



PROJECT IDENTIFICATION FORM (PIF).

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: LDCF

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PART I: PROJECT INFORMATION

Project Title:	Reducing the climate change vulnerability of local communities in Uganda through EbA in forest and wetland ecosystems		
Country(ies):	Uganda	GEF Project ID: ¹	8035
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01346
Other Executing Partner(s):	Ministry of Water and Environment	Submission Date:	13/02/2015
		Resubmission date:	01/04/2015
GEF Focal Area(s):	Climate Change adaptation	Project Duration(Months)	60 months
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of parent program:	[if applicable]		

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
CCA-1, Outcome 1.1 <i>Vulnerability of physical assets and natural systems reduced</i>	LDCF	1,740,000	3,000,000
CCA-1, Outcome 1.2 <i>Livelihoods and sources of income of vulnerable populations diversified and strengthened</i>	LDCF	1,310,000	10,000,000
CCA-1, Outcome 2.3 <i>Institutional and technical capacities and human skills strengthened to identify, prioritize, implement, monitor and evaluate adaptation strategies and measures</i>	LDCF	1,300,000	4,500,000
Total Project Cost		4,350,000	17,500,000

INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: to increase the capacity of government and vulnerable communities in Uganda living around forests and wetlands to adapt to climate change using Ecosystem-based Adaptation (EbA).

Project Component	Financing Type ³	Project Outcomes	Trust Fund	(in \$)	
				GEF Project Financing	Co-financing
Component 1: Capacity development for EbA in Uganda.	TA	Outcome 1: Technical and institutional capacity at the local and national level to integrate EbA into existing management plans for forests and wetlands is strengthened.	LDCF	830,000	3,800,000
Component 2: Climate change resilient communities and ecosystems in Uganda.	Inv	Outcome 2: Climate change vulnerability of communities living around degraded forests and wetlands is decreased through the implementation of EbA interventions.	LDCF	1,650,000	2,850,000
	Inv	Outcome 3: Communities living around the project intervention sites have increased capacity to adopt alternative livelihoods and climate-smart agriculture techniques to decrease their vulnerability to climate change and reduce degradation of forests and wetlands.	LDCF	1,250,000	9,500,000
Component 3: Knowledge and research on EbA and	Inv	Outcome 4: Increased knowledge and awareness of government officials and target communities	LDCF	412,858	475,000

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the GEF Website, *Focal Area Results Framework* which is an *Excerpt from GEF-6 Programming Directions*.

³ Financing type can be either investment or technical assistance.

climate resilient livelihoods.		of: i) the ecosystem services provided by forests and wetlands; and ii) the benefits of EbA for increasing the resilience of livelihoods to climate change.		
Subtotal			4,142,858	16,625,000
Project Management Cost (PMC) ⁴			207,142	875,000
Total Project Cost			4,350,000	17,500,000

INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Please include confirmed co-financing letters for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Multilateral Agency	Japanese International Corporation Agency (National Wetlands Project)	Grant	4,000,000
National Government	Government of Uganda (Environment and Natural Resources Investment Plan)	Grant	3,000,000
International donor	European Union and Government of Norway (SAWLOG Production Grant Scheme)	Grant	10,000,000
GEF Agency	United Nations Environment Programme (Ecosystem Based Adaptation in Mountain Ecosystems)	Grant	500,000
Total Co-financing			17,500,000

C. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNEP	LDCF	Uganda	Climate Change Adaptation	(select as applicable)	4,350,000	413,250	4,763,250
Total GEF Resources					4,350,000	413,250	4,763,250

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.

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

D. PROJECT PREPARATION GRANT (PPG)⁵

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY (IES), TRUST FUND, COUNTRY (IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁶⁾ (b)	Total c = a + b
UNEP	LDCF	Uganda	Climate Change	(select as applicable)	130,000	12,350	142,350
Total PPG Amount					130,000	12,350	142,350

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

⁵ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$1 mil; \$100k for PF up to \$3 mil; \$150k for PF up to \$6 mil; \$200k for PF up to \$10 mil; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

⁶ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

PART II: PROJECT JUSTIFICATION

A. PROJECT OVERVIEW

A.1. Project Description

*A.1.1. The **project problem**, root causes and barriers that need to be addressed*

In Uganda, natural ecosystems such as forests and wetlands contribute considerably to people's livelihoods and to the national economy⁷. Forest contribute ~6% of the country's gross domestic product (GDP)⁸ through timber, non-timber forest products (NTFPs) and other services. In addition to providing production services such as firewood, honey and medicinal plants, forests also provide a variety of other ecosystem services, including *inter alia*: i) cultural and social services such as recreation and tourism; ii) regulating services such as soil protection, air/water purification and carbon sequestration; and iii) supporting services such as nutrient cycling and soil accretion. Wetlands are equally important to local livelihoods and it is estimated that natural resources from wetlands contribute \$432 per year to the average Ugandan household⁹. Wetlands serve a role in the: i) regulation of flow and purification of water; ii) control of sediments and floods; iii) provision of breeding and feeding habitats for a variety of species; and iv) provision of fish and clean water for local communities. The Government of Uganda (GoU) therefore recognizes forests and wetlands as primary growth sectors for the country¹⁰.

Uganda's population, currently estimated to be ~36 million people, is increasing with an average annual growth rate of ~3.2%¹¹. This rapid population growth has led to the degradation of Uganda's forests and wetlands as a result of increased demand for firewood, conversion of land for agricultural purposes and the unsustainable harvesting of forest and wetland products. Firewood and charcoal provide ~95% of Uganda's energy needs¹², and therefore according to the National Forest Authority, ~80,000 hectares (~2%¹³) of Uganda's forests are cleared annually for charcoal production. Only 30% of the forests in Uganda are currently under formal protection. The remaining 70% are unprotected community and private forest and it is these forests that are rapidly declining. Similarly, between 1994 and 2009, wetland cover reduced from ~16% to ~11% of Uganda's total land surface, representing a loss of ~30% of Uganda's wetlands¹⁴. The continued degradation of forests and wetlands is of increasing concern as it reduces the ability of these ecosystems to provide valuable ecological and socio-economic services and consequently jeopardizes the livelihoods of dependent local communities. Local communities living around these forests and wetlands are particularly vulnerable to this degradation as a result of their limited access to other sources of income to sustain their livelihoods.

Current climate variability and change is further exacerbating the above-mentioned environmental stresses and associated vulnerabilities. Between 1991 and 2000 alone, Uganda experienced more droughts (7) than it had in the previous 70 years¹⁵, negatively impacting on the agricultural sector and threatening food security in the country. An increase in the frequency and intensity of floods, landslides, wind storms and hailstorms has also been attributed to the current effects of climate change¹⁶. These extreme weather events have caused damage to infrastructure, famines and the deterioration of pastures. In addition, they have had other negative impacts on the health and economic sectors. For instance, 1,000 people died and 150,000 were displaced from their homes as a result of the

⁷ National Development Plan Uganda, 2010. *Growth, Employment and socio-economic transformation for prosperity*.

⁸ Magisa.M. et al, 2013. *Contribution of Uganda's Forestry Sub-sector to the National Economy: Natural Resource Accounting Approach*.

⁹ Turyahabwe et al., 2013. *Contribution of wetland resources to household food security in Uganda*. *Agriculture and Food Security*, 2(5), 2-12.

¹⁰ National Development Plan Uganda, 2010. *Growth, Employment and socio-economic transformation for prosperity*.

¹¹ <https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html>. Accessed 15 October, 2014.

¹² National Development Plan Uganda, 2010. *Growth, Employment and socio-economic transformation for prosperity*.

¹³ https://energypedia.info/wiki/Uganda_Energy_Situation#Biomass.5B5.5D. Accessed 15 October 2014.

¹⁴ Wetlands Management Department. (2009). *Mapping a better future: How spatial analysis can benefit Wetlands and reduce poverty in Uganda*. Wetlands Management Department, Ministry of Water and Environment.

¹⁵ NAPA, 2007, p. 22.

¹⁶ State of Environment Report for Uganda, 2008. Government of Uganda.

floods and landslides that occurred in 1998, while in 2005, hailstorms took three lives and led to the displacement of 2,800 people in Rakai.

Predicted climate change, including variable rainfall patterns and higher temperatures, will further negatively affect local communities living around forests and wetlands in Uganda, as well as the ecosystems upon which they depend.

Climate change scenarios predict an increase in mean temperatures in Uganda between 0.7°C and 1.5°C by 2020, and a dramatic change in rainfall patterns. Decreased and more erratic rainfall patterns are expected to have secondary and tertiary impacts on all productive sectors of the Ugandan economy, chief among them agriculture, as well as energy production and health. Decreased rainfall will also have secondary impacts on forest and wetland ecosystem health, upon which many communities are dependent for many goods and services. Uganda's National Adaptation Programme of Action (NAPA) also confirms that the most vulnerable segments of the Ugandan populations are rural communities who are directly dependent on ecosystem services. It is also predicted that climate change will continue to bring about an increase in the frequency and intensity of extreme weather events such as droughts, floods, landslides and hailstorms¹⁷. The predicted increase in frequency and intensity of these climate change impacts is likely to lead to i) decreased food security through failed crop yields; ii) increased loss of property and lives by storms and landslides; iii) decreased water availability for drinking and irrigation; iv) reduced water quality; v) increased soil erosion; vi) damage to infrastructure; vii) increased incidences of water borne diseases such as cholera, typhoid and dysentery; viii) increased frequency of fires as a result of droughts; and ix) reduced energy supply through reduced availability of water for hydropower and firewood for cooking. These projected climate change impacts and associated costs require innovative strategies to adapt to the effects of climate change and restore degraded forests and wetlands.

