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:

The Adaptation Fund Board Secretariat
1818 H Street NW
MSN P4-400
Washington, D.C., 20433
U.S.A
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Email: afbsec@adaptation-fund.org

ADAPTATION FUND

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category:	Regular
Country/ies:	UGANDA
Title of Project/Programme:	STRENGTHENING CLIMATE CHANGE ADAPTATION OF SMALL TOWNS AND PERI-URBAN COMMUNITIES WITHIN MEDIUM RIVER CATCHMENTS IN UGANDA
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 U.S DOLLARS

1. 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.

1.1 Project area context

Uganda is a landlocked country occupying an area of 241,550.7km^2 of which 43,941km^2 is covered by open water bodies and swamps. Out of the country's total land area, approximately 80% area is arable. The largest water bodies in Uganda are Lakes Victoria, Kyoga, and Albert. Lake Victoria is the second largest freshwater lake in the world and accounts for about 80 percent of Uganda's water resources. In addition to the fresh water resources, rainfall is the most important source of water resources in Uganda with mean annual rainfall estimated at 1,180mm. However precipitation levels vary widely due to the country's topography. For instance, 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 as well as Masindi in the west and Gulu in the northern Uganda. The seasonal and spatial variability of precipitation remains a major challenge to agricultural production and human well-being in the humid and semi-arid regions of the country. Livelihoods of communities in such areas are inextricably linked to water resources. About 71% of Uganda's population depends on subsistence agriculture dominated by crops and livestock farming, fisheries and forestry. Furthermore, about 68% of households derive their livelihoods[1] from agriculture albeit high variations in precipitation across the country.

[1]UNDP/NEMA/UNEP Poverty Environment Initiative, Uganda (2009) Enhancing the Contribution of Weather, Climate and Climate Change to Growth, Employment and Prosperity.

Therefore, water availability and/or scarcity remains such a huge challenge that consequently engenders human population migration into neighboring districts, potentially sparking ethnic conflicts that lead to disruption of agricultural production and community development initiatives/activities.

Climate change affects water availability, contributes to water scarcities aggravating the water related problems especially on water supply systems and related ecosystems of Kyenjojo-Katoke, Bundibugyo and Kapchorwa districts within the Atari, Aswa and Tokwe River catchments in Uganda. In these areas, 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 daily[2]. Climate change is a threat to the livelihoods of such vulnerable members of the community stemming from its impacts on the country's freshwater resources and socio-economic activities that are dependent on these resources. The human 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 further projected to grow to about 103 million by 2050[3]. Based on the projected population growth, the total renewable water resources of the country per capita is expected to drop to 1072 m^3/year by 2030, on the brink of a regime of water scarcity especially in arid and semi-arid regions[4]. Such water deficit poses a threat to community livelihoods especially those in small towns and peri-urban areas that depend on adequate supply of water resources for household, sanitation and other domestic needs, a situation compounded by climate change.

Under climate change, 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 eventually increase vulnerability to climate change effects.

1.2 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 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 drying up of boreholes and reduced lake levels that cause impede water services provision in urban areas[5]. Reduced water availability causes severe water stress to communities particularly the most vulnerable

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[2] Uganda Water and Sanitation Sub-sector Gender Strategy (WSGSIII), May 2017

[3] Bashaasha B., Thomas, T. S., Waithaka M., Kyotalimye M. (2012) East African Agriculture and Climate Change: A Comprehensive Analysis, Uganda

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

[5] Government of Uganda (2017) Strategic Water Supply and Sanitation: Funding proposal to the AfDB.

such as women and girls that are traditionally responsible for collecting water and managing the homes. Women and girls in Uganda bear (i.e. most vulnerable to) the impacts of inadequate, deficient or inappropriate water and sanitation services as well as limited access to safe water.

Furthermore, a large proportion of small towns and peri-urban communities have limited access to adequate and resilient sanitation facilities. The most common type of sanitary facilities being used at household level is the ordinary pit latrine (77.8%) and Ventilated Improved Pit (VIP) latrines (20.8%)[6]. Therefore, it is inevitable that floods events pose are likely to increase pollution of 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.[7] The poor are the most affected by these disease outbreaks.

The Ministry of Water and Environment (MWE) with funding support from the African Development Bank under the Strategic Towns Water Supply and Sanitation Project (STWSSP), has planned to undertake water supply interventions by utilizing main surface water sources from Lakes Victoria and Kyoga and River Nile for peri-urban areas affected by inadequate supply of water. The main areas of focus include Kyenjojo-Katooke (Kyenjojo District), Nakasongola (Nakasongola District), Kayunga-Busana (Kayunga District), Kamuli (Kamuli District), Kapchworwa (Kapchorwa District), Dokolo (Dokolo District), Bundibugyo (Bundibugyo District) and Buikwe (Buikwe District) with respective water sources (rivers and lakes) (Table 1.1).

Table 1.1: Proposed Water and Sanitation Service provision of the Ministry of Water and Environment.

Proposed Town WSS	***Water Source***
Kyenjonjo-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

Although five (5) towns will abstract water from large water bodies (L. Victoria, L. Kyoga and R. Nile), the remaining three (3) will need abstraction for water supply from medium sized rivers (Aswa, Atari and Tokwe) to strengthen the resilience of communities to climate change. Although the Directorate of Water Resources Management (DWRM) of the MWE, through regional / decentralized Water Management Zones (WMZs), has

[6] WSDF-C Regional Sanitation and Socio-economic baseline survey report 2013.

[7] "Intestinal worms, diarrhea 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.

prioritized catchment management interventions based on major water basins/bodies in the country, efforts to abstract water supply from small to medium water surface water sources have largely remained low. As such, local communities in catchments within the L. Victoria, L. Kyoga and R. Nile basins are largely dependent on climate resilient interventions undertaken by mandated/responsible area Authorities / regional WMZ. However, the communities in small towns and peri-urban areas in catchments within small to medium water basins continue to face climate change impacts due to limited capacity to undertake appropriate adaptation actions. It is against this background that this proposal seeks to capacitate and support local communities with climate resilient water supply systems in order to ably undertake climate change adaptation actions in Aswa, Atari and Tokwe river catchments. Such support would not only contribute to ensuring sustainable but also reliable water sources for Kyenjojo-Katoke, Bundibugyo & Kapchorwa piped water supply systems.

1.3 Description of the project sites/catchments

1.3.1 River Atari in Awoja Catchment

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 needs 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-lying 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.

The Atari sub-catchment covers an area of 106.5 Km^2 (Figure 1) with reference to a river gauging station on Mbale-Moroto road. The sub-catchment is located in the eastern part of Uganda, at the foothills of Mount Elgon and contains Chebonet river as

the major tributary of the Atari river. The sub-catchment falls in Awoja catchment (inset of Figure 1) with an extensive area of about 11,000 Km^2 in the Kyoga Water Management Zone (KWMZ). Administratively, the sub-catchment covers small parts of three districts, namely; Kween, Kapchorwa and Bulambuli with the largest part falling in Kween and Kapchorwa Districts.

The topography of the sub-catchment (Figure 1) is generally hilly, ranging from 1,076m in the north west to 3,461m in the south east with an average of 2,240m. The sub-catchment experiences two rainfall seasons (March-May and September-December). The annual rainfall in the sub-catchment ranges from 708 to 1873 mm with an average of 1062 mm. The upstream part of the sub-catchment is dominated by the Mount Elgon National Park (Figure 1) that covers 53 Km^2, representing 50% of the sub-catchment area. The downstream part of the sub-catchment is dominated by subsistence agriculture with elements of cultivation up to the river banks along most reaches of the river. Given the hilly nature of the sub-catchment characterised by high slopes, the land use in the area becomes a critical factor affecting soil erosion in the sub-catchment.

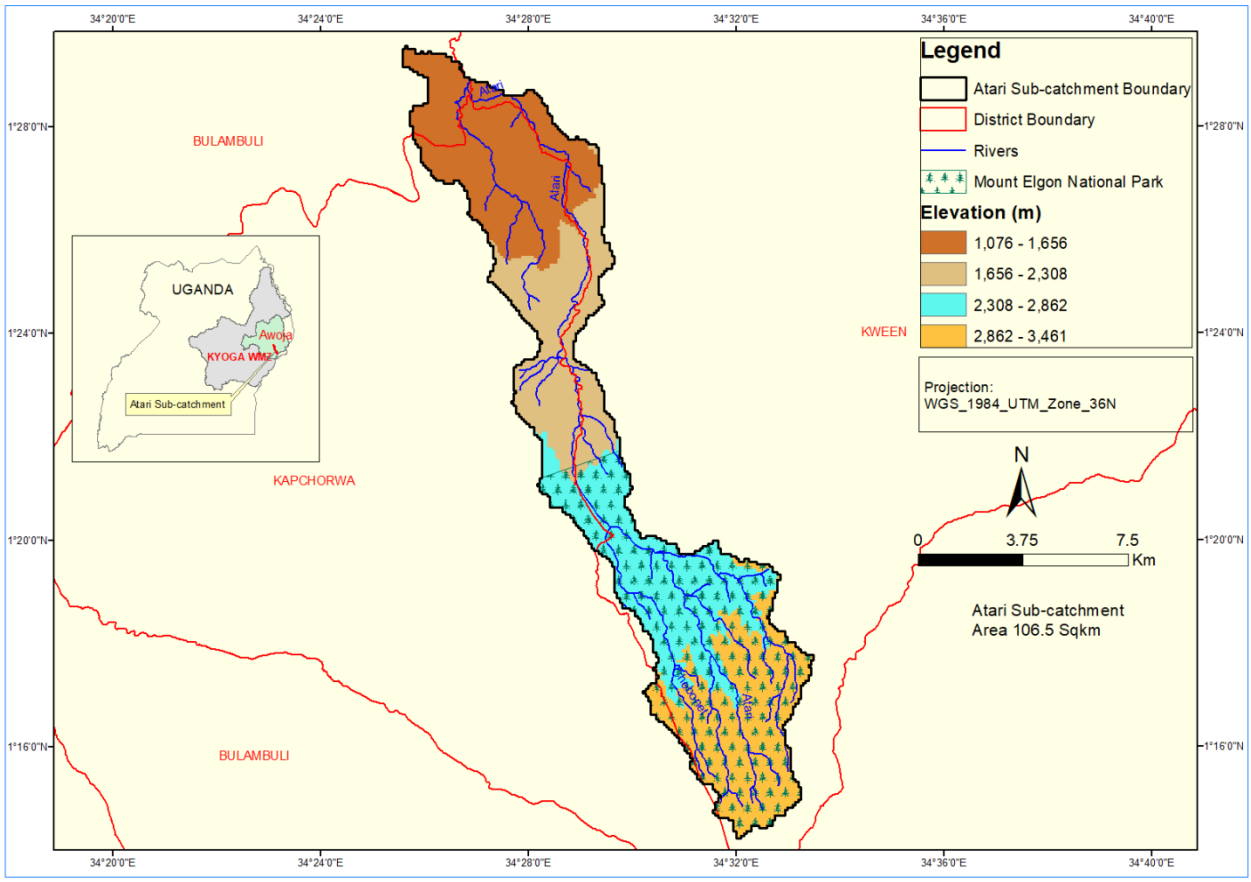

Figure 1: Atari Sub-catchment Map

1.3.2 Tokwe River in Tokwe catchment

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.

The Tokwe catchment is located in the western part of Uganda and is drained by the Tokwe River. The catchment covers an area of 104 Km^2 (Figure 2) with reference to the catchment outlet. The catchment falls in the Albert Water Management Zone (AWMZ) and administratively, it falls entirely in Bundibugyo district (Figure 2). The topography of the catchment (Figure 2) ranges from 710 to 2,983 m with an average of 1,220 m.

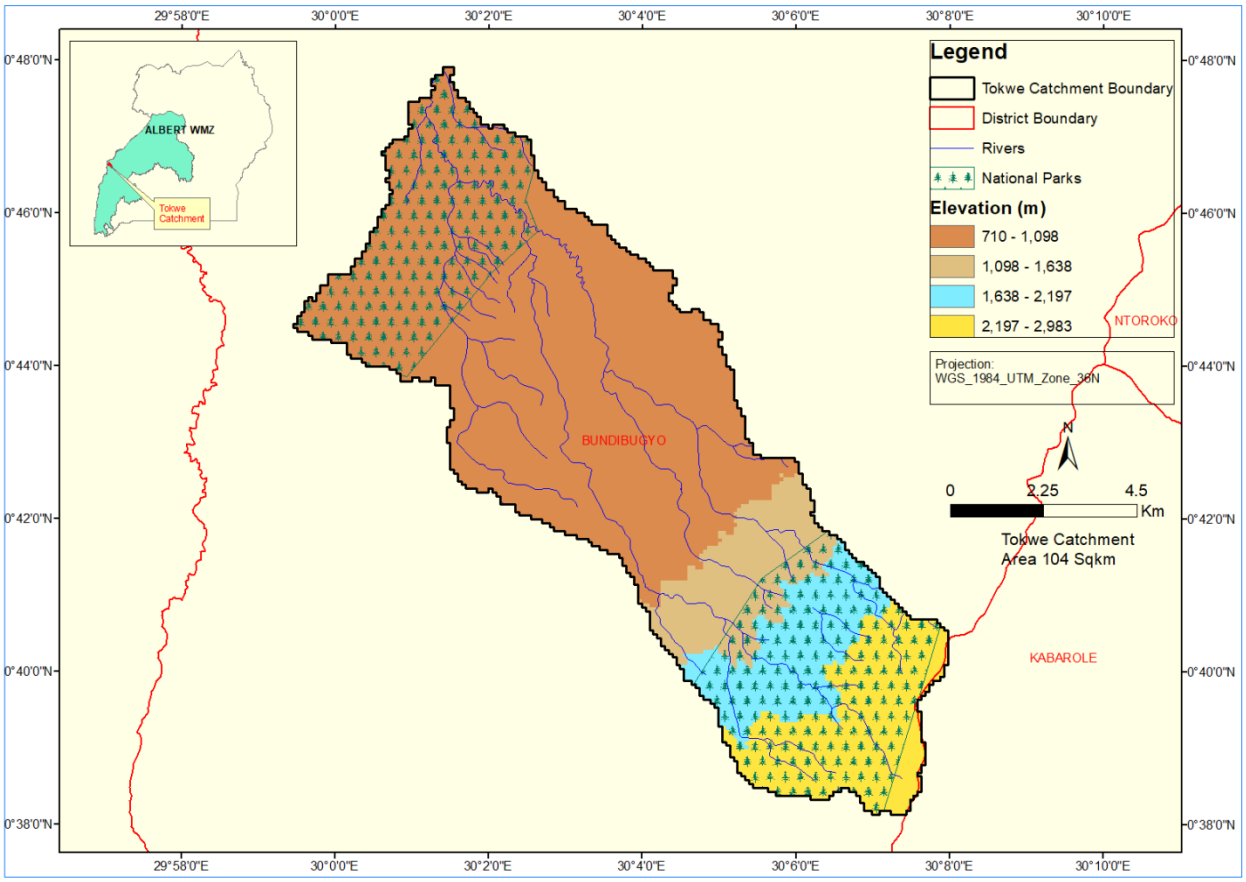

Figure 2: Tokwe Catchment Map

1.3.3 River Aswa in Muzizi Catchment

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

The Aswa sub-catchment is located in the western part of Uganda and is drained by the Aswa River, a tributary to the downstream part of River Muzizi. The sub-catchment covers an area of 404.4 Km^2 (Figure 2) with reference to just before the point of confluence of River Aswa and River Muzizi. The sub-catchment falls in Muzizi catchment (inset of Figure 2) with an extensive area of about 3,681 Km^2 in the Albert Water Management Zone (AWMZ). Administratively, the sub-catchment falls entirely in Kyenjojo district (Figure 2) and covers parts of 10 sub-counties (Bugaaki, Butiiti, Katooke T.C, Kotooke, Kyarusozi, Kyarusozi T.C, Kyenjojo T.C, Nyabuharwa, Nyankwanzi and Nyantungo).

The topography of the sub-catchment (Figure 2) is generally hilly, ranging from 1,158m to 1,678m with an average of 1,371m. The annual rainfall in the sub-catchment ranges from 1300 to 1660 mm with an average of 1480 mm.

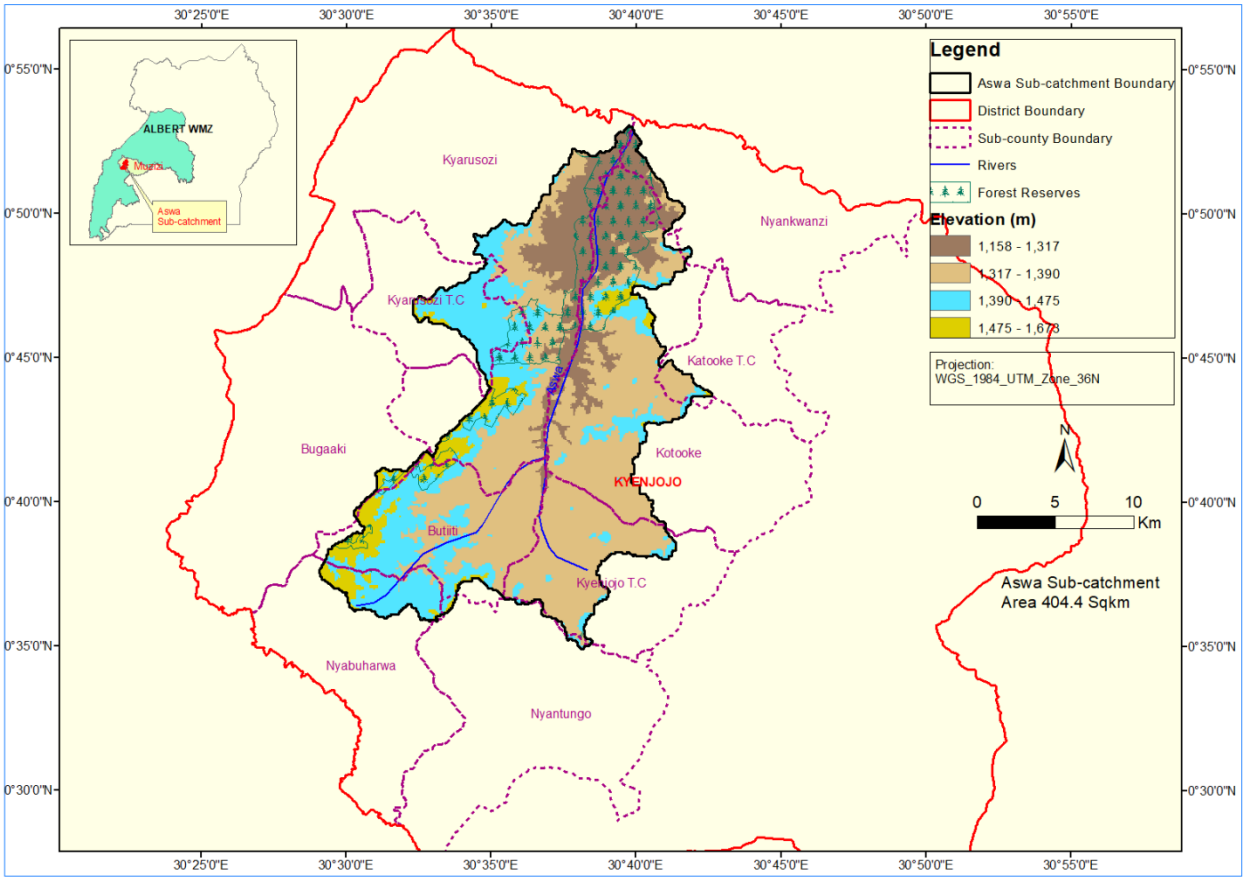

Figure 3: Aswa Sub-Catchment Map

1.3.4 Targeted Towns

The project will implement interventions in the small towns described in subsequent sections. These include:

(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, Mwikoona, 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 by 2037. The system is based on abstraction of water from **R. Aswa** via a water treatment plant with a water production capacity of 2,360m^3/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. 2,500m^3/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 450m^3.

(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 6,000m^3/d. The total length of the transmission main is 10km and a total of 90km of distribution pipelines. The total designed water storage is 1,120m^3.

1.4 Factors that limit community and ecosystem resilience – the problem

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 variability and change. 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-lying 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 on natural resources for their livelihoods with agriculture being the primary source of food and income. 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 to climate variability. 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 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.

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) Districts 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.

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. Integrated resource management planning to cope with climate change is therefore key to sustainable development.

Uganda has developed a National Adaptation Programme of Action (NAPA) based on lessons learnt to guide climate change adaptation activities. Top priority interventions identified in the NAPA include forestry and water resource management, promote and strengthen the conservation and protection of watersheds, water catchment areas, riverbanks and water bodies, as well as contingency planning for extreme events such as floods and drought.

The proposed project will therefore 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 degraded riverbanks.

2. Project / Programme Objectives:

The overall goal of the project is to increase the resilience of communities to climate change risks by promoting water source supply, protection and catchment management measures in selected small towns and peri-urban areas within medium river catchments.

The project targets to support local communities in selected areas to implement measures that are climate resilient to ensure sustainable and reliable water supply in project sites.

The specific objectives of the project are to:

a) Increase resilience by strengthening community structures in environmental and water resources management in alignment with community adaptation to climate change.

b) Increase resilience by supporting adaptation actions for sustained water supply, ecosystems management and livelihoods.

c) Build the capacity of selected stakeholders at different levels to better disseminate information that support communities to undertake and in water source catchment management.

3. Project / Programme Components and Financing:

The project is designed with three components that utilise policy and practical experiences. The three components of the project are:

I. Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe;

II. Supporting adaptation actions for increased community resilience and sustained livelihoods

III. Building capacity of catchment management structures and knowledge management

The relationship among the components of the project, expected outcomes, concrete outputs and corresponding budgets are presented in Table 1.2.

Table 1.2: Components, outcomes, outputs and corresponding budgets.

