



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Naoko Ishii
CEO and Chairperson

October 15, 2014

Dear LDCF/SCCF Council Member,

AfDB as the Implementing Agency for the project entitled: ***Uganda: Building Resilience to Climate Change in the Water and Sanitation Sector***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with AfDB procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by the LDCF/SCCF Council in March 2013 and the proposed project remains consistent with the Instrument and LDCF/GEF policies and procedures. The attached explanation prepared by AfDB satisfactorily details how Council's comments have been addressed. I am therefore endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org for your information. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

for Naoko Ishii
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee



REQUEST FOR CEO ENDORSEMENT ¹

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: MULTI-TRUST FUND

For more information about the GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title: Building resilience to climate change in the water and sanitation sector			
Country(ies):	Uganda	GEF Project ID: ¹	5204
GEF Agency(ies):	AfDB	GEF Agency Project ID:	
Other Executing Partner(s):	Department of Climate Change, Ministry of Water and Environment	Submission Date:	19 August 2014
GEF Focal Area (s):	Climate Change	Project Duration (Months)	36
Name of Parent Program (if applicable): For SFM/REDD+ <input type="checkbox"/> For SGP <input type="checkbox"/> For PPP <input type="checkbox"/>		Agency Fee (\$):	795,150

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives*	Expected FA Outcomes**	Expected FA Outputs**	RCE		
			Trust Fund	Grant Amount (\$)	Confirmed Co-financing (\$)
CCA-1	1.2 Reduced vulnerability to climate change in development sectors (water and sanitation)	1.2.1 Vulnerable physical and natural assets strengthened in response to climate change, including climate variability	LDCF	1,950,000	15,375,000
CCA-2	2.2 Strengthened adaptive capacity to reduce risks to climate-induced economic losses	2.2.2 Targeted population groups covered by adequate risk reduction measures	LDCF	2,500,000	12,375,000
CCA-2	2.3 Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	2.3.1 Targeted population groups participating in adaptation and risk reduction awareness activities	LDCF	1,350,000	6,375,000
CCA-3	3.1 Successful demonstration and deployment of relevant adaptation technology in targeted areas	3.1.1 Relevant adaptation technology transferred to targeted groups	LDCF	2,570,000	3,875,000
Total project costs				8,370,000	38,000,000

B. PROJECT FRAMEWORK

Project Objective:	Building resilience to climate change in the water and sanitation sector
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Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
Component 1 Baseline analysis and adaptation alternatives: Flood-prone areas	INV	Outcome 1: - Improved integrity of Uganda's mountain ecosystems;	Output 1.1: Rehabilitation of 500 ha of encroached / degraded forest through taungya and enrichment planting in Mt Elgon NP	LDCF	1,100,000	12,500,000

¹ Project ID number will be assigned by GEFSec.

² Refer to the Focal Area Results Framework and /LDCF/SCCF Framework when completing Table A.

of Mount Elgon		<ul style="list-style-type: none"> - Improved availability and quality of water resources in the Kyoga Water Management Zone; - Lower risk of flooding and landslides in the Mount Elgon region 	<p>Output 1.2: Plantation of 400 ha of indigenous/ environmentally friendly trees, bamboos and grasses along 250 km of stream/ river banks inside and outside the NP</p> <p>Output 1.3: Communities in Bududa, Lerima, Bukwo and Manafwa-Tororo GFS trained, supported and strengthened in the options for conservation of water resources</p>			
Component 2: Ensuring climate-resilient sanitation in flood-prone peri-urban areas	INV	<p>Outcome 2:</p> <ul style="list-style-type: none"> - Increased access to climate-resilient sanitation in flood-prone peri-urban areas - Improved health status and reduction in water-borne diseases in flood-prone peri-urban areas 	<p>Output 2.1: Installation of appropriate sanitation facilities (ecological sanitation, VIP-lined, waterborne) in schools and markets of peri-urban flood-prone areas in (Soroti, Bukedea, Budaka, Pallisa, Kumi, Butaleja)</p> <p>Output 2.2: Community mobilisation and sensitization on sanitation, hygiene and climate change</p>	LDCF	2,200,000	6,500,000
Component 3: Ensuring access to water for production as an adaptation in drought-prone areas	INV	<p>Outcome 3:</p> <ul style="list-style-type: none"> - Improved availability of safe and clean water for domestic consumption in drought-prone areas; - Improved crop production levels through availability of bulk water from existing water sources, rock water catchments, sub-surface dams, valley tanks - Improved livestock farming through improved water availability 	<p>Output 3.1: 900 households in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) provided with domestic rainwater harvesting technology for drought adaptation</p> <p>Output 3.2: 10 communities in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) provided with community rainwater harvesting tanks for drought adaptation</p> <p>Output 3.3 Extension of gravity schemes to Nabweya, Bududa District to increase access to water among drought-prone communities</p> <p>Output 3.4: 9 valley tanks constructed/ de-silted for the storage of community water in Otuke/ Apac/ Katakwi for livestock farming</p> <p>Output 3.5: 10 communities in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) trained in the maintenance and use of water harvesting technology for drought adaptation</p>	LDCF	4,150,000	14,500,000

Component 4: Knowledge Management and Monitoring and Evaluation	TA	Outcome 4: Improved awareness of technologies, measures and practices to increase resilience to climate change in flood- and drought-prone regions	Output 4.1: Empirical analysis of experiences and lessons learned in building resilience in the water and sanitation sector in flood- and drought-prone areas of Uganda	LDCF	520,000	3,000,000
Sub-total					7,970,000	36,500,000
Project management cost ³				LDCF	400,000	1,500,000
Total project costs					8,370,000	38,000,000

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
GEF Agency	African Development Bank (RWSSI)	Grant	3,500,000
GEF Agency	African Development Fund)	Soft Loan	34,500,000
Total Co-financing			38,000,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
Total Grant Resources						

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

² Indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS

Component	GEF Amount (\$)	Cofinancing (\$)	Project Total (\$)
Local consultants	914,600	1,125,000	2,039,600
International consultants	304,900	450,000	754,900

G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT?

No

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

³ Same as footnote #3.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁴

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

N/A

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

N/A

A.3 The GEF Agency's comparative advantage:

N/A

A.4 The baseline project and the problem that it seeks to address:

N/A

A.5 Incremental / Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

No component level or outcome-level changes have been made between the PIF approval and RCE submission. By building on the updated baseline assessment carried out during PPG work, some complementary outputs to and some rewording of the previous outputs presented in the PIF have been added into the project design. These changes are reflected in the Project Results Framework presented in the Project Appraisal Report. The changes from the PIF are as follows:

Under Component 1: Baseline analysis and adaptation alternatives: Flood-prone areas of Mount Elgon

For what was “Output 1.1: Construction of 500 hectares of community-planted indigenous trees for ecosystem-based management of water resources in the catchments of Bududa, Lerima within the Kyoga Water Management Zone” has been split into two outputs – “1.1. Rehabilitation of 500 ha of encroached / degraded forest through taungya and enrichment planting in Mt Elgon NP” and 1.2 “Output 1.2: Plantation of 400 ha of indigenous/ environmentally friendly trees, bamboos and grasses along 250 km of stream/ river banks inside and outside the NP”. This separates better the activities on farmland outside of the National Park and land within the National Park. It also names the type of interventions.

Additionally, for what was “Output 1.3. Communities in Bududa and Lerima trained in the options for conservation of water resources”, two new GFS locations have been added as they are also important for climate resilience of the GFS investments and the description of capacity building has been enhanced.

Under Component 2: Ensuring climate-resilient sanitation in flood-prone peri-urban areas

⁴ For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter “NA” after the respective question

For what was “Output 2.1 Installation of 300 appropriate sanitation facilities (ecological sanitation, VIP-lined, waterbond) in peri-urban flood-prone areas in (Soroti, Bukedea, Budaka, Pallisa, Kumi, Butaleja”, the amount of sanitation facilities to be installed has been reduced from 300. This is because further investigation of the costs per unit of construction have shown that it will only be possible to build 132 installations using project resources (120 in schools and 12 in markets).

For what was “Output 2.2 Strengthened awareness of communities in the same areas of the health impacts of climate change due to water and sanitation (e.g. water-borne diseases and hygiene)”, the output has been changed to add mobilization of the communities rather than just awareness.

Under Component 3: Ensuring access to water for production as an adaptation in drought-prone areas

For all relevant outputs, the district of Nakasongola has been changed to the district of Otuke due to the fact that additional climate resilience efforts are taking place in Nakasongola. Additionally, the community of Nabweya in Bududa District has been added to the activities and outputs. Nabweya has also been specified as the location where the extension of gravity schemes will take place.

