ones in charge of the formulation and implementation of new projects
Low community demand to implement or sustain SLWM technologies	M	The Program will pay particular attention to local benefits (besides national and global ones) in selection of activities. Participatory land and watershed planning exercises will build local awareness and establish incentives required. The projects will also be encouraged to have the flexibility to focus on smaller range of more readily accepted technologies, if necessary.

H=High; S= Substantial; M=Moderate; and L=Low

Each country-level or regional project to be financed within the Program will need to indicate the existent and potential risks and the measures to mitigate them.

J. Outline the institutional structure of the program including coordination and monitoring & evaluation:

The Program's implementation arrangements don't intend to duplicate existent structures but be based on existing African mechanisms, programs, and arrangements. The program will therefore not require, create or result in parallel implementation structures. The Program will be implemented via a portfolio of national and regional projects. Therefore, there will be two levels of implementation: Regional and National execution on ground.

National execution on ground. The program will be implemented through various specific projects at national level depending on specific identified priorities, absorptive capacity and discrete investment operations. Each country will choose the agencies responsible for project implementation. Forest agencies, agriculture ministries, rural development ministries and ministries of planning are possible agencies to be involved. In addition, extensive coordination will be established with other agencies working in the countries in similar initiatives such as the African Development Bank (AfDB), the International Fund for Agricultural Development (IFAD) and other UN Agencies.

This coordination will avoid replication of activities and promote exchange of experiences and knowledge. Because the proposed program should focus heavily on public goods derived from SLWM and adaptation to climate change interventions, it will require extension and other advisory services on the ground. Coordination committees at national level will play an important role in advising individual projects so they contribute to the common Program goal as well as achieving national priorities and plans. Indeed, some countries have already established coordination committees that coordinate all SLM investments in the country including activities related to mitigation and adaptation to climate change.

Regional implementation. To maximize synergies, the Program will work under the TerrAfrica platform for coordination and cooperation activities at the regional level. In addition, regional institutions and authorities²³ such as the AU/NPCA and the Pan Africa Agency of the GGWI as well as Centers of Excellence²⁴ and research will play a key role as partners for coordination and execution of regional projects and activities. Overall, the program will rely on existent regional public and private organizations in order to coordinate and implement regional or multi-country operations designed to complement countries' agendas (through advocacy, policy dialogues or operational alliances) or address challenges in transboundary ecosystems. These regional organizations have accumulated significant experiences aiming at controlling and reversing desertification trends. Some of these organizations are implementing subregional action programs under the UNCCD process and thus coordination with the Program's activities will be ensured. The program's regional activities on information and institutions will benefit from directly and indirectly involve key SRAP facilitators including ECOWAS/CILSS for West Africa, IGAD for Eastern Africa and ECCAS/COMIFAC for Central Africa.

The program will be a TerrAfrica Program under GEF 5 and the Bank will coordinate with the TerrAfrica partners.

The Program will gather a Technical Committee integrated by experts from participating countries, the Africa Union Commission, CEN-SAD General Secretariat, relevant RECs, technical institutions (such as OSS and CILSS) and development partners as relevant. The Committee will meet twice per year and provide technical oversight for the on-the-ground implementation and advice on needed policy orientation so activities remain consistent with the national and regional action plans and investment frameworks. The committee will be advisory in nature; not an executive body. If needed, a sub-committee may be constituted for a closer and more frequent follow-up of the program implementation. The Technical Committee will become a subgroup of TerrAfrica Executive Committee.

Regarding M&E, at the Program level, a selected regional center of excellence will synthesize, aggregate and report annually on the program's progress using the indicators designed to measure the accomplishment of the outcomes and outputs considered in the Program's Results Framework. The M&E system at program level will be done based on national level information coming from the countries. The design will guarantee that the information from the different projects will be used at the program level for learning and knowledge management. Involvement of regional scientific institutions will be key to facilitate the monitoring and modeling of the ecosystem services and impacts. Results from the Program's M&E will also contribute to the REDD+'s reference scenarios.

The institutional structure for the project level M&E will be designed accordingly by each implementing agency. However, it would need to be consistent with the program level M&E as this would need to receive comparable inputs from the projects. During the design stage of each project as well as the regional knowledge management and M&E project, a theory of change baseline values and realistic targets will be established by a key set of stakeholders for each project's results and outcomes. Each project will monitor GEF tracking tools for the focal areas triggered at year 0, mid term and final year.

²³ Such as: the Economic Community of West African States - Water Resources Coordination Center (ECOWAS-WRCC), the Community of Sahel-Saharan State (CEN-SAD), the Permanent Interstate Committee for Drought Control in the Sahel (CILSS – *Comité permanent Inter-État de Lutte contre la Sècheresse au Sahel*) and the Intergovernmental Authority on Development (IGAD).

²⁴ Such as the Sahara and Sahel Observatory (OSS), 2iE and Rural Hub.

K. Identify key stakeholders involved in the program including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

A Program of such large scale will involve numerous stakeholders at regional, national and local level. Some of the national and local stakeholders will be defined in each particular project under the umbrella program. However, key stakeholders already identified for the Program are the following.

- National governments. The West Africa and Sahel countries' governments will be in charge of the design and implementation of the national projects.
- AfDB, bilateral agencies (such as France, European Commission, Norway, Netherlands, Germany, USA) and UN agencies (IFAD, UNEP, UNDP, FAO). The WB will work with these institutions under the TerrAfrica platform for coordination and implementation of the Program.
- NEPAD Planning and Coordinating Agency (AU/NPCA). Created as a technical body of the African Union (replacing the NEPAD Secretariat). It will have an important role in policy dialogue and advocacy, support to leveraging of co-financing, and ensure learning exchange, peer review and mentoring.
- Pan-African Agency of the Great Green Wall. Created in June 2010 in order to coordinate, monitor and evaluate activities relating to the GGWI and mobilize the necessary resources. The Agency's main role will be political coordination, advocacy and knowledge management.
- Regional research institutes and centers of excellence. These organizations (such as: Sahara and Sahel Observatory -OSS-²⁵, Permanent Interstate Committee for Drought Control in the Sahel –CILSS-²⁶, Agrhymet²⁷, African Centre of Meteorological Applications for Development –ACMAD-²⁸, International Institute for Water and Environmental Engineering -2iE-²⁹ and Rural Hub³⁰) will play a key role as partners for execution of regional activities as well as program M&E. CILSS for example, will be responsible for the Regional Knowledge Management compilation and dissemination component, in close collaboration with CGIAR Centers such as ICRAF and IITA. Agrhymet will be responsible for providing accurate methereo forecast to the countries of the Program. This center will work in close collaboration with IGAD Climate Prediction and Application Center (ICPAC)³¹, based in Nairobi. The OSS will be responsible for aggregating country M&E

²⁵ The OSS (Observatoire du Sahara et du Sahel) is an international organization based in Tunis. It was founded in 1992 to improve early warning and monitoring systems for agriculture, food security and drought in Africa. The OSS community includes 22 member countries including 4 sub-regional organizations— representing West Africa (CILSS and Côte d'Ivoire), East Africa (IGAD) and North Africa (AMU and Egypt), a sub-regional organization covering the whole circum-Sahara (CEN-SAD), regional organizations, as well as organizations part of the United Nations System and Civil Society.

²⁶ CILSS' mandate is to invest in research for food security and the fight against the effects of drought and desertification for a new ecological balance in the Sahel. It is an international organization of 8 countries in the Sahel (including Burkina Faso, Mali, Mauritania, Niger, Senegal and Chad). It is based in Ouagadougou, Burkina Faso.

²⁷ Agrhymet is a specialized center from CILSS for training and research in the field of Agronomy, Hydrology and Meteorology. It contributes to build African capacities in the field of food security and natural resources management. It is based in Niamey, Niger. Courses in AGRHYMET are recognized by the African Council for Higher Education (CAMS) and cover a wide range of fields (Climate Change, Sustainable Land Management, Natural Resource Management, hydrology). In addition, the center also provides continuing education in various aspects of natural resource management.

²⁸ ACMAD is the Weather and Climate Centre with African continental competence, based in Niamey, Niger. The Centre disseminates products on a regular basis to African countries for a continent-wide weather and climate watch, including early warning information and short- and long-term forecasts.

²⁹ 2ie has been officially recognized as a Regional Center of Excellence in the field of water and environment. Created in 1970 by 14 countries (including Benin, Burkina Faso, Cameroon, Chad, Mali, Mauritania, Niger, Senegal and Togo)

³⁰ The Hub's goal is to assist West and Central African stakeholders to promote coherence in rural development programs worldwide.

³¹ ICPAC works closely with East Africa countries on the predictions of climate risks and their impacts on the environment.

project data into regional M&E data in order to monitor the indicators of the program presented in the PDF results framework.

- Regional Economic Communities. The RECs (including the Economic Community of West African States – ECOWAS-³², Community of Sahel-Saharan States -CEN-SAD-³³ the Common Market for Eastern and Southern Africa -COMESA-³⁴ and the Inter-governmental Authority on Development –IGAD-³⁵) will participate in regional projects contributing to establishing knowledge support systems and include some principles of SLWM and adaptation to climate change into the economic planning of the region.
- Regional IUCN (International Union of the Conservation of Nature). The Regional IUCN office in Burkina Faso has been leading work on Trans-boundary biodiversity in the Region and Biological/Wildlife corridors. Regional IUCN office will be responsible for preparation of Trans-boundary Biodiversity Management Plans for the Program.
- Local communities/organizations. Considering the focus of the Program to on-the ground activity, community-based organizations will be key stakeholders. These organizations will vary depending on the particular country and region of intervention but will involve different civil society organizations starting from the grass root, traditional organizations, village committees, farmer organizations or cooperatives, women associations and to those NGOs with a broader level of intervention. Details will depend on each country's project, but overall these organizations will be in charge of the on-ground implementation activities. Involvement of NGOs or commercial organizations, chambers, committees or federations will be considered to support community engagement and/or specific technical activities if for example there are specific extension activities (such as introduction of new livelihood alternatives or land management tools) in which they have proven expertise in the area of intervention. Local communities will consist mainly of primary producers (men and women): farmers, herdsman, coalmen, gum, honey and resin harvesters, healers, hunters, wood carvers, etc.
- Local governments. In some countries such as Burkina Faso, local governments will play a role in the projects as key decision takers regarding natural resources management.
- Private sector. The private sector will play an important role in some of the projects where they will be involved in tourism activities as well as participants of activities related to SFM such as payment for environmental services.

L. Indicate the co-financing amount the GEF agency is bringing to the project:

The overall financing package estimates a potential baseline co-financing (with blended, partially blended and parallel projects in the tune of: US\$1,735M. The sources of this amount come from the World Bank's IDA and other trust funds: FIP, GFDRR, FCPF and PPCR. Annex C includes a list of the potential projects that will co-finance the proposed Program. In addition, each country will provide precise co-financing sources and amounts during project preparation.

M. How does the program fit into the GEF Agency's program (reflected in documents such as UNDAF, CAS, etc.) and the Agency staff capacity in the country to follow up program implementation:

The program is consistent with the World Bank's Strategy for Africa released in March 2011, *Africa's Future and the World Bank's Support to It*. The strategy, which builds on lessons learned from the Africa Action Plan (AAP)

³² Among the potential participant countries, Benin, Burkina Faso, Ghana, Mali, Niger, Nigeria, Senegal and Togo are some of ECOWAS members. The Water Resources Coordination Center (ECOWAS-WRCC) will also participate in the project, as it is ECOWAS' center that assists the member countries for water related issues.

³³ Among CEN-SAD members, Benin, Burkina Faso, Chad, Ghana, Mali, Niger, Nigeria, Senegal, Sudan and Togo are present.

³⁴ Ethiopia and Sudan are member countries of COMESA.

³⁵ Ethiopia and Sudan are member countries of IGAD. Projects in these countries may also involve IGAD's Climate Prediction and Applications Centre (ICPAC), as a stakeholder. ICPAC mission is the provision of timely climate early warning information and supporting specific sector applications to enable the region cope with various risks associated with extreme climate variability and change.

and the recent IEG Evaluation of the AAP, provides the framework in which to embed country strategies. Within its second pillar, Vulnerability and Resilience, the World Bank will harness its comparative advantage in building resilience to address (through financial support, knowledge, global experience and technical assistance) the cumulative effects of several shocks such as food shortages and climate change. In particular, the strategy establishes that the WB will provide knowledge, finance, advocacy and convening power in helping countries adapt to climate change.

The Program will make a contribution to each of the WB Africa Regional Climate Change Strategy’s four pillars: (i) Making adaptation and climate risk management a core developmental component with a particular focus on sustainable water resources, land, and forest management, increased agricultural productivity, among others; (ii) Taking advantage of mitigation opportunities through access to carbon finance against land use changes and avoided deforestation, promoting clean energy sources and energy efficiency, and adopting cost effective clean coal energy generation and reduced gas flaring; (iii) Focusing on knowledge and capacity development by improving weather forecasting, water resources monitoring, land use information, improving disaster preparedness, investing in appropriate technology development, and strengthening capacity for planning and coordination, participation and consultation; and, (iv) Scaling up financing opportunities.

Also, in 2008 the World Bank completed a Regional Integration Assistance Strategy (RIAS) for Sub-Saharan Africa in order to help leverage increased benefits for the region through investments in cross-border integration and collaboration. The Program will contribute to the RIAS and particularly to its third pillar that aims at coordinated investments in support of regional public goods by focusing on shared water resources, climate change, emergency response, agricultural productivity, among others. The Strategy acknowledges that regional integration and cooperation contributes to an improved and more sustainable management of shared natural resources and to more effectively address regional commons, such as climate change.

At the national level, a number of World Bank Country Assistance Strategies (CAS’s) and Country Partnership Strategies (CPS’s) have identified integrated natural resources management as an important aspect of the countries’ economy and development.

The WB staff will have ample capacity to follow-up on the Program’s activities at regional and national level. The Bank is already engaged in the different countries in several activities related to sustainable land and water management and adaptation to climate change, which will become integrated under the programmatic approach. The Bank will also be able to draw upon regional and global experience in integrated natural resources management, scaling up of SLWM technologies, promoting sustainable forest management and conservation of biodiversity, piloting payment for environmental services and ecotourism activities as well as adaptation measures.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
 (Please attach the [Operational Focal Point endorsement letter \(for Qualifying GEF Agency\)](#) and [Operational Focal Point Endorsement letter \(for Program Coordination Agency\)](#) with this template.

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Tewolde Berhan Gebre Egziabher	Director General	ENVIRONMENTAL PROTECTION AUTHORITY -ETHIOPIA	03/10/2011
Mr. Delphin AIDJI	Secrétaire General Adjoint du Ministère	Ministère de l'Environnement et de la	

		Protection de la Nature, Benin	
Mr. Mamadou HONADIA	Permanent Secretary	Permanent Secretariat for the National Council for Environment and Sustainable Development, Burkina Faso	
Mr. Gaourang MAMADI N'GARKELO	Directeur de Cabinet du Ministre de L'Environnement	Ministere de l'Environnement, de la Qualité de vie et des Parcs Nationaux, Chad	3/29/2011
Dr. Raymond BABANAWO	Technical Director, Ghana Environmental Conventions Coordination Authority (GECCA)	Ministry of Environment, Science and Technology, Ghana	3/23/2011
Mr. Alamir Sinna TOURE	Ingénieur des Eaux et Forêts	Agence de l'Environnement et du Développement Durable, Mali	
Dr. Mohamed Yahya LAFDAL	Directeur de la Programmation, de la Coordination Intersectorielle et de la Coopération (DPCIC)	Ministère délégué auprès du Premier Ministre chargé de l'Environnement, Mauritania	3/30/2011
Mr. Zouladaini MALAM GATA	Commissioner in Charge of Development	Ministry of Economy and Finance/ Ministere de l'Economie et des Finances, Niger	
Mrs. Jaji OLABISI BOLANLE	Director	Federal Ministry of Environment Policy Analysis, Monitoring and Inspectorate Department, Nigeria	3/22/2011
Mr. Ndiaye Cheikh SYLLA	Directeur Environnement et Etablissement Classés, Point Focal UNFCCC	Ministry of Environment, Senegal	4/5/2011
Dr. Elfadil ALI ADAM	Undersecretary	Ministry of Environment and Physical Development, Sudan	
Mr. Djiwonou FOLLY	Ingenieur des Travaux des Eaux et Forets	Ministere de l'Environnement et des Ressources, Togo	3/28/2011

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.