Project/Programme Components	Expected Outcomes	Expected Concrete Outputs	Amount (US$)
1. Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe	1.1 Water source and catchment management planning that integrates issues of climate change strengthened	1.1.1. Water source and catchment management plans for three rivers developed	**500,000**
	1.2 Water source and environment managed by appropriate community structures	1.1.2 Fifteen (15) Water source and environment management committees supported	
2. Implementing adaptation actions for increased community resilience and sustained livelihoods	2.1 Adequate quality and quantity of water from the three rivers provided/supplied	2.1.1 Innovative water source protection structures constructed/improved	**1,105,932**
	2.2 Resilience of ecosystems services of forests wetlands and riverbanks enhanced	2.2.1 Degraded Forests, wetlands and riverbanks and agricultural landscapes restored/rehabilitated.	
	2.3 Resilience of livelihood systems to climate change enhanced.	2.3.1 Innovative climate resilient Income Generating Activities (IGAs) promoted	
3. Building capacity of catchment management structures and knowledge management	3.1 Adaptive capacity of stakeholders and communities to climate change impacts strengthened	3.1.1 Capacities of key stakeholders and communities in water source protection and catchment management strengthened to support communities in climate change adaptation interventions	**300,000**
	3.2 Knowledge and awareness on resilient climate change adaptation actions increased	3.2.1 Good practices and lessons documented and disseminated	
4.			
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**

4. Projected Calendar:

The project will be implemented over a period of three years as detailed in the subsequent table.

Milestones	Expected Dates
Start of Project/Programme Implementation	October, 2019
Mid-term Review (if planned)	January 2021
Project/Programme Closing	August 31st 2022
Terminal Evaluation	October 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.

Project Components

The proposed project has three components namely: Component 1: Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe; Component 2: Supporting adaptation actions for increased community resilience and sustained livelihoods and Component 3: Building capacity of catchment management structures and knowledge management. In order to discern the contribution of each of the three components to climate resilience there is a need to highlight the baseline situation prevalent in the sub-catchments as well as the specific interventions proposed to improve such conditions under the proposed project. The detailed description is as follows.

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

Baseline situation

Although Uganda government has developed and adopted catchment management planning guidelines as a means of ensuring coordinated and integrated planning and implementation of water and related activities in a catchment, implementation of the guidelines has largely remained at higher levels. Consequently, sub catchment for instance in Atari, Tokwe and Aswa rivers have undergone tremendous degradation due to lack of plans as well as functional management structures. The sub-catchments are exposed to landslides, floods, erosion and collapsing of river banks. The current situation is aggravated by inadequate institutions, structures and plans for climate change resilience against the various climate change risks and hazards in the sub catchments.

Proposed interventions

Under component one the proposed project will intervene by supporting sub-catchment management planning to ensure that climate change aspects are incorporated in the developed plans. Sub-catchment management structures will be established and supported to ensure that they remain functional and guide the community members to be resilient to climate change. Existing sub-catchment management structures will also be strengthened to be functional and organized. The specific activities under this component are detailed below.

Outcome 1.1: Water source and catchment management planning that integrates issues of climate change strengthened

This will involve development of participatory water source protection and sub-catchment management plans in the three sub-catchments along rivers Atari, Tokwe and Aswa. Consultative community meetings and workshops at local/sub-national and national levels will be organized to develop the plans. Efforts will be made to ensure that the water source protection and sub-catchment management plans incorporate climate change issues especially how to support communities to be resilient against the major climate change risks that they are exposed to. Deliberate efforts will be made to ensure that gender disparities are given due consideration especially by considering relatively more women and youth participate in the consultations and their views captured. The activities under component one will be led by the Ministry of Water and Environment supported by District Local Government Officers and Consultants. The specific outputs and activities include:

Output 1.1.1: Water source and catchment management plans for three rivers developed

Activity 1.1.1.1 Facilitate developing the 3 CMPs
Activity 1.1.1.2 Organize stakeholder consultative workshops to develop CMPs
Activity 1.1.1.3 Facilitate developing water source protection plans
Activity 1.1.1.4 Edit and print the CMPs and water source plans
Activity 1.1.1.5 Disseminate and popularise the Water source and CMPs (1 National and 3 catchment level workshops)

Outcome 1.2: Water source and environment managed by appropriate community structures

Water source and environmental management structures will be established in the three sub-catchments where they are are no-existent. The existing ones will be supported so that in posterity, both the new and strengthened existing water source protection and environmental management structures are functional enough to guide the community members to undertake climate change adaptation actions thereby increasing their resilience. The structures will eventually have committees that hold regular meetings to plan and update the rest of the communities in the three sub-catchments. At least 6 committees per sub catchment will be targeted for establishment and strengthening. Specifically the activities are:

Output 1.2.1 Fifteen (15) Water source and environment management committees supported

Activity 1.2.1.1 Facilitate start up meetings for establishing the18 water source and environment committees
Activity 1.2.1.2 Facilitate organisation of quarterly meetings of water source and environment committees to regularly review progress of activities
Activity 1.2.1.3 Support formulation of Bye-laws and Ordinances for water source protection and environment management

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

Baseline situation

At least 70% of the human population in the targeted sub-catchments majorly depends on natural ecosystems for subsistence and livelihoods including water, food, energy and other basic needs. Communities therein extract such resources unsustainably. Consequently, natural ecosystems are so degraded that they cannot ably support the increasing human population with adequate goods and services. The ecological functional integrity of the natural ecosystems has tremendously deteriorated and is aggravated by the prevailing climate change risks to which populations and ecosystems are exposed too. There is a need to intervene by undertaking deliberate efforts to reduce the sensitivity and vulnerability of both human populations and ecosystems and increase their resilience to climate change threats.

Proposed interventions

Under component two, the proposed project seeks to essentially increase the resilience of human populations and ecosystems to climate change threats by supporting communities to reduce pressure exerted on natural ecosystems for the various goods and services. It also seeks to promote alternative sources of income for the vulnerable communities so as to increase their adaptive capacity to cope up with the climate change threats. Under this component, deliberate efforts will be made to restore/rehabilitate the degraded natural systems in order to improve their ecological functional integrity to provide the much needed ecosystem goods and services in the three sub-catchments. Resilience of natural systems including water, forests, river banks and wetlands as well as livelihood systems will be increased under outcomes 2.1, 2.2 and 2,.3 of this proposed project. The detailed interventions include:

Outcome 2.1 Adequate quality and quantity of water from the three rivers provided/supplied
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. Efforts to increase access to water and sanitation services in peri-urban areas are a strategic socio-economic importance to the district headquarters. Specifically, the proposed adaptation project seeks to integrate critical adaption measures to 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. The specific outputs and activities include:

Output 2.1.1 Innovative water source protection structures constructed/improved

Activity 2.1.1.1 Support water source assessment and abstraction in each river catchment
Activity 2.1.1.2 Develop guidelines for surface and ground water protection
Activity 2.1.1.3 Provide inputs to communities for abstracting water sources in 3 river catchments
Activity 2.1.1.4 Provide inputs to communities for water source protection structures

Outcome 2.2: Resilience of ecosystems services of forests, wetlands and riverbanks enhanced

The three sub-catchments are characterized by a high human population. This population exerts high pressure on natural ecosystem good and services and has led to degradation of resources in these ecosystems due to their unsustainable utilization. Communities in the three catchments continue to derive their livelihoods from these ecosystems unsustainably due to inadequate knowledge and access to information as well as inputs for sustainable forest, wetlands and river banks management practices that enhance their resilience to the impacts of climate change. Forests are exploited for timber, firewood, and charcoal for biomass energy as well as encroached upon for agricultural crop farming thereby increasing their vulnerability to landslides, mudslides and floods. Wetlands are also exploited for various products including papyrus for crafts and quite often encroached upon for agricultural crop farming, grazing, brick baking, sand mining and settlements. River banks are threatened by erosion and collapsing due to encroachment for cultivation of food crops is done close to the river banks. In this outcome, the proposed project seeks to intervene by increasing the resilience of forests, wetlands and river bank ecosystems to climate change impacts through restoration and rehabilitation activities. Forests will be restored through trr planting for instance with indigenous tree species including, *Terminalia* spp, Acacia spp, *Albizzia* spp, Bamboos etc; training, sensitization and construction of small-scale flood and soil erosion control structures e.g. embankments, ponds, valley dams and storm water diversion channels to reduce encroachment of wetlands and river banks, demarcation using live markers or

concrete pillars will be supported by the proposed project. The outputs and associated activities are:

Output 2.2.1 Degraded Forests, wetlands, riverbanks and agricultural landscapes restored/rehabilitated

Activity 2.2.1.1 Procure and distribute seedlings to selected communities
Activity 2.2.1.2 Train community members in forests, wetland and riverbank restoration activities
Activity 2.2.1.3 Demarcate wetland boundaries in the 3 catchments so as to reduce encroachment on wetlands for cultivation.
Activity 2.2.1.4 Organize community workshops to develop site specific river banks restoration action plans
Activity 2.2.1.5 Demarcate River banks in the 3 catchments
Activity 2.2.1.6 Conduct workshops and meetings to sensitize communities on water harvesting for flood control and drought management
Activity 2.2.1.7 Train communities on construction and maintenance of water harvesting and flood control structures
Activity 2.2.1.8 Provide inputs for constructing small-scale flood and soil erosion control structures e.g. embankments, ponds, valley dams and storm water diversion channels.

Outcome 2.3 Resilience of livelihood systems to climate change impacts enhanced
As a way of compensating encroachers that derive their livelihoods from natural systems, the proposed project will intervene by promoting climate resilient income generating activities (IGAs). In doing so, deliberate efforts will be made for gender considerations. Some of the alternative income generating activities include ecotourism, apiculture, crafts making such as production of ropes and art crafts, and improved fast growing vegetable growing. Promotion of such IGAs will take into consideration the gender roles and availability. Women, youth and children will be involved in IGAs that do not require them to spend much time to impede other household chores. Such members of the community will initially be trained on the various IGAs as businesses. They will also receive training in value addition and marking of their products. Depending on the interest and suitability, the proposed project will select and support groups of women and youth with seed funds to undertake innovative IGAs.

Selection Criteria

- Groups whose members were initially dependent on natural systems for their livelihoods and are affected by the proposed project. In this particular case, proximity to a forest river bank or wetlands will be considered. The closer to these natural systems the more such would be likely selected for the respective IGAs.
- Women and youth that actively participate in project interventions
- Women and youth that attend all the training sessions as described in the training manual developed.

The activities include;

Output 2.3.1 Innovative climate resilient Income Generating Activities (IGAs) promoted

Activity 2.3.2.1 Select and train potential beneficiaries in income generating activities, including business planning, value addition and marketing
Activity 2.3.1.2 Support Vulnerable women and Youth groups to undertake innovative IGAs

Component 3: Building capacity of catchment management structures and knowledge management

Baseline situation

Stakeholders at national, district, catchment, and local levels have limited capacity to address impacts of climate change through a catchment based approaches. The water, forest, environment, agriculture and wetlands officials of the local governments are too inadequate to support the local population to engage in climate change adaptation due to their limited capacity. The communities are vulnerable to climate change risks yet their capacity to take local adaptation actions and manage natural systems in a sustainable manner is also limited. There is also limited awareness at various levels on the importance of taking local actions to build resilience to climate change. Documentation of good practices in climate change adaptation in Uganda for learning and scaling-up has remained largely inadequate. In addition, cross learning (community-to-community) experiences are limited too. Therefore, this project proposes specific interventions for building the capacities of stakeholders and institutions at sub-catchment, and district levels such that local communities are supported through awareness creation about the climate change adaptation.

Proposed interventions

The proposed project intends to strengthen the capacity of communities, other stakeholders such as community leaders by promoting knowledge generation and dissemination interventions. In this case, specific capacity gaps will be identified, training tools developed and training sessions organized at various levels. Efforts to capture innovative and resilient climate change adaptation actions in the three sub-catchments will be made and shared within and outside the project participating communities.

Outcome 3.1 Adaptive capacity of communities and other stakeholders to climate change impacts strengthened

The main impediments to the implementation of the existing CMPs are limited financial resources as well as limited capacity of the sub-regional and local management structures. Under outcome 3.1, capacity of stakeholders at various levels (national, catchment, district and local levels) to effectively support the implementation of the project will be built. It will be aimed at increasing resilience to climate change impacts in the three catchments. A capacity needs assessment will be done, training manual developed and stakeholders trained. The specific outputs and activities are:

Output 3.1.1 Capacities of key stakeholders and communities in water source protection and catchment management strengthened

Activity 3.1.1.1 Conduct capacity needs assessment for key stakeholders (Regional and Local government staff, extension workers, CMCs)
Activity 3.1.1.2 Develop a detailed training plan to guide the capacity building program for the Project
Activity 3.1.1.3 Develop training manual to build capacity of stakeholders and communities on a continuous basis

Outcome 3.2: Knowledge and awareness on resilient climate change adaptation actions increased

To facilitate cross learning in climate change adaptation, the proposed project intends to also capture knowledge across the training and implementation of interventions. Good practices that can be shared to influence policy and practice within and outside the three sub-catchments will be documented and disseminated. The specific output and activities are:

Output 3.2.1 Good practices and lessons documented and disseminated

Activity 3.2.1.1 Documenting and disseminating lessons and best practices from project interventions
Activity 3.2.1.2 Develop and disseminate Information Education and Communication (IEC) Materials for awareness raising
Activity 3.2.1.2 Share knowledge and to information through use of existing and popular platforms e.g. media, telecom that are easily accessible by the stakeholders.
Activity 3.2.1.3 Engage Policy Makers in dissemination of information on adaptation actions

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.*

Climate variability and change is expected to have an impact on Uganda's performance in the agriculture, water and environment sectors, which are the backbone of the economy on which the human population derive their livelihood.. 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.

The proposed project will enhance the resilience of communities and ecosystems to the impacts of climate change by focusing on water source protection and catchment management interventions in thereby ensuring safe and reliable freshwater supply to a vast majority of the vulnerable population (women, youth, children and the elderly) in the selected strategic small towns of Uganda described in section 1.3. The economic, social and environmental benefits likely to accrue from the project interventions that are vital for the vulnerable communities include:

Economic benefits

The proposed interventions will stimulate productivity and wealth creation as time saved from water collection can be re-allocated to diversify beneficiaries' 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 including health centres, educational institutions, and agro-based industries all of which are essential ingredients for development. These will directly benefit the approximately 5000 women and youth who will benefit from increased opportunities for employment and trade.

Specifically, the proposed adaptation project will focus on employment creation for women and youth. Such beneficiaries groups will be engaged in activities that not only support the project such as production of tree seedlings from established tree nurseries but also enable them obtain incomes. The training interventions for instance in tree nursery establishment and management, tree planting and other ecosystem restoration interventions will enable them acquire knowledge and skills to produce tree seedlings for sale to other agencies engaged in ecosystem restoration interventions. The groups will be given hands-on training on setting up nurseries and marketing the resulting tree seedlings. 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 including, degraded wetlands and along river banks in 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 form of profits) is expected to be reinvested into the business to offer sustainable economic benefits.

Social benefits

The project also aims to directly improve the adaptation capacity of approximately 10,000 people from approximately 1,200 households (3,500 people, 500 households targeted in each of the three catchments). Generally, 50%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, youth and elderly) will be targeted. The socio-economic profile of the beneficiary groups will be further analyzed and disaggregated by gender during the stage of undertaking the baseline study in the project sites. .

Sustained and increased availability of water is key to social development. 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 socio-economic activities including education. The reduction in time spent collecting water can improve the participation of youths (especially girls) in school, thereby improving the level of education in the targeted communities.

Furthermore, 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 including:

i. Formation of Water and Environmental Management Committees with 50% women representation will be encouraged to participate. There will be affirmative action taken in supporting women to take up leadership positions (50% composition) and as such, one third of the membership will be women in accordance with the Gender Policy of the MWE.
ii. Conflict management is another social benefit that is likely to benefit vulnerable communities. Conflictt management is inevitably 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.
iii. 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. Such participation further contributes to managing conflicts between communities related to access to and use of natural resources.
iv. 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 proposed project sites face rampant ecosystem and environmental degradation evident in terms of soil loss across the agricultural landscapes, siltation of rivers, erosion of riverbanks and reduction in biodiversity. Such ecosystem degradation greatly contributes to the low resilience to climate change because of the inability to sustainably supply ecosystem goods and services to the vulnerable members of the targeted communities. The proposed project is expected to have positive environmental impacts as it supports catchment and water resource protection practices, including catchment planning and soil conservation measures (e.g. flood control reforestation and erosion

control). All these factors are essential to enhance the resilience of ecosystems and ensure long-term and sustainable water availability and security for ecosystems and vulnerable members of the targeted project sites.

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 wetland ecological systems of Atari, Tokwe and Aswa catchments will be improved and protected through various interventions as will be outlined in the development of wetland-specific restoration action plans. Degraded and deforested areas within the three river catchments including affected buffer zones and degraded riverbanks shall be reforested. Floods and landslides across landscapes will be controlled through community training on appropriate / modern farming practices involving soil erosion control measures; besides implementation of corrective bio-physical measures such as small scale flood management measures proposed, thereby strengthening resilience of agricultural landscapes.

Training in tree nurseries establishment and management as well as purchase and distribution of tree seedlings for planting will improve the natural vegetation cover of the catchment areas thereby contributing to proper management of the flood hazards to communities in the catchments. Overall the proposed concrete adaptation actions 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 with USD 500,000=, supporting adaptation actions for increased community resilience and sustained livelihoods with USD 925,932= and building capacity of catchment management structures with USD 300,000= under components one, two and three respectively..

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, the proposed 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 viable and cost effective alternatives to conventional capital-intensive water resources management solutions and/or 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 used 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. The proposed activities that 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.

Therefore, the proposed project is considered cost-effective because:

a) The project support to catchment management (including sustainable land and water management practices) and governance at the community scale is expected to improve water source protection and secure access to water supply for domestic and agricultural purposes. It is anticipated that the modest investment of Adaptation Fund resources will result in (i) significant improvements in water supply in the targeted small 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 the 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 in posterity 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 National Water Policy 1999 and related Policies

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 National Water Policy 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 and relevant to this project 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).

The Uganda Vision 2040

The Uganda Vision 2040 recognizes that climate change affects all sectors of the economy and emphasizes capacity enhancement to respond to climate change related challenges through adaptation and mitigation strategies necessary. It lays out the specific long-term priorities for the agriculture and Water & Environment sectors that are consistent with the proposed project.

National Development Plan I and II

Water supply and sanitation is 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 catchment management approach being promoted through this project aligns with the MWE's Catchment-based Water Resources Management (CbWRM) strategy**,** which is aimed at developing and implementing Catchment Management Plans through a stakeholders driven process. Catchment Management Planning (CMP) Guidelines (MWE 2014, revised in 2017) have been developed to guide the process of preparation of CMPs in Uganda and the de-concentration of water resources management to WMZs.

The National Climate Change Policy
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. The policy calls for the integration of climate change concerns into national efforts for sustainable and long-term conservation, access and effective utilization and management of water resources.

The Uganda Nationally Determined Contributions (NDC)
The Uganda's Nationally Determined Contributions (NDC) for the water sector prioritizes the management of water resource systems, including wetlands, particularly in cities, in such a way that floods are prevented and existing resources conserved through the establishment of an IWRM system.

Uganda's National Communication on climate change to UNFCCC
Uganda's National Communication on climate change to UNFCCC also emphasizes access to information on additional measures and policies required to adapt to climate change, 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.

National Adaptation Programme of Action (NAPA)
In addition, 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.

Uganda NAP Planning Process - The proposed programme is consistent with the Country's NAP process for instance the NAP for the agriculture sector focuses on increasing the resilience of Uganda's agricultural sector through coordinated interventions that enhance sustainable agriculture, food and nutritional security, livelihood improvement and sustainable development. Similarly discussions on the NAP for the Water and Environment sector are on-going. The project will endeavor to integrate the recommendations of this process into project implementation.

Sustainable development Goals(SDGs) - The proposed program also specifically contributes to the attainment of SDGs,1 on poverty,2 on hunger ,5,6 on water and sanitation ,13 on climate action ,15 life on land and 17 on global partnerships for sustainable development

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.*

The project is relevant to the climate adaption objectives for the water sector as articulated in the Uganda NAPA and NDC. The proposed climate resilient catchment management planning activities have also be informed by the Uganda Catchment Management Planning Guidelines (MWE 2014, revised.2017). The Directorate of Water Resource Management (DWRM) under the MWE leads the Catchment based water resources management program for Uganda and is responsible for the development and enforcement of national water laws, policies and regulations including managing, regulating and monitoring national water resources through issuance of water use permits, abstraction and wastewater discharge permits.

Other relevant regulations include the (i) **National Environment Management Policy and National Environment Act, Cap 153**, which requires projects or policies likely to have significant adverse ecological or social impacts to undertake an Environment and Social Impact Assessment before implementation. The Act imposes a mandatory duty on a project developer to have an Environmental Impact Assessment conducted before embarking on a project. The National Environment Management Agency (NEMA) was established under the Act to oversee, coordinate and supervise environmental management in Uganda, including the review of EIAs and issue permits before project implementation, (ii) National **Wetland Conservation and Management** Policy requires the preparation of Environmental Impact Assessment and Audit procedures for all activities to be carried out that will have an impact on a wetland (s). Furthermore, the policy aims at maintaining an optimum diversity of uses and users and consideration for other stakeholders when using a wetland, (iii) N**ational Environment (Riverbanks, Lakeshores and Wetlands) regulations, 2000** provides a list of regulated activities whose implementation in wetlands is subject to issuance of a permit granted by NEMA in consultation with the Lead Agencies. These include, among others, cultivation, drainage, commercial exploitation, sewerage filtration, fish farming and aquaculture. Environmental Impact Assessment is mandatory- under the statue-for all activities in the wetlands, riverbanks and lakeshores and special measures are essential for protection of these ecosystems, (iv) **National Forestry and Tree Planting Act (2003)** makes provision for conservation of Uganda forests and guides tree planting activities in the Uganda.

Consistent with the above national regulations and the Fund's ESP, an environmental and social impact assessment shall be conducted to assess the potential risks that may be associated with the proposed adaptation project's interventions. This will be accompanied by an environmental and social management plan that would elaborate the mitigation measures that will be taken to ensure consistency with the ESP Principles and Uganda laws and regulations. NEMA shall approve the EIA/ESMP and issue the required license and permit prior to the implementation of the associated tree planting,

riverbank and wetland rehabilitation activities in accordance with Ugandan environmental laws.

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

This is the first integrated 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-Katooke and Kapchorwa. The proposed climate adaption project will implement catchment protection measures that will 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 adaptation measures are not undertaken.

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

Knowledge management, awareness creation and dissemination are incorporated under component three of the proposed project. It is understood that 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 and documentation of success stories (through brochures, 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.

In order to enhance learning and knowledge management, the project has planned under **Output 3.2.1** to document good lessons and practices emanating from project interventions. It is also planned under the same output to prepare information communication and dissemination materials so that they are used for knowledge and experience sharing.
In addition, The MWE communication 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 formulation of this full project proposal has aligned with the development of the baseline project of the AfDB, which has involved consultation with a range of stakeholders during the Preparation (21st August - 1st September 2017) and Appraisal (2nd – 10th November 2017) missions. In addition more consultative workshop was held with stakeholders brought together on 20th and 21st December 2018 (Annex I). Overall, the consultation process included previous field based meetings, and working sessions that encompassed various stakeholders including technical staff and proposed project 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 at 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.

