



ADAPTATION FUND

**REQUEST FOR PROJECT/PROGRAMME
FUNDING FROM THE ADAPTATION FUND**

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

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PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category:	Regular Project
Country/ies:	Uganda
Title of Project/Programme:	Strengthening Climate Change Adaptation of Small Towns and Peri-Urban Communities
Type of Implementing Entity:	Multilateral Implementing Entity (MIE)
Implementing Entity:	African Development Bank Group
Executing Entity/ies:	Ministry of Water and Environment
Amount of Financing Requested:	2,249,000 (in U.S Dollars Equivalent)

Project / Programme Background and Context:

Provide brief information on the problem the proposed project/programme is aiming to solve. Outline the economic social, development and environmental context in which the project would operate.

Geographical and Socioeconomic Context

Uganda is a landlocked country occupying 241,550.7 km² of land, of which 43,941km² is covered by open water and swamps; its largest water bodies are Lakes Victoria, Kyoga, and Albert. Lake Victoria, the second largest freshwater lake in the world, accounts for about 80 percent of Uganda's water resource. Rainfall is the most important source of water resources in Uganda with mean annual rainfall estimated at 1,180 mm, however precipitation levels varies widely due to the country's topography. Precipitation varies from 750 mm/yr in the Karamoja pastoral dry areas in the northeast to 1,500 mm/yr in the high rainfall areas on the shores of Lake Victoria, around the highlands of Mount Elgon in the east, the Ruwenzori Mountains in the southwest, Masindi in the west and Gulu in the north.

The seasonal and spatial variability of precipitation remains a challenge in the humid and semi-arid regions of the country. Livelihoods of communities are inextricably linked to water resources; over 60 percent of the population is engaged in rain-fed subsistence agriculture dominated by crops and livestock farming, fisheries and forestry. Water scarcity engenders migration into neighboring districts, which can potentially spark ethnic conflicts and lead to the disruption of agricultural production and potentially affecting the development of these communities. Vulnerable groups including women are disproportionately impacted by deficiencies in water supply. Water collection remains the primary role of women and girls, who walk long distances to fetch water. According to the Uganda Water and Sanitation Sub-sector Gender Strategy, about 55% of women and girls' time is spent travelling to collect water daily¹.

Climate change is a potential threat to the country's freshwater resources and the socio-economic activities depending on these resources. Based on projected population growth, the total

¹ Uganda Water and Sanitation Sub-sector Gender Strategy (WSGSIII), May 2017

renewable water resources of the country per capita is expected to drop to 1072 m³/year by 2030, on the brink of a regime of water scarcity especially in arid and semi-arid regions². The population of Uganda has grown significantly over the past decade from 24.2 million in 2002 to about 45.2 million in 2016 and is projected to reach over 100 million by 2050.

Rapid population growth coupled with migration to urban centers, and increased economic activities will exert additional stress on already overstretched physical resources and facilities including water, land and waste management infrastructure and increase vulnerability to climate change effects.

Climate Vulnerability and Resilience

In recent times, Uganda has experienced heavy rainfalls that led to flash floods, which resulted in increased pollution of unsafe water sources and leading to the outbreak of waterborne diseases such as diarrhoea, typhoid and cholera in certain parts of the country. In addition, climate change will not only exacerbate water scarcity problems in semi-arid areas but also impair water quality. Prolonged droughts have also been recorded to affect groundwater levels leading to dry up of boreholes and reduced lake levels that caused serious challenges to water services provision in urban areas³. This causes severe water stress for communities particularly women and girls who are traditionally responsible for collecting water and managing the homes. Women and girls in Uganda bear the impact of inadequate, deficient or inappropriate water and sanitation services.

In addition to safe water access difficulties outlined in the paragraph above, a large proportion of small town communities do not have access to adequate sanitation facilities. The most common type of sanitary facility being used at household level is the ordinary pit latrine (77.8%) followed by Ventilated Improved Pit (VIP) latrines (20.8%)⁴. Hence, flood events could pose serious pollution problems to sources of drinking water, with the potential danger of outbreaks of water borne diseases. Water and sanitation related diseases are among the top ten killer diseases in Uganda.⁵ The poor are the most affected by these disease outbreaks.

In consideration of the water supply problems prevalent in the country, the Ministry of Water and Environment has prepared and is ready to implement the Strategic Towns Water Supply and Sanitation Project (STWSSP) with funding support from the African Development Bank. The identified towns to benefit from STWSSP include Kyenjojo-Katooke (Kyenjojo District), Nakasongola (Nakasongola District), Kayunga-Busana (Kayunga District), Kamuli (Kamuli District), Kapchorwa (Kapchorwa District), Dokolo (Dokolo District), Bundibugyo (Bundibugyo District) and Buikwe (Buikwe District). The STWSSP will utilise surface water sources (rivers and lakes) as shown in the table below:

² Lukas Ruettinger and Dennis Taenzler (2011) Water Crisis and Climate Change in Uganda, A Policy Brief. Initiative for Peace Building

³ Governemnt of Uganda (2017) Strategic Water Supply and Sanitation: Funding proposal to the AfDB.

⁴ WSDf-C Regional Sanitation and Socio-economic baseline survey report 2013.

⁵ "Intestinal worms, diarrhoea and asthma topped the list of the most prevalent diseases in Kampala city between 2006 and 2009. Kampala City Council's health division says these diseases jointly contribute to more than 80 per cent of the disease burden in the city" (By Lirri of the Monitor Publications, 6 April 2010", Contemporary Issues And Challenges Related To Water, Health And Environment In Uganda

Proposed Town WSS	Water Source
Kyenjojo-Katoke	R. Aswa
Nakasongola	L. Kyoga
Kayunga-Busana	R. Nile
Kamuli	R. Nile
Kapchorwa	R. Atari
Dokolo	L. Kyoga
Bundibugyo	R. Tokwe
Buikwe	L. Victoria

As seen from the table above, 5 towns will abstract water from large water bodies (L. Victoria, L. Kyoga and R. Nile), while the remaining 3 will abstract from medium sized rivers namely Aswa, Atari and Tokwe. The Directorate of Water Resources Management (DWRM) of the MWE, through regional / decentralized Water Management Zones (WMZs), prioritizes catchment management interventions for major water basins/bodies in the country with less emphasis on small to medium sized water basins. As such, catchments for L. Victoria, L. Kyoga and R. Nile basins are being managed by the responsible area / regional WMZ. This proposal is aimed at implementing adaption actions for resilient and sustained catchments of rivers Aswa, Atari and Tokwe in order to ensure sustainability and reliability of water sources for Kyenjojo-Katoke, Bundibugyo & Kapchorwa piped water supply systems.

Overview of the project areas / catchments

River Atari is the water source for the proposed Kapchorwa water supply system and is one of the rivers that feed into Lake Kyoga. The Atari catchment is located in Kyoga basin in the eastern part of Uganda and originates from the ranges of Mt. Elgon. The most common uses of the river include provision of water for domestic purposes such as washing, cooking, bathing and watering animals. It is also used for economic activities such as brick making and irrigation of gardens in the immediate vicinity of the river.