The **problem** that the proposed LDCF-financed project (hereafter referred to as the LDCF project) seeks to address is that local communities living around forests and wetlands in Uganda are vulnerable to the current degradation of forests and wetlands and the associated reduction in ecosystem services. The observed and predicted effects of climate change, including variable rainfall patterns and higher temperatures, will exacerbate this problem. Currently, local communities and government have limited technical and institutional capacity to adapt to these predicted effects of climate change. Consequently, there is an urgent need to build capacity to maintain and restore forest and wetland ecosystems to reduce the climate change vulnerability of local communities.

The **proposed solution** is to strengthen the capacity of communities and government to implement Ecosystem-based Adaptation (EbA) interventions in forest and wetland ecosystems in Uganda. This will be achieved by demonstrating on-the-ground EbA interventions in pilot sites around forests and wetlands and by providing training to local and national government to implement EbA as a tool to adapt to climate change. This training will also include the integration of EbA into existing forest and wetland management plans. In addition, knowledge and lessons learned on the benefits and implementation of the EbA interventions will be disseminated throughout the pilot sites.

EbA provides a low-cost and effective way to reduce climate change vulnerability while enhancing multiple ecosystem benefits for vulnerable communities. As part of an integrated adaptation approach, EbA has been shown to require comparatively small investments relative to the long-term social, economic and environmental benefits^{18,19}. The proposed EbA interventions implemented through this project will address the management of land degradation as prioritized by the NAPA for Uganda as one of the urgent and immediate adaptation interventions.

Barriers to achieving the implementation of EbA exist in the country. These include: i) limited technical capacity of local and national government to implement EbA in forests and wetlands; ii) limited understanding of EbA and the

¹⁷ Government of Uganda, 2007. *Climate change: Uganda National Adaptation Programmes of Action*.

¹⁸ Jones, H.P., Hole, D.G. & Zavaleta, E.S. 2012. Harnessing nature to help people adapt to climate change. *Nature Climate Change* 2, 504-509.

¹⁹ UNEP/STREP 2012. A comparative analysis of ecosystem-based adaptation and engineering options for Lami Town, Fiji: Synthesis Report.

benefits provided by ecosystem services as a result of limited on-the-ground examples; iii) limited knowledge and financial resources to integrate EbA into existing management plans; and iv) limited alternative livelihood options to reduce reliance on extractive and destructive practices in forests and wetlands

The LDCF project will overcome these barriers by: i) strengthening the technical and institutional capacity of local and national governments to support local communities to plan and implement EbA; ii) demonstrating EbA interventions in forest and wetlands ecosystems to increase local community resilience to climate change; iii) increasing knowledge and awareness of EbA nationally; iv) developing forest and wetlands management plans that integrate EbA; and vi) introducing alternative livelihood strategies and climate-smart agricultural techniques to reduce the vulnerability of local communities around forests and wetlands to climate change.

*A.1.2. The **baseline scenario** and associated baseline projects*

Currently, rapid population growth and the consequent expansion of settlements and agriculture is causing widespread degradation of forests and wetlands in Uganda. The degradation of forests is further exacerbated by unsustainable fuelwood harvesting to supply the growing demand for charcoal in urban areas. Similarly, the degradation of wetlands is exacerbated by the recent expansion of rice farming into wetland areas. The degradation of these important ecosystems is reducing their capacity to provide valuable ecosystem goods (e.g. fuelwood, fish) and services (e.g. soil stabilization, water purification), and is thus negatively impacting upon local communities who depend upon these goods and services for their livelihoods. To address these problems, initiatives have been implemented that focus on improving the management of these ecosystems, promoting the restoration of degraded forest and wetlands and establishing alternative sources of timber and fuelwood to reduce deforestation. However, most of these initiatives have a limited or non-existent climate change focus. In particular, tailored EbA is not integrated into their activities. Therefore, local communities that are targeted by these initiatives remain vulnerable to the negative effects of climate change.

The initiatives described below are potential baseline co-financing projects for the LDCF project. For a more comprehensive description of the LDCF project activities, and how these will build on the baseline projects, see Section A.1.4. The co-financing amounts provided by the baseline projects are based on consultations with relevant stakeholders. These amounts will be validated at PPG phase.

- The **National Wetlands Project (NWP)** (2012 – 2016; \$4,000,000) is funded by the Japanese International Cooperation Agency (JICA) and implemented by the Wetland Management Department in the Ministry of Water and Environment. The project is focussed on the effective management of the Awoja wetland system. The overarching objectives of the project are: i) to restore valuable biological resources in the wetland system; and ii) to promote sustainable utilisation of those resources on an ongoing basis. Project interventions include the development of five wetland framework management plans. Through Component 1, the LDCF project will build on the ongoing activities of the NWP by integrating climate change considerations and EbA into new wetland framework management plans for the LDCF project's intervention sites. The LDCF project will also further contribute to the technical capacity developed within the Wetland Management Department by the NWP by providing training on climate change and EbA to local and national government staff. Finally, lessons learned and best-practice developed from the NWP will be integrated into the activities under Component 1 of the LDCF project. \$4,000,000 from the NWP is considered as co-financing for the LDCF project.
- The **Environment and Natural Resources Investment Plan (ENRIP)** describes the Government of Uganda's planned activities and investment in the environmental sector. Within the ENRIP, annual expenditure for the Forestry Sector Support Department totals ~\$500,000 per year (~\$2,500,000 over 5 years). Activities outlined in the plan for this department include formulation of a forestry policy, provision of technical backstopping to the forestry sector and forest restoration. Also within the ENRIP, annual expenditure for the Wetland Management Department totals ~\$500,000 per year (~\$2,500,000 over 5 years). The plan outlines various wetland-focussed activities, including *inter alia*: i) development of wetland framework management plans and community-based wetland management plans; ii) demarcation of wetlands; iii) restoration of degraded wetlands; and iv) establishment of buffer zones. Through activities under

Component 2, the LDCF project will integrate climate change into restoration activities outlined in the ENRIP through the demonstration of EbA interventions in forest and wetland ecosystems. As not all of the annual expenditure is necessarily relevant to the LDCF project, the co-financing contribution from the ENRIP to the LDCF project is conservatively estimated at \$300,000 per year from each of the two relevant departments (\$3,000,000 over 5 years).

- The **SAWLOG Production Grant Scheme Phase 2** (2015 – 2018) is funded by the EU and the Government of Norway. The total budget of this project is ~\$20,000,000 over four years – \$10,000,000 is estimated as applicable co-financing for this LDCF project. The objective of SAWLOG Phase 2 is to support the private sector to establish commercial timber plantations in Uganda. This will help to bridge the supply gap of wood products by increasing private sector quality production. Goals of Phase 1 and 2 of SAWLOG include establishment of: i) 40,000 ha of plantations; ii) 175 ha of woodlots; and iii) 2000 ha of on-farm trees. The scheme also supports private growers with technical advice, training, and research grants. The LDCF project, through activities under Component 2, will bolt onto the SAWLOG scheme by helping to reduce pressure on remaining natural forests through the implementation of EbA interventions, the promotion of alternative livelihood strategies in target communities, and the introduction of climate-smart agricultural techniques. Additionally, community woodlots will be established during the LDCF project using techniques and management arrangements similar to those employed by the SAWLOG Production Grant Scheme.

Additional co-financing for the LDCF project will also be sought from the following project which does focus on reducing the negative effects of climate change on local communities in Uganda:

- The **Ecosystem Based Adaptation in Mountain Ecosystems** (2010 – 2015) is funded by BMU and jointly implemented by UNEP, UNDP and IUCN. The project is concerned with the impacts of climate change on the integrity and functioning of mountain ecosystems in Nepal, Peru and Uganda. In Uganda, the project is focused on strengthening the GoU's capacity to implement EbA options and to reduce the vulnerability of communities, with particular emphasis on mountain ecosystems. The project's on-the-ground interventions are implemented in the Mount Elgon region in Uganda, and include vulnerability impact assessments, training of local communities on EbA, developing action plans for mainstreaming EbA into district government, and restoring forest. The LDCF project, mainly through activities under Component 3, will build on the ongoing regional knowledge management and awareness-raising activities of this project. The co-financing contribution from the BMU EBA project is estimated as \$500,000.