Agency Coordinator,	Signature	DATE (MM/dd/yyyy)	Project Contact	Telephone	Email Address
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Agency name			Person		
Karin Shepardson GEF Agency Executive Coordinator	<i>Karin Shepardson</i>	March 25, 2011	Paola Agostini Regional Coordinator Africa Region	(202) 473 7620	pagostini@worldbank.org

LIST OF PROJECTS UNDER THE PROGRAM FRAMEWORK

Projects Submitted for Council approval in this work program + Future submissions:						
<u>Project Title</u>	<u>GEF Amount (\$)</u>			<u>Agency Fee (\$)</u>	<u>Total (\$)</u>	<u>Expected Submission Date</u>
	<u>Focal Area 1</u>	<u>Focal Area 2</u>	<u>TOTAL</u>			
	<u>Project</u>	<u>Project</u>	<u>Project</u>			
<u>FSP submitted with PFD in the work program</u>						
1.			0		0	Same as program framework document
2.			0		0	
3.			0		0	
4.			0		0	
<u>Total</u>	0	0	0	0	0	
<u>MSPs Submitted for CEO approval</u>						
1.			0		0	
2.			0		0	
3.			0		0	
<u>Total</u>	0	0	0	0	0	
<u>FSP Projects to be submitted in future work programs:</u>						
1.			0		0	
2.			0		0	
3.			0		0	
4.			0		0	
<u>Total FSPs</u>	0	0	0	0	0	
<u>MSP Projects to be submitted for CEO Approval</u>						
1.			0		0	
2.			0		0	
3.			0		0	
4.			0		0	
<u>Total</u>	0	0	0	0	0	

Note: Qualifying GEF Agencies submitting the PFD do not need to fill this table. For all other GEF Agencies, fill in the focal area split, if any. If more than two focal areas involved, add columns as necessary.

PROGRAM FRAMEWORK DOCUMENT
Sahel and West Africa Program in support of the Great Green Wall Initiative

Ratification participant countries to Conventions and submission to specific action plans

Country	Ratification CBD	Ratification UNCCD	Ratification UNFCCC	Submission NAP	Submission NAPA
Benin	Jun 1994	Aug 1996	Jun 1994	2000	Jan 2008
Burkina Faso	Sep 1993	Jan 1996	Sep 1993	2000	Dec 2007
Chad	June 1994	Sep 1996	Jun 1994	2000	Feb 2010
Ethiopia	Apr 1994	Jun 1997	Apr 1994	2000	Jun 2007
Ghana	Aug 1994	Dec 1996	Sep 1995	2002	NA
Mali	Mar 1995	Oct 1995	Dec 1994	2000	Dec 2007
Mauritania	Aug 1996	Aug 1996	Jan 1994	2002	Nov 2004
Niger	July 1995	Jan 1996	Jul 1995	2000	Jul 2006
Nigeria	Aug 1994	Jul 1997	Aug 1994	2001	NA
Senegal	Oct 1994	Jul 1995	Oct 1994	2000	Nov 2006
Sudan	Oct 1995	Nov 1995	Nov 1993	2002	Jun 2007
Togo	Oct 1995 (acceptance)	Oct 1995 (acceptance)	Mar 1995	2002	Sep 2009

PROGRAM FRAMEWORK DOCUMENT
Sahel and West Africa Program in support of the Great Green Wall Initiative

Preliminary Project Summaries

1. Benin

Project Name	Sustainable Land and Biodiversity Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline projects:</p> <p>The baseline projects in Benin are the West Africa Agriculture Productivity Project (WAAPP) (\$10M) and the Urban Environment and Disaster Management Project (\$10M).</p> <p>The <u>WAAPP</u> is a 10 year APL that aims at generating and enhancing agricultural productivity and competitiveness while promoting regional integration, through four (4) components: (i) enabling conditions for sub-regional cooperation in the generation, dissemination, and adoption of agricultural technologies; (ii) strengthening national centers of specialization and strengthening of the research system; (iii) support to demand-driven technology generation, dissemination and adoption; and, (iv) project coordination, management, and monitoring and evaluation. The new phase of the project will incorporate activities including research and extension to support agricultural production and inputs and seeds acquisition to boost the countries' top agricultural commodity priority. For Benin, the project will support the strengthening of the National Centers of Specialization for maize.</p> <p>The <u>Benin Emergency Urban Environment Project</u> aims to improve infrastructure and mitigate the negative environmental impact of floods and to increase Benin's level of preparedness for future flooding. There are five components in the project: (i) Drainage Improvement and rehabilitation; (ii) Municipal solid waste management; (iii) Improved wastewater management and sanitation; (iv) Flooding and Disaster Risk Preparedness and Management; (v) Project Management.</p> <p>Estimated baseline financing (before GEF): \$ 20M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>GEF resources from the Land Degradation and Biodiversity Focal Areas will be partially blended with the WAAPP and associated with the Emergency Environment project (in flood prone suburban areas) in order to jointly promote sustainable land and water management and ecosystems services production. Through the development of SLWM practices the GEF increment will be able to ensure sustainability in the agricultural practices and technologies to be promoted with the WAAPP (component 3). Investments for SLWM (including appropriate sustainable agricultural technologies, as well as sustainable harvesting technologies for timber and non-timber products) and biodiversity conservation will also reduce pressures on forest resources and by doing so, will contribute to one of the objectives of the Sustainable Forest Management GEF focal area.</p>

	<p>Protected Areas Fund will also be supported, building on the multiple GEF experience, and on the country needs, for a social, financial, environmentally sustainable tool for protected areas management.</p> <p>The project will also pilot community-based activities to mitigate impact of flooding, such as: river bank restoration and protection, canal maintenance, pond construction and maintenance, small-scale reforestation, tree nursery site establishment and tree planting. The GEF increment will take into account the close interconnectivity between flood risks, land degradation and ecosystem services from protected areas and productive landscapes. Other sustainable land management practices to be considered are: no-till, agroforestry, integrated soil fertility, cover crops, rotational grazing, water harvesting, and many others, coupled with broader landscape planning</p> <p>In addition, the GEF will enable the exchange of experiences within the countries that participate in the WAAPP (Benin, Togo and Niger), and also to the other countries in the Sahel region that share similar challenges.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$6M Land degradation focal area: \$ 3.5 M Biodiversity focal area: \$ 1.5 M Climate change mitigation focal area: none Sustainable Forest Management bonus: \$1M LDCF: none SCCF: none</p> <p>Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#)
<p>Implementing body (if known)</p>	<p>The Ministry of Environment (tbc).</p>

2. Burkina Faso

Project Name	Sustainable Land and Forestry Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline project.</p> <p>The baseline projects in Burkina Faso are: the Community and Private Forest Investment Project (CFIP) (\$27), the Regional Natural Resource Management Project (\$12M) and the Disaster Management Project (\$5).</p> <p><u>The Community and Private Forest Investment Project (CFIP) (\$27).</u> The overall objective is to support an improved and sustainable use of forests in Burkina Faso through socio-economic development aimed at reducing pressure on forest resources and increasing their carbon sequestration capacity. The project has four components:</p> <p>Component 1: Assessment and diagnostic studies. This will involve, among other things: (i) Integration of available knowledge of forest situations and trends into political strategies and practices; (ii) Evaluation of carbon stock in forest formation and agro-forestry (baseline study) and assessment of the carbon sequestration potentials of local forest landscapes (according to MRV and within the REDD+ context); (iii) Evaluation of the potential of key wood and non wood products (such as shea/<i>karite</i> and Arabic gum); (iv) Socio-economic assessments of poverty levels and characteristics within vulnerable communities who are dependent on forest products for their subsistence; and (v) Institutional support to national research institutions, (ii) private sector involvement and added value.</p> <p>Component 2: Investments in commune and private forest management. This will involve: (i) Adequate support to the leadership of Local Governments (LGs) in environmental planning in general and in forest management in particular; (ii) Adequate support to the private sector in forest management, (iii) Demarcation and sustainable management of regional and sub-regional forests and the implementation of community-based forest projects (including income generating activities) through appropriate financing mechanisms; (iv) Planning of alternative land uses in selected areas, comprising demarcation of residential areas as well areas reserved for conservation and production (including hunting zones) and land management initiatives; (v) Implementation of a range of private initiatives aimed at promoting and disseminating sustainable practices of natural resource management (including integration of tree farming, forestry and livestock; soil erosion management; physical soil and water conservation; combination of engineering, biological, and community-centered low-tech measures, and the like).</p> <p>Component 3: Capacity building. This will involve: (i) Support to the administrative, institutional and technical measures aimed at empowering Local Governments, civil society organizations and private stakeholders (ii) Improving LGs' environmental planning instruments; (iii) Provision of technical training to local stakeholders (including women's groups) on issues related to sustainable forest management; (iv) Scaling up best experiences of 'co-management' of forest resources (involving local elected authorities, user groups, and deconcentrated line departments); and (v) Establishment of a comprehensive communication strategy and action plan.</p> <p>Component 4. Project management. This component would aim to support</p>

	<p>central and local government institutions to implement this project.</p> <p>In addition, an integrated <u>Regional Natural Resource Management Project</u> is currently under preparation for several countries including Burkina-Faso (\$12M). This project, that is still under development, will seek to: (i) enhance natural resource management capacities of the countries, building on lessons learned and exchange of experiences; (ii) pilot natural resource management initiatives; and, (iii) strengthen governance for natural resources management. The project will include development of inter-sectoral coordination mechanisms (agriculture, livestock, forestry, water, transport, etc.) for planning and information exchange, and development and application of monitoring tools to measure the outcomes and transformational impacts of planned activities.</p> <p>Also, a <u>Disaster Management Project</u> (\$5) will be part of the country’s baseline. This project aims at strategically mainstream disaster risk management into national development strategies and support implementation in targeted areas of the priorities identified in the country’s program related to knowledge and capacity enhancement for disaster risk management, policy and institutional capacity, awareness and communication, and disaster monitoring and early warning and disaster preparedness and recovery.</p> <p>Estimated baseline financing (before GEF): 44 Million</p>
<p>GEF/LDCF or SCCF alternative</p>	<p>Description of GEF alternative:</p> <p>GEF resources from the land degradation, climate change mitigation and biodiversity Focal Areas will be blended with the CFIP and associate with the other two baseline projects to promote on ground investments in sustainable land and water management practices and biodiversity conservation measures, particularly in fragile lands and areas prone to the negative effects of climate change and variability.</p> <p>The GEF will pilot innovations and SFM tools such as payment for environmental and ecosystem services provided by local communities (with a scheme of ‘safety nets’ to household, in order to reduce the pressure on forest resources). Actions that will strengthen SFM efforts in the area of climate change mitigation will also contribute to restoration and enhancement of carbon stocks in the forest areas of intervention. In addition, the GEF alternative will support the preparation and implementation of protected area management plans as well as the establishment of wildlife corridors.</p> <p>Incremental GEF / Additional LDCF/SCCF financing: \$8 million Land degradation focal area: \$3 million Biodiversity focal area: \$1.5 million Climate change mitigation focal area: \$1.5 million Sustainable Forest Management bonus: \$2 million SCCF: none LDCF: none</p> <p>Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include (check those that apply):</p>

contribution	<ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#) ✓ KPI 4. Change in carbon accumulation rates in biomass and soil, compared to baseline (tC/ha)
Implementing body (if known)	Ministry of Environment and Sustainable Development (MEDD)

3. Chad

Project Name	Sustainable Land and Water Management project
Parent Project Description (IDA)	<p>Description of baseline projects: The baseline projects in Chad are: the Local Development Program Support Project 2 (LDPSP 2) (\$30M) and the Agricultural Productivity Project (\$30M)</p> <p><u>Local Development Program Support Project 2 (LDPSP 2).</u> The project aims to achieve: (i) improved access to basic infrastructure and social services in targeted districts; and (ii) improved planning, management and monitoring by local communities and communes of decentralized investments. There are two technical components: (i) capacity building of local communities and communes³⁶ and support to decentralization; and (ii) decentralized financing of micro-projects. The objective of <i>Component 1</i> is to support the development of improved technical and fiduciary skills needed at the different decentralized levels and in the national institutions responsible for decentralization. <i>Component 2</i> will support targeted financing of demand-driven micro-projects based on LDPs and Annual Investment Plans (AIPs). The micro-projects, to be financed through a matching grant (MG) mechanism, will promote access to basic socio-economic services, income-generating activities, and sustainable natural resources management through the adoption of innovative technologies. The Project will channel funds to communes and local communities in order to finance: (i) socio-economic infrastructure micro-projects (education, health, water facilities, etc); (ii) environmental and natural resources management micro-projects (acacia plantations, sustainable land management, Sahelian gardens, etc.); and (iii) rural income-generating micro-projects (small scale irrigation, agricultural equipment, drying facilities, small transformation and storage facilities, etc.).</p> <p>Besides the LDPSP 2, the World Bank will prepare a new <u>Agricultural Productivity Project</u> for Chad. The objective is to tap the significant agriculture potential in the southern part of the country (sudanian and sahelian zones) in order to reduce food insecurity and household vulnerability, increase agricultural incomes, and consequently strengthen the diversification of the Chadian rural economy. The operation will use a demand-driven approach, supporting local communities, and is expected to focus on agricultural-livestock linkages and resource management (land and water). As this preparation is just starting, both projects will be able to blend as they can be formulated jointly establishing better synergies.</p> <p>Estimated baseline financing by IDA (before GEF): \$60 M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>The proposed GEF project will partially blended with the Local Development Program Support Project 2 (LDPSP 2) and associated with the Agricultural Productivity Project and is intended to generate global environmental benefits (biodiversity conservation in watersheds, enhancement of carbon stocks in forests, protection against erosion, etc) through targeted investments. Funds from GEF focal areas will incorporate planning process, appropriate</p>

³⁶ In Chad the term “communes” refers to urban communities, while for rural entities the term “rural communities” tends to be used.

	<p>management and sustainable technologies, and community and government capacity building. This will contribute to ensure sustainability of the development micro-projects as well as the agriculture and livestock practices and technologies promoted in the baseline.</p> <p>Details will be determined during project formulation, but it is expected that the funds will support the implementation of the following actions:</p> <ul style="list-style-type: none"> • Sustainable land management interventions for agricultural systems, • Creation and management of Protected Areas in watersheds, • Support for creation and management of nurseries, • Management of humid and gallery forests, • Information, education, communication for communities in the context of GGWI. This will add value to the technical skills enhanced at the different decentralized levels through the LDPSP 2. • Institutional and legal framework for implementation of GGW. <p><u>Linkage with LDCF/SCCF</u></p> <p>LDCF resources will also be deployed to cover some of the additional costs to improve the climate resilience of Government and community livelihood investments, including the infrastructure and civil works promoted with the LDPSP 2. The resources will implement related priorities identified in the National Action Plan for Adaptation (NAPA) such as retention of surface water for agriculture and feeding of livestock, diversification and intensification of cultures in Sudanese and Sahelian areas, improvement of information, education and communication on adaptation to climate change, food bank for livestock, and construction of infrastructure for the defense and conservation of soils as a mean to develop agricultural activities. During project preparation, the specific NAPA priority(ies) to be supported in association with the baseline will be identified. Activities will contribute to both objectives: CCA-1 and CCA-2.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: US\$ 10 million Land degradation focal area: US\$ 2.5 million Biodiversity focal area: US\$ 1.5 million Climate change mitigation focal area: none Sustainable Forest Management bonus: US\$ 1.0 million LDCF: US\$ 5.0 million SCCF: none</p> <p>Note: These amounts include the fee to be paid to the Agency. In addition, as Chad is a STAR flexible country, resources from the CC focal area were moved to both BD and LD focal areas.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the following KPIs to be aggregated at portfolio program level:</p> <p>KPI 1. Area with SLWM practices, compared to baselines of individual projects (hectares, reported by crop, range, forest, wetlands, protected areas)</p> <p>KPI 2. Changes in vegetation cover, compared to baselines of individual projects</p> <p>KPI 3. Number of targeted institutions with increased adaptive capacity to reduce risks and response to climate variability, compared to baselines of individual projects</p>

	KPI 4. Change in carbon accumulation rates, compared to baselines of individual projects (tC/ha)
Implementing Agency	Ministry of Environment and Fisheries (MoEF)/ <i>Ministère de l'Environnement et des Ressources Halieutiques (MERH)</i>