The catchment population is rapidly growing and is projected to reach about 4 million people by 2035. The Atari catchment is characterized by rain-fed agriculture, livestock farming especially cattle-keeping, undulating mountain ranges besides lowland plains with wetlands, open shrubs with grassland and small herbaceous fields with sparse trees. As a result of the increasing population pressure and man's quest for improved livelihood, the catchment is being encroached upon for habitation, subsistence farming, livestock keeping and harvesting of eco-system goods such as fuel wood, timber, and reeds for art and crafts.

During the rainy seasons, the region receives heavy rainfall; this coupled with the hilly terrain has led to massive landslides and devastating floods in the low-laying areas of the catchment. The R. Atari bank catchments have been degraded culminating into river siltation and flooding. For the past years, as land use change around the River Atari catchment has progressed towards agriculture, there has been an increase in sediment levels in the river. The increase in sediment level has threatened the ecosystem biodiversity, stability and quality of water in R. Atari.

Tokwe River originates from Rwenzori mountain ranges in Bundibugyo district and is the main source of water for Bundibugyo town. The river is faced with challenges of siltation due to numerous landslides and erosion/collapsing river banks and flash floods. The melting of ice caps on Rwenzori Mountains has accelerated the erosive power of river Tokwe. Such erosive power and associated siltation downstream, compounded by the intensive cultivation along the river course, have enabled the river to factually block its original course at various points resulting into heavy and destructive floods.

The communities living by the river and its vicinity experience floods during both rainy and dry seasons. In rainy seasons, surface run-off and glacial melt from Rwenzori Mountains cause the river to overflow its banks with potential to sweep away bridges, crops and even settlements downstream. Usually the floods are so strong causing massive soil erosion and sand deposition on the banks. In dry seasons the flow in the river can be seen low during the mornings but often in the middle of some days the river swells and flows over the banks. Flooding of the river during dry seasons is attributed to the melting of glaciers from the Rwenzori Mountains (UNAPA, 2007). These floods have claimed lives and continue to affect livelihoods of the communities that depend on the river for domestic uses besides other income generating activities. The floods are also a threat to infrastructure such as the Fort Portal - Bundibugyo road, schools and human settlements in the Tokwe valley.

R. Aswa is located in Kyenjojo district in south western Uganda and drains in L. Albert. The related challenges for the sub catchment for this river include high rates of soil loss in some areas, loss of vegetation cover especially along the banks.

Problem Situation

The catchments for rivers Atari, Tokwe and Aswa are some of the areas in Uganda that have been most affected by the impacts of climate change and variability. Floods and landslides are consequences of natural climatic variations in these catchments aggravated by climate change. The three catchments are highly vulnerable to landslides in the mountainous / hilly sections of the rivers and floods in the low-laying areas. Land degradation and massive deforestation have also made the catchments predominantly vulnerable to flooding during rainy seasons. These drastic events of landslides and floods have over the years led to loss of human life, animals and crops, and destruction of homes and infrastructure such as roads and bridges. The three catchments are highly vulnerable to the impacts of climate change and variability mainly because of the factors described below:

Ecosystem degradation: Riverbanks, wetlands, forests and mountain ecosystems such as Elgon and Rwenzori in the catchments are degraded due to increasing human pressures such as encroachment and deforestation. The vegetation of ecosystems on riverbanks is very important to stabilize the shoreline and prevent flooding. Wetlands play a crucial role throughout the country in capturing sediments, maintaining water quality, and environmental flows to meet the minimum requirements of ecosystems. Wetlands and lake systems are also degraded due to encroachment for crop and livestock farming. Forests on the other hand are vital for maintenance of the hydrological cycle as well as stabilization of soils across different landscapes. Deforestation due to the high wood and non-wood demands of the increasing human population in the catchments is a major threat. Such pressures on wetlands and forests reduce the capacity of such ecosystems to maintain their ecological integrity and provide ecosystem services. This renders the entire catchments more vulnerable to the

impacts of climate change. The mountain ecosystems of Elgon and Rwenzori (sources for rivers Atari and Tokwe respectively) are also being highly encroached on by humans.

Degradation of farming land: The populations of the catchments are heavily dependent upon natural resources for their livelihoods with subsistence agriculture being the primary source of food and income. Almost all socio-economic activities rely upon the natural resources. The local communities are largely subsistence farmers. Their livelihoods depend on agriculture without alternative livelihood strategies to generate income from other sources and minimize their vulnerability. Due to the growing human population, poor farming practices, such as uncontrolled use of land for farming, grazing and deforestation, the natural resources are increasingly degraded. The degradation of the natural resources renders agricultural landscapes in the catchments more vulnerable to risks of climate change such as floods and landslides.

Inadequate knowledge and skills on climate change and adaptation: Knowledge about water resources and impacts of climate change on these resources, particularly at the local level is not sufficient to support water resources planning and management and mandated institutions cannot effectively enforce compliance with existing laws and regulations.

The proposed project will execute interventions aimed at improving the resilience of communities, agricultural landscapes and ecosystems in the three catchments to the impacts of climate change by reducing the risk of floods, landslides and collapsing river banks. The capacities to adapt and manage these challenges are weak particularly at the community level, where the urban poor have limited resources to cope with the vagaries of climate change. At the same time, institutional capacity, disaster-management capacities and financial resources at the national and local levels, are also limited. The country has developed a National Adaptation Programme of Action (NAPA) based on lessons learnt to guide climate change adaptation activities. Top priority interventions in the NAPA were identified as forestry and water resource management, promoting and strengthening the conservation and protection of watersheds, water catchment areas, riverbanks and water bodies, including contingency planning for extreme events such as floods and drought.

Other specific areas where climate resilience is necessary include: (a) restoration of water catchment ecosystems to ensure continued sustainable water flow at all times. The degradation of natural resources, exacerbated by livelihood strategies adopted out of poverty, often leads to adverse effects on water availability, access and quality; (b) Some districts are prone to drought and/or floods which, combined with the lack of adequate supply of safe water and sanitation, may result in water borne disease outbreaks such as cholera; (c) Some peri-urban areas lack adequate resources to provide climate-resilient water sources for human consumption and agricultural production, which limits traditional sources of water during extreme climate events. Integrated resource management planning to cope with climate change is therefore key to sustainable development.

It has become imperative that water sector interventions are designed to reduce vulnerability to avoid or cushion the impacts from climate change and enable people to respond to climate hazards, thereby enhancing economic, social and climate resilience.

Project / Programme Objectives:

List the main objectives of the project/programme.

The project's overall objective is increase the resilience of water sources to climate change effects by protecting the catchments for the water supply systems of Kyenjojo-Katoke, Bundibugyo and Kapchorwa. This will ensure sustainable water supply to the beneficiary towns/communities. Specifically, the project will:

- a) Strengthen community structures in environmental and water resources management in alignment with community adaptation to climate change.
- b) Increase the resilience of communities by supporting adaption actions for sustained ecosystems and livelihoods.
- c) Build the capacity of selected stakeholders at different levels in catchment management.

Project / Programme Components and Financing:

Fill in the table presenting the relationships among project components, activities, expected concrete outputs, and the corresponding budgets. If necessary, please refer to the attached instructions for a detailed description of each term.

