

A REPORT ON ROOT CAUSES ANALYSIS FOR THE BOTTLENECK ON LIMITED FINANCE FOR IWRM AND WASH IN UGANDA



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ACRONYMS AND ABBREVIATIONS

AfDB	African Development Bank
AMCOW	African Ministers' Council on Water
CbiWRM	Catchment Based Integrated Water Resources Management
CCA	Climate change adaptation
CMCs	Catchment Management Committees
CSOs	Civil Society Organizations
DWRM	Directorate of Water Resources Management
FCDO	Foreign and Commonwealth Development Office
GoU	Government of Uganda
GWL	Global Water Leadership
GWP	Global Water Partnership
GWPEA	Global Water Partnership East Africa
IFIs	International Financial Institutions
IWRM	Integrated Water Resources Management
MDA	Ministry, department & agency
MWE	Ministry of Water and Environment
NBI	Nile Basin Initiative
NDP	National Development Plan
NEMA	National Environment Management Authority
NRECCLWM	Natural Resources, Environment, Climate Change, Lands and Water Management
NWSC	The National Water and Sewerage Cooperation
RMS	Resource Mobilization Strategy
SDGs	Sustainable Development Goals
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UOs	Umbrella Organizations
URA	Uganda Revenue Authority
UWASNET	Uganda Water and Sanitation Network
WASH	Water Sanitation and Hygiene
WGI	Water Governance Institute
WHO	World Health Organization
WUCs	Water User Committees

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EXECUTIVE SUMMARY

Financing towards IWRM and WASH has been limited over the years for a number of reasons including perceptions that consider IWRM and WASH as low priority investments, yet they are critical in social and environmental health. The root causes for the low consideration of IWRM and WASH as priority investment is not well understood - a reason a root cause analysis was undertaken to understand the bottleneck on “limited financing for IWRM and WASH in Uganda”.

The study was conducted at national and sub-national levels, and it involved consultation with government officials, CSOs, religious, cultural and academic institutions as well as private sector actors to obtain opinions about what they considered as the root causes for the bottleneck on limited financing for IWRM and WASH. The consultations were done individually and collectively through stakeholder engagement meetings/ workshops. The consultations were conducted in the 4 Water Catchment Zones of Uganda, namely; Upper Nile, Lake Victoria, Kyoga and Albertine catchments with stakeholder engagements in the districts of Gulu, Mbarara, Soroti and Kabarole (Fort Portal), respectively. The consultations were backed up by review of literature that offered insights into some of the root causes to the bottleneck to limited financing for IWRM and WASH. This work was part of a Global Water Leadership (GWL) programme that was implemented by GWPEA, UNICEF, GWP and Government of Uganda.

The study revealed that.

- The limited financing for IWRM and WASH was not entirely because funding is lacking, but because funding for IWRM and WASH is often scattered across different sectors in small amounts not sufficient to cause significant impact, thus resulting in scattered interventions/investment with minimal impact. It was, in this regard, recommended that IWRM and WASH funding in the different sectors be consolidated and investment projects implemented in a concerted manner. This calls for different sectors to work together in designing and implementing IWRM and WASH interventions.
- Uganda has invested significantly in the water and sanitation sub-sector, but access to water and sanitation services and infrastructure remains low. Access to clean and safe water in Uganda is reported at 69%, while that to sanitation is at 6% in Kampala city (AFD, 2023)¹. The 2022/23 budget framework paper of the Ministry of Water and Environment allocated shillings 610,003billion only to the Natural Resources, Environment, Climate Change, Land and Water Programme. Of which 157.676billion was allocated to IWRM and 190.05 billion to WASH with specific projects.
- There are positive strides in respect to IWRM and WASH planning that are well guided by the water policy and water catchment managements guidelines. However, implementation does not always match with the planning usually because of limited finances. This calls for more funds to be allocated for IWRM and WASH. This, notwithstanding, there are still challenges at the planning and implementation stages of IWRM and WASH intervention of inclusiveness of stakeholders and beneficiaries as well as establishing resilient water resources management and WASH services.
- While WASH is well appreciated among different stakeholders, IWRM is a concept that is not yet well internalized, especially at planning and implementation levels of projects. This calls for more capacity

¹. AFD (2023). Improving access to drinking and sanitation in Kampala. <https://www.afd.fr/en/carte-des-projets/improving-access-drinking-water-and-sanitation-kampala>. accessed February 3, 2023

building on IWRM and how it can be properly integrated in development projects in different sectors. Current IWRM interventions have focused mainly on catchment/ macro level, but have not been scaled to address village or household (micro) level projects;

- The root causes to the bottleneck of limited financing for IWRM and WASH are also associated with technological, community management, administrative analyses, institutional capacity, financing & budgeting, policy implementation, and financial systems & management issues. For instance, limited access to technology restricts the capacity of the sector to generate revenue and sustainably manage water resources; many communities lack the requisite skills and knowledge to effectively manage their water resources, which results in poor water quality and quantity. This affects the ability of the sector to attract investment and funding; Administrative analysis revealed that the sector's regulatory framework is inadequate, which results in limited compliance by stakeholders, which limits the sector's ability to attract funding from development partners and other financial institutions; Limited Institutional capacity (i.e. technical, technological & financial) undermines the sector's ability to effectively mobilize resources to manage and implement policies and programs; Limited budgetary allocations to the sector for IWRM and WASH restricts the sector's ability to the sector's ability to implement projects and programs effectively; Policy implementation challenges were also identified as key root causes to the bottleneck for limited financing for IWRM and WASH; and finally, financial systems and management issues related with the manner in which the systems are used as well as the practice was found to be greatly lacking and inadequate - which could explain the limited accountability and transparency that has persisted in the sector. This undermines the sector's ability to attract funding.

The study recommends that:

- GoU and all partners should address the systemic and systematic bottlenecks associated with technology, community management, administration, institutional capacity, budgetary allocations, policy implementation, and financial systems & financial management as well as integrity, transparency and accountability issues;
- Strengthen the capacity of technical officers in developing bankable or fundable projects that are clearly conceived, designed and can be implemented in a cost-effective manner. In addition, strengthen technical officers' ability to identify innovative financing for projects designed.
- Modify conditions of donor funds in favor of IWRM and WASH projects to be implemented by the primary stakeholders who are the local government and the communities.
- Strengthen the capacity of technical officers to internalize IWRM and to properly conceive and integrate IWRM concepts into different sector projects. In addition, encourage different sectors with IWRM budgets to plan and implement IWRM project collectively.
- Allocate more funds for IWRM and WASH interventions.
- Encourage private and public sector participation in IWRM and WASH; and
- Design IWRM and WASH interventions that are gender inclusive and equity responsive.

Overall, addressing the limited financing of IWRM and WASH services will require a collaborative effort by the government, development partners, financial institutions, and communities. By adopting a multi-stakeholder approach and implementing the strategies above, financing for IWRM and WASH services can be improved in Uganda.

SECTION ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction

Water resources are critical for the sustainable development of communities and the environment in Uganda. Uganda is a country almost evenly covered by lakes, rivers and wetlands. These cover 15.3% of the land surface area². Also, the country has continued to receive a moderate and relatively even distribution of rainfall. The open water body endowment together with the rainfall patterns put the country among the most water endowed.

Uganda recognizes access to safe water and sanitation as a basic human right and improved water resource management as crucial for the health, well-being, and development of communities and environment.

The idea of Integrated Water Resource Management (IWRM) emerged during a United Nations' Water Conference in 1977 and later in 2002 when governments committed to its application by agreeing to develop IWRM and Water Efficiency Plans. Uganda has been implementing (IWRM) since the early 2000s, and in 2008, the government launched the National Water Policy, which aims to promote IWRM principles and practices. The policy recognizes the importance of involving all stakeholders in water management, including the government, civil society organizations, and the private sector. The policy also emphasizes the need for sustainable financing mechanisms to support the implementation of IWRM.

The National Development Plan (NDP) III (2020-2025) identifies the water sector as a key area for investment and highlights the importance of adopting an integrated approach to water resources management. Specifically, the NDP III aims to achieve universal access to safe and clean water, improve the management of water resources, and enhance the resilience of communities to water-related disasters. To achieve these goals, the NDP III emphasizes the need to adopt an integrated water resources management approach that promotes the sustainable use and conservation of water resources. However, it is important to note that previous national plans and budgets were not very explicit in respect to integrated water resources management (IWRM). Often, budgeting was silent on IWRM considering it as a crosscutting issue that would be dealt with at sector (ministry, department & agency -MDA) level. At MDA level, IWRM was often planned and financed at catchment level with little or no emphasis for its down streaming to the village and household level. It is increasingly being recognized that IWRM needs to be down streamed to the village and household level and that one cannot divorce IWRM from WASH, because they are intricately intertwined.

² . Ministry of Finance, Planning and Economic Development (MFPED) 2022. Natural Resources, Environment, Climate Change, Land and Water Resources Management Programme. Semi-Annual Budget Monitoring Report Financial Year 2021/22. <https://www.finance.go.ug/sites/default/files/Publications/NRECCLWRM%20Programme%20Semi%20Annual%20Monitoring%20Report%20FY2021-22.pdf> Accessed November 11, 2022.

Despite Uganda being water resource's endowed, the water resources are under increasing pressure from climate change, population growth, and competing demands from various sectors. Uganda faces numerous challenges in managing their water resources sustainably, including limited financial resources, weak governance structures, and inadequate technical capacity. As a result, access to clean water and sanitation for many communities, particularly those living in rural areas has not been realized. There are variable statistics about access to water and sanitation in Uganda, which calls for more reliable statistics to be generated. But for the purposes of this report, the authors have considered a range of statistics related to the urban and rural settings, which reflect the individual reports on access to water and sanitation in Uganda. Access to water in Uganda is considered to vary from 28% in Kyegegwa district to 95% in Kitgum district³. There are 136,671 domestic water points which serve a total of 28,519,361 people - of which 23,355,638 are in rural areas. The water points include protected springs (21.4%), shallow wells (23.9%), deep boreholes (45.3%), Rainwater Harvesting Tank (RWH) (0.4%) and public taps (9.1%). There are 5,312 constructed water points that have remained non-functional for more than 5 years - mainly due to low yield (18.6%), technical breakdown (40.7%), water quality (11.7%), silted (12%), vandalism (8.0%), Leaking (3.3%) and other causes (10.8%). In addition to these water points, there are 1,211 piped schemes.

According to Natural Resources, Environment, Climate Change, Lands and Water Management (NRECCLWM) Annual Programme Performance Report (APPR) of the Financial Year (FY) 2021/22 with respect to investments in natural resources, environment, climate change, land and water management, disaster preparedness and risk management. The Programme Financing the financial year indicates that Programme received a total of UGX581.97bn of which UGX281.689bn was from Government of Uganda, UGX268.21bn was external financing (loans and grants) and UGX32 bn was off budget. The NRECCLWM Programme required budget as per NDPIII was UGX 983.24bn. This shows a budget shortfall of over UGX400bn. The allocation to Disaster Management was UGX84.33bn, Land Management UGX 42.32bn and Natural Resources, Environment, Climate Change and Water Management (UGX 455.326bn). Out of the UGX 581.076bn allocations to the Programme, UGX 466.75bn was released, representing 82% of the budget released from the Treasury. UG 426.77bn was spent representing 94% absorption rate. Environment and Natural Resources Civil Society Organizations (ENR-CSOs) ENR-CSOs contributed USD2,860,836 (UGX10.585bn) and UWASNET contributed UGX78.61bn. According to this report, the financing gap was estimated to be over UGX400bn. It is not yet clear whether this is still the gap or additional financing is required to fill the gap.

The financing of Integrated Water Resources Management (IWRM) and Water, Sanitation and Hygiene (WASH) programs remains limited, resulting in inadequate access to clean water and sanitation services. It's against this background that root causes of causes analysis of the limited financing of IWRM and WASH in Uganda. This report therefore presents a root causes analysis of the limited financing of IWRM and WASH in Uganda. This report seeks to identify the root causes of limited financing for IWRM and WASH programs in Uganda.

The actors in these studies included the Ministry of Water and Environment, Global Water Partnership Uganda, and Global Water Partnership Eastern Africa, UNICEF, in collaboration with partners, who are implementing the Global Water Leadership in a Changing Climate (GWL) programme, with the support of the Government of the United Kingdom, through the Foreign and Commonwealth Development Office

³ . Uganda Water Supply Atlas (2022). Copyright © Directorate of Water Development, Ministry of Water & Environment, Republic of Uganda, 2022 Accessed November 11, 2022. <http://wsdb.mwe.go.ug/index.php/reports/national>

(FCDO). The objective of the GWL programme is to strengthen leadership and collaboration in water resources and WASH governance at national and global levels, in addition to supporting the enabling environment for resilient and sustainable WASH services. The programme supports 7 countries from 2021 to 2024, including Uganda and Rwanda in the Eastern Africa Region.

As part of the programme, GWP is supporting an inclusive and participatory government-led, multi-stakeholder change process to identify systemic and systematic financial constraints in water resource management and define strategies to overcome them. In Uganda, UNICEF is also supporting a multi-stakeholder change process focusing on inclusive and climate resilient WASH services under the programme. In line with this, a stakeholder consultation meeting was organized to identify bottlenecks and barriers that affect the achievement of IWRM and WASH services in Uganda. One of key bottlenecks that was identified and prioritized is “Limited Financing in Inclusive and Resilient Water Resources Management and WASH services in Uganda. Other issues identified that are related to the key bottlenecks are: Poor maintenance and sustainability of established infrastructures; inadequate planning; implementation and monitoring challenges; lack of capacity building; Limited financial resources to finance WASH investment infrastructures; Low household incomes to afford basic sanitation facilities and services due to poverty; Limited knowledge and information on WASH and IWRM; Inadequate resource mobilization skills; Poor water source management practices; High cost of investment setup and maintenance/sustainability; Enforcement of financial policies and laws; Limited access to data (cost, quality & quantity); Inadequate coordination across institutions; Limited capacity and management resources (i.e technological, human/technical⁴ & financial) to manage and implement sanitation, hygiene and water services; Poor coordination between stakeholders and ministries; Poverty among communities; Lack of expertise for unpacking information for consumption; Inadequate capacity to implement WASH and IWRM; Operation and maintenance of WASH facilities are inadequate; Inadequate funding for WASH investments for both rural and urban areas.

In addition, the lack of appropriate and the expensive technology options that are not affordable and suitable for the majority of the population who live in the rural and informal urban settlements, makes it difficult for the country to achieve SDG 6 of universal access to water and sanitation with such disparities. Also, data quality and inadequate validation of goods and services at all levels complicates subsequent planning for water, sanitation, and hygiene interventions. Discrepancies in standardizing measurable indicators for in-country specific and JMP programme of UNICEF and WHO further complicates planning for WASH. This is further compounded by the difficulty in tracking WASH financing due to its being scattered in different line Ministries and country programmes. Furthermore, the WASH and IWRM programmes are not yet fully inclusive of all segments⁵ of the populations (universal access) to cover everyone so that no one is left behind as per the SDGs guidelines. Moreover, sustainability of results for both facilities and behaviors are still difficult.

The findings of this report will provide insights and recommendations for policymakers, development partners, and other stakeholders on how to increase the financing of IWRM and WASH programs in Uganda.

⁴ . Staffing levels for Environmental Health Workers currently at 52% and District Water Officers at 60% in the whole country.

⁵ . Women, men, youth, children, disabled (differently abled persons), urban, suburb, rural and refugee settings.

The report will also contribute to the global efforts to achieve universal access to safe and clean water and sanitation services, in line with the Sustainable Development Goals.

1.2 Purpose and Objectives of the Root Cause analysis

1.2.1 Purpose

The purpose of the study was to conduct an analysis of the root-causes of limited finance bottleneck for IWRM and WASH investment and services in Uganda as well as proposed solutions towards overcoming the root-causes, gaps and implementation challenges associated with IWRM and WASH investments and services in Uganda.

1.2.2 Objectives.

1. Root causes for limited financing in the implementation of IWRM and WASH in Uganda identified, including the gaps, implementation challenges/obstacles, and opportunities.
2. Solutions or ideas to purge or mitigate the root causes as well as the gaps and implementation challenges associated with financing for IWRM and WASH proposed, including actions for inclusiveness to eliminate gender disparities in accessing IWRM and WASH services in Uganda.

SECTION TWO: SITUATION ANALYSIS /CONTEXT

2.1 Global and Country Context on IWRM and WASH

2.1.1 General Context

Water is a single resource with many competing uses. It is used to address social, environmental and economic needs. Considering that freshwater is scarce globally⁶ worsened by rapid population growth and urbanization, miss-allocation of resources, environmental degradation, and mismanagement of water resources, countries face new challenges which call for a new approach to water resources management (AfDB, 2000)⁷. Experience has shown that water management is complex and multi-level and requires a comprehensive framework that takes into account interconnections between the ecosystem and socio-economic activities in river basins - including assessing social, economic, and environmental objectives; water resources within each basin; evaluates and manages water demand, and seeks stakeholders' participation (Smith & Clausen, 2017)⁸. This vision is widely accepted now leading to a shift from the original engineer's hydraulic mission towards a mission of Integrated Water Resources Management (IWRM). IWRM sets out to reconcile multiple, competing uses for water, with legitimacy attained through public participation, and with coordination and technical competence assured through specialized basin entities or agencies where they exist. This, notwithstanding, there are still problems in water resource management that accumulate faster than they are resolved, because people are still learning on the job on how to actually achieve IWRM.

The idea of IWRM emerged during a United Nations' Water Conference in 1977 and later in 2002 when governments committed to its application by agreeing to develop IWRM and Water Efficiency Plans. By 2012, more than 80% of the countries had made progress towards having IWRM and Water efficiency plans. However, to date, IWRM is still under study, because demands for change that lead to more efficient and more sustainable water resources management have only begun to be deepened.

New challenges for water management have emerged, particularly climate change adaptation and mitigation and the water energy-food security nexus, which although require similar approaches as IWRM, call for improved IWRM approaches and an accelerated action that leads to solutions. If there is a litmus test for the effectiveness of IWRM, it is that IWRM must lead to change (*Ibid*). IWRM must make changes in water management in complex social, environmental, economic and political contexts manageable (*Ibid*).