4. Ethiopia

Project Name	Sustainable Land and Biodiversity Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline projects: Policy dialogue is centered on the following priority investments that overall contribute to reinforce landscape approach in the country moving from agricultural land to the forest land and to the drylands. The baseline projects are: Agriculture Growth Project (\$150M), Productive Safety Net Project –PSNP/ APL III (\$ 450M), Pastoral Community Development Project (\$ 56 M), Forest Carbon Partnership (\$3.6M) and Sustainable Land Management Project II (\$ 100 M).</p> <p><u>Agriculture Growth Project (\$ 150M IDA).</u> The objective is to increase agricultural productivity and market access for key crop and livestock products in targeted woredas with increased participation of women and youth. There are three components to the project: (i) Agricultural production and commercialization; (ii) small-scale rural infrastructure development and management; and, (iii) AGP management and monitoring and evaluation (M&E).</p> <p><u>Productive Safety Net Project –PSNP/ APL III (\$ 450M IDA).</u> The objective is to improve the effectiveness and efficiency of the PSNP and related Household Asset Building Program (HABP) for chronically food insecure households in rural Ethiopia. There are four components: (i) safety net grants will provide cash and in-kind transfers to chronically food insecure households through: labor-intensive public works that provide transfers to able-bodied households and direct support that provides transfers to labor-poor households; (ii) drought risk financing, which aims to provide timely resources for transitory food insecurity in response to shocks within the existing program areas; (ii) institutional support for the PSNP; and, (iv) support to the HABP.</p> <p><u>Pastoral Community Development Project (\$ 56 M IDA).</u> The objective is to contribute to: (i) increasing the resilience of Ethiopian pastoralists to external shocks; and (ii) improving the livelihoods of beneficiary communities, and thereby to contribute to overall poverty alleviation in Ethiopia. There are four components to the project: (i) sustainable livelihoods enhancement; (ii) pastoral risk management to improve the existing pastoral early warning system; (iii) participatory learning and knowledge management; (iv) project management.</p> <p><u>Forest Carbon Partnership (\$3.6M).</u> The purpose will be to develop the plan for Ethiopia to get ready for REDD (Reducing Emissions from Deforestation and Forest Degradation) implementation. This will include actions towards key outputs such as: (i) awareness raised on REDD+; (ii) individual and institutional capacity built to support REDD+; (iii) participation enhanced in decision -making and action; (iv) more in-depth analysis of REDD+ issues; (vi) field tested REDD+ supported experimental strategies/pilots to address deforestation and degradation; (vii) enabling environment including appropriate institutions and policies; (viii) benefit-sharing mechanisms identified and/or established; (ix) reference scenario of carbon stock; (x) REDD+ monitoring and evaluation systems.</p> <p><u>Sustainable Land Management Project II (\$ 100 M IDA).</u> The development objectives of the proposed project will be similar to the first project that aimed to reduce land degradation in agricultural landscapes and improve the agricultural productivity of smallholder farmers. The project will be developed through three components: (i) investment in small infrastructure for watershed management; (ii)</p>

	<p>rural land certification and administration; and, (iii) project management.</p> <p>Estimated baseline financing (before GEF): \$759.6M</p>
<p>GEF/LDCF or SCCF alternative</p>	<p>Description of GEF alternative:</p> <p>The GEF resources will be blended with the Sustainable Land Management Project II project, and associated with the other baseline projects. GEF resources from the multiple focal areas will build on the extensive baseline to generate local, national and global environmental benefits by promoting the uptake of sustainable land use management and biodiversity conservation practices by agro-pastoral communities in order to reduce land degradation and support sustainable development and enhanced livelihoods. The investment will build on the achievements of various successful projects to address the linkage of community driven initiatives with the need for safeguarding biodiversity, enhancement carbon stocks in forest and non-forest lands and other ecosystem services at appropriate scales. Actions developed within the project will also contribute to the country’s readiness to implement REDD+ in terms of enabling environment as well as on the ground activities. The baseline projects plus the GEF project will form the pieces of a puzzle to address landscape management issues. GEF will complement by addressing the interphase between agriculture land, pastoral land and forest land in an integrated ecosystem approach that generates global benefits.</p> <p>Some of the activities to be developed so to generate local, national and global benefits will be: (i) vegetative measures such as agroforestry, natural forest regeneration, woodlots and cover cropping; (ii) land use planning including grazing corridors; (iii) additional sustainable measures such as contour farming and small terraces, micro irrigation, conservation set-asides along vulnerable areas, among others; (iv) diversified application of renewable energy, particularly through the use of biofuel and biogas; and (v) community based alternative livelihood options that reduce pressure on natural resources. Incentives mechanisms such as payment for environmental services will be piloted to contribute to the enabling environment for the application of SLWM. These practices would be based on participatory land and water use planning approaches to address specific livelihoods needs and priorities at the local level as well as within the wider landscape mosaic.</p> <p><u>Linkage with LDCF/SCCF</u></p> <p>LDCF resources will also be deployed to cover some of the additional costs to improve the climate resilience of the baseline projects including the small-scale rural infrastructure and public works promoted. This will also complement and add value to the pastoral early warning system established in the Pastoral CDP. The resources will be consistent to some of the priorities identified in the National Action Plan for Adaptation (NAPA): strengthening/enhancing drought and flood early warning systems, development of small scale irrigation and water harvesting schemes in arid, semi-arid, and dry subhumid areas, improving/enhancing rangeland resource management practices in the pastoral areas, promotion of on farm and homestead forestry and agroforestry practices in arid, semiarid and dry-sub humid parts of Ethiopia. During project preparation, the specific NAPA priority(ies) to be supported in association with the baseline will be identified. Activities in the project will contribute to both objectives: CCA-1 and CCA-2 and will address some of the causes for vulnerability to climate variability and change identified in the NAPA, such as the very high dependence on rain fed agriculture,</p>

	<p>under-development of water resources, low adaptive capacity, and lack of awareness.</p> <p>Finally, the vulnerability assessment carried out under NAPA indicated that the most vulnerable sectors to climate variability and change are: agriculture, water and Human health. It was also indicated that in terms of livelihood approach smallholder rain-fed farmers and pastoralists are found to be the most vulnerable. The project in Ethiopia will act on two of the three sectors (agriculture and water) and will consider rain-fed farmers and pastoralists as its main beneficiaries.</p> <p>The project will support the implementation of the Ethiopia Strategic Investment Framework developed with the support of TerrAfrica. The overall development objective is to improve the livelihoods and economic well-being of the country's farmers, herders and forest resource users by scaling up SLM practices with proven potential to restore, sustain and enhance the productivity of Ethiopia's land resources.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$ 14 M Land degradation focal area: \$ 3.0 M Biodiversity focal area: \$ 3.0 M Climate change mitigation focal area: \$ 1.0 M Sustainable Forest Management bonus: \$ 2.0M LDCF: \$ 5M SCCF: none</p> <p>Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program's objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) □ ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#) ✓ KPI 4. Change in carbon accumulation rates in biomass and soil, compared to baseline (tC/ha)
<p>Implementing body (if known)</p>	<p>The Ministry of Environment (tbc).</p>

5. Ghana

Project Name	Sustainable Land and Biodiversity Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline projects: The baseline projects for Ghana are: Agriculture Development Policy Loan (\$50M), Community Based Rural Development Project (\$82M), Forest Carbon Partnership (\$3.6M), Forest Investment Program (FIP) (\$ 30 M) and Natural Resource and Environmental Governance DPL (\$10M).</p> <p><u>Agriculture DPL (\$ 50 M IDA).</u> The objective is to contribute to the poverty reduction efforts in Ghana through improvement of soil and water management. <input type="checkbox"/> Specifically, the operation aims to scale up the implementation of the Africa Action Plan in priority areas: (i) Strengthening the private sector (ii) Economic empowerment of women (iii) Skills Development for increased competitiveness (iv) Agricultural productivity enhancement.</p> <p><u>Community Based Rural Development Project (\$82M IDA).</u> The objective is to strengthen the capacity of rural communities to enhance their quality of life by improving their productive assets, rural infrastructure, and access to key support services from private and public sources. An additional credit is being negotiated to help finance the costs associated with scaling up of CBRDP to reconstruct public goods in the flood-affected regions of the north, and extend support for decentralized service provision through the financing of basic public infrastructure by local level government authorities.</p> <p><u>Forest Carbon Partnership (\$3.6M).</u> The funds will assist Ghana to prepare for reducing emissions from deforestation and forest degradation (REDD), and become ‘ready’ for the implementation of an international mechanism for REDD. This R-PP Implementation phase will be divided in three steps: (i) <i>Analysis, Preparation and Consultation</i> (analysis of REDD+ policy, legal and technical requirements, setting of the Reference Emissions Level, confirmation of institutional roles, responsibilities and oversight for REDD+, establishment of the entity responsible for MRV, selection of potential pilots / demonstration activities, continued consultation, information sharing and awareness raising, finalization of REDD+ strategy); (ii) <i>Piloting and Testing</i> (initial capacity building for pilots, establishment of pilots / demonstration activities, establishment of carbon accounting registry, testing of carbon measurement, accounting and MRV procedures, consultation around demonstrations and pilots, consultation on potential REDD+ policies, decisions and actions, training Needs Analysis for full REDD+ implementation); (iii) <i>Becoming Ready</i> (approval of any new legislation and legal texts, finalized financing mechanisms, procedures, audit and controls, finalized operating procedures for MRV entity, recruitment of staff, training and capacity building on the development and technical aspects of REDD+, operational plan to scale up REDD+.</p> <p><u>Forest Investment Program (FIP) (\$ 30 M).</u> FIP will fund investments for the implementation of Ghana’s REDD+ strategy aiming at promoting innovative and replicable transformational approaches and incentive mechanisms to reduce GHG emissions from forests, generate sustainable development co-benefits in poverty reduction and biodiversity protection by tapping into forest sector potential. The project will include a mix of activities, including, but not limited to, knowledge generation and sharing, private sector engagement, use of country systems, civil society engagement, and technical assistance. Such activities will be consistent</p>

	<p>with the REDD readiness activities identified by the Government in the R-PP.</p> <p><u>Natural Resource and Environmental Governance DPL (\$10M IDA).</u> The challenges of the Ghana Natural Resources and Environmental Governance (NREG) Program were to improve transparency in systems and procedures for natural resource management, which could lead to more effective forest law enforcement, improved collection of revenues in the mining and forestry sectors, and mainstreaming environment and climate change in economic planning and development. Achievements demonstrated in the initial years of policy reforms and institutional capacity building in the forestry and mining sectors would be scaled up, based on a review of results.</p> <p>Estimated baseline financing (before GEF): \$175.6M</p>
<p>GEF/LDCF or SCCF alternative</p>	<p>Description of GEF alternative:</p> <p>The GEF resources will be blended with the Forest Investment Program (FIP) and associated with Agriculture Development Policy Loan, Community Based Rural Development Project, Forest Carbon Partnership, and Natural Resource and Environmental Governance DPL.</p> <p>GEF resources from multiple focal areas will build on the extensive baseline to generate local, national and global environmental benefits (including reducing land degradation, conserving biodiversity and reducing vulnerability to climate change) following an integrated landscape approach. The baseline: agriculture in fertile areas, small infrastructure works in forests, and an enabling environment for strengthening the governance over natural resources management, will be integrated with the GEF project through the implementation of SLWM and biodiversity conservation targeted investments, coordinated planning and dialogue.</p> <p>Some of the activities to be detailed in the future project formulation will be: (i) vegetative measures such as agroforestry, natural forest regeneration, woodlots and cover cropping; (ii) land use planning including grazing corridors; (iii) additional sustainable measures such as contour farming and small terraces, micro irrigation, conservation set-asides along vulnerable areas, among others; and, (iv) conflict resolution and incentive mechanisms to address the challenge over competing natural resources between farmers and pastoralists in the context of providing opportunities for livelihood improvement.</p> <p>The project will support strengthening the enabling environment for SLWM and biodiversity conservation practices as well as on the ground activities in the selected landscapes. Advances at the policy level achieved through the NREG will contribute to the enabling environment for this project. SLWM practices will contribute to enhancing carbon stocks in forests and non-forest lands located in the north of the country, complementing activities developed in the south by the FIP.</p> <p>Key stakeholders in the project’s on-ground investments will be the village communities (and where several villages are involved, Unit Committees), Community Environment Management Committees and Water User Groups. These organizations will contribute identifying and putting in place community infrastructure investments, prioritizing SLWM and biodiversity conservation interventions, and establishing the incentive frameworks for adoption of SLWM</p>

	<p>technologies by individual farmers. SLWM agreements will be developed with Farmer Groups (usually at hoc groupings of 15 to 20 farmers, formed around interest in specific extension capacity) that will then be responsible for coordinating the activities of their members.</p> <p>In addition, an integrated SLWM M&E and knowledge management information system, backstopped by and linked to the regional level, will be established to support implementation across a variety of actors. A wealth of information and knowledge on REDD+ in Ghana has been identified but consolidation of the knowledge produced is needed. The overall Program’s knowledge management system will be a key tool to address this issue not only for Ghana’s benefit but also for all other participant countries.</p> <p>Finally, the project will contribute directly to the goal of Ghana’s <i>Country Strategic Investment Framework for Sustainable Land Management (SLM)</i>, which is to support country priorities in improving natural resource-based livelihoods by reducing land degradation, in line with MDGs 1 and 7. The objective of the CSIF is to mainstream and scale-up sustainable land management in the development framework of Ghana at all levels to improve the governance of land management decisions and secure ecosystem services and improve rural livelihoods in the country. The achievement of this objective involves long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions in particular at the community level.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$9.45M Land degradation focal area: \$ 3.0 M Biodiversity focal area: \$ 2.0 M Climate change mitigation focal area: \$2.45M Sustainable Forest Management bonus: \$2M LDCF: not eligible SCCF: none</p> <p>Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#)
<p>Implementing body (if known)</p>	<p>The Ministry of Environment (tbc).</p>

6. Mali

Project Name	Sustainable Land and Biodiversity Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline project: The baseline projects for Mali are: Program for Scaling Up Renewable Energy (SREP) (\$ 30 M), Disaster risk management project (\$5M) and Regional Natural Resource Management Project (\$12M).</p> <p><u>Program for Scaling Up Renewable Energy (SREP) (\$ 30 M).</u> This project aims to design and start up the SREP investment plan for Mali. The SREP will capitalize on this existing National Strategy for the Development of Renewable Energies and support its implementation. The SREP will focus several activities such as (not exhaustive): rural electrification, household energy, promotion of biofuels. In preliminary stages of the formulation it has been recognized that special emphasis should be on private sector involvement and the necessary changes in legislation / regulation to encourage private investments.</p> <p><u>Disaster risk management project (\$5M from GFDDR).</u> The project will support implementation of the Comprehensive Disaster Risk Management and Climate Adaptation Program for Mali prepared in 2009 in consultation with the government and development partners. The project will include the following activities: (i) Strengthening Disaster Risk Reduction and Management institutional framework; (ii) fulfillment of a systematic populations and stakeholders' awareness raising, for information advocacy and technical capacity building; (iii) strengthening key institutions' material and technical capacities; (iv) integration of Disaster risk management and reduction, and adaptation to climate change in primary and secondary school curriculum; (v) Strengthening post-emergency assessment and recovery implementation system, (vi) development of a National Policy, Strategy and Action Plan for disaster and risk management and reduction (DRM/R); (vii) implementation of a pilot project for vulnerable communities' protection through an integrated disaster risks management (floods, drought, locust invasion, and bush fires); (viii) support for strengthening disaster risk management and reduction financing mechanism.</p> <p><u>Regional Natural Resource Management Project (\$12M).</u> The project that is still under development will seek to: (i) enhance natural resource management capacities of the countries, building on lessons learned and exchange of experiences; (ii) pilot natural resource management initiatives; and, (iii) strengthen governance for natural resources management. The project will include development of inter-sectoral coordination mechanisms (agriculture, livestock, forestry, water, transport, etc.) for planning and information exchange and development and application of monitoring tools to measure the outcomes and transformational impacts of planned activities.</p> <p>Estimated baseline financing (before GEF): \$ 47 M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>GEF resources will complement with the existing baselines and particular will blend with the Regional NRM project emphasizing support to the development of community based livelihood such as ecotourism to catalyse the scaling-up of improved natural resource management in Mali. This is a multi-sector (energy, forest, and agriculture) and multi focal area (land degradation, biodiversity, climate change mitigation) project that will also assist local people to adapt to the</p>

predicted impacts of CC in Mali and also promotion of technologies that reduce pressure on natural resources. Integrated landscape management, erosion control and SLM will provide direct transformational benefits to the Disaster Risk Management project and of the Renewable Energy Project. There will be four components:

Component 1: Institutions, Information and Policy. This component will support scaling up of good practices demonstrated on the ground through institutional strengthening and catalyzing understanding that SLM / NRM are inter-sectoral, win-win issues at both national and local (decentralized authority) levels.

Component 2: Investment in SLWM and Biodiversity based livelihoods: In targeted areas, in particular near protected areas (PA), ecotourism will be developed and supported by inventories in PA; co-management plans for PA; ecotourism infrastructure; development and implementation of co-management plans; and advocacy and communication. The project will also work in agrobiodiversity and in particular in the conservation of crop wild relatives (CWR) contributing to food security, enhancing of productivity and improving nutritional quality of crops. This component will draw in particular from Land Degradation and Biodiversity focal areas as well as from the SFM.