For the case of a programme, individual components are likely to refer to specific sub-sets of stakeholders, regions and/or sectors that can be addressed through a set of well defined interventions / projects.

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
Component 1: Establish climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe	Environmental and Social Management Framework (ESMF) focusing on robust climate change adaptation actions / measures developed for the project Catchment management plans developed for R. Atari, R. Tokwe and R. Aswa Water & Environmental Management (WEM) committees established and supported in line with protection of catchments and sub catchments	Enhanced environmental integrity and social plight of beneficiary communities	500,000
Component 2: Supporting adaptation actions for increased community resilience and sustained livelihoods	Community equipped with appropriate land use techniques to control erosion and siltation of rivers	Improved ecosystems in the three catchments. Ensure long term provision of adequate and unpolluted water from the three rivers	1,105,932

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US\$)
	<p>Degraded sub catchments are restored through tree planting in selected buffer zones</p> <p>Community supported to establish and sustain commercial tree nurseries</p> <p>Degraded river banks restored and buffer zones protected</p> <p>Community supported to rehabilitate degraded wetlands existent in sub catchments</p>	<p>Community livelihood enhanced through climate change resilient interventions</p>	
Component 3: Building capacity of catchment management structures	<p>Training catchment management stakeholders (WSCs, district and local government extension workers, relevant NGOs/CBOs) in climate change adaptation activities</p> <p>Selected women and youth groups trained in establishment and management of tree nurseries</p> <p>Appropriate Information, Educational & Communication materials produced and disseminated in communities</p> <p>Best practices and lessons learnt documented and disseminated</p>	<p>Improved awareness on climate resilience and suitable adaptation measures/practices</p> <p>Strengthened capacity of communities/stakeholders to climate change adaptation</p>	300,000
6. Project/Programme Execution cost			181,064
7. Total Project/Programme Cost			2,086,996
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			162,004
Amount of Financing Requested			2,249,000

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	Jan 1, 2019
Mid-term Review (if planned)	July - August 2020
Project/Programme Closing	Dec 31 st 2021
Terminal Evaluation	April 2022

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project / programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

Inadequate access to water has profound effects on socio-economic and overall wellbeing of the populace in urban and peri-urban settlements of Uganda. In many small towns and peri-urban settlements specifically water stressed areas, people inhabit highly polluted, over-crowded and unhygienic environments where they are subject to outbreaks of waterborne diseases. Due to the exponential population growth in such towns and rural growth centres, the water and sanitation challenges have become acute and severe. Climate change effects (droughts and floods) will impact water quantity and quality in these towns.

The proposed project is expected to complement the African Development Bank funded Strategic Water Supply and Sanitation project, which is being prepared to support the Government of Uganda's efforts to increase access to water and sanitation services in towns have strategic socio-economic importance to the district headquarters. These are areas of high population growth and industrial development.

Specifically, the proposed adaptation project seeks to integrate critical adaption measures in the baseline project, which will ensure continued water supply to the communities at all times, during the drought period, while conserving/protecting water resources from the floods and related risks.

The proposed adaptation project will ensure all-year round access to water that would eliminate the water shortages, improve socio-economic and overall health conditions for the beneficiary population.

STWSSP Target Towns:

(i) Kyenjojo - Katooke TWSS: The water supply area of the proposed water supply and sanitation scheme covers the Town councils of Katooke, Kyenjojo and Butunduzi in Kyenjojo District. The current population in the water supply area is 22,792 people. The proposed water supply area includes the entire Town councils of Katooke, Kyenjojo and Butunduzi, in addition, the water supply and sanitation scheme will serve other trading centres along the pipeline route that include Nyakiisi, Munjeru, Mwikoono, Nyamwandara, Kaiganga, Rwamukora (Along the Katooke-Kyenjojo route) and Kyanayiti, Kihuura and Matiri (Along the Kyenjojo-Butunduzi pipeline route). The proposed water supply system is designed to serve approximately 59,281 people in 2037. The system is based on abstraction of water from **R. Aswa** via a water treatment plant with a water production capacity 2,360 m³/d. The total length of the transmission main is 79km and a total of 113km of distribution pipelines. The total water storage is 750m³.

(ii) Bundibugyo TWSS: Bundibugyo Town Council is located in Bundibugyo District approximately 356km west of Kampala City. It is approximately 35km west of Fort Portal town. The town had a population of approximately 30,000 people in 2015. The town has a piped water supply system that is not sufficient. The proposed water supply area includes the entire Bundibugyo Town Council and the surrounding villages. The proposed water supply system is designed to serve approximately 79,010 people in 2040. The system is based on gravity flow of water from **River Tokwe** with a production of approx. 2,500m³/d. The total length of the proposed transmission main is 10km and a total of 100km of distribution pipelines. The total proposed water storage is 450m³.

(iii) Kapchorwa TWSS: Kapchorwa Municipality is located on the slopes of Mt Elgon in Kapchorwa District in Eastern Uganda approximately 310km northeast of Kampala City and 65km northeast of Mbale Municipality. The Municipality has a current approximate population of 52,397 people. Binyiny Town Council borders Kapchorwa District to the West and hosts the Kween District headquarters. The proposed water supply area includes the entire Kapchorwa Municipality and the trading centres of Kaserem, Chema and Tegeres in Kapchorwa District and Binyiny Town Council in Kween District. The proposed water supply system is designed to serve approximately 98,000 people in 2035. The improved system is based on an abstraction of water from **Atari River** via an expanded water intake and treatment plant of capacity 6,000m³/d. The total length of the transmission main is 10km and a total of 90km of distribution pipelines. The total designed water storage is 1,120m³.

Proposed activities:

Component 1: Establish climate resilient catchment management framework for three catchments of Rivers Atari, Aswa and Tokwe

Building resilience of piped water supplies is critical to address pressures related to urbanization, resource use and population growth requires action such as catchment protection and rehabilitation to climate-proof water supply infrastructure against extreme weather events.

The forested mountainous areas of Elgon and Rwenzori are an asset to the country as they protect water catchments ensuring supplies of domestic water; maintaining downstream fisheries and hydro-electric power generation and also ameliorate local climatic conditions providing suitable conditions for agriculture. Floods wash away the top soils in these mountainous areas,

thereby causing soil erosion and soil degradation, while during the dry seasons, the areas are not easily served by household water supplies. Communities therefore trek long hilly distances and terrains to get water in the slippery valleys.