*A.1.3. The proposed **alternative scenario**, with a brief description of expected outcomes and components of the project*

The proposed alternative scenario will increase the capacity of institutions and local communities in Uganda to implement EbA to reduce their vulnerability to climate change. The EbA approach will be implemented to enhance the services that forests and wetlands provide. These services include: i) protection and regulation of water supplies; ii) provision of agricultural products, NTFPs and other ecosystem goods; and iii) buffering against climate-related events such as droughts and landslides. To this end, EbA will be implemented to: i) increase the resilience of forest and wetland ecosystems; ii) promote groundwater recharge and water quality; iii) provide alternative livelihood options to local communities; and iv) stabilise slopes. To implement, sustain and upscale this approach to climate change adaptation, the LDCF project will: i) strengthen the technical and institutional capacity of local and national governments to integrate EbA into forest and wetland management plans; and ii) enhance knowledge and awareness of the public – including government, NGOs, CSOs and local communities – of this approach. In addition to forest and wetland EbA interventions, the LDCF project will introduce alternative livelihood strategies and climate-smart agricultural techniques to local communities living around the project intervention sites. By diversifying livelihood options and improving agricultural outputs under a changing climate, the project will reduce the ongoing degradation of forest and wetland ecosystems and reduce the climate change vulnerability of local communities. This integrated approach to reducing climate change vulnerability is in line with the GoU's NAPA Implementation Framework²⁰ that promotes a NAPA resilient community concept.

²⁰ Government of Uganda, Ministry of Water and Environment 2008.

By implementing the interventions described above, the proposed project will address four NAPA priorities, namely Priorities: 1 – Community Tree Growing; 2 – Land Degradation Management; 8 – Indigenous Knowledge and Natural Resources Management; and 9 – Climate Change and Development Planning.

The LDCF project consists of three major components, described below. A detailed description of the adaptation scenario funded by LDCF resources is presented in Section A.1.4 with indicative activities presented in Appendix 1.

Component 1: Capacity development for EbA in Uganda

This component will strengthen the technical and institutional capacity local and national government to plan and implement EbA around forests and wetlands. This strengthened capacity will facilitate the integration of EbA into new and existing forest and wetland management plans.

Indicative outputs within this component are described below.

Outcome 1: Technical and institutional capacity at the local and national level to integrate EbA into existing management plans for forests and wetlands is strengthened.

Output 1.1: Training on EbA techniques for restoring degraded forests and wetlands delivered to local and national authorities.

Output 1.2: Climate impacts to forests and wetlands in Uganda are assessed/updated under the latest climate scenarios and areas vulnerable to climate change (hot spots) are identified.

Output 1.3: Framework management plans and community management plans for forests and wetlands developed, or existing plans revised, to integrate EbA for improved ecosystem services and livelihood security.

Output 1.4: A strategy developed to upscale, sustain and replicate EbA interventions in forests and wetlands.

Component 2: Climate change resilient communities and ecosystems in Uganda

This component will implement concrete on-the-ground EbA interventions within forests and wetlands in Uganda. These interventions are designed to reduce the vulnerability of local communities to the effects of climate change. In addition, activities under this component will increase the capacity of local communities at the project intervention sites to adopt alternative livelihoods and climate-smart agriculture techniques. This will both reduce the vulnerability of these communities to climate change as well as reduce degradation of forests and wetlands.

Indicative outputs within this component are described below.

Outcome 2: Climate change vulnerability of communities living around degraded forests and wetlands is decreased through the implementation of EbA interventions.

Output 2.1: Protocols for climate-resilient restoration of forests and wetlands developed and implemented.

Output 2.2: Local communities and district environmental officers at project intervention sites are trained to implement/sustain the project's EbA interventions.

Output 2.3: Degraded forest restored using multi-use and climate-resilient species to improve ecosystem services and provide goods to local communities in Kumi (Lake Bisina) and Hoima/Kibaale districts..

Output 2.4: Degraded wetland areas restored using multi-use and climate-resilient species to improve water quality and supply in Kumi (Lake Bisina) and Hoima/Kibaale districts.

Outcome 3: Communities living around the project intervention sites have increased capacity to adopt alternative livelihoods and climate-smart agriculture techniques to decrease their vulnerability to climate change and reduce degradation of forests and wetlands.

Output 3.1: Community-specific alternative livelihood plans, identifying alternative livelihood strategies appropriate for each community, are developed.

Output 3.2: Community members and district environmental officers are trained on alternative livelihoods and climate-smart agricultural techniques.

Output 3.3: Climate-smart agricultural techniques, such as agroforestry and conservation agriculture, are implemented in target communities.

Output 3.4: Improved water supply infrastructure, including crop irrigation systems, constructed in target communities to improve access to water and reduce agriculture in wetlands.

Output 3.5: Community-managed woodlots, away from patches of natural forest, established to provide fuelwood and reduce natural forest degradation.

Output 3.6: Community associations, including alternative livelihood and climate-smart agriculture demonstration sites, established at project sites.

Component 3: Knowledge and research on EbA and climate resilient livelihoods

This component will increase knowledge and awareness of EbA at a national level. Awareness of the importance of forest and wetland ecosystems and the valuable goods and services that they provide will also be increased to promote sustainable environmental management. A research programme established under this Component will generate knowledge on the long-term biological, physical and socio-economic benefits of EbA.

Indicative outputs within this component are described below.

Outcome 4: Increased knowledge and awareness of government officials and target communities of: i) the ecosystem services provided by forests and wetlands; and ii) the benefits of EbA for increasing the resilience of livelihoods to climate change.

Output 4.1: Knowledge and lessons learned on EbA in Uganda (including lessons learned from other EbA projects) disseminated through an online platform to promote South-South knowledge exchange.

Output 4.2: Awareness-raising campaign conducted on: i) the ecosystem services provided by forests and wetlands; and ii) the benefits of EbA for increasing the resilience of livelihoods and ecosystems to climate change.

Output 4.3: Long-term EbA research programme established in relevant national research institution.

A.1.4. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

The LDCF project will increase the capacity of government and vulnerable communities in Uganda living around forests and wetlands to adapt the negative effects of climate change described in Section A.1.1. This will be achieved within three main components. The additional cost reasoning for each component is described below.

Component 1: Capacity development for EbA in Uganda

Business as usual scenario:

Several projects in Uganda are promoting the integration of climate change into national policies and strategies. For instance, the Global Climate Change Alliance (GCCA) is providing technical support to the Climate Change Department to integrate climate change into the National Development Plan (NDP). However, apart from the UNEP/UNDP/IUCN Ecosystem Based Adaptation in Mountain Ecosystems project, none of the ongoing capacity development initiatives includes EbA. Therefore under the business-as-usual scenario national and district level stakeholders will have limited capacity to plan and implement EbA in Uganda. In particular, stakeholders that are implementing initiatives for restoration of forest and wetlands ecosystems will have limited technical capacity to: i) select appropriate EbA interventions; and ii) integrate these interventions into the designs of their initiatives.

As described in Section A1.1, the GoU recognizes forests and wetlands as primary growth sectors for the country. However, both of these ecosystems are currently experiencing wide scale degradation. To try and reduce degradation and sustainably manage these ecosystems, forest/wetland framework management plans are being developed for entire forest/wetland systems. These framework management plans are implemented at a district level. At a smaller scale, forest/wetland community management plans outline sustainable management of sub-sections of a wetland/forest system associated with a specific community. Because of limited technical capacity, currently neither forest/wetland framework management plans nor community management plans integrate climate change adaptation – and therefore EbA – into their sustainable management and restoration activities. Furthermore,

most forest/wetland systems have yet to have any management plans developed²¹.

The limited integration of EbA into forest/wetland management and restoration activities is further hindered by a lack of up-to-date climate change vulnerability assessments for these important ecosystems. This lack of vulnerability assessments, combined with limited financial resources, prevents the identification of high risk areas and subsequently adaptation is not prioritized in these areas.

Under the business as usual scenario, the institutional and technical capacity of national and district stakeholders to plan and implement EbA will likely remain limited. Therefore, EbA will not be integrated into initiatives for forest/wetland restoration and sustainable social and economic development in Uganda. Consequently, the vulnerability of local communities living around forest and wetlands will continue to increase with the predicted increase in negative effects of climate change.

The baseline cost (approximately \$3,800,000) under this component includes funds allocated by the National Wetlands Project for the development of wetland framework management plans for the Awoja wetlands.

Adaptation scenario:

Additional funding (GEF/LDCF: \$830,000) is required to strengthen the institutional and technical capacity of government stakeholders at both the national and district level to integrate EbA into existing management plans for forest and wetland systems. Firstly, relevant government officials – including members of the Climate Change Department, climate change desk officers in key ministries, officials in the Forestry Sector Support Department and staff of the Wetland Management Department – will be trained on EbA techniques for restoring degraded wetlands and forests. This training will be informed by a capacity needs assessment to identify priority training needs. A training workshop will also be conducted with the Interministerial Climate Change Technical Committee to promote the integration of EbA into the national climate change policy and climate change mainstreaming strategy.

Secondly, climate change impacts to forests and wetlands in Uganda will be assessed under the latest climate change scenarios to identify those areas (hot spots) most vulnerable to climate change. To facilitate this process, the LDCF project will provide training to technical staff within the Climate Change Department and Forest Administration on climate change modeling and GIS techniques. Furthermore, the relevant data required to produce these vulnerability assessments will be procured. The vulnerability assessments conducted through the LDCF project will build on, and incorporate lessons learned from, the vulnerability impacts assessments conducted by the Ecosystem Based Adaptation in Mountain Ecosystems project around Mt. Elgon²².