For what was “Output 3.1: 800 households in Nakasongola/Apac/Katakwi districts provided with domestic rainwater harvesting technology for drought adaptation”, the amount of households has been increased to 900 to reflect the additional community added and level of priority of the measure.

For what was “Output 3.5: 10 valley tanks provided for the storage of community rainwater harvesting in Nakasongola/ Apac/ Katakwi for livestock farming”, reflecting Government and budget priorities, the number of valley tanks has been reduced to 9.

Additional detail on Project Activities for Components 1, 2, and 3

As a result of project preparation activities, additional detail has been developed in describing the additional activities requested for LDCF financing and the associated adaptation benefits to be delivered by the project. They are described in detail below:

Component 1 Baseline analysis and adaptation alternatives: Flood-prone areas of Mount Elgon

As noted in the PIF, the Mount Elgon region forms one of Uganda’s mountain ecosystems. Human pressures on the land and demand for wood has led to deforestation and resulting slope instability. In case of floods, which are projected to increase under climate change, the unstable slopes are prone to landslides which threaten the ecosystem, reduce water quality (and alter availability), and threaten surrounding settlements.

Baseline investment:

The baseline investment for Component 1 is four Gravity Flow Schemes (GFS) which intake water from the upper catchments where the LDCF investments will occur.

Additional adaptation measures using LDCF resources:

The additional LDCF resources will make the baseline investment into the GFS climate resilient by safeguarding the quality and quantity of water entering the Scheme intakes. Although located within the Mt Elgon National Park, and therefore – in principle – protected, the sub-catchments of three of the four GFS have been seriously degraded through the illegal encroachment of cultivators seeking more (and more fertile) land.

Activities under this Component, therefore, take a dual approach: 1) re-establishing forest cover in the affected sub-catchments to reduce the siltation load of water entering the GFS; and 2) working with the farming communities outside the National Park to improve their agricultural productivity and livelihoods, which should reduce the pressure for further encroachment. These interventions should also help to protect the GFS infrastructure and distribution-pipe network from landslides.

Additionally, the project allocates resources for fuel efficient stoves to reduce demand for fuel wood which is one of the main drivers for deforestation inside and outside the National Park.

By working closely with the Uganda Wildlife Authority to implement ‘taungya’ (an agroforestry system which enables crops and trees to be grown together in the early stages of establishment), the medium-term plan is that the illegal cultivators will move out of the National Park. This Component also promotes awareness within communities of the importance of protecting watersheds. This will include the establishment and support of watershed management committees (in line with the MWE’s Framework and Guidelines for Water Source Protection) and collaborative forest management groups.

How these measures will be integrated into and scaled up through the baseline programme:

Lessons learned and knowledge gained will be integrated into other relevant GFS which may be invested in. Additionally, the success of this project will serve as a replicable model for protection of forest resources throughout this area and in others.

Specific activities to be implemented within this Component include:

Output 1.1: Rehabilitation of 500 ha of encroached / degraded forest through taungya and enrichment planting in Mt Elgon NP

- Design and choosing of specific sites for implementation and implementation supervision as well as sensitization of farmers and encroachers
- Re-establishment of forest cover in the catchments above the GFS intakes
- Use enrichment planting to re-establish forest cover in other areas (previously encroached)

Output 1.2: Plantation of 400 ha of indigenous/ environmentally friendly trees, bamboos and grasses along 250 km of stream/ river banks inside and outside the NP

- Design and choosing of specific sites for implementation and implementation supervision as well as sensitization of farmers and encroachers
- Restore river- and stream-bank vegetation with trees, grass strips
- Soil and water conservation integrated with introduction of high value crops/ improved varieties

Output 1.3: Communities in Bududa, Lerima, Bukwo and Manafwa-Tororo GFS trained, supported and strengthened in the options for conservation of water resources

- Establish collaborative forest management arrangements between UWA and the National Park-adjacent communities
- Promotion of ‘climate-smart’ agriculture and agroforestry
- Raising community awareness of the benefits of catchment protection
- Strengthening existing / establish environmental protection structures at district- and community-level
- Promoting household-level improved cook stove technologies to reduce stress on forests
- Exchange visits to Collaborative Forest Management Projects
- Support local Governments to integrate climate-resilient watershed catchment protection into environmental protection by-laws, in District Development Plans (DDPs), District Coordination Committee meetings and national environment and natural resources management events
- Support FSSD coordination and technical backstopping (Joint planning, coordination, monitoring and supervision)
- Support District Local Governments coordination and technical backstopping

Component 2: Ensuring climate-resilient sanitation in flood-prone peri-urban areas

As noted in the PIF, flooding causes problems for people in the densely populated peri-urban areas. Inadequate, or non-climate-proofed, sanitation in these low-lying areas is compromised in

times of flood, increasing the prevalence of hygiene-related diseases. The sanitation facilities are overtaken by water causing environmental damage, unsanitary conditions, and destruction of the facilities. In particular, this is a problem in schools where children (especially girls) even quit their education due to lack of climate-resilient, gender-appropriate sanitation facilities. This problem is also very evident in public places – especially markets.

Baseline investment:

The baseline investment involves support to rural water and sanitation in Local Governments including schools and marketplaces within other districts. These investments include various sanitation schemes, but do not include climate-resiliency into their feasibility studies and construction methods.

Additional adaptation measures using LCDF resources:

The LCDF resources will go towards investing in climate-resilient sanitation technology which will not be compromised by changing subterranean water levels and will be flood-resilient. The LCDF resources will go toward the additional cost of installing 132 climate-resilient sanitation facilities in peri-urban flood-prone communities in Soroti, Bukedea, Budaka, Pallisa, Kumi and Butaleja districts, in order to reduce the vulnerability of physical infrastructure to climate change, and to deploy relevant adaptation technologies. These best practices as promoted using LCDF funds will allow for replication of the use of climate-resilient technologies in sanitation through the rest of the baseline project's investments in community and school-based toilets. Knowledge-sharing and awareness raising outside of the target areas will take place as a part of Component 4 – where information on project successes will be shared with various stakeholders.

Before construction, the LCDF resources will allow for an appropriate design, including a geo-technology review and site assessment to document best sanitation technologies for the flood-prone peri-urban areas considering soil type and hydrogeological analyses (e.g., lined drainable pit latrines, impermeable septic tanks). A feasibility study on using Ecosan in the target communities will also be conducted. Designs will consider gender, handicapped and religious sensitive latrines suitable for different peri-urban areas. It is estimated that 20 additional climate-resilient toilets in schools for each district (a total of 120) as well as 2 climate-resilient toilets in markets (a total of 12) will be installed.

Each toilet will include:

- Septic tanks/ cess pools as required;
- Odor-absorbing trees planted around the latrines;
- Sand bags and watertight covers for sanitation facilities to prevent contamination as a result of flooding;
- 5,000 litre rainwater harvesting tanks to provide for water availability for handwashing.

For markets, each toilet stance will have 2 toilets for females, a unit for disabled persons, one toilet unit for men and a urinal that can accommodate up to 6 people.

Furthermore, appropriate signage for awareness raising of hygiene issues will be developed for the toilets in the markets. Templates for signage advertising the existence and use of latrines will be developed for markets and schools. When lined pits fill up a pit will be dug and covered after disposal of sludge. The use of untreated faecal sludge will be avoided.

As part of the component, targeted population groups – in particular local masons, district governments, local Sanitation Committees and schools – will gain strengthened knowledge and ownership of adaptation and risk reduction processes at the local level through training. The training interventions will vary according to the target group as described in the activities below.

Awareness building and training will include community knowledge exchange with communities in South-western Uganda and Rwanda where Ecosan (for example) has been successful. Training will include building capacity of local Sanitation Committees on the roles and responsibilities for managing, operating and maintaining climate-resilient sanitation facilities. Sensitization for communities and schools will take place before, during and after construction. Political and religious leaders (CAO, LC) will also be trained on how to embrace and promote climate-resilient WASH interventions.

How these measures will be integrated into and scaled up through the baseline programme:

The LDCF-funded activities will demonstrate sustainable, climate-resilient latrines that can be used by communities within the districts directly impacted by the project and potentially beyond. Communities which are not directly impacted by the investment will be invited to take part in workshops/trainings and they will also see the climate-resilient sanitation facilities as part of the market-places. This, combined with knowledge management within the baseline programme, will allow for scaling up of climate resilient sanitation facilities.