Under this component, the following activities shall be implemented:

- i) Development of Environmental and Social Management Framework (ESMF) to guide implementation of concrete climate change adaptation actions in the catchments of three rivers (River. Atari, River. Tokwe and River. Aswa)- It is the role of Project Implementation Unit (PIU) to safeguard the environment and social plight of affected communities during project implementation. The objective of the ESMF will be to provide guidance to Project Implementation Staff, communities, and others stakeholders participating in the Climate Change Adaptation project in line with sustainable environmental and social management. The ESMF will also be helpful in identification of possible negative impacts of the project and proposing appropriate mitigation measures, and in monitoring implementation of the proposed mitigation measures.
- ii) Development of catchment-specific management plans for the three rivers (Atari, Tokwe and Aswa)- A Consultant will be required to ease the process of developing climate-proofed catchment management plans for the three catchments. As part of the process the Consultant shall undertake Catchment Situation Assessments (CSAs) to delineate / define the catchments and ascertain baseline conditions.
- iii) Establishment and support of Water & Environmental Management (WEM) Committees to undertake distinct catchment protection activities within the project areas- In this project, each of the three major catchments will be sub-divided into micro-catchments covering the different zones (highlands, midlands and lowlands). A WEM committee will be established for each of the micro-catchments and such committees would be helpful in identifying key water resources and climate change issues to be addressed in the catchment management planning process as well as identifying specific locations where priority interventions ought to be implemented. The WEM committees will continue beyond the project period and be sustained by government using innovative funding sources such as water abstraction permit fees and funds for water source/catchment protection that would be paid by investments that are based on each of the rivers.
- iv) Environmental and Social Audit of the climate adaptation project in consideration of the project's ESMF and developed / implemented catchment plans. With assistance of a Consultant Mid-term and End of project Environmental and Social Audit will be conducted for the project in line with the provisions of the AfDB's Environmental and Social Safeguards Policy and National Environment (Audit) Regulations, 2006.

Component 2: Supporting adaptation actions for increased community resilience and sustained livelihoods

As a measure to ensure long term sustainability of the quantity and quality of water provided by the rivers, there will be need to protect both the rivers and their catchments. Once rivers are polluted it can be very costly to treat the water and make it potable for drinking and other domestic purposes; and besides, degradation of drinking water catchments can lead to a

reduction in quantity of water available for abstraction and supply to beneficiary communities. Activities under this component will include:

- i) Community equipped with appropriate land use techniques to control erosion and siltation of rivers. The detailed activities will include:
 - Identification and mapping of degraded agricultural landscapes that call for corrective action
 - Community training on modern methods/best practices of farming to counteract the effects/impacts of climate change on land
 - Provide demonstrational rainwater harvesting systems for household and institutional levels
 - Construction of suitable flood management structures e.g. embankments, ponds, valley dams and storm water diversion channels.
- ii) Restoration of degraded sub catchments through tree planting in selected buffer zones. Suitable tree species in terms of community acceptability or importance, soil stabilisation and control of run off/erosion will be planted to trim down the rain drop effect thereby lowering the frequency and magnitude of flood episode and or landslides. Specific activities will include:
 - Identification and demarcation of suitable areas to act as buffer zones
 - Planting of appropriate tree species in the different marked mapped zones
- iii) Communities will be supported to establish and sustain commercial tree nurseries
 - Set up groups within micro-catchments/zones to establish tree nurseries
 - Offer hands-on training on setting up nursery beds, caring after them and marketing of the resulting tree seedlings including basic book keeping skills
 - Established demonstrational nursery beds in the micro-catchments/zones
- iv) Degraded river banks will be restored and buffer zones protected

Due to poor management practices, banks of rivers originating from mountainous/hilly areas are facing a higher risk of erosion and siltation. The proposed project will support the protection and restoration of degraded river banks and buffer zones in the catchments through:

- Development of river-specific banks restoration plans.
 - Demarcation of degraded river banks in the 3 catchments. The project will aim at restoring degraded buffer zones and riverbanks in accordance with developed action plans.
 - Training communities on protection of river banks.
 - Equip beneficiary communities with appropriate tools to implement river-specific bank restoration plans
- v) Communities will be supported to rehabilitate degraded wetlands located in delineated catchments and sub catchments of the three rivers. The project will aim at rehabilitating degraded wetlands existent in the delineated catchments and sub-catchments so as to enhance their water retention capacity, ultimately helping in controlling of floods.
 - Definition of wetland boundaries in a participatory manner to avoid community conflicts
 - The community members of which 50% are women will be trained in wetland rehabilitation/restoration techniques

- The wetlands in the targeted catchments and sub-catchments will be marked and communities equipped to undertake wetland- specific restoration plans.
- Development of site-specific plans for wetland restoration within the defined catchments
- Equip beneficiary communities with appropriate tools to implement wetland-specific restoration plans

Component 3: Building capacity of catchment management structures; Knowledge management and dissemination

This component will support climate change education for a range of stakeholders from the local to national level to ensure better understanding of climate change impacts, their causes, and means of responses available. It will facilitate the mainstreaming of climate resilience in urban water and sanitation sector planning. Specific activities will include:

- Conduct a capacity needs assessment to determine capacity gaps among the different stakeholders in order to inform the training content
- A detailed training programme will be developed to guide the trainings
- Training catchment management stakeholders (WEMs, district and local government extension workers, relevant NGOs/CBOs) in climate change adaptation activities such as damming of streams to collect and store seasonal overflows, rainwater harvesting to supplement water supply
- Develop and disseminate Information Education and Communication (IEC) Materials for advocacy and visibility among various stakeholders
- Documentation and dissemination of best practices and lessons learnt from the implemented climate adaptation activities including development of a communication strategy.

B. Describe how the project / programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy of the Adaptation Fund.

The proposed project will enhance the resilience of communities and ecosystems to the impacts of climate change by ensuring safe and reliable freshwater supply to a vast majority of the vulnerable population (women and children) in selected strategic small towns of Uganda.

Economic benefits

Climate variability and change is expected to have an impact on Uganda's performance in the agricultural sector, the mainstay of the economy. Some of the effects include high food prices, lower domestic revenues and an increase in the current budget deficit due to low export earnings. The UN's Food and Agricultural Organization found that the drop in the growth of the Ugandan economy from 6.6% in 2004-2005 to 5.3% in 2005-2006 was largely due to the variability of the weather, specifically its impact on agriculture.

Improved access to clean water will alleviate adverse health effects and allow for the reallocation of time dedicated to fetching water towards engaging in other productive activities. The interventions proposed will therefore improve household/family incomes as they have more space and time to diversify their revenue streams by building new businesses and expanding gardens and agricultural crops.

In addition, sustained water access in towns will trigger economic growth through stimulation of commercial activities such as hotels, and support to end-user social services like health centres, educational institutions, and agro-based industries all of which are essential ingredients for development. These directly benefit women and youth who will benefit from increased opportunities for employment and trade.

Further, the project will aim to directly improve adaptation capacity of approximately 10,000 people from approximately 1,500 households (3,500 people, 500 households targeted in each of the three catchments). This will be achieved through trainings and implementation of proposed concrete climate change adaptation measures. Generally, half of the target beneficiary population (5,000) will be women and youth. Of the 5,000, different categories of vulnerable and or marginalized beneficiaries (people with disabilities, female headed and child headed households) will be targeted. The proposed environmental protection and conservation activities will also help to improve the natural-resource base of the communities living in the three catchments.

The proposed climate change adaptation project will focus on employment creation for women and youth; these beneficiary groups will be engaged in activities that support the project such as production of tree seedlings from established tree nurseries. The groups will be given hands-on training on setting up nurseries and marketing the resulting tree seedlings. Demonstration nursery beds will be established by the project for the rest of the community to learn, share and replicate. As part of project activities, appropriate tree species (an assessment will be carried out to establish market trends/pricing, marketable and environment friendly species), will be planted in selected buffer zones, degraded wetlands and along river banks in restoration of the degraded catchments.