Consultation processes with particular emphasis on focus group discussions and interviews with marginalized and vulnerable groups will continue and shall remain at the

core of the development of the full project proposal. The stakeholders consulted and the proceedings are provided in Annex I of the 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.

It is documented that in Uganda, climate change, water-related disasters, such as floods, landslides, windstorms and hailstorms, contribute well over 70% of the natural disasters and destroy annually an average of 800,000 ha of crops, resulting in economic losses of over U Sh120 billion.[8] Floods and landslides following the heavy rains in 1997/1998 killed 53 people and displaced over 2,000 people. Roads, bridges, houses, crops, and property, worth more than US$20 million were also destroyed. The 2007 floods most heavily affected the eastern and northern parts of the country, and indicated the country's vulnerability to impacts of adverse effects of climate change. Property worth over US$80 million was destroyed[9] and an estimated 50,000 households (300,000 people) have been affected by the flooding, and required humanitarian assistance of $40,844,801[10] to address urgent humanitarian and some limited early recovery needs. Considering the costs associated with responding to such disasters highlighted above, it is evident that the proposed financial resources are needed and would just be adequate to design resilience and adaptive capacities of communities against climate change impacts.

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

The program designing process carefully considered the issue of sustainability.

The program's ***environmental sustainability*** is mainly reflected right from the objectives. The main objective is to increase the resilience of communities to climate change risks by promoting water source supply, protection and catchment management measures in selected small towns and peri-urban areas within medium river catchments. It is upon this framework that project activities were identified. The risk assessment exercise carried out for the project also covered environmental assessment of the project. The project will consider monitoring and evaluation of environmental changes as part of the regular project M&E system.

Economic sustainability is relying on the participatory and consultative process to build ownership of the project by communities, local governments and other key stakeholders. This approach will essentially be used to also mobilize additional resources to ably implement the project thus ensuring continuity of the activities at

[8] Second United Nations World Water Development Report (2006)

[9] UNDP/NEMA/UNEP Poverty Environment Initiative, Uganda (2009) Enhancing the Contribution of Weather, Climate and Climate Change to Growth, Employment and Prosperity.

[10] Uganda Consolidated Appeals Process (CAP) 2007

project exit. Considering that the project will contribute to the achievement of the objectives and targets of various government sectors in Uganda these sectors provided in-kind thus contributed to the project development. Since government employees receive salaries and have a responsibility to provide services to the people, once their capacity is improved the sustainability of their service provision to the people should be guaranteed. Similarly, local communities will be motivated to participate in project activities especially in engaging in innovative alternative income generating activities. Seed grants that will be provided to women and youth groups to undertake resilient adaptation actions will further contribute to economic sustainability of the proposed project because such interventions can be carried forward beyond the project lifespan with positive rates of return.

Technical, logistical, material and political support is expected from the different stakeholders and will be ensured through the various stakeholder coordination and collaboration structures that will be created by the project.

Project interventions such as soil erosion and flood management structures across the agricultural landscapes will continue to provide benefits to communities beyond the project lifespan so as to meet their current and future demands. Investment plans and budgets developed will ensure future investments are implemented with ease based on available financial information and costing of investments

Economic viability of the type of activities, technologies or practices of the project interventions is assured by taking the economic situation of the communities into consideration. That means proposed interventions are mostly based on the communities' local knowledge systems and practices and their available resources to ensure economic feasibilities. Training of communities in economically sustainable sources of alternative incomes will also contribute to economic sustainability of the project.

Technical/technological sustainability is also considered during the design phase through ensuring technical acceptability of project interventions by local communities, which will contribute to sustainability of the interventions. The project will build the capacity of extension staff, farmers and stakeholders in improved water, ecosystems and water source protection and catchment management technologies including water harvesting and storage, appropriate soil erosion control and small-scale flood control. This will ensure resident capacity to continue with the technologies when the programme ends.

Social sustainability is another useful consideration during project design. Issues of social, cultural and other social values of local communities have been considered when proposing interventions. Participation of local communities to appraise the proposed interventions will be considered during the initial inception phase of project implementation. Recognition of the role of women and youth in the implementation of the project by all stakeholders is also expected to contribute to sustainability. The project appreciated the differences in livelihoods, social systems and identified interventions in response to those differences. Noting that targeted catchments are dispersed in different agro-ecological zones with marked differences in livelihood

systems, they are similarly related in agricultural and natural resources management practices. Through wide-scale consultation of stakeholders before full scale commencement of project implementation, social sustainability of the project will be ensured and create a sense of ownership of the project by communities.

Institutional sustainability will be achieved through the management structure included in the project design. The project will be executed through already existing MWE and government structures at national, catchment, and local levels. The structures and personnel will ensure sustainability of the project results beyond project lifecycle because institutions are permanent and will continue to execute their mandates after the project and their capacities would have been built by the project. The planned interventions on establishing water source protection and environment management and catchment management will contribute to having institutions and governance structures that will ensure institutional sustainability of project interventions. Finally, the M&E including mid-term review and phasing out strategy do also contribute to sustainability of project interventions.

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

The proposed project seeks to fully align with the Adaptation Fund's Environmental and Social Policy (ESP) and Uganda safeguard laws. Based on available information and evaluation of the proposed activities against the AF environmental and social principles (see E&S risks matrix of the ESMF Annex II), the project interventions can be classified category B in accordance with the Adaptation Fund ESP, this is also consistent with the Uganda EIA categorization for projects of this nature.

Overall, the project will have significant positive environmental and social impacts through improving the ecosystems and promoting sustainable water and land management practices within the sub-catchments of the selected rivers. The proposed activities under Component 2 (including tree planting, construction of small-scale flood management structures and other riverbank and wetland restoration activities) may portray some negative risks. However, such negative risks will be largely small-scale and localized risks that they can be readily managed with the application of mitigation measures suggested in the ESMP, Annex II. A detailed environment and social impact assessment and management plan for all the interventions will be completed in line with the safeguard policies of the Government of Uganda (EIA regulations for small-scale activities) and the ESP at project inception.

During preparation of the full project proposal, an assessment was undertaken to elaborate the scale, scope and location of these activities, identify pertinent E&S while considering the Adaptation Fund principles that may be associated with the proposed project interventions as introduced in the Table 1.3 below. In addition, the fully developed project document examined the necessity for a grievance mechanism, which could be used by targeted beneficiaries. The mechanism is designed to receive and facilitate grievances in a transparent manner to allow for adequate monitoring, evaluation and response to address complaints in a timely fashion.

Table 1.3: Checklist for Environmental and social principles

Checklist for Environmental and social principles		
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	Yes. The proposed project complies with the relevant domestic law and policies as indicated in section chapter 3, sub sections 3.1 and 3.4 of this document. According to Environmental Impact Assessment (EIA) Regulation (1998) and Sectorial EIA Guidelines of Uganda most of the components and activities of the proposed project **do not fall** within the First Category of projects that require full EIA. Some of the activities such as the construction of water source protection structures in each sub catchment may require EIA. However, the size and location of such proposed structures has to be given due consideration.	None
Access and Equity	Yes. In general the proposed project promotes for fair and equitable access to benefits of the project. Activities such as those under component 2, under outcome 2.3 that are aimed at enhancing resilient livelihoods through promoting Income Generating Activities (IGAs) are not intended to benefit all including those that are not direct project beneficiaries. Through training in IGAs, all other non-direct beneficiaries will benefit from the planned training. The proposed project will also target all project beneficiaries and provide support to assure equal access of men, women youth and the most vulnerable to various benefits including IGAs and other agricultural landscape interventions such as soil and flood control/management structures. The project will also closely monitor targeting of all project beneficiaries to assure that equal access of men,	None to low risk

	women youth and the most vulnerable is achieved. Indicators in this regard are included in the M&E scheme.	
Marginalized and Vulnerable Groups	There are no initiatives identified with orientation or execution that could generate negative impacts on marginalized and/or vulnerable groups. Some activities, such as the promotion of IGAs aimed at livelihood improvement. The tree planting and IGAs are targeting women, single headed households and marginalized groups. The delineation of buffer zones for restoration of degraded (river and stream banks as well as other degraded ecosystems) and other restoration methods such as demarcation of the degraded areas need to be monitored closely, especially the former resource users in those degraded areas, in order to these measures are accompanied with livelihood improvement projects and other means to assure subsistence of people who have exploited those resources. assure that these measures are accompanied with livelihood improvement assure subsistence of people who have exploited those resources. Indicators in this regard are included in the M&E scheme.	Low risk
Human Rights	No activities are identified whose execution is not in line with the established international human rights. The proposed project objectives essentially promote basic human rights for equitable access to training and other services, inputs for adaptation actions as well as small-scale flood and soil erosion control structures e.g. embankments, ponds, valley dams and storm water diversion, capacity building and access to information.	None
Gender Equity and Women's Empowerment		Low risk - The proposed activities in this project are designed to promote a fair and equal access of men and women to project benefits. The project promotes equal participation in decision-making processes by assuring women representation in water source and environment management committees, as well as any participatory platforms for all stakeholders including deliberate balancing representation in the

		forums. All the proposed project activities have been screened and analysed in order to take gender aspects into consideration. An in depth gender analysis of the involvement of men and women implementation of the concrete adaptation actions proposed will be undertaken at the commencement of project implementation.
Core Labour Rights	The project respects the labour standards as identified by ILO.	None
Indigenous Peoples		Low to moderate risk - The proposed project promotes respect for rights and responsibilities set forth in the United Nations Declaration on the Rights of Indigenous Peoples. In the local communities' context, different tribes exist in the three sub catchments. However, there are no sharp and/or conflicting distinctions between indigenous and non-indigenous people can be made. There is a risk that traditional natural resource use and land use rights are undermined. Therefore a detailed analysis of resource use rights and land use rights particularly with regards to water source/point resources, forests and other ecosystems will be undertaken at the commencement of project implementation
Involuntary Resettlement	The proposed project will not be involved in major resettlement activities of communities. However, people that might have contributed to the degradation of ecosystems e.g. forests, riverbanks and wetlands through encroachment and unsustainable utilization methods will be asked to move out of the area. Such community members will be involved in restoration activities as IGAs to support them with alternative income generation to assure their livelihoods. The project will closely monitor the project beneficiaries targeted to provide assurance that the people that previously encroached on protected natural resources are deliberately supported to undertake IGAs. This is the kind of financial support provided as inputs under Output 2.3.1. Their involvement in income generating activities will serve to compensate for the inconveniences of leaving protected area ecosystems and the income foregone.	Moderate risk

Protection of Natural Habitats	The proposed project undertakes the protection of wetlands, forests, riverbanks and agricultural landscapes and their natural habitats and biological diversity is a core objective of under component 2 of this project. During implementation of all project activities related to protection and management of the highlighted natural habitats including wetlands, riverbanks forests agricultural landscapes and surrounding areas, monitoring to evaluate whether or not the expected impact is achieved or if any unexpected negative side effects show up.	Low risk
Conservation of Biological Diversity	The proposed project undertakes to conserve biological diversity under component 2 especially in restoring degraded forests and wetlands. The potential risk could be the emergency of tree pests and diseases. However, the proposed project has planned to procure and distribute mainly seedlings of indigenous tree species that are resistant to pests and diseases. Such seedlings will not only be planted to restore degraded forest areas but also planted as live markers to demarcate wetlands.	Low risk
Climate Change	The project does not only increase the adaptation capacity of the local population and the resilience of the ecosystems, but also reduces greenhouse gas emissions the planned tree planting by communities under component 2.	None to low risk
Pollution Prevention and Resource Efficiency	The project will contribute positively to resource efficiency through water source protection structures which consequently leads to, efficient use of water. Water pollution will be prevented while undertaking interventions for wetland restoration such as demarcation and also erecting flood management structures across agricultural landscapes. Such structures will be vital in serving as barriers to run off and floods that would otherwise pollute the water resources downhill in valleys.	None

Public Health	The project will not have negative impacts on public health. On the contrary the project will contribute to improved health conditions of the communities by reducing floods and erosion as well as contamination of water sources thereby reducing water borne diseases and, improving living environment (healthy surroundings). However, water source protection structures may lead to flourishing of some diseases such as malaria. During the implementation of the project awareness raising activities will be undertaken on malaria and other water related diseases especially during training sessions on ecosystem restoration activities.	Low risk
Physical and Cultural Heritage	The project will not have any activity related to affecting physical and cultural heritages. Protection / conservation of such physical and cultural heritage will rather be promoted by the proposed project.	None
Lands and Soil Conservation		Low risk - Soil conservation, reduction of land degradation through supporting flood management and erosion control measures such as terraces, afforestation is a core objective of component 2 of the project. During the implementation all the activities related to protection and management of land shall be closely monitored to evaluate if the expected impact is achieved or if any unexpected negative side effects show up.

PART III: IMPLEMENTATION ARRANGEMENTS

A. *Describe the arrangements for project / programme implementation*.

The project will be implemented by the African Development Bank (AfDB) as the Multilateral Implementing Entity (MIE) and executed by the Ministry of Water and Environment (Uganda) in collaboration with other key stakeholders such as National Forestry Authority (NFA), National Environment Management Authority (NEMA) and the participating district local governments.

AfDB will be responsible for the overall management of the project financed by the Adaptation Fund, including the financial, monitoring, and reporting duties. For this matter, AfDB will receive the funds and disburse them to Uganda through the Ministry of Finance, Planning and Economic Development as the Designated Authority for the Adaptation fund. The Ministry of Water and Environment (MWE) in Uganda will be responsible for project management and execution. The MWE through its Directorate of Water Development will take the lead in executing the project. The project execution offices will closely collaborate with local government structures in the execution of the project in line with sector policies.

A project Manager will be appointed and stationed at MWE to ensure liaison on project activities among and between the MWE, the field offices, local governance structures and other stakeholders.

The project will be guided by various committees including the Project Steering Committee, Project Coordination Team, Project Execution Team, and the Support Team at the Ministry.

The diagram below shows the project implementation structure with linkages among different parties.

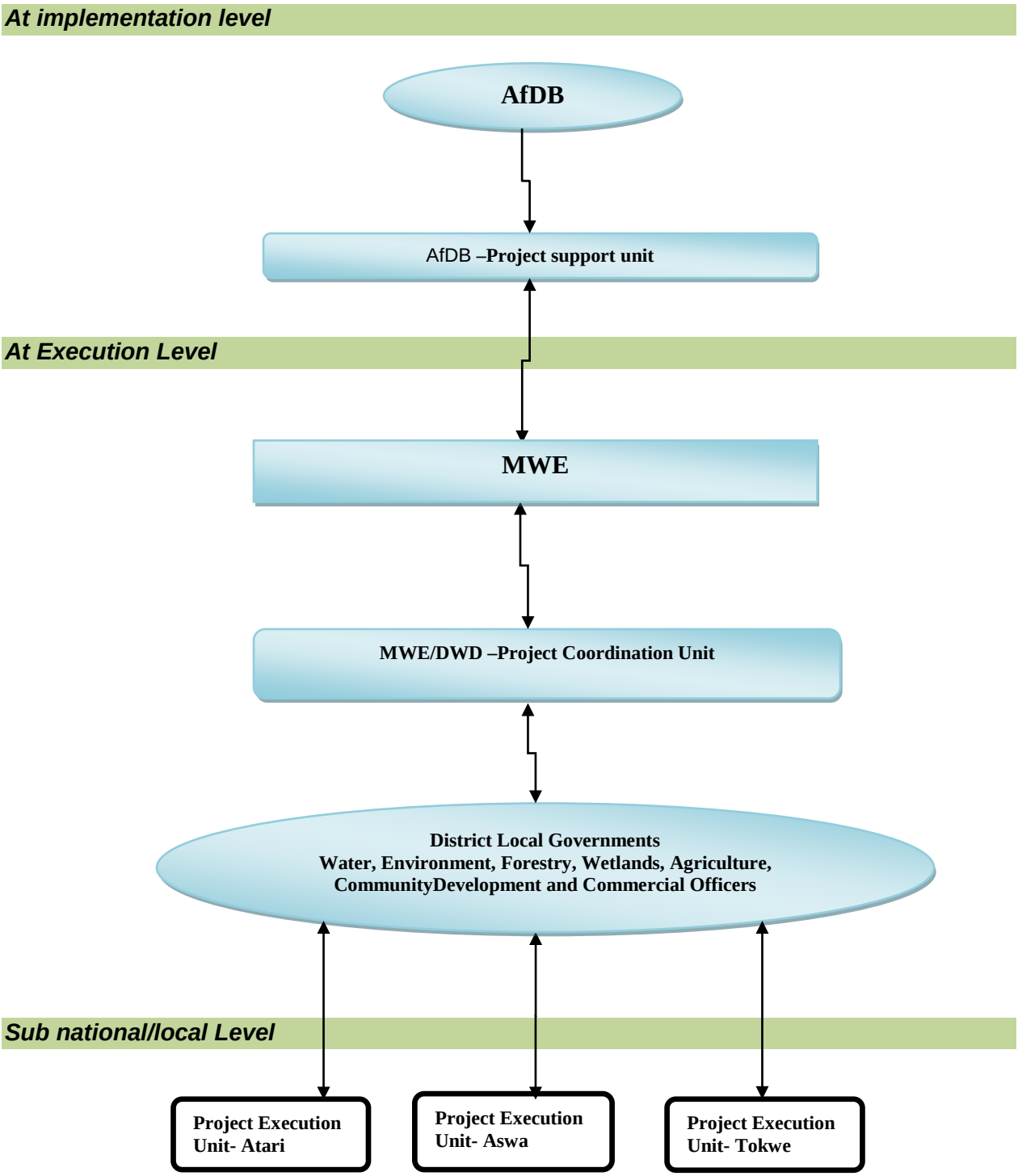

Figure 1.1: Project implemention structure

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

The project anticipates various risks during the implementation phase. Table 1.4 summarizes the anticipated financial and operational risks and their mitigation measures.

Table 1.4: Financial and project management risks

Risk	Proposed Mitigation Measure
A) Financial Risks	
Delayed fund disbursements to project sites to undertake early implementation	Increased awareness to relevant institutions responsible for funds disbursement on prioritizing climate related projects as they affects vulnerable populations
Resource capture	Officials in the district wanting projects to be implemented in their own specific sites will be deflected by ensuring community participation in all project activities.
B) Operational Risks	
Delayed implementation by the government negatively affects project outcomes	Continuous lobbying and sensitization of the concerned stakeholders secure cooperation and commitment.
Inadequate commitment from communities undermines the effectiveness of the project interventions	The project will avoid a 'top down' approach and seek to create community ownership of the interventions through community training and encouraging participation in project activities.
Limited capacity in combating climate change impacts	Capacity building components within the program to have aspects of managing climate related impacts.

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

At this stage of developing a full proposal of the proposed project, a broader or general view of Environmental and Social Management Plan (ESMP) for the proposed project has been developed in collaboration and guidance by the NEMA as the mandated Agency for environmental and social impacts assessment (see Annex II). Therefore, further detailed ESMP for each of the proposed interventions will be formulated during the inception phase of project implementation***.*** The ESMP for the proposed interventions of the project is shown in Table 1.5

Table 1.5: Risk and risk management measures for the proposed interventions of the project

No	*Identified Risks*	*Level (H, M, L)*	*Risk Management Measures*
1	Delineation of degraded forest, river banks and wetlands for restoration of (if not carefully selected) may aggravate degradation	M	Carefully select areas for restoration and include populations in the restoration activities. Promote Introduction of alternative income generation activities (IGAs) for livelihood diversification to reduce pressure on such natural resources Monitor and protect such areas and as well as surrounding environment.
2	Selection of project beneficiaries in the three sub-catchments might cause some conflicts that could delay project implementation	M	Undertake wide consultations in communities when selecting project beneficiaries. Strengthen local management processes with deliberate consideration of gender differences among the project beneficiaries.
3	Water harvesting, flood control facilities may aggravate some water borne diseases for instance malaria	L	Raise awareness through community based health workers on malaria and other water related diseases
4	Increased water sources assessment and abstraction may also increase water supply thereby reducing the risk of scarcity of safe and clean water but could also increase incidences of waterborne diseases.	L	Raise awareness through community based health workers on malaria and other water related diseases
5	Introduction of IGAs including high yielding enterprises such as apiculture or pottery may contribute to low food crop production by farmers	L	Promote conservation of local crop varieties and livestock breeds when promoting soil and water conservation measures across the agricultural landscapes.
6	Upstream activities may have negative environmental impact downstream and cause social conflict with downstream users	M	Strengthen coordination and conflict resolution mechanisms at sub-catchment level water source protection and environmental management committees' structures.
7	Promoting the planting of both exotic and indigenous tree species may not only lead to conflicts but also increase the incidence and severity of agricultural pests and diseases	M	Properly consult all stakeholders in reforestation measures and inform about advantages of planting indigenous tree species over the exotic ones and vice-versa.
8	Natural Resource Use related Conflicts	M	Include all stakeholders in consultation at local level, strengthen existing local conflict resolution mechanism, and integrate conflict

			resolution mechanism in water source protection and environmental management committee structures. Also establish a Grievance Mechanism at local and national levels.
9	Stabilization after long time of armed Conflict neighbouring the Tokwe sub-catchment around Bundibugyo near the Democratic Peoples of Congo.	L	The conflict in the area is perceived as a passed conflict that has been overcome. Many projects in the region work on the stabilization of the area, though recent development interventions are also there.

Grievance mechanism

Grievance Redress Mechanisms (GRMs) are vital for providing a formal avenue for affected groups or stakeholders to engage with the project implementers or owners on issues of concern or unaddressed impacts. Grievances are any complaints or suggestions about the way a project is being implemented. They may take the form of specific complaints for damages/injury, concerns about routine project activities, or perceived incidents or impacts. Identifying and responding to grievances supports the development of positive relationships between projects and affected groups/communities, and other stakeholders. Grievance redress mechanisms should receive and facilitate resolution of the affected institutional or communities' concerns and grievances.

The proposed project has included a mechanism to manage conflicts/grieviences.