Framework management plans as well as community management plans will also be developed for the forest and wetland systems targeted by the LDCF project. These management plans will promote the sustainable utilization of the targeted forests and wetlands, and will integrate EbA approaches for restoration that will improve ecosystem services and community livelihoods. The management plans could also include the registration and/or declaration of private and community forests to enhance the regulation of forest harvesting. A stocktaking exercise will be carried out after the management plans have been developed to identify barriers and opportunities for integrating EbA – and climate change adaptation in general – into other local level development plans and strategies. The results of this stocktaking will be a set of recommendations for national level policy-makers for overcoming barriers to the integration of climate change into local levels plans. In this way the LDCF project will contribute to creating an enabling environment for climate change adaptation in Uganda. The project will also, through both this stocktaking and the vulnerability assessments conducted, assist to lay the groundwork for the NAP process in Uganda.

Finally, a strategy to upscale, sustain and replicate EbA interventions in forests and wetlands will be developed. As

²¹ Currently 5 wetland framework management plans and ~60 wetland community management plans are under development.

²² The LDCF project will refer to the “Guidance for vulnerability and impact assessment as part of ecosystem-based adaptation to climate change” document produced by the Ecosystem Based Adaptation in Mountain Ecosystems project.

part of the strategy development process, entry points for incorporating EbA into national and sectoral development plans will be identified. The development of a nation-wide upscaling strategy will be led by the Inter-ministerial Climate Change Technical Committee, and validated by government officials in relevant ministries.

The additional funding will build on the ongoing activities of the NWP baseline project by integrating climate change considerations and EbA into new wetland framework management plans for the LDCF project's intervention sites. The LDCF project will also further contribute to the technical capacity developed within the Wetland Management Department by the NWP by providing training on climate change and EbA to local and national government staff.

For further details on the adaptation scenario funded by LDCF resources please see the Logical Framework presented in Appendix 1.

Component 2: Climate change resilient communities and ecosystems in Uganda

Business as usual scenario:

Forests are an important component of Uganda's natural assets, contributing approximately 6% of the gross domestic product and providing ~\$550 million annually in the form of tangible products from forestry, tourism, agriculture and energy²³. However, forests in Uganda are currently experiencing high levels of deforestation and degradation. Indeed, between 1990 and 2005 forest cover in Uganda declined from 4.9 million hectares to 3.6 million hectares. This deforestation and degradation is driven by the demand for charcoal and timber products, and the clearance of forested areas for agriculture.

Wetlands are also considered an important ecosystem in Uganda as they play an important role in the hydrological cycle, carbon sequestration, sediment control and flood mitigation, and provide a range of valuable ecosystem goods. However, similar to forests, wetlands are also currently experiencing wide spread degradation. This degradation is driven by an increased demand for agricultural land. In particular, an increase in rice farming has led to the encroachment of agricultural practices into wetland ecosystems. Limited alternative livelihood options, coupled with poor demarcation of wetlands and a lack of management plans, means that this degradation of wetland systems is likely to continue.

Several initiatives currently ongoing in Uganda aim to reduce the degradation of forest and wetland ecosystems. Some projects, such as Environmental Management for Livelihood Improvement (EMLI), have promoted the use improved efficiency cooking stoves to reduce charcoal consumption and thereby reduce deforestation. Other projects, such as SAWLOG, support the reforestation of degraded areas to supply additional timber and charcoal resources. In wetlands, projects such as COBWEB²⁴ are trying to protect valuable wetland ecosystems through the expansion of the country's protected area network to incorporate biologically important wetlands. While these projects are achieving some success, for the most part they do not undertake an integrated approach to forest or wetland management that incorporates both forest/wetland restoration and the livelihoods of local communities. Furthermore, many of these projects do not incorporate the predicted negative effects of climate change into their design.

Predicted climate change effects in Uganda, including variable rainfall patterns, higher temperatures and an increase in the frequency and intensity of extreme weather events, is likely to lead to: i) decreased food security; ii) increased poverty; iii) decreased water availability; iv) increased soil erosion; and vi) reduced energy supply. There is therefore a need for integrated approaches that incorporate climate change into forest/wetland restoration programmes to ensure that these ecosystems continue to provide valuable ecosystem goods and services to vulnerable communities.

²³ Emerton, L. and Muramira, E. 1999. Uganda Biodiversity: Economic Assessment. NEMA and IUCN.

²⁴ Community Based Conservation of Wetland Biodiversity in Uganda.

Under the business-as-usual scenario, on-the-ground interventions to restore degraded forest and wetland ecosystems and promote socio-economic development within Uganda will remain threatened by the effects of climate change. Consequently, the vulnerability of local communities that are targeted by such interventions will continue to increase with the predicted negative effects of climate change.

The baseline cost (approximately \$12,350,000) under this component includes funds allocated by the baseline projects to implement on-the-ground activities to achieve their objectives. In particular, this includes funds allocated by: i) the ENRIP to the forestry and wetland management sectors; ii) SAWLOG to support the private sector to establish commercial timber plantations in Uganda.

Adaptation scenario:

Additional funding (GEF/LDCF: \$2,900,000) is required to implement EbA demonstrations in forests and wetlands in Uganda. Consequently, the vulnerability of local communities living around these areas – for which these ecosystems provide goods and services – will be reduced. Initially, protocols for climate-resilient restoration of degraded forests and wetlands will be developed with relevant stakeholders including government, academics, practitioners and technicians of baseline projects. Indigenous, multi-use and climate resilient species to be used for restoration will be identified during the development of the protocols. These protocols will also build on lessons learned from other restoration projects and will facilitate the replication of these climate-resilient interventions in other forests and wetlands. Local communities and district environmental officers at project intervention sites will then be trained, according to the protocols, to implement and sustain the LDCF project's EbA interventions.

EbA interventions, including tailored forest and wetland restoration, will be implemented in two²⁵ selected forest and wetland sites in Uganda. The preliminary sites identified are in the districts of Kumi (Lake Bisina) and Hoima/Kibaale. These districts house important forests and wetlands that are being rapidly degraded. The final site selection, including a decision on the total number of sites, will take place during the PPG phase and will be based on a list of criteria that will be validated with relevant stakeholders. These criteria could include *inter alia*: i) the presence of both forest and wetland; ii) level of degradation; iii) presence of other ongoing initiatives; iv) importance for biodiversity conservation; v) accessibility; and vi) willingness of local communities to participate. Climate-resilient and multi-use species that supply a diverse range of goods for commercial as well as domestic use – including timber and NTFPs such as resin, medicine, fibre, nuts and fruit – will be used in the tailored restoration of forest and wetlands. This will provide local communities with alternative livelihood options while at the same time increasing the potential of these ecosystems to provide valuable services such as water provision and soil stabilization. In addition, appropriate multi-use species will be used to demarcate the boundaries of wetland zones, according to the management plans developed in under Component 1. A strategy to monitor the implementation and bio-physical impacts of forest and wetland EbA interventions will also be designed and implemented within this component.

In addition to forest and wetland EbA interventions, the LDCF project will increase the capacity of local communities living around the project intervention sites to adopt alternative livelihoods and climate-smart agriculture techniques. By introducing alternative livelihood strategies and climate-smart agricultural techniques to local communities, the project will reduce the ongoing degradation of forest and wetland ecosystems and reduce the climate change vulnerability of local communities. This integrated approach to reducing climate change vulnerability is in line with the GoU's NAPA Implementation Framework²⁶.

To identify alternative livelihood strategies appropriate for each community, community-specific alternative livelihood plans will be developed. Community members and district environmental officers will then be trained on these alternative livelihoods as well as climate-smart agricultural techniques. To further this training, climate-smart agricultural techniques, such as agroforestry, conservation agriculture and organic farming will be implemented

During the PPG phase, a thorough assessment of the extent of degraded forest/wetland at the proposed intervention sites will be undertaken. Based on the results of this assessment, and considering the budget available for forest/wetland restoration, the number of sites may be increased to three.

²⁶ Government of Uganda, Ministry of Water and Environment 2008.

with selected pilot families at the project intervention sites. Furthermore, improved water supply infrastructure, including for crop irrigation and livestock and domestic use, will be constructed in target communities to improve access to water and thereby reduce agriculture in wetlands. To reduce degradation of forests, community-managed woodlots will be established to provide alternative sources of fuelwood, and appropriate harvesting and production technologies will be introduced to improve production efficiency and reduce waste of timber products. Strategies to mitigate forest fire risks will also be introduced in target communities. Finally, community associations, including alternative livelihood and climate-smart agriculture demonstration sites, will be established at project sites. These community associations will facilitate the transfer of knowledge both amongst community members at the project intervention site as well as other communities who are brought to the demonstration sites.

The additional funding will build on the ongoing activities of the ENRIP baseline project by integrating climate change into restoration activities through the demonstration of EbA interventions in forest and wetland ecosystems. The LDCF project will bolt onto the SAWLOG baseline project by helping to reduce pressure on remaining natural forests through the implementation of EbA interventions, the promotion of alternative livelihood strategies in target communities, and the introduction of climate-smart agricultural techniques.

For further details on the adaptation scenario funded by LDCF resources please see the Logical Framework presented in Appendix 1.