Private tree farmers (both small and large scale tree planters) in the project areas will be identified and encouraged to source seedlings from the project tree nurseries. Sales from tree seedlings will provide the required financial resources to sustain the tree nurseries. Part of the revenues/income gained (in profits) is expected to be reinvested in the business to offer sustainable services.

Social benefits

A community based participatory approach to planning and implementation will be developed and this will lead to developing socially accepted project interventions by the beneficiary/catchment communities. The proposed project will yield social benefits to the community. These include:

- a) Formation of Water and Environmental Management Committees in which women will be encouraged to participate. There will be affirmative action taken in supporting women to take up leadership positions and as such, one third of the membership will be women in accordance with the Gender Policy of the MWE.
- b) Conflict management; this aspect will be integrated in all project implementation activities at different levels. Appropriate skills and knowledge on community conflict management and leadership will be imparted to various stakeholders.
- c) Active participation by all stakeholders in all project activities will be encouraged and this will be achieved through conducting meetings, trainings, at an agreed time and venue to encourage participation by all concerned. This will again contribute to managing conflicts between communities related to access to and use of natural resources.
- d) Enhanced social cohesion; establishment of commercial tree nurseries will contribute to social cohesion and stabilization of beneficiary communities since rural-urban migration in search of income generating opportunities, especially by the youth, is expected to tone down.

Environmental Benefits

The project areas are faced with rampant ecosystem and environmental degradation, soil loss, siltation of rivers, erosion of riverbanks and reduction in biodiversity, which contribute to low resilience to climate change. The proposed project is expected to have positive environmental impacts as it supports catchment and water protection practices, including catchment planning and soil conservation measures (e.g. reforestation). All these factors are essential to enhance the resilience of ecosystems and ensure long term and sustainable water availability and security.

The wetland ecological systems of Atari, Tokwe and Aswa catchments will be improved and protected through various interventions as will be outlined in the developed wetland-specific restoration plans. Degraded and deforested areas within the three catchments including affected buffer zones and degraded river banks shall be reforested/restored. Floods and landslides across landscapes will be controlled through community training on appropriate / modern farming practices besides implementation of corrective bio-physical measures thereby strengthening of resilience of agricultural landscapes.

Establishment of tree nurseries will improve the natural vegetation cover of the catchment areas thereby contributing to proper management of the flood hazards to communities in the catchments.

Generally, the project adaptation activities will support the sustainability of critical catchments and sub catchments for the three rivers (R. Atari, R. Aswa and R.Tokwe).

C. Describe or provide an analysis of the cost-effectiveness of the proposed project / programme.

The proposed project aims to enhance the resilience of communities in selected catchments through establishing climate-resilient management framework for the catchments of Rivers Atari, Aswa and Tokwe (\$ 500,000), supporting adaptation actions for increased community resilience and sustained livelihoods (\$1,105,932) and building capacity of catchment governance structures (\$ 300,000).

The interventions retained to foster climate change adaptation are based on existing options for improving climate resilience of water sources in Uganda as articulated in the national strategies and policies including the NAPA, Water Resources Policy, etc. Overall, these interventions will improve efficiency, increase water availability and reduce losses from extreme weather events (floods).

The cost-effectiveness of the project's adaptation interventions will be greatly enhanced by the catchment management approach. Catchment management has been recognized to offer a viable and cost effective alternative to conventional capital-intensive water resources management solutions / hard infrastructure. Catchment activities contribute towards land management that delivers flood control and efficient resource use outcomes, hence help reduce flood damage and the need to invest in flood mitigation works. The Uganda National Climate Change-Costed Implementation Strategy (MWE, 2012) costed the proposed actions of its integrated water resources management program as documented in the Government of Uganda's Climate Change Adaptation Strategy and compared them to potential benefits in terms of reducing unmet water demand or in reducing losses from floods. The model calculates the minimum reduction in damages required for the project to generate a 10% rate of return. The results indicate that with minimum investment the programme would already generate this rate of return. Activities to enhance integrated catchment management, restoration of wetlands and riverbanks yield significant benefits, based on estimates of economic value of ecosystem services provided by the catchments; and justify the cost of investments in climate change adaptation.

The project is considered cost-effective for the following primary reasons:

a) Project support to catchment management (including sustainable land and water management practices) and governance at the community scale is expected to improve source protection and secure access to water supply for domestic and agriculture purposes. It is anticipated that the modest investment of AF resources will result in (i) significant improvements in water supply in the target towns; (ii) enhance community livelihoods; (iii) foster community participation in the management of natural resources, (iv) improve wetland and forestry restoration; amongst others. This will yield significant benefits. For instance, the 2016 Industrial Economics analysis prepared for the MWE on the Contribution of Water Resources Development and Environmental Management to Uganda's Economy showed that activities to improve wetlands management could yield benefits of between US\$ 230 - US\$ 400 per hectare/year based on estimates of economic value of goods and services provided by wetlands. The report also showed that total cumulative health care cost savings from water resources development across a 25-year period; under both moderate and high investment scenarios are \$870 million and \$1.0 billion over a business as usual scenario.

b) The project investments in the development of the climate resilient catchment management framework will support situation analysis including vulnerability assessments that will be key to determining appropriate and suitable adaptation actions for each catchment. The project will support the detailed assessments on the funding mechanisms, governance and institutional capacity that will contribute to the long-term sustainability of water resources and resilience of communities and ecosystems to climate variability and change.

D. Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The policy framework for the management and development of water resources in Uganda is based on the National Water Policy (1999). The National Water Policy promotes an integrated approach to the management of the water resources in ways that are sustainable and most beneficial to the country. In addition, the NWP recognizes the economic value of water, promotes the participation of all stakeholders, including women and the poor, in all stages of water supply and sanitation, and confirms the right of all Ugandans to safe water. Other policy documents which complement the policy include: National Environment Management Policy (1994); the Wetlands Policy (1995), the upcoming Land Use Policy; National Health Policy and Health Sector Strategic Plan (1999); National Environmental Health Policy (2005); the School Health Policy (2006); and the National Gender Policy (1997).

Water supply and sanitation is also recognized as key issue under the National Development Plan (NDP) covering the period 2010/11 to 2014/15, 2015-2016-2019/20. The NDP is the key government document for fighting poverty through rapid economic development and social transformation replacing the second Poverty Eradication Action Plan (PEAP) of 2004. Water resources development is also enshrined as key undertaking within the National Vision 2040, which seeks to transform the socio-economic livelihood of Ugandans.

The National Climate Change Policy (NCCP) is Uganda's integrated response to climate change that clearly defines a pathway for dealing with the challenges of climate change within the socio-economic context. The goal of Uganda's National Climate Change Policy is to ensure a harmonized and coordinated approach towards a climate resilient and sustainable low-carbon development path for Uganda. The overall policy objective is to ensure that all stakeholders address climate change impacts and their causes through appropriate measures, while promoting sustainable development.

Uganda's National Communication on climate change to UNFCCC also emphasizes access to information on additional measures and policies to adapt as well as information on gaps and constraints besides lack of financial resources and technical constraints, and the weak capacity of lower level decision-makers to manage natural resources due to inadequate information / knowledge.