The proposed project will essentially be guided by the African Development Bank (AfDB) group **grievance mechanism.** AfDB has a well-developed Independent Review Mechanism (IRM) that provides people adversely affected by projects financed by the African Development Bank Group (AfDB) with an independent mechanism through which they can request the Bank Group to comply with its own policies and procedures. The IRM is administered by the Compliance Review and Mediation Unit (CRMU). Investigations are carried out by the Panel of Experts who report to the Boards of Directors. The Compliance Review and Mediation Unit is the organizational entity of the Bank that administers the IRM. It was established by a Resolution of the Board and headed by a Director. The Director is assisted by professional and support staff. CRMU maintains the IRM Roster of Experts and provides administrative and technical support to them when they constitute themselves into a compliance review panel when undertaking compliance reviews. These undertake problem-solving exercises, advisory services and outreach activities to fulfill its mandate and to contribute to the AfDB's overall objectives (https://www.afdb.org/en/independent-review-mechanism).

The project will also establish and support a feedback and grievance redress mechanism that will help to diffuse conflicts arising from project implementation.

The project will establish three levels at which conflicts can be resolved i.e. at the community, district and national/ministry levels. This system will ensure that simple and

practical procedures for complaints are properly recorded, responded to, and reported, and allow for effective escalation of unresolved issues. The process will also enable awareness and accessibility to grievance redress in a way that is consistent with the scope of the project.

Further, the process will strengthen policy, legal and institutional framework for managing grievances and conflicts that can assist in handling/ addressing stakeholder concerns and issues relevant to project implementation. The stakeholders will be informed of the existence of the grievance mechanism set up by the project using the available communication channels such as meetings, media websites etc. This will enable stakeholders who have any issues to get assistance as quickly as possible.

For purposes of transparency, complaints and follow ups will be communicated/ published to stakeholders. A clear and concise step wise operationalization and management structure of the feedback and grievance mechanism will be designed at the project inception phase. The feedback and grievance mechanism will be of tremendous support to water source protection and environmental management committees that form the actual interface between the affected and the proposed project.

Overall, beyond the community, district and national/ministry levels grievance mechanisms the highest authorities to consider complaints lies with the Adaptation Fund and the Implementing Entity. At the 17th Board Meeting of the Adaptation Fund, in consideration of the recommendation of the Ethics and Finance Committee, it was decided that the Adaptation Fund sets up Mechanisms for Handling Complaints. Accordingly, a dedicated AF website (https://www.adaptation-fund.org/projects-programmes/programme-complaints/ provides the contact persons from the Adaptation Fund as well as from the implementing entities in charge of receiving complaints, as well as of providing links to the key procedures that the IEs apply with regard to issues such as fraud and corruption. Any complaints related to fraud and misuse of project funds and resources will be directly followed up and eventually sanctioned by those authorities.

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

Overall, the Adaptation Fund Board requires that Implementing Entities submit annual status reports on projects and programmes to the Ethics and Finance Committee (EFC) under their implementation. The EFC with support of the Adaptation Fund Secretariat monitors the Adaptation Fund portfolio of projects and programmes. Implementing Entities ensure that the capacity to measure and monitor results of Executing Entities at the country-level exists. Based on this background, AfDB

as an Implementing Entity will supervise the M&E activities of the project. The AfDB will ensure that the Ministry of Water and Environment (MWE)/ Directorate of Water Development (DWD) and the field offices including the DLGs will undertake quarterly monitoring of progress of project interventions, prepare and submit annual reports. To

this effect the Ministry of Water and Environment will assign a Project Manager from the Directorate of Water Development (DWD), based at the DWD headquarters to devote a substantial part of his time to project activities. He will be supported by a Project Coordinator to liaise the project work in the three sub catchments. It is expected that Quarterly Progress Reports will be prepared by the Project team in Uganda and verified by the AfDB. It will also prepare Annual Project Reports and submit to AFDB to monitor progress. The reporting will focus on the project results framework by highlighting the following aspects:

- Progress made towards project objectives and project outcomes - each with indicators, baseline data, mid and end-of-project targets (cumulative);
- Project outputs delivered per project outcome (annual);
- Lessons learned/good practices;
- Annual expenditure reports;
- Reporting on project risk management.

At project inception, the project management team will conduct baseline studies and prepare a detailed M&E plan that will streamline project objectives, indicators and methodologies of data collection in order to aid tracking progress in future. A joint monitoring mission to the project sites will also be planned to be conducted annually. The joint review will include representatives from MWE/DWD, AfDB, DLG participating Officials, lower local governments and communities. The first mission will focus on reviewing and harmonizing project plans while the second will focus on the project results.

In terms of financial monitoring, the project team will provide the AfDB with certified periodic financial statements. Audits on the project will follow AfDB finance regulations and rules as well as applicable audit policies. Annual Work Plans (AWP‘s) and Quarterly Work Plans (QWP‘s) will be developed to refine project delivery targets and re-align project work upon consultation and endorsement by the AfDB. An independent Mid-Term project evaluation will be undertaken at 1.5 years to track progress and other vital adjustments needed to improve performance. Similarly an independent terminal evaluation and audit will also be conducted.

The costs associated and parties responsible for the M&E are presented in Table…

Table: Proposed project Monitoring and Evaluation Work Plan and Budget

M&E activity	**Responsible parties**	**Budget (USD)**	**Time frame**											**Notes**
			2019	**2020**				**2021**				**2022**		
				Quarters				**Quarters**				**Quarters**		
			4	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	
Detailed studies: ESMP, Gender analysis and baseline surveys	Project Manager, DWD/MWE/Consultants	40,000													Baselines to be undertaken at project inception to facilitate tracking changes/impact
Regular/routine monitoring	Project Manager, DWD/MWE	50,000													Will be undertaken quarterly
Mid-term evaluation	Project Manager, DWD/MWE/AfDB	20,000													Will be done after the one and half years
Final evaluation	Project Manager, DWD/MWE/AfDB	20,000													Will be done at least two months before the end of the Project
Terminal project report	Project Manager, DWD/MWE	20,000													Will be submitted at the end of the Project
Final Audit	AfDB	30,000													Will be done at least two months before the end of the Project
Total M&E Costs		**180,000**													

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

A Results Framework of the proposed project that defines success indicators, and the respective means of verification is provided in Table 1.6 A Monitoring and Evaluation (M&E) system for the project will be established, based on the indicators and means of verification. Any changes to the Results Framework will require approval from the Project Steering Committee. The project inception workshop will be held in order to build ownership by various stakeholders.

Table 1.6: Results framework for the proposed project

Result	Indicators	Baseline	Milestones (After 1.5 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Objective: To increase the resilience of communities to climate change risks by promoting water source supply, protection and catchment management measures in selected small towns and peri-urban areas within medium river catchments	• Number of water source supply systems • Number of beneficiary communities with adaptation measures • Proportion (%) of households with increased incomes. • Proportion (%) of restored ecosystems	*(To be determined at baselines)*	• Number of water source supply systems (to be determined) • Number of beneficiary communities with adaptation measures (to be determined) • At least 20% of households with increased incomes.	• Number of water source supply systems (to be determined) • Number of beneficiary communities with adaptation measures (to be determined) • At least 60% of households with increased incomes.	• Project implementation reports • Field visits • M&E reports • Interviews with community members and community leaders	• AfDB, • Ministry of Water and Environment Uganda	• Willingness of community members to participate in project interventions • Adequate security to enable project implementation (Assumption) • Political will
Component 1: Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe							
Outcome 1.1: Water source and catchment management planning that integrates issues of climate change strengthened	• Comprehensive documents describing and guiding the management system s for water sources and catchments	• There are no functional water source protection and catchment management systems in the three water catchments	• Two functional water source protection and catchment management systems in place	• Three functional water source protection and catchment management system in place	• Interviews with community members and community leaders • Project implementation reports • Field visits • Mid-term M&E report	• AfDB, • Ministry of Water and Environment Uganda	No major disputes and conflicts among the beneficiary communities

Result	Indicators	Baseline	Milestones (After 1.5 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Output 1.1.1: Water source and catchment management plans for three rivers developed	• Water source protection plans and CMPs for three (3) river catchments developed • Number of copies of CMPs printed • Number of dissemination workshops held	• Currently there are no existing water source protection plans and CMPs for medium river catchments.	• At least three (3) water source protection and 2 CMPs developed • 90 copies of water source protection plans • 200 copies of CMPs • Three (3) workshops held	• Six (6) water source protection and three (3) CMPs developed • 180 copies of water source protection plans • 400 copies of CMPs • 6 workshops held	• Activity and monitoring reports of MWE • Workshop reports	• AfDB • Project Manager	
Outcome 1.2: Water source and environment managed by appropriate community structures	• Appropriate water source and catchment management structures for the three medium rivers strengthened and functional	• Interim structures with limited management capacity exist	• At least three (3) water source and two (2) functional structures in place	• Six (6) water source and Three (3) Fully functional structures by the end of the project	• Reports on decisions • Reports on conflicts	• Project Manager • MWE	
Output 1.2.1: Fifteen (15) Water source and environment management committees supported	•Number of gender balanced functional Committees, Fora and Secretariats established and supported •Bye-laws and ordinances formulated	• No functional structures in the targeted sites exist • The interim structures have inadequate capacity for water source and catchment management	At least seven (7) committees, Fora and Secretariats established/strengthened in the three catchments At least 1Bye-law and 1 ordinance formulated per river catchment	All the 18 water source and environment committees, Fora and Secretariats established/strengthened in the three catchments • At least 2 Bye-laws and 2 ordinances formulated per catchment	• Project progress reports • Quarterly M& E and WMZ reports • Activity and monitoring reports • Minutes of meetings of catchment management structures • Interviews with community members and community leaders	• Project Manager • MWE • District Environment Officers (DEOs)	
Component 2: Implementing adaptation actions for increased community resilience and sustained livelihoods							

Result	Indicators	Baseline	Milestones (After 1.5 years)	End of Project Targets	Means of Verification	Responsible Parties	Risks and Assumptions
Outcome 2.1: Adequate quality and quantity of water from the three rivers provided/supplied	• Percentage of households accessing adequate quantity and quality water • Percentage of water supply systems	There are limited/or no current opportunities and options for water supply from medium river catchments	• At least 30% of households accessing adequate quantity and quality water • At least 30% of water supply systems in place	• At least 60% of households accessing adequate quantity and quality water • At least 60% of water supply systems in place	• Project implementation reports • Field visits • M&E reports • Interviews with community members and community leaders	• Project Manager • MWE • District Environment Officers (DEOs)	
Output 2.1.1: Innovative water source protection structures constructed/improved	• A report on water assessment and abstraction • A comprehensive report/Guidelines/regulations on surface and ground water resources developed • Number of water sources abstracted from the three rivers • Number of water source protection structures	Information on surface and ground water sources is inadequate. Also Guidelines/regulations for protection and management of surface and ground water sources are lacking. No water sources have been abstracted from the three rivers and no existing protection structures are in place.	• Draft Surface and ground water assessment report • Final draft report on water source abstraction • Guidelines (document for surface and ground water regulations developed • At least one (1) water source abstracted per medium river • At least one (1)water source protection structure per catchment	• Final Surface and ground water assessment report • Final report on water source abstraction • Final copy of Guidelines for surface and ground water regulation developed. • At least two (2) water source abstracted per medium river • At least two (2) water source protection structure per catchment.	• Project implementation reports • Field visits • M&E reports • Interviews with community members and community leaders	• AfDB • Project Manager • MWE • District Environment Officers (DEOs)	
Result	**Indicators**	**Baseline**	**Milestones (After 1.5 years)**	**End of Project Targets**	**Means of Verification**	**Responsible Parties**	**Risks and Assumptions**

Outcome 2.2: Resilience of ecosystems services of forests wetlands and riverbanks enhanced	Number of natural systems with improved resilience/Area of degraded ecosystems (forests, wetlands, river banks) restored.	Ecosystems have low resilience. forests, wetlands and river banks are degraded (*Statistics not available*)	At least two (2) ecological systems per river catchment have improved resilience	At least three (3) ecological systems per river catchment have improved resilience	• Field visit reports • MWE reports • Project reports • Biomass, water resources and wetlands survey	• AfDB • Project Manager • MWE • District Environment Officers (DEOs)	Environmental authorities and local communities work together to incorporate ecosystem conservation measures into climate change risk reduction

Output 2.2.1: Degraded Forests, wetlands, riverbanks and agricultural landscapes restored/rehabilitated	• Area (acreage) of degraded site restored • Number of wetland action plans developed • Number of river bank restoration action plans developed • Survival rate of seedlings. • Area (ha) of forest restored • Area of degraded wetland restored/undisturbed • Area of riverbank restored • Number of people/ households trained • Number of wetlands, river banks and forests restored. • Number of households undertaking soil erosion control measures on their land	Forest, wetland and riverbanks are highly encroached upon. Communities currently cultivate their gardens up to the river banks promoting their erosion.	• At least 20% of the degraded sites restored • At least two (2) wetland action plans developed • At least two (2) river bank restoration action plans developed • At least 70% tree survival achieved • At least 20% forest restored • At least 20% wetland area restored • At least 20% river bank area restored • At least 30% of participating households trained • At least 30% of participating households undertaking soil erosion control measures	• At least 60% of the degraded sites restored • At least four (4) wetland action plans developed • At least four (4) river bank restoration action plans developed • At least 80% tree survival achieved • At least 60% forest restored • At least 60% wetland area restored • At least 60% river bank area restored • At least 60% of participating households trained • At least 60% of participating households undertaking soil erosion control measures	• Field reports • Project reports: Semi-annual and annual reports; mid-term and final evaluations • Surveys • Activity and M & E reports • Satellite data	• AfDB • Project Manager • MWE • District Environment Officers (DEOs)	
Result	• **Indicators**	**Baseline**	**Milestones (After 1.5 years)**	**End of Project Targets**	• **Means of Verification**	• **Responsible Parties**	**Risks and Assumptions**

Outcome 2.3: Resilience of livelihood systems to climate change enhanced.	• Percentage of households with improved livelihoods and undertaking resilient alternative income generating activities • Percentage change in livelihoods of beneficiary households	Communities have limited alternative income sources and are overexploiting natural resources.	• At least 400 households have improved livelihoods • At least incomes of 40% of participating households have improved.	• 1200 vulnerable households have improved livelihoods • At least incomes of 70% of participating households have improved income.	• Semi-annual and Annual Reports • Mid-term and Final evaluation Reports • Survey Reports • WMZ reports • Activity M&E reports • Livelihood reports	• Project Manager • DEOs • District Community Development Officer (CDOs), • District Commercial Officer	
Output 2.3.1 Innovative climate resilient Income Generating Activities (IGAs) promoted	• Number of households trained in different IGAs • Number of households undertaking innovative IGAs • Number of women and youth groups involved in the implementation of IGAs	Communities have limited knowledge and skills on planning and implementing various income generating activities	• At least 300 HH trained (10 trainings each of 20 participants per year with at least 2 trainings per river catchment. • At least 2 women and youth groups given grants to undertake adaptation actions per river catchment.	• At least 1200 HH trained (20 trainings each of 20 participants per year with at least 2 trainings per river catchment. • At least 4 women and youth groups undertaking at least 1 IGA per river catchment.	• Training report • Field reports • Project reports: Semi-annual and annual reports; mid-term and final evaluations	• Project Manager • Trainers, • District Community Development Officer (CDOs), • District Commercial Officer	
Result	**Indicators**	**Baseline**	**Milestones (After 1.5 years)**	**End of Project Targets**	**Means of Verification**	**Responsible Parties**	**Risks and Assumptions**
Component 3: Building capacity of catchment management structures and knowledge management							

Outcome 3.1: Adaptive capacity of stakeholders and communities to climate change impacts strengthened	Percentage of targeted communities undertaking climate change adaptation actions.	Adaptive capacities of the Communities in the target areas are very low.	Adaptive capacities of at least 30% target communities to climate change impacts have been strengthened.	Adaptive capacities of at least 60% target communities to climate change impacts have been strengthened.	• Field reports • Project reports: Semi-annual and annual reports; mid-term and final evaluations • Household Surveys • Activity M&E reports	• Project Manager • Trainers, • District Community Development Officer (CDOs), • DEOs	
Output 3.1.1 Capacities of key stakeholders and communities in water source protection and catchment management strengthened	• Capacity needs assessment report Capacity needs assessment report • Copies of capacity building plans, • Copies of training manuals • Number of stakeholders trained • Number of training workshops held • Number of households engaged/undertaking innovative adaptation actions	• The communities in the three river catchments have inadequate capacity in climate change adaptation strategies	• 3Capacity needs assessment report • 3Copies of capacity building plans • 3Copies of training manuals • At least30% of targeted stakeholders trained • At least one (1) training workshop conducted per river catchment per year in adaptation actions.	• 3Capacity needs assessment report • 3Copies of capacity building plans • 3Copies of training manuals • At least80% of targeted stakeholders trained • At least two (2) training workshop conducted per river catchment per year in adaptation actions.	• Field reports • Project reports: • Semi-annual and annual reports; • Mid-term and final evaluations • Surveys • Activity M&E reports	• Project Manager • Trainers, • District Community Development Officer (CDOs), • DEOs	

Outcome 3.2: Knowledge and awareness on resilient climate change adaptation actions increased	• Percentage of households of targeted communities practicing adaptation actions	There is a small percentage of community members with access to adequate information and knowledgeable in climate change adaptation actions	At least 40% of the targeted community members participating in information sharing platforms	At least 80% of the targeted community members participating in information sharing platforms	• Project implementation reports • •Field visits • •M&E reports • •Interviews with community members and community leaders	• AfDB • MWE • Project Manager District Community Development Officer (CDOs), • DEOs	
Output 3.2.1 Good practices and lessons documented and disseminated	• Number of knowledge products e.g. documents on lessons and best practices from project interventions • Number of case studies and lessons learned documented and shared projects	There is limited information on successful cases studies and documentation of lessons learned learned from implementation of innovative climate change adaptation	• 2 brochures, on lessons and best practices from project interventions • At least 3 case studies /lessons on adaptation actions documented, packaged and shared with key stakeholders for upscaling and informing project interventions	• 4 brochures, on lessons and best practices from project interventions • At least 6case studies /lessons learn documented, packaged and shared with key stakeholders for upscaling and informing project interventions	• Project implementation reports • Field visits • M&E reports • Interviews with community members and community leaders	• AfDB, and MWE • Project Manager	Target communities are willing to share information

F. *Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund*
Alignment of project objectives/outcomes with that of Adaptation Fund is shown in the table below:

Table: Alignment with Adaptation Fund Results Framework

Project Objective(s)[11]	**Project Objective Indicator(s)**	**Fund Outcome**	**Fund Outcome Indicator**	**Grant Amount (USD)**
Objective: To increase the resilience of communities to climate change risks by promoting water source supply, protection and catchment management measures in selected small towns and peri-urban areas within medium river catchments	• Number of water source supply systems • Number of beneficiary communities with adaptation measures • Proportion (%) of households with increased incomes. • Proportion (%) of restored ecosystems	**Outcome 2**: Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses	2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased	**2,249,000**
•		**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Percentage of targeted population applying appropriate adaptation responses	
		Outcome 4: Increased adaptive capacity within relevant development sector services and infrastructure assets	4.1. Responsiveness of development sector services to evolving needs from changing and variable climate 4.2. Physical infrastructure improved to withstand climate change and variability-induced stress	
		Outcome 5: Increased	5. Ecosystem services and	

[11] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

		ecosystem resilience in response to climate change and variability-induced stress	natural resource assets maintained or improved under climate change and variability-induced stress	
		Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1 Percentage of households and communities having more secure access to livelihood assets 6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods	
		Outcome 7: Improved policies and regulations that promote and enforce resilience measures	7. Climate change priorities are integrated into national development strategy	
Component 1: Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe	Number of functional/ operational frameworks in place	**Outcome 3:** Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level	3.1. Percentage of targeted population aware of predicted adverse impacts of climate change, and of appropriate responses 3.2. Percentage of targeted population applying appropriate adaptation responses	**500,000**
Component 2: Implementing adaptation actions for increased community resilience and sustained livelihoods	Percentage change in the incidences of landslides and floods Percentage of households with improved livelihoods through undertaking resilient alternative income generating activities Percentage of households with diversified income sources	**Outcome 4**: Increased adaptive capacity within relevant development sector services and infrastructure assets **Outcome 5**: Increased ecosystem resilience in response to climate change and variability-induced stress	4.1. Responsiveness of development sector services to evolving needs from changing and variable climate 4.2. Physical infrastructure improved to withstand climate change and variability-induced stress 5. Ecosystem services and natural resource assets maintained or improved under climate change and	**1,105,932**

		Outcome 6: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	variability-induced stress 6.1 Percentage of households and communities having more secure access to livelihood assets 6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods	
Component 3: Building capacity of catchment management structures and knowledge management	Number of institutions/officials whose capacities have been built are undertaking adaptation actions Good practices and lessons from the project are documented and influence policy	**Outcome 2:** Strengthened institutional capacity to reduce risks associated with climate-induced socioeconomic and environmental losses **Outcome 7:** Improved policies and regulations that promote and enforce resilience measures	2.1. Capacity of staff to respond to, and mitigate impacts of, climate-related events from targeted institutions increased 7. Climate change priorities are integrated into national development strategy	**300,000**
Project Outcome(s)	**Project Outcome Indicator(s)**	**Fund Output**	**Fund Output Indicator**	**Grant Amount (USD)**
Outcome 1.1 Water source and catchment management planning that integrates issues of climate change strengthened	Comprehensive documents describing and guiding the management system s for water sources and catchments	***Output 7:*** Improved integration of climate-resilience strategies into country development plans	7.1. No. of policies introduced or adjusted to address climate change risks (by sector)	**213,600**
Outcome 1.2 Water source and environment managed by appropriate community structures	Appropriate water source, environment and catchment management structures for the three medium rivers strengthened and functional	***Output 2***: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender) 2.1.2 No. of targeted institutions with increased capacity to minimize	**286,400**

			exposure to climate variability risks (by type, sector and scale)	
Outcome 2.1 Adequate quality and quantity of water from the three rivers provided/supplied	Percentage of households accessing adequate quantity and quality water Percentage of water supply systems	***Output 5:*** Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	**231,000**
Outcome 2.2 Resilience of ecosystems services of forests wetlands and riverbanks enhanced	Number of natural systems with improved resilience/Area of degraded ecosystems (forests, wetlands, river banks) restored.	***Output 5:*** Vulnerable ecosystem services and natural resource assets strengthened in response to climate change impacts, including variability	5.1. No. of natural resource assets created, maintained or improved to withstand conditions resulting from climate variability and change (by type and scale)	**586,932**
Outcome 2.3 Resilience of livelihood systems to climate change enhanced.	Percentage of households with improved livelihoods and undertaking resilient alternative income generating activities Percentage change in livelihoods of beneficiary households	**Outcome 6:** Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	6.1 Percentage of households and communities having more secure access to livelihood assets 6.2. Percentage of targeted population with sustained climate-resilient alternative livelihoods	**108,000**
Outcome 3.1 Adaptive capacity of stakeholders and communities to climate change impacts strengthened	Percentage of targeted communities undertaking climate change adaptation actions.	***Output 2***: Strengthened capacity of national and sub-national centres and networks to respond rapidly to extreme weather events	2.1.1. No. of staff trained to respond to, and mitigate impacts of, climate-related events (by gender) 2.1.2 No. of targeted institutions with increased capacity to minimize exposure to climate variability risks (by type, sector and scale)	**198,000**
Outcome 3.2 Knowledge and awareness on resilient climate change adaptation actions increased	Good practices and lessons from the project are documented and influence policy			**102,000**

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.