Specific activities to be implemented within this Component include:

Output 2.1: Installation of appropriate sanitation facilities (ecological sanitation, VIP-lined, waterborne) in schools and markets of peri-urban flood-prone areas in (Soroti, Bukedea, Budaka, Pallisa, Kumi, Butaleja)

- Design and construction supervision (study soil types and establish suitable technology options including Ecosan)
- Construction of sanitation facilities in primary schools; gender segregated climate change resilient sanitation latrines with rainwater harvesting tanks for (lined pits, flush toilets, Ecosan, sandbags, etc.)
- Construction of sanitation facilities in markets and public places; gender segregated climate change resilient sanitation latrines with rainwater harvesting tanks for handwashing (lined pits, flush toilets, sandbags, etc.) and good signage-

Output 2.2: Community mobilisation and sensitization on sanitation, hygiene and climate change

- Training for 30 masons (5 in each district) on climate-resilient latrine construction
- Production of Information, Education and Communication (IEC) material for climate resilient sanitation
- Support/establish and train WASH Structures (NGOs/CBOs, SCLTS focal points, Village Health Teams) to sensitise communities and schools on climate-resilient sanitation and hygiene practices including exchange visits-
- Support school sanitation clubs for further integration of hygiene sanitation and climate change awareness in schools
- Support local Governments to integrate climate-resilient sanitation promotion into sanitation by-laws, in District Development Plans (DDPs), District Coordination Committee meetings and national sanitation events

Component 3: Ensuring access to water for production as an adaptation in drought-prone areas as well as areas in the districts that also experience floods

As noted in the PIF, many areas in Uganda are drought-prone, and climate change threatens to exacerbate the existing situation of regular water shortages for domestic use and for both livestock and crop farming. The lack of water for household use and for production leads to significant hardship. Investments to increase the climate resiliency of water supplies are necessary to ensure that water supplies are not vulnerable to exhaustion due to continued and increased climate shocks.

Baseline investment:

The baseline investment being undertaken is the Construction of the rural water facilities – including water delivery systems. This includes investments in GFS and other water delivery schemes throughout the region.

Additional adaptation measures using LDCF resources:

This investment is being climate-proofed by ensuring that water resources are available in times of drought through a series of 4 measures to increase water availability during the dry seasons which will also increase resiliency to droughts which are expected to be increased in intensity under climate change.

LDCF resources will specifically go towards:

1. **Household and community rainwater harvesters:** In 10 communities, 900 household level rainwater harvesters will be installed. Additionally (potentially in different communities) a total of 20 community rainwater harvesting tanks – 2 per community – will be provided for communal use. These investments are additional to the baseline in that they diversify sources of water for periods of drought – reducing pressure on wells, river runoff, etc.
2. **A gravity flow scheme:** This will involve the use of LDCF resources to augment AfDB funds to bring a gravity flow scheme to an area particularly at-risk due to climate - Nabweya within the Bududa District. This investment is additional in that it builds on resources already planned for investment in GFS schemes allowing a particularly climate-vulnerable area to have water resources available during dry periods and droughts.
3. **Construction or desilting of valley tanks:** A number of valley tanks which were constructed over 20 years ago have become silted. Additionally, there is scope for new valley tanks of ~10,000 m3 capacity. This measure will involve either be constructed or desilted – depending upon the specific needs of the community and benefits to the communities versus the expense. The additionality of these valley tanks is that – like the rainwater harvesters – they will diversify water resources for dry periods – providing capacity for the storage of community rainwater. The valley tanks will provide water for households as well as water to be used for agricultural purposes (livestock and crops).

Appropriate training will be provided for masons and for women’s groups in the construction, maintenance and use of the technology. At least 30 masons and an additional 40 people will be trained. Additionally, it is at least District Technical Support Unit personnel and existing NGOs will be trained on maintenance and proper community-based O&M schemes for the investments. Finally, local Governments will be assisted in integrating climate change adaptation programmes into agricultural production by-laws, District Development Plans (DDPs), District Coordination Committee meetings and national agricultural events.

Reducing drought risks and improving production will, in turn, reduce the likelihood of people in drought-prone areas from engaging in deforestation and other unsustainable land use practices in order to secure their livelihoods.

How these measures will be integrated into and scaled up through the baseline programme:

These measures will be integrated into the baseline programme by demonstrating how climate considerations can feed into the decision-making for investments into diversified water resources for households and communities. Furthermore, the knowledge gained from the implementation of the component will be used for the planning and implementation other community-level investments in the baseline programme.

Specific activities to be implemented within this Component include:

Output 3.1: 900 households in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) provided with domestic rainwater harvesting technology for drought adaptation

- Choosing of households and communities, engineering design and construction supervision
- Installation of technology amongst 900 households

Output 3.2: 10 communities in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) provided with community rainwater harvesting tanks for drought adaptation

- Installation of the technology at 20 sites

Output 3.3 Extension of gravity schemes to Nabweya, Bududa District to increase access to water among drought-prone communities

- Construction of the extension of the water scheme

Output 3.4: 9 valley tanks constructed/ de-silted for the storage of community water in Otuke/ Apac/ Katakwi for livestock farming

- Engineering design and construction/ de-silting supervision
- Construction/ de-silting of valley tanks

Output 3.5: 10 communities in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) trained in the maintenance and use of water harvesting technology for drought adaptation

- Training for 30 masons (7 or 8 in each district) on climate-resilient O & M.
- Training of District Technical Support Unit personnel and existing NGOs
- Production and distribution of Information, Education and Communication (IEC) material for O & M of climate resilient water harvesting technology
- Training of women groups in construction of ferro-cement tanks
- Support local Governments to integrate climate change adaptation programmes into agricultural production by-laws, District Development Plans (DDPs), District Coordination Committee meetings and national agricultural events

Component 4: Knowledge Management and Monitoring and Evaluation

This Component's activities are described in more detail in Section II.C.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

The project risks have been altered to become much more specific in their analysis of risks based on measures to be implemented in the project. They are described below.

Risk	Mitigation Measure
Delays or diminished political commitment may result in the deterioration of the service levels in the sector	Effective monitoring and policy dialogue between Development Partners and the GoU will ensure commitment to on-going policy implementation is sustained as relates to, for example, protection of water catchment areas, improved sanitation schemes that are sustainable, and the continued climate-proofing of water resources.
Investments jeopardized by an unanticipated increase in the frequency of flood events and continued drought.	This risk is common to all project interventions. Project investments will be climate-proofed in terms of their locations, designs and capture capacities so as to be able to withstand forecast future climate stresses. A detailed technical feasibility study will guide the choice of climate-resilient latrines to be built.
Cultivators in the national forests will not move out after the expiry of the taungya-cultivation agreement between them and UWA.	This will be mitigated by investments in livelihood diversification (such as sustainable, high-value agroforestry) and the establishment of community-based forest management structures.
Lack of community and farmer buy-in for private land	Sensitization activities will take place upon project inception before planting occurs. The project will also cover initial planting

investments on stream/river banks	expenses (seedlings) to encourage the interventions.
Theft of latrine and rainwater harvesting equipment.	Construct robust facilities to deter theft. Participation of local communities via software activities and encouraging a sense of ownership will also serve to reduce theft risks.
Lack of community and political buy-in for sanitation interventions	Awareness raising will be carried out with various stakeholders (including local governments) about WASH and how it affects health and income/revenue
Lack of incentives put in place for effective O & M	O & M will be encouraged to be incorporated also into schools and Districts budgeting process
Lack of technical ability of those implementing long-term O & M	Training of masons and artisans and inclusion of them in the construction process will take place.
Works associated with water mobilization and retention infrastructures lead to unanticipated environmental impacts	Environmental and Social Impact Assessments will probably be applied before construction, providing a thorough analysis of possible environmental impacts of interventions, and their associated best management practices and mitigation strategies. AfDB's EIA screening procedure was also applied during project preparation.

A.7 Coordination with other relevant GEF financed initiatives

N/A

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

Stakeholders will be engaged in project implementation in a variety of ways. At the national level, the project takes place as a part of the broader WSSP. National-level stakeholders will be engaged via the following coordination mechanisms:

- Uganda's donor coordination mechanism is composed at the high level by the Local Development Partner Group, which brings on board all heads of development agencies and over 25 diverse macro and thematic sector working groups that meet regularly on a broad spectrum of national issues.
- The Water and Environment Sector Working Group (WESWG) is the formal decision-making body on water supply, sanitation and environment related issues. The working group meets at least four times a year and is supported by two sub sector working groups: (i) the Water and Sanitation Sub-Sector Working Group (WSSWG) and (ii) the Environment and Natural Resources Sub-Sector Working Group (ENRSWG). The sub sector working groups meet quarterly. Each Subsector working group has a supporting Development Partner Working Group which meets on monthly basis (WSSDPG). The Bank led the WSSDPG during 2011/2012.