Additionally, the proposed project is in line with the adaptation priorities identified under the National Adaptation Programme of Action (NAPA) for Uganda; the project will contribute towards implementing NAPA priority interventions in Uganda such as communal tree planting, management of land degradation through modern and climate-proofed farming methods, and sustainable provision of water for production and domestic use.

E. Describe how the project / programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

Projects on Environmental and Water resources management fall under specific legislative and regulatory frameworks in the Ugandan context. Developers should thus ensure that these legislation and regulatory frames are consulted to ensure that the proposed environmental and water resources related project establishments, and activities therein, are in line with the national laws.

The proposed project will be implemented following the national standards of Uganda related to environmental, water, and ecosystems management. The project shall comply with the Environmental Impact Assessment (EIA) Regulation (1998) and EIA Guidelines of Uganda. The state of the environment in the tree catchments of Tokwe, Atari and Aswa will be improved as a result of the project; generally there are no negative environmental impacts anticipated. Positive environmental impacts will be realized through improving wetland ecosystems within the catchments and by improving sustainable management of water and other natural resources besides addressing issues of community resilience to climate change, and improving community livelihoods.

F. Describe if there is duplication of project / programme with other funding sources, if any.

This is the first integrated approach project that is designed to supplement the AfDB-funded *Strategic Towns Water Supply and Sanitation Project* with the aim of scaling up climate resilience in three water stressed, environmentally degraded, and vulnerable towns in western and eastern regions of Uganda (Bundibugyo, Kyenjojo-Katoke and Kapchorwa). As a result, there is no duplication of this project with other funding sources.

The STWSSP is more focused on water and sanitation infrastructure development for the 10 towns identified, including Bundibugyo, Kyenjojo-Katoke and Kapchorwa. This project will implement catchment protection measures that mitigate the climate change impacts on the water resources of the identified towns. Communities are currently using the water resources, however, when the new infrastructure is built, there will be increased abstraction that could exuberate the situation if these project measures are not undertaken.

The project will also focus on contributing to institutional capacity building, strengthening adaptive capacity and resilience to climate change, and dissemination of key climate-related knowledge for awareness raising.

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

Knowledge management of lessons learned on climate resilience through reducing pressure on water resources, encouraging environmentally and sustainable land use practices and sustainable climate resilient measures in small towns against drought effects will contribute to the

knowledge and facilitate information sharing, knowledge exchange visits and documentation of success stories (newsletters and other knowledge dissemination materials and WASH learning forums). The lessons learned will be synthesized to include knowledge based on implementation processes, impacts of the project activities and best practices.

Concretely, in order to enhance learning and knowledge management, the project will prepare a strategy for the dissemination and communication of lessons learned from the project implementation and impacts. The communication strategy will be developed in the full proposal. The strategy will ensure that lessons learned reach the target audience in the appropriate format. The target audience will include policy makers; WASH advocates, key development partners and different communities across the county that value and understand the threat of climate change and committed to building climate change resilience.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy of the Adaptation Fund.

The consultative process for the Concept Note development mirrored the existing stakeholder's structures and networks established under the NAPA and NEMA, specifically looking at "strengthening adaptive capacity and resilience to Climate in the project target areas/communities.

The formulation of this Concept Note has aligned with the development of the baseline project, which has involved consultation with a range of stakeholders during the Preparation (21st August - 1st September 2017) and Appraisal (2nd – 10th November 2017) missions. The consultation process included meetings, and working sessions that encompassed various stakeholders including technical staff and beneficiaries.

- i. Technical Working Sessions: Technical staffs at the national and town levels were involved in the planning and provision of data on the existing water and sanitation systems and the investment plans for relevant towns, which helped identified the needs, selection of towns and guided the design of the proposed project. The technical working session closely adopted the "gender mainstreaming guidelines" developed for the water and environment sector, to ensure that the proposed project interventions are gender responsive.
- ii. Field visits and Meetings: These were conducted to proposed project sites to engage with local governments and beneficiaries' to establish their level of involvement in the planning process and to better understand the environmental and climate change issues at the proposed intakes and water sources. The project focal team held preliminary discussions with local authorities, existing water management committees (responsible for water supply, sanitation and hygiene and environmental conservation), community groups (including women), household heads on the proposed project activities and objectives, beneficiary needs with respect to water resources and climate risk management. During the meetings to Bundibugyo and Kyenjojo district local governments, communities expressed demand for the proposed interventions services and indicated an overwhelming interest in the proposed project, which was deemed critical to address water

scarcity and poor sanitation concerns particularly amongst women who spend time collecting water and caring for their families. District gender officers who are responsible for ensuring gender responsive initiatives were consulted as well.

Consultations will continue and shall remain at the core of the development of the full project proposal.

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

Scaling-up of safe water supply and sanitation using appropriate technologies for vulnerable communities has been identified as one of the Uganda National Adaptation Programmes of Action. This is also echoed in various national and sector policy directions including National Development Plan (NDP), Water Supply and Sanitation Sector Programme Support (WSSPS) and the Medium Term Expenditure Framework (MTEF).

High population growth in these small towns (population is expected to bump up by over 100% by 2040) has led to overwhelming demand for safe water supply services thus straining the existing water resources. Climate change related effects such as floods and droughts have compounded the situation, with the need for re-thinking development approaches aligned to IWRM with due consideration for possible climate change effects. This approach has not received prominent implementation in the development of water and sanitation infrastructure in small towns, which has been the reason behind the failure of existing water supply systems during extreme climatic events. Hence the project is designed to build the resilience of water supply systems through protection of catchments and encouraging other sustainable climate resilient measures in project areas.

The provision of safe water will increase water access and reduce the burden of work on women and children who walk long distances to fetch water, the storage techniques will allow women to save time that can be used instead to engage in other productive activities. The proposed STWSSP will lead to minimization of incidences of water borne diseases (especially for children) and foster development by increased productivity of the population especially the women. The provision of sustainable piped water supply systems in the target towns will trigger economic growth through stimulation of commercial activities such as hotels, and support to end-user social services like health centres, educational institutions, and agro-based industries all of which are essential ingredients for development.

Specifically, this project will complement the STWSSP by focusing on the climate change and adaptation measures in the catchments of R. Aswa, R. Tokwe and R. Atari, which are considered most vulnerable to the effects of climate change. These measures will ensure that the benefits of STWSSP infrastructure continue to serve sustainably. The project activities would still benefit the community in the absence of STWSSP intervention, albeit to limited capacity utilization. The activities identified under climate change resilience in R. Aswa, R. Tokwe, and R. Atari will be exclusively implemented under this project. These will build capacity of the sector to implement similar activities in other project catchments. The project design has indeed benefited from lessons learnt by Uganda in implementation of similar projects; including AF funded “Enhancing Resilience of Communities to Climate Change through Catchment Based Integrated Management of Water and Related Resources in Uganda”. The GEF also provided additional funds toward

implementation of the ADF funded “Water Supply and Sanitation Program”, which focused on water and sanitation infrastructure, while the GEF additional funds supported measures targeted to improving climate change resilience of the beneficiary communities.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project / programme.