Component/Outcome/ Output/Activities	Budget (USD)	Budget notes	Cost/unit (USD)	No. Units	Total Budget (USD)
Component 1: Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe					
Outcome 1.1: Water source and catchment management planning that integrates issues of climate change strengthened					
Output 1.1.1: Water source and catchment management plans for three rivers developed					
Activity 1.1.1.1 Facilitate developing the 3 CMPs	45,000	Consultancy @20 man days @USD 300 and associated costs of USD 9,000 reimbursables per catchment	15,000	3	45,000
Activity 1.1.1.2 Organize stakeholder consultative workshops to develop CMPs	30,600	1 National and 3 catchment based Workshops @ USD 7,650	7,650	4	30,600
Activity 1.1.1.3 Facilitate developing water source protection plans	90,000	Consultancy @25 man days @USD 300 and associated costs of USD 7,500 reimbursables for 2 water sources per catchment	30,000	3	90,000
Activity 1.1.1.4 Edit and print the CMPs and water source plans	17,400	Designing, printing 400 Copies (100@at national and catchment level) of CMPs and 180 copies	30	580	17,400

		(60 per catchment) of water source protection plans @USD 30			
Activity 1.1.1.4 Disseminate and popularize the Water source and CMPs (1 National and 3 catchment level workshops)	30,600	Three (3) stakeholder engagements	7,650	4	30,600
Sub-Total Output 1.1.1	**213,600**				**213,600**
Outcome 1.2: Water source and environment managed by appropriate community structures					
Output 1.2.1 Fifteen (15) Water source and environment management committees supported					
Activity 1.2.1.1 Facilitate start up meetings for establishing the18 water source and environment committees	162,000	3 Community level Meetings @USD 3,000 for 18 committees in river catchments	9,000	18	162,000
Activity 1.2.1.2 Facilitate **o**rganization of quarterly meetings of water source and environment committees to regularly review progress of activities	108,000	Quarterly (4) meetings for 18 committees @USD 1,500 for 1.5 years	1,500	72	108,000
Activity 1.2.1.3 Support formulation of Bye-laws and Ordinances for water source protection and environment management	16,400	Involves hiring a Facilitator for 20 days @USD 400 and USD 8,400 for 3 meetings (1 consultative, 1 validation and 1 launching) spread for the 3 river catchments	16,400	1	16,400
Sub-Total Output 1.2.1	**286,400**				**286,400**
Sub-Total Component one	**500,000**				**500,000**
Component 2: Implementing adaptation actions for increased community resilience and sustained livelihoods					-

Outcome 2.1 Adequate quality and quantity of water from the three rivers provided/supplied					-
Output 2.1.1 Innovative water source protection structures constructed/improved					-
Activity 2.1.1.1 Support water source assessment and abstraction in @river catchment	90,000	Consultancy @20 man days @USD 300 and associated costs of USD 9,000 reimbursables for two (2) water sources per catchment	15,000	6	90,000
Activity 2.1.1.2 Develop guidelines for surface and ground water protection	45,000	Consultancy @20 man days @USD 300 and associated costs of USD 9,000 reimbursables per catchment	15,000	3	45,000
Activity 2.1.1.3 Provide inputs to communities for abstracting water sources in 3 river catchments	42,000	Involves purchase of two (2) water source abstraction units @USD7,000 per catchment	7,000	6	42,000
Activity 2.1.1.4 Provide inputs to communities for water source protection structures	54,000	Two innovative structure units @USD 9,000 per catchment	9,000	6	54,000
Sub-Total Output 2.1.1					**231,000**
Outcome 2.2: Resilience of ecosystems services of forests wetlands and riverbanks enhanced					
Output 2.2.1 Degraded Forests, wetlands, riverbanks and agricultural landscapes restored/rehabilitated					
Activity 2.2.1.1 Procure and distribute seedlings to selected communities	100,932	The project buys seedlings from quality tree nurseries at the average cost of USD 01 for indigenous tree seedlings and	1.0	100,932	100,932

		other species apart from Eucalyptus.			
Activity 2.2.1.2 Train community members in forests, wetland and riverbank restoration activities	18,000	3 day workshops in each catchment@USD2000	2,000	9	18,000
Activity 2.2.1.3 Demarcate wetland boundaries in the 3 catchments	90,000	Demarcate using pillars and live markers @USD 10,000 per wetland for 3 wetlands per catchment	10,000	9	90,000
Activity 2.2.1.4 Organize community workshops to develop site specific river banks restoration action plans	18,000	4 community workshops @USD 2000 per catchment conducted by the DEOs for wetland restoration	2,000	9	18,000
Activity 2.2.1.5 Demarcate river banks in the 3 catchments	90,000	Demarcate using pillars and live markers	10,000	9	90,000
Activity 2.2.1.6 Conduct workshops and meetings to sensitize communities on water harvesting for flood control and drought management	54,000	2 day community workshops conducted by CDOs and DAOs on water harvesting and flood control structures	3,000	18	54,000
Activity 2.2.1.7 Train communities on construction and maintenance of water harvesting and flood control structures	72,000	Three (3) day community meetings per catchment	2,000	36	72,000
Activity 2.2.1.8 Provide inputs for constructing small-scale flood and soil erosion control structures e.g. embankments, ponds, valley dams and storm water diversion channels.	144,000	Budget for the inputs for constructing flood and erosion control structures. Secure a service provider for sustainability	16,000	9	144,000

Sub-Total Output 2.2.1					**766,932**
Outcome 2.3 Resilience of livelihood systems to climate change impacts enhanced					
Output 2.3.1 Innovative climate resilient Income Generating Activities (IGAs) promoted					
Activity 2.3.2.1 Select and train potential beneficiaries in income generating activities, including business planning, value addition and marketing	18,000	Two (2) day workshops in each sub catchment	1,000	18	18,000
Activity 2.3.1.2 Support Vulnerable women and Youth groups to undertake innovative IGAs	90,000	Three (3) groups per catchment USD 10,000	10,000	9	90,000
Sub-Total Output 2.3.1					**108,000**
Sub-Total Component two					**925,932**
Component 3: Building capacity of catchment management structures and knowledge management					
Outcome 3.1 Adaptive capacity of communities and other stakeholders to climate change impacts strengthened					
Output 3.1.1 Capacities of key stakeholders and communities in water source protection and catchment management strengthened					
Activity 3.1.1.1 Conduct capacity needs assessment for key stakeholders (Regional and Local government staff, extension workers, CMCs)	90,000	Consultancy for 25 Man days @ USD 400 and reimbursables of USD 20,000 per catchment	30,000	3	90,000
Activity 3.1.1.2 Develop a detailed training plan to guide the capacity building program for the Project	84,000	Consultancy for 20 Man days @ USD 400 and reimbursables of USD 20,000 per catchment	28,000	3	84,000
Activity 3.1.1.3 Develop training manual to build capacity of stakeholders and communities on a continuous basis	24,000	Developing training manual	4,000	6	24,000
Sub-Total Output 3.1.1					**198,000**
Outcome 3.2: Knowledge and awareness on resilient climate change adaptation actions increased					

Output 3.2.1 Good practices and lessons documented and disseminated					
Activity 3.2.1.1 Documenting and disseminating lessons and best practices from project interventions	28,950	1 workshop per catchment and dissemination materials	9,650	3	28,950
Activity 3.2.1.2 Develop and disseminate Information Education and Communication (IEC) Materials for awareness raising	22,950	Three (3) catchment based Workshops	7,650	3	22,950
Activity 3.2.1.2 Share knowledge and information through use of existing and popular platforms e.g. media, telecom that are easily accessible by the stakeholders.	30,000	Three media engagements @ USD 10,000 per catchment	10,000	3	30,000
Activity 3.2.1.3 Engage Policy Makers in dissemination of information on adaptation actions	20,100	Three catchment based workshops @USD 20,100	20,100	1	20,100
Sub-Total Output 3.2.1					**102,000**
Sub-Total Component three					**300,000**
4. 1 Executing Entity Budget including M&E					**181,064**
Project inception launch activities	**30,000**	A National and 3 Sub- - catchment based Workshops			**30,000**
Project Co-ordination and management fees	**70,000**	Staff allowances for project coordination and management staff ,finance, procurement and administration			**70,000**
Operating costs	**41,064**	Operation costs related to travel, DSA, Printing, fax and telecom, and related ones			**41,064**
Equipment	**40,000**	Costs associated with the provision of equipment to the executing entity			**40,000**
Sub-total EE budget	**181,064**				**181,064**

4.2 Implementing Entity Budget including M&E					
Detailed studies: ESMP, Gender analysis and baseline surveys	40,000	To be undertaken by consultants procured by IE			40,000
Regular/routine monitoring	32,004	Headquarter Project Team at MWE; AfDB will be involved at different times/intervals during the project period.			32,004
Mid-term evaluation	20,000	An External M&E Consultant will be hired for Mid-term evaluation			20,000
Final evaluation	20,000	An External M&E Consultant will be hired for Mid-term evaluation			20,000
Terminal project report	20,000	The Final report will be compiled by the Project Manager			20,000
Final Audit	30,000	An external Auditor will be engaged to Audit the Project			30,000
Sub-total M&E	**162,004**				**162,004**

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

Component/Outcome/ Output/Activities	**Cost/unit (USD)**	**No. Units**	**Total Budget (USD)**	**Year 1**	**Year 2**	**Year 3**	**Total**
Component 1: Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe							

Outcome 1.1: Water source and catchment management planning that integrates issues of climate change strengthened							
Output 1.1.1: Water source and catchment management plans for three rivers developed							
Activity 1.1.1.1 Facilitate developing the 3 CMPs	15,000	3	45,000	45,000			**45,000**
Activity 1.1.1.2 Organize stakeholder consultative workshops to develop CMPs	7,650	4	30,600	30,600			**30,600**
Activity 1.1.1.3 Facilitate developing water source protection plans	30,000	3	90,000	90,000			**90,000**
Activity 1.1.1.4 Edit and print the CMPs and water source plans	30	580	17,400		17,400		**17,400**
Activity 1.1.1.4 Disseminate and popularise the Water source and CMPs (1 National and 3 catchment level workshops)	7,650	4	30,600		30,600		**30,600**
Sub-Total Output 1.1.1			**213,600**	**165,600**	**48,000**		**213,600**
Outcome 1.2: Water source and environment managed by appropriate community structures							
Output 1.2.1 Fifteen (15) Water source and environment management committees supported							

Activity 1.2.1.1 Facilitate start up meetings for establishing the18 water source and environment committees	9,000	18	162,000	50,000	50,000	62,000	**162,000**
Activity 1.2.1.2 Facilitate **o**rganisation of quarterly meetings of water source and environment committees to regularly review progress of activities	1,500	72	108,000	50,000	58,000		**108,000**
Activity 1.2.1.3 Support formulation of Bye-laws and Ordinances for water source protection and environment management	16,400	1	16,400	16,400			**16,400**
Sub-Total Output 1.2.1			**286,400**	**116,400**	**108,000**	**62,000**	**286,400**
Sub-Total Component one			**500,000**	**282,000**	**156,000**	**62,000**	**500,000**
Component 2: Implementing adaptation actions for increased community resilience and sustained livelihoods			-				
Outcome 2.1 Adequate quality and quantity of water from the three rivers provided/supplied			-				
Output 2.1.1 Innovative water source protection structures constructed/improved			-				
Activity 2.1.1.1 Support water source assessment and abstraction in @river catchment	15,000	6	90,000	90,000			**90,000**
Activity 2.1.1.2 Develop guidelines for surface and ground water protection	15,000	3	45,000	45,000			**45,000**

Activity 2.1.1.3 Provide inputs to communities for abstracting water sources in 3 river catchments	7,000	6	42,000		42,000		**42,000**
Activity 2.1.1.4 Provide inputs to communities for water source protection structures	9,000	6	54,000	34,000	20,000		**54,000**
Sub-Total Output 2.1.1			**231,000**	**169,000**	**62,000**		**231,000**
Outcome 2.2: Resilience of ecosystems services of forests wetlands and riverbanks enhanced							
Output 2.2.1 Degraded Forests, wetlands, riverbanks and agricultural landscapes restored/rehabilitated							
Activity 2.2.1.1 Procure and distribute seedlings to selected communities	1.0	100,932	100,932	50,000		50,932	**100,932**
Activity 2.2.1.2 Train community members in forests, wetland and riverbank restoration activities	2,000	9	18,000		18,000		**18,000**
Activity 2.2.1.3 Demarcate wetland boundaries in the 3 catchments	10,000	9	20,000		70,000		**90,000**
Activity 2.2.1.4 Organize community workshops to develop site specific river banks restoration action plans	2,000	9	18,000	18,000			**18,000**
Activity 2.2.1.5 Demarcate river banks in the 3 catchments	10,000	9	20,000		70,000		**90,000**
Activity 2.2.1.6 Conduct workshops and meetings to sensitize communities on water harvesting for flood control and drought management	3,000	18	54,000	54,000			**54,000**
Activity 2.2.1.7 Train communities on construction and maintenance of water harvesting and flood control structures	2,000	36	72,000		40,000	32,000	**72,000**

Activity 2.2.1.8 Provide inputs for constructing small-scale flood and soil erosion control structures e.g. embankments, ponds, valley dams and storm water diversion channels.	16,000	9	144,000	50,000	50,000	44,000	**144,000**
Sub-Total Output 2.2.1			**766,932**	**172,000**	**348,000**	**246,932**	**766,932**
Outcome 2.3 Resilience of livelihood systems to climate change impacts enhanced							
Output 2.3.1 Innovative climate resilient Income Generating Activities (IGAs) promoted							
Activity 2.3.2.1 Select and train potential beneficiaries in income generating activities, including business planning, value addition and marketing	1,000	18	18,000	18,000			**18,000**
Activity 2.3.1.2 Support Vulnerable women and Youth groups to undertake innovative IGAs	10,000	9	90,000		50,000	40,000	**90,000**
Sub-Total Output 2.3.1			**108,000**	**18,000**	**50,000**	**40,000**	**108,000**
Sub-Total Component two			**1,105,932**	**359,000**	**460,000**	**286,932**	**925,932**
Component 3: Building capacity of catchment management structures and knowledge management							
Outcome 3.1 Adaptive capacity of communities and other stakeholders to climate change impacts strengthened							
Output 3.1.1 Capacities of key stakeholders and communities in water source protection and catchment management strengthened							
Activity 3.1.1.1 Conduct capacity needs assessment for key stakeholders (Regional and Local government staff,	30,000	3	90,000	90,000			**90,000**

extension workers, CMCs)							
Activity 3.1.1.2 Develop a detailed training plan to guide the capacity building program for the Project	28,000	3	84,000	44,000	40,000		**84,000**
Activity 3.1.1.3 Develop training manual to build capacity of stakeholders and communities on a continuous basis	4,000	6	24,000	24,000			**24,000**
Sub-Total Output 3.1.1			**198,000**	**158,000**	**40,000**		**198,000**
Outcome 3.2: Knowledge and awareness on resilient climate change adaptation actions increased							
Output 3.2.1 Good practices and lessons documented and disseminated							
Activity 3.2.1.1 Documenting and disseminating lessons and best practices from project interventions	9,650	3	28,950	10,000	10,000	8,950	**28,950**
Activity 3.2.1.2 Develop and disseminate Information Education and Communication (IEC) Materials for awareness raising	7,650	3	22,950	10,000	8,000	4,950	**22,950**
Activity 3.2.1.2 Share knowledge and information through use of existing and popular platforms e.g. media, telecom that are easily accessible by the stakeholders.	10,000	3	30,000	10,000	10,000	10,000	**30,000**
Activity 3.2.1.3 Engage Policy Makers in dissemination of information on adaptation actions	20,100	1	20,100		10,000	10,100	**20,100**
Sub-Total Output 3.2.1			**102,000**	**30,000**	**38,000**	**34,000**	**102,000**
Sub-Total Component three			**300,000**	**188,000**	**78,000**	**34,000**	**300,000**

4. 1 Executing Entity Budget including M&E			**181,064**	60,000	60,000	61,064	**181,064**
Project inception launch activities			**30,000**	30,000			**30,000**
Project Co-ordination and management fees			**70,000**	30,000	20,000	20,000	**70,000**
Operating costs			**41,064**	15,000	15,000	11,064	**41,064**
Equipment			**40,000**	20,000	20,000		**40,000**
Sub-total EE budget			**181,064**	95,000	55,000	31,064	**181,064**
4.2 Implementing Entity Budget including M&E							
Detailed studies: ESMP, Gender analysis and baseline surveys			40,000	40,000			40,000
Regular/routine monitoring			32,004	12,004	10,000	10,000	32,004
Mid-term evaluation			20,000		20,000		20,000
Final evaluation			20,000			20,000	20,000
Terminal project report			20,000			20,000	20,000
Final Audit			30,000			30,000	30,000
Sub-total M&E			**162,004**	52,004	30,000	80,000	**162,004**

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

A. Record of endorsement on behalf of the government[12]

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:

Mr. Keith Muhakanizi *Permanent Secretary / Secretary to the Treasury* *Ministry of Finance, Planning and Economic Development*	Date*: (Month, day, year)*

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

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, commit to implementing the project/programme in compliance with the Environmental and Social Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.	
 Ayanleh Daher Aden Implementing Entity Coordinator	
Date: *February 5th, 2019*	Tel. and email: (+225) 20 26 43 47; a.daheraden@afdb.org
Project Contact Person: Andrew MBIRO	
Tel. And Email: +256772403854; A.MBIRO@AFDB.ORG	

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.

MINISTRY OF WATER AND ENVIRONMENT

DIRECTORATE OF WATER DEVELOPMENT

CONSULTATIVE MEETINGS REPORT ON CATCHMENT PROTECTION FOR RIVERS TOKWE, ASWA AND ATARI

DECEMBER 2018

TABLE OF CONTENTS

1.0 Introduction

Following the inception of the concept note on “Strengthening Climate Change Adaptation of Small Towns and Per-Urban Communities within Medium River catchment in Uganda”, as part of preparation of a proposal to strengthen climate change adaptation of communities within Tokwe, Aswa and Atari River Sub-catchments, stakeholder consultative meetings were held in the three districts of Bundibugyo, Kyenjonjo and Kapchorwa where these rivers are located. The stakeholder meetings were aimed at generating information on the activities and challenges/threats along the rivers and within their sub-catchments as well as to seek views on possible corrective actions to mitigate the threats in order to sustainably co-exist with the rivers. All the meetings targeted local communities including crop farmers, cattle keepers, women, youth representatives of vulnerable groups district technical and political leaders as well as lower local government officials based at the sub-counties traversed by the rivers. The method of consultation was participatory where participants were free to ask questions and share views in the plenary discussion sessions.

Specific areas of interest were:

1. Human activities within/along the river sub-catchments
2. Threats to the river and its sub catchment
3. Proposed corrective actions

1.1 Target group

The various categories invited for the meetings included the following:

1. Resident District Commissioners
2. District Chairpersons
3. Selected District and LC III council Executive members.
4. District Councilor in charge of the sub-catchment
5. District Water Officers
6. District Environment Officers
7. District Natural Resources Officers
8. The Senior Assistant Secretary/Sub-county Chief and or Town Clerk
9. Selected Chairpersons LC I council for the villages neighboring the rivers
10. Secretary for Gender
11. LC II Chairperson/Parish chief
12. Extension workers like Health Inspector, Community Development Assistant
13. Chairpersons of women groups.
14. Youth Representatives
15. PWD Representatives
16. Opinion leaders.
17. Some Landlords

1.2 Duration

The meeting in each district was for half day and were held at the district council halls.

1.3 Overall Objective of the meetings

To consult the district stakeholders on activities, threats and proposed corrective actions for the river sub-catchments.

1.4 Meeting Methodology

The following methods were used:-

- Plenary presentation
- Brain storming
- Questions and answer sessions.

2.0 PROCEEDINGS

2.1 Bundibugyo meeting

2.1.1 Opening Session

The meeting was opened with a prayer from one of the participants. The Resident District Commissioner Ms. Grace Asiimwe welcomed all the participants and thanked them for showing their demand for sustainable catchment protection through their good turn up. She appreciated that the season was demanding as people had farm work but opted to come for the meeting to share their views. She said Bundibugyo was very peaceful and encouraged residents to feel free to interact with the team from the Ministry of Water and Environment. She urged technical officers to give guidance since they are more on the ground than the Ministry Officials. She called upon the leaders of Harugari Sub County to freely express their concern on the river Tokwe so that a better proposal can be written. She was glad that the stakeholders have been called upon to participate right from the proposal stage and prayed that the proposal succeeds if the river is to serve for generations to come. She opened the meeting officially.

2.1.2 Key Note Address

Mayor
The LC III Chairperson/Mayor Mr. Edward Kakonge Kifunga also thanked the Ministry of Water and Environment for organizing this meeting in which all stakeholders have been invited to share views on the R. Tokwe sub-catchment during the proposal stage. He pledged his support to the MWE team during this data/views collection and urged all political leaders to give political support to the planning and hopefully implementation of the catchment for thee river which will generate water for the proposed water system.

2.1.3 Participants' Expectations

In a bid to harmonize the meeting objectives and the participants' expectations, participants were asked to freely express what they expected to gain or learn or share from this meeting. Below is a summary of their expectations:

- Time frame for proposal
- Information of the new water system

- Management arrangements for the R. Tokwe sub catchment
- Bye-laws to enforce encroachment along the river
- Funds to compensate farmers along the river catchment
- Awareness creation strategies

The above expectations were discussed vis a vis the meeting objectives (below) to cross check that the purpose of the meeting was in line with what the participants expected.