The Ministry of Water and Environment will be implementing the project, with the following key departments and local partners involved in each component. The Project's implementation arrangements are described in the Project Appraisal Report.

The Water Liaison Division will handle overall coordination of the project. The WSSWG which has full representation of all relevant departments, Advisors and NGOs will provide strategic input as needed as an Advisory Group.

Specific plans for component-level involvement of stakeholders are described below. It should be noted that gender issues will be main-streamed into this involvement, ensuring that women are highly represented amongst all stakeholders engaged.

Component 1 activities will be implemented by the MWE Forest Sector Support Department coordinating with the Uganda Wildlife Authority, District Local governments, and the Kyoga Water Management Zone (KWMZ) Office. Local stakeholders and how they will be involved will include:

- Farmers within the national park who will be involved in taungya tree planting activities and farmers outside of the national park who will be trained in climate resilient agricultural practices;
- Local citizens, farmers, etc. who will be involved in community catchment protection groups and forest co-management groups to be established, as well as trained in water conservation / catchment protection.
- Local Governments who will be assisted in integrating climate-resilient watershed catchment protection into environmental protection by-laws, in District Development Plans (DDPs), District Coordination Committee meetings and national environment and natural resources management events.

Component 2 activities will be implemented by the Division of Sanitation within the MWE jointly planned with the Districts. Local stakeholders and how they will be involved will include:

- Masons will be trained on the construction and O&M of sanitation facilities.
- NGOs/CBOs, School Community Leadership Team (SCLT) focal points, Village Health Teams, etc. will be supported and trained to sensitise communities and schools on climate-resilient sanitation and hygiene practices including exchange visits.
- School sanitation clubs will be supported for further integration of hygiene sanitation and climate change awareness in schools.
- Local Governments will be supported to integrate climate-resilient sanitation promotion into sanitation by-laws, in District Development Plans (DDPs), District Coordination Committee meetings and national sanitation events.

Component 3 activities will be implemented by the Rural Department and Water for Production Department under the Directorate of Water Development (DWD). Local stakeholders and how they will be involved include:

- Masons will be trained on the climate-resilient construction and O&M of rainwater harvesting and valley tank technologies.
- District Technical Support Unit personnel and existing NGOs will also be trained on O&M of the technologies.
- Women's groups will be trained in the construction of ferro-cement tanks.
- Local Governments will be supported to integrate climate change adaptation programmes into agricultural production by-laws, District Development Plans (DDPs), District Coordination Committee meetings and national agricultural events

Component 4 activities will be implemented by the Department of Climate change DCC. As part of this component, at least 6 workshops will be held to engage stakeholders, inform them of progress from the project, lessons learned, and to obtain feedback on activities and potential for scaling up activities.

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCE/SCCF):

Socioeconomic benefits from the project are expected to impact over 695,000 people regarding access to water and sanitation – including a focus on incorporating gender dimensions into these benefits.

Gender dimensions:

From a gender viewpoint, women and girls are the major water collectors, users and managers in homes. They are also the major promoters of sanitation activities at household and community levels. They bear the impact of inadequate, deficient or inappropriate water and sanitation services. Men still dominate the arena of planning and decision making regarding water and sanitation development. Women's views are often under-represented, implying that women's practical and strategic needs are not addressed.

To help in securing inclusive representation of the needs and interest of all stakeholders, including women, the MWE developed a Water and Sanitation Gender Strategy (2010 – 2015) as well as policies to promote a pro-poor development within an overall poverty reduction and equity promotion theme. The project will be aligned with these strategies and is expected to have the following positive gender impacts:

- Related to agroforestry, women headed families will be targeted to get at least 40% women involvement;
- Related to sanitation facilities, the project's focus on schools will likely reduce the number of girls dropping out of school due to lack of appropriate sanitation facilities. There will be separate facilities for the girls with a bathroom to provide for menstrual issues. Additionally, sanitation facilities in markets will be gender-sensitive;
- Related to climate-resilient water resources, the project will help to free women and girls of the burden of having to spend a lot of their time collecting and carrying water in the dry season often from sources distant from their houses. This reduction in burden allows women and girls time for other activities including furthering their education and participating in income generating activities.

Numerous indicators will be evaluated in a gender-disaggregated manner as outlined in the project results framework.

Social dimensions:

Other positive benefits pertain to social issues – particularly related to health. The project will have significant strategic benefits in reducing the burden on health care services as diseases will be reduced.

Related to employment, the use of appropriate labour intensive methods for some of the construction project (e.g. excavation for pipelines) will present employment opportunities for local people (including women and youth) and generate direct income benefits to local households.

B.3. Explain how cost-effectiveness is reflected in the project design:

Cost-effectiveness is reflected in the project design in a number of ways. It is worth noting that through careful project development, it has been possible to increase the targets for most of the investments planned from the PIF stage.

- For Component 1, the project will involve local communities, farmers, and taungya contracting to ensure lower per hectare costs than would be the case if a company was simply hired to plant trees. An estimated 18,000 people will benefit directly from project interventions with approximately 250,000 people benefiting downstream from the increased climate-resilience of the baseline GFS investments.
- For Component 2, the project will involve local communities, NGOs, schools, etc. to raise awareness and ensure appropriate O&M of facilities. Additionally, this component is

expected to have a positive impact on an estimated 400,000 people for a small incremental LDCF investment of only USD 2.2 million.

- For Component 3, the rainwater harvesters will be implemented at a scale to allow easy replicability and lower per-unit prices. Additionally, the plan for valley tanks will allow for either desilting or new construction, whichever is more cost-effective. For the gravity flow scheme, the project is cost-effective in that it acts to augment investment under the WSSP to diversify resources to a community at risk for climate impacts. It is estimated that this component will improve access to drinking water for ~29,000 people along with water for agricultural production (livestock and crops).

A number of alternatives were considered for project interventions which are described below along with the reasons they were not chosen. These are described below:

Technical solutions retained are based on existing options for improving the climate-resiliency of water sources and are known and implemented within Uganda. A list of the technical solutions, primary alternatives explored, and the reasons for rejection of those alternatives are as follows:

Component 1:

1.1. Technical solution retained: Reforestation of encroached/ degraded forest through taungya planting

- **Alternative explored:** Forceful eviction of encroachers - In addition to forceful eviction of encroachers, this would involve strict prevention of re-entry; and then use of hired labour to plant trees.
- **Reasons for rejection**
 - This approach seldom works.
 - Not acceptable politically (or morally).
 - Existing Court injunction currently prevents any such action at site near Lirima GFS and Manafwa-Tororo GFS.
 - Using hired labour Three times as expensive, as labour will need to be hired, and possibly transported to planting sites daily.

1.2. Technical solution retained: Planting of indigenous trees, bamboos and grasses along stream/river banks

- **Alternative explored:** Legal ban on cultivation within 100m of stream lines until regeneration takes its course. This would involve strict enforcement of legal ban on cultivation within 100m of stream lines until regeneration take its course
- **Reasons for rejection:**
 - Already gone too far to reverse.
 - Some farms lie fully within the 100 m zone.
 - Natural regeneration would take longer.

1.3. Technical solution retained: Use of efficient stoves for cooking

- **Alternative explored:** Business as usual - Continued inefficient stoves used for cooking.
- **Reasons for rejection:**
 - Cutting fuelwood is one of the main drivers of deforestation inside and outside the NP.
 - Reducing the amount required will contribute to better forest outcomes.

Component 2:

2.1. Technical solution retained: Installation of climate-resilient, gender-appropriate sanitation facilities in schools and markets

- **Alternative explored:** Use of only one technology for latrines to decrease per-unit costs
- **Reasons for rejection:**

- This would involve a rigid application of only one type of technology for all the latrines to be set up – such as Ecosan, pit latrines, or other.
- The appropriate technology depends upon the circumstances (e.g. Ecosan would not work in markets).
- Existing standard designs usually lack sensitivity to gender and religious values.
- Handwashing, odour control, etc. may not be included in all designs.

Component 3:

3.1. Technical solution retained: Installation of community and household-level rainwater harvesters.

- **Alternative explored:** Gravity Flow Schemes (Otuke/ Apac/Katakwi) - A gravity-fed supply from a small upland river, stream or spring, impounded within a protected catchment, is an example of a sustainable water supply technology requiring little-to-no treatment.
- **Reasons for rejection:**
 - GFS requires terrain with a reasonable slope for water to flow due to gravity. Some of the sites have no slope that would allow water to flow in.