Financial sustainability: There is high political will and demand for water supply services in small towns in Uganda, due to the high populations and importance to socio-economic development of the Country. However, the budget allocation by Government towards activities aimed at increasing resilience of communities to climate change effects in relation to sustained access to safe water supplies is insufficient. This funding request under preparation is expected to help foster interventions geared at protecting selected water sources and their catchments and strengthening community adaptation measures. Continuous catchment protection interventions (during operation of constructed water supply systems) will be financed from generated revenue from monthly water sales.

Institutional sustainability and strengthening of capacities: The MWE established the Water and Sanitation Development Facilities (WSDF) regional offices in order to implement different programs targeted to the specific region, as opposed to stand-alone projects, which have limitations on institutional sustainability. Also at the regional level are the Umbrella Organizations (UO), who are permanently present in the regions to ensure continuity of all projects benefits. The regional Water Management Zones (WMZ) are also established at the regional level throughout the country to ensure continuity of catchment protection measures. Institutional sustainability is also enhanced through the various implementation manuals, policies and databases developed within the project, which will always be available for future generations. Through this proposed project, capacity will be built in feasibility studies, detailed designs, tender documentation, contract management and supervision. The MWE and Local Government professional staff will benefit directly from exposure and will utilize gained experience in other similar sector work/assignments. Also, capacity will be received by contractors and consultants who will participate in the studies and works and this capacity will be used by the public sector which is regularly employed by the MWE. As a policy of MWE, the constructed water supply facilities are transferred to the local governments, and managed by outsourced qualified water operators, procured through competitive means to offer management services. Through this management arrangement, the water supply systems are managed competently to generate revenue which is used for day to day management.

Ownership: The high response to call for applications for water supply and sanitation infrastructure in the country demonstrates the need for the services. From implementation realised in previous MWE projects especially under the WSDFs, communities avail land and actively participate in the implementation and monitoring of the projects, demonstrating high commitment to ownership of the same. Once completed, the infrastructure will be handed over to the local governments, which will also be gazetted as water authorities to take charge of ownership of all assets and take up management of the service. The monitoring of proper functionality of the system will be the responsibility of the Regulation Unit of the MWE who together with the UO will also monitor the quality of the water on a regular basis. The MWE through UO will finance downstream activities especially expanding the network and increasing connections in order to increase the business volume and make the system economically viable and sustainable

K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.

The proposed project is designed to align with the Environmental and Social Policy of the Adaptation Fund as well as the environmental and social safeguard requirements of the Government of Uganda and the African Development Bank (AfDB). Under AfDB's Integrated Safeguards System, 2013, a summary of safeguard operational policies to be triggered by the proposed project are as described in the table below.

Operational safeguard	Triggered	Requirements
OS 1: Environmental and Social Assessment	√	An Environmental and Social Management Framework (ESMF) focusing on robust climate change adaptation actions / measures will be developed for the entire project; also an Environmental and Social Management Plan (ESMP) will be prepared to guide / ensure effective management of environmental and social risks during and after implementation of the specific sub projects.
OS 2: Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation	X	This Operational Safeguard in particular embraces comprehensive and forward-looking notions of livelihood and assets, accounting for their social, cultural, and economic dimensions. It also adopts a definition of community and common property that emphasizes the need to maintain social cohesion, community structures, and the social inter-linkages that common property provides. There is no anticipated resettlement under the proposed climate change adaptation project; interventions will be limited to available land / gazetted buffer zones and wetlands existent in three river catchments (Atari, Tokwe and Aswa).
OS 3: Biodiversity and Ecosystem Services	X	The overarching objective of this safeguard is to conserve biological diversity and promote the sustainable use of natural resources e.g. integrated water resources management. The proposed project aims at supporting adaption actions for sustained ecosystems and livelihoods as part of its objectives.
OS 4: Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials and Resource Efficiency	X	This safeguard covers the range of impacts of pollution, waste, and hazardous materials for which there are agreed international conventions and comprehensive industry-specific and regional standards, including greenhouse gas accounting. It is anticipated that the proposed adaptation project will not trigger this OS; instead planned interventions will play a big role in preventing / controlling environmental and water pollution in the three project rivers and corresponding catchments.
OS 5: Labour Conditions, Health and Safety	√	This safeguard establishes the Bank's requirements for its borrowers or clients concerning workers' conditions, rights and protection from abuse or exploitation. It covers working conditions, workers' organizations, occupational health and safety, and avoidance of child or forced labour.

√ - Triggered; X- Not triggered

OS 1 on Environmental Assessment is **triggered** and as such an ESMF and Project ESMP will

be prepared to guide the implementation of the Climate Change Adaptation Project

OS 2 on Involuntary Resettlement is **not triggered** since the project interventions will be limited to available land away from settlements / gazetted buffer zones and wetlands existent in river catchments (Atari, Tokwe and Aswa).

OS 3 on Biodiversity and Ecosystem Services is **not triggered** since the proposed project aims at supporting adaption actions for sustained ecosystems and livelihoods as part of its objectives. Planned interventions will only complement biodiversity conservation and ecosystem restoration efforts.

OS 4 on Pollution Prevention & Hazardous Materials is **not triggered**; instead planned interventions will play a big role in preventing / controlling environmental and water pollution in the three rivers and their corresponding catchments.

OS 5 on Labour Conditions, Occupational Health and Safety is **triggered** since river bank and wetland restoration works will require recruitment of a labour force to complement community effort and undertake the required restoration works. Works related to restoration of river banks and wetlands might expose individuals involved to occupational safety risk and infections. This occupational safety risk will be mitigated through the selection and effective use of appropriate mechanical equipment and personal protective gear. Work procedures, training, and awareness creation/sensitization will also be done for everyone involved in the project.

In consideration of the Operational Safeguards that will be triggered (OS 1 and OS 5), the proposed project has been classified **category 2** in line with the AfDB's Environmental and Social Management Procedures and the Integrated Safeguard System, which corresponds to **category B** according the Fund's ESP. This indicates that the anticipated environmental and social impacts can be readily managed with appropriate mitigation/enhancement measures. The project will have significant environmental and social benefits including protecting the natural habitats of critical ecosystems through catchment protection, enhance the resilience of vulnerable groups to drought/flood events, and promote public health and improve livelihoods through increased and sustainable availability of high quality water.

During preparation of the full project proposal, detailed assessment will be undertaken to identify pertinent E&S risks that may be associated with the proposed project interventions as introduced in the table below.