The conventional change model for IWRM was based on four practical elements: a) policies, laws and plans; b) an institutional framework; c) use of management and technical instruments; and d) investments in water infrastructure. As a result, national progress on IWRM has tended to emphasize planning and reforms to policies, laws and institutional frameworks and less to social, economic and political elements. While

⁶ . With only 2.5% of global freshwater, the rest is saline water.

⁷ . Policy for Integrated Water Resources Management. [Policy for Integrated Water Resources Management \(afdb.org\)](https://www.afdb.org/en/knowledge/publications/policy-for-integrated-water-resources-management). accessed 30th November 2022

⁸ . Mark Smith and Torkil Jønch Clausen (2017). Integrated Water Resources Management: A new way forward. A Discussion Paper of the World Water Council Task Force on IWRM. [Integrated Water Resource Management-A new way forward .pdf \(worldwatercouncil.org\)](https://www.worldwatercouncil.org/publications/integrated-water-resources-management-a-new-way-forward). Accessed 30th November, 2022.

such policy legal and institutional change is necessary, it is never sufficient and calls for syncing social (including education), economic and political aspects in the change processes.

IWRM, while a popular concept, is difficult to implement successfully (Schreier *et.al.*, 2014)⁹. Many authors have expressed concern that few IWRM projects have resulted in improvement in the way we manage water, and few have solved the emerging water quantity and quality problems (*Ibid*). The two main criticisms for IWRM lie with the fact that a) Restructuring the many government agencies responsible for water to make them work in an integrated or collaborative manner is an unrealistic proposition; and b). The issues are too complex to be solved in an integrated manner, because there is a disconnect between the land, water, governance, political, human behavior, social and environmental factors. In addition, IWRM and integration activities themselves are mostly unpredictable. Few of the critical authors offer viable alternatives, because neither the traditional top-down sectoral approach nor the integrated multi-stakeholder or programme approach has been successful in solving all the water problems. It was proposed that the IWRM be practiced within watersheds, because it was the only sensible way to address the complex land, water, human, political and environmental issues at the time. But this too has limitations in that the impacts of IWRM are not easily noticeable at village and household levels where they are most needed. Also, current practice prepared national plans and budgets that were not explicit in respect to IWRM. Often, budgeting was silent on IWRM considering it as a crosscutting issue that would be dealt with inadvertently at sector (ministry, department & agency -MDA) level, yet this was not the case. The current paradigm calls for a nexus approach that makes linkages between the top-down and bottom-up approach as well as one that includes selective stakeholders to develop and implement IWRM plans. It also calls for syncing social, economic and political change aspects in the process.

It is argued that the multi-stakeholder processes need to be streamlined to a more problem-solving session with fewer and selective participants. It is expected that this will speed up the process and allow more resources to be assigned to IWRM interventions. In addition, this approach requires a commitment by the researchers and managers to monitor the effectiveness of the IWRM interventions over time. Furthermore, it is suggested that the new paradigm IWRM approach can only be successfully implemented at the micro- (village) and meso- (household) levels and not at the river basin level.

In short, IWRM is criticized for not applying pragmatic problem-solving approaches. Therefore, a change in mindset over expectations of IWRM will be very critical. An updated and forward-looking agenda for IWRM – focused on operationalizing adaptive strategies for change – will be instrumental in charting the actions needed to drive progress on both a possible dedicated SDG on water and water-related targets under other goals. Lessons from experience show that a revitalized agenda for IWRM, suited to the demands of implementation of the SDGs, will have to reconcile IWRM processes and pragmatic problem solving. Those leading and promoting change in water resources development and management or who are active in implementing management actions need to focus on helping and facilitating top-down and bottom-up to work in concert. It will also be important to recognize that water resources management will need to shift focus towards water resources governance. This is on the understanding that water resources management is not necessarily the same as water resources governance.

⁹ . Hans Schreier, Mathew Kurian & Reza Ardakanian (2014). Integrated Water Resources Management: A Practical Solution to Address Complexity by Employing the Nexus Approach. Working Paper - No. 2. United Nations University. UNU Flores. [WorkingPaper_No2.pdf \(unu.edu\)](#). Accessed 30th November 2022

Although integrated water resources management and water governance concepts are related, they are not entirely the same (Katusiime & Schutt, 2020)¹⁰. While IWRM deals with water governance and water management, they differ conceptually, but are interrelated i.e. water management refers to the primary mechanism through which actions are implemented to achieve set goals and involves the application of structural interventions like soil erosion, flood control infrastructures as well as non-infrastructural interventions like behavioral change, education, water resources assessment, allocation, pollution monitoring and control, financial management, information management, and planning for human and environmental purposes. Water governance refers to the mechanisms through which rules that guide the water actions and plans are established and enforced (ibid).

The importance of IWRM for the SDG agenda was foreseen in Target 6.5, which calls for implementation by 2030 of integrated water resources management at all levels, including through trans-boundary cooperation as appropriate (Smith & Clausen, 2017). In their assessment of inter-linkages of water across the SDGs, UN-Water concluded that IWRM provides the framework for addressing the synergies and potential conflicts related to water among targets “by balancing the demands from various sectors [and stakeholders] on water resources, as well as the potential impacts of different targets on each other, to form a coordinated planning and management framework.”

Climate change is increasingly becoming a fundamental threat to society. Water is a key ingredient through which climate change influences the earth’s ecosystems and therefore people’s livelihoods and well-being. Change in the hydrological cycle due to climate change leads to diverse impacts and risks.

Bates et.al. 2008¹¹ and Jimenez Cisneros et.al. 2014¹² analyzed water-related impacts on human and earth biome. Renewable surface water and groundwater resources in most dry sub-tropical regions are projected to reduce due to climate change. A fraction of the global population that will be affected by water scarcity and riverine floods is projected to increase with temperature in the current century. Agriculture which is directly related to water and therefore, food security will be affected by climate change - including food production, transportation, process, access, use and price stability. Climate change and the associated impacts on water are expected to lead to increases in water-related diseases¹³ in many regions and especially in the low-income developing countries. In urban areas, climate change is projected to increase risks for people, assets, economies and ecosystems - including risks from heat stress, storms and extreme

¹⁰ . Juliet Katusiime and Brigitta Schutt.(2020). Integrated Water Resources Management Approaches to Improve Water Resources Governance. MDPI Journal. [Water | Free Full-Text | Integrated Water Resources Management Approaches to Improve Water Resources Governance \(mdpi.com\)](#). Accessed 30th November 2022

¹¹ . Bates BC, Kundzewicz ZW, Shaohong W, Palutikof JP (eds) (2008) Climate change and water. Technical Paper of the Intergovernmental Panel on Climate Change. IPCC Secretariat, Geneva. <https://www.ipcc.ch/pdf/technical-papers/climate-change-water-en.pdf> Accessed 30th November 2022

¹² . Jiménez Cisneros BE, Oki T, Arnell NW, Benito G, Cogley JG, Döll P, Jiang T, Mwakalila SS (2014) Freshwater resources. In: Field CB, Barros VR, Dokken DJ, Mach KJ, Mastrandrea MD, Bilir TE, Chatterjee M, Ebi KL, Estrada YO, Genova RC, Girma B, Kissel ES, Levy AN, MacCracken S, Mastrandrea PR, and White LL (eds.) Climate change 2014: impacts, adaptation, and vulnerability. Part A: global and sectoral aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, pp 229–269. Accessed 30th November 2022

¹³ . Now the World Health Organisation (WHO) and the Center for Disease Control and Prevention (CDC) are mooting that there is a likelihood of Anti-Microbial Resistance (AMR) Pandemic risk becoming a reality and that we need to brace ourselves for it. <https://www.cdc.gov/drugresistance/>

precipitation, inland and coastal flooding, landslides, air pollution, drought, water scarcity, sea rise and storm surges. Rural areas are expected to experience major impacts on water availability and supply, food security, infrastructure and agricultural incomes - including shifts in the production areas of food and non-food crops around the world. Besides climatic drivers, other non-climatic drivers such as current demographic trends, economic development and related land-use changes have a direct impact on social and ecological systems and their processes. These drivers of change are closely linked to each other and pose complex management problems for land and water resources, thus creating a water management and governance crisis.

Climate change adaptation (CCA) is an emerging policy agenda worldwide. In the context of water resources, one of the challenges for adaptation is to integrate and mainstream it into a paradigmatic IWRM concept. Integrating and mainstreaming adaptation with IWRM introduces more implementation burden on IWRM (Giupponi & Gain, 2017)¹⁴. However, it also offers and fosters innovative management and governance arrangements and practices to build adaptive capacity to climate change impacts. While the main focus of IWRM is more on current and historical issues than long-term and futuristic adaptation (Ludwig et.al, 2014)¹⁵, they (IWRM & adaptation) both share the same goal of promoting sustainable development and both require some identical key ingredients (e.g. public participation, information sharing and disclosure, and concern for social justice) for their successful implementation (He 2013)¹⁶. According to Jimenez Cisneros et.al. (2014), IWRM continues to be a promising instrument for exploring adaptation to climate change. Ongoing attempts at mainstreaming climate change in water management provide a unique opportunity for lessons to be drawn and knowledge to be exchanged on IWRM and CCA, especially on how they contribute to, or undermine, each other. The recent approval of Agenda 2030 by the United Nations (UN, 2015)¹⁷ has provided a new framework in which IWRM and CCA can be considered as components of the global efforts towards sustainable development and, in particular, as ingredients contributing respectively to sustainable development goal SDG 6 of ensuring availability and sustainable management of water and sanitation for all as well as SDG 13 of taking urgent action to combat climate change and its impacts. SDG Goal 6 and target 6.5 focus on IWRM requiring its implementation at all levels - including through trans-boundary cooperation as appropriate to be achieved by 2030.

IWRM has further been criticized for lacking gender specific issues; a consideration for poverty and inequality; guidelines for coordination between sectors; and a lack of devolution of decision-making to the lowest appropriate level of action (Rahaman, 2007)¹⁸. Being silent on gender issues is a serious flaw to ideas being proposed for new IWRM concepts and this must be rectified going forward.

¹⁴ . Carlo Giupponi and Animesh K. Gain. (2017). Integrated water resources management (IWRM) for climate change adaptation. [Integrated water resources management \(IWRM\) for climate change adaptation \(springer.com\)](https://www.springer.com). accessed 30th November 2022.

¹⁵ . Ludwig F, van Slobbe E, Cofino W (2014) Climate change adaptation and integrated water resources management in the water sector. *J Hydrol* 518:235–242. doi:[10.1016/j.jhydrol.2013.08.010](https://doi.org/10.1016/j.jhydrol.2013.08.010). accessed 30th November 2022

¹⁶ . He X (2013) Mainstreaming adaptation in integrated water resources management in China: from challenge to change. *Water Policy* 15:895–921. doi:[10.2166/wp.2013.084](https://doi.org/10.2166/wp.2013.084). Accessed 30th November 2022

¹⁷ . United Nations (2015) Transforming our world. The 2030 Agenda for sustainable development. UN A/RES/70/1. <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication>

¹⁸ . Rahaman, M., 2007. EU Water Framework Directive vs. Integrated Water Resources Management: The Seven Mismatches, Helsinki: International Journal of Water Resources Development.

While water is a daily basic need for all, decision making for its different uses is overshadowed by men, yet the actual use of water is mostly by women for their families, exacerbating this disparity. Being aware of this reality makes it difficult to ignore the need to integrate IWRM through a gender-inclusive approach.

UNICEF has stated that more than 12 million deaths occur annually from water borne diseases (Brian Grover & Cynthia Carr, 1993)¹⁹. To date, similar statistics are reported by World Vision. Globally, 785 million people lack access to clean drinking water and over 800 people (especially children) die of waterborne diseases (World Vision, 2022)²⁰ that would otherwise be avoidable. This scale of death is equivalent to having one million deaths a month or 100 jumbo jets crashing every day - this is hard to comprehend (Brian Grover & Cynthia Carr, 1993).

In 1980, the United Nations General Assembly declared the period 1981 to 1990 the decade of water supply and sanitation with a target of “drinking water for all by 1990”. This, notwithstanding, each country was allowed to set its own target depending on country context and the population to be served. During this period, the proportion of the developing world population served by water supply and sanitation grew significantly from 44% to 69% for water supply and 46% to 56% for sanitation (*ibid*). According to the World Bank, 30% of the world’s population lacks access to clean and safe water, while 60% lacks access to well managed sanitation services and facilities (World Bank, 2019)²¹. The impact of water scarcity affects families and their communities, especially women and children - children because they are more vulnerable, while women and girls bear the burden of fetching water for the families. This results in many girls dropping out of school. Access to clean water changes everything, it is a steppingstone towards development, because people begin to practice good hygiene and sanitation.

The year 2020 saw a significant increase in water use in response to the COVID-19 pandemic that required frequent handwashing. The positive out-turn from COVID-19 response, was reduction in the number of waterborne disease cases and the adoption of a culture of handwashing and sanitization.

2.2 Existing Financing arrangements and instruments for IWRM and WASH

Uganda has been implementing IWRM since the early 2000s, and in 2008, the government launched the National Water Policy, which aims to promote IWRM principles and practices. The policy recognizes the importance of involving all stakeholders in water management, including the government, civil society organizations, and the private sector. The policy also emphasizes the need for sustainable financing mechanisms to support the implementation of IWRM.

Integrated Water Resources Management (IWRM) and Water, Sanitation, and Hygiene (WASH) are critical areas in Uganda, and there are several financing arrangements and instruments that support them. Through the National Budget, the Ugandan government allocates funds for IWRM and WASH programs in

¹⁹ . Brian Grover & Cynthia Carr (1993) CANADIAN PERSPECTIVES ON WATER SUPPLY AND SANITATION IN DEVELOPING COUNTRIES, Canadian Water Resources Journal, 18:4, 493-502, DOI: 10.4296/cwrj1804493

²⁰ . World Vision (2022). [Global Water Crisis - Water Scarcity Facts & How To Help | World Vision Australia](#)

²¹ . World Bank (2019). Public Services: Water, Sanitation and Hygiene. Open Government Partnership Global Report DEMOCRACY BEYOND THE BALLOT BOX . [Global-Report Water-Sanitation-Hygiene.pdf \(opengovpartnership.org\)](#). Accessed 6th December 22

its national budget through the Natural Resources, Environment, Climate Change, Lands and Water Management (NRECCLWM) Programme. These funds are used to support the implementation of policies, programs, and projects in the sector.

Through development partners such as the World Bank, African Development Bank, European Union, USAID, UNICEF, among others, provide financial support to Uganda for IWRM and WASH projects. These partners provide grants, loans, and technical assistance to implement projects and programs in the sector.

The private sector also plays a crucial role in financing IWRM and WASH projects in Uganda. Private sector players such as water utilities, water treatment companies, and construction companies can invest in the sector and provide financing for projects and programs.

Overall, there are several financing arrangements and instruments for IWRM and WASH in Uganda. These arrangements and instruments are critical in ensuring that the sector is adequately financed to provide safe and clean water to the population and promote sustainable use of water resources.

It's reported that Uganda has invested significantly in the water and sanitation sub-sector, but access to water and sanitation services and infrastructure remains low. Access to clean and safe water in Uganda is reported at 69%, while that to sanitation is at 6% in Kampala city (AFD, 2023)²². The 2022/23 budget framework paper of the Ministry of Water and Environment allocated shillings 610,003 billion only to the Natural Resources, Environment, Climate Change, Land and Water Programme. Of which 157.676 billion was allocated to IWRM and 190.05 billion to WASH with specific projects.

According to Natural Resources, Environment, Climate Change, Lands and Water Management (NRECCLWM) Annual Programme Performance Report (APPR) of the Financial Year (FY) 2021/22 with respect to investments in natural resources, environment, climate change, land and water management, disaster preparedness and risk management. The Programme Financing the financial year indicates that Programme received a total of UGX 581.97 bn of which UGX 281.689 bn was from Government of Uganda, UGX 268.21 bn was external financing (loans and grants) and UGX 32 bn was off budget. The NRECCLWM Programme required budget as per NDPIII was UGX 983.24 bn. This shows a budget shortfall of over UGX 400 bn. The allocation to Disaster Management was UGX 84.33bn, Land Management UGX 42.32 bn and Natural Resources, Environment, Climate Change and Water Management (UGX 455.326bn). Out of the UGX 581.076 bn allocations to the Programme, UGX 466.75bn was released, representing 82% of the budget released from the Treasury. UG 426.77 bn was spent representing 94% absorption rate. Environment and Natural Resources Civil Society Organizations (ENR-CSOs) ENR-CSOs contributed USD 2,860,836 (UGX10.585 bn) and UWASNET contributed UGX 78.61 bn. According to this report, the financing gap was estimated to be over UGX 400 bn which translates to 40.7%.

Gaps in sanitation and drinking water services are still at large throughout Uganda. Population growth, lack of financing, governance challenges, and swelling refugee flows have all contributed to demand for water and sanitation infrastructure that outpaces service provision rates. Only 32 percent of Ugandans

²² . AFD (2023). Improving access to drinking and sanitation in Kampala. <https://www.afd.fr/en/carte-des-projets/improving-access-drinking-water-and-sanitation-kampala>. accessed February 3, 2023

have access to a basic water supply, while 19 percent have access to basic sanitation and seven million Ugandans practice open defecation.

The budget target of the Ministry of Water and Environment (MWE) towards WASH by 2025 was to increase households' access to safe and affordable water supply in rural areas from 69% to 85% by 2025, while ensuring availability of at least one source per village and to increase overall access to safe and affordable water supply in urban areas from 70.5% to 100% by 2025 and coverage for all by 2040 (MWE, 2022/23)²³. The NDP3 caters for mobilizing finances for IWRM which is a review for low finances in the sector. The budget allocation to MWE for the financial year 2022/23 was shillings 509.217billion (US\$137.63billion), excluding external support. With external support, the budget was shillings 1,819.315 billion (US\$491.71billion) (*ibid*).