Component 3: Knowledge and research on EbA and climate resilient livelihoods

Business as usual scenario:

In Uganda, a number of initiatives that focus on upscaling climate change adaptation have been implemented (see Section A.5. and Appendix 2). However, the public – including government stakeholders and communities living around forests and wetlands – has limited understanding of the benefits of EbA as a means of adaptation. In particular, government and local communities are not aware of the potential for EbA to promote: i) water conservation and groundwater recharge; ii) soil stability; iii) provision of ecosystem goods and services; and iv) climate-resilient livelihoods. Consequently, the public – including government and local communities – will have limited awareness on the benefits of EbA and this approach will not be prioritised nor upscaled into ongoing ecosystem management and restoration activities.

Additionally, there is limited scientific research underway on the benefits of EbA interventions to manage the effects of climate change in Uganda. The Ecosystem Based Adaptation in Mountain Ecosystems project is undertaking research on EbA, including cost-benefit analyses of this approach, but it is limited to EbA in the mountain ecosystems around Mt. Elgon. Ecological and climate change research is also taking place in Makerere University but it does not focus on EbA. In the business as usual scenario, information on EbA for restoring forest and wetland ecosystems and promoting sustainable development will not be generated, managed nor shared to support climate-resilient social and economic development.

The baseline cost (approximately \$475,000) under this component includes funds allocated by the Ecosystem Based Adaptation in Mountain Ecosystems project to ongoing knowledge management activities.

Adaptation scenario:

Additional funding (GEF/LDCF: \$412,858) is required to increase the knowledge and awareness of the public in Uganda of the benefits of EbA for increasing the resilience of livelihoods to climate change. The awareness of local communities living around project intervention sites regarding the value of the goods and services provided by forests and wetlands will also be increased. To achieve this, knowledge products, best practices and lessons learned – including the benefits of adaptation interventions and financing mechanisms – from relevant EbA-related projects in Uganda and elsewhere will be collated and disseminated through appropriate online platforms. To avoid duplication with other projects, existing platforms such as AAKNet and GAN will be utilized. Furthermore, an awareness-raising campaign will be designed and implemented targeting government officials, NGOs/CSOs and

local communities around the project interventions sites. This awareness raising campaign will include information on: i) the ecosystem services provided by forests and wetlands; and ii) the benefits of EbA for increasing the resilience of livelihoods and ecosystems to climate change.

A long-term EbA research programme will also be established in an appropriate national research institution, such as Makerere University. This research programme will be designed to scientifically assess the long-term biological, physical and socio-economic impacts of the forest and wetland restoration and other EbA interventions implemented by the project. The knowledge generated through this research will guide future climate-resilient forest and wetland restoration in Uganda, thereby contributing to the long-term sustainability of the project. The research programme will also assist in building the case for EbA as a multi-beneficial approach for adapting to climate change.

The additional funding will build on the ongoing knowledge management activities of the Ecosystem Based Adaptation in Mountain Ecosystems.

For further details on the adaptation scenario funded by LDCF resources please see the Logical Framework presented in Appendix 1.

A.1.5. Adaptation benefits (LDCF/SCCF)

Should EbA interventions not be implemented in Uganda, climate change is predicted to have continuing negative effects on local communities. The LDCF project will address climate change vulnerabilities within a complex socio-economic environment by strengthening the institutional and technical capacity to plan and implement EbA in pilot areas. This will be achieved by: i) collating best practice information; ii) training authorities and local communities; iii) implementing and demonstrating EbA; iv) conducting research; v) increasing public awareness; and vi) developing framework management plans and community management plans that integrate EbA.

The LDCF project will advance the National Adaptation Programme of Action (NAPA) for Uganda. This will be achieved by: i) training local and national authorities on EbA techniques for restoring degraded forests and wetlands; ii) developing and implementing protocols for climate-resilient restoration of forests and wetlands; and iii) training community members and district environmental officers on alternative livelihoods and climate-smart agricultural techniques to prevent further degradation and ensure communities can benefit from sustainable livelihoods in a changed climate. Additionally, the LDCF project addresses several barriers that hinder effective implementation of prioritised NAPA interventions by developing, *inter alia*: i) public understanding of climate change and its impacts; ii) technical capacity to plan and implement adaptation, including EbA measures, within the GoU; and iii) institutional and coordinating mechanisms for addressing adaptation nationally²⁷.

The expected benefits of this programme at the community level will be an increased capacity to anticipate and adapt to climate change and to manage climate risks and vulnerability in pilot areas. By working with local communities to establish alternative livelihoods, the LDCF project will promote sustainable management of ecosystem services provided by wetlands and forests. In particular, the project will: i) identify alternative livelihood strategies appropriate for each community ii) train trainers on these livelihood strategies and on sustainable agriculture techniques; and iii) implement techniques – such as organic farming and conservation agriculture – with pilot farmers. Therefore, the project will reduce the vulnerability of local communities living in pilot areas.

The specific adaptation benefits of the proposed LDCF-financed project will include: i) increasing the resilience of wetland ecosystems to buffer against climate-induced droughts and floods; ii) reducing soil erosion; iii) improving and maintaining water quality²⁸ through restored wetland ecosystems; iv) improving water supply by promoting groundwater recharge and water conservation; v) enhancing resilience to landslides by stabilising soils; vi) providing NTFPs and alternative livelihoods; vii) improving food security through intensified and diversified

²⁷ Government of Uganda, 2007. *Climate change: Uganda National Adaptation Programmes of Action*.

²⁸ This will increase the availability of fresh water and result in fewer water-borne diseases.

climate-resilient agricultural areas. To manage the effects of climate change, cost-effective interventions need to be implemented in Uganda. In comparison with the costs of other types of investments, the value of the benefits of EbA is favourable²⁹. The LDCF project interventions are no-regret³⁰ and low cost with tangible benefits and will reduce the vulnerability of communities living in and around project intervention sites.

The project is also expected to generate global environmental benefits by reducing deforestation and the protecting biodiversity. It will also protect environmental services – such as clean water and fuel wood provision – as a basis for continued resilience.

A.1.6. Innovativeness, sustainability and potential for scaling up

Research is increasingly indicating that an EbA approach represents an innovative and cost-effective means of adapting to climate change³¹. This is because EbA reduces vulnerability to climate change by decreasing sensitivity while simultaneously providing a range of co-benefits such as carbon storage and sequestration, biodiversity conservation and alternative livelihoods opportunities to reduce poverty. Therefore, the LDCF project will implement EbA approaches in the three selected areas in Uganda to promote: i) water conservation and groundwater recharge; ii) soil stability, through reforestation; and iii) development of climate-resilient livelihoods. As a result, the use of EbA interventions will reduce the frequency and intensity of floods and landslides caused by erratic rainfall.

To maximise benefits, the LDCF project will collaborate with relevant stakeholders to avoid redundancy and promote complementarity and cost-effectiveness of project objectives. This will include community engagement during all phases of the LDCF project to create ownership of the interventions to promote sustainability. To further enhance sustainability and the replication of results, an upscaling strategy will be developed and institutionalized under Outcome 1. In addition, lessons learned from this particular project will be documented and used to inform the future EbA and other adaptation interventions.

The sustainability and replication of the proposed LDCF-financed project will further be enhanced by:

- **strengthening the institutional and technical capacity** of local governments, communities, district officers and national stakeholders to plan and implement EbA in forest and wetland ecosystems, including the development of training manuals which can be used outside of the project activities;
- developing new forest and wetland management plans that integrate EbA;
- developing **technical protocols** to guide both the LDCF's project as well as future climate-resilient restoration of forests and wetlands;
- **demonstrating the benefits of EbA** to local governments and communities at intervention sites;
- establishing **community associations** to share knowledge on alternative livelihood strategies and climate-smart agricultural practices;
- disseminating information on best-practice EbA;
- developing a **long-term research programme on the benefits of EbA** that will be implemented within Component 3; and
- conducting public awareness campaigns on EbA and the benefits of this approach.

A.2. Stakeholders

²⁹ A study in Lami Town, Fiji, found that EbA options provide a high benefit-to-cost return in terms of avoided flood damages as well as provision of secondary ecosystem services. See: UNEP/STREP 2012. A comparative analysis of ecosystem-based adaptation and engineering options for Lami Town, Fiji: Synthesis Report.

³⁰ No-regret options are those that are justified by current climate conditions and further justified when climate change is considered, e.g. pollution reduction in water supplies will be beneficial if water supplies decrease as a result of climate change. Lim, B, and E. Spanger-Siegfried. 2004. Adaptation policy frameworks for climate change: developing strategies, policies and measures. Cambridge University Press, Cambridge, UK pp 253.

³¹ Jones, H.P., Hole, D.G., Zavaleta, E.S. 2012. Nature Climate Change, 2: 504-509.

Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes /no) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation:

Key stakeholders in this project include local communities, regional and district administrations as well as decentralized and central government agencies. This project will also create active partnerships with NGOs and CBOs at the local and national level, as well as private sector partners in the project sites.