2.1.4 Meeting Objectives

1. To consult stakeholders on the human activities that take place along R. Tokwe catchment
2. To share threats that may affect R. Tokwe's existence
3. To propose corrective actions for the threats

2.1.5 Overview of proposal on catchment protection by Senior Environment and Sanitation Officer/MWE

2.1.5.1 Key highlights

- Water availability and/or scarcity remains such a huge challenge that consequently engenders human population migration into neighboring districts, potentially sparking ethnic conflicts that lead to disruption of agricultural production and community development initiatives/activities.
- Effects of climate change on water availability and livelihood
    - Drying of water sources
    - Suffering of women (who fetch water)
    - Increased incidence of water borne/water-washed diseases
    - Loss of time due to moving long distances in search for water
    - Agriculture – reduction of water for irrigation and watering animals
    - Environment degradation
- Degradation of Catchments
    - Population pressure on land and natural resources
    - Indiscriminate disposal of waste in the environment
- Measures to protect catchments
    - Community sensitization
    - Development and implementation of catchment management plans
    - Planting of appropriate indigenous tree species
    - Enacting of relevant catchment protection bye-laws and enforcement

2.1.5.2 Status of R. Tokwe

As part of the consultative process, and as a way of initiating discussions on the state of the river, current photographs were shared. Below are some of the pictures shared:

Plate 1: Sand mining in R. Tokwe and cassava garden along the bank

Plate 2: Stone quarrying in R. Tokwe

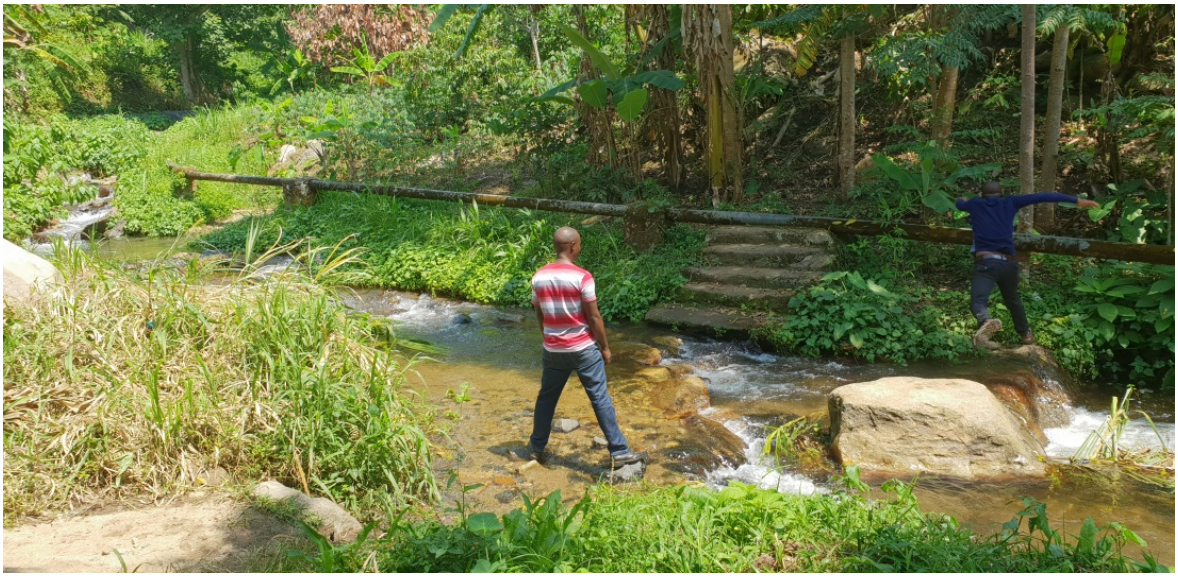

Plate 3: Bananas plantation on the banks of R. Tokwe with unprotected water source for abstraction

Plate 4: View of settlements and banana plantations along R. Tokwe Sub-catchment

2.1.6 Findings from Plenary Discussions on R. Tokwe Sub-catchment

Table 1: Findings on R. Tokwe sub-catchment

Discussion areas
a) Human Activities within/along the river sub-catchment: 1. Sand mining within and along the river 2. Stone quarrying and crushing along and within the river 3. Cultivation of both cash and food crops along the river banks. Common food crops include cassava, matoke (plantain), beans, maize and sweet potatoes and irish potatoes, while cash crops include cocoa and coffee. 4. Grazing and watering of domestic animals namely cows, goats and sheep.
b) Threats to the river and its sub-catchment: 1. Siltation as a result of increased soil erosion. This is escalated by gardening on river banks 2. Human settlement close to the river banks 3. Water pollution resulting from human activities within the catchment 4. River bank degradation 5. Increased flooding which compromises water quality
c) Proposed Corrective Actions: 1. Engage communities to explore other available options for income generation 2. Bye-laws to regulate activities within the river and along the banks 3. Buffer zones between the river banks and the gardens should be created and protected. 4. Restoration of river banks through re-vegetation with bamboo species

2.2 Kyenjojo meeting

2.2.1 Opening Session

To kick start the meeting, a prayer was said by one of the participants, and all the members introduced themselves to ensure everyone got to know each other. The meeting was officially opened by the Deputy Chief Administrative Officer Ms. Jessica Ndagire. She thanked the Ministry of Water and Environment for convening this meeting because projects where leaders are not involved end up not getting local support. She informed the meeting that she has prior experience on MWE implemented projects and was happy with the approach where leaders and stakeholders are involved from the start. She called upon the district political leaders to support such projects that require a cross section of community members so as to ease entry into the communities. On the proposal that was being prepared, she urged the participants to contribute ideas, knowledge on the targeted river so that resources are mobilized to protect the river so that it can supply water continuously for the newly approved water supply project (Strategic Towns Water and Sanitation Project) which will serve water to Katooke and Kyenjojo towns. She implored the MWE to source for more funding to supply piped water to Butunduzi town which was initially part of the beneficiary towns but later dropped. She invited the Assistant Chief Administrative Officer Ms. Irene Kengonzi to also say a few words. In her remarks, she prayed that the proposal is accepted because without sustainable water sources, the entire community of Kyenjojo will suffer because many communities depend on these rivers for survival. She called upon leaders especially from the newly created Nyakisi sub-county to work together with other leaders in managing the wetlands sustainably. She urged participants to freely give their views since most of them have experience in managing the catchment of a related river (R. Mpanga) in Kabarole district.

2.2.2 Meeting Objectives

- To consult stakeholders on the human activities that take place along R. Aswa catchment
- To share threats that may affect R. Aswa's existence
- To propose corrective actions for the threats

2.2.3 Overview of proposal on catchment protection

2.2.3.1 Key highlights

- Water availability and/or scarcity remains such a huge challenge that consequently engenders human population migration into neighboring districts, potentially sparking ethnic conflicts that lead to disruption of agricultural production and community development initiatives/activities.
- Effects of climate change on water availability and livelihood
    - Drying of water sources
    - Suffering of women (who fetch water)
    - Increased incidence of water borne/water-washed diseases
    - Loss of time due to moving long distances in search for water
    - Agriculture – reduction of water for irrigation and watering animals
    - Environment degradation
- Degradation of Catchments
    - Population pressure on land and natural resources
    - Indiscriminate disposal of waste in the environment
- Measures to protect catchments
    - Community sensitization
    - Development and implementation of catchment management plans
    - Planting of appropriate indigenous tree species
    - Enacting of relevant catchment protection bye-laws and enforcement

2.2.4 Status of R. Aswa

Plate 5: Proposed abstraction on R. Aswa in Kyenjojo

Plate 6: Tree cutting within the R. Aswa sub-catchment

Plate 7: Human settlement and encroachment close to the R. Aswa sub-catchment

2.2.5 Findings from Plenary Discussions on R. Aswa Sub-catchment

Table 2: Findings on R. Aswa sub-catchment

Discussion areas
a) Human Activities within/along the river sub-catchment: 1. Harvesting of wood products such as timber, poles and fuel wood 2. Growing of food crops along the river banks namely maize, sweet potatoes and beans. 3. Grazing of goats and cows. 4. Harvesting of papyrus reeds for use as roofing material and crafts (baskets, mats and locally made fishing traps.
b) Threats to the river and its sub-catchment: 1. Water pollution resulting from human activities within the catchment 2. Degradation of river banks 3. Flooding of the river and bursting its banks and changing its course time and again
c) Proposed Corrective Actions: 1. Sensitization of communities in the river catchment on catchment management 2. Establishment of tree nurseries to provide seedlings for tree planting within the sub-catchment to restore lost forest cover 3. Buffer zones between the river banks and the gardens should be created and protected. 4. Adopt modern farming methods such as terracing and stone bands.

2.3 Kapchorwa meeting

2.3.1 Opening Session

District Water Officer - Kapchorwa
The meeting started with a prayer which was led by a volunteer. The District Water Officer Mr. David Oki in his opening remarks thanked the MWE officials for involving key stakeholders in the proposal preparation phase and hoped that information given by the participants will be of great assistance in understanding the dynamics of R. Atari and sustained harvesting of water for commercial and domestic uses.

Area Councillor – East Division/Kapchorwa Municipality
Mr. George Chepkurui, as the area councilor of the region where the river passes, also thanked the MWE for thinking about protection of the river on which many families thrive. He informed the meeting that all the neighbours of the river survive on the river in one way or another. He shared that most people in Kwoti use the river to irrigate their irish potato gardens and as such proper conservation of the river is paramount. He urged members to actively participate in order to save the river. He informed the meeting that previous attempts were made by the community to restore the catchment but all these attempts failed due to lack of adequate financing to undertake protection activities. He further informed the meeting that efforts are required to ensure that the catchment is restored in order to improve on the quantity and quality of water flowing in R. Atari. He cited an example where some of the downstream users lack water completely due to excessive drawing of water from the river in the dry season. He promised to mobilize all stakeholders for further meetings because most people require information and sensitization on catchment matters.

2.3.2 Meeting Objectives

- To consult stakeholders on the human activities that take place along R. Atari catchment
- To share threats that may affect R. Atari's existence
- To propose corrective actions for the threats

2.3.3 Overview of proposal on catchment protection by Senior Environment and Sanitation Officer/MWE

2.3.3.1 Key highlights

- Water availability and/or scarcity remains such a huge challenge that consequently engenders human population migration into neighboring districts, potentially sparking ethnic conflicts that lead to disruption of agricultural production and community development initiatives/activities.
- Effects of climate change on water availability and livelihood
    - Drying of water sources
    - Suffering of women (who fetch water)
    - Increased incidence of water borne/water-washed diseases
    - Loss of time due to moving long distances in search for water
    - Agriculture – reduction of water for irrigation and watering animals
    - Environment degradation
- Degradation of Catchments
    - Population pressure on land and natural resources
    - Indiscriminate disposal of waste in the environment
- Measures to protect catchments
    - Community sensitization
    - Development and implementation of catchment management plans
    - Planting of appropriate indigenous tree species
    - Enacting of relevant catchment protection bye-laws and enforcement

2.3.3.2 Status of R. Atari

Plate 8: One of the watering point for cows along the river

Plate 9: Dwindling volumes as the river flows downstream

Plate 10: Cultivation within the river catchment

Plate11: Irrigation of crops with sprinklers in the sub-catchment

Plate 12: Cows grazing in the sub-catchment

Plate 13: Sheep and cattle grazing upstream of the existing abstraction point along the river

2.3.3.3 Findings from Plenary Discussions on R. Atari Sub-catchment

Table 3: Findings on R. Atari sub-catchment

Discussion areas
a) Human Activities within/along the river sub-catchment: 1. Both commercial and subsistence farming. Crops commonly grown include, Irish potatoes, Onions, Cabbages. 2. Commercial Irrigation of crops through use of irrigation sprinklers 3. Keeping animals especially cows, goats, sheep and donkeys. Donkeys are mainly used for transporting food harvest especially irish potatoes, cabbages and firewood. 4. Watering of animals along the river
b) Threats to the river and its sub-catchment: 1. Water pollution through use of herbicides and pesticides in the gardens. 2. High demand for water (especially for commercial irrigation) adversely affecting downstream users 3. Siltation of the river during the rainy seasons due to soil erosion from the hilly slopes/terrain which are largely farm lands/gardens 4. Creation of water diversion channels for agricultural purposes
c) Proposed Corrective Actions: 1. A buffer zone of 50 metres created and demarcated with bamboo woodland 2. Resettlement of homesteads living within 50 metres of the river banks 3. Creation of a community enforcement unit to monitor and ensure protection of the buffer zone.

Annex 1: Record of attendance for consultative meetings conducted in Bundibugyo, Kyenjojo and Kapchorwa districts

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting – Proposal to Strengthen Climate Change Adaptation of Communities within Tororo River Sub catchment Date: 20th / December / 2018

S/N	Name	Title/Address	Contact	Signature
1	BWIRA JULIET	D/Councillor	0782945520	
2	ASTIMWE BRIDGET	DT Councillor	0789032061	
3	Bosco Om Sollex	D/councilla	0774291982	
4	BANDALIZA LIGHTI	D/councilor	0773354666	
5	William Kadyla	Youth Representative	0785301570	
6	LWIANZO SAM	EAO water	0782024545	
7	KAMUSIIME SCOVIA	Staff District Headquarter	0783132567	Scovia.

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: STAKE HOLDERS' CONSULTATIVE MEETING – PROPOSAL TO STRENGTHEN CLIMATIC CHANGE ADAPTATION OF COMMUNITIES WITHIN TORWE RIVER SUB CATCHMENT. Date: 20th / December / 2018

S/N	Name	Title/Address	Contact	Signature
1	BIRAHOLE EDDIE	EHA HARUGALE S/C	0784021307	
2	MASIKA KEZIA	CDO HARUGALE S/C	0772527823	
3	muhindo Adijan	S/county Harugale	0778262921	
4	MUGISA STANLEY RUHUMA	ADO-BDLG/ENVT	0773108273	
5	KANSIIME ENID	For C/person Social service	0775460679	
6	BINEGDE BARNABAS	DIST. V/C PERSON LGT	0776014575	
7	Mugarzi Joshua	Sec Finance	0772902311	

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Okoa River Sub Catchment Date: 20th / December / 2018

S/N	Name	Title/Address	Contact	Signature
1	SSENYONDO FRANCIS	TOWN CLERK	0782741795	
2	OLEGA CAESAR IRUN	CDO KASH	0772874423	
3	AGUMUWE GRACE KARUSYA	RDC	0752623929	
4	NUWSABIGABA V P	DCAO	0773654292	0773 654292
5	BAKASWALA ROWETI	SAS HARUGALE	0788519250	
6	Nkundabo B. Ayona	BAG.	0782995271	
7	TUSIIME ISMAIL	BOLG	0772618393	

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Okuwa River Sub Catchment Date: 20th / December / 2018

S/N	Name	Title/Address	Contact	Signature
1	MUGISA PATRICK	SEC-WORKS-BDLG	0775399368	
2	BULIGWA JULIUS	Sec/WDS	0772180029	
3	GODWIN BUHAIMBALE	News Reporter	0778202100	
4	MUMBERE BONNY HASTINGS	DISTRICT COUNCILLOR PWDS	0775263077	
5	Muhindo B. Robert	D/Engineer BDLG	0772-359893	
6	Kyemigisa Irine	SEC/CBS B/TC	0787363379	
7	Mbakania Ismail	DHI/ADWO-San	0782363239	

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Okole River Sub Catchment Date: 20th/December/2018

S/N	Name	Title/Address	Contact	Signature
1	KATUSABE PENINAH	D/ Speaker	0773594484	
2	BWAMBALE PETER	SECM ATIRIDE	0783006784	
3	BAGAMBE MOSES	SPEAKER	0775398921	
4	BATHEMUKA ANDREW	RDC/Arua	0774957903	
5	BAMBUMAZE micheal	Councillor	0775767217	
6	MWEEKE RONALD	LCV	0782.141274	
7				

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Okwe River Sub Catchment Date: 20th / December / 2018

S/N	Name	Title/Address	Contact	Signature
1	Asiimwe Goeffrey	DCDO Rbhg	0773979090	
2	[illegible]	Social Srvcs Committee	0772933915	
3	KAKONGE Edwards Kiiza	C/man B.F.C	0774553885	
4	Byamarka Hamma	CP S/C Okwe	0772199532	
5	KABYANGA DAVID	LC III C/P. Harugale	0772614728	
6	Tipher Asiimwe	Youth representative Harugale S/C	0773838776	
7	SIBUKO AGNES	Sec. Social Services	0780297078	

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen climate change Adaptation of Communities within Aswa river Sub Catchment Date: 20th – December – 2018

S/N	Name	Title/Address	Contact	Signature
1	AYESIGA DEO	Kyenjojo Fm News reporter	0772805901	Ayesiga D.
2	Rukulake Benon	PRESS. Unity 96.7 Fm URA	0704752629	[signature]
3	Kabaseben; Oliver	Sec. for youth	0780118614	[signature]
4	KISEMBO STEPHEN	PWD councilor	0777139810	[signature]
5	BYAMUKAMA SELE	C/P LC III Nyakisi	0777295528	[signature]
6	ATUHAIRWE JACKLINE	CDO - NYAKISI S/C	0783117645	[signature]
7	MBABAZI MONDAY	SEC FOR WOMAN	0781781656	Mbabazi Monday

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Kawa river Sub Catchment Date: 20th - December - 2018

S/N	Name	Title/Address	Contact	Signature
1	[illegible]	DCAO	0772630775	
2	Kaseija Robert	SAS Nyakisi s/c	0779-111250	
3	Kaganzi Samuel	Clerk to Council	0704931990	
4	Mugisa H. Harriet	OC/Attendant	0789973440	
5	Richard Busingye	D/Planner-Kyenjojo	0772568588	
6	Ainomugisha Anthony	ACO/Water	0779547582	
7	Kaniwabo Elizabeth	Communication Officer MWLWS	0787393181	
8.	Muganzi Ronald	Driver	0766638337	

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Abwo river Sub Catchment Date: 20th - December - 2018

S/N	Name	Title/Address	Contact	Signature
1	Asiimwe Samuel	Security officer	0778796815	
2	TWOOLIYAFES, F	DCDO Kyenjojo	0772570801	
3	KAAHWA JENIFFER	Councillor Kotoke/c	0774479453	
4	Agaba Emmanuel	D/V/chairperson	0704508337	
5	Kasyregenyu L.	C OFFICE HP	0775459431	
6	Nagudi Sara Ade	for DSO Kyenjojo	0782241107	
7	AKUMUBWE JAMES	SHI KDLG	0782452919	
8	Friday Isaac Newton	Ag. D/Engineer	0772683639	

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Aswa river Sub Catchment. Date: 20th - December - 2018

S/N	Name	Title/Address	Contact	Signature
1	Agondeze Ismail	HPA Katoke	0758928237	
2	Olike Christopher	for. DEO	0782-525548	
3	KYOMUHENDO EDSON	DWO	0772437816	
4	Mugumya Robert	T.E.O MoWS	0772361544	
5	KENGOMZI IRENE	ACAO	0789924181	
6	KATO ADOLF.	CHIEF-NYAKISI	0772455153	
7	Mugabe Henry	O/A water.	0773273742	

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Ateni river Sub Catchment Date: 21st / Dec / 2018

S/N	Name	Title/Address	Contact	Signature
1	Wonge George	Sec. Production	0779468610	Wonge
2	Henry Akuso	Chairperson Kwoti Sc	0775792524	
3	Chemonges Irene	Kwoti Women Group	—	
4	Maureen Chebyget	Councillor PWD	0704702871	Maureen
5	Kapsiro Henry	Farmer Kwoti	0776806517	
6	Chebet John Peter	Potato farmer	group 0783202041	John
7	Newumbe Gimanga	Kwoti Potato group		Gimanga

WATER AND SANITATION DEVELOPMENT FACILITY – CENTRAL

Attendance Registration Form

For: Stake holders Consultative Meeting - Proposal to Strengthen Climate Change Adaptation of Communities within Atari river Sub Catchment Date: 21st/Dec/2018

S/N	Name	Title/Address	Contact	Signature
1	Joseph Cheruyot	DWRO	0772645591	
2	Oki David	DWO	0392 96 3767 0752 520 789	
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7	Rose Cherukut	DC Kapchorwa	0772693596	

The Republic of Uganda
Ministry of Water and Environment

Environmental and Social Management Framework

for

"Strengthening Climate Change Adaptation of Small Towns and Peri-urban Communities within Medium River Catchments in Uganda" Project

December 2018

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Background

Uganda is a landlocked country occupying an area of 241,550.7km^2 of which 43,941km^2 is covered by open water bodies and swamps. Out of the country's total land area, approximately 80% area is arable. The largest water bodies in Uganda are Lakes Victoria, Kyoga, and Albert. Lake Victoria is the second largest freshwater lake in the world and accounts for about 80 percent of Uganda's water resources. In addition to the fresh water resources, rainfall is the most important source of water resources in Uganda with mean annual rainfall estimated at 1,180mm. However precipitation levels vary widely due to the country's topography. For instance, 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 as well as Masindi in the west and Gulu in the northern Uganda. The seasonal and spatial variability of precipitation remains a major challenge to agricultural production and human well-being in the humid and semi-arid regions of the country. Livelihoods of communities in such areas are inextricably linked to water resources. About 71% of Uganda's population depends on subsistence agriculture dominated by crops and livestock farming, fisheries and forestry. Furthermore, about 68% of households derive their livelihoods from agriculture albeit high variations in precipitation across the country. Therefore, water availability and/or scarcity remains such a huge challenge that consequently engenders human population migration into neighboring districts, potentially sparking ethnic conflicts that lead to disruption of agricultural production and community development initiatives/activities.

Climate change affects water availability, contributes to water scarcities aggravating the water related problems especially on water supply systems and related ecosystems of Kyenjojo-Katoke, Bundibugyo and Kapchorwa districts within the Atari, Aswa and Tokwe River catchments in Uganda. In these areas, 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 daily. Climate change is a threat to the livelihoods of such vulnerable members of the community stemming from its impacts on the country's freshwater resources and socio-economic activities that are dependent on these resources. The human 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 further projected to grow to about 103 million by 2050. Based on the projected population growth, the total renewable water resources of the country per capita is expected to drop to 1072 m^3/year by 2030, on the brink of a regime of water scarcity especially in arid and semi-arid regions. Such water deficit poses a threat to community livelihoods especially those in small towns and peri-urban areas that depend on adequate supply of water resources for household, sanitation and other domestic needs, a situation compounded by climate change.

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

The key symptoms of climate change in Uganda include an increase in the frequency and intensity of disasters such as droughts, floods and landslides; variability and unpredictability of rainfall patterns; and increase in temperature. These disasters affect water availability for communities' livelihoods in small towns and peri-urban areas. Uganda's capacity to adapt to climate change is relatively weak. In general, livelihoods in most of Uganda and specifically the vulnerable communities within the medium river catchments in Kyenjojo-Katoke, Bundibugyo and Kapchorwa districts within the Atari, Aswa and Tokwe River catchments in Uganda are threatened by the impacts of climate change because of great exposure to such impacts sensitivity and reduced capacities of their livelihoods.