Climate finance²⁴ would significantly help in purging the funding gap. However, the manner in which it is likely to be structured might make it difficult or overburdening to access. For example, climate finance is likely to be modelled around grants, equity and loans with grants having the smallest share, while equity and loans take up the largest share of the financing. While grants would be the most preferred option, the countries contributing to the climate finance basket would be unwilling to expand the grant portfolio and more inclined to equity and loan arrangements. The equity arrangement is problematic in the sense that it would require private sector actors accessing climate finance as investment capital. Private sector actors would be more inclined to invest in profitable IWRM and WASH ventures - which are scarce. Climate finance loans are probably going to be the most common financing model preferred by the lenders to government since it guarantees repayment but is not going to be very attractive to the borrowers, especially countries whose debt-loan ratios threaten sustainability targets. It is prudent, therefore, for countries to consider building their own climate finance funds so as to be self-sufficient and avoid the loan burden.

The Uganda Revenue Authority (URA) charges an environmental levy that ranges from zero for new vehicles to 50% of the FOB-value of the saloon cars and SUVs, with the exception of large lorries and trucks which are considered critical inputs for the construction and goods transport sub-sectors of the economy. With an average of 3500 saloon and SUV cars imported every month, the government is in position of generating the equivalent of US\$12.25million every month - assuming an average CIF value of \$10,000 and environmental levy of 35% per 10-year-old vehicle. If for example, 30% of the collections are directed to the Environment Fund every month to cater for environmental needs including climate finance, environmental research and development, the Fund would grow at a rate of \$3.675million per month (\$44.1million per year). This could also contribute 26.75% of the sector ministry's budget for the Natural Resources, Environment, Climate Change, Land and Water programme of shillings 610.003billion (US\$164.87million)²⁵.

²³ . MWE, 2022/23 Budget Framework Paper for the FY 2022-23.

https://budget.finance.go.ug/sites/default/files/Sector%20Spending%20Agency%20Budgets%20and%20Performance/Ministry%20of%20Water%20and%20Environment_3.pdf. accessed 2/2/23

²⁴ . Globally, the climate finance requirement is estimated at \$100 trillion to \$150trillion annually. This is a significant amount expected to be increased annually. [COP26 and the Climate Finance Bubble | Morningstar](#). accessed 2/2/2023.

²⁵ . ACODE and CARE (2021). Mainstreaming Climate Change in the National Budget: Memorandum of issues from the Review of the Budget Framework Paper for 2020/2021 <https://www.acode-u.org/uploadedFiles/CC.pdf>

2.3 Policy, Legal and Institutional Framework on Finance Management in Uganda

Uganda has a comprehensive policy, legal, and institutional framework that guides the financing of Integrated Water Resources Management (IWRM) and Water, Sanitation, and Hygiene (WASH) programs in the country. Below are key frameworks.

2.3.1 National Policy and Legal Framework

2.3.1.1 National Policy Framework

Relevant Policies	Relevance to analysis of limited financing
<p>The National Water Policy, 1999 (under review)</p>	<p>Water is a key resource in the socio-economic fabric of our society and an important factor in the development potential of the nation. It is therefore imperative that proper water resources and sanitation management is supported.</p> <p>The national water policy promotes a new integrated approach to manage the water resources in ways that are sustainable and most beneficial to the people in Uganda.</p> <p>The policy intended to promote the following key directives among others;</p> <ul style="list-style-type: none"> ● Integrated and sustainable development, management and use of the national water resources, with the full participation of all stakeholders. ● Improvement of collaboration and coordination among the sector stakeholders to achieve efficient and effective use of financial and human resources, follow consistent planning and implementation approaches within the context of decentralization and government policies on private sector participation, the role of NGOs, Civil society and beneficiary communities. ● Promotion of awareness of water management and development issues, and the creation of the necessary capacity for the sector players at different levels. <p>The organizational structure for water resources management at national, district and local levels for handling water resources functions recognizes NGOs and the private sector.</p> <p>The role of NGOs and the private sector is clear in terms of involvement in partnership with the government at various operational levels.</p>

	<p>Key strategies for implementation of water supply, sanitation and sewerage services among others include;</p> <ul style="list-style-type: none"> ● Financing, subsidies and tariffs. Generally financing of new installations should have low priority where maintenance of similar installations in the same areas is neglected. ● Private sector participation. The private sector represents a viable resource of increasing importance which must be addressed to contribute to the implementation of this policy in a variety of areas. Presently the private sector has only been used in contracted implementation roles. It is the intention of the government to promote the role of the private sector in mobilizing and financing resources for the sector. ● Coordination and collaboration. The policy recognizes the need for a competent lead agency for the water sector and formal coordination and collaboration mechanism for all actors in the sector. The policy confirms support for establishment of similar coordination and collaboration mechanisms at districts and sub-county levels. In addition, the coordination role should also mobilize additional resources and ensure cost effective utilization of resources.
National Development Plan-III	<p>The National Development Plan III (NDP III) prioritize Natural Resources, Environment, Climate Change, Lands and Water Management (NRECCLWM) as one of the key Programme to achieve national development and recognizes the importance of financing for Integrated Water Resources Management (IWRM) and Water, Sanitation, and Hygiene (WASH) programs in Uganda.</p> <p>NDP III aims to increase public investment in water resources, with a focus on promoting sustainable water use and management. The plan aims to mobilize domestic and international resources to finance various water-related programs and initiatives.</p> <p>NDP III recognizes the role of the private sector in financing water-related projects and aims to promote private sector participation in the development and financing of IWRM and WASH projects. The plan aims to encourage public-private partnerships to leverage private sector resources and expertise for the development of water-related infrastructure.</p> <p>NDP III recognizes the need for innovative financing mechanisms to mobilize resources for water-related projects. The plan aims to promote the use of innovative financing mechanisms, such as water user fees, carbon finance, and green bonds, to finance IWRM and WASH programs.</p> <p>NDP III recognizes the importance of sound financial management for the effective implementation of water-related projects. The plan aims to</p>

	strengthen financial management systems to ensure efficient and effective use of resources for IWRM and WASH programs.
Ministry of Water and Environment resource mobilization strategy for catchment-based integrated water resource management (2020-2030)	Resource mobilization is often considered to be an alternative for fundraising and in most cases is used interchangeably. <i>The goal for the resource mobilization strategy is to:</i> “Ensure sustainable funding of catchment based integrated water resources management (CbiIWRM) initiatives in Uganda for socio-economic transformation. <i>The overall objective of the Resource Mobilization Strategy for CbiIWRM is to:</i> “Ensure that there is a clear, systematic, predictable and well-coordinated approach to soliciting, acquiring, utilizing, managing, reporting, monitoring, and evaluating of resources for sustainable implementation of the CbiIWRM” <i>Specific Objectives:</i> <ul style="list-style-type: none"> ● Mobilize adequate resources for implementation of CbiIWRM activities. ● Establish a framework for resource mobilization and utilization for CbiIWRM. Resource mobilization for CbiIWRM can no-longer be viewed through the narrow “financing” lens but rather through a broader continuum that considers the different stakeholders, different sectors, different institutions, competing internal systems, new and emerging technologies, global imperatives, trans-boundary and location-specific water resource challenges. Financial resources can come from Government budgets, Grants from international development agencies; International non-governmental organizations (NGOs); Bilateral and Multilateral Organizations, loans from international financial institutions (IFIs), Foundations (in-kind contributions), private sector and philanthropic foundations; corporate and academic institutions. Sustainable implementation of CbiIWRM requires a new financing paradigm. In Uganda, certain activities within the water sector have been perceived as an external undertaking. The Water Resources Management and ENR sub-sectors have perennially received limited GOU funding. As such, resource mobilization for CbiIWRM is occasioned by several factors: Several projects and IWRM initiatives highlighted in the Catchment Management Plans remain unimplemented due to limited funding.

	<p>The resource mobilization strategy (RMS) is guided by seven principles. These include:</p> <ul style="list-style-type: none"> ● <i>Accountability:</i> All resources mobilized internally or externally for CbiWRM are formally monitored and accounted for; ● <i>Awareness:</i> All CbiWRM stakeholders are aware of the implementation and roll of CbiWRM initiatives in their locality. ● <i>Collaboration:</i> Resource partnership agreements for CbiWRM (including MOUs with partners and other stakeholders) are consistent or comply with MWE’s legal and operating framework. ● <i>Partnerships:</i> Old and new partnerships for CbiWRM resource mobilization are supported and encouraged. ● <i>Coordination:</i> All resource mobilization efforts for CbiWRM are coordinated and harmonized across MWE within a strongly supportive enabling environment which includes adequate support for identifying, mobilizing, tracking, spending, monitoring and reporting back on resources received. ● <i>Collaboration:</i> Resource mobilization is embedded system-wide across both vertical and horizontal channels. ● <i>Consolidation:</i> All resources mobilized for CbiWRM support MWE’s strategic plan and are therefore focused on delivering on sector and national priority results. <p>The guideline conceptualized resource mobilization for catchment-based integrated water resources management along a three-tiered framework that include mechanisms, means and sources.</p>
<p>The Local Governments Financial and Accounting Manual, 2007</p>	<p>This Manual has been written in conformity with Section 78(2) of the Local Governments Act, and Regulations 58 of the Local Governments Financial and Accounting Regulations (LGFAR), 2007.</p> <p>The Manual provides guidelines based on illustrations and instructions for application by Local Councils Finance and Accounts Officers in their day-to-day duties of processing accounting information for decision making at various levels in the Local Councils and related Institutions.</p> <p>The functions of the Finance Department follow logically from the duties of Head of Finance in accordance with Regulation 11 of the LGFAR, and they are, among others; revenue assessment and revenue mobilization.</p> <p>The manual recommends an organization chart for a finance department in line with the LGFAR.</p>

	<p>Local governments own a number of assets/resources which must, therefore, be managed and utilized efficiently and effectively in order to maximize the future economic benefits or services provided to the community. This responsibility is an onerous one and it requires due diligence of Council employees.</p>
<p>Uganda National Climate Change Policy, 2015</p>	<p>Key guiding principle of the policy among others include;</p> <ul style="list-style-type: none"> ● Mainstreaming and coordinated response to climate change. ● Identifying, developing and influencing financing mechanisms. ● Promote both local and International Cooperation and relations. <p>The policy objective 6 identifies with the need to facilitate mobilization of financial resources to address climate change in Uganda.</p> <p>The main sources and financial instruments proposed include the following;</p> <ul style="list-style-type: none"> ● National and Sectoral Development Plans and Budgets, as climate change concerns are mainstreamed and leveraged through various development plans. ● Private Sector investments, particularly with respect to energy, industrial developments and technology transfer. ● Multilateral and bilateral development partners' support as well as support from international climate change funds, particularly with respect to issues of capacity development, technical assistance and awareness raising. ● Market-based mechanisms for climate-related actions, such as Clean Development Mechanisms, benefit-sharing schemes under REDD+, emissions-trading revenues, tax incentive and tariff schemes. ● Payment for Ecosystem Services (PES) Schemes which is the practice of offering incentives to farmers or landowners in exchange for managing their land to provide some sort of ecological service. PES programmes promote the conservation of natural resources in the marketplace.

2.3.1.2 The National Legal and Regulatory Framework

<p>The Constitution of the Republic of Uganda, 1995</p>	<p>Articles 190 to 197 of the Constitution details powers of Local Governments to plan, mobilize revenue and entitlement to receive grants from Government.</p>
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	<p>Article 190 of the Constitution specifies that “District Councils shall prepare comprehensive and integrated development plans incorporating the plans of lower local governments for submission to the National Planning Authority”.</p>
<p>The local government act</p>	<p>Section 86 of the Local Governments Act, requires every Local Government and Administrative Unit to keep proper books of account and financial records, balance the accounts and produce statements of Financial Statements at the year end. In addition, section 78(2) of the Local Governments Act requires the Minister to make, by Statutory Instrument, Financial and Accounting Regulations prescribing financial and accountability measures for compliance by all Local Governments.</p>
<p>Local Governments (Financial and Accounting) Regulations, 2007</p>	<p>These Regulations shall apply to all financial transactions and business of all local government councils and administrative units and to the management of all public monies and public property in local governments.</p> <p>The law stipulates functions/duties of the different offices/officers at the local government levels, regarding financial administration and control.</p> <p>Annual plans and budgets A local government council shall formulate, approve and execute budgets and plans in accordance with section 77 of the Act.</p> <p>The budget estimates shall be based on the objectives to be achieved for the financial year and during implementation efforts shall be made to achieve the agreed objectives or targets, as the Programme of the council.</p> <p>Budget desk and duties of the budget desk Each local government council shall have a budget desk composed of officers specified in the accounting manual or the instructions issued by the Minister. The duties of the budget desk shall include among others; coordinating the departments to produce annual plans and budgets for submission to the chief executive, ensuring that the council departments produce realistic budget estimates and development plans and ensuring that planning is linked to the budgeting.</p> <p>Annual revenue and expenditure estimates The annual estimates of revenue and expenditure shall give full information concerning the policy which the council intends to pursue during the year of the estimate in the form of background to the budget and shall contain as much details as is consistent with clarity and conciseness. The descriptive titles in the estimates and explanatory notes of various items shall be framed with accuracy and where an item covers a number of different, though related purposes, a breakdown of the figure shall be given.</p>

Authority for revenue collection and expenditure

On approval of the complete estimates by the local government council, the council may collect the revenue, incur the expenditure and generally put into operation the provisions of the estimates.

The Minister may issue instructions on sharing of revenue collected by councils and receipts from central Governments.

The head of finance is responsible for ensuring that revenue collectors, defined under these regulations, carry out their duties properly to ensure that all revenue due to the council is promptly collected in the approved manner and banked intact.

Grants from Government

An unconditional grant shall be considered as part of local government revenue and shall be integrated in the local government budget, to be spent on priorities determined by the council taking into consideration national priority Programme areas, in accordance with section 83 of the Act.

Conditional grants from the Government shall be part of local government revenue but planned for, recorded and accounted for according to the grant conditions.

Conditional grants shall be budgeted following an agreement between the Government and the local governments and accountability and reporting for conditional grants shall be agreed with the responsible line ministry or donor.

Equalization grants shall be handled in accordance with the procedures agreed upon with the central Government.

Donor's funds

Local governments that receive donor funds shall ensure that those funds are spent solely on the objectives and activities specified in the agreements between the donor and the central Government or between the donor and the respective local governments.

Unconditional donor's grants shall be integrated into the local government revenue, as part of the general fund.

Other donor funds shall be treated and utilized according to the agreement and separate accountability statements shall be submitted to the donors in accordance with the terms agreed upon, which shall include the format of reporting where necessary, and in accordance with these Regulations and the

	<p>Local Government Act and copies of the statement shall be given to the Auditor General, the Minister and the Resident District Commissioner.</p> <p>Remittance of shared revenue collections by local governments</p> <p>The chief executive of a lower local government shall ensure that a higher local government’s share of revenue collected is remitted promptly.</p> <p>The chief executive of a higher local government shall ensure that revenue collected by the higher local governments is remitted to lower local governments.</p>
Public Private Partnerships Act, 2015	<p>This Act concerns Public Private Partnership (PPP) and relative agreements between a contracting authority (Ministry, department of Government or any other body established by Government and mandated to carry out a public function) and a private party.</p> <p>This Act shall apply to all public private partnerships and in particular shall apply to the design, construction, maintenance and operation of infrastructure or services including water management facilities, including dams and water storages, water supply and distribution systems, irrigation and drainage systems and sanitation, sewerage and waste management systems and agricultural processing industries.</p> <p>The Act sets out principles to govern the implementation of PPP's, provides with respect to various procedures, and establishes the Public Private Partnerships Committee, the Public Private Partnerships Unit and a Project Development Facilitation Fund.</p>

2.3.2 Regional and International Legal Framework

Uganda is a party to several regional and international legal frameworks that support the financing of Integrated Water Resources Management (IWRM) and Water, Sanitation, and Hygiene (WASH) programs. Some of the key frameworks include:

Sustainable Development Goals (SDGs): Uganda is a signatory to the 2030 Agenda for Sustainable Development, which includes SDG 6 on clean water and sanitation. The SDGs aim to mobilize resources from different sources, including domestic and international resources, to finance sustainable development, including IWRM and WASH programs.

The United Nations Framework Convention on Climate Change (UNFCCC): Uganda is a party to the UNFCCC, which aims to address the challenge of climate change. The UNFCCC recognizes the impact of climate change on water resources and promotes the mobilization of resources for climate-resilient water infrastructure, including IWRM and WASH programs.

African Water Vision 2025: Uganda is a member of the African Union (AU), which adopted the African Water Vision 2025 in 2000. The vision aims to provide access to safe and adequate water supply and

sanitation services to all Africans by 2025. The vision recognizes the importance of sustainable financing mechanisms for the development and management of water resources.

African Water Facility (AWF): Uganda is a beneficiary of the AWF, which is an initiative of the African Ministers' Council on Water (AMCOW) aimed at financing water-related programs and projects in Africa. The AWF provides grants and concessional loans to support the development and management of water resources, including IWRM and WASH programs.

The Nile Basin Initiative (NBI): Uganda is a member of the NBI, which is a regional intergovernmental organization aimed at promoting the sustainable development and management of the Nile Basin water resources. The NBI provides a platform for regional cooperation and promotes the mobilization of resources for the development and management of water resources in the Nile Basin.

Overall, Uganda is a party to several regional and international legal frameworks that support the financing of IWRM and WASH programs. These frameworks aim to mobilize resources from different sources and promote sustainable financing mechanisms for the development and management of water resources.

2.3.3. Institutional Framework

Uganda, the institutional framework for Integrated Water Resources Management (IWRM) is established under the National Water Policy of 1999 and the Water Act of 1995, as amended in 1997 and 1998. The key institutions involved in the management of water resources in Uganda are:

Ministry of Water and Environment (MWE): The MWE is responsible for the overall management and coordination of water resources in Uganda. The ministry is also responsible for the development and implementation of water policies, strategies, and plans.