Stakeholder type	Stakeholder list	Possible contributions and roles in the programme
Government ministries (at central and decentralized levels)	<ul style="list-style-type: none"> ▪ Ministry of Water and Environment ▪ Ministry of Foreign Affairs ▪ Ministry of Finance, Planning, and Economic Development ▪ Ministry of Local Government ▪ Ministry of Health ▪ Ministry of Gender, Labour & Social Development ▪ Ministry of Energy and Minerals ▪ Ministry of Agriculture, Animal, Husbandry and Fisheries 	Delivery of technical components of project according to sectoral expertise; provision of technical advice; realization of scientific studies; coordination with local authorities and mobilization of human and financial resources;
Regional and local administrations	<ul style="list-style-type: none"> ▪ Regional administrations ▪ District Administrations ▪ Municipal authorities 	Beneficiaries of capacity building initiatives; local coordination; authorizations and permits
Community-level stakeholders	<ul style="list-style-type: none"> ▪ Church leaders ▪ Village leaders ▪ Natural resources user groups ▪ Women's groups ▪ CBOs 	Community mobilization; delivery of programme components; beneficiaries of capacity building.
NGOs	<ul style="list-style-type: none"> ▪ GEF-NGO Network ▪ Nature Uganda ▪ Environmental Management for Livelihood Improvement Bwaise Facility ▪ Uganda Red Cross ▪ World Vision Uganda ▪ Agency for environment and Wetlands (AEW) ▪ Uganda Women Tree Planting Association ▪ Uganda Forestry Working Group ▪ Others to be determined 	Beneficiaries of training; trainers and social mobilization; delivery of alternative livelihoods training and assets; monitoring of ecological conditions and participation in environmental rehabilitation initiatives

A.3. Gender Considerations

Are gender considerations taken into account? (yes /no). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

Men and women use different strategies to cope and adapt to the effects of climate change³². In Uganda, the adaptive capacities of both men and women to the effects of climate change are low as a result of: i) limited access to weather and climate information; ii) limited access to and control over natural resources; and iii) limited participation in relevant social networks that provide resources or support to cope with the effects of climate change. Women in particular are vulnerable to the effects of climate change because of their role and responsibility to manage climate sensitive resources such as water and crops for their livelihoods. A reduction in access to these resources has therefore detrimental implications for women in terms of i) health; ii) nutrition; and iii) livelihood income³³. The LDCF project will address the vulnerability and low adaptive capacity of women to climate change by mainstreaming gender considerations into the implementation of EbA activities and designing interventions in such a way so as to benefit men and women equally. These activities will align with the following existing national policies and ratified international conventions: i) the National Gender policy; ii) the Land Act; and iii) the Convention on Elimination of All Forms of Discrimination against Women (CEDAW). To integrate gender into relevant activities, within Component 1 the LDCF project will collaborate with the following institutions: i) the Ministry of Gender, Labour and Social Development; ii) the directorate of Environment of the Ministry of Water and Environment; and iii) the Association of Uganda Professional Women in Agriculture and Environment³⁴. Under Component 2, gender specific indicators and targets will be developed to monitor the progress of gender mainstreaming into EbA activities and the development of alternative livelihoods.

A.4.Risks

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

Risk	Rating	Risk category	Countermeasure
Civil strife or social unrest may prevent interventions from taking place	Low	Social	<ul style="list-style-type: none"> Pilot interventions will be situated in areas that have been free of conflict.
Local stakeholders resist the implementation of the proposed EbA interventions.	Medium	Social	<ul style="list-style-type: none"> Active participation of local stakeholders throughout the design, implementation and monitoring of the project. Capacity building and training of relevant stakeholders (e.g. local authorities and communities) to increase their understanding and awareness of the benefits of EbA and their ability to effectively implement, use and maintain EbA measures. Implementation of public awareness programmes on the effects of climate change and the benefits of EbA interventions. Demonstration of the benefits of EbA interventions in pilot sites around forests and wetlands

³² Ministry of Water and Environment: Climate change department. *Gender and climate change: assessing impacts and strategies for mitigation and adaptation to climate change in Uganda*. Available at <http://www.ccu.go.ug/index.php/resources-publications-2/executive-summary>. Accessed 19 September 2014.

³³ Ministry of Water and Environment: Climate change department. *Gender and climate change: assessing impacts and strategies for mitigation and adaptation to climate change in Uganda*. Available at <http://www.ccu.go.ug/index.php/resources-publications-2/executive-summary>. Accessed 19 September 2014.

³⁴ Mukasa, C., et al. 2012. *Gender and forestry in Uganda: Policy, legal and institutional frameworks*. CIFOR.

Variation and limitation in technical capacity will reduce the efficiency of the project implementation.	Medium	Technical	<ul style="list-style-type: none"> Local communities and district environmental officer around the pilot sites will be trained in the design, planning and implementation of EbA interventions. International experts will be engaged to assist local authorities in implementing EbA interventions where national expertise is not available. Existing inter-ministerial climate change technical committee will be engaged to facilitate knowledge sharing and capacity building.
Limited technical capacity of institutions to undertake rigorous scientific research	Low	Institutional	<ul style="list-style-type: none"> Identify capable human resources to establish and implement the long-term EbA research programmes in relevant institutions. Roles and responsibilities of each participating stakeholder will be agreed upon before the start of the project and explored in the PPG phase.
Funding may not be available for subsequent phases	Medium	Economic	<ul style="list-style-type: none"> An upscaling strategy will be developed and institutionalised. This strategy will include planning for future funding of EbA. EbA measures will be mainstreamed into policies and awareness raising will be conducted for decision makers. The project will include activities to explore national and international sources of funding for subsequent phases, including national budget allocations and local financing schemes. A financing strategy, along with a replication and upscaling strategy will be devised during the first years of implementation.
Other economic developments, such as mining, may compete with the implementation of the projects activities	High	Economic	<ul style="list-style-type: none"> The project will include the demarcation of boundaries of the forests and wetlands and propose a mandate to prevent these areas from any economic development that jeopardizes the functioning of these ecosystems.
High staff turnover in the government departments and implementing agencies.	Medium	Organisational	<ul style="list-style-type: none"> Supporting relationships including deputies and alternative representation will be recommended and established during project inception to ensure sufficient continuity. Handbooks developed in English and the local language to guide new staff to the proposed project.

A.5. Coordination

Outline the coordination with other relevant GEF-financed and other initiatives

There are several GEF and non-GEF projects currently implemented in Uganda that focus on climate change adaptation. The LDCF project will build on and coordinate with these ongoing projects and initiatives to: i) benefit from the interventions of the project listed in Appendix 2 by collating the lessons learned to increase the knowledge available on adaptation practices; and ii) disseminate the information on successes, failures and lessons learned from previous adaptation interventions for the implementation of this project. See Appendix 2 for a full list of aligned initiatives and a description of how the project will coordinate with these initiatives.

B.1. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH NATIONAL PLANS OR STRATEGIES

Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no).If yes, which ones and how: NAPAs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

The LDCF project is aligned with the strategies, plans and reports described in the table below.

National Strategies and plans	Consistency
National Adaptation Programme of Action (NAPA)	The proposed LDCF-financed project is aligned with the following priorities in the NAPA: 1, Community tree growing; 2, Land degradation management; 5, Water for production; 8, Indigenous Knowledge and Natural Resource Management; and 9, Climate change and development planning.
Millennium Development Goals (MDGs)	The proposed LDCF-financed project will contribute towards achieving: MDG 1 - eradicating extreme poverty and hunger; and MDG 3 - promoting gender equality and empowering women. The overall objective of the project will contribute to MDG 7 - ensuring environmental sustainability.
United Nations Development Assistance Framework (UNDAF)	In particular, the proposed LDCF-financed project is aligned with Outcome 7 under Component 2 - People living in areas vulnerable to climate change risk and disasters benefit from improved risk management and are more resilient to hazard-related shocks.
National Development Plan (NDP) 2010-2015	The NDP is a successor of the Poverty Eradication Action Paper (PEAP) –from 1997-2007– and has the overarching goal to achieve sustainable economic development while eradicating poverty. The proposed LDCF-financed project is particularly aligned with the following NDP objectives: i) increase household income and promote equity; ii) Enhance the availability and quality of gainful employment; and iii) promoting sustainable population and the use of environmental and natural resources.
Poverty Reduction Strategy Papers (PRSPs)	Uganda’s PRSP is part of the NDP.
The Initial National Communication	The Initial National Communication (NC) to the United Nations Framework Convention on Climate Change (UNFCCC, 2004) details the vulnerability of local communities in Uganda to climate change. The proposed LDCF-financed project will support the sustainable technologies promoted by this NC, in particular regarding agriculture, forestry and water resources.
Public Investment Plan (PIP) 2013-2016	The PIP provides an overview of all investment profiles for Central Government Votes with development funding. The proposed LDCF-financed project is aligned with the projects under vote 010 for Ministry of Agriculture and Vote 142 for the National Agricultural Research Organisation.
Peace Recovery and Development Plan 2 (2012-2015)	The proposed LDCF-project is consistent with this plan particularly for the districts of Lira, Otuke and Alebtong.
National Biodiversity Strategic Action Plan (NBSAP)	National Biodiversity Strategy Action Plan (2002) addresses the objectives of the United Nations Convention on Biological Diversity. In particular, the proposed LDCF-financed project will support the objective of the NBS to

	conserve biodiversity in forests and wetlands.
National Policy for the Conservation and Management of Wetland Resources (1995)	The proposed LDCF-financed project aligns specifically with three of the objectives of the policy: i) to maintain the biological diversity of natural or semi-natural wetlands; ii) to maintain wetland functions and values; and iii) to integrate wetland concerns into the planning and decision making of other sectors.
Agricultural Sector Development Strategy and Investment Plan (DSIP)	The proposed LDCF-financed project is particularly aligned with objective 1.1 of the DSIP: Enhanced contribution of agricultural research to sustainable agricultural productivity, competitiveness, economic growth, food security and poverty eradication.
Uganda Strategic Plan 2011-2015	This strategic plan from the organisation Restless Development focuses on the development and participation of youth in Uganda society. The proposed project will align with the objective of the USP to train, educate, support and inspire young people to lead development in their countries and communities, particularly in the field of agriculture.
National Forestry Policy 2001	The policy provides the strategic objectives of the forestry sector in Uganda. The proposed project will deliver the policy objectives on private forest management, watershed management, community forestry to enhance rural livelihoods and sustainability in management and development of forest resources in Uganda.
The National Forest Plan 2012	The plan provides the framework and strategies for implementation of the National Forest Policy. The proposed project will deploy the strategies of multi-stakeholder and institutional participation, inclusiveness and poverty reduction to deliver the project objectives.