*Component 3: Promote integrated landscape management through local-level generation of renewable energy and planning of sustainable plantations for wood fuel: *Jatropha curcas* L.* will be promoted through plantation, local-level processing and electricity generation systems for ecotourism and local people. This component will draw in particular from the Climate Change Mitigation Focal Area and will directly contribute to the Disaster Risk Management project through the erosion control and to the Renewable Energy Project through promotion of integrated landscape management practices adopted by local communities.

Component 4: Project co-ordination, monitoring and evaluation. This component will support Government at local and national levels to implement, monitor and evaluate this project, also strategic communications and documentation.

Linkage with LDCF/SCCF

LDCF funds will help the baseline projects to become resilient to climate change and complement activities developed through the disaster risk management project. The project will contribute towards food security by promoting agrobiodiversity activities and conservation of crop wild relatives. Also, the resources will consider some of the top priorities included in the NAPA such as the promotion of fodder stock for livestock, elaboration of a technological package of training for the population with simple adaptation practices to climate change, sensitization and organization of the population for the preservation of natural resources (elaboration of local conventions on reforestation and agroforestry), and promotion of income-generating activities and development of mutual assistance. During project preparation, the specific NAPA priority(ies) to be supported in association with the baseline will be identified. Activities will contribute to both objectives: CCA-1 and CCA-2.

The program will promote coordination with other organizations implementing related initiatives. For the case of Mali, coordination will be explored with UNDP and FAO who are involved in other projects related to the agricultural sector that are being implemented. Mali, as the other countries in the Program benefit from an operational SLM platform that provides an additional coordination mechanism

	<p>amongst partners.</p> <p>The Project will contribute directly to the <i>Country Strategic Investment Framework for Sustainable Land Management (SLM)</i> in Mali that was developed with the support of TerrAfrica. The investment framework has two distinct specific objectives: (i) amplify the good practices of SLM to fight against the degradation of the land, the loss of the biodiversity and to adapt to climate change; and, (ii) reinforce the technical and financial institutional capacities of actors concerned with the integration of SLM in the development policies of the country.</p> <p>During the preparation of the project documents, country driven consultation processes will take place to define the priority areas of intervention.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$14M Land degradation focal area: \$3.04 M Biodiversity focal area: \$1.96 M Climate change mitigation focal area: \$2M Sustainable Forest Management bonus: \$2M LDCF: \$ 5 M SCCF: none</p> <p>Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include (check those that apply):</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#) ✓ KPI 4. Change in carbon accumulation rates in biomass and soil, compared to baseline (tC/ha)
<p>Implementing body (if known)</p>	<p>The Government at national and local levels.</p>

7. Mauritania

Project Name	Sustainable Land and Water Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline project: The baseline projects for Mauritania are: Integrated Development Project for Irrigated Agriculture APL #3 (PDIAIM) (\$10M), the Community Based Rural Development (CBRD) II (\$10M) and the Regional Natural Resource Management Project (\$12M).</p> <p>The <u>Integrated Development Project for Irrigated Agriculture APL #3 (PDIAIM) (\$10M)</u> aims to promote the sustainable increase of agricultural productivity and income in a rural environment, improve food security, and reduce poverty--all within the context of integrating the management of natural resources. The new phase will retain components from previous phases: (1) continue development of key incentive measures, (2) increase sustainable irrigation schemes, and (3) intensify agricultural diversification for targeted actors engaged in irrigated agriculture.</p> <p>The <u>Community Based Rural Development (CBRD) II (\$10M)</u> is being formulated to consolidate and scale up previous achievements towards improving the living conditions of village communities in terms of sustainable income increase, access to basic socio-economic services, and improved natural resource management practices. The project would achieve its objective through capacity building (targeting village communities, rural municipalities and suppliers of support services to communities), and investments in economic, social and environmental sub-projects implemented by these communities.</p> <p>In addition, an integrated <u>Regional Natural Resource Management Project</u> is currently under preparation for Burkina-Faso, Mali, Mauritania, Niger and Senegal (\$12M for Mauritania). The project that is still under development will seek to: (i) enhance natural resource management capacities of the countries, building on lessons learned and exchange of experiences; (ii) pilot natural resource management initiatives; and, (iii) strengthen governance for natural resources management. The project will include development of inter-sectoral coordination mechanisms (agriculture, livestock, forestry, water, transport, etc.) for planning and information exchange and development and application of monitoring tools to measure the outcomes and transformational impacts of planned activities. Achieving improvements in management capacities will contribute with securing ecosystem services, which will indeed contribute to higher productivity and increased options for livelihood improvement.</p> <p>Estimated baseline financing (before GEF): \$32M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>GEF resources from the Land Degradation and Biodiversity Focal Areas will associate to the baseline projects (Integrated Development Project for Irrigated Agriculture APL and Community Based Rural Development (CBRD) II) and will be blended with the Natural Resources Management project, in order to jointly promote sustainable land and water management and ecosystems services production. The GEF project will contribute to addressing the key institutional, policy and technological barriers to SLWM identified by the country. Enabling environments for SLWM practices with biodiversity considerations will ensure the sustainability of the agricultural practices and alternative livelihood options</p>

promoted in the baseline projects as well as consistency and coordination in natural resources management.

The resources will also support investments for the implementation of watershed management plans as well as agroforestry, natural forest regeneration and other sustainable community and small holder forestry management practices, green belt and dune stabilization and wind break in the Senegal valley to protect the agricultural perimeters, among others.

These activities will be directly integrated with the bottom-up decision-making process that has been embodied in the CBRD. The implementation of interventions prioritized at local and community levels will continue proving the potential for generating global environmental benefits such as increase vegetation cover, reduced land degradation, climate change mitigation and biodiversity conservation in dry lands.

Linkage with LDCF/SCCF

LDCF resources will also be deployed to cover some of the additional costs to improve the climate resilience of Government and community livelihood investments. The resources will be focused at reinforcing adaptive capacities to reduce sea level rise, flooding and sand dune encroachment threats. This will be achieved by developing tools for improving planning, policy and practice for monitoring and mitigating the effects of sea level rise and dune encroachment on targeted areas. Three components have been already identified: (i) monitoring, land use planning, and information support; (ii) sand dune and land degradation control; and, (iii) project management and monitoring. This resources will be consistent with some of what has been prioritized in the National Action Plan for Adaptation (NAPA), particularly: reorganization of the communities adversely affected by climate change, participatory reforestation for energy and agroforestry in agricultural zones, restoration and integrated management of the lowlands and wetlands, and improvement of knowledge about, and sustainable management of, the forest resources. During project preparation, the specific NAPA priority(ies) to be supported in association with the baseline will be identified. Activities will contribute to both objectives: CCA-1 and CCA-2.

The summary of vulnerability studies developed for the NAPA revealed that all the vital sectors of the economy are affected by the weather variability phenomena and climate change. The socio-economic consequences are all the more dramatic given that they affect communities that live mainly on natural resources. The project will act on several of the sectors such as agriculture, water and forestry and will benefit communities whose livelihoods depend on their natural resources.

Finally, all the above activities will support the implementation of the country's strategic investment framework developed with the support of TerrAfrica.

Incremental GEF financing / Additional LDCF/SCCF: \$7.9M

Land degradation focal area: \$2.4M

Biodiversity focal area: \$1.5 M

Climate change mitigation focal area: none

Sustainable Forest Management bonus: \$1M

LDCF: \$3M

SCCF: none

	Note: These amounts include the fee to be paid to the Agency.
Indicative indicators for measuring GEF contribution	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, wetlands, forest, protected areas) □ ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#)
Implementing body (if known)	The Ministry of Environment (tbc).

8. Niger

Project Name	Sustainable Land and Water Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline projects: The baseline for the project in Niger are the following projects: West Africa Agriculture Productivity Project – WAAPP/1C- (\$ 10 M), Pilot Program for Climate Resilience (\$ 63 M) and the Regional Natural Resources Management Project (\$ 12 M).</p> <p><u>West Africa Agriculture Productivity Project – WAAPP/1C- (\$ 10 M IDA).</u> The objective is to generate and accelerate the adoption of improved technologies in the participating countries’ top agricultural commodity priorities areas that are aligned with the sub-region’s top agricultural commodity priorities, as outlined in the ECOWAP. The project has four components: (i) Enabling Conditions for sub-Regional Cooperation in the Generation, Dissemination, and Adoption of Agricultural Technologies to allow ECOWAS member countries to benefit from those technologies; (ii) National Centers of Specialization (NCOS). For Niger, the new project will expand the range of commodities to include livestock; (iii) Support to Demand-driven Technology Generation and adoption; (iv) Project Coordination, Management and Monitoring and Evaluation.</p> <p><u>Pilot Program for Climate Resilience (PPCR \$ 63 M CIF).</u> Niger’s PPCR investment strategy involves mainstreaming climate resilience into development strategies; expanding sustainable land management initiatives and integrating them into planning and budgeting processes; updating the quality of weather and climate information and making it publicly available; and improving monitoring and evaluation methodologies.</p> <p><u>Regional Natural Resources Management Project (\$ 12 M IDA).</u> A regional integrated Natural Resource Management Project is currently under preparation for Burkina-Faso, Mali, Mauritania, Niger and Senegal. The project that is still under development will seek to: (i) enhance natural resource management capacities of the countries, building on lessons learned and exchange of experiences; (ii) pilot natural resource management initiatives; and, (iii) strengthen governance for natural resources management. The project will include development of inter-sectoral coordination mechanisms (agriculture, livestock, forestry, water, transport, etc.) for planning and information exchange and development and application of monitoring tools to measure the outcomes and transformational impacts of planned activities.</p> <p>Estimated baseline financing (before GEF): \$85M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>GEF resources from the Land Degradation and Climate Change Focal Areas will be associated with the West Africa Agriculture Productivity Project – WAAPP/1C-, Pilot Program for Climate Resilience and blended with the Regional Natural Resources Management Project. These coordination will jointly help secure the supporting and regulating ecosystem services that are critical for sustaining productivity increases in the priority agro-ecological zones targeted in the baseline project. With the implementation of SLWM (that contributes inter alia to enhancement of carbon stocks in dry land forest and non-forest lands) and biodiversity conservation practices, the project will add to the pieces of a landscape mosaic that the baseline is already offering and that relate to agricultural productivity, climate resilience in agriculture and natural resources</p>

	<p>management.</p> <p>The project will develop incentive structures for promoting on ground SLWM practices designed for farmer groups (men and women) and based on their needs. Promoting alternative livelihoods and small scale income diversification that reduces pressure on the natural resources including forests will become part of the incentive structures. In addition, the project will support natural habitat and wildlife management activities focused on maintaining and enhancing key habitat values as part of the broader landscape mosaic approach.</p> <p>The project will facilitate investment in climate resilient SLWM through strengthened enabling environment (e.g. strengthening knowledge management and M&E systems and their use, enhancing inter- and intra-sectoral cooperation, policies and regulatory frameworks for SLWM, etc.). GEF funding will also provide high quality technical assistance and the capacity strengthening of SLWM implementers and service providers in agroecological techniques and principles as well as in the development of SLWM agreements with local farmers.</p> <p>All the above activities will support the implementation of the country’s strategic investment framework that was developed with support of TerrAfrica – GEF/SIP program. The overall objective is to sustainably reduce land degradation and thus contribute to reduce poverty through the establishment of a national strategic framework that will prioritize, plan and guide the implementation of current and future SLM investments for both public and private sector and all local to national stakeholders.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$5.0M Land degradation focal area: \$ 2.0M Biodiversity focal area: \$1.0M Climate change mitigation focal area: \$ 1.0M Sustainable Forest Management bonus: \$1.0M LDCF: none SCCF: none Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#) ✓ KPI 4. Change in carbon accumulation rates in biomass and soil, compared to baseline (tC/ha)
<p>Implementing body (if known)</p>	<p>The Ministry of Environment (tbc).</p>

9. Nigeria

Project Name	Nigeria Erosion and Watershed Management Project (NEWMAP)
Parent project description (IDA, TF, etc)	<p>Description of baseline project:</p> <p>NEWMAP’s objective is to restore degraded lands and reduce longer-term erosion vulnerability in targeted areas.</p> <p>This multi-sector project is expected to support a transformation in how Nigerians relate to their land. To respond to the President of Nigeria’s request to the Bank to support the country to address severe erosion in southeastern Nigeria, the Project would take a comprehensive watershed management approach coupled with an investment focus on gully erosion prevention and rehabilitation in derived savannah and forested areas. Also, via a cross-state learning element, the project will be dynamic, visible, active, and transparent, push for reforms, and provide a framework for action that could be scaled out nationwide.</p> <p>There are three components:</p> <p>Component 1: Investment in soil erosion management: Component 1 would aim to support on-the-ground interventions to address, prevent and reverse land degradation. A strategic combination of engineering, biological, and community-centered low-tech measures would be deployed to (i) stabilize severe erosion sites, and (ii) prevent emerging erosion problems early on when intervention costs are low. Accordingly, interventions will include structural, vegetative, and adaptive natural resource based livelihood measures, coupled with micro-catchment planning where necessary</p> <p>Component 2: Watershed planning and institutional and information development: This component would address longer-term sustainability by strengthening the enabling environment to address erosion and watershed degradation problems in a comprehensive manner across sectors and States. The component would support modernization and coordination of the many institutions involved in planning, management, assessment, enforcement, and monitoring of watershed and erosion related activities from sub-watershed to basin scales. To reinforce good design and prioritization of investment, the component would also support improvements in the policy environment, data modernization, development and application of analytical and monitoring tools, and diagnoses of watershed problems.</p> <p>Component 3. Project management: This component would aim to support the government at Federal and State levels to implement this project. This will include support for project management, including fiduciary aspects (procurement, financial management, environmental and social safeguards), project M&E, strategic communications, and documentation.</p> <p>Estimated baseline financing (before GEF): \$400M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>GEF resources from the land degradation and biodiversity Focal Areas will be blended into NEWMAP to promote vegetative land management practices, such as by establishing conservation set asides along erosion-prone waterways and vegetation corridors. Technical assistance on geo-informatics, monitoring and</p>

	<p>land use planning will also be provided at local and national scales – with important lessons and tools that can be transferred to northern States on the front line of Sahelian land degradation. The work also includes development of coordination mechanisms for watershed planning and information exchange; development and application of monitoring tools to measure the flow of ecosystem services in watersheds and land use systems; and piloting innovations in environmental financing and ecosystem services such as payments for environmental services.</p> <p>With regard to the SFM window, the project would contribute to the protection of existing forest resources important for reducing erosion impacts through activities such as watershed scale planning, vegetation corridors and afforestation measures.</p> <p><u>Linkage with LDCF/SCCF</u> SCCF resources will also be deployed to cover some of the additional costs to improve the climate resilience of civil works susceptible to or contributing to erosion. This includes (i) incorporating climate parameters into civil works planning and design, and (ii) targeted investment add-ons to civil structures that accommodate greater climate variability than baseline investments would otherwise.</p> <p>According to the vulnerability assessment in Nigeria’s UNFCCC National Communications, “as a consequence of climate change, some areas will start receiving heavier and steadier rainfall and such areas will inevitably begin to experience increased rainfall-induced erosion. These are extremely serious situations given that soil erosion is already of catastrophic proportions in Nigeria whether viewed as gully erosion or sheet erosion, while floods annually ravage many parts of the country during the rainy season. For example, it is estimated that in Abia, Anambra and Imo States located in the south-eastern part of Nigeria, there are no fewer than 600 gully erosion sites. As a result of widespread reduction of vegetation cover, all parts of the country are vulnerable to soil erosion resulting from climate change either in terms of removal of soil by wind and rain or deposition of same in low-lying and down-wind locations.”□□</p> <p>Priority actions in Nigeria’s UNFCCC National Communications include: “establishment of mechanical and engineering structures (e.g check dams, storm diversion channels, bench terraces, contour bunds), as well as biological measures (e.g. cover cropping, mulching, contour cultivation, minimum or zero tilling) that could reduce soil erosion.” It is important to note that these types of actions also appear in other national plans (NAP, NBSAP, SLM Investment Framework, and National Agriculture Strategy), reinforcing the idea of an integrated, holistic response to the erosion problem targeted by the baseline Project.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$9.28M Land degradation focal area: \$0.6M Biodiversity focal area: \$2.68M Climate change mitigation focal area: none Sustainable Forest Management bonus: \$1M SCCF: \$5M LDCF: Not eligible</p> <p>Note: These amounts include the fee to be paid to the Agency.</p>
Indicative	The GEF increment will contribute to the Support Program’s objectives via Key

indicators for measuring GEF contribution	<p>Performance Indicators to be aggregated at portfolio program level. The KPIs include (check those that apply):</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (hectares) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#)
Implementing body (if known)	The federal government and participating state governments.