3.2. Technical solution retained: Extension of gravity water scheme

- **Alternative explored:** Construction of Valley Dams (Bududa (Nabweya) and Otuke/ Apac/Katakwi)
- **Reasons for rejection:**
 - A valley dam is formed essentially by construction of an earth dam across a valley by joining points along the same contour line or altitude above sea level, thereby impounding the surface run-off and creating a large storage reservoir.
 - Sedimentation problems arising from the degradation of catchment areas fuelled by four pressure indicators namely agricultural production, rapid population growth, poverty and wood energy demands.
 - Inappropriate runoff estimation methods can result in over sizing or under-sizing of dams.
 - There are unreliable spillway flood estimation methods.

3.3. Technical solution retained: Construction and desilting of existing Valley Tanks

- **Alternative explored:** Building of only new Valley Tanks (Otuke/ Apac/Katakwi)
- **Reasons for rejection:**
 - This would involve either the abandonment or deconstruction of existing Valley Tanks and building of new ones. It is expected to be more cost effective to rehabilitate/desilt existing Valley Tanks in many cases.
 - Since the sites already exist, there are less issues with location decisions, expediting the process.

C. DESCRIBE THE BUDGETED M&E PLAN:

Component 4 of the project is focused on supporting Knowledge Management (KM) and Monitoring and Evaluation (M&E) of the project. The following approach for KM and M&E will be used to build awareness of technologies, measures and practices to increase resilience to climate change in flood- and drought-prone regions. The mechanisms described below will enable empirical analysis of experiences and lessons learned in building resilience in the water and sanitation sector in flood- and drought-prone areas of Uganda. In accordance with Stakeholder discussions, LDCF funds for M&E will be channeled through Uganda's Joint Partnership Fund (JPF).⁵ The following M&E process adheres to that of the JPF.

⁵ Funds transfers will take place in annual tranches to the JPF account based on annual workplans

A detailed budget for this component and the M&E plan is provided in **Annex F**.

The LDCF financed project will make use of the existing Department of Climate Change's (DCC) M&E system. The DCC will be responsible for KM and have the overall responsibility for monitoring the implementation of the project. They will be tasked with:

- Collecting and disseminating project information for all components to support M&E;
- Documenting and conducting empirical analyses of experiences and lessons learned;
- Supporting networking within and in between components (During training neighbouring communities should be encouraged to take part in the training if possible. This accelerates the spread of technologies);
- Developing informational materials for distribution; and
- Updating the project website.

Knowledge Management (KM) Activities:

A mechanism designed to capture knowledge has been put in place by the DCC and data and information is collected on a regular basis on environmentally-related activities. The MWE will also ensure that the Rural and Urban Database annually captures the hydro-geological data and related information on all new and rehabilitated facilities under the project to facilitate assessment of progress and input in the next Water ATLAS.

Explicit emphasis will be placed on knowledge management, vested within the DCC, to ensure that lessons learned from the implementation of this project are available for application to other adaptation projects. A knowledge management product establishing the lessons learned, results, etc. of the project will also be developed which will allow for the knowledge gained during the project to be shared both during and after the project. There will be a two-way flow of information between this project and other projects of a similar focus.

Results and lessons learned from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums. These include via channels such as the Water and Environment Sector Working Group and its sub-group the Water and Sanitation Sub-Sector Working Group. Furthermore, workshops, trainings, and consultations that are held with beneficiaries and District-level Government institutions will provide excellent fora for dissemination of results, information on project activities, and lessons learned. The updated website will also serve this purpose.

The DCC's Information Management System and Performance Measurement Framework will be updated on an annual basis. The knowledge stored in the MWE's database and in the DCC's IMS will assist the environment and natural resources sub-sector in achieving sustainable management of water resources and best sanitation practices. Lessons learned will support MWE to replicate the good practices in other zones of the country.

When relevant, the project will identify and participate in scientific, policy-based roundtables as well as any other networks that may benefit project implementation through lessons learned. Likewise, the project will identify, analyse, and share lessons learned that might be beneficial in the design and implementation of similar future projects.

M&E Activities:

The project will be monitored through the following Monitoring and Evaluation (M&E) activities. The M&E framework set out in the Project Results Framework in Annex A of this Request for CEO Endorsement is aligned with the AMAT tool.

In order to improve local ownership for all components of the project, the management of M&E at the activity level will be vested with the appropriate District-level institutions.

- For Component 1, the Kyoga Water Management Zone Office will play a key role in managing and monitoring project interventions.
- For Component 2, the Village Health Teams will be supported to continue M&E of WASH interventions in each district. They will also be responsible for recording lessons learned.
- Finally, for Component 3, the Rural Department representatives under the MWE will monitor the progress of the project.

Project start: A Project Inception Workshop will be held within the first two months of project start with those with assigned roles in the project organization structure, AfDB country office and, where appropriate/feasible, regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership of the project results and to planning the first year's Annual Work Plan.

The **Project Launch** should address a number of key issues including:

- Assist all partners to fully understand and take ownership of the project: detail the roles, support services and complementary responsibilities of the AfDB Country Office vis-à-vis the project team; discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms; discuss the Terms of Reference for project staff again as needed.
- Based on the Project Results Framework set out in the Project Results Framework in Annex A of this request for CEO Endorsement and the LDCF related AMAT: finalize the first Annual Work Plan; review and agree on the indicators, targets and their means of verification; and recheck assumptions and risks.
- Provide a detailed overview of reporting, M&E requirements: agree on and schedule the M&E Work Plan and budget.
- Discuss financial reporting procedures, obligations, and arrangements for annual audits.

Baseline: A consultancy will be contracted to conduct a baseline study during the first year of project implementation to:

- Refine the M&E Framework;
- Develop a strong Performance Measurement Framework;
- Collect baseline data regarding selected indicators; and
- Define roles and responsibilities in conducting monitoring activities throughout the lifespan of the project.

This study will also lead to the development of a specific M&E Manual.

As per the ESMP, the impact of project interventions on the current revenues of the project beneficiaries must be documented. The DCC will also have the responsibility of overall coordination and management of the baseline study. The Ministry of Water and Environment (MWE), acting as the executing agency, will be responsible for creating the Terms of Reference for baseline studies and outsourcing of these studies – involving specific departments where necessary.

Quarterly: To align with the WSSP baseline project, the DCC will compile and submit to the MWE quarterly progress reports. The reports will include an update to the work plans. Quarterly reporting will be done via the Joint Partnership Fund (JPF) reporting system.

Based on the initial risk analysis submitted in the Request for CEO Endorsement and Project Appraisal Document, the risk log shall be regularly updated, at least quarterly. Risks become critical when the impact and probability are high.

Annually: The Annual Project Review (APR) is a key report and will be prepared to monitor progress made since project start and, in particular, for the previous reporting period. Annual reporting will be done via the Joint Partnership Fund (JPF) reporting system.

The APR will include, but will not be limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative);
- Project outputs delivered per project outcome (annual);
- Lessons learned/best practices;
- Annual Work Plan and other expenditure reports; and
- Risk and adaptive management.

The APRs must be aligned with the annual audit arrangements by the Office of the Auditor General. Through these arrangements, the Office of Internal Control system of MWE is responsible for conducting internal audits annually. To remove redundancies and maximise resources, the APRs and annual audits will be synchronized.

Periodic Monitoring through site visits: The DCC will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Members of the Water and Sanitation Sub-Sector Working Group (WSSWG) and/or the Environment and Natural Resources Sub-Sector Working Group (ENRSWG) may also join these visits. A Field Visit Report will be prepared by the DCC and will be circulated to the project team and PSC members no less than one month after the visit.

Mid-term of project cycle: The project will undergo a Mid-Term Review at the mid-point of project implementation (expected to be in April 2017). The Mid-Term Review will determine progress being made toward the achievement of outcomes and will identify course corrections if needed. It will focus on the effectiveness, efficiency, and timeliness of project implementation; highlight issues requiring decisions and actions; and present initial lessons learned about project design, implementation and management. The Review will include extensive consultations with Stakeholders. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the Mid-Term Review will be decided after consultation between the parties of the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the MWE and the format of the report will be agreed upon between AfDB and MWE. The LDCF/SCCF AMAT will also be completed during the mid-term evaluation cycle.

The Mid-Term Review will account for the findings compiled in AfDB's Implementation Progress and Results Reports (IPRs) which are conducted during two annual supervision missions. The IPRs are used as a rating tool to monitor results in-line with the Results Framework, emphasizing Output and Outcome indicators.