Directorate of Water Resources Management (DWRM): The DWRM is a department under the MWE responsible for the development and management of water resources in Uganda. The directorate is responsible for the coordination and monitoring of all water-related activities, including IWRM.

National Water Resources Institute (NWRI): The NWRI is a training and research institution under the MWE responsible for the capacity building of water professionals and the development of IWRM training programs in Uganda.

National Environment Management Authority (NEMA): NEMA is responsible for the regulation and management of the environment, including water resources. The authority is responsible for the monitoring and enforcement of environmental regulations, including those related to IWRM.

Water User Committees (WUCs): WUCs are established at the local level to promote community participation in the management of water resources. The committees are responsible for the management and maintenance of water sources and infrastructure, as well as the collection of user fees to finance water-related projects.

Catchment Management Committees (CMCs): CMCs are established at the catchment level to promote the integrated management of water resources. The committees are responsible for the development and implementation of catchment management plans, as well as the coordination of water-related activities in the catchment.

Overall, the institutional framework for IWRM in Uganda is established under the National Water Policy and Water Act. The key institutions involved in the management of water resources in Uganda include the Ministry of Water and Environment, Directorate of Water Resources Management, National Water Resources Institute, National Environment Management Authority, Water User Committees, and Catchment Management Committees. These institutions are responsible for the coordination, regulation, and management of water resources in Uganda.

The Ministry of Water and Environment (MWE), through its directorates, plans, coordinates all water and environmental sector activities and is the ultimate authority responsible for water resources and environmental management in Uganda.

Within the MWE, the Directorate of Water Development (DWD) is responsible for providing overall technical oversight for the planning, implementation and supervision of the delivery of urban, rural water and sanitation services, and water for production across the country. The Directorate of Water Resources Management (DWRM) is responsible for managing and developing water resources of Uganda in an integrated and sustainable manner in order to provide water of adequate quantity and quality for all social and economic needs for the present and future generations. The Directorate comprises of four departments namely Water Resources Monitoring and Assessment Department, Water Resources Planning and Regulation Department, Water Quality Management Department and the International Trans boundary and Water Affairs Department.

The Climate Change Department (CCD) under the Directorate of Environmental Affairs is meant to strengthen Uganda's implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol (KP) and other climate change interventions.

The Ministry of Water and Environment established institutional setup to implement Integrated Water Resources Management (IWRM) that is aimed at the de-concentration of water resources management to the Water Management Zone (WMZ) and catchment levels' coordinate Catchment based Water Resources Management, but they also establish Catchment Management Organizations (CMO) which promote Coordination and integrated planning among stakeholders in the catchment.

In addition, t WMZ, at regional level, the Directorates implement their activities through the following de-concentrated structures including:

- Water and Sanitation Development Facility (WSDF) in Western, Central, Northern and Eastern regions, which are semi-autonomous branches that plan and implement small town and rural growth Centre water and sanitation projects.

- Umbrella Organizations (UOs) which provide technical and management support, training, advocacy, water quality monitoring, financial and audit services to the local water authorities or boards. They ensure functionality, financial viability and sustainability of small, piped water schemes. The UOs have regionally elected executive committees elected by General Assemblies. There are six UOs in the country based in Central, Eastern, and Northern, Mid -West, Southwest and Karamoja regions. The General Assemblies are constituted by representatives from each of the water schemes in their region (water users and local leadership).
- Through decentralization policy, the MWE works with Local governments, which are responsible for the implementation of rural water supply and sanitation programs at the district level.
 - The National Water and Sewerage Cooperation (NWSC) and Six Umbrella Authorities (UAs) manage water supply. NWSC manages the large towns while the UOs oversee the operational management of the water schemes in small towns and rural areas. The UOs assume direct management responsibilities for the “gazetted”, or formally registered water schemes, and operate as public water utilities. The objective of introducing the UA model was to professionalize the management of water and sanitation infrastructure and to achieve sustainable functionality by ensuring adequate maintenance, revenue collection and re-investment. They operate independently, under the supervision and with support from the MWE and also supported by Development Partners to ensure affordable water and sanitation services while ensuring sustainability of the infrastructure. (AMCOW, 2011).
 - Technical Support Units (TSU) under the Directorate of Water Development set up to support District Local Government water offices in rural water and sanitation planning and implementation activities.
 - Water for Production Regional Centers (WFPRC) in the East, North and Southwest Uganda.
 - At community level, operation and management of water and sanitation facilities is either through Community Based Management System (CBMS) for point water sources and small piped water systems outside the currently gazette areas, or through Umbrella Organization for small to medium and Large Gravity Flow Scheme sized piped water systems in gazetted areas or the National Water Sewerage Corporation (NWSC) in gazetted rural areas, large Gravity Flow Schemes and Rural Growth Centers. In addition, Private Sector operators, NGOs and CBOs also promote a number of approaches to operation.

2.3.4 Existing IWRM and WASH related Projects in Uganda

Various projects have been developed and implemented or under implementation in response to actions required by these policies. Key projects carried out through coordination and collaboration with NGO’s under IWRM include;

There are various projects being implemented by MoWE. These include; The Integrated Water Management and Development Project (IWMDP) Project, Lake Victoria Environment Management Project, The Joint Water and Environment Sector Support Programme (JWESSP), Water for Production (WfP) Centers for Eastern, North, Central and South West; The Irrigation for Climate Resilience Project (ICRP), and WASH component of European Union -Trust Fund for the Support Programme to the Refugee Settlements and Host Communities in Northern Uganda.

Development of Catchment Management Plans (CMP) across the WMZ. These include; Kiiha, Rushango, Ruhezamyenda, Lake Bunyonyi and Waaki among several others. Environmental restoration, water and sanitation projects have equally been supported by private sectors and NGOs, and these focused on demarcation of riverbanks using permanent concrete pillars and live fences, wetland demarcation and restoration, rural community water supply, school sanitation facilities and hygiene promotion, afforestation, and areas of integrated community alternative livelihood improvement.

SECTION THREE: METHODOLOGY

3.1 Introduction

This study employed a multi-pronged approach, which included literature reviews, field surveys, and stakeholder consultative meetings. These activities were conducted in the four catchment zones of Uganda, specifically the Lake Victoria, Albertine, Upper Nile, and Kyoga Water Management Zones. The Finance Working Group was responsible for carrying out the study due to their membership with the necessary technical capacity and experience in the subject matter. Additionally, they played a key role in conceptualizing the study as part of the development of the response strategy, which was supposed to be established through the formation of the working groups. The team visited the four Water Management Zones over the course of one month, starting with Albertine WMZ and Victoria WMZ and concluding with Upper Nile and Kyoga WMZ in October 2022. Key stakeholders (*as shown in Figure 3-1*) included water catchment leadership, district water officers, natural resource officers, civil society organizations, private sector representatives, religion leaders, and cultural leaders who were aligned with Integrated Water Resources Management/Water, Sanitation, and Hygiene (IWRM/WASH) services.

The participation was represented by both women, men, youth, elderly PWDs with the percentage as in the table below.

Gender	Number	Percentage
Women	35	24.13
Men	110	75.86
Total	145	99.99

Table 1. Percentage rate in participation according to gender



Figure 3- 1: Key stakeholder participation in the meeting in various regions of the WMZs

3.2 Literature Review

This included reviewing reports and any other relevant literature related to financing in IWRM and WASH in Uganda later from the field (WMZ) by the thematic working groups (*Figure 3- 2*).



Figure 3- 2: Review of the literature by the thematic working group committee members

3.3 Data Collection

This was developed by the Working group Team and reviewed by the program coordinator for verification. These included questionnaire guides for focus groups discussions (*Figure 3- 3*) and key informant interviews. Tools were designed based on questions that will tease-out the root causes to the financing bottleneck for IWRM and WASH in Uganda.

3.4 Field Survey

A team of 7 members of the Working Group was assigned to undertake the survey. They were responsible for generating the data collection tools including analyzing the collected data to draw inferences and preparing the study reports. The Field team visited and conducted business in the districts where the zonal catchment headquarters are situated.



Figure 3- 3: Focused group discussion

The teams had a one-day meeting per site conducting interviews/consultations and compilation of the report was conducted for one day as an extra. The consultations were held with district local authorities - including those in charge of the Water Catchment Management zone.

3.5 Feedback session

The focused group discussion generated various opinions on the root causes of the financial bottlenecks. Results from the discussion were presented during feedback sessions (*Figure 3- 4*) for evaluation and agreement of the entire team.



Figure 3- 4: Participants during feedback sessions in Gulu, Fort Portal, Soroti and Mbarara Cities

SECTION FOUR: STUDY FINDINGS (RESULTS)

4.0 Introduction

The section introduces the findings regarding various root causes of limited financing for integrated water resource management and Water, Sanitation, and Hygiene (WASH) services. However, the provision of these services is hindered by limited financing, which affects the availability and accessibility of these services to communities in need. This study aimed to identify the root causes of limited financing for IWRM and WASH in Uganda. The findings of the study indicate that there are several challenges that hinder the availability and accessibility of adequate financing. The findings of this study are categorized into technological issues, community management, administrative analysis, institutional capacity, financing and budgeting, policy implementation, and financial systems and management issues.

Technological issues were identified as one of the major hindrances to financing in the IWRM and WASH Services. Many of the water management facilities were found to be outdated and limiting in the necessary technology to facilitate effective management and monitoring of the water resources. This limits the capacity of the sector to generate revenue and sustainably manage water resources.

IWRM and WASH services are intricately interconnected to the extent that technology, machinery, and equipment used in developing either service are usually the same. For example, an excavator used in road construction is the same that is used in ground clearing for agricultural fields and fishponds for aquaculture. One of the respondents reported that 10% of the equipment at the local government in Soroti district are used for 10% of the time - implying that there is underutilization of the equipment and machinery allocated to the district, thus calling for concerted planning so as to increase the efficiency and useability of the equipment and machinery allocated to the local governments.

60% of respondents, however, claimed they did not use the resources allocated to other departments because they are not aware of their existence, which necessitated the development of data and the disclosure of information on machinery, equipment, and technology available at the local government level, so as to enhance planning for their usage. It was also recommended that an inter-programme council for IWRM/WASH be created to facilitate and coordinate implementation of IWRM/WASH at central and local government levels to avoid duplication and the claim of limited funding for IWRM/WASH.

The fact that financing for water management, sanitation, and hygiene is usually spread over numerous line ministries and national programs will make it easier to trace and pool such funds through the national budget, thus making it easy to identify funds for IWRM and WASH services.

Community management was also found to be a critical challenge. Many communities lack the necessary skills and knowledge to effectively manage their water resources, which results in poor water quality and quantity. This affects the ability of the sector to attract investment and funding.

Administrative analysis revealed that the sector's regulatory framework is inadequate, which results in limited compliance by stakeholders. This limits the sector's ability to attract funding from development partners and other financial institutions.

Institutional capacity was also found to be lacking, with inadequate staffing and limited training opportunities for personnel in the sector. This affects the sector's ability to effectively manage and implement policies and programs that require adequate human resource capacity.

Financing and budgeting issues were identified as a significant challenge, with limited funding and budgetary allocations to the sector. This limits the sector's ability to implement projects and programs effectively.

Policy implementation challenges were also identified, with limited implementation of policies related to water management. This results in limited investment in the sector, which affects the availability of funding.

Finally, financial systems and management issues were found to be a challenge, with limited financial reporting systems and inadequate financial management practices in place. This results in limited accountability and transparency, which hinders the sector's ability to attract funding.

This section therefore covers the findings of this study that provide critical insights into the root causes of limited financing for IWRM and WASH in Uganda.

4.1 Technological for IWRM and WASH

The limited financing for IWRM and WASH in Uganda can be attributed to several factors, including technological challenges. It is important to recognize that there are multiple technical solutions available to address the challenges of water resource management and sanitation. The engineering challenge lies in identifying feasible alternatives and selecting the most appropriate one. Improving existing systems in a cost-effective manner is often preferred to developing new master plans for major systems.

The basic principles for deciding on technology options for IWRM and WASH are recognizing that there is always more than one technical solution to a problem. Recognizing that the engineering challenge is always to discover the feasible alternatives and choose the most appropriate. Note that everybody everywhere drinks some water and disposes of their body wastes today. The technical challenge is usually to find workable and affordable improvements to the existing systems, rather than preparing master plans for major new systems. In rural areas, water systems without piping, such as shallow dug wells and drilled boreholes, are recommended. Natural springs can be improved if local conditions permit. Piped water systems are usually necessary in towns and cities, but pipes are often expensive meaning that one needs alternative water delivery mechanisms. Costs can be minimized by keeping the lengths of pipes to a minimum. It is important to recognize that not everybody needs or can afford a private connection in a poor population. Public stand-posts or taps are much cheaper. Distribution systems need to be kept affordable, for low basic demands, with flexibility in the design for future upgrading as the consumers can afford a higher standard of service.

Sanitation or fecal waste disposal also offers technological choices. Many designs were researched and tested in recent years. It is important to recognize that reduced water supply (to meet basic needs only) results in much lower wastewater volumes - which might be the most desired situation, but one needs to make sure that no wastes are left behind to accumulate upstream. Dry latrines are recommended, particularly in arid areas where water is more valuable for cooking, washing and gardening than for toilet flushing. Wet latrines (so-called pour flush) with a soak pit are another option often suitable for locations that are not

water stressed. Septic tanks and tile drains may be necessary for greater wastewater volumes and tighter soils, especially where waste-water disposal is unavoidable (i.e. where high population density, high water use and/or tight soils exist). Note that small bore sewers with septic tanks are cheaper than conventional sewers. By collecting and concentrating wastewater flows, sewer systems force choices in treatment and disposal. Lagoons are the most robust and reliable treatment, if land is available. None of these technical solutions is revolutionary. The difference is that sector planners are now able to examine a range of options with proven designs and field experience.

4.3 Community Management:

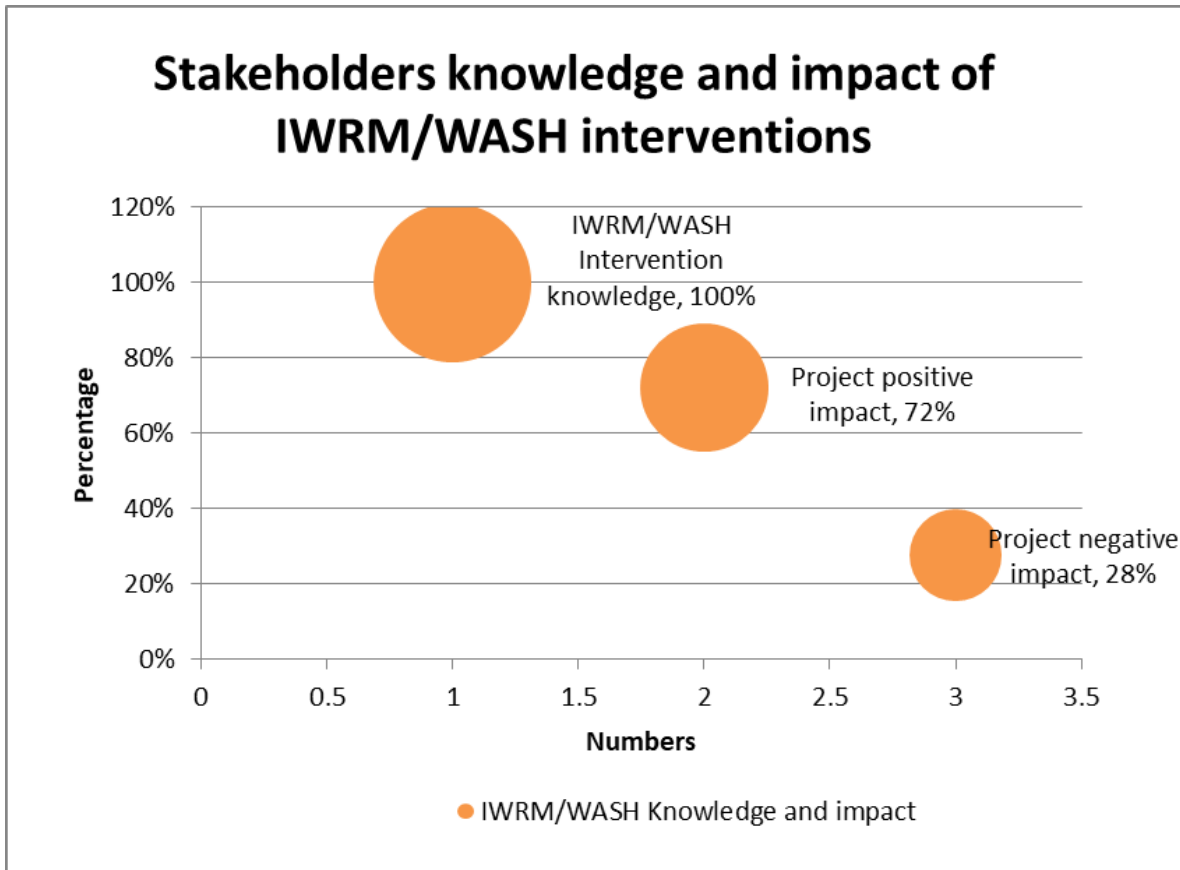
Lack of effective community management is one of the root causes of limited financing for IWRM and WASH that was noted during the study. It has been recognized that the involvement of local communities is essential for the sustainable management of water and sanitation systems. Community management requires the participation of users at all stages, especially in decision-making processes. Women and girls, who are responsible for collecting water and managing sanitation and hygiene in households, need to be involved in the planning and budgeting for water investments and infrastructure at the community level. However, the implementation of this approach requires sensitivity to sociological aspects of sector planning, which is not typically a strength of engineers. Involving NGOs in the implementation of projects can be a source of insights on how to work with the local population, rather than parachuting into the communities externally conceived ideas and systems. In addition, with the changing social setups and behavior influenced by the internet and social media, technologies and project implementation methods are being modified to support the beneficiaries' expanded role in the management of their water system. The common borehole hand-pump used in the past is a good example that is increasingly failing where large populations with little or no technical skills use it daily. Such pumps wear out too fast when used by the entire community and local people can seldom repair them, assuming parts are available. This could partly explain why many of the boreholes previously installed became non-functional. Now through the village water committees and umbrellas different hand-pumps have been installed that can withstand large community use.