10. Senegal

Project Name	Senegal Community based land and energy management project
Parent project description (IDA, TF, etc)	<p>Description of baseline project: The baseline projects for Senegal are: Second Sustainable and Participatory Energy Management Project (PROGEDE II) (\$15M) and the Regional Natural Resource Management Project (\$12M).</p> <p><u>Second Sustainable and Participatory Energy Management Project (PROGEDE II)</u></p> <p>Objective: PROGEDE II aims to contribute to increase the availability of diversified household fuels in a sustainable and gender equitable way, and to contribute to increase the income of participating communities while preserving the forest ecosystems.</p> <p>Components: There are four components:</p> <ol style="list-style-type: none"> 1. The Institutional Reforms of the Charcoal Value Chain 2. The Sustainable Wood fuels Supply Management 3. The Promotion and Diversification of Modern Household Energy 4. The Institutional Arrangements for Project Implementation <p>Component 1 will address the political economy and equity issues (income and decision making) particularly in the (supplying) regions, and in the country as a whole. It will support central and decentralized government, local government, as well as communities for a full implementation of the reform.</p> <p>Component 2 will finance technical assistance, logistical support and equipment to central and decentralized forestry services, local collectivities, including Community-Based Organizations (CBOs) and Non Governmental Organizations (NGOs) involved in forest/natural resource management/biodiversity and environmental-social protection activities; and communities.</p> <p>Component 3 will finance technical assistance, logistical means and equipment for the Directorate of Petroleum Products and Household Energy (DPHE) and private entrepreneurs to support massive production and dissemination of improved stoves and alternative wood fuel.</p> <p>Component 4 will support government institutions and community organizations to play their rightful role in scaling up the program; hence the consultants will play a more catalytic, supportive and advisory role.</p> <p>Other Associated project: An integrated Natural Resource Management Project with regional IDA is currently under preparation for Burkina-Faso, Mali, Mauritania, Niger and Senegal. This project will seek to enhanced natural resource management capacities of the countries, building on lessons learned and experience exchange.</p> <p>Estimated baseline financing (before GEF): \$27M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative: GEF resources from the land degradation and climate change mitigation Focal Areas will be blended with the PROGEDE II in order to jointly promote community based sustainable land and energy management.</p>

	<p>Climate change mitigation measures will derive from restoration and enhancement of carbon stocks in forests and other vegetative cover within Component 2 PROGEDE II (GEF Objective CCM5) and from promotion of low carbon energy within Component 3 of PROGEDE II (GEF Objective CCM3). Sustainable land management (SLM) measures will focus on integrated landscape management practices adopted by local communities through, among other things, promotion of best practices within Component 2 of PROGEDE II (GEF Objective LD-3).</p> <p>The project will aim at consolidate local support to the Green Wall Initiative by generating climate resilient livelihoods to local community in targeted areas. Specific attention will be provided to ensure the sustainability of the project results. Taking into account the project implementation capacity built through the PROGEDE II, existing country systems will thus be used for the project implementation. Following a similar approach, activities planned with the GEF resources will be added to the Clean Development Mechanism. When relevant, specific activities will be implemented by CSOs. The GEF related reporting requirements will also be facilitated.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$8.01M Land degradation focal area: \$3.9M Biodiversity focal area: \$1.2 Climate change mitigation focal area: \$0.91 M Sustainable Forest Management bonus: \$2M LDCF: none SCCF: none Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) □ ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) KPI 4. Change in carbon accumulation rates in biomass and soil, compared to baseline (tC)
<p>Implementing body (if known)</p>	<p>The Ministry of Environment.</p>

11. Sudan

Project Name	Sustainable Land and Biodiversity Management project
Parent project description (IDA, TF, etc)	<p>Description of baseline project:</p> <p>The baseline project in Sudan is the <u>Improving Agricultural Support Services in the Traditional Rain-Fed Farming Areas (\$ 20 M)</u> that is financed by the Multi-Donor Trust Fund. The project's objective is aiming at improving delivery and access to agricultural support services in the traditional rain-fed farming areas to achieve sector strategy and objectives of ensuring poverty reduction and sustainable improvement of household food security. The project depends on scaling up current tested and successful technologies, rural credit initiatives, agricultural marketing and other supporting services in the context of existing sector development policies and strategies. The project strategy for development of agricultural support services provision is to focus on traditional small agro-pastoral farmers, benefiting from the previous lessons learned, maximizing community participation and relevant institutions and capacity building targeted beneficiaries. The project is structured around number of diversified and integrated activities/ interventions that are designed to provide crop and livestock producers with sustainable support services. The projects four components are: (i) Capacity Building of Public and Private Sector Agricultural Services Providers; (ii) Technology Development and Extension; (iii) Promotion of Investment in Community-Based Agricultural Services; and, (iv) project management.</p> <p>Estimated baseline financing (before GEF): \$20M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>GEF resources from the Land Degradation and Biodiversity Focal Areas will be blended with the baseline project in order to achieve global environmental benefits from the agricultural support services. The project will facilitate a variety of sustainable land and water management practices such as soil conservation techniques, crop management, agro-forestry practices, water harvesting and improved livestock management activities. Community based natural regeneration will also be supported contributing to reducing land degradation in the targeted areas.</p> <p>The project will address several aspects of the landscape mosaic and will not only act in agricultural areas but will also promote biodiversity conservation measures and sustainable forest management practice in adjacent areas that will derive in environmental benefits (increasing productivity, increasing food security, providing local energy sources, providing local fresh and clean water, among others) for these rain-fed agricultural areas.</p> <p>The project will be incremental to the baseline activities but the financial resources will not be part of the multi-trust fund that finances the baseline. The GEF will be treated as a Sector Investment Loan (SIL).</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$7.35M Land degradation focal area: \$2.67 M Biodiversity focal area: \$3.68 M Climate change mitigation focal area: none Sustainable Forest Management bonus: \$1M LDCF: none</p>

	<p>SCCF: none</p> <p>Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas)□ ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (unit and methodology pending) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#)
<p>Implementing body (if known)</p>	<p>The Ministry of Environment (tbc).</p>

12. Togo

Project Name	Togo Integrated Disaster and Land Management (IDLM)
Parent project description (IDA, TF, etc)	<p>The combined GEF resources will be associated with three projects: The Agricultural Sector Support Project (PASA -\$37M) the West Africa Agricultural Productivity Program Project (WAAPP - \$10M) and the Integrated Disaster and Land Management Project (IDLM - \$7.8M). The GEF resources will be fully blended with the later to take advantage of a joint implementation unit within the Ministry of Environment and Forest Resources.</p> <p>Description of baseline project: Integrated Disaster and Land Management (IDLM) – Disaster Risk Management (DRM) activities</p> <p>Objective: IDLM aims to reduce the risk of flooding and land degradation in targeted rural and urban areas.</p> <p>Components: There are four components:</p> <ol style="list-style-type: none"> 5. Institutional and Capacity Building 6. Support to Local Development Activities 7. Support the Development of Knowledge and Monitoring Systems 8. Awareness and Communication <p>Component description below covers DRM activities.</p> <p>Component 1 addresses Flood Risk Management and Preparedness. DRM activities will focus on training and equipment that will be provided to key national, and regional, local and community actors engaged in flood prevention, mitigation, preparedness, response and recovery.</p> <p>Component 2 will pilot community-based activities to mitigate impact of flooding, such as: river bank restoration and protection, canal maintenance, pond construction and maintenance, small-scale reforestation, tree nursery site establishment and tree planting.</p> <p>Component 3 will support the Development of a Comprehensive Early Warning System: development of a shared working plan and a coordinated approach to better forecast floods in rural and urban areas and identify appropriate disaster mitigation investments.</p> <p>Component 4 will support Information Campaigns on Risk and Prevention of Flooding. General awareness campaigns on prevention and mitigation measures will target relevant agencies and general public.</p> <p>Description of other associated projects:</p> <p><u>Agricultural Sector Support Project (PASA) (\$37M)</u></p> <p>Objective: The PASA aims to (i) rehabilitate and reinforce productive capacities among targeted beneficiaries across Selected Value Chains, and (ii) foster an enabling institutional environment for the development of the agricultural sector, in the Recipient’s territory.</p> <p>Components: There are three components</p> <ol style="list-style-type: none"> 1. Promotion of strategic food crop, export crop and freshwater fish production 2. Recovery of the livestock sub-sector

	<p>3. Support for capacity building and sector coordination</p> <p>The PASA aims at increasing the production of strategic food crop such as cotton, coffee, cocoa, rice and corns of which production are demanding in soil and water.</p> <p><u>West Africa Agricultural Productivity Program Project (WAAPP) (\$10M)</u></p> <p>Objective: To generate and accelerate the adoption of improved technologies in the participating countries' top agricultural commodity priority areas that are aligned with the sub-region's top agricultural commodity priorities.</p> <p>Components: There are four components:</p> <ol style="list-style-type: none"> 1. Enabling conditions for sub-regional cooperation in the generation, dissemination, and adoption of agricultural technologies. 2. Strengthening national centers of specialization and strengthening of the research system. For Togo this component will focus on strengthening capacities for adaptive research and technology transfer. 3. Support to demand-driven technology generation, dissemination and adoption. 4. Project coordination, management, and monitoring and evaluation. <p>Estimated baseline/associated financing (before GEF): \$54.8M</p>
<p>GEF/LDCF or SCCF alternative</p>	<p>Description of GEF alternative: GEF resources from the land degradation and biodiversity Focal Areas will be blended with the Disaster Risk Management activities and will provide an ecological support to strategic food crop supported by the PASA and the WAAPP.</p> <p>GEF resources will contribute to up-scaling integrated landscape approaches (FA Objective LD3) through strengthened capacity on sustainable land management (IDLm component 1, PASA component 3, WAAP component 2), through dissemination of information on integrated natural resources management technologies and good practices (IDLm components 2&4; PASA component 1, WAAPP component 1) and through the development of integrated natural resources management tools and methodologies (IDLm components 2&3; PASA components 1, WAAPP component 3).</p> <p>It is expected that carbon benefits from SFM funds will be generated from avoided deforestation and natural regeneration in rehabilitated Protected Areas (BD2, SFM 1) with community participation (IDLm components 1,2&4).</p> <p><u>Linkage with LDCF/SCCF</u> LDCF resources will contribute to increase adaptive capacity (FA Objective CCA-2) by implementing adaptation and risk reduction awareness activities at local level (IDLm components 1,2&4; PASA Component 1, WAAP components 2&3) in both agricultural practices and flood prevention work.</p> <p>The project will directly support the implementation of priority 1 and 2 projects as defined in the National Adaptation Programs of Action of Togo (Adaptation of the agricultural production systems, flood early warning system).</p>

	<p>The project will also support Togo’s country strategic investment framework for SLM that the country developed in 2010 under the name of National Investment Programme for Environment and Natural Resources (NIPERN). The proposed project is fully integrated within the NIPENR as it directly contributes to four out of the six sub-programs. These four sub-programs are (i) institutional, legal, financial and technical capacity-building in the area of sustainable environmental and natural resource management, (ii) support for the implementation and dissemination of best practices in environmental and natural resource management in the rural areas, (iii) attenuating the effects of climate change, disaster management and risk prevention, (iv) drawing up and putting into practice a system of knowledge acquisition and management, monitoring/evaluation and development of a communication strategy in order to support the development of environmental and natural resources management.</p> <p>Given the focus of the project to on the ground activity, community-based organizations will be essential. In Togo, communities establish Village Development Committees though out the territory. Another key player will be the Agency for support to grass root initiatives (AGAIB), whose board comprises representatives of NGOs, government, and civil society. Given the blending with the agricultural project, key organizations that could participate are: Coffee & Cocoa Value Chains Coordination Committee, the Coffee and Cocoa Interprofessional Board, the Togo Cereal Producer Organization, the Togo Federation of Coffee & Cocoa Producers’ Groups Unions, the Business Services & Producer Organizations, the Togo Federation of Cotton Producers’ Groups, the New Togo Cotton Company and the Enterprises Territories and Development NGO. In the forest/protected areas management sector, the Ministry of Environment and the Agency for Forest Development and Exploitation (ODEF) are obvious key partners. Around protected areas, the Village Association for Participatory Management of Protected Areas (AVGAP) has been established and they should also play a key role.</p> <p>For more details look at the Project Detailed Description in ANNEX C.1.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$9.89M Land degradation focal area: \$3.89M Biodiversity focal area: \$1.0 M Climate change mitigation focal area: none Sustainable Forest Management bonus: \$1M LDCF: \$4M SCCF: None</p> <p>Note: These amounts include the fee to be paid to the Agency. Also, as Togo is a STAR flexible country resources from the CC focal area would be transferred to the LD focal area.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program’s objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include:</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas)□ ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to

	<p>baseline (unit and methodology pending)</p> <p>✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#)</p>
<p>Implementing body (if known)</p>	<p>The Ministry of Environment and Forest Resources.</p>

13. Knowledge Management, Monitoring and Evaluation

Project Name	Knowledge Management, Monitoring and Evaluation Project
Parent project description (IDA, TF, etc)	<p>Description of baseline project: All the World Bank IDA/IBRD/TF projects that serve as baseline in each country, have an M&E Component that will be the baseline for this project. In addition, the Centers of Excellence have programs mainly financed by the CGIAR, European Commission and TerrAfrica that serve as baseline for Knowledge Management.</p> <p>Estimated baseline financing (before GEF): \$ 10 M</p>
GEF/LDCF or SCCF alternative	<p>Description of GEF alternative:</p> <p>GEF resources from the Land Degradation and Climate Change Mitigation set-asides will be used to promote among all countries participating in the Program exchange of experiences, lessons learnt and best practices in relation to land management practices, agro-silvo-pastoral systems, economics of SLWM, and carbon measures, and technical assistance on GIS, monitoring and land use planning at regional level.</p> <p>The project will have two components:</p> <ol style="list-style-type: none"> 1. Knowledge Management compilation and dissemination 2. Program Monitoring and Evaluation <p>The project will be implemented by Centers of Excellence (in collaboration with civic society organization and CGIAR centers) from the Regions such as:</p> <p>The permanent Interstate Committee for drought control in the Sahel (CILSS - Comité permanent Inter-État de Lutte contre la Sécheresse au Sahel) is an international organization of heigh countries in the Sahel (Burkina Faso, The Gambia, Cap Verde, Mali, Mauritania, Niger, Senegal and Chad). The CILSS is based in Ouagadougou, Burkina Faso and will be responsible for the Regional Knowledge Management compilation and dissemination component, in close collaboration with CGIAR Center such as ICRAF and IITA.</p> <p>The AGRHYMET Regional Centre was established in 1974 as a institute of the CILSS specialized on Agro-Hydro-Météorology. It is composed of nine member States (Burkina Faso, Cape Verde, Chad, Gambia, Guinea Bissau, Mali, Mauritania, Niger, Senegal). It is based in Niamey, Niger. Its main objectives are the contribution to achieving food security and increased agricultural production in the CILSS member States and the improvement natural resources management in the Sahelian region and will be responsible for providing accurate metheo forecast to the countries of the Program. This center will work in close collaboration with IGAD Climate Prediction and Application Center (ICPAC), based in Nairobi.</p> <p>The OSS (Observatoire du Sahara et du Sahel) is an international organisation based in Tunis. It was founded in 1992 to improve early warning and monitoring systems for agriculture, food security and drought in Africa. The OSS community includes 22 <u>member countries</u> including 4 sub-regional organizations— representing West Africa (<u>CILSS</u> and Côte d’Ivoire), East Africa (<u>IGAD</u>) and North Africa (<u>AMU</u> and Egypt), a sub-regional organization covering the whole</p>