It is evident that the communities in small towns and peri-urban areas within small to medium river basins continue to face climate change impacts due to limited capacity to undertake appropriate adaptation actions. Although Uganda is party to several regional and international agreements related to climate change and environmental protection and has developed its climate change response strategies that are linked to its overall development agenda, it remains constrained with adequate financial and technical resources to support vulnerable communities to undertake concrete climate change adaptation actions. Therefore, It is against this background that a proposal ***"Strengthening Climate Change Adaptation of Small towns and Peri-urban communities within Medium River Catchments in Uganda"*** that seeks to capacitate and support local communities with climate resilient water supply systems for communities to ably undertake climate change adaptation actions in Aswa, Atari and Tokwe river catchments has been developed. It is aimed at contributing to maintaining sustainable and reliable water sources for Kyenjojo-Katoke, Bundibugyo & Kapchorwa piped water supply systems.

The proposed project has been prepared by Uganda's Ministry of Water and Environment, Directorate of Water Development (Executing Agency (EA) of the Project) with consultations from key stakeholders in the water and related sectors. The Multilateral Implementing Entity (MIE) of the project is the African Development Bank (AfDB). The Adaptation Fund Board at its thirty-second meeting which took place on 11-12 October 2018 in Bonn, Germany, considered the above-mentioned project concept and decided to endorse it (Board Decision B.32/25, 2018).

This document presents the Environmental and Social Management Plan (ESMP) of the proposed project as a requirement by the Adaptation Fund, Uganda Government and AfDB to ensure that future implementation of the proposed project activities will not have significant environmental and social impacts, but rather enhance positive environmental impacts. The ESMP presented in this document is aligned to the Adaptation Fund Environmental and Social Policy (ESP), Environment Impact Assessment (EIA) for Uganda and the World Bank's environmental and social safeguard policies.

The Adaptation Fund's Environmental and Social Policy (ESP), approved in November 2013, and revised in 2016, ensures that projects and programmes supported by the Fund address any possible Environmental and social adverse impacts and risks such that they do not result in unnecessary environmental and social harms. Managing these risks is integral to the

success of the projects/programmes and the desired outcomes which are described in the 15 environmental and social principles (principles) of the ESP. The proposed project activities are screened against the 15 Adaptation fund Environmental and Social Principles that include:

1. Compliance with the Law
2. Access and Equity
3. Marginalized and Vulnerable Groups
4. Human Rights
5. Gender Equality and Women's Empowerment
6. Core Labor Rights
7. Indigenous peoples
8. Involuntary Resettlement
9. Protection of Natural Habitats
10. Conservation of Biological Diversity
11. Climate Change
12. Pollution Prevention and Resource Efficiency
13. Public Health
14. Physical and Cultural Heritage
15. Lands and Soil Conservation

The above15 environmental and social principles that are part of the ESP provide the basis for the identification and management of environmental and social risks. Not all projects/programmes are expected to encounter the issues addressed in each of the 15 principles. These principles provide end points for the Implementing Entities (IEs), but there may be various paths to achieve these outcomes. The EIA process in Uganda shall also inform this ESMP, while applying the National Environment Act, Cap. 153 relevant sector guidelines such as national water sector EIA guidelines, etc.

1. Project Description

2.1 The project sites and targeted towns

2.1.1 The catchments

The proposed project will be implemented in three sub catchments namely; River Atari, Tokwe River and River Aswa sub catchments in Awoja, Tokwe and Muzizi catchments.

i. 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. As a result of the increasing population pressure and needs 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-lying areas of the catchment. The R. Atari bank catchments have been degraded culminating into river siltation and flooding. The increase in sediment level has threatened the ecosystem biodiversity, stability and quality of water in R. Atari. The Atari sub-catchment covers an area of 106.5 Km^2. The topography of the sub-catchment is generally hilly, ranging from 1,076m in the north west to 3,461m in the south east with an average of 2,240m.

ii. 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. The Tokwe catchment is located in the western part of Uganda and is drained by the Tokwe River. The catchment covers an area of 104 Km^2. The topography of the catchment ranges from 710 to 2,983m with an average of 1,220m.

iii. River Aswa is located in Kyenjojo district in south western Uganda and drains in Lake Albert. The related challenges for the sub catchment for this river include high rates of soil loss and loss of vegetation cover especially along the banks. The Aswa sub-catchment is located in the western part of Uganda and is drained by the Aswa River, a tributary to the downstream part of River Muzizi. The sub-catchment covers an area of 404.4 Km^2 with reference to just before the point of confluence of River Aswa and River Muzizi. The sub-catchment falls in Muzizi with an extensive area of about 3,681 Km^2 in the Albert Water Management Zone (AWMZ). The topography of the sub-catchment is generally hilly, ranging from 1,158m to 1,678m with an average of 1,371m.

2.1.2 Targeted towns

The project will implement interventions in the small towns described in subsequent sections. These include:

(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, Mwikoona, 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 by 2037. The system is based on abstraction of water from **R. Aswa** via a water treatment plant with a water production capacity of 2,360m^3/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. 2,500m^3/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 450m^3.

***(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 6,000m^3/d. The total length of the transmission main is 10km and a total of 90km of distribution pipelines. The total designed water storage is 1,120m^3. The proposed project will undertake 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 degraded riverbanks. It is planned that in order to effectively implement adaptation actions proposed by the project, field visits will initially be undertaken with various stakeholders to agree and confirm the specific project sites in each catchment.

2.2 Project Objectives

The overall goal of the project is to increase the resilience of communities to climate change risks by promoting water source supply, protection and catchment management measures in selected small towns and peri-urban areas within medium river catchments. The project targets to support local communities in selected areas to implement measures that are climate resilient to ensure sustainable and reliable water supply in project sites.

Specific objectives of the project are to:

i. Increase resilience by strengthening community structures in environmental and water resources management in alignment with community adaptation to climate change.

ii. Increase resilience by supporting adaptation actions for sustained water supply, ecosystems management and livelihoods.

iii. Build the capacity of selected stakeholders at different levels to better disseminate information that support communities to undertake and in water source catchment management.

2.3 Project Components

The project is designed with three components that utilise policy and practical experiences. The three components of the project are:

I. Establishing climate resilient catchment management framework for catchments of Rivers Atari, Aswa and Tokwe;

II. Supporting adaptation actions for increased community resilience and sustained livelihoods

III. Building capacity of catchment management structures and knowledge management

2. Policy, Legal and Institutional framework

3.1 Introduction

The main policy document for the Environmental Impact Assessment (EIA) practice in Uganda is the National Environment Management Policy 1994. The goal of EIA is to ensure sustainable social and economic development that maintains and enhances environmental quality and resource productivity to meet the needs of present generations without compromising the ability of the future generations to meet their own needs. Furthermore, there are other supportive sectoral and cross-sectoral policies that are relevant to the specific EIA activities.

The National Water Policy 1999 is for example a policy specific to water resources management and development. The policy advocates for the management and development of water resources in Uganda in an integrated and sustainable manner in order to secure and provide reliable, adequate quality and quantity of water to meet all the social and economic needs for present and future generations with the full participation of all stakeholders.

The National Environment Act Cap 153 provides for the establishment of the National Environment Management Authority (NEMA) as the Principal Agency in Uganda for the Environmental management. NEMA was established in 1996 and mandated to coordinate, monitor and supervise the sustainable management of the environment. NEMA may delegate, by statutory instrument, any of its functions to a lead agency, a technical committee or any other public officer. The Act further addresses national and sub-national environment planning, regulation as well as establishment of standards.

3.2 Environmental and Social Policy of the Adaptation Fund

According to the Adaptation Fund Social and Environmental Policy approved in November 2013, and revised in 2016, all projects/programmes supported by the Fund shall be designed and implemented to meet the environmental and social principles. However, depending on the nature and scale of a project/programme all the principles may not necessarily be relevant and applicable to every project/programme.

Therefore, the following15 environmental and social principles form the basis for identifying and managing environmental and social risks.

i. ***Compliance with the Law:*** - Projects/programmes supported by the Fund shall be in compliance with all applicable domestic and international laws.
ii. ***Access and Equity:-*** Projects/programmes supported by the Fund shall provide fair and equitable access to benefits in a manner that is inclusive and does not impede access to basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, and land rights. Projects/programmes should not exacerbate existing inequities, particularly with respect to marginalized or vulnerable groups.
iii. ***Marginalized and Vulnerable Groups:-*** Projects/programmes supported by the Fund shall avoid imposing any disproportionate adverse impacts on marginalized and vulnerable groups including children, women and girls, the elderly, indigenous people, tribal groups,

displaced people, refugees, people living with disabilities, and people living with HIV/AIDS. In screening any proposed project/program, the implementing entities shall assess and consider particular impacts on marginalized and vulnerable groups.

iv. ***Human Rights:-*** Projects/programmes supported by the Fund shall respect and where applicable promote international human rights.

v. ***Gender Equity and Women's Empowerment:-*** Projects/programmes supported by the Fund shall be designed and implemented in such a way that both women and men (a) are able to participate fully and equitably; (b) receive comparable social and economic benefits; and (c) do not suffer disproportionate adverse effects during the development process.

vi. ***Core Labor Rights:-***Projects/programmes supported by the Fund shall meet the core labour standards as identified by the International Labor Organization.

vii. ***Indigenous Peoples:-***The Fund shall not support projects/programmes that are inconsistent with the rights and responsibilities set forth in the UN Declaration on the Rights of Indigenous Peoples and other applicable international instruments relating to indigenous peoples.

viii. ***Involuntary Resettlement:-*** Projects/programmes supported by the Fund shall be designed and implemented in a way that avoids or minimizes the need for involuntary resettlement. When limited involuntary resettlement is unavoidable, due process should be observed so that displaced persons shall be informed of their rights, consulted on their options, and offered technically, economically, and socially feasible resettlement alternatives or fair and adequate compensation.

ix. ***Protection of Natural Habitats:-*** The Fund shall not support projects/programmes that would involve unjustified conversion or degradation of critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognized by authoritative sources for their high conservation value, including as critical habitat; or (d) recognized as protected by traditional or indigenous local communities.

x. ***Conservation of Biological Diversity:-***Projects/programmes supported by the Fund shall be designed and implemented in a way that avoids any significant or unjustified reduction or loss of biological diversity or the introduction of known invasive species.

xi. ***Climate Change:-*** Projects/programmes supported by the Fund shall not result in any significant or unjustified increase in greenhouse gas emissions or other drivers of climate change.

xii. ***Pollution Prevention and Resource Efficiency:-*** Projects/programmes supported by the Fund shall be designed and implemented in a way that meets applicable international standards for maximizing energy efficiency and minimizing material resource use, the production of wastes, and the release of pollutants.

xiii. ***Public Health:-***Projects/programs supported by the Fund shall be designed and implemented in a way that avoids potentially significant negative impacts on public health.

xiv. ***Physical and Cultural Heritage:-*** Projects/programmes supported by the Fund shall be designed and implemented in a way that avoids the alteration, damage, or removal of any physical cultural resources, cultural sites, and sites with unique natural values recognized as such at the community, national or international level. Projects/programs should also not permanently interfere with existing access and use of such physical and cultural resources.

xv. ***Lands and Soil Conservation:-*** Projects/programmes supported by the Fund shall be designed and implemented in a way that promotes soil conservation and avoids degradation or conversion of productive lands or land that provides valuable ecosystem services.

3. Screening of project against Environmental and social principles

Based on the table and format provided in the Adaptation Fund project proposal template, a risk screening in accordance with the Adaptation Fund ESP principles including on access and equity has been undertaken. Furthermore, impacts and risks have been identified, provided and screened using the Adaptation Fund environmental and social policy (ESP) and gender policy (GP) as indicated in Table 1.

Table 1: Project screening against the Adaptation Fund ESP principles

Checklist for Environmental and social principles		
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	Yes. The proposed project complies with the relevant domestic law and policies as indicated in section chapter 3, sub sections 3.1 and 3.4 of this document.	According to Environmental Impact Assessment (EIA) Regulation (1998) and Sectorial EIA Guidelines of Uganda most of the components and activities of the proposed project **do not fall** within the First Category of projects that require full EIA. Some of the activities such as the construction of water source protection structures in each sub catchment may require EIA. However, the size and location of such proposed structures has to be given due consideration.
Access and Equity	Yes. In general the proposed project promotes for fair and equitable access to benefits of the project.	Activities such as those under component 2, under outcome 2.3 that are aimed at enhancing resilient livelihoods through promoting Income Generating Activities (IGAs) are not intended to benefit all including those that are not direct project beneficiaries, through training in IGAs all other non-direct beneficiaries will benefit from the planned training. The proposed project will also target all project beneficiaries and provide support to assure equal access of men, women youth and the most vulnerable to various benefits including IGAs and other agricultural landscape interventions such as soil and flood control/management structures. The project will also closely monitor targeting of all project beneficiaries to assure that equal access of men, women youth and the most vulnerable is achieved. Indicators in this regard are included in the M&E scheme.
Marginalized and Vulnerable	There are no initiatives identified with orientation or execution that could generate negative impacts on	The delineation of buffer zones for restoration of degraded (river and stream banks as well as other degraded

Groups	marginalized and/or vulnerable groups. Some activities, such as the promotion of IGAs aimed at livelihood improvement. The tree planting and IGAs are targeting women, single headed households and marginalized groups.	ecosystems) and other restoration methods such as demarcation of the degraded areas need to be monitored closely, especially the former resource users in those degraded areas, in order to ensure that these measures are accompanied with livelihood improvement projects and other means to assure subsistence of people who have exploited those resources. Indicators in this regard are included in the M&E scheme.
Human Rights	No activities are identified whose execution is not in line with the established international human rights. The proposed project objectives essentially promote basic human rights for equitable access to training and other services, inputs for adaptation actions as well as small-scale flood and soil erosion control structures e.g. embankments, ponds, valley dams and storm water diversion, capacity building and access to information.	-
Gender Equity and Women's Empowerment	The proposed activities in this project are designed to promote a fair and equal access of men and women to project benefits. The project promotes equal participation in decision-making processes by assuring women representation in water source and environment management committees, as well as any participatory platforms for all stakeholders including deliberate balancing representation in the forums.	All the proposed project activities have been screened and analysed in order to take gender aspects into consideration as detailed in Annex VI. An in depth gender analysis of the involvement of men and women implementation of the concrete adaptation actions proposed will be undertaken at the commencement of project implementation.
Core Labour Rights	The project respects the labour standards as identified by ILO.	-
Indigenous Peoples	The proposed project promotes respect for rights and responsibilities set forth in the United Nations Declaration on the Rights of Indigenous Peoples. In the local communities' context, different tribes exist in the three sub catchments. However, there are no sharp and/or conflicting distinctions between indigenous and non-indigenous people can be made.	There is a risk that traditional natural resource use and land use rights are undermined. Therefore a detailed analysis of resource use rights and land use rights particularly with regards to water source/point resources, forests and other ecosystems will be undertaken at the commencement of project implementation
Involuntary Resettlement	The proposed project will not be involved in major resettlement activities of communities. However, people that might have contributed to	The project will closely monitor the project beneficiaries targeted to provide assurance that the people that previously encroached on protected natural resources

	the degradation of ecosystems e.g. forests, riverbanks and wetlands. through encroachment and unsustainable utilization methods will be asked to move out of the area. Such community members will be involved in restoration activities as IGAs to support them with alternative income generation to assure their livelihoods.	are deliberately supported to undertake IGAs. This is the kind of financial support provided as inputs under Output 2.3.1. Their involvement in income generating activities will serve to compensate for the inconveniences of leaving protected area ecosystems and the income foregone.
Protection of Natural Habitats	The proposed project undertakes the protection of wetlands, forests, riverbanks and agricultural landscapes and their natural habitats and biological diversity is a core objective of under component 2 of this project.	During implementation of the all project activities related to protection and management of the highlighted natural habitats including wetlands, riverbanks forests agricultural landscapes and surrounding areas, monitoring to evaluate whether or not the expected impact is achieved or if any unexpected negative side effects show up.
Conservation of Biological Diversity	The proposed project undertakes to conserve biological diversity under component 2 especially in restoring degraded forests and wetlands.	The potential risk could be the emergency of tree pests and diseases. However, the proposed project has planned to procure and distribute mainly seedlings of indigenous tree species that are resistant to pests and diseases. Such seedlings will not only be planted to restore degraded forest areas but also planted as live markers to demarcate wetlands.
Climate Change	The project does not only increase the adaptation capacity of the local population and the resilience of the ecosystems, but also reduces greenhouse gas emissions the planned tree planting by communities under component 2.	
Pollution Prevention and Resource Efficiency	The project will contribute positively to resource efficiency through water source protection structures which consequently leads to, efficient use of water. Water pollution will be prevented while undertaking interventions for wetland restoration such as demarcation and also erecting flood management structures across agricultural landscapes. Such structures will be vital in serving as barriers to run off and floods that would otherwise pollute the water resources downhill in valleys.	
Public Health	The project will not have negative impacts on public health. On the contrary the project will contribute to improved health conditions of the communities by reducing floods and erosion as well as contamination of water sources thereby reducing water	During the implementation of the project awareness raising activities will be undertaken on malaria and other water related diseases especially during training sessions on ecosystem restoration activities.

	borne diseases and, improving living environment (healthy surroundings). However, water source protection structures may lead to flourishing of some diseases such as malaria.	
Physical and Cultural Heritage	The project will not have any activity related to affecting physical and cultural heritages. Protection/conservation of such physical and cultural heritage will rather be promoted by the proposed project.	-
Lands and Soil Conservation	Soil conservation, reduction of land degradation through supporting flood management and erosion control measures such as terraces, afforestation is a core objective of component 2 of the project.	During the implementation all the activities related to protection and management of land shall be closely monitored to evaluate if the expected impact is achieved or if any unexpected negative side effects show up.

4.1 Policy, Legal and Institutional Framework

Climate change and water resources protection/management are supported and guided by specific legislative and regulatory frameworks. Project developers are therefore obliged to ensure that these legislation and regulatory frames are consulted to ensure that the proposed project activities therein, are aligned with the relevant national laws. Relevant international conventions, treaties and protocols also need to be looked at in certain areas e.g. Ramsar Sites, World Heritage Sites, and transboundary water resources and ecosystems. Some of the key legislations that apply to the water resources and climate change related projects are presented in Table 2.

Table 2: Key legislations for climate change related projects in the water and environment sectors

Legislation/Policy	Applicability	Institutions Responsible
Constitution of the Republic of Uganda, 1995	Article 14 provides that every Ugandan has a duty to clean and protect a healthy and clean environment. Article 39, stipulates that every Ugandan has a right to a clean and healthy environment. Article 27 (The Environment) further recognizes the need for sustainable management of water and land resources, and utilization of natural resources to meet development and environment needs and conservation of natural resources.	Ministry of Water and Environment (MWE)
The National Environment Act. Cap. 153.	Provides for projects to be considered for EIA NEMA as the mandated authority for EIA approval, EIA and Environmental Audit compliance.	National Environment Management Authority

		(NEMA)
The Water Act, Cap 152, 2000.	Provides for the Management of water resources, Regulation and issuance of water use, abstraction and wastewater discharge permits. It further provides for the Prevention of water pollution. Managing and monitoring and regulation of water resources	DWRM and DWD
The National Wetlands Policy, 1995	Provides for conservation of Uganda's wetlands in order to sustain their ecological, social and economic functions for the present and future generations: Implementation of environment impact assessment procedures on all development activities sited in wetlands.	Wetlands Management Department
National Forestry and Tree Planting Act, 2003.	Provides for conservation of Uganda forests and guides tree planting activities in the Uganda.	National Forestry Authority (NFA)
The Land Act (Cap 227)	Article 44(1) of this Act provides that the Government or a local government shall hold in trust for the people and protect natural lakes, rivers, ground water, natural ponds, natural streams, wetlands, forest reserves, national parks and any other land reserved for ecological and touristic purposes for the common good of the citizens of Uganda. Section 45 of the Land Act stipulates that any use of the land shall conform to the provisions of the Town and Country Planning Act and any other laws. The proposed project would be compatible with the land-use planning in the area. For this matter, there will be no need to apply for a change in land use at the project site.	Ministry of Lands, Housing and Urban Development
The Health Act	Provision of clean and sanitary premises, Protection of public health and Prevention of public nuisance	Ministry of Health
The Occupational Safety and Health Act, 2006	Provision of Occupation Health and Safety of workers Inspection of places of works	Ministry of Gender, Labor and Social Development
National Environment (Conduct and Certification of Environmental Practitioners)	Registration and certification of EIA practitioners.	NEMA and Committee of Practitioners

Regulations, 2003		
The Environmental Impact Regulations S.I. No. 13/1998	Provides for preparation of project briefs ; Provides for conducting EI Studies in accordance with ToRs developed by the developer in consultation with NEMA and the lead agency	NEMA
The Water Resources Regulations, S.I. No. 33/1998	Provides for sustainable management Provides for the protection of water sources.	DWRM
The Water (Waste Discharge) Regulations, S.I. No. 32/1998	Specifies what quality is acceptable in terms of effluent released into rivers. Water pollution prevention Provides for effluent discharge in aquatic and sewerage system standards	DWRM
The National Environment (Wetlands, River Banks and Lake Shores Management) Regulations, S.I., No. 3 /2000	Provides for protection of Wetlands, River Banks and Lakeshore zones	NEMA
Protocol on Environment and Natural Resources Management, 2006	Article 13. Provides for Management of Water Resources by the Partner States: Cooperate in the management of shared water resources, which may include the establishment of joint management mechanisms; Cooperate with regard to the management and execution of all projects likely to have an effect on hared water resources; Cooperate to respond to the needs or opportunities for regulation of the flow of the waters of shared water resources.	EAC
Agricultural and Rural Development Policy for EAC, 2006.	Promotes private sector and community participation in the development of irrigation, water management and maintenance of irrigation infrastructure in East Africa.	EAC

4.2 Environmental Impact Assessment processes

4.2.1 Introduction

The process of conducting an environmental impact assessment (EIA) including for water resources protection and management related projects., namely; Screening phase (planning/project conception), scoping stage (pre-feasibility study); EIA study phase (Feasibility study); Contract procurement (compensation and resettlement); defects liability period (environment monitoring); and operation and maintenance phase (compliance audit). It is mandatory that the EIA process for any applicable water resources related development project conforms and aligns to the provisions of the National Environment Act, Cap 153 and the accompanying Regulations.