Involvement of the public in water resource management is critical for its success, However, participation is limited, and there is a lack of awareness of the importance of water resource management.

4.3 Administrative analysis

The management of processes, activities and affairs of any system requires sufficient knowledge of the programmes available for supervision and resource allocation. Planning and supervision of IWRM and WASH activities is necessary in achievement of the strategic objectives of such intervention in any organization. In this case, to examine the root cause of the financial bottleneck, assessment of the knowledge of interventions in IWRM/WASH (*Chat 4- I*) and how the process management contributed to the attainment of the set objectives were analyzed in line with impact and usefulness of the project. Key questions were asked around, knowledge of IWRM/WASH interventions, impacts of the projects on beneficiaries, administrative level of implementation (National, regional, local, etc.) and required improvement in the implementation arrangement of IWRM/WASH. The finding showed that all respondents agreed to full knowledge of IWRM/WASH interventions being implemented in their organizations/communities as presented in figure below. This level of awareness of IWRM/WASH activities

is in line with key directive of the Water policy that seeks to promote awareness of water management and development issues and creation of the necessary capacity for the sector players at different levels. This is vital for resource mobilization as guided by the Ministry of Water and Environment resource mobilization strategy for catchment-based integrated water resource management (2020-2030), where awareness forms one of the principles that guides this strategy.

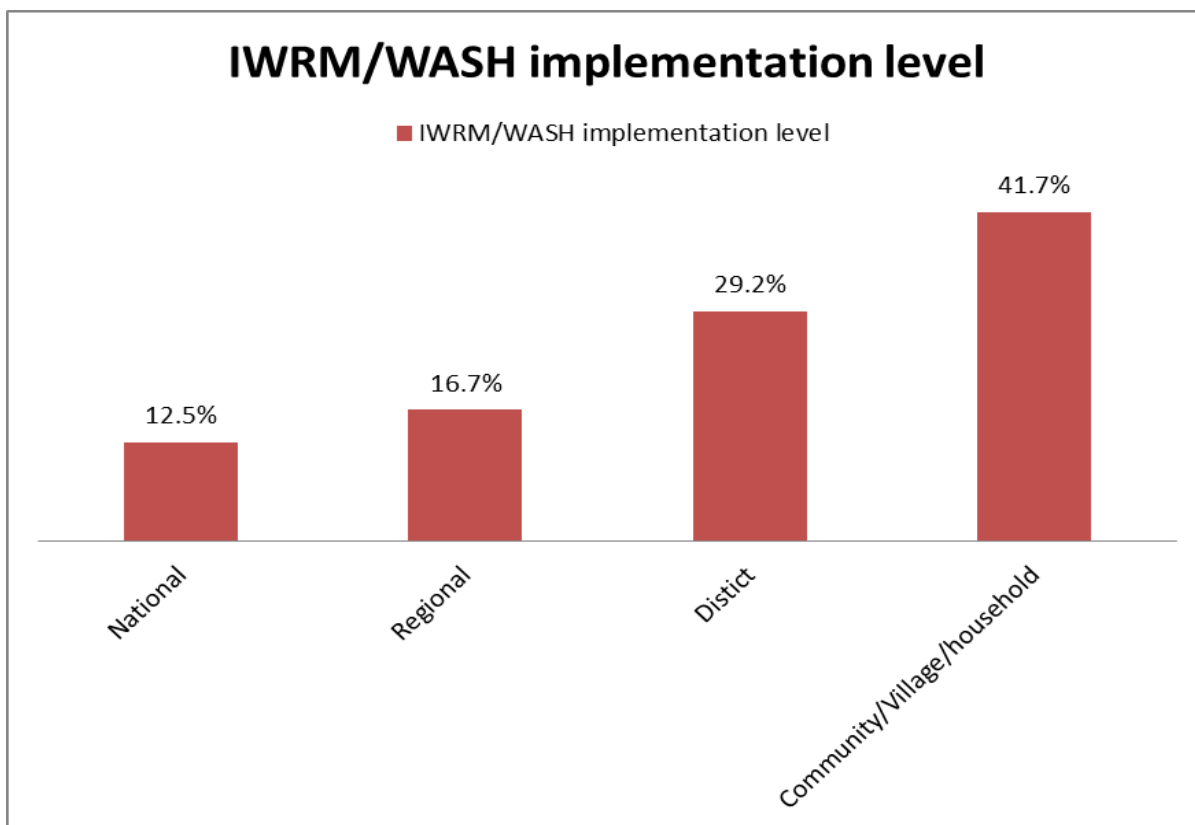


Chat 4- 1: Stakeholders Knowledge and impact of IWRM/WASH interventions

The contribution of IWRM/WASH interventions to the livelihood of the people was generally appreciated by the implementers, with positive impact evaluated at 72%. Nevertheless, some of these activities were considered to interfere with limited aspects of lives, informing displacement of people, cultural disruption, and financial commitment by locals. To this, 28% of the feedback was associated with negative impact of the interventions on community livelihoods as presented in the **Chart 4- 1** above.

41.7% of the stakeholders consulted noted that the implementation of IWRM/WASH has been administered to a greater scale at the community/village/household level as presented in Chat 4- 2 below. This has been attributed to the additional financial contribution from the private sector and NGOs directly at the community/lower local government level. The result also suggested that the preference to implement IWRM/WASH at the lower administrative structures is more than the higher levels. This demonstrated efforts towards public private partnership in ensuring access to safe and clean water and in providing resources to implement activities at the lowest level and also offered direction for strategic resource mobilization as presented in the figure below.

On collaboration, there are opportunities to collaborate on resource mobilization as stipulated in the MWE's strategy on resource mobilization for CbIWRM (2020-2030) across both vertical and horizontal channels within the governance.



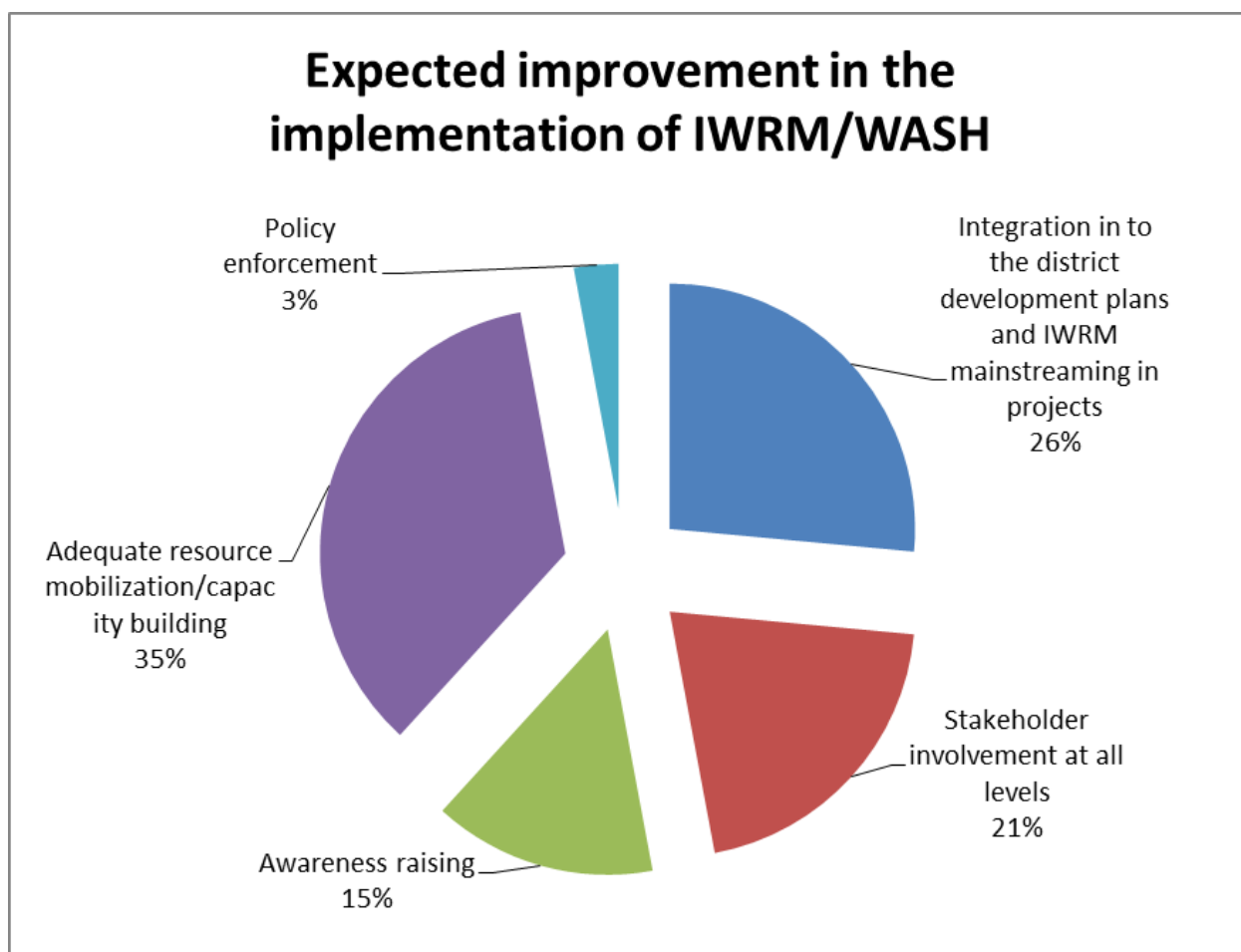
Chat 4- 2: Level of implementation of IWRM/WASH activities

Expected improvement in the implementation of IWRM/WASH in Uganda.

Several ideas were proposed to improve implementation of IWRM/WASH in the country. This included coordination and strengthening of partnership to improve stakeholder awareness and resource mobilization; budget influence through advocacy; staff capacity development; awareness raising; mainstreaming IWRM/WASH in project development and integration into development plans at all levels; timely release of planned and budgeted IWRM/WASH activities; and policy enforcement. All these were summarized under five main categories presented in *Chat 4- 3* below. The result showed aspects of resource mobilization and capacity building and development highly ranked (with 35% of the respondents thought so) to improve implementation of IWRM/WASH. The integration of IWRM/WASH in development plans at all levels and mainstreaming into project formulation was equally considered necessary to the implementation strategy.

Key strategies provided by the water policy for the implementation of WASH/IWRM recognize private sector participation, promotion of awareness, coordination and collaboration mechanisms for all actors in the sector. The Ministry of Water and Environment resource mobilization strategy for catchment-based integrated water resource management (2020-2030) also shares these strategies with its principles that guide resource mobilization. While all appropriate mechanisms for the administration of implementation of IWM/WASH are in place, the proposals for improvement cited above are well placed and the gaps

therefore can be addressed by considering implementing these various suggestions in order to close on the financial bottlenecks.



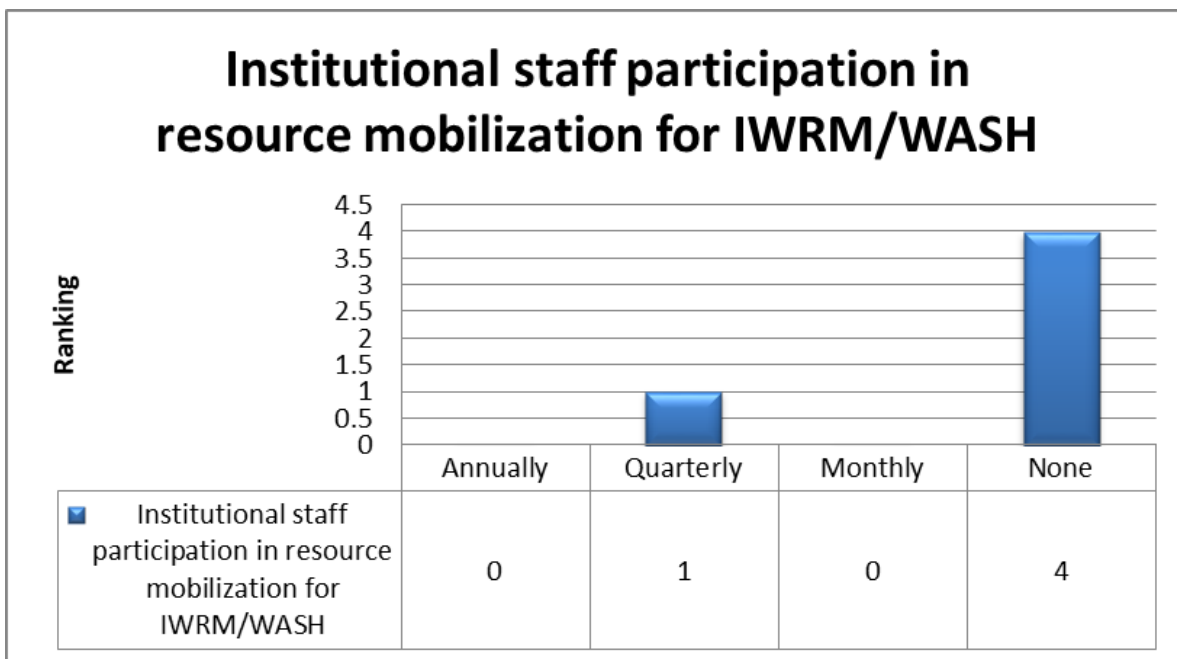
Chat 4- 3: Expected improvement in the implementation of IWRM/WASH

4.4 Human and Institutional Capacity

The stakeholders recognized that implementing IWRM/WASH interventions is quite complex in a sustainable manner. Government does not only require access to funds to manage and develop water resources and address issues of sanitation, but it should also have a robust institutional and human capacity to plan, design, budget and finance the IWRM/WASH activities. While it is difficult to precisely define institutional capacity in a simple manner, the United Nations Development Programme (UNDP) and the United Nations Disaster Risk Reduction Offices (UNISDR) define institutional capacity as the capability of an institution to set and achieve social, economic and environmental goals, through knowledge, skills, systems, and institutions. It also means having the appropriate and adequate technology, technical/ human resource, financial and infrastructure to deliver on the set social, economic and environmental goals. Inadequate institutional, human and infrastructural capacity can be seen as an enabler to poor planning and budgeting and subsequently, inadequate resource mobilization towards implementation of activities. As a result of this, in some cases, little or no planning of IWRM/WASH interventions specific to the challenges that faces a particular community is likely to emerge. This, in a way, can be linked to lack of

capacity to conceptualize available planning framework to plan and develop projects or incorporate activities within the budgetary process. All these aspects indicate how the lack of institutional and human capacity can hinder financing of IWRM/WASH activities.

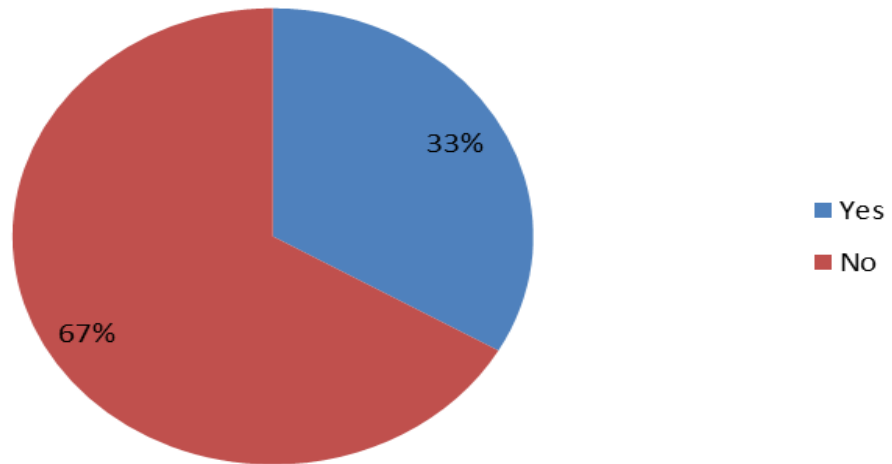
The study looked at various aspects of the human and institutional performance that contributed to making finances available or caused the inadequacy in financing IWRM/WASH activities. This was analyzed based on the following indicators; institutional staff participation in resource mobilization for IWRM/WASH; institutional financial forecast; integration of financial forecast in development plans and budgets; and consultation of previous cash flow to create a financial forecast and capacity needs requirement for resource mobilization (*Chat 4- 4*).



Chat 4- 4: Institutional staff participation in resources mobilization for IWRM/WASH

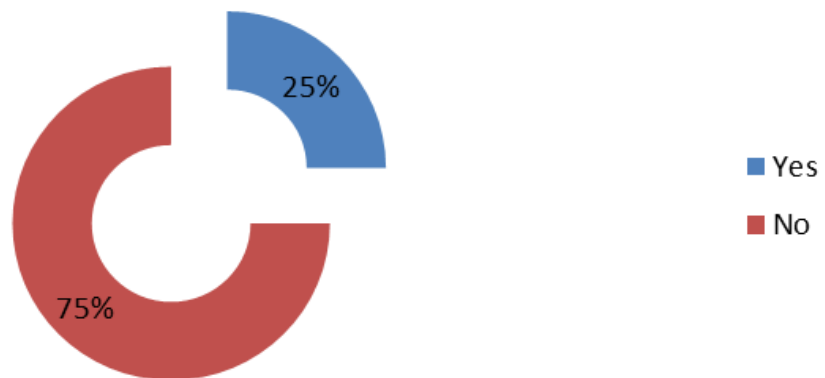
The stakeholders consulted (33%) revealed that there was little or no staff participation in resources mobilization for IWRM/WASH (Chart 4) above. In respect to staff involvement in resource mobilization forecasts for IWRM/WASH, majority (67%) of the respondents revealed that there no involvement of staff in such forecasts (*Chat 4- 5*). Seventy five percent (75%) of the respondents revealed that there was no integration of financial forecasts in development plans and budgets (*Chat 4 - 6*).