End of Project: Upon disbursement of 85% of the project's funds, the MWE (DCC) will start the preparation of a Project Completion Report (PCR) to be submitted to the bank for approval. As part of developing this Report, a Terminal Evaluation will take place three months prior to the final closure of the project. The Terminal Evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the Mid-Term Review, if any such correction took place). The Terminal Evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terminal Evaluation will also provide recommendations for follow-up activities and will indicate appropriate management responses. The Terms of Reference for this evaluation will be prepared by the MWE. Findings from the Terminal Evaluation will be incorporated into the Project Completion Report (PCR). The DCC will have the responsibility of preparing the report and submitting the PCR to the MWE & AfDB.

Environment and Social Management Plan Monitoring

The DCC will furthermore supervise the implementation of Environmental and Social Management Plans in each site. The Plans will be used to enforce compliance and mainstreaming of social and environmental safeguards for all project interventions on-the-ground. Monitoring and Evaluation will be guided by the approved Environmental and Social Management Plans.

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

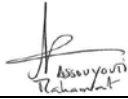
A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):

(Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for CEO endorsement/approval of Project.

AGENCY COORDINATOR, AGENCY NAME	SIGNATURE	DATE (MONTH, DAY, YEAR)	PROJECT CONTACT PERSON	TELEPHONE	EMAIL ADDRESS
ASSOUYOUTI, Mahamat		19.08.2014	MBIRO, ANDREW		A.MBIRO@AFDB.ORG

ANNEX A: PROJECT RESULTS FRAMEWORK

(Either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

The following results framework reflects that which is in the Project Appraisal Report.

Results chain	Performance indicators				Means of verification	Risks/mitigation measures	
	Indicator (including CSI)	Baseline		Target			
Outcome 1: - Improved integrity of Uganda's mountain ecosystems; - Improved availability and quality of water resources in the Kyoga Water Management Zone; - Lower risk of flooding and landslides in the Mount Elgon region	Surface of Forest protected, reforested or rehabilitated (ha) (CSI and to be input for AMAT 2.3.1.1)	0		+ 900		UWA records and reports Reports from MWE KWMZ Office / District Local Government Technical team in Bududa, Manafwa and Bukwo	Risk: Delays or diminished political commitment may result in the deterioration of the service levels in the sector Mitigation measure: Effective monitoring and policy dialogue between Development Partners and the GoU. Risk: Investments jeopardized by an unanticipated increase in the frequency of flood events and continued drought. Mitigation Measure: Project investments climate-proofed by locations, designs and ability to handle climate stress. A detailed technical feasibility study will guide the choice of climate-resilient investments to be built.
	<u>% of population covered by risk reduction measures which mitigate the impacts of flooding and landslides (% male, % female) (AMAT 2.2.2.1)</u>	<u>0% male</u> <u>0% female</u>		<u>80% male</u> <u>60 female</u>			
Outcome 2: - Increased access to climate-resilient sanitation in flood-prone peri-urban areas - Improved health status and reduction in water-borne diseases in flood-prone peri-urban areas	People with access to improved sanitation, of which are female (CSI, - equivalent to AMAT 1.2.3, and Golden Indicator 8, Feed-in to Golden Indicator 4.1 - rural)	Total	Female	Total	Female	Uganda Bureau of Statistics MWE records on sanitation activities M&E records by the CC Unit and The District Water and Sanitation Committees	Risk: Cultivators will not move out after the expiry of the taungya-cultivation agreement between them and UWA. Mitigation measure: Investments in livelihood diversification & establishment of community-based forest management structures Risk: Lack of community and farmer buy-in for private land investments Mitigation measure: Sensitization activities along with initial planting expenses (seedlings) covered
	# of students with access (and using) hand washing facilities (Schools) (linked to WSSP indicator)	0	0	400,000	207,000		
	Pupil to latrine/toilet stance ratio – schools (Golden Indicator 4.2)	86:1		40:1			
Outcome 3:	People with access to improved	-		29,000		Uganda Bureau of	

Results chain	Performance indicators			Means of verification	Risks/mitigation measures
	Indicator	Baseline	Target		
	(including CSI)				
<ul style="list-style-type: none"> - Improved availability of safe and clean water for domestic consumption in drought-prone areas; - Improved crop production levels through availability of bulk water from existing water sources, rock water catchments, sub-surface dams, valley tanks - Improved livestock farming through improved water availability 	drinking water sources, of which are female (53%) (CSI - equivalent to AMAT 1.2.3)			<p>Statistics</p> <p>The Uganda Water Supply Atlas</p> <p>MWE records on Water for production activities</p> <p>M&E records by the CC Unit, the Rural Department of MWE and The district Water and sanitation Committees</p>	<p>Risk: Theft of latrine and rainwater harvesting equipment. Mitigation Measure: Construct robust facilities to deter theft. Participation of local communities to serve to reduce theft risks.</p> <p>Risk: Lack of community and political buy-in for sanitation interventions Mitigation Measure: Awareness raising about WASH and how it affects health and income/revenue</p> <p>Risk: Lack of incentives put in place for effective O & M Mitigation Measure: O & M will be encouraged to be incorporated also into schools and Districts budgeting process</p> <p>Risk: Lack of technical ability of those implementing long-term O & M Mitigation Measure: Training of masons and artisans and inclusion of them in the construction process</p> <p>Risk: Works associated with water mobilization and retention infrastructures lead to unanticipated environmental impacts Mitigation Measure: EIA before construction of Valley Tanks and Water Extension schemes</p>
	Additional potable and non-potable (for irrigation) water production capacity at a community water point (litres - where 1 m3 = 1000 litres) (CSI - Equivalent to AMAT 1.2.4 and Golden Indicator 6)	No increase	136 million		
Outcome 4: Improved awareness of technologies, measures and practices to increase resilience to climate change in flood- and drought-prone regions	Proper implementation of M&E protocols for the project	Limited capacity for implementing M&E	M&E carried out according to plan	<p>Reports submitted including APRs, PIRs, Mid-term review and Project Completion Report/Terminal Evaluation</p>	

Output-level indicators

	Results chain	Performance indicators			Means of verification
		Indicator	Baseline	Target	
		(including CSI)			
Outputs	Component 1 Baseline analysis and adaptation alternatives: Flood-prone areas of Mount Elgon				
	Output 1.1: Rehabilitation of 500 ha of encroached / degraded forest through taungya and enrichment planting in Mt Elgon NP	Surface of Forest protected, reforested or rehabilitated (ha) (CSI, equivalent to AMAT 2.3.1.1)	0	500	UWA records and reports Reports by company engaged to do the work
	Output 1.2: Plantation of 400 ha of indigenous/ environmentally friendly trees, bamboos and grasses along 250 km of stream/ river banks inside and outside the NP	Surface of Forest protected, reforested or rehabilitated (ha) (CSI, equivalent to AMAT 2.3.1.1)	0	+400	Reports from MWE KWMZ Office / District Local Government Technical team in Bududa, Manafwa and Bukwo
		People trained in climate resilient agricultural practices, of which are female (number, 33%) (CSI, equivalent to AMAT 2.3.1.1)	0	+300	Reports by company engaged to do the work
	Output 1.3: Communities in Bududa, Lerima, Bukwo and Manafwa-Tororo GFS trained, supported and strengthened in the options for conservation of water resources	Community catchment protection groups established and functioning (equivalent to AMAT 2.3.1.2)	0	8	Training records
		Forest co-management groups established (equivalent to AMAT 2.3.1.2)	0	4	Reports of MWE KWMZ Office / District Local Government Technical team in Bududa, Manafwa and Bukwo
		Community members trained in water conservation / catchment protection (equivalent to AMAT 2.3.1.2)	0	+ 200	
		Environmental protection structures at the GFS sites strengthened (equivalent to AMAT 2.3.1.2)	0	8	UWA Reports
		Households using technology to reduce wood consumption (equivalent to AMAT 2.3.1.2)	0	+ 1500	Reports by company engaged to do the work
	Component 2: Ensuring climate-resilient sanitation in flood-prone peri-urban areas				
Output 2.1: Installation of appropriate sanitation facilities (ecological sanitation, VIP-lined, waterborne) in schools and markets of peri-urban flood-prone areas in (Soroti, Bukedea, Budaka, Pallisa, Kumi, Butaleja)	No. of gender-segregated & disabled-friendly public sanitation facilities constructed including schools / institutions (WSSP indicator, equivalent to AMAT 1.2.1.1)	0	+ 132	Logs from the District councils on training for O&M for the communities and masons.	