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

A. Record of Endorsement³⁵ of GEF Operational Focal Point (S) on Behalf of the Government(s): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [SGP OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE(MM/dd/yyyy)
Patrick Ocailap	GEF Operational Focal Point	Ministry of Finance, Planning and Economic Development	5 th February 2015

GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies³⁶ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

³⁵For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

³⁶GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Brennan van Dyke; Director, GEF Coordination Office, UNEP		April 01, 2015	Ermira Fida Manager, UNEP- GEF Adaptation Portfolio	+254-20- 762-3113	Ermira.fida@unep.org

C. Additional GEF Project Agency Certification*(Applicable Only to newly accredited GEF Project Agencies)*
For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.

Appendix 1: Logical Framework

Project Objective: to increase the capacity of government and vulnerable communities in Uganda living around forests and wetlands to adapt to climate change using Ecosystem-based Adaptation (EbA).			
Outcome	Indicative Output	Indicative activities	Indicative budget (US\$)
Component 1: Capacity development for EbA in Uganda.			
<p>Outcome 1: Technical and institutional capacity at the local and national level to integrate EbA into existing management plans for forests and wetlands is strengthened.</p> <p>LDCF financing: <i>US\$1,200,000</i></p> <p>Co-financing: <i>US\$3,800,000</i></p>	<p><i>Output 1.1:</i> Training on EbA techniques for restoring degraded forests and wetlands delivered to local and national authorities.</p>	<ul style="list-style-type: none"> • Conduct a capacity needs assessment of relevant national and district government authorities, taking into account the capacity development activities of ongoing projects such as the GCCA, to identify priorities for training on climate change adaptation and EbA. • Develop training manuals for local and national authorities to implement EbA for restoring forests and wetlands. • Train members of the national Climate Change Department and climate change desk officers (focal points situated within key ministries, agencies, academia and CSOs) on EbA techniques for restoring degraded forests and wetlands utilising the training manuals developed. • Train members of the Inter-ministerial Climate Change Technical Committee, under the Climate Change Policy Committee and Inter-ministerial Climate Change Committee, on EbA to promote the integration of EbA approaches into national climate change adaptation plans. • Host training workshops with the Inter-ministerial Climate Change Technical Committee on current climate change adaptation finance to strengthen the capacity of the technical committee to identify and access international/national funds for adaptation. 	130,000
	<p><i>Output 1.2:</i> Climate impacts to forests and wetlands in Uganda are assessed/updated under the latest climate scenarios and areas vulnerable to climate change (hot spots) are identified.</p>	<ul style="list-style-type: none"> • Train technical staff within the Climate Change Department and Forest Administration on current climate modelling and GIS techniques. • Acquire the relevant data required to assess/update climate change impacts on forests and wetlands in Uganda. • Assess the current and predicted vulnerability of forests and wetlands to climate change and produce digital vulnerability maps. • Train local and district level policy-makers on the use of these maps in decision-making. 	400,000
	<p><i>Output 1.3:</i> Framework management plans and community management plans for forests and wetlands developed, or existing plans revised, to integrate EbA for improved ecosystem services</p>	<ul style="list-style-type: none"> • Review, where applicable, existing framework management plans and community management plans for forest and wetland ecosystems at the selected project sites. • Identify relevant stakeholders and local communities to be involved in the development of framework management plans and community management plans where they do not currently exist. • Hold participatory workshops to obtain relevant information and stakeholder needs required to develop framework management plans and community management plans. 	250,000

	and livelihood security.	<ul style="list-style-type: none"> Assist local district officers to develop a framework management plan for both forests and wetlands at each of the selected intervention sites that integrates EbA into the management activities. Explore the potential for registration of private and community forests and declaration of community forests in management plans in order to enhance regulation of forest harvesting to ensure sustainability. Assist local district officers and local communities to develop community management plans for each relevant sub-section of the three project intervention sites that integrates EbA into the management activities. Undertake a stock-taking exercise to identify barriers and opportunities for integrating EbA into other framework management plans and community management plans, based on the lessons learned during the management plan development during the project. Develop a set of recommendations for policy/strategy revisions that will facilitate the integration of EbA into local level management plans based on the stocktaking exercise, including when in the policy cycle these revisions should be considered. 	
	<i>Output 1.4:</i> A strategy developed to upscale, sustain and replicate EbA interventions in forests and wetlands.	<ul style="list-style-type: none"> Identify good practices for, and barriers to, the effective upscaling of EbA interventions. Assess current entry points for incorporating EbA into national development plans and sectoral plans (e.g. forestry and agriculture). Develop a nation-wide EbA upscaling strategy, led by the Inter-ministerial Climate Change Technical Committee, to sustain and replicate forest and wetland EbA interventions. Host a workshop, with all relevant local and national government officials, to validate and institutionalise the upscaling strategy developed. 	50,000
Component 2: Climate change resilient communities and ecosystems in Uganda.			
<p>Outcome 2: Climate change vulnerability of communities living around degraded forests and wetlands is decreased through the implementation of EbA interventions.</p> <p>LDCF financing: US\$2,500,000</p>	<i>Output 2.1:</i> Protocols for climate-resilient restoration of forests and wetlands developed and implemented.	<ul style="list-style-type: none"> Collate lessons learned and best practices from ongoing ecosystem restoration projects in Uganda. Undertake a market assessment at each of the chosen intervention sites to identify multi-use plant species for forest and wetland restoration that can provide co-benefits to local communities. Identify indigenous multi-use and climate-resilient species, incorporating the finding of the market assessment, to restore forests and wetlands. Develop appropriate planting schedules, using the short- and medium-term climate forecasts developed under Output 1.2, for the chosen multi-use and climate-resilient forest and wetland species. Develop wetland and forest protocols to guide the implementation of EbA interventions. 	70,000

Co-financing: US\$2,850,000	<i>Output 2.2:</i> Local communities and district environmental officers at project intervention sites are trained to implement/sustain the project's EbA interventions.	<ul style="list-style-type: none"> Adapt and develop training programmes for local communities on: i) EbA and the benefits of this approach; and ii) methods to implement and maintain EbA interventions. Assist district environmental officers to establish local community planting teams who will implement the forest and wetland restoration activities. Conduct training of local communities (identified community planting teams in particular) and district environmental officers on implementing and maintaining forest and wetland EbA interventions using the programmes that have been developed. Adopt appropriate harvesting, processing and production technologies to improve efficiency in consumption and reduce waste in forest products. Adopt and upscale technologies to mitigate forest fire risks. 	130,000
	<i>Output 2.3:</i> Degraded forest restored using multi-use and climate-resilient species to improve ecosystem services and provide goods to local communities in Kumi (Lake Bisina) and Hoima/Kibaale districts.	<ul style="list-style-type: none"> Establish community-managed nurseries to grow the seedlings required for forest and wetland restoration. Map, at a fine scale, the areas of degraded forest at the three project intervention sites that are suitable for restoration. Restore identified areas of degraded forest at the three selected project intervention sites, using the local community planting teams and according the protocols developed in Output 2.1.1, using multi-use and climate-resilient species. Identify degraded woodland ecosystems that can be regenerated in targeted charcoal producing districts. Design a long-term strategy to monitor the implementation and bio-physical impacts of forest and wetland EbA interventions. Implement the long-term monitoring strategy in areas of restored forest and wetlands, including the production of annual technical monitoring reports. 	800,000
	<i>Output 2.4:</i> Degraded wetland areas restored using multi-use and climate-resilient species to improve water quality and supply in Kumi (Lake Bisina) and Hoima/Kibaale districts.	<ul style="list-style-type: none"> Map, at a fine scale, the areas of degraded wetland at the three selected project intervention sites that are suitable for restoration. Demarcate the boundaries of wetland zones, according the management plans developed in Output 1.3, using a combination of natural infrastructure (e.g. trees) and concrete pillars. Restore identified areas of degraded wetland at the three project intervention sites, using the local community planting teams and according to the protocols developed in Output 2.1.1, using multi-use and climate-resilient species. 	650,000
Outcome 3: Communities living around the project intervention sites have increased capacity to adopt alternative livelihoods and climate-	<i>Output 3.1:</i> Community-specific alternative livelihood plans, identifying alternative livelihood strategies appropriate for each community, are developed.	<ul style="list-style-type: none"> Conduct a cost-benefit analysis of various alternative livelihoods strategies in forests and wetlands (e.g. beekeeping, fruit harvesting, animal husbandry, sustainable harvesting NTFPs). Hold workshops with local communities at the project sites to assess current livelihood strategies and identify potential methods for livelihood diversification. Design alternative livelihood plans identifying alternative livelihood strategies appropriate for each community. 	80,000
	<i>Output 3.2:</i> Community	<ul style="list-style-type: none"> Train the trainers (district environmental officers and members of the community 	120,000