Institutional financial forecast



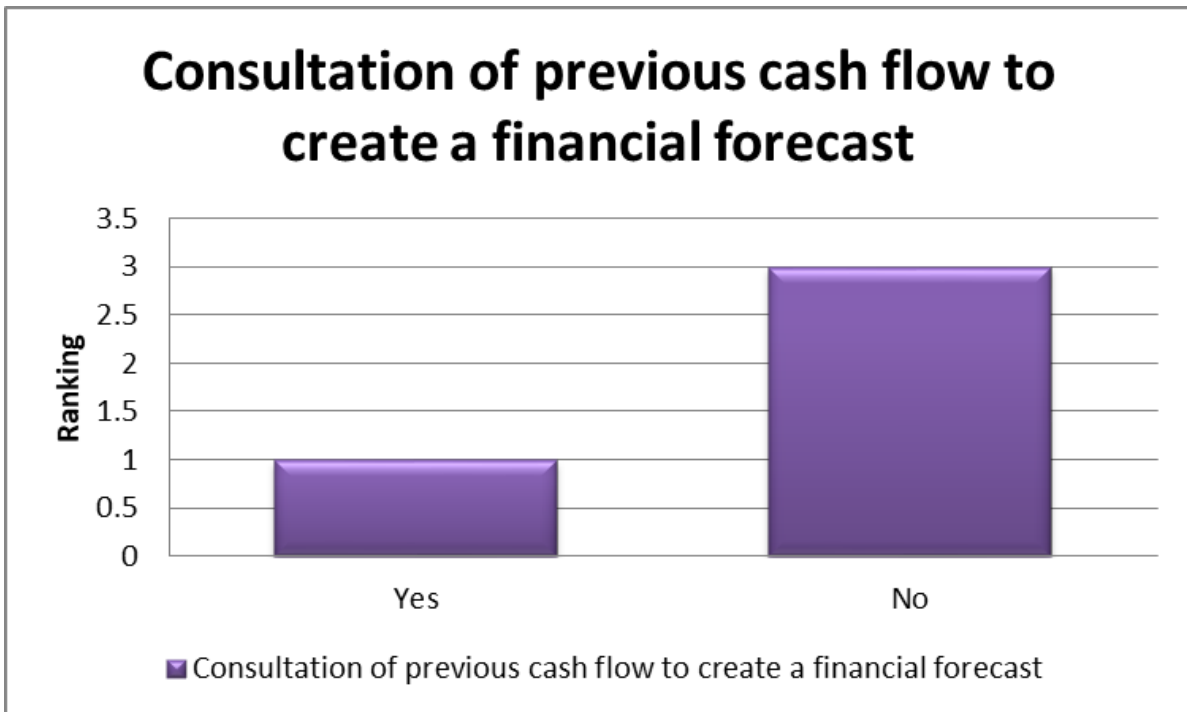
Chat 4- 5: Institutional financial forecast

Integration of financial forecast in development plans and budgets



Chat 4 - 6: Integration of financial forecast in development plans and budgets

Also, 90% of the respondents revealed that consultation of previous cash flows to inform subsequent year cash flows (forecasts) was not a common practice (*Chat 4- 7*).



Chat 4- 7: Consultation of previous cash flow to create a financial forecast.

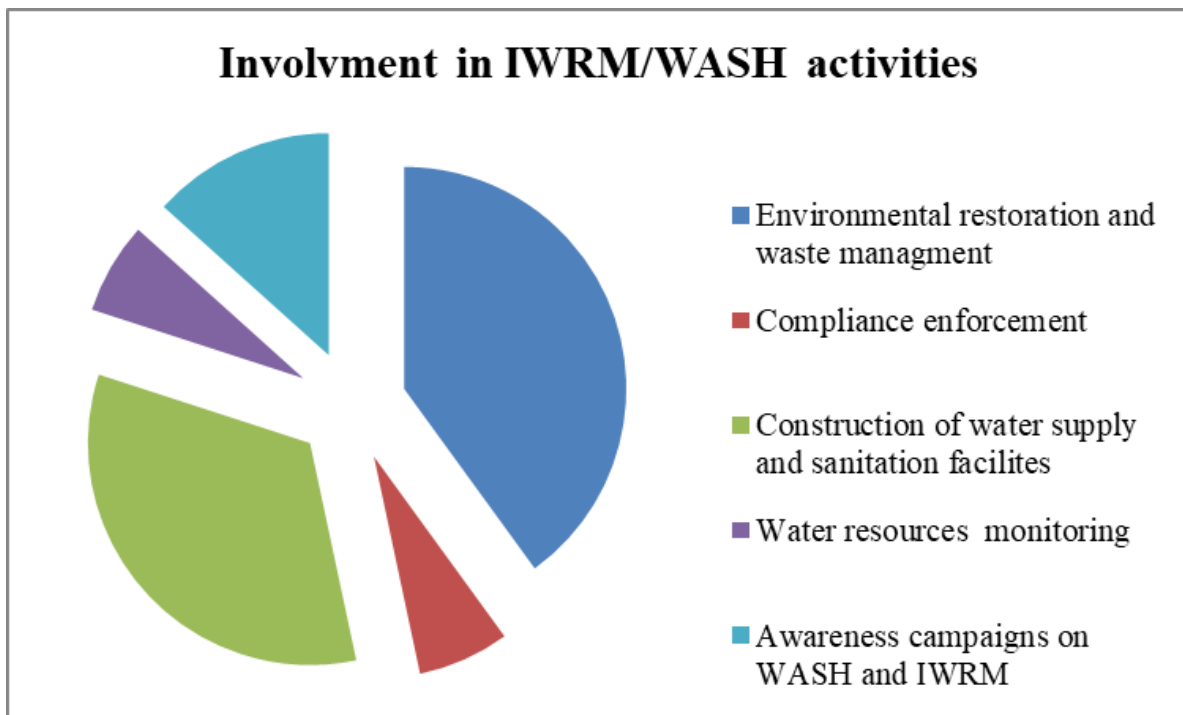
The study therefore concludes that institutional capacity for IWRM in Uganda is influenced by several root causes, including limited political will and commitment. Water resource management requires political support and commitment from the government. However, water resource management is not prioritized as it deserves, which leads to limited funding and weak institutional capacity. Uganda still faces financial constraints, which limit the ability to invest in the necessary infrastructure and institutional capacity for effective water resource management. There is limited technical expertise necessary to develop and implement effective water resource management policies and programs. IWRM programs require close coordination and cooperation among different sectors and stakeholders, including government agencies, civil society, and the private sector. However, there is no effective coordination and cooperation among IWRM and WASH sectors, making it difficult to secure financing. Climate change is also affecting water availability and quality, exacerbating existing water management challenges in the country.

4.5 Finance and Budgeting for IWRM/WASH

Planning and budgeting for IWRM and WASH are commonly done along the following core themes; namely, a) Environmental restoration and waste management; b) Compliance or Enforcement; c) Construction of water supply and sanitation facilities; d) Water resources monitoring; and e) Awareness campaigns on WASH and IWRM. While these themes are important for IWRM and WASH, they are not comprehensive in addressing all needs for IWRM and WASH interventions. Such programming runs a risk of spending so much money on a given task over a long period of time just because it is something that the implementers are accustomed with; is easy to implement; and it fits very well in the themes. Such broad themes around which

planning and budgeting for IWRM/WASH is done risks undermining innovative thinking on other important IWRM/ WASH interventions.

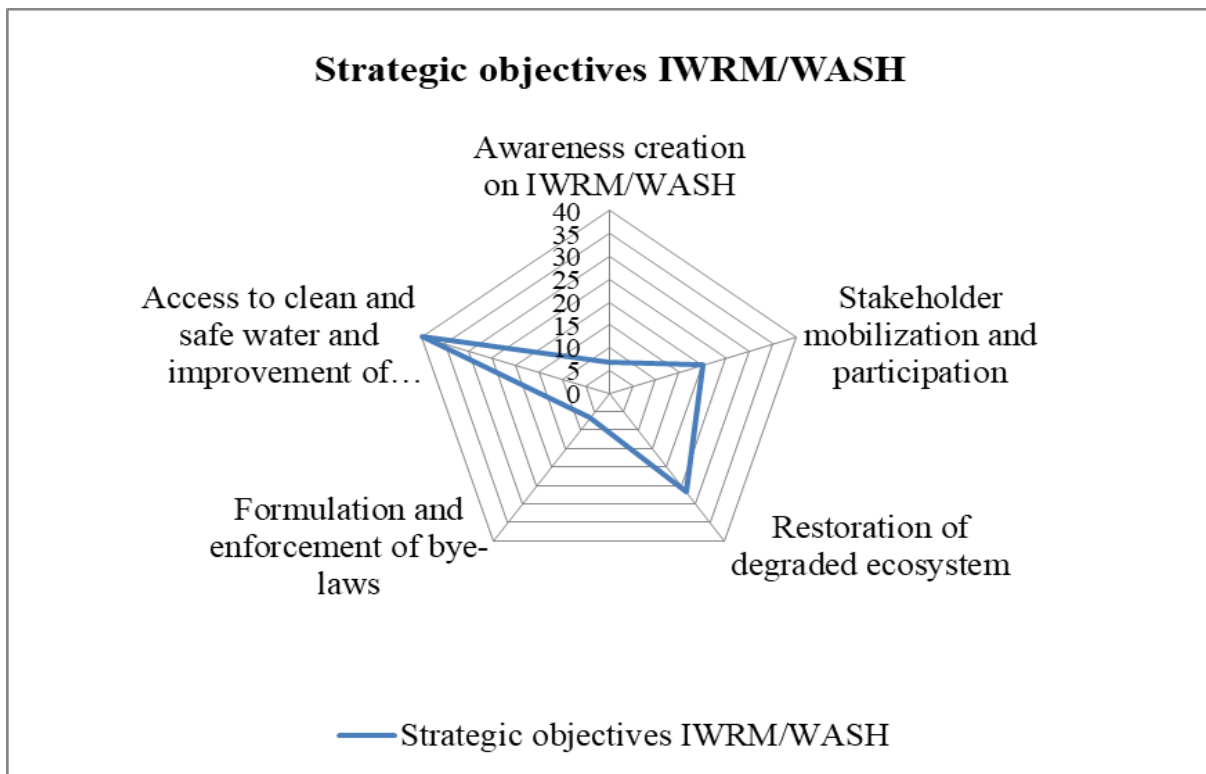
The Local Government (financial and accounting) Regulations, 2007 require annual budgets to be based on the objectives to be achieved for the financial year. It assumes that budgets will be prepared in a balanced/comprehensive manner for a specific programme. However, in practice, there has been over-financing of one objective in a programme for a long time within a specific period at the expense of other important areas of intervention under the same or other objectives in the programme. For example, environmental restoration, waste management and construction of water supply and sanitation infrastructure received the largest budget allocations in contrast to other aspects of IWRM/WASH (*Chat 4-8*). This needs to be rectified to avoid over-financing one objective for a long time, at the expense of other areas of intervention.



Chat 4- 8: Involvement in IWRM/WASH activities

It was observed by 40% of the respondents that budgets for IWRM and WASH were more skewed towards access to clean and safe water as well as improved planning and management. This was followed by restoration of degraded ecosystems (27%); stakeholder consultations and participation (20%), while awareness creation on IWRM/WASH together with formulation and enforcement of policy and bylaws were at 8% recognition (*Chat 4- 9*). These statistics suggest the order of importance and the possibility that subsequent planning and budgeting will most likely allocate funds for these objectives in this order at the expense of other critical IWRM/WASH interventions. The low interest and low budget allocation towards compliance and enforcement of policies and legislation as well as low budget allocations towards creating awareness, explains why we continue to see poor compliance, weak enforcement and low levels of awareness about IWRM/WASH at all levels of society.

A holistic and balanced approach towards planning for IWRM/WASH that aligns with the organization's objective for funding should be encouraged by all stakeholders.



Chat 4- 9: Strategic objectives for IWRM/WASH

The available financing, as found out, was from government grants for WASH and Environment and natural resources (ENR) (receiving minimal amount). This constituted about 60% of funding for WASH. Such a grant has not been extended to activities that address IWRM, though districts receive some little grant on ENR which were silent on how this could be utilized for IWRM work. The 2022/23 budget framework paper of the Ministry of Water and Environment allocated shillings 610,003billion only to the Natural Resources, Environment, Climate Change, Land and Water programme. Of which 157.676billion was allocated to IWRM and 190.05 billion to WASH with specific projects. The specific WASH projects included:

- Protection of Lake Victoria - Kampala Sanitation Program.
- Kampala Water- Lake Victoria Water & Sanitation project.
- Solar Powered Mini-Piped Water Schemes in rural Areas.
- Karamoja Small Town & Rural growth Centers Water Supply & Sanitation Project.
- Water Service Acceleration Project (SCAP 100%).
- Water and Sanitation Development Facility East-Phase II.
- Water and Sanitation Development Facility-Southwest Phase II.
- Strategic Towns Water Supply and Sanitation Project (STWSSP).
- Southwestern Cluster (SWC) Project.
- 100% Service Coverage Acceleration Project-umbrellas (SCAP 100- umbrellas);

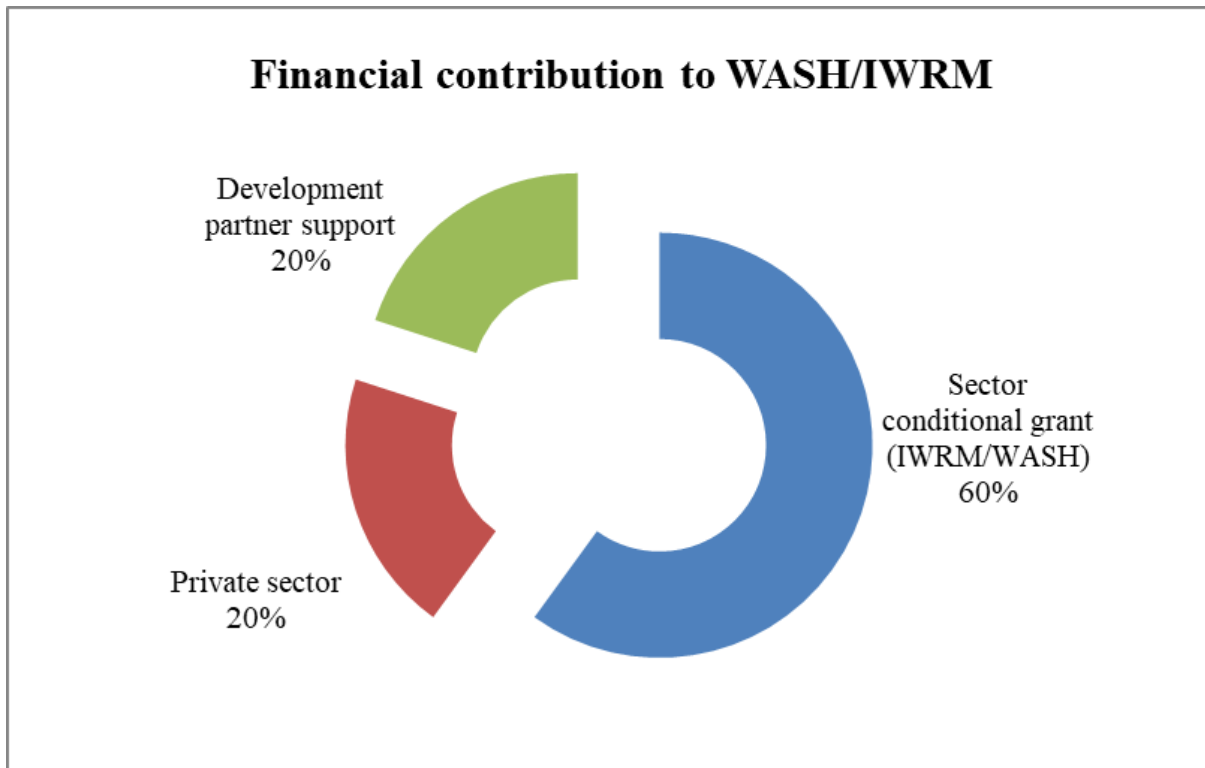
- Water and Sanitation Development Facility Central-Phase II.
- Water and Sanitation Development Facility North-Phase II.
- Lake Victoria Water and Sanitation (LVWATSAN) Phase 3.
- Support to Rural Water Supply and Sanitation Project.
- Strengthening Water Utilities Regulation Project; and
- Development of Solar Powered Irrigation and Water Supply Systems.

The specific IWRM project considered in the budget was the Integrated Water Resources Management and Development Project (IWMDP) - a confirmation that little planning and budgeting for IWRM is done.

According to the Ministry of Water and Environment resource mobilization strategy for catchment-based integrated water resource management (2020-2030), financial resources can be obtained from various sources, but not limited to Government grants. The need to expand the resource base is therefore critical. Potential partnership through collaboration can leverage the inadequate resource allocation across the sector, recognizing the need to elevate water resource management through the IWRM approach and using it to mobilize finances (The National Water Policy, 1999).

During the focus group discussions, the respondents were asked in the strategic objectives of IWRM and WASH activities are gender responsive and 67% mentioned that there are gender responsive strategies and indicators such as increasing women participation in water management (i.e. % increase of women accessing & participating in water resources as well as % increase of marginalized groups). This is in line with one of outcome indicators of the NDP III 2020/2021- 2024/25 under rural water supply in relation to Ministry of Water and environment contribution to human capital development Programme which targets “Percentage of Water and Sanitation Committees with at least one woman holding a key position”. It is also in-line with the Ministry’s performance indicator of increasing women in senior management positions from 86%-90% by end of FY 2020/2022²⁶. Other gender related strategies mentioned include awareness creation on gender roles and responsibilities, Gender and equity and social inclusion.