	<p>circum-Saharan (<u>CEN-SAD</u>), regional organizations, as well as organizations part of the United Nations System and Civil Society. The Observatory will be responsible for aggregating country M&E project data into regional M&E data in order to monitor the indicators of the program presented in the PDF results framework.</p> <p>The Regional IUCN (International Union of the Conservation of Nature) office in Burkina Faso has been leading work on Trans-boundary biodiversity in the Region and Biological/Wildlife corridors. Regional IUCN office will be responsible for preparation of Trans-boundary Biodiversity Management Plans for the Program.</p> <p>These centers will collaborate with the ECOWAS Water Resources Coordination Centers (WRCC), IGAD, Rural Hub and 2iE, ICRAF, IITA, ACMAD (African Center for Climate Applied to Development) among others.</p> <p>The program's regional activities on information and institutions will benefit from directly and indirectly involve key SRAP facilitators including ECOWAS/CILSS for West Africa, IGAD for Eastern Africa and ECCAS/COMIFAC for Central Africa.</p> <p>For the M&E, the project will aim to apply the UNEP/GEF-financed carbon benefits tools that are not yet available. Discrete projects will consider applying this tool depending on country circumstances and results will be aggregated by the regional project. Discrete project teams will also consider alternate tools such as the GEF-financed LADA toolkit. In addition, the project will consider the Performance Review and Assessment of the Implementation System (PRAIS) designed for monitoring the implementation of the UNCCD 10-year strategy and the convention, in the design and implementation of the national projects within the program.</p> <p>Incremental GEF financing / Additional LDCF/SCCF: \$ 5M Land Degradation set-aside: \$3M Climate Change Mitigation set-aside: \$2M Note: These amounts include the fee to be paid to the Agency.</p>
<p>Indicative indicators for measuring GEF contribution</p>	<p>The GEF increment will contribute to the Support Program's objectives via Key Performance Indicators to be aggregated at portfolio program level. The KPIs include (check those that apply):</p> <ul style="list-style-type: none"> ✓ KPI 1. Increase in land area with SLWM practices in targeted areas, compared to baseline (hectares, reported by crop, range, forest, wetlands, protected areas) ✓ KPI 2. Changes in vegetation cover in targeted areas, compared to baseline (hectares) ✓ KPI 3. Targeted institutions with increased adaptive capacity to reduce risks and respond to climate variability, compared to baseline (#) ✓ KPI 4. Change in carbon accumulation rates, compared to baselines of individual projects (tC/ha)
<p>Implementing body (if known)</p>	<p>CILSS - <i>Comité permanent Inter-État de Lutte contre la Sécheresse au Sahel</i>) AGRHYMET Regional Centre was established in 1974 as a institute of the CILSS specialized on Agro-Hydro-Météorology. OSS (Observatoire du Sahara et du Sahel) Regional IUCN (International Union of the Conservation of Nature</p>

Annex to Togo project summary:

PROJECT DETAILED DESCRIPTION FOR TOGO

PART I: PROJECT FRAMEWORK

Project objective: To reduce the risk of flooding and land degradation in targeted rural and urban areas					
Project component	Grant Type (TA/INV)	Expected outcomes	Expected outputs	Indicative financing from relevant TF (GEF/LDCF/SCCF) (\$)	Indicative co-financing (\$)
Component 1: Institutional and capacity building	TA	Outcome 1.1. Institutional and technical capacity for climate resilient sustainable land management is built Outcome 1.2. Investment (US\$) in sustainable land and forest management increases compared to baseline	Output 1.1. Capacity development program and training events developed and delivered at the Ministry of Environment and Forest Resources, relevant extension units and targeted population groups (number of programs and events) Output 1.2. Multi-partners multi-sectors coordination mechanisms and events are developed and organized (number of mechanisms and events)	1,100,000	11,985,000
Component 2: Support to Local Development Activities	Inv	Outcome 2.1. Climate resilient sustainable land management practices adopted by targeted local communities	Output 2.1.1 Innovative sustainable land and forest management approaches piloted and promoted in targeted areas (number)	4,721,666	26,950,000

		<p>Outcome 2.2. Sustainable management of targeted forest and protected areas is strengthened</p>	<p>Output 2.1.2. Climate resilient sustainable land management practices are introduced in the targeted agricultural production systems (hectares)</p> <p>Output 2.2. Sustainable forest management practices are introduced in targeted areas (number and hectares by forest type)</p>		
<p>Component 3: Support the Development of Knowledge and Monitoring System</p>	TA	<p>Outcome 3.1 Knowledge is generated on climate resilient sustainable land management practices</p> <p>Outcome 3.2. Sustainable country-based monitoring system is developed</p>	<p>Output 3.1. Products (guidelines, toolkit, etc) developed on existing and innovative climate resilient sustainable land management practices (number of products)</p> <p>Output 3.2. Information system operational for monitoring vegetation cover (hectares) and land use (hectares, reported by crop, range, forest, protected areas) in targeted areas</p>	1,750,000	7,651,000

Component 4: Awareness and Communication	TA	Outcome 4.1. Strengthened awareness and ownership of climate resilient sustainable land and forest management practices	Output 4.1. Awareness and communication program and events developed and delivered (number of program and event)	670,000	2,725,000
Project management Costs				915,741	5,479,000
Total project costs				9,157,407	54,790,000

PART II: PROJECT JUSTIFICATION

A. Description of the consistency of the project with:

A.1.1. The GEF Focal Area/LDCF/SCCF strategies:

The proposed project will be developed as a multi-focal area strategy combining several of the GEF strategic goals, namely:

- To contribute to arresting and reversing current global trends in land degradation, specifically desertification and deforestation.
- Conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services.
- Achieve multiple environmental benefits from improved management of all types of forests.
- Support developing countries to become climate resilient by promoting both immediate and longer-term adaptation measures in development policies, plans, programs, projects and actions

The project will support Togo to rehabilitate existing protected areas (BD1 – Outcome 1.1 – Output 1.3. and SFM 1 – Outcome 1.2 - Output 1.2.). The 1938 Decree officially delineated 85 protected areas representing 14.2% of the Togolese territory. After the period of social unrest in the 1990s, hectares of protected areas were lost. Only a small proportion (4% of the territory) has been reinstated with the participation of local population.

Specific outputs from BD1 and SFM1 focal areas are usefully being combined into the introduction of sustainable forest management practices in targeted areas measured in number and hectares by forest type.

The proposed project will directly address land degradation challenges in the targeted area by promoting community-based sustainable land and forest management practices and building/supporting existent and effective enabling environments for sustainable land and forest management so to reduce pressure on natural resources from competing land uses (LD-3 - Outcomes 3.2. and 3.3. – Outputs 3.2. and 3.4).

Focusing primarily on community, the proposed project will also incorporate activities to reduce vulnerability and increase the adaptive capacity to actual or potential impacts of climate variability (LDCF – CCA-2 – Outcome 2.3. – Output 2.3.1.)

A.1.2. For projects funded from LDCF/SCCF: the ldcf/sccf eligibility criteria and priorities:

The LDCF resources will catalyze adaptation to climate change in both agricultural development and flood prevention interventions.

In order to support the agricultural sector in Togo, several multilateral organizations have united forces to implement the recently approved National Agriculture and Food Security Investment Program. The US\$ 33.5 million Togo Rural Development Support Project (PADAT) supported by the International Fund for Agricultural Development (IFAD), ECOWAS Bank for Investment and Development (EBID) and the West Africa Development Bank (BOAD) and the US\$ 37 million Agricultural Sector Support Project (PASA) supported by World Bank are entering in final preparation stage. An additional US\$12 million West Africa Agriculture Productivity Project (WAAP) supported by the World Bank is also under preparation.

The LDCF resources will contribute to mainstream and integrate climate resilient agricultural practices in activities carried out by the PASA. The LDCF resources will directly contribute to the NAPA priority 1 project i.e. “Adaptation of the agricultural production systems in three regions through the development of techniques that integrate climate change and improve agro-meteorological information”. The areas specifically targeted in the NAPA are the Savannah region (North West), the Maritime region (land bar, the lower valley of the River Mono) and the Central region (Sotouboua zone).

The NAPA priority 2 project is the “Development of an early warning system for real time information on floods in the Maritime and Savannahs regions” to which the GFDRR will contribute under the Integrated Disaster and Land Management project. The LDCF resources will also be deployed to cover some of the additional costs to improve the climate resilience of selected flood related work through the implementation of sustainable land management practices in selected vulnerable zones.

A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

National strategies and plans:

The Government of Togo (GoT) has developed strategies and plans for several international conventions. To quote only few of them, the GoT has submitted its National Biodiversity Strategy and Action Plan (NBSAP) in 2003, its National Action Plan for Adaptation to Climate Change (NAPA) in September 2009. A National Action Program to Fight Desertification was also developed. These documents identify sustainable land management has an important priority.

The Ministry of Environment and Forest Resources (MERF) has undertaken several actions in recent years to develop operational planning tools that have not given the expected results to date. The abundance and the difficulty of implementing political, legislative texts, regulations and institutional dysfunction and fifteen years of suspension of cooperation (1990-2005) with International partners did not encourage the promotion of sound environmental and natural resources management in the country.

In an attempt to consolidate and operationalize these plans, GoT has developed in 2010 its National Investment Program for Environment and Natural Resources (NIPENR) clearly identifying and budgeting priorities. The proposed IDLM project is fully integrated within the NIPENR as it directly contributes to four out of the six sub-programs. These four sub-programs are (i) institutional, legal, financial and technical capacity-building in the area of sustainable environmental and natural resource management, (ii) support for the implementation and dissemination of best practices in environmental and natural resource management in the rural areas, (iii) attenuating the effects of climate change, disaster management and risk prevention, (iv) drawing up and putting into practice a system of knowledge acquisition and management, monitoring/evaluation and development of a communication strategy in order to support the development of environmental and natural resources management.

The proposed IDLM project seeks to address both environmental and institutional aspects by demonstrating the benefits of sustainable land and forest management practices on the ground (IDLM Components 2 & 4) and by strengthening the coordination and institutional capacity of Togo to better manage, promote and coordinate sound environmental approach (Component 1 and 3).

The Great Green Wall Initiative (GGWI):

Although Togo is not formally part of the GGWI, the proposed project does contribute to the objectives of this initiative. Togo has important savannah and forest systems linked to the Sahel. The expansion of the area of intervention will not only allow sharing of knowledge among countries that share very similar issues but will also consolidate and add value to the Program, since northern and southern ecosystems are interrelated.

B. Project Overview:

B.1. Describe the baseline project and the problem that it seeks to address:

The combined GEF resources will be associated with three projects: The Agricultural Sector Support Project (PASA) the West Africa Agricultural Productivity Program Project (WAAPP) and the Integrated Disaster and Land Management Project (IDL). The GEF resources will be fully blended with the later to take advantage of a joint implementation unit within the Ministry of Environment and Forest Resources.

The Agricultural Sector Support Project (PASA):

The objectives of the PASA are to (i) rehabilitate and reinforce productive capacities among targeted beneficiaries across Selected Value Chains, and (ii) foster an enabling institutional environment for the development of the agricultural sector, in the Recipient's territory.

The PASA has three components:

1. Promotion of strategic food crop, export crop and freshwater fish production
2. Recovery of the livestock sub-sector
3. Support for capacity building and sector coordination

Component 1 will support three productive sub-sectors through improved productivity and value-added of key commodities chosen for their growth potential and poverty reduction impact. For cotton, the PASA will support institutional strengthening of the producers' organization in order to enable it to take full responsibility for input distribution to farmers, to improve quality of seed cotton. For coffee and cocoa, the Project will support gradual regeneration of the existing plantations.

Component 2 will provide emergency short term support to rehabilitate small ruminant and poultry production. Activities will focus on quick results for investments geared at restocking and enhancing productivity of short cycle species.

Component 3 will enable the institutional setup implement sound agricultural investments through PNIASA, while preparing for the transition to a sector wide approach in the future.

West Africa Agricultural Productivity Program Project (WAAPP):

Objective: To generate and accelerate the adoption of improved technologies in the participating countries' top agricultural commodity priority areas that are aligned with the sub-region's top agricultural commodity priorities.

Components: There are four components:

5. Enabling conditions for sub-regional cooperation in the generation, dissemination, and adoption of agricultural technologies.
6. Strengthening national centers of specialization and strengthening of the research system. For Togo this component will focus on strengthening capacities for adaptive research and technology transfer.
7. Support to demand-driven technology generation, dissemination and adoption.
8. Project coordination, management, and monitoring and evaluation.

The Integrated Disaster and Land Management Project (IDL):

The IDL is the combination of GFDRR funded Disaster Risk Management (DRM) set of activities with GEF funded sustainable land and forest management set of activities. The two sets will be fully blended. The objective of the IDL is to reduce the risk of flooding and land degradation in targeted rural and urban areas.

The IDL has four components:

- 1- Institutional and Capacity Building
- 2- Support to Local Development Activities
- 3- Support the Development of Knowledge and Monitoring Systems
- 4- Awareness and Communication

Component 1 addresses Flood Risk Management and Preparedness. Training and equipment will be provided to key national, and regional, local and community actors engaged in flood prevention, mitigation, preparedness, response and recovery.

Component 2 will pilot community-based activities to mitigate impact of flooding, such as: river bank restoration and protection, canal maintenance, pond construction and maintenance, small-scale reforestation, tree nursery site establishment and tree planting.

Component 3 will support the Development of a Comprehensive Early Warning System: development of a shared working plan and a coordinated approach to better forecast floods in rural and urban areas and identify appropriate disaster mitigation investments.

Component 4 will support Information Campaigns on Risk and Prevention of Flooding. General awareness campaigns on prevention and mitigation measures will target relevant agencies and general public.

B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The incremental GEF resources will contribute to consolidate land and forest ecosystem services and to reduce the threat of land degradation, biodiversity loss and climate risk through resilient sustainable land and forest management.

Key facts on land degradation and biodiversity in Togo:

Land degradation affects at least 85% of arable lands: According to Brabant *et al*¹, 63% of the lands are slightly degraded, 21% are moderately degraded and 2% are severally degraded. The "Environmental Profile of Togo (MERF, 2007) indicates that coffee and cocoa trees planting on deforested land in the South West has quickly led to erosion. Farmers are increasingly reporting land degradation in cotton crops areas. The soil erosion is occurring to a critical level in the Savannah region in the North, the mountainous area west of the Plateaux region, Atakora and Fazo, and the Maritime region in the South.

The diagnosis established by the Environmental Profile underlines an important environmental and natural resources degradation particularly due to unsustainable land management (deforestation, excessive clearing of slopes, inappropriate cropping technique, non-mastery of the concepts of maintaining fertility, destruction of organic matter, firings, overgrazing). Rural population that is already vulnerable to land degradation may suffer even more with the increase variability due to Climate Change.

Togo offers a wide variety of ecological conditions **offering habitat for an important biodiversity.**

Inventories that have been made so far give 3,752 plant species and 3,458 animal species. The population of many species has declined sharply and some of them have disappeared or are endangered. The 1938 Decree officially delineated 85 protected areas representing 793,000 ha or 14.2% of the Togolese territory. The period of social unrest of the 1990s led to local opposition to the institutions of the former government, including the system of protected areas. Exploitation of the forests and fauna, deforestation, overgrazing and development for agriculture and habitation reduced the integrity of the reserves to the point that many are protected in name only. Out of the original 793,000 ha of protected areas, 230,000 ha (4% of the territory) have been reinstated with the participation of local population.

Baseline scenarios:

Whereas **the Agricultural Sector Support Project (PASA) and the West Africa Agricultural Productivity Program Project (WAAPP)** are aiming at increasing agricultural productivity. The PASA in particular is targeting specific crops (cotton, coffee, and cacao) already known in Togo for their impacts on land degradation, the project may not be able to counter the ongoing trend of biodiversity loss and land degradation, the latter being amplified by climate variability. The PASA development scenario is to increase national

production of rice, coffee, cocoa and small livestock. As a result of a single sector approach that would be applied under the PASA and the WAAPP, the environmental sustainability dimension of increased rural productivity could be limited.

Similarly, the baseline **Disaster Risk Management (DRM)** set of activities of the IDLM project is aiming at addressing flood risk and it is not necessarily taking into account the close interconnectivity between flood risks, land degradation and ecosystem services from protected areas. The DRM development scenario is to empower administration and local communities to better address flood risks that are being amplified by climate variability. A too limited integration of sustainable land and forest management approach under the DRM activities could limit the sustainability of flood mitigation efforts.

GEF alternative scenario:

The proposed IDLM project as designed will support activities through five defined components: (1) Institutional and Capacity Building; (2) Support to Local Development Activities; (3) Support the Development of Knowledge and Monitoring Systems (4) Awareness and Communication (5) Project management.

(i) On the ground activities (components 2 and 4 of the proposed IDLM project) is the main focus of the project.

On the ground activities being the main focus of the proposed project, receive a large majority of both baseline and combined GEF resources.

GEF resources will introduce sustainable land and forest management practices on the ground primarily in baseline targeted areas and in conjunction with the PASA (component 1), the WAAP (component 3) and the DRM activities (components 2 and 4). Sustainable land management practices (LD3) will be introduced in key areas to improve agricultural practices and to consolidate flood prone watershed. Restoration of selected forest and key protected areas (BD1) will be undertaken with community participation.

LDCF resources will be deployed to cover some of the additional costs to improve the climate resilience of agricultural practices and flood prevention works contributing or vulnerable to land degradation. This includes introducing resilient sustainable land management practices such as no-till, agroforestry, integrated soil fertility, cover crops, rotational grazing, water harvesting, and many others, coupled with broader watershed or other landscape planning, build stronger and more resilient ecosystems that can deliver a diverse range of ecosystem services and reduce vulnerability to land degradation, floods, drought and other shocks.