Environmental and Social Risks Matrix

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	√ Due to the small-scale interventions and environmental protection activities, the project will have minimal impacts that can be managed based on measures elaborated in ESMPs (which will be developed as part of the full proposal). The project will operate within the prevailing laws and regulations of	

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
	Uganda. Project will comply with all international and national laws and regulations currently in force in Uganda.	
<i>Marginalized and Vulnerable Groups</i>		√ People with disabilities and female and child headed families are present in the project areas.
<i>Human Rights</i>	√ The project has no potential human rights risks	
<i>Gender Equity and Women's Empowerment</i>		√ Women issues are compromised by cultural hindrances and limited low economic status.
<i>Core Labour Rights</i>	√ The project will be managed in accordance with the Ugandan Labor Law, which prohibits forced labor, child labor, and discrimination and allows freedom of association.	
<i>Indigenous Peoples</i>	√ The project will not create any negative impact on the indigenous people but rather enhance their quality of life.	
<i>Involuntary Resettlement</i>	√ There will be no involuntary resettlement as a result of the project.	
<i>Protection of Natural Habitats</i>	√ The project will facilitate protection of natural habitats including the critical watersheds of rivers Atari, Aswa and Tokwe. This will enhance recharge and restoration of water systems including groundwater.	
<i>Conservation of Biological Diversity</i>	√ Project activities will enhance conservation of biological diversity in the target catchments.	
<i>Climate Change</i>	√ The proposed project is designed to integrate climate resilience into the project activities to climate proof investments and ensure long-term sustainability of infrastructures. Afforestation activities will minimize GHG emissions.	
<i>Pollution Prevention and Resource Efficiency</i>	√ The project will support pollution prevention; unsustainable practices that impair water quality and issues of river pollution will be managed.	
<i>Public Health</i>	√ Improved public health is an outcome of this project. Water quality will be improved as a result of environmental / catchment protection	
<i>Physical and Cultural Heritage</i>	√ The project activities will not be implemented in an area known for having physical cultural resources,	.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
	cultural sites and sites with unique natural values. If cultural resources are discovered, the relevant technical ministry will be notified	
Lands and Soil Conservation	√ The project interventions will support sustainable soil and land management practices.	

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project / programme implementation.

The Executing Agency (EA) is the MWE, who will be responsible for the overall coordination of planning, implementation and monitoring of the programme. The implementation of the programme will be managed through existing national decision making structures, utilizing national planning, procurement, budgeting, accounting and reporting systems. The program may be implemented as sub-component of the Joint Water and Environment Sector support program, under Joint Partnership Fund.

Operational implementation for Component 1&2 shall be implemented through the Urban Water Supply department under the Water and Sanitation Development Facility – Central Program of the MWE. Component 3 shall be implemented by the Water Sector Liaison department which is responsible for the overall sector capacity support.

The overall monitoring setup, as part of the JPF includes overall Sector Reviews, held twice a year, Technical Review in March and Joint Sector Review in September. In addition the sector conducts regular technical reviews, surveys, VFM and tracking studies. The programme will make use of these existing MWE monitoring and evaluation (M&E) system, which is part and parcel of the Government’s M&E system.

B. Describe the measures for financial and project / programme risk management.

The table below identifies the key risks that the project management may face in achieving these objectives and provides possible mitigation measures to address these risks.

Risk	Risk Mitigation measures incorporated into programme design
Country -Weaknesses in government public financial management systems and procurement systems.	To address the high level of country risk, a government led Public Financial Management Reform Programme is under implementation which addresses issues of procurement and its related enforcement. New Procurement regulations (2014)

Risk	Risk Mitigation measures incorporated into programme design
	have been enacted to mitigate procurement challenges in the public sector.
Entity level- (MWE) - Delays in project implementation as a result of poor coordination	The coordination of the project will be vested with the Water Sector Liaison Department which is responsible for overall sector activities coordination and reporting.
Project level – Inability to use funds efficiently and economically for purposes intended. -Identification of adequate water resources (ground water/surface water) on accessible land is a major risk	Use of the Ministry’s Internal Audit Department to provide checks and balances. Extensive ground water investigations and test drilling will be conducted in the region and local stakeholders involved in acquisition of the land identified Extensive stakeholder involvement and sensitization will be ensured.
External Audit - Delays in submitting the audit reports. Financial audit limitations to verify economic use of resources.	The Auditor General will be responsible for the audit but has the power to subcontract to competent private auditors should capacity be an issue. Draft ToR will be agreed upon with the office of the AG at commencement of the project.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy of the Adaptation Fund.

Site-specific environmental and social impact assessment and management plans (ESIA/ESMPs) will be developed for each small town interventions in compliance with environmental and social regulatory framework of the Government of Uganda, AfDB and the Adaptation Fund

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan.

Project M&E will be undertaken in accordance with the procedures and rules of partners and donors involved, including the Adaptation Fund with respect to business planning, reporting, monitoring and evaluation procedures. The overall monitoring set up, as part of the JPF includes overall Sector Reviews held twice a year, Technical

Reviews and Joint Sector Reviews. In addition the sector conducts regular technical reviews surveys and tracking studies.

Monitoring and evaluation (M&E) will be part of the regular M&E system. M&E activities will be based on the logical results framework (to be developed). The overall M&E format for the project will follow the instructions and guidelines of the Adaptation Fund, including compliance with the Fund's Environmental and Social Policy (ESP).

A mid-term evaluation will be conducted focusing on the effectiveness and efficiency and where necessary corrective action will be taken for successful project implementation. The Final Evaluation will occur at the end of the project and will be based on the same approach as the mid-term evaluation. It must also make recommendations on additional actions for sustainability. In addition, an ex-post assessment will focus on the sustainability of project results and lessons learned including best practices, anticipated costs, applying the lessons at the sectoral and thematic levels as the basis of the policy development and future planning. Independent of the Final Evaluation an ex-post assessment will be undertaken, focusing on assessing the sustainability of project results, lessons learned, including best practices and cost-benefit in relation to vulnerability and resilience. Both ex-post assessment and final evaluation will also provide key messages for policy development and future adaptation planning, including NAPA revision.

- E.** Include a results framework for the project proposal, including milestones, targets and indicators.

To be provided at the next stage of the proposal

- F.** Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

To be provided at the next stage of the proposal

- G.** Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

To be provided at the next stage of the proposal

- H.** Include a disbursement schedule with time-bound milestones.


To be provided at the next stage of the proposal

PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. Record of endorsement on behalf of the government⁶ *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

<p>Mr. Keith Muhakanizi <i>Permanent Secretary / Secretary to the Treasury Ministry of Finance, Planning and Economic Development</i></p>	<p>Date: (Month, day, year)</p>
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B. Implementing Entity certification *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

<p>I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans and subject to the approval by the Adaptation Fund Board, <u>commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund</u> and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.</p>	
<p>Ayanleh Daher Aden</p> <div style="text-align: center;">  </div> <p>Implementing Entity Coordinator</p>	
<p>Date: <i>January 15th, 2018</i></p>	<p>Tel. and email: (+225) 20 26 43 47; a.daheraden@afdb.org</p>
<p>Project Contact Person: Andrew MBIRO</p>	
<p>Tel. And Email: +256772403854; A.MBIRO@AFDB.ORG</p>	

⁶. Each Party shall designate and communicate to the secretariat the authority that will endorse on behalf of the national government the projects and programmes proposed by the implementing entities.

ANNEX 1
Consultation Proceedings: List of Participants

Ministry Of Finance Officials

	Name	Designation	Email/ Contact
1	Fredrick Twesiime	Ag Comm, Development Assistance and Regional Corporation Department	'Fred.Twesiime@finance.go.ug'
2		Desk Officer	

Ministry Of Water Officials

	Name	Designation	Email/ Contact
1.	Mr. Alfred Okot Okidi	Permanent Secretary – MWE	alfred.okidi@mwe.go.ug
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