²⁶ Natural Resource Environment, Climate Change, Land and Water Management Programme Performance Report FY 2020/202



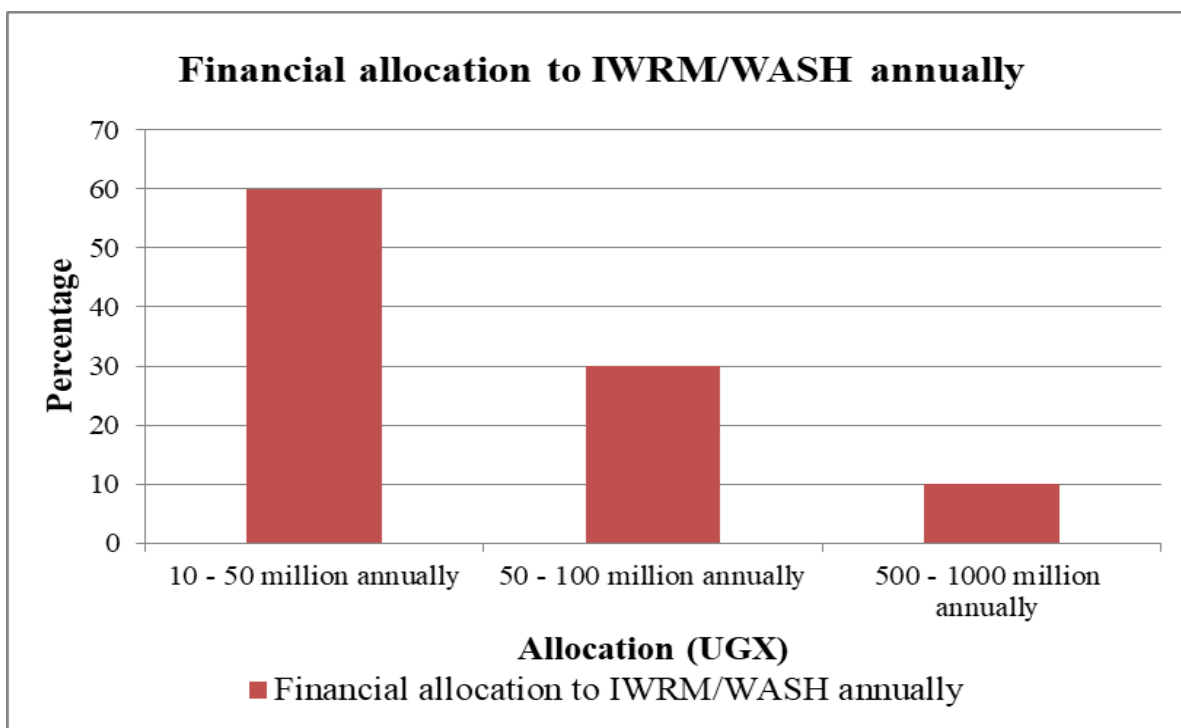
Chat 4 - 10: Financial contribution to WASH/IWRM

The financial allocation to WASH and IWRM was found to vary from organization to organization. It was reported that the private sector and the development partners each contributed 20% of the funding to WASH and IWRM annually (*Chat 4 - 10*). Government contributed 60% of the funding to WASH and IWRM as conditional grant (*Chat 4 - 10*). It was observed that smaller budget allocations of between shillings 10 - 50 million were the most common (*Chat 4 - 11*) followed by 50 - 100 million allocations. Shilling 500million to 1.0billion allocations were the least common. It is important to note that small budget allocations to isolated and scattered WASH/IWRM intervention tend to have minimum impact on society and environment. The effectiveness of small budget allocations would best be realized when the intervention for WASH/IWRM are concerted and interlinked to deliver a more comprehensive outcome. For example, investing in catchment level IWRM interventions that improve the access to water at community and house level through, for example, constructing bench terraces or contour trenches on hillslopes to reduce soil erosion, prevent landslides and enhance groundwater recharge, so as recover boreholes in the valley that had become dysfunctional due to dropping water table. Another example could be demarcating and restoring wetlands to recover degraded surfaces that were serving as sponges or catchment for water, so as to enhance water availability that can be used by the communities, wildlife and surrounding ecosystems. This, in turn, will contribute to mitigating the effects/ negative impacts of climate change. Such strategic planning and budgeting for concerted and integrated outcomes is what is desired. The respondents suggested that annual budgets for WASH/IWRM be increased.

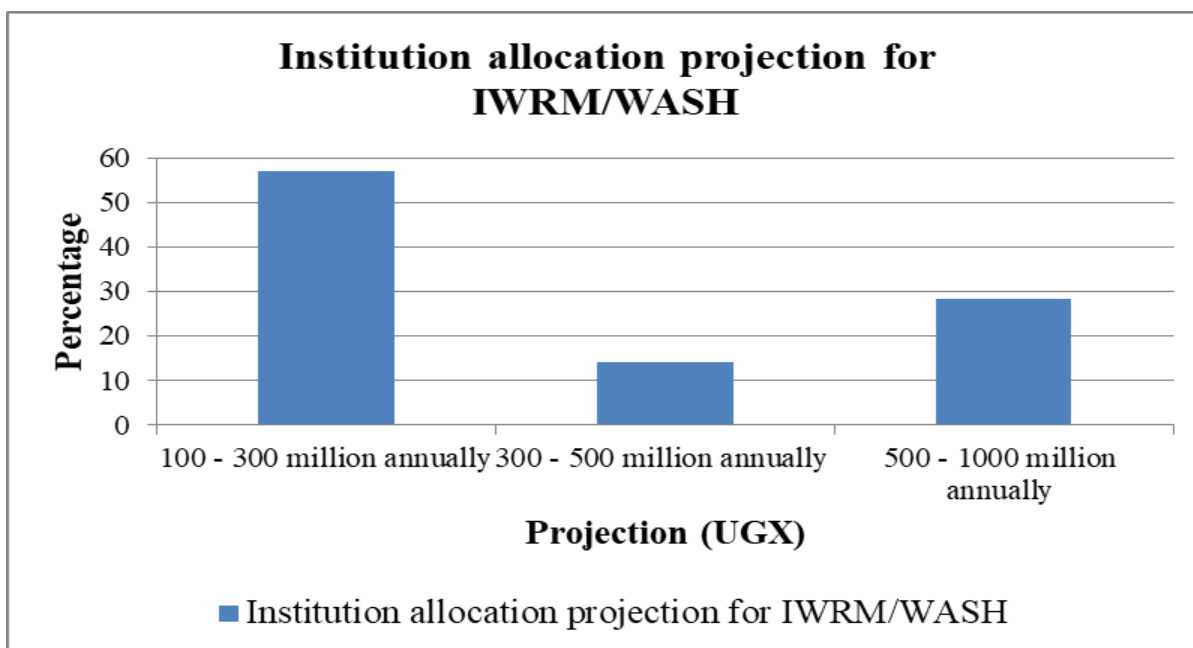
When inquired about gender considerations in planning and budgeting, 40% of the respondents confirmed that their respective institutions considered gender issues in planning and budgeting. They reported that some of the issues considered include capacity building on gender related issues; Involving women to take up leadership roles; Gender inclusiveness and mainstreaming in specific government programs; among

others. It was reported in one FGD in Mbarara that “under their intervention for restoration of ecosystems project, they committed to target 68 rural women groups and reached 540 beneficiaries from the programmes”. While this targeting is good, it was observed that such gender targets were isolated and not always captured clearly in all district development plans, budgets and activities. It was also observed that gender consideration was equated to a mere targeting and involvement of women to participate or be targeted in district projects and activities, thus ticking the box as having been gender compliant. Gender consideration goes beyond mere targeting and participation of women in district projects to involving them in planning, budgeting and execution of district projects. Such planning, budgeting and implementation risks misrepresenting gender considerations and womanizing them (i.e. making them a woman issue, yet gender involves more than women. It includes considering male, girls, boys, youth, the elderly, retired, child-headed households, the disabled or persons differently able-d. Gender consideration goes beyond.

The study revealed that many (60%) of the officers involved in planning and budgeting did not have sufficient knowledge on how to consider gender issues in planning and budgeting, yet it is government’s requirement that all Ministries, Departments and agencies consider gender, equity and equality as crosscutting issues in planning, budgeting and implementation. They (staff) were learning on the job and needed capacity building in this regard.



Chat 4 - 11: Financial allocation to IWRM/WASH annually



Chat 4 - 12: Institution allocation projection for IWRM/WASH

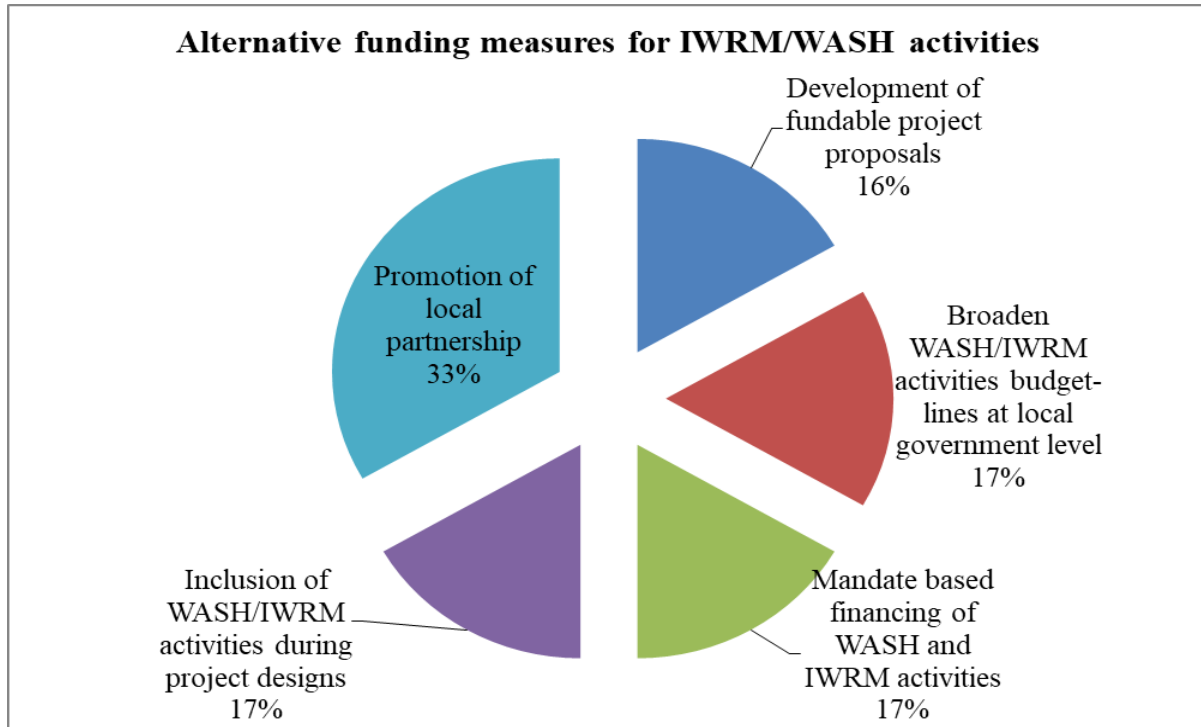
Thirty percent of the respondents acknowledged that sector conditional grants allowed for 2% of the grants to be allocated to gender issues in IWRM/WASH interventions. In addition, Local Governments are allowed to allocate 8% of the District Water and Sanitation Conditional Grant (DWSCG) to software activities-including gender mainstreaming. This implied that 70% of the respondents were not aware of these provisions, meaning that they were not able to implement the provisions as required.

Similar studies have revealed that there is a general failure among all departments of MWE to allocate funds for gender mainstreaming in IWRM and WASH services and if they do, they tend to allocate small budgets to gender mainstreaming issues. There is a general perception that ‘engineers squeeze software’ and that ‘if there are to be any budget cuts, the software budgets will be the first victim. This is attributed to a claim that politicians are more interested in visible and tangible products’ which are not always evident in gender mainstreaming processes. This is further complicated by the apparent and persistent release of the conditional grants late, commonly in the 3rd quarter, which consequently leads to compression of software activities due to lack of sufficient time to pursue them. In addition, this is compounded by the restricted fund releases from the central government.”²⁷.

The respondents offered insights on how alternative funds towards WASH/IWRM can be generated. Thirty three percent of the respondents suggest establishing local partnerships for WASH/IWRM; 16% suggested developing fund-able proposals; 17% suggested integrating IWRM/WASH designs into all relevant government projects such as road and housing infrastructure projects, etc.; 17% proposed mandated-based financing for IWRM/WASH; and 17% proposed broadening IWRM/WASH activities in local government budget lines (*Chat 4 - 13*).

²⁷ Ministry of Water and Environment, 2017, a gender impact Study of the water and sanitation sub-sector

Key proposals for considerations were highlighted in the chart below.



Chat 4 - 13: Alternative funding measures for IWRM/WASH activities

4.6 Policy Implementation

The existing policy, legal and institutional framework is sufficient to deliver adequate WASH and IWRM. Implementation of policy is a process that will require the participation of many stakeholders including civil society organisations, private sector actors, community, and household members. The centralization policy that government adopted needs to be effectively implemented considering that service delivery to the community and household levels. However, there are still some policy implementation challenges that were also identified, with limited implementation of policies related to water management which results in limited investment in the sector, which affects the availability of funding.

There are a few gaps in the legislation and institutional framework that will need to be purged to ease the implementation of IWRM at community and household level as well as streamlining on how IWRM is integrated in national plans and budgets considering that the mandates for IWRM implementation are duplicated in a number of Ministries, Departments and Agencies. This is particular true considering that government is shifting from a sector wide planning and budgeting towards a programme-based planning and budgeting. The same is true for WASH considering that there a number of government programmes that must clearly integrated it in planning, budgeting and implementation. For example, there is an ongoing Parish Development Model (PDM). It is not clear how WASH and Gender Issues have been captured in the PDM.

The shift from sector-wide planning and budgeting to programme-based planning and budgeting further risks being silent or altogether ignoring IWRM and WASH by assuming that they will be considered at

planning and budgeting level. To avoid such a risk occurring, it is suggested that IWRM and WASH be required to have certificate of compliance as basis for approving programme budgets.

Most assumptions by policy makers is that once a policy has been formulated, it will be implemented and that the policy is adequate to deliver the desired outcomes, even before it is tested. New policies need to be allowed time to test their effectiveness and when implementation gaps are identified, then be purged appropriately. The success of a policy largely depends on its quality and appropriate implementation, in terms of planned resources, skills, organizational features, risk mitigation and political will to enforce it as stipulated.

4.8 Financial System and Processes

Government finances are managed using the National Finance Management Act (2015) that provides procedure, guidelines and systems for depositing and accessing funds. MDAs receive funds through the Budget process which requires them to prepare annual budget framework papers that stipulate the objectives, projects/ investments that each MDA will be implementing throughout the Financial Year. Once funds are approved by Parliament, then MDAs access the funds through an IFRIS system through which requisitions are made. If an activity was not approved by parliament or not included in the MDAs annual work plan (budget), such an activity may not be implemented in that FY - a reason why it is important for MDAs to submit complete budgets covering all the activities they intend to undertake in a given financial year.

Fifty percent (50%) of the respondents reported that they are currently implementing procedures stipulated in the Finance and Accounting Processes 2018 that defines financial controls for efficient financial management under the “The Joint Partnership Fund”.

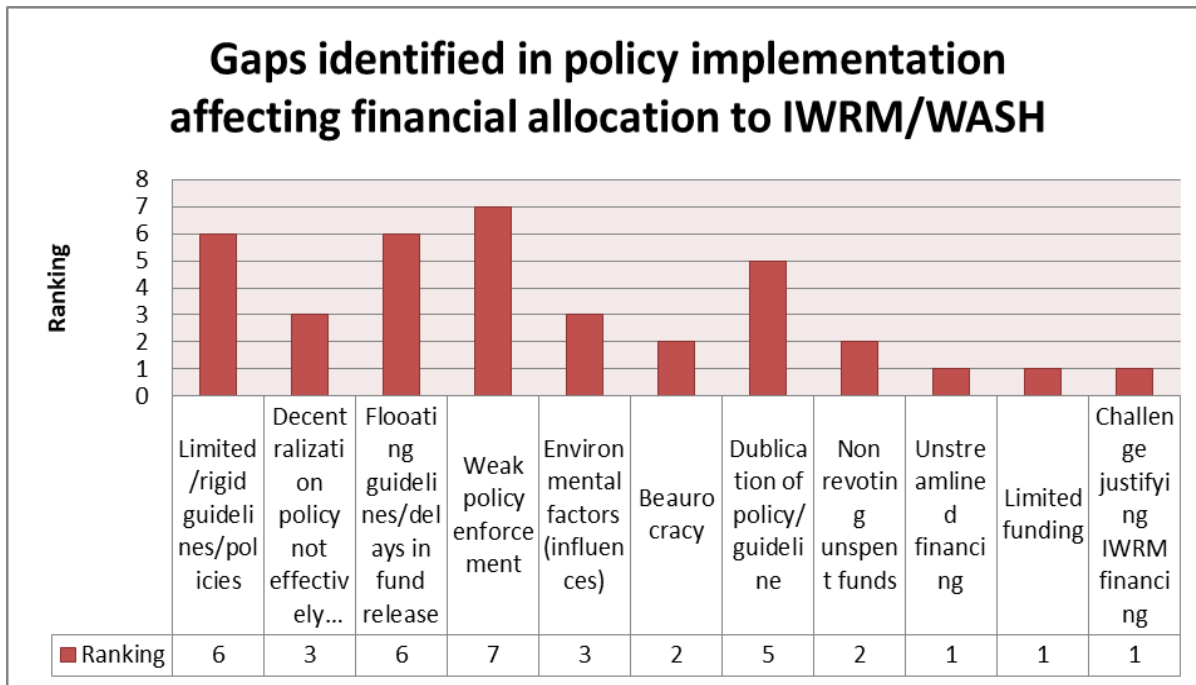
The rest don't have them because they don't understand financial management, and occasionally because the government doesn't follow up on financial reports, which is the main reason their budget gets approved so slowly. The money is used in a variety of ways up until the financial year's end as soon as it becomes available.

A robust financial control system, on the other hand, ensures an organization's overall operational effectiveness, including spending control with cash flow visibility, which results in planned and controlled payments to suppliers and contractors, which prevents late or absent financial report submissions.