Results chain	Performance indicators			Means of verification
	Indicator	Baseline	Target	
	(including CSI)			
Output 2.2: Community mobilisation and sensitization on sanitation, hygiene and climate change	No. of artisans / masons trained (30% female) (WSSP indicator, equivalent to AMAT 3.2.1.1)	0	30	School records on training for Sanitation Committees. Reports by company engaged to do the work (including feedback forms)
	People educated through hygiene programs, of which are female (50% female) (CSI, equivalent to AMAT 2.3.1.2)	0	+540	
Component 3: Ensuring access to water for production as an adaptation in drought-prone areas				
Output 3.1: 900 households in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) provided with domestic rainwater harvesting technology for drought adaptation	No. of rain water harvesting systems constructed (WSSP indicator, equivalent to AMAT 1.2.1.4 3.1.1.2)	0	+900	Construction records by the Ministry of Water and Environment Reports by company engaged to do the work - Site visits
Output 3.2: 10 communities in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) provided with community rainwater harvesting tanks for drought adaptation	No. of rain water harvesting systems constructed (WSSP indicator, equivalent to AMAT 1.2.1.4 3.1.1.1)	0	+20	
Output 3.3 Extension of gravity schemes to Nabweya, Bududa District to increase access to water among drought-prone communities	No. of gravity flow schemes constructed (WSSP indicator, equivalent to AMAT 1.2.1.5)	0	1	
Output 3.4: 9 valley tanks constructed/ de-silted for the storage of community water in Otuke/ Apac/ Katakwi for livestock farming	Agriculture-related climate resilient interventions (number) (CSI, equivalent to AMAT 1.2.1.5))	0	9	
Output 3.5: 10 communities in Otuke/ Apac/ Katakwi/ Bududa (Nabweya) trained in the maintenance and use of water harvesting technology for drought adaptation	No. of artisans / masons trained (30% female) (WSSP indicator, equivalent to AMAT 3.2.1.1)	0	30	Training logs for The Water User Committees
	District personnel and NGOs trained in climate resilient water production (equivalent to AMAT 2.3.1.2)	0	80	Logs from the district councils on Training for O&M for the communities and masons
Component 4: Knowledge Management and Monitoring and Evaluation				
Output 4.1: Empirical analysis of experiences and lessons learned in building resilience in the water and sanitation	Number of reports and briefs	0	15	Meeting notes, reports

Results chain	Performance indicators			Means of verification
	Indicator	Baseline	Target	
	(including CSI)			
sector in flood- and drought-prone areas of Uganda	Number of dissemination workshops	0	6	

ANNEX B: RESPONSES TO PROJECT REVIEWS

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

(i) Comments from the GEF Secretariat

Comment	How addressed at the RCE stage
By CEO Endorsement, upon relevant vulnerability assessments, please provide a more detailed additional reasoning, including further information as to how the proposed additional adaptation measures will be targeted in relation to the baseline investments, and how these additional measures will be integrated into and scaled up through the baseline program.	Detailed additional information has been provided in Section II.A.5 related to the baseline investments, what the additional adaptation measures will be using LDCF resources and how they are related to the baseline investments, and how these additional measures will be integrated into and scaled up. This has been broken down on a per-component basis.

(ii) Comments from GEF Agencies

No comments received

(iii) Comments from Council Members at work program inclusion

Comment	How addressed at the RCE stage
Expand on the types of adaptation technologies that may be deployed, in addition to the installation of the 300 climate-resilient sanitation facilities, under Project Component 2	The specific characteristics of the adaptation technologies that will be deployed are described in detail in section A5 under Component 2 – including resilient sanitation latrines with rainwater harvesting tanks for (lined pits, flush toilets, Ecosan, sandbags, etc.). It is envisioned that a combination of lined pits, flush toilets, and Ecosan will be used – along with rainwater harvesters to provide water for handwashing.
Clarify how the proposed gravity schemes and water harvesting tanks, which are also part of the baseline project, meet the additionality reasoning;	Further clarification has been provided in Section II.A.5 under component 3. In general, the investments are additional in that they allow for a diversification of water resources which will put less of a strain on existing sources of water (surface water, ground wells, etc.) during times of drought.
Expand on the methods to be employed by the Climate Change Unit in the Ministry of Water and Environment in overseeing the knowledge management process, including the sharing of lessons learned	As noted in Section II.A.5 under component 4, the Department of Climate Change will be involved with: <ul style="list-style-type: none">• Collecting and disseminating project information for all components to support M&E;• Documenting and conducting empirical analyses of experiences and lessons learned;• Supporting networking within and in between components (During training neighbouring communities should be encouraged to take part in the training if possible. This accelerates the spread of

	<p>technologies);</p> <ul style="list-style-type: none"> • Developing informational materials for distribution (to at least 30 organizations); and • Updating the project website.
Provide more information on how the analysis of downscaled climate projections, mentioned as part of Component 3, will be conducted, and how the results of the analysis will be used to inform project activities.	It is not currently planned within the project to conduct downscaled climate projection analysis. Any results from additional downscaled climate projection analysis that may be carried out within a different climate change related project (such as the development of a National Communication) will be incorporated into the parameters for ensuring climate resilience within the lifetime of investments. so that
We expect that AfDB, in the development of its full proposal, will clarify how it will communicate results, lessons learned and best practices identified throughout the project to the various stakeholders both during and after the project	<p>As noted in Section II.C, communication to stakeholders will take place via existing channels such as the Water and Environment Sector Working Group and its sub-group the Water and Sanitation Sub-Sector Working Group. Furthermore, workshops, trainings, and consultations that are held with beneficiaries and District-level Government institutions will provide excellent fora for dissemination of results, information on project activities, and lessons learned. The updated website will also serve this purpose.</p> <p>A knowledge management product establishing the lessons learned, results, etc. of the project will also be developed which will allow for the knowledge gained during the project to be shared both during and after the project.</p>
We expect that AfDB, in the development of its full proposal, will engage local stakeholders, including women, in both the development and implementation of the program	<p>Local stakeholders – including women – were fully engaged during the development of the project. Meetings were held in the various districts where the project interventions will take place in order to gauge priorities and to tailor the interventions to community needs – while addressing gender issues.</p> <p>The project has mainstreamed gender considerations and the focus on women into its activities and results framework, as can be seen in Section II.A.5 as well as in the project results framework.</p>

(iv) Comments from the STAP

No comments received

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁶

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

PPG Grant Approved at PIF:			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
			250,000
Preparation Consultancy fee	193,782.00	29,080.00	164,702.00
Consultancy reimbursables	26,170.00	16,722.23	9,447.77
Total	219,952.00	45,802.23	164,702.77

⁶ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected refloWS to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

N/A

ANNEX E: STAKEHOLDERS CONSULTED WITH DURING PROJECT PREPARATION

Table 1: National-level stakeholders consulted with during project development

Institution	People met with
African Development Bank	Medjomo Coubaly, Resident Representative
African Development Bank	Andrew Mbiro
Appropriate Technology Centre for the Ministry of Water & Environment, Mukono	Paul Kimera, Senior Research Training Officer
Technical Adviser, MWE/DCC	Barbara Siegmund
Commissioner, Water Resources Planning and Regulation	Dr Tindimugaya Callist
Community Integrated Development Initiatives (CIDI)	Dr Juuko Fulgensio, Director
DANIDA	Majbrit Jakobsen
Food and Agriculture Organization (FAO)	Dr. Kennedy Igbokwe Dr. Adam Vinaman Yao, Deputy Representative
Forest Sector Support Department – Ministry of Water & Environment	Adata Margaret, Assistant Commissioner (Caretaker Commissioner for forestry)
Gesellschaft fuer International Zusammenarbeit – German Cooperation (GIZ)	Daniel Opwonya
Ministry of Water & Environment - Commissioner for Sanitation	Mukama Daoud Mukunga
Ministry of Water & Environment - Forest Sector Support Department	Margaret Athieno Mwebesa, Assistant Commissioner for Forestry
Ministry of Water & Environment - Forest Sector Support Department	Kamedha Irene, Senior Forestry Officer
Ministry of Water & Environment - Forest Sector Support Department	Nambaza Jackson, FIEFOC Project
Ministry of Water & Environment - Forest Sector Support Department	Valence Arineitwe, Senior Forestry Officer
Ministry of Water & Environment – Department of Climate Change	Paul Isabirye, Coordinator, UNFCCC Focal Point
Ministry of Water & Environment - Directorate of Water Development	Eng. Aaron M. Kabirizi
Ministry of Water & Environment - Directorate of Water Resources Management	Callist Tindimugaya
Ministry of Water & Environment - Permanent Secretary	David O. Obong
Ministry of Water & Environment - Rural Water and Sanitation Department (RWSS)	Grace Maraka: Environmental Health Officer,
Ministry of Water & Environment - Rural Water and Sanitation Department (RWSS)	Lawrence Tubenawe: Environmental Health Officer,
Ministry of Water & Environment - Rural Water and Sanitation Department (RWSS)	David Mukama: Sanitation Coordinator
Ministry of Water & Environment - Rural Water and Sanitation Department (RWSS)	Paul Bisoborwa: Social Scientist
Ministry of Water & Environment - Rural Water and Sanitation Department (RWSS)	Eng. Dr Paul Nyeko Ogiramoi. Principal Engineer / Project Manager; Bududa/ Nabweya Gravity Flow Scheme
Ministry of Water & Environment - Rural Water and Sanitation Department (RWSS)	Eng. Joseph Oriono Eyatu, Assistant Commissioner
Ministry of Water & Environment - Water for Production Department	Eng. Richard Cong, Commissioner
Ministry of Water & Environment - Water for Production Department	Eng. Kizito Lwawuga, Principal Engineer
Ministry of Water & Environment - Water Sector	Eng. Disan Ssozi, Assistant Commissioner Water Sector