4.2.2 Water protection and management EIA required projects

The Third Schedule of the National Environment Act Cap 153 lists projects to be considered for environmental impact assessment. Under that categorization, most water resources related projects fall under two ground and surface water resources. These include projects that may have a focus different from water, but still have a considerable impact on the water resources. For groundwater resource projects it is necessary that in order to avoid excessive abstraction or pollution of the available ground water resources, an assessment be carried out for all those water use projects that are likely to impact on such groundwater resources. These include ***rural and small towns' water supply projects*** e.g. Borehole drilling and gravity flow schemes. Examples of surface water resources projects that require EIA include Industrial and commercial water supply and discharge projects. Environmental Impact Assessment (EIA) should be linked with the project cycle as early as possible. This should be initiated at the project identification phase. When pre-feasibility studies are being undertaken, the screening process should also begin. The basic components of the EIA Process in Uganda consist of three interconnected phases: screening, environmental impact study, and decision making. The three phases are:

Phase I: Screening

Screening is undertaken during project identification and pre-feasibility studies. The purpose of screening is to categorize whether or not a project requires a full EIA, partial EIA or no EIA at all. This is important as it enables the application of an EIA only to those projects, which generate significant impacts. This is because certain projects may have less impact than others. Water resources related projects have four screening categories (Table 3).

Table 3: Project screening categories for EIA

Category 1	Small projects which do not have potential significant impacts and for which separate EIAs are not required, as the environment is the major focus of project preparation. These could include borehole drilling, hand augured shallow wells, protected springs and earth reservoir construction.
Category 2:	Environmental analysis is normally unnecessary, as the project is unlikely to have significant environmental impacts. A project brief is enough. This could include project location in less sensitive areas or where many such schemes are in the same locality and their synergetic effects have potential impacts.

Category 3	A limited environmental analysis is appropriate, as the project impacts can be easily identified and for which mitigation measures can be easily prescribed and included in the design and implementation of the project. Projects in this category could include: rural water supply, large earth reservoirs, but not located in very sensitive areas, big gravity flow schemes, all category one projects located in sensitive areas etc.
Category 4	An EIA is normally required because the project may have diverse significant impacts. Projects in this category could include: water projects requiring water to a level more than 400m^3 in any period of twenty four hours, or projects requiring using motorized pumps; storage dams, barrages, weirs, valley tanks and dams; river diversions and inter-basin water transfer among others.

Based on this scheme provided, the water related activities of the proposed project "***Strengthening Climate Change Adaptation of Small Towns and Peri-urban Communities within Medium River Catchments in Uganda***" Project would fall into **category 1**.

Project Brief Preparation and Review

Arising from the screening process that assesses the cost or benefit of the particular project, the developer is required to prepare a project brief based on the development projects that are listed in the Third Schedule of the National Environment Act (NEA) Cap 153. A project brief is a vital requirement for any developer intending to develop a water resources related project to submit the brief to NEMA, containing a prescription of the activity being considered. At this stage, NEMA determines the category of the project, undertakes a review; and screens the brief in consultation with DWD. After the review, NEMA decides whether or not:

- the project is exempt from any further assessment through EIR or EIA and consequently;
- a conditional or unconditional approval for the project shall be granted; or
- it is envisaged that the project is likely to lead to significant impacts on the environment, thereby requiring an EIR or a full EI Study be carried out.

Phase II: The EIA study Phase

The EI Study process for water resources related projects shall comply with the National Environment Act Cap 153 and EIA Regulations 1998. The main steps to be followed in the EI Study phase include:

i. Scoping which involves identification-what will happen as a result of the project?
- Prediction - what will be the extent of the changes?
- Evaluation - do the changes matter?
- Mitigation - what can be done about them?
- Monitoring - how can critical impacts and the compliance of mitigation measures be monitored?
- Documentation-how can the decision makers be informed of what needs to be done?

4. Environmental and Social Management Framework

5.1 Introduction

The proposed project activities are time tested, contribute to enrich the environment and improve the socio-economic condition of the people living in the proposed project areas. According to the Environmental Impact Assessment (EIA) Regulation (1998) and Sectorial EIA Guidelines of Uganda most of the components/activities of the proposed project do not fall within the First Category of projects that require full EIA. Some of the activities such as construction of water source structures may require EIA depending on the magnitude and location of the interventions.

Therefore during implementation of the proposed project, Uganda national standards such as the Water Source Protection Guidelines, Water Resources Regulation and Environmental Impact Assessment Regulation and Guidelines will be duly followed and respected. Environmental performance of the project will be regularly monitored through conducting environmental audits and reviewing project reports. Environmental and social impact assessments for selected project activities will also be undertaken based on the guidance obtained from the National Environmental Management Authority of Uganda and under the supervision of the MIE (AfDB).

While developing the full project proposal, the National Environmental Management Authority (NEMA) approved the overall approach for environmental and social impact assessment for the proposed project for which an Environmental and Social Management Plan/Framework has been prepared. However, detailed assessment will be done at project implementation stage for certain specific interventions based on their magnitude, location and type of interventions. Further consultations and guidance will be provided by NEMA and other relevant sectors during the preparation of detailed assessments for particular interventions as required.

5.2 The Environmental and Social Management Plan

5.2.1 Objectives of the ESMP

The overall objective of the Environmental and Social Management Plan (ESMP) is to provide an environmental and social screening process for the proposed project. It further guides the Ministry of Water and Environment (MWE) as the lead execution agency on sustainable environmental and social management of the proposed project.

The specific objectives of the ESMP are to:

i. Screen for potential environmental and social impacts of the project components and activities
ii. Identify possible impacts and propose appropriate mitigation measures
iii. Monitor the implementation of these measures.

5.2.2 Methods Applied in the Preparation of the ESMP

To accomplish the objectives of the ESMP, a number of methods were employed. These included; Literature Review including reviewing the relevant policies, regulations and proclamations, Environmental and Social baseline surveys (Appraisals) and stake holder

consultations at National and Local levels as detailed in subsequent sections of this document.

(a) Review of project related documents

Relevant documents on the project "***Strengthening Climate Change Adaptation of Small Towns and Peri-urban Communities within Medium River Catchments in Uganda"*** were reviewed. These include the Adaptation Fund endorsed project concept, the project document and other study reports.

(b) Review of Relevant Policies, Proclamations and Regulations

Relevant environmental and social management policies, proclamations and regulations of Uganda were reviewed in accordance with the Adaptation Fund and World Bank's environmental and social safeguards. The information from the desk review was utilized in to clarify, enrich and complete discussions held with stakeholders. These are listed in this ESMP to serve as references for the preparation and implementation of environmental and social management plans.

(c) Consultations with Key Stakeholders

National and local level (Sub catchment) consultations targeting key field staff and local governments in water and environment sectors as well as Water Management Zone (WMZ) staff, Climate Change Department, Directorates of Water Resources Management and Water Development, and other key national stakeholders were conducted. This ESMP is a product of the Ministry of Water and Environment developed with guidance from National Environment Management Authority (NEMA) as the mandated agency. NEMA provided guidance regarding the required social and environmental impact assessments as required by the relevant Law in Uganda. NEMA also cleared the ToRs, processes and/or methods of conducting environmental and social impact assessments and approved the ESMP as a key stakeholder. The MWE also undertook extensive consultations during the preparation of the Full Project Proposal. In these consultative meetings, some of the environmental and social issues likely to impact on the proposed project were also identified. The key stakeholders consulted include:

- *Local Governments*: Lower local government at districts, small towns and sub counties within the three sub catchments where the proposed project will be implemented were consulted. These include, Kyenjojo-Katoke, Bundibugyo & Kapchorwa, Kween and Bulambuli
- *Existing projects staff*: Strategic Towns Water Supply and Sanitation Project (STWSSP) staff in Kyenjojo-Katoke, Bundibugyo & Kapchorwa,
- *Government Organizations* including the Ministry of Finance Planning and Economic Development, Ministry of Water and Environment (MWE), National Environmental Management Authority (NEMA), Uganda National Meteorological Authority (UNMA), Directorate of Water Development, Directorate of Environment Affairs, MWE, Directorate of Water Resources Management, MWE, Climate Change Department, MWE, and Policy and Planning Department, MWE
- Non-Government Organizations including, Environment Alert and other Environment and Natural Resources Network of CSOs) and ECOTRUST
- Development Partners and other programs such as UNDP-Country Office-Uganda and FAO- Country Office-Uganda

5.2.3 Characteristics and baseline situations of the proposed project sites for project implementation

The social and environmental baseline conditions in Rivers Atari, Tokwe and Aswa sub catchments as well as the climate change risks that populations and ecosystems are exposed to are presented in Table 4.

Table 4: Social and environmental baseline conditions in the three sub-catchments

Proposed project sites	**Exposure to risks**	**Social and livelihood issues**	**Environmental/ecosystems issues**
River Atari sub catchment	• Massive landslides • Devastating floods in the low-lying areas • River siltation and flooding.	• Characterized by rain-fed agriculture, and livestock farming especially cattle-keeping. • There is increasing population pressure with limited/inadequate needs for improved livelihood • Encroachment on protected resources including forests, wetlands and river banks for subsistence farming, livestock keeping and harvesting of eco-system goods such as fuel wood, timber, and reeds for art and crafts. • Land use changes around the River Atari catchment has progressed towards agriculture; • There has been an increase in sediment levels in the river.	• There are undulating mountain ranges besides lowland plains with wetlands, open shrubs with grassland and small herbaceous fields with sparse trees • Degraded banks of river Atari • Ecosystem biodiversity erosion, • Deteriorating water quality in R. Atari. • Land degradation and landslides • Deforestation within the landscape • Over-cultivation of hills/high slopes with evident soil erosion

		• Destruction of infrastructure including settlements	
River Tokwe Sub Catchment	• Collapsing/erosion of river banks • Flash floods • Landslides • Siltation of rivers and streams	• High human population • Characterized by intensive cultivation along the river course, • Agriculture on mountain slopes and lowlands is the main livelihood • River Tokwe main source of domestic water use • There is limited income generating sources. • Destruction of infrastructure including settlements	• Degraded river banks, surrounding wetlands and marshy areas. • Over-cultivation of hills/high slopes with evident soil erosion • Deteriorating water quality in R. Tokwe. • Land degradation and landslides
River Aswa Sub catchment	• Landslides in the mountainous / hilly sections of the rivers and • Floods in the low-lying areas during rainy season. • Soil erosion steep slopes • Erosion of river banks	• High population pressure in the catchment • Degradation of water and tree resources due to massive deforestation and encroachment for cultivation • Destruction of infrastructure including settlements • Loss of lives and property due to floods and landslides	• High rates of soil loss and loss of vegetation cover especially along the banks. • Deteriorating water quality in R. Aswa. • Land degradation and landslides. • Ecosystem biodiversity erosion • Deforestation and wetlands degradation.

5.2.4 Potential Environmental and Social Impacts of the project

The positive environmental and social impacts expected from the implementation of the proposed project are that:

- The proposed project plans to develop sub catchment and water source protection plans. This activity will contribute to enhancing climate resilient and sustainable management of water sources and other related natural resources such as agricultural landscapes, forests, streams and rivers as well as wetlands.

- In establishing the water source protection and environment committees the proposed project will be contributing to enhancing the capacity of communities to ably adapt to climate change.

- The proposed project will also support the formulation of bye-laws and ordinances for water source protection and environmental management. In such activity, the project contributes to sustainable management of water and environmental management.

- Water sources assessment and abstraction during implementation of the proposed project will serve to contribute to recharging groundwater help environmental rehabilitation, and increase the resilience against the risk of floods and landslides

- Development of guidelines for surface and ground water protection will serve to contribute to recharging groundwater help environmental rehabilitation, and increase the resilience against the risk of floods and landslides thereby ensuring ecosystems restoration and increasing the resilience to floods and landslides

- Sensitization, awareness creation and training communities in forest, river bank and wetlands restoration, water harvesting, flood control and drought management, income generating activities, including business planning, value addition and marketing will contribute to imparting the appropriate knowledge and skills in management of climate change issues and environmental management. This further contributes to enhancing the capacity of communities in climate change adaptation.

- Construction of water harvesting and flood management/control structure coupled with restoration of degraded forests, riverbanks and wetlands will also positively contribute to ecosystems restoration and increase the resilience to floods and landslides for both human populations and ecosystems to ably provide the ecosystem goods and services.

- Development of a training manual for communities will also contribute to continuous information dissemination between trainers and communities thereby further enhancing their climate change adaptive capacity and sustainable environmental management.

The following negative environmental and social impacts may also be expected if the project is implemented:

- Selection of project beneficiaries in the three sub-catchments might cause some conflicts that could delay project implementation
- Water harvesting, and flood management structures may lead to increased pests and diseases infestation across agricultural landscapes as well as water borne diseases among the communities.
- Implementation of ecosystem restoration activities may contribute to disturbance of natural systems, causing communities to shift for resource use in other sub-catchments thereby aggravating ecosystems degradation.
- Delineation of degraded areas for restoration may lead to communities shifting the pressure on natural resources utilization to non-degraded areas in other nearby sub-catchments thereby aggravating ecosystems degradation.

5.2.5 Enhancement and Mitigation measures

On one hand the proposed project will endeavour to undertake appropriate measures that will enhance positive environmental impacts presented (see sub-section 5.2.4). On the other hand, project implementation will ensure that there will be no significant adverse social and environmental impacts by taking suitable mitigation measures as provided in Table 5. It is worth noting that for the ESMP of the proposed project, a general view has been developed. Further detailed ESMP for each intervention will be formulated during the inception phase of project implementation.

Table 5: Enhancement and management programmes for the proposed project

Environmental Impact	Enhancement/ Mitigation Measures	Responsibility for Implementation	Site of Implementation	Implementation Schedule	Responsibility for Monitoring	Monitoring Indicators
Enhancement of Positive Impacts						
(i) Restoration of degraded forest, river banks and wetlands	Rehabilitating degraded forests, riverbanks and wetlands will contribute to ecosystems restoration and reduce the risk of floods and landslides	DWD, NEMA, District Local Government (DLGs), NFA and Wetlands Department	Rivers Atari, Tokwe and Aswa sub-catchments	Throughout the programme cycle	District environmental, water and Forestry and Agriculture officers	Area (ha) of restored areas
(ii) Enhance water sources protection and environmental management planning and construction of water	Increased water availability and infiltration thereby reducing the risk of erosion, floods and landslides	DWD, NEMA, District Local Government (DLGs), NFA and Wetlands Department	Rivers Atari, Tokwe and Aswa sub-catchments	Throughout the programme cycle	District environmental, water and Forestry and Agriculture officers	Number of structures established

harvesting and flood control structures						
(iii) Increased water sources assessment and abstraction	Increased water supply thereby reducing the risk of scarcity of safe and clean water	DWD, NEMA, District Local Government (DLGs), NFA and Wetlands Department	Rivers Atari, Tokwe and Aswa sub-catchments	Throughout the programme cycle	District environmental, water and Forestry and Agriculture officers	Number of water sources structures established and abstracted
(iv) Strengthened capacity for water source protection and environmental management	Programmes for training, awareness creation/sensitization on water source protection, climate change adaptation, IGAs and environmental management aspects	DWD NEMA, NFA and DLGs	Rivers Atari, Tokwe and Aswa sub-catchments	Throughout the programme cycle	District environmental, water and Forestry and Agriculture officers	No. trainers trained Number of trainings conducted Number of people undertaking IGAs
(v) Increase in IGAs	Introducing IGAs that will contribute to reduction of pressure on natural resources and increase household incomes	DWD NEMA, NFA and DLGs	Rivers Atari, Tokwe and Aswa sub-catchments	After first year of project implementation till the end of the of project	District Commercial Officer and Community Development Officers (CDOs)	Number of people engaged in IGAs; Improved incomes Livelihoods created
Mitigation of negative impacts						
(i) Conflicts between and among communities	Undertake wide consultations in communities when selecting project beneficiaries. Strengthen local management processes	DWD, NEMA, District Local Government (DLGs), NFA and Wetlands Department	Rivers Atari, Tokwe and Aswa sub-catchments	Throughout the programme cycle	District Commercial Officer and Community Development Officers	Resistance and conflicts in communities contained
(ii) Increased incidences and severity of pests and diseases including water borne diseases	Create awareness of health workers, farmers and communities on pests and diseases and water related diseases	DWD and DLGs	In project sites where Water harvesting, and flood management structures facilities	Throughout the programme cycle	District Health officers	Reduction in pests and disease infestations
(iii) Aggravating ecosystems degradation	Undertake targeted sensitization with regular inspections/patrols Properly select	DWD, NEMA, NFA and DLGs	Rivers Atari, Tokwe and Aswa sub-catchments	Throughout the programme cycle	District environmental, water, Forest and Community	Area of ecosystems (ha) that is protected

	methods and technologies that do not cause degradation				Developme nt officers	

5.2.6 Monitoring Programme

The monitoring programme of the ESMP for the proposed project will involve the Executing Agency, NEMA and AfDB at different levels. The National Environmental Management Authority (NEMA) will undertake surveillance of the implementation of the ESMP. The AfDB will also regularly visit the project sites in order to review where necessary and monitor the implementation of the ESMP. It is very useful to understand that the Enhancement and Mitigation programmes described (Table 5) are part and parcel of the project design, including budget. The overall budget of the proposed project including the implementation of the ESMP is USD 2.249 Million. The activities under which a detailed ESMP will be undertaken are included in the M&E budget, which amounts to 180,000 USD.

Monitoring activities will be based on indicators that measure changes over time for key environmental and social components including:

- Checking the extent to which the mitigation and benefit enhancement measures have been adopted and their effectiveness in practice;
- Providing a mechanism whereby unforeseen or unexpected impacts during the ESIA study could be identified and provide measures to mitigate the unexpected negative impacts;
- Preparing periodical reports and liaising with agencies through an established forum in order to discuss and resolve issues arising from the monitoring process; and
- Preparing the annual Environmental and Social Audit (ESA) report to NEMA in Uganda,
- Monitoring of key environment parameters such as changes in water quality; increase in pollution; soil erosion; level of awareness; incidences of pests and diseases including water-borne diseases; climatic variables; changes in human population and social dimensions; changes in employment characteristics; changes in biodiversity; and any other changes in socio-ecological and economic attributes.

5.2.7 Institutional arrangements for ESMP implementation

Institutional arrangements have been identified and provided at community, sub-catchment, district and national levels for all the components of the proposed project. These involve supportive roles at the various levels to properly implement the environmental and social management plan of the proposed project (Table 6).

Table 6: Roles of various institutions for ESMP implementation

Institution	Mandate
National Environment Management Authority (NEMA)	Oversee, coordinate and supervise environmental management. NEMA's overall goal is to promote sound environmental management and prudent use of natural resources in Uganda.
Ministry of Water and Environment (MWE)	As described in the proposal document (See Part III: section A of the proposal document).
District Local Government Structures	District and Local Council Administrations (LC1-5) are stakeholders in the Project and had input into the EIA and ESMP processes and will be involved in

	implementation of the project as well as subsequent monitoring. They will also take part in grievance mechanisms and sensitization of communities.
DLGs including the District Water, Environment, Forest, Agriculture, Community Development, etc. Officers	District Officers are will carry out spot checks on programs to confirm that environmental and social screening and environmental management plans are properly done.

5.2.8 Grievance mechanism

Grievance Redress Mechanisms (GRMs) are vital for providing a formal avenue for affected groups or stakeholders to engage with the project implementers or owners on issues of concern or unaddressed impacts. Grievances are any complaints or suggestions about the way a project is being implemented. They may take the form of specific complaints for damages/injury, concerns about routine project activities, or perceived incidents or impacts. Identifying and responding to grievances supports the development of positive relationships between projects and affected groups/communities, and other stakeholders. Grievance redress mechanisms should receive and facilitate resolution of the affected institutional or communities' concerns and grievances.

The ESMP for the proposed project has included a mechanism to manage conflicts/grieviences.

The proposed project will essentially be guided by the African Development Bank (AfDB) group **grievance mechanism.** AfDB has a well-developed Independent Review Mechanism (IRM) that provides people adversely affected by projects financed by the African Development Bank Group (AfDB) with an independent mechanism through which they can request the Bank Group to comply with its own policies and procedures. The IRM is administered by the Compliance Review and Mediation Unit (CRMU). Investigations are carried out by the Panel of Experts who report to the Boards of Directors. The Compliance Review and Mediation Unit is the organizational entity of the Bank that administers the IRM. It was established by a Resolution of the Board and headed by a Director. The Director is assisted by professional and support staff. CRMU maintains the IRM Roster of Experts and provides administrative and technical support to them when they constitute themselves into a compliance review panel when undertaking compliance reviews. These undertake problem-solving exercises, advisory services and outreach activities to fulfill its mandate and to contribute to the AfDB's overall objectives (https://www.afdb.org/en/independent-review-mechanism).

The proposed project will also establish and support a feedback and grievance redress mechanism that will help to diffuse conflicts arising from project implementation.

The proposed project will establish three levels at which conflicts can be resolved i.e. at the community, district and national/ministry levels. This system will ensure that simple and practical procedures for complaints are properly recorded, responded to, and reported, and allow for effective escalation of unresolved issues. The process will also enable awareness and accessibility to grievance redress in a way that is consistent with the scope of the project.

Further, the process will strengthen policy, legal and institutional framework for managing grievances and conflicts that can assist in handling/ addressing stakeholder concerns and issues relevant to project implementation. The stakeholders will be informed of the existence of the grievance mechanism set up by the project using the available communication channels such as meetings, media websites etc. This will enable stakeholders who have any issues to get assistance as quickly as possible.

For purposes of transparency, complaints and follow ups will be communicated/ published to stakeholders. A clear and concise step wise operationalization and management structure of the feedback and grievance mechanism will be designed at the project inception phase. The feedback and grievance mechanism will be of tremendous support to water source protection and environmental management committees that form the actual interface between the affected and the proposed project.

Overall, beyond the community, district and national/ministry levels grievance mechanisms, the highest authorities to consider complaints lies with the Adaptation Fund and the Implementing Entity. At the 17th Board Meeting of the Adaptation Fund, in consideration of the recommendation of the Ethics and Finance Committee, it was decided that the Adaptation Fund sets up Mechanisms for Handling Complaints. Accordingly, a dedicated AF website (https://www.adaptation-fund.org/projects-programmes/programme-complaints/ provides the contact persons from the Adaptation Fund as well as from the implementing entities in charge of receiving complaints, as well as of providing links to the key procedures that the IEs apply with regard to issues such as fraud and corruption. Any complaints related to fraud and misuse of project funds and resources will be directly followed up and eventually sanctioned by those authorities.