Revenue collection and resources mobilization were generally expected to increase with some organizations and similarly a decrease in others. Though the Public finance and management act, allows for 5% variance (positive and negative). The implication is that planning and budgeting is limited to this condition and does not take into reality the performance of the local economy and the potential to partner in order to mobilize resources at the local level.

4.9 Summary of Root-causes for limited finance allocated to IWRM and WASH in Uganda.

The findings indicate that there are several elements and factors have been identified as the root-causes for limited finance allocated to IWRM and WASH in Uganda and these include (*Chat 4 - 14*):



Chat 4 - 14: Gaps identified in policy implementation affecting financial allocation to IWRM/WASH

- While many people may understand what IWRM refers to, many - including the duty bearers in government and citizens - do not understand well what it takes to realize IWRM. There is need to create deeper understanding of IWRM and what it takes to plan, budget, implement and realize it.
- In Uganda, water is taken for granted assuming that it will always be there and readily accessible, which is not the case. With changing climate, water is increasing becoming scarce. As a result of taking water for granted, planning and budgeting for it use is done on a case-by-case or project-by-project basis. There is little or long-term planning and budgeting for water in the country at large. Until Ugandans realise or consider water as a security issue, water will continually be ignored.
- Every person every day goes to the toilet for a short and long call, but we seldom ask ourselves where every person goes for toilet or the quality of toilet they go to. We assume that because they have survived each day, all is well, which may not necessarily be the case. Also, WASH is generally assumed as an entitlement for those living in urban and suburb settings - which could explain the low- and poor-quality coverage of toilets and pit-latrines in the rural areas and the prevalent open-air defecation in rural areas. WASH is generally considered as a sanitation issue and less of a hygiene issue - which explains why each time the term WASH is use peoples' minds quickly perceive toilets and pit-latrines. The way we understand WASH is influencing how we plan and fund the sub-sector. In addition,

planners seldom contextualize the linkage between IWRM and WASH in planning and budgeting, yet it is a very significant one.

- **Bureaucracies:** The processes of acquiring funds for projects tend to go through a number of bureaucratic steps, which slow down the process of fund acquisition. Also, through these bureaucratic steps, funds intended for IWRM/WASH may be shrunk in favor of other competing interests.
- **Environmental and Climate Change factors:** There are environmental factors that could undermine the effective adoption of IWRM/WASH. For example, in areas where the water table is very low (e.g. more than 300m below ground) and the abstraction volumes are low compared to the demand such factors may undermine the introduction of IWRM/WASH. However, this should not be the excuse for not offering IWRM/WASH services to the communities - more innovative interventions could be adopted to realize the objective. In addition to this, Climate change exacerbates water scarcity and the frequency and severity of extreme weather events, making it more expensive to manage water resources. In Uganda often limited the financial resources to cope with these challenges, making it difficult to implement IWRM programs effectively.
- **Political factors:** Politics tends to influence where the money is invested away from IWRM/WASH projects, because these are often perceived as a waste of money, assuming that the negative effects/impacts for not investing in IWRM/WASH are not evident and immediate and thus, such investments could be delayed.
- **The institutional capacity to mobilize resources to implement and manage IWRM programs effectively.** This includes a shortage of skilled personnel, inadequate infrastructure, and weak regulatory frameworks, all of which hinder their ability to attract financing. Implementing organization (systemic & systematic) factors. There are systemic and systematic factors within the institutions responsible for implementing IWRM and WASH that undermine such projects that include lack of or weak human capacity to effectively conceptualize IWRM/WASH projects. Also, it is being asked whether the limited financing to IWRM/WASH a result of limited funds or inability is really to pool the funds allocated to the different line MDAs for IWRM and WASH considering that a number of MDAs tend to have budgets for IWRM and WASH which they do not effectively utilize, but instead divert or misappropriate.
- **Diversion of funds:** Often, funds intended for IWRM/WASH project are diverted to supporting other competing projects considered to be more important. This is repeated each financial year, because of inadequate institutional capacity to plan and budget for IWRM/ WASH interventions.
- **Non-revoting of funds unspent in previous financial year (FY).** The current financial management system (Financial Management Act 2015) requires government projects and local governments to return all unspent funds to the consolidate fund every year and wait for the next budget allocation in the preceding year and there is no guarantee that all the money returned to the consolidated fund would be returned to the project or local government. This process takes away money that would be critical for timely project implementation in the subsequent FY considering that there always delayed and late fund releases every FY.
- **Low community contribution and ownership to IWRM/WASH projects:** It is not a culture of government to require communities to contribute to government led project - considering that communities would have already made a contribution through the taxes they pay to government. This has the effect of

reducing the community's ownership and sustenance of the projects once the government has completed setting them up. When communities contribute to a project finances or in-kind contribution, their level of ownership and commitment to sustain the project is enhanced. It may be important that, going forward, communities are encouraged to contribute (cash or in-kind) towards IWRM/WASH project interventions.

- Poor accountability, corruption and governance. Poor accountability, corruption and ultimately governance that riddle government projects are a major undermining factor to project success. Projects are started and not completed or if they are completed the cost of implementing them is extremely higher than normal. This could explain why few projects have been completed.
- Duplication of policies/ guidelines, mandates and activity implementation: Traditionally, the mandate for WASH would be with the Health Ministry, but you find it duplicated in other ministries, departments and agencies. Similarly, IWRM is a mandate that would traditionally belong to MWE, but that mandate also stretches to the Ministry of Works and Transport with each ministry submitting plan and budgets for IWRM/WASH interventions for approval by Parliament. This duplication of mandates for IWRM and WASH is resulting in uncoordinated IWRM/WASH investments.
- Delayed and late releases of funds in violation of set guidelines including implementing institution failure to appropriately triggering release of funds using the current IFRIS system.
- Lack of integration of IWRM/WASH in project designs: As mentioned above, one finds government projects that are required to implement IWRM/WASH acting in isolation of each other. Thus, tends to result in duplication of services in a given area. It is important that the different government agencies have a component of IWRM/WASH coordinate on how to implement the projects.
- Limited absorption capacity of funds: Limited absorption of funds at central and local government level may not necessarily be because of lack of technical (human) capacity, but other factors such as delayed and late releases of funds; inadequately capacity to use the IFRIS system considering that it is a new government finance management system as well as delayed procurement due to the need to comply with PPDA procedures.
- Weak policy implementation on IWRM/WASH: Government policy is weak in respect to IWRM/WASH. It is not clear how investments in IWRM/WASH will be done.
- Need to decentralize IWRM to the districts: Currently IWRM is implemented at catchment level by the central government, with little or no involvement of the local governments, yet the direct beneficiaries of the investments are in the local government.
- Limited funding to IWRM/WASH: Generally, IWRM and WASH interventions receive smaller budget allocations compared to other government projects; and
- Challenges of justifying IWRM financing: The technical staffs have difficulty in justifying why IWRM/WASH interventions need to be implemented, mainly because they do not appreciate the criticality of the issues.

SECTION FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

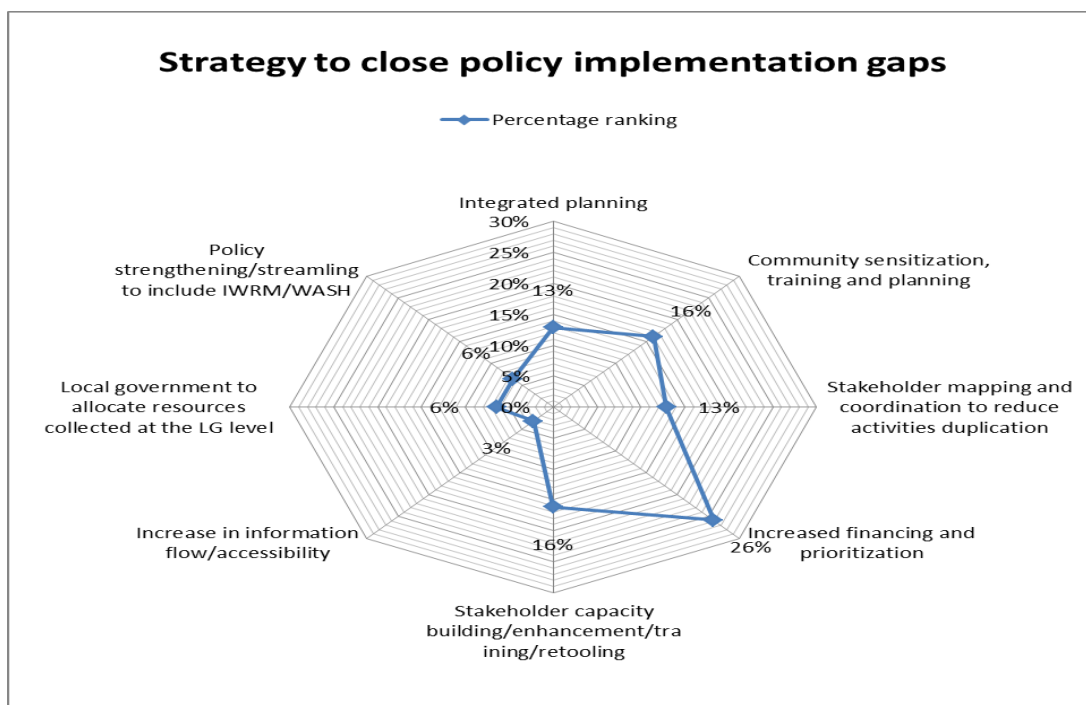
In conclusion, the findings of this study indicate that the IWRM and WASH in Uganda faces several challenges that hinder adequate financing. These challenges include technological issues, community management, administrative analysis, institutional capacity, financing and budgeting, policy implementation, and financial systems and management issues.

Based on these findings, it is evident that there are several root causes for limited financing in IWRM/WASH. Firstly, there is a lack of understanding of IWRM/WASH by duty bearers in government and citizens, which has hindered the effective planning, budgeting, and implementation of these programs. Secondly, water is taken for granted in Uganda, and there is little or no long-term planning and budgeting for it. Thirdly, the understanding of WASH is limited to sanitation issues, and the linkages between IWRM and WASH are not adequately considered in planning and budgeting. Fourthly, bureaucratic processes of acquiring funds for projects tend to be slow and may shrink funds intended for IWRM/WASH in favor of other competing interests. Fifthly, environmental and climate change factors, political factors, institutional capacity, diversion of funds, *non-revoting* of funds, low community contribution and ownership, and poor accountability, corruption, and governance all contribute to the limited financing of IWRM/WASH.

Addressing these challenges is critical to increasing investment in the sector and promoting sustainable water resource management in Uganda. Therefore, to address these root causes, there is a need to create deeper understanding of IWRM/WASH among duty bearers in government and citizens. Additionally, there is a need for long-term planning and budgeting for water in Uganda, and the understanding of WASH needs to be expanded to include hygiene issues. Furthermore, bureaucratic processes of acquiring funds for projects need to be streamlined to ensure timely financing of IWRM/WASH projects. Environmental and climate change factors need to be considered in planning and budgeting for IWRM/WASH, and political factors need to be addressed to ensure that funds are not diverted to other competing interests. There is also a need to strengthen institutional capacity to mobilize resources, and to encourage community contribution and ownership of IWRM/WASH projects. Finally, measures need to be put in place to ensure accountability, transparency, and good governance in IWRM/WASH projects.

5.2 Recommendation to Increase financing for IWRM and WASH

The Respondents consulted revealed the following solutions to some of the root-causes for limited financing for IWRM/WASH (*Chat 4 - 15*).



Chat 4 - 15: Strategy to close policy implementation gaps

The Above chart indicates that thirteen percent (13%) of the respondents consulted suggested integrated planning of the different line ministries and programmes as a solution to limited financing for IWRM/WASH interventions; Sixteen percent (16%) suggested that community sensitization, training and planning on IWRM/WASH are a solution to the limited financing to IWRM/WASH as this would enhance public demand for IWRM/WASH services - which would ultimately trigger government's financing of the sub-sector; Thirteen percent (13%) of the respondents suggested stakeholder mapping and coordination to reduce activity duplication - implying that government programmes should first identify the other line ministries, departments and agencies that have a budget for IWRM/WASH as well as identify the beneficiaries, so that they (government entities) meet and plan how they would individually and collectively implement IWRM/WASH services without resulting in duplication of services. This should not be a problem, since the entities that have budgets for IWRM/WASH will have been stipulated in the approved Programme budgets.

The chart above further indicates that twenty six (26) percent of the respondents suggested increased financing and prioritization of IWRM/WASH in government programmes as the solution to limited financing for IWRM/WASH interventions; Sixteen percent (16%) of the respondents suggested that stakeholder capacity building, enhancement, training and retooling in respect to IWRM/WASH was critical to solving the challenge of limited financing to IWRM/WASH.

Three percent (3%) of the respondents suggested that an increase in information flow and access to information related to IWRM/WASH would contribute to solving the challenge of limited financing for IWRM/WASH; Six percent (6%) of the respondents suggested that local governments need to be allowed to spend at source locally generated revenues - including towards IWRM/WASH; and six percent (6%) suggested that strengthening and streamline policy in respect to IWRM and WASH was critical to purging the root-causes for the challenge of limited financing for IWRM and WASH.

In summary, the study proposed the following strategies to address the address the identified issues and increase financing for IWRM and WASH services in Uganda;

1. **Strengthen institutional capacity:** Building the capacity of institutions responsible for water resources management, including IWRM, is critical for effective implementation. Governments should invest in training programs, technical assistance, and capacity building initiatives to ensure that institutions have the necessary skills and knowledge to carry out their functions effectively. Efforts should be made to build the institutional capacity of the sector to effectively mobilize financial resources, manage and implement policies and programs that require adequate human resource capacity. Capacity building on writing proposals for IWRM/WASH projects should be provided. Proposals should be written to develop *fundable* and Bankable projects that can attract funding and investment.
2. **Resource mobilization:** Efforts should be made to mobilize resources from other development partners to fill the financial allocation gap.
3. **Develop innovative financing mechanisms:** Traditional sources of financing for water resources management, such as government budgets and donor funding, may not always be sufficient or sustainable. Therefore, innovative financing mechanisms such as public-private partnerships, water user fees, and green bonds should be explored to mobilize additional resources for IWRM. Private sectors and NGOs should be encouraged to provide off-budget support. innovative financing instruments for gender transformation in water including use of blended finance instruments and foster inclusion of private sector should be prioritised.
4. **Increase financial allocation;** The sector should be adequately funded, and budgetary allocations should be made to implement projects and programs effectively. Local government should collect taxes such as pay as you earn, VAT, withholding tax, and budget for their use at the source. The government should increase its towards WASH and IWRM services. The use of non-tax revenue at the source, such as permit processing fees, water quality analysis fees, should be promoted. Gender and Equity budgeting should be prioritized.
5. **Technology upgrade:** Investments should be made to upgrade the existing water management facilities and adopt new technology that can facilitate effective management and monitoring of water resources. This can help to increase the sector's capacity to generate revenue and sustainably manage water resources. Alternative technologies for water storage and sanitation improvement should be promoted.
6. **Community involvement:** Communities should be involved in the management of their water resources through training and capacity building programs. This can improve water quality and quantity, thereby attracting investment and funding. Promoting stakeholder engagement and participation is crucial for effective IWRM. Governments should create platforms for stakeholders to participate in decision-making processes and ensure that the voices of all relevant stakeholders, including women and marginalized groups, are heard. Efforts should be made to empower stakeholders from village, parish, sub-county to district levels to prioritize the economic cost of water resources.

7. **Regulatory framework:** The sector's regulatory framework should be reviewed and updated to ensure compliance by stakeholders. This can help to attract funding from development partners and other financial institutions.
8. **Policy implementation:** There should be a concerted effort to implement policies related to water management. This can attract investment in the sector and increase funding availability. The conditions of the donor fund should be modified to favor implementation by the primary stakeholders, which are the local government and the community.
9. **Financial management:** There should be adequate financial reporting systems and financial management practices to ensure transparency and accountability in the sector. This can help to attract funding and increase investment in the sector.
10. **Enhance integration of gender in IWRM and WASH Financing.** Efforts should be made to mobilize leaders and resources for financing gender-transformative approach mainstreaming related activities in IWRM and WASH. Technical and political leaders and other stakeholders should be trained on the integration of gender-transformative approaches in IWRM and WASH. Guideline for gender mainstreaming in IWRM and WASH Planning and budgeting should be developed.
11. **Strengthen awareness and understanding of the importance of IWRM:** Decision makers should be trained to understand the need for and importance of IWRM/WASH. It is essential to raise awareness and educate stakeholders about the benefits and potential of IWRM, emphasizing the linkages between water resources management and broader socio-economic development. Efforts should be made to support budget advocacies at different planning and budgeting levels.
12. **Women leaders' empowerment:** Capacity-building programs/initiatives should be developed and implemented to enhance women leaders' agency and decision-making power in IWRM and WASH.
13. **Quality and Monitoring aspects:** The aspect of O&M should be put in place for sustainability of the projects.
14. **Control of political interference:** Political interference that discourages funders from investing in WASH and IWRM should be controlled.

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7. APPENDICES

7.1 List of participants

7.2 Questionnaire guide

Background: The ministry of water and environment has developed and approved a costed Ministerial policy statement (MPS) for FY 2022/2023. Similarly, various strategies have been put in place to ensure IWRM and WASH activities are adequately implemented. Some of these strategies include (i) the resource mobilization strategy for Catchment based Integrated Water Resource Management (CbiIWRM) for the period, 2020 – 2030, operational manual for the Water Management Zone (WMZ), 2020, strategy for CbiIWRM in Uganda, 2020-2030, Water and Sanitation Gender strategy 2018 – 2022, National Development Plan III 2020/21 – 2024/25, Water Policy 1995, Source protection plan guidelines. Other strategic documents that guide implementation of WASH and IWRM activities include, the district development plans, district WASH master plans. The implementation (or a scale up of water resources and WASH activities) is ongoing at all levels. In order to gain insight into the financing status, GWL is conducting a financial gap analysis and its root cause. The results will help advocate for filling funding gaps, accelerating implementation and providing the basis for improving accountability—i.e. monitoring of disbursements and utilization of funding for planned activities.

Interview: The purpose of this interview is to collect