<p>smart agriculture techniques to decrease their vulnerability to climate change and reduce degradation of forests and wetlands.</p> <p>LDCF financing: US\$1,800,000</p> <p>Co-financing: US\$9,500,000</p>	<p>members and district environmental officers are trained on alternative livelihoods and climate-smart agricultural techniques.</p>	<p>associations in Output 2.2.6) on alternative livelihood strategies (as identified in Output 2.2.1) and climate-smart agricultural techniques.</p> <ul style="list-style-type: none"> • Train communities at the target intervention sites on the identified alternative livelihoods strategies. • Support target communities through training and knowledge sharing to establish forest based income generating activities for improvement of household incomes and livelihoods. • Train farmers, both at the project intervention sites and in the surrounding communities, on climate-smart agricultural techniques. 	
	<p><i>Output 3.3:</i> Climate-smart agricultural techniques, such as agroforestry and conservation agriculture, are implemented in target communities.</p>	<ul style="list-style-type: none"> • Investigate the potential for micro-finance and weather index-based insurance products in target communities to assist local farmers. • Select pilot farmers, through participatory workshops and meetings with community leaders, to trial climate-smart agricultural techniques. • Implement climate-smart agricultural techniques, such as agroforestry, conservation agriculture and organic farming, with pilot farmers. • Provide start-up kits for climate-smart agriculture, including flood-resilient crop seeds, farming implements and irrigation infrastructure, to local farmers on at the project intervention sites. 	350,000
	<p><i>Output 3.4:</i> Improved water supply infrastructure, including crop irrigation systems, constructed in target communities to improve access to water and reduce agriculture in wetlands.</p>	<ul style="list-style-type: none"> • Assess water requirements for both household consumption and irrigation at project intervention sites. • Conduct a hydrological study at each of the project intervention sites to identify appropriate means of improving water supply to target communities, including the potential for boreholes or solar-powered pumps. • Implement appropriate rainwater harvesting and wastewater treatment techniques to supply additional water for crop irrigation. • Design and construct improved water supply infrastructure to improve communities' access to water for domestic use, crop irrigation and livestock and reduce the expansion of agriculture into forests and wetlands. 	300,000
	<p><i>Output 3.5:</i> Community-managed woodlots, away from patches of natural forest, established to provide fuelwood and reduce natural forest degradation.</p>	<ul style="list-style-type: none"> • Train communities on community-based woodlot management, including fire prevention and control, harvesting permits and planned regeneration. • Establish community-managed woodlots to reduce natural forest degradation 	100,000
	<p><i>Output 3.6:</i> Community associations, including alternative livelihood and climate-smart agriculture demonstration sites, established at project sites.</p>	<ul style="list-style-type: none"> • Establish community associations, including representatives from communities outside of the project intervention sites, to share knowledge on climate-smart agricultural techniques and EbA in forests and wetlands. • Establish a demonstration site for each community association that includes examples of climate-smart agricultural techniques, alternative livelihoods and rainwater harvesting. 	300,000

		<ul style="list-style-type: none"> • Host community open days at the demonstration sites. • Design and implement learn-by-doing campaigns through the community associations to increase community awareness of the potential to increase climate resilience and soil fertility through EbA in forests and wetlands. • Provide basic financial management training to communities through the community associations. 	
Component 3: Knowledge and research on EbA and climate resilient livelihoods.			
<p>Outcome 4: Increased knowledge and awareness of government officials and target communities of: i) the ecosystem services provided by forests and wetlands; and ii) the benefits of EbA for increasing the resilience of livelihoods to climate change.</p> <p>LDCF financing: US\$485,000</p> <p>Co-financing: US\$475,000</p>	<p><i>Output 4.1:</i> Knowledge and lessons learned on EbA in Uganda (including lessons learned from other EbA projects) disseminated through an online platform to promote South-South knowledge exchange.</p>	<ul style="list-style-type: none"> • Collate knowledge products, best practices and lessons learned – including the benefits of adaptation interventions and financing mechanisms – from relevant EbA-related projects in Uganda and world-wide. • Design and implement a knowledge management plan and communication strategy to capture, store and disseminate knowledge products generated by the project. • Disseminate knowledge products and lessons learned on EbA in forest and wetland ecosystems through an appropriate online platform. 	85,000
	<p><i>Output 4.2:</i> Awareness-raising campaign conducted on: i) the ecosystem services provided by forests and wetlands; and ii) the benefits of EbA for increasing the resilience of livelihoods and ecosystems to climate change.</p>	<ul style="list-style-type: none"> • Design and implement public awareness programmes on the effects of climate change, the benefits of functional forest and wetland ecosystems, and the benefits of EbA for increasing the resilience of ecosystems and livelihoods to climate change. 	225,000
	<p><i>Output 4.3:</i> Long-term EbA research programme established in relevant national research institution.</p>	<ul style="list-style-type: none"> • Identify appropriate research institutions that will be able to assess the impact of EbA interventions in forest and wetland ecosystems. • Design a research programme, with the selected research institution/s, to scientifically assess the long-term biological, physical and socio-economic impacts of the forest and wetland restoration and other EbA interventions. 	102,858

Appendix 2: Coordination with other GEF and non-GEF projects

The UNDP-GEF project “**Developing an Experimental Methodology for Testing the Effectiveness of Payments for Ecosystem Services to Enhance Conservation in Productive Landscapes in Uganda**”, with which collaboration will be sought during the Project Preparation Phase.

Support to GEF Eligible Parties (LDCs & SIDs) for the Revision of the NBSAPs and Development of Fifth National Report to the CBD - Phase 1 (GEF/UNEP). With the overarching goal of integrating Conservation of Biological Diversity (CBD) Obligations into National Planning Processes through Enabling Activities, the objective of this project is to enable GEF eligible LDCs and SIDs to revise the National Biodiversity Strategies and Action Plans (NBSAPs) and to develop the Fifth National Report to the CBD. The LDCF project will consult this project to collate information on the NBSAPs related to forests and wetlands.

The **Strengthening Sustainable Environment and Natural Resource Management, Climate Change Adaptation and Mitigation in Uganda project** (2011-2014) is a UNDP/WWF/IUCN project. This project is aimed at strengthening efforts of Government of Uganda (GoU) by enhancing sustainable conservation and utilization of natural resources and climate change adaptation and mitigation and strengthen the capacities of institutions (government and Civil Society Organisations) to undertake sustainable environment and natural resources actions. This will be achieved through i) Biodiversity Conservation and Restoration of Degraded Ecosystems; ii) Scaling-up successful SLM models and approaches; and iii) Promoting Climate Change Resilient Development. This project shortens the awareness raising and capacity building curve for the GoU and CSO’s on climate change adaptation and the restoration of degraded ecosystems. The LDCF project will therefore consult these agents to avoid duplication of strategies for awareness raising and capacity building.

The UNDP-GEF “**Strengthening climate information and early warning systems in Africa for climate resilient development and adaptation to climate change**” project (2013 – 2017). This project aims to strengthen the weather, climate and hydrological monitoring capabilities, early warning systems and available information for responding to extreme weather and planning adaptation to climate change in Uganda. In particular, the LDCF project will collaborate with this project when producing updated climate change vulnerability assessments.

The FAO **Global Climate Change Alliance** (GCCA) (2012 – 2016) implemented through the Ministry of Water and Environment and Ministry of Animal Husbandry and Fisheries. This project aims to: i) strengthen the resilience of rural populations and agricultural production in the cattle corridor; and ii) build the capacities of communities, commercial farmers and the GoU to cope with climate change. The LDCF project will build on the capacity development activities the GCCA is undertaking with the Climate Change Department.

Economic assessment of the impacts of climate change in Uganda (2013-2015) implemented by the GoU and funded by the Climate and Development Knowledge Network (CDKN). The project will develop an economic model, disaggregated at the national, sectoral and district levels, to assess the economic impact of climate change on climate-sensitive sectors and areas of the economy. The results of the economic assessment will feed into the decision-making process around budgetary allocations to help direct resources to sectors and districts most at risk to climate change. Knowledge dissemination to decision-makers will be an important aspect to raise awareness of the economic case for investment in climate compatible development policies in Uganda. The LDCF project will benefit from this project by building forth on the strategies for knowledge dissemination to decision-makers and the awareness raised within the GoU to make budget available for climate change programmes.

The AfDB-GEF project “**Building resilience to climate change in the water and sanitation sector**” (2015 – 2018), which aims to build resilience to climate change through the water and sanitation sector in flood- and drought-prone regions of Uganda. Collaboration with this project will be sought during the PPG phase.

The UNIDO-GEF “**Reducing vulnerability of banana producing communities to climate change through banana value added activities**” (2014 – 2018). This project aims to support vulnerable communities in western Uganda to better adapt to the effects of climate change through banana value addition activities, to provide greater

opportunities for income generation, poverty reduction and food security. Lessons learned from this project will be incorporated into the design of the LDCF project.