SFM resources will support the sustainable management of existing forest. The proposed project will directly address land degradation challenges in the targeted area by promoting community-based sustainable land and forest management practices and building/supporting existent and effective enabling environments for sustainable land and forest management so to reduce pressure on natural resources from competing land uses (LD-3). Specific outputs from BD-1 and SFM-1 focal areas will usefully be combined into the introduction of sustainable forest management practices in targeted areas measured in number and hectares by forest type. It is expected that carbon benefits from SFM funds will be generated from avoided deforestation and natural regeneration in rehabilitated Protected Areas (SFM-1, BD-1).

(ii) Setting the environment for scaling up good practices and monitoring environmental benefits (Components 1 and 3 of the proposed IDLM project).

In conjunction with the PASA (component 3) the WAAPP (components 1&2) and the DRM activities (components 1 and 3), the GEF/LDCF/SFM resources will also contribute **to strengthen institutions and capacities and to generate knowledge** in order to promote, mainstream and upscale climate resilient sustainable land and forest management practices nationwide. Best practices guide and a national sustainable land management website will be developed. Improving climate resilience will include incorporating climate parameters into civil works planning and design; and targeted investment add-ons to civil structures that accommodate greater climate variability than baseline investments would otherwise.

A **country-owned information system**, operational for monitoring vegetation cover (hectares) land use (hectares, reported by crop, range, forest, protected areas) and Carbon storage estimate in targeted areas, will be developed with the support mainly from GEF and SFM resources.

Global environmental benefits:

Global benefits will cut across the different GEF focal areas with (i) increase in biodiversity conservation through improved management of existing protected areas, (ii) increase in carbon stocks in soil and vegetation as a result of better managed forest and improved soil conservation and (iii) reverse the trends in land degradation.

¹ *Brabant P, Darracq S, Egué K et V. Simmonneaux, 1996. Togo. Etat de dégradation des terres résultant des activités humaines. Note explicative de la carte des indices de dégradation. Collection Note Explicative n°112, ORSTOM Eds, Paris, 66 p*

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits(GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#):

At local level:

In the project areas where sustainable land and forest management practices will be introduced, the expected socioeconomic benefits for the communities derive from (i) the reduced impact from climate change and (ii) the improved resilience of livelihoods. The impacts of flood, of which magnitude may increase as a result of climate change, will be mitigated thanks to a combined approach of integrated watershed management and direct flood risk mitigation work in targeted areas. Providing a more secure and less unpredictable environment to local communities is a primary condition to generate multiple benefits such as improved health or more secure income.

The improved resilience will be a direct result of sustainable land management practices such as seed diversification, no-till, agroforestry, integrated soil fertility, cover crops, rotational grazing and water harvesting. Various sustainable land management technologies have indeed the potential to deliver viable economic returns in terms of food, fuel, fiber or fodder that are competitive with other less sustainable production investment.

The IDLM project will directly target rural households composed of most vulnerable people. It will have a special focus on women as they play a major role especially in food crop production. One of the PDO level result indicator of the IDLM project is the number of beneficiary disaggregated by gender with the aim of benefiting as many men as women.

At national level:

In order to consolidate local level benefits, the IDLM project will (i) strengthen national institutions and capacity at local and national levels and (ii) will generate and consolidate knowledge on sustainable land and forest management. With these capacities in place, the IDLM project sets the conditions to replicate the approach in other areas.

Gender mainstreaming will be integral and central to the implementation at all levels and in all respects. Gender-specific concerns will be integrated into all the topics addressed during capacity building. The awareness and capacity building campaigns on climate change will emphasize gender awareness and sensitivity. Also, where possible the reports and M&E activities will provide gender-disaggregated data.

Global environmental benefits and adaptive benefits:

The GEF support will contribute to safeguarding the eco-system services provided by natural production systems generating intertwined global and local environmental benefits. These benefits accrue from the uptake of selected sustainable land and forest management practices that aim to maintain or expand vegetation cover and improve soil quality and water retention. The IDLM project will contribute to delivering global environmental benefits that center on ecosystem services supported by biodiversity conservation, soil formation, carbon accumulation in the soil, reforestation and ability of communities to adapt to climate to climate variability and change.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

According to the National Action Program for the Environment (1999), the annual increase of average temperature from 1950 to 1995, ranges from 0,015°C to 0.024°C. The highest increase has occurred in the North. During the same period, there was a decrease in rainfall and number of rainy days in most parts of the country. Albeit uncertainty and inaccuracy of climate change forecast models, it is believed that the current trends will continue. Temperatures may thus continue to increase, in particular in the North while rainfall may continue to decrease. Besides weather patterns may become more variable.

A likely impact of climate change is thus scarcer water resources while natural vegetative cover and agricultural production will have to adjust to a dryer environment. It is thus important that appropriate science is applied in order to select most appropriate sustainable land and forest management practices. Regional variability and differential impacts of climate change across the country are also important for the preparation of the recommendations. Under Component 3 (Knowledge and Monitoring System) of the IDLM project, knowledge will be generated and specific attention will be given to include the expected impacts from climate change in the different regions of Togo to feed into Component 2 under which sustainable land and forest management practices will be implemented on the ground.

Project overall risk rating is Medium-I, low likelihood-high impact. Although the IDLM Project Implementation Unit has manifested strong commitment in pursuing the DRM and SLM agenda, government structures and related skills, experience as well as work flows and oversight mechanisms are new and not sufficiently tested. The IDLM Project Implementation Unit (PIU) has no prior experience with implemented Bank finances projects and as this may be the most significant risk, AGETUR and AGAIB will be sub-contracted for procurement and financial management purposes, while capacity of the PIU will be strengthened. Overall, the project design is relatively simple and its objectives are focused. More generally, the political situation of the country has markedly improved.

Against fraud and corruption risks inherent to the public sector in Togo, the following measures have been incorporated into the Project design: (i) Agreement on regular internal audit missions to be completed by Togo Finance General Inspectors team which will be reinforced by the recruitment of an internal audit consultant; (ii) a reasonable sample of grants will be reviewed each year by the financial auditor to ensure that communities activities were completed pursuant to the agreed procedures and that funds were used for the purposes intended.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

The IDLM project will benefit from the participatory process that led to the preparation of the National Investment Program for Environment and Natural Resources (NIPENR), because the IDLM project is one of the first projects supporting the implementation of the Investment Program. The IDLM project will be supervised by a multi-partner Steering Committee with representatives from different sectors.

Given the focus of the IDLM project to on the ground activity, community-based organizations are essential. In Togo, Village Development Committees are established by communities in the commune though out the territory. Another key player will be the Agency for support to grass root initiatives (AGAIB). There is five AGAIB in each of the five regions of Togo. The AGAIBs' boards comprise representatives of NGOs, government, and civil society. The AGAIB have the legal status of a non-for profit association, and have strong working relations with the public administration. The AGAIB finance subprojects of poor communities. They do not implement community subprojects, but work with communities or other implementing bodies.

In the agricultural sector, key stakeholders for the IDLM project are the organizations playing a potential role to influence agricultural practices. With the focus of the PASA on cotton, coffee and cacao productions, key organizations, either public or private, could be among the following: Coffee & Cocoa Value Chains Coordination Committee, the Coffee and Cocoa Interprofessional Board, the Togo Cereal Producer Organization, the Togo Federation of Coffee & Cocoa Producers' Groups Unions, the Business Services & Producer Organizations, the Togo Federation of Cotton Producers' Groups, the New Togo Cotton Company, the Enterprises Territories and Development NGO.

In the forest/protected areas management sector, the Ministry of Environment and the Agency for Forest Development and Exploitation (ODEF) are obvious key partners. Around protected areas, Village association for participatory management of protected areas (AVGAP) have been established and they should also play a key role.

B.6. Outline the coordination with other related initiatives:

The Program in support of the Great Green Wall will provide the IDLM team with a large platform for exchange of experience on climate resilient natural resources based livelihoods. Togo being in the belt of the Sahel zone, this proposed project will consolidate the objectives of the Great Green Wall initiative.

In addition to the baseline projects, the IDLM project will coordinate with other World Bank projects, in particular the Community Development Project (CDP).

The CDP provides poor communities with improved basic-socio-economic infrastructures and income generating activities. Extended until 2012, the CDP will finance more than 2,000 ha of rehabilitation of degraded lands and reforestation with the support of the AGAIBs. On the ground activities of the IDLM project will also be implemented through the AGAIBs which will ensure the coordination of sustainable land and forest management activities.

Other donors have joined the World Bank to implement the national agriculture and food security investment program (PNIASA) of Togo. International Fund for Agricultural Development (IFAD), ECOWAS Bank for Investment and Development (EBID) and the West Africa Development Bank (BOAD) finance the Togo Rural Development Support Project (PADAT). The PADAT will contribute to enhancing food security and incomes of agricultural producers.

IFAD is also preparing a project with LDCF resources to be associated with the PADAT. The World Bank and IFAD are coordinating to ensure the complementarity of the World Bank led IDLM project and the future LDCF financed project of IFAD.

UNDP is strengthening the conservation role of Togo's national System of Protected Areas through a GEF financed project. The project is targeting the Oti-Kéran-Mandouri complex in the North of the Country. The IDLM project that is planning to work Oti-Kéran Protected Area will coordinate with UNDP team.

C. describe the GEF agency's comparative advantage to implement this project:

The Bank's comparative advantage lies in the blending of the GEF resources to the baseline projects, namely the PASA (\$37M), the WAAP (\$10M) and the DRM (\$7.79M). Another associated project that may be taken into account to estimate the leveraging effect of GEF resources is the Community Development Project (\$25.9M) with which the IDLM team will also coordinate closely. Taking into account total direct and indirect co-financing, leveraging effect of this GEF contribution amounts up to US\$ 80.69 M.

In addition, the Bank has played a key role in launching TerrAfrica in 2005. Subsequently, the GEF-4 TerrAfrica SIP for up-scaling SLM in sub-Sahara Africa was approved under in the Land Degradation focal area by GEF Council in November 2006. Under the SIP, the Bank has developed a large number of projects in several sub-saharian countries. In addition, the connection to TerrAfrica provides a platform of experience exchange.

In Togo, the Bank has agreed to provide leadership in the TerrAfrica program to support the government to develop and implement the NIPENR. This project thus constitutes the first initiative in the dynamic of NIPENR and is fully in line with TerrAfrica approach. The Bank is also co-chair of the newly created Agricultural Donor Working Group in Togo.

C.1 indicate the co-financing amount the GEF agency is bringing to the project:

The World Bank is bringing \$54.79M as co-financing.

C.2 how does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The project builds upon the World Bank Country Assistance Strategy (CAS), which has the long-term objective of improving efficiency and sustainability of Natural Resource Management (NRM) and the Interim Strategy Note for Togo (ISN, April 7, 2008, Report No. 43257-TG). It also takes support the overall policy of the Government, the Paper Strategy for Poverty Reduction (PRSP) and the Priority Actions Programme (PAP).

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Baseline projects and cofinancing (Estimated Financing)

Country	Potential Baseline Project	Baseline				Incremental cost		Additional cost
		Financing (millions)	Source of Financing	Active	Potential Pipeline	Potential GEF Increment (US\$M)	Top up for SFM (US\$M)	Potential Adaptation Increment (SCCF or LDCF) (US\$M)
Benin	West Africa Agriculture Productivity Project (WAAPP)	\$10.0	IDA		X			
Benin	Urban Environment and Disaster Management Project	\$10.0	IDA		X	\$5.0	\$1.0	
Burkina Faso	Forest Investment Program (FIP)	\$27.0	FIP		X			
Burkina Faso	Disaster Management Project	\$5.0	GFDRR		X			
Burkina Faso	Regional NRM Project	\$12.0	IDA		X	\$6.0	\$2.0	
Chad	Agricultural Productivity Project	\$30.0	IDA		x			
Chad	Local Development Program Support Project 2 (LDPSP 2)	\$30.0	IDA		X	\$4.00	\$1.0	\$5.0
Ethiopia	Sustainable Land Management Project (SLMP II)	\$100.0	IDA		X			
Ethiopia	Agriculture Growth Project	\$150.0	IDA	X				
Ethiopia	Productive Safety Net Project (PSNP)	\$450.0	IDA	X				
Ethiopia	Forest Carbon Partnership / REDD	\$3.6	FCPF		X	\$7.0	\$2.0	\$5.0

Ethiopia	Pastoral Community Development Project	\$56.0	IDA	X				
Ghana	Forest Carbon Partnership / REDD	\$3.6	FCPF					
Ghana	Natural Resources and Environmental Governance DPL	\$10.0	IDA		X			
Ghana	Forest Investment Program (FIP)	\$30.0	FIP		X			
Ghana	Community based Rural Development Project (CPRDP)	\$82.0	IDA	X				
Ghana	Agriculture DPL	\$50.0	IDA	X		\$7.5	\$2.0	
Mali	Natural Resource Management in a Changing Climate (Regional NRM)	\$12.0	IDA	X	X			
Mali	Disaster Risk Management	\$5.0	GFDDR		X			
Mali	Program Scaling up renewable energy (SREP)	\$30.0	TF		X	\$7.0	\$2.0	\$5.0
Mauritania	Integrated Development Project for Irrigated Agriculture APL #3 (PDIAIM)	\$10.0	IDA		X			
Mauritania	Regional Natural Resources Management Project	\$12.0	IDA		X			
Mauritania	Community Based Rural Development (CBRD) II	\$10.0	IDA		X	\$3.9	\$1.0	\$3.0
Niger	Regional Natural Resources Management Project	\$12.0	IDA		X			
Niger	PPCR	\$63.0	PPCR		X			
Niger	West Africa Agriculture Productivity Project (WAAPP)	\$10.0	IDA		X	\$4.0	\$1.0	
Nigeria	Nigeria Erosion & Watershed Management Project (NEWMAP)	\$400.0	IDA		X	\$3.3	\$1.0	\$5.0
Senegal	PROGEDE Forestry Project	\$15.0	IDA	X				
Senegal	Regional Natural Resources Management Project	\$12.0	IDA			\$6.0	\$2.0	

Sudan	Improving Agricultural support services in the Traditional Rain-Fed farming areas	\$20.0	TF	X		\$6.4	\$1.0	
Togo	Agriculture Sector Support Project	\$37.0	IDA		X			
Togo	Integrated Disaster and Land Management	\$7.8	GFDDR		X			
Togo	West Africa Agriculture Productivity Project (WAAPP)	\$10.0	IDA		X	\$4.9	\$1.0	\$4.0
Regional	Regional knowledge management and M&E project	\$10.0	IDA			\$5.0		
	Total Financing	\$1,735.0				\$69.9	\$17.0	\$27.0
	Co-financing EU	\$15.00						
	Co-financing national governments	\$60.00						
	TOTAL COFINANCING	\$1,810.00						

* the amounts shown for GEF/SFM/LDCF by country include the agency fees

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Key suggestions from Bonn Ministerial Declaration (Feb, 2011)

In the program design the World Bank took into consideration the key technical comments that were provided in the Expert and Ministerial Consultation on the GGW that was held in Bonn in February, 2011. Some of these key considerations referred to: taking advantage of existing work and lessons learned in the region; addressing the land degradation and climate change challenges with an holistic approach; considering the pastoralist issues in the Sahel; the need for political and legislative framework to facilitate mainstreaming of successful interventions; following an integrated ecosystem management approach; and, the need for integration of interventions at regional scale.

The following table summarizes the main suggestions and comments included in the statements from countries and partners during the meeting.