Liaison Division	Liaison Division
TGCC/USAID	Rebecca Carter, Chair of the Donors Group: Thematic Group of Climate Change Committee
Uganda Water Sanitation NGO and Network (UWASNet)	Josephine Mugala, Research and Development Officer.
Uganda Wildlife Authority	Charles Tumwesigye. Deputy Director of Conservation
UNDP	Daniel McOmodo McMondo, Program Analyst Energy and Environment
Water Aid	Ms Spera Atuhairwe, Head of Programme Effectiveness
Water for people	Cate Zziwa Nimanya

Table 2: Meetings held during the site visit for “Component 1: Building resilience to climate change in flood-prone areas of Mount Elgon”

#	Date	Site	Stakeholder Consulted	Position
1	28/04/2014	Mbale	Louis Mugisha	Team Leader, Kyoga Water Management Zone Office, MWE
2	28/04/2014	Mbale	Dr Anrea Schalla	Technical Adviser, WME, KWMZ Office, Mbale
3	29/04/2014	Mwanafwa District	Collins Kebazamukama	Water Engineer, MWE
4	29/04/2014	Mwanafwa District	Amongin Ruth	Social Scientist, Manafwa DLG
5	29/04/2014	Mwanafwa District	Bisikwa Sarah	Senior District Env. Officer, Manafwa DLG
6	29/04/2014	Mwanafwa District	Alunyu Denis	District Water Officer, Manafwa DLG
7	29/04/2014	Mwanafwa District	Wabweni Andrew	Senior Community Development Officer, Manafwa DLG
8	29/04/2014	Mwanafwa District	Nambuya Modesta	District Production Officer, Manafwa DLG
9	29/04/2014	Mwanafwa District	Martin Jacan Gwokto	Chief Administrative Officer, Manafwa DLG
10	29/04/2014	Mbale	Anying Pamela	Senior Warden-Forest Restoration, Uganda Wildlife Authority
11	30/04/2014	Bududa District	Kizito Mukasa Fred	Chief Administrative Officer, Bududa DLG
12	30/04/2014	Bududa District	Namono Marrion	District Environment Officer, Bududa DLG
13	30/04/2014	Bududa District	Namboko Loyce	Deputy Mayor (LC III) Bududa Urban Council
14	30/04/2014	Bududa District	Kusolo Patrick	Sub-county Chief - Nabweya
15	30/04/2014	Bududa District	Kitutu David	LCIII Chairperson-Bukigoi SC
16	30/04/2014	Bududa District	Bugosi Samali	Sub-county Chief-Bukigai
17	30/04/2014	Bududa District	Tsolobi David	District Community Development Officer

#	Date	Site	Stakeholder Consulted	Position
18	30/04/2014	Bududa District	Basasa Alice	Sub-county Chief-Buswimbu
19	30/04/2014	Bududa District	Bukoma Isa	District Water Engineer
20	30/04/2014	Bududa District	Bikala Patrick	Bushiya Sub-County Chief
21	30/04/2014	Bududa District	Mutonyi Fatuma	Community Development Assistant-Bushiya Sub-County
22	30/04/2014	Bududa District	Nabudesi Andrew Mkute	LC I (Village) Chairperson Matua Village-Matua Parish
23	30/04/2014	Bududa District	Nabifo Penina, Nabifor Beatrice, Kutosi Tom, Wamangu Andrew, Maloni Moses, Mukute Paul & Gusolo Sam	Community Members (Matua Village)
24	30/04/2014	Bududa District	Bukoma Isa	District Water Engineer
25	02/05/2014	Kampala	Semambo Muhammad	Climate Change Officer – Adaptation, MWE/CCU
28	02/05/2014	Kampala	Barbara Nakangu	Former IUCN Country head
29	02/05/2014	Kampala	James Omoding	Project Officer, IUCN

Table 3: Meetings held during the site visit for “Component 2: Ensuring climate-resilient sanitation in flood-prone peri-urban areas”

#	Date	Stakeholder Consulted
1	13/5/2014	Kyoga Management Zone
2	14/5/2014	Water and Sanitation Development Facility (East)
3	14/5/2014	Pallisa District
4	14/5/2014	Budaka District
5	14/5/2014	Butaleja District
6	15/5/2014	Bukedea District
7	15/5/2014	Kumi District
8	16/6/2014	Soroti District
9	16/6/2014	Drop in the Bucket NGO
10	16/6/2014	Soroti Catholic Diocesan Integrated District Organisation (SOCODIDO)
11	16/6/2014	Bukedea CBO

Table 4: Meetings held during the site visit for Component 3 “Ensuring access to water for production as an adaptation in drought-prone areas”

T	Date	Site	Stakeholder Consulted	Position
1	26/5/2014	Apac District	Olinga Samson	District Engineer
2	26/5/2014	Apac District	Akwnaga Nicholas	District Community Dev. Officer
3	26/5/2014	Apac District	Leru Andrew	Chief Administrative Officer
4	26/5/2014	Apac District	Godfrey Byarugaba	TSU Water Specialist for Water
5	26/5/2014	Apac District	Stephen Obore	TSU Community Development Specialist
4	27/5/2014	Otuke District	Dr. Anyuru Thomas	District Veterinary Officer
5	27/5/2014	Otuke District	Etilu Tom	District Planner
6	27/5/2014	Otuke District	Awor Christine	Ag. District Community Dev. Officer
7	27/5/2014	Otuke District	Onyanga Patrick	District Forestry Officer
8	27/5/2014	Otuke District	Oreech Edward	For District Water Officer

9	27/5/2014	Otuke District	Ebong Boniface	District Environment Officer
10	27/5/2014	Otuke District	Ocen Bonny	Agricultural Officer
11	27/5/2014	Otuke District	Kiplagat Martin	Chief Administrative Officer
12	27/5/2014	Otuke District	Ebong Samuel	District Agricultural Officer
13	28/5/2014	Katakwi District	Oleja Albert	District Water Officer
14	28/5/2014	Katakwi District	Ikabalet James	Community Development Officer
15	28/5/2014	Katakwi District	Apolot Elizabeth	Senior Environment Officer
16	28/5/2014	Katakwi District	Asekenye Damalie	District Community Development Officer

ANNEX F: DETAILED BUDGET FOR COMPONENT 4

Type of M&E activity	Responsible Parties	Budget USD	Time frame
		<i>Excluding project team staff time</i>	
Baseline studies (including confirmation of baseline assessment for indicators) & Measurement of Means of Verification of project results.	MWE DCC (supervision)	148,000	Within first year of project implementation
	Consultants		
Knowledge products, internet site, site visits, etc.	MWE DCC	67,000	Ongoing
M&E support to local teams	Ugandan Wildlife Authority and Kyoga Water Management Zone Office representative (Component 1)	90,000	Quarterly and ongoing
	Village Health Teams in 6 districts (Component 2)		
	Rural Department district representatives (Component 3)		
Monitoring of Implementation of ESMP, Project Documentation	MWE DCC	80,000	Ongoing
Quarterly and Annual Project Reports (APRs)	MWE DCC	65,000	Quarterly and annually
Mid-term Review	MWE DCC	35,000	At the mid-point of project implementation.
	AfDB Country office		
Terminal Evaluation and Project Completion Report	MWE DCC	35,000	At least three months before the end of project implementation
	AfDB Country office		
Visits to field sites	AfDB representatives	For GEF supported projects, paid from Agency fees and operational budget	Yearly for AfDB country office
	Government representatives		
TOTAL indicative COST		520,000	
Excluding project team staff time and AfDB staff and travel expenses			