Organization/Country	Suggestions/comments	WB's response
United States Agency for International Development (USAID)	<ul style="list-style-type: none"> • Importance of building on and scaling up past successes to national and regional level. • Need to strengthen local governance in implementing SLM initiatives. 	The program was designed building on past experiences particularly under the TerrAfrica heritage. Strengthening local governance will be supported complementing advances achieved by baseline projects.
French Ministry Foreign Affairs	<ul style="list-style-type: none"> • Importance of involving existing institutions (AU, CEN-SAD) as well as regional and subregional organizations such as OSS and CILSS. 	All these organizations and institutions will be involved in the Program as implementing agencies of regional activities and members of the Technical Committee.
International Fund for Agriculture Development (IFAD)	<ul style="list-style-type: none"> • Support and interest in participating in the initiative linking their portfolio with GEF components (as it has been done with SIP/TerrAfrica). 	The WB will promote coordination with IFAD for the Program's implementation. Coordination already has started. For example, for Togo and Senegal coordinated work resulted in the identification of priorities to be included in the LDCF envelope.
United Nations Environment Programme (UNEP)	<ul style="list-style-type: none"> • Highlights key points: integrated approach, impacts at local level and taking advantage of existing good practices. • UNEP indicates areas in which they could support countries. 	The Program has considered the key points mentioned for its design and will promote coordination with this agency.
United Nations Development Programme (UNDP)	UNDP highlights several vehicles which can accompany the GGWI.	The WB took note of these points and will promote coordination.
European Commission	EC has already developed activities and committed funds to support GGWI.	The WB has coordinated with EC for program design as some of the funds will co-finance program's activities.
Food and Agriculture Organization (FAO)	<ul style="list-style-type: none"> • Highlights the importance of forests and trees in arid zones and their contribution to the effective implementation of the GGWI. • Need for a multi-sectoral approach, strong collaboration among regional 	Sustainable Forest Management is one of the key components of the proposed Program. In addition, the Program will incorporate all the practices and interventions at the landscape scale mentioned by FAO: SFM, forest landscape restoration, agroforestry, fighting sand

	organizations and countries, and community involvement.	encroachment, SLWM, sustainable management and restoration of rangelands, good agricultural practices, and urban and peri-urban forestry and greening. The program is designed as a multisectoral investment that will build on the TerrAfrica platform for regional collaboration. Local communities will be in charge of implementing on-ground activities. The WB will promote coordination.
African Development Bank (AfDB)	<ul style="list-style-type: none"> The challenge cannot be adequately addressed by limited available resources and by single governments or institutions as the investment levels need to match the scale of the challenge. Will support the initiative particularly related to the Lake Chad Basin. 	The World Bank will promote coordination with other agencies working in the countries in similar initiatives such as the African Development Bank (AfDB).
Sahara and Sahel Observatory (SSO)	Highlights the main aspects in which the institution will be able to contribute to the GGWI.	The SSO will become a partner in the Program's implementation particularly for the regional knowledge management and M&E project.
World Wildlife Fund (WWF)	Urgency to develop a regional capacity to provide decision support methodologies and tools: sophisticated technology-based information systems (geospatial information technologies for natural resource management, computer modelling of climate impacts and knowledge-based systems for cataloguing and disseminating information).	The regional knowledge management and M&E project will consider the tools mentioned.
World Agroforestry Centre (ICRAF)	<ul style="list-style-type: none"> Importance of incorporating dimensions of income generation and markets Interest in supporting regional baseline measures and on going monitoring (biophysical and socioeconomic) 	These dimensions have been incorporated in the Program design. ICRAF will participate in the regional knowledge management and M&E project.
International Union for Conservation of Nature (IUCN)	Highlights areas of expertise that could support GGWI.	WB proposes that the Regional IUCN will be one of the partners to implement the regional knowledge management and M&E project, particularly being responsible for preparation of Trans-boundary Biodiversity Management Plans for the Program.

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Sustainable Land and Water Management – definition and practices

(From: TerrAfrica’s Country Support Tool

SLWM practices include both technologies and approaches applied to raise land quality (see definitions given earlier of land, SLWM, land degradation, and land quality in Annex 5 of the TerrAfrica Country Support Tool). The precise practices are usually site specific, and this indicator allows project managers freedom in defining what is an SLWM technology or practice. For example, tree planting may be an SLM practice in one area but not in another because the practice may negatively affect downstream water availability.

Technologies refer to agronomic, vegetative, structural, and management measures that control land degradation in the field. Examples include terracing, forestation, reduced tillage, micro-irrigation, etc. Approaches include ways and means of support that help to introduce, implement, adapt, and apply technologies in the field. Examples include watershed management, climate risk management, community land use planning, etc.

Recognizing that there is no one ‘miracle’ solution to solve the problems of land degradation and low productivity, selection of the appropriate SLWM technologies for a particular area will be determined by: (i) the qualities and characteristics of the local land resources; (ii) the SLWM requirements of the land use to be pursued; and (iii) the socio-economic context and priorities of the land users. While SLWM should target landscape level, it will be based on gaining incremental improvements within the land use production system through combining local practices that will result in:

- improved plant management (e.g. higher yields, good vegetative cover, reduced raindrop impact);
- improved soil and nutrient management (e.g. higher organic matter levels, integrated plant nutrition, improved soil structure, good rooting conditions);
- improved rainwater management (e.g. reduced runoff, increased infiltration, improved soil moisture conditions);
- reduced risk to production systems, people, and assets.

There will be synergistic benefits from combining many of these, which can be expected to lead to greater productivity and environmental benefits than could be achieved with each one on a purely incremental basis.

There are a number of common technical elements that underpin win-win management options, notably: minimum soil disturbance; maintenance of good ground cover; restoration of soil organic matter and related biological activity; integrated plant nutrition management; better crop husbandry; development of integrated crop/livestock/agro-forestry systems; opportunistic flexible management of traditional pastoral systems; and delineation of temporary or permanent protected areas.

Specific practices that can be used in combination to advance toward SLM are listed in the table below:

SLWM Practices		
Land/water management approaches	Land/water mgt technologies	
Land use regimes	Agronomic and vegetative measures	Structural measures
<ul style="list-style-type: none"> • Watershed plans • Community land use plans • Grazing agreements, closures, etc. • Biodiversity corridors • PA management • Conservation zones • Other 	<ul style="list-style-type: none"> • Inter-cropping • agro-forestry in crop or grazing systems • afforestation and reforestation • mulching and crop residue • crop rotation • fallowing • low till • composting/green manure • integrated pest mgt • vegetative strip cover • contour planting • re-vegetation of rangelands • integrated crop-livestock systems • woodlots • alternatives to woodfuel • Sand dune stabilization • Other 	<ul style="list-style-type: none"> • Terraces and other physical measures (e.g. soil bunds, stone bunds, bench terraces, etc.) • Flood control and drainage measures (e.g. rock catchments' water harvesting, cut-off drains, vegetative waterways, stone-paved waterways, flood water diversion, etc.) • Water harvesting, runoff management, and small-scale irrigation (shallow wells / boreholes, micro ponds, underground cisterns, percolation pits, ponds, spring development, roof water harvesting, river bed dams, stream diversion weir, farm dam, tie ridges, inter-row water harvesting, half-moon structures, etc.) • Gully control measures (e.g. stone checkdams, brushwood checkdams, gully cut/reshaping and filling, gully revegetation, etc) • Other

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Summary of Baseline Investments and GEF Alternatives in Participating Countries

Country	Baseline Project(s)	Financing (US\$M)	GEF Alternative	GEF Totals (program amount) (US\$M)	GEF Totals (program amount + fee) (US\$M)
Benin	West Africa Agriculture Productivity Project (WAAPP)	\$10.0	Sustainable Land and Biodiversity Management <i>Objective:</i> To promote SLWM and generate ecosystem services for sustainability and resilience of production systems (agriculture and forest landscapes). By integrating components within the baseline investments, the GEF increment would ensure sustainability of agricultural practices and technologies, mainstream biodiversity, reduce pressures on forest resources, and increase resilience in production systems. This investment would contribute to GEBs under LD, BD, and SFM, and priorities under CCA.	\$5.56	\$6.0
	Urban Environment and Disaster Management Project	\$10.0			
Burkina Faso	Forest Investment Program (FIP)	\$27.0	Burkina Faso Sustainable Land and Forestry Management Project <i>Objective:</i> To promote SLWM practices and biodiversity conservation measures, particularly in fragile lands and areas prone to the negative effects of climate change and variability. The GEF alternative would build on relevant components in the baseline projects to facilitate the application of innovative approaches for integrated natural resources management, create options for climate change mitigation in forest landscapes, increase habitat connectivity for biodiversity, and reduce risks of disasters. The project would contribute to GEBs under LD, BD, CCM and SFM, and priorities under CCA.	\$7.41	\$8.0
	Disaster Management Project	\$5.0			
	Regional NRM Project	\$12.0			
Chad	Agricultural Productivity Project	\$30.0	Chad Sustainable Land and Water Management <i>Objective:</i> To promote SLWM practices and biodiversity conservation measures incorporating planning processes, appropriate management and sustainable technologies, and	\$9.26	\$10
	Local Development	\$30.0			

	Program Support Project 2 (LDPSP 2)		community and government capacity strengthening. The GEF alternative is expected to ensure sustainability and climate resilience of the agricultural and livestock practices and technologies introduced in the baseline projects. The project would contribute to GEBs under LD, BD, and SFM, and priorities under CCA.			
Ethiopia	Sustainable Land Management Project (SLMP II)	\$100.0	Sustainable Land and Biodiversity Management project <i>Objective:</i> To promote the uptake of sustainable land use management and biodiversity conservation practices by agro-pastoral communities in order to reduce land degradation and support sustainable development and enhanced livelihoods. The investment would build on the extensive baseline to address the linkage of community driven initiatives with the need for safeguarding biodiversity, enhancing carbon stocks in forest and non-forest lands, improving climate resilience of productive systems and securing other ecosystem services at appropriate scales. The GEF alternative would address the interphase between agriculture land, pastoral land and forest land in an integrated ecosystem approach that generates global benefits under LD, BD, CCM and SFM, and priorities under CCA. The project would also support the implementation of the Ethiopia Strategic Investment Framework developed with the support of TerrAfrica.	\$12.96	\$14.0	
	Agriculture Growth Project	\$150.0				
	Productive Safety Net Project (PSNP)	\$450.0				
	Forest Carbon Partnership / REDD	\$3.6				
	Pastoral Community Development Project	\$56.0				
Ghana	Forest Carbon Partnership / REDD	\$3.6	Sustainable Land and Biodiversity Management project <i>Objective:</i> To promote implementation of SLWM and biodiversity conservation targeted investments, coordinated planning and dialogue. The GEF alternative would follow an integrated landscape approach building on the existent baseline and supporting the enabling environment for SLWM and biodiversity conservation as well as on the ground activities in the selected landscapes. This will include sustainable vegetative measures such as agroforestry, land use planning, incentive mechanisms for SLWM and conflict resolution tools over competing natural resources. The project would contribute to GEBs under LD, BD, CCM, SFM and to the implementation of the Country Strategic Investment Framework for Sustainable Land Management which aims to mainstream and scale-up sustainable land management in the development framework of Ghana at all levels.	\$8.75	\$9.45	
	Natural Resources and Environmental Governance DPL	\$10.0				
	Forest Investment Program (FIP)	\$30.0				
	Community based Rural Development Project (CPRDP)	\$82.0				
	Agriculture DPL	\$50.0				
Mali	Natural Resource Management in a Changing Climate	\$12.0	Sustainable Land and Biodiversity Management project <i>Objective:</i> To support the development of sustainable community based livelihood alternatives to catalyse the scaling-up of	\$12.96	\$14.0	

	(Regional NRM)		improved natural resource management and the adaptation to predicted impacts related to climate change. For the GEF alternative several components have been identified: institutional strengthening and awareness raising about SLWM, on ground investments in climate resilient SLWM and biodiversity based livelihoods (such as ecotourism) and local-level generation of renewable energy (including plantations of <i>Jatropha curcas</i> L as a source of wood fuel). The project would contribute to GEBs under LD, BD, CCM and SFM, and priorities under CCA.			
	Disaster Risk Management Program Scaling up renewable energy (SREP)	\$5.0 \$30.0				
Mauritania	Integrated Development Project for Irrigated Agriculture APL	\$10.0	Sustainable Land and Water Management project <i>Objective:</i> To promote sustainable land and water management and ecosystems services production by addressing key institutional, policy and technological barriers to SLWM and biodiversity conservation measures. The GEF alternative would contribute to ensuring the sustainability of the agricultural practices and alternative livelihood options promoted in the baseline projects, consistency and coordination in natural resources management as well as reinforcing adaptive capacities to threats such as flooding, sea level rise and sand dune encroachment. On ground activities involve implementation of watershed management plans, agroforestry, natural forest regeneration, sand dune control and other sustainable community, small holder forestry management practices. This investment would generate GEBs under LD, BD, and SFM, and priorities under CCA. It would also support the implementation of the country's strategic investment framework developed with the support of TerrAfrica.	\$7.32	\$7.9	
	The Community Based Rural Development (CBRD)	\$10.0				
	Regional Natural Resources Management Project	\$12.0				
Niger	Regional Natural Resources Management Project	\$12.0	Sustainable Land and Water Management project <i>Objective:</i> To promote implementation of SLWM and biodiversity conservation targeted investments in order to secure the supporting and regulating ecosystem services that are critical for sustaining agricultural production and natural resources management in priority agro-ecological zones. With the implementation of SLWM and biodiversity conservation practices, the project is designed to add to the pieces of a broader landscape mosaic that the baseline is already offering and that relate to agricultural productivity, climate resilience in agriculture and natural resources management. Investments on climate resilient SLWM activities would go together with high quality technical assistance and capacity building for SLWM implementers and service providers. The project would	\$4.63	\$5.0	
	PPCR	\$63.0				
	West Africa Agriculture Productivity Project (WAAPP)	\$10.0				

			contribute to GEBs under LD, BD, CCM and SFM as well as the overall objective of the country's strategic investment framework that aims to sustainably reduce land degradation.		
Nigeria	Nigeria Erosion & Watershed Management Project (NEWMAP)	\$400.0	Nigeria Erosion and Watershed Management Project (NEWMAP) <i>Objective:</i> To restore degraded lands and reduce longer-term erosion vulnerability in targeted areas. Blending with the baseline project, the GEF alternative would: promote vegetative land management practices; establish land use planning at local and national scales, develop coordination mechanisms for watershed planning and information exchange; develop and apply monitoring tools to measure the flow of ecosystem services in watersheds and land use systems; pilot innovations in environmental financing and ecosystem services such as payments for environmental services; incorporate climate parameters into civil works planning and design; and, investment add-ons to civil structures that accommodate greater climate variability. The project would contribute to GEBs under LD, BD, and SFM, and priorities under CCA.	\$8.56	\$9.28
Senegal	PROGEDE Forestry Project	\$15.0	Senegal Community based land and energy management project	\$7.43	\$8.01
	Regional Natural Resources Management Project	\$12.0	<i>Objective:</i> To promote community based sustainable land and energy management. Building on the components of the baseline projects, the GEF alternative aims to consolidate local support to the Green Wall Initiative by generating climate resilient livelihoods to local community in targeted areas. It would also support restoration and enhancement of carbon stocks in forests and other vegetative cover, promotion of low carbon energy alternatives, and integrated landscape management practices adopted by local communities. The project would contribute to GEBs under LD, CCM and SFM, and priorities under CCA.		
Sudan	Improving Agricultural support services in the Traditional Rain-Fed farming areas	\$20.0	Sustainable Land and Biodiversity Management project <i>Objective:</i> To promote SLWM practices in order to reduce land degradation in targeted rain-fed agricultural areas. The project would facilitate a variety of climate resilient sustainable land and water management practices (in both agricultural areas and adjacent areas) such as soil conservation techniques, crop management, agro-forestry practices, community based natural regeneration water harvesting and improved livestock management activities. These activities would also improve climate resilience of the baseline's agricultural practices. The project would contribute to GEBs under LD, BD, and SFM, and	\$6.81	\$7.35

priorities under CCA.					
Togo	Agriculture Sector Support Project	\$37.0	Togo Integrated Disaster and Land Management (IDL M) <i>Objective:</i> To reduce the risk of flooding and land degradation in targeted rural and urban areas. Building on the existing baseline, the GEF alternative would introduce on-the-ground climate resilient sustainable land and forest management practices coupled with broader watershed or other landscape planning as well as capacity strengthening on SLWM. This would improve agricultural practices and their climate resilience, consolidate flood prone watershed, restore selected forest and key protected areas and reduce pressure on natural resources from competing land uses. The project would contribute to GEBs under LD, BD, and SFM, and priorities under CCA.	\$9.16	\$9.89
	Integrated Disaster and Land Management	\$7.8			
	West Africa Agriculture Productivity Project (WAAPP)	\$10.0			
Regional	Regional knowledge management and M&E project	\$10.0	Knowledge Management, Monitoring and Evaluation <i>Objective:</i> To promote among all participating countries exchange of experiences, lessons learnt and best practices in relation to land management practices, agro-silvo-pastoral systems, economics of SLWM and carbon measures, and technical assistance on GIS, monitoring and land use planning at regional level. Regional Centers of Excellence such as: the CILSS, AGRHYMET, OSS, and regional IUCN would implement the project. These centers will collaborate with civic society organizations and institutions like the CGIAR centers, ECOWAS Water Resources Coordination Centers (WRCC), IGAD, Rural Hub and 2iE, ICRAF, IITA, ACMAD (African Center for Climate Applied to Development) among others.	\$4.63	\$5.0
Total Financing		\$1,735.0		\$105.44	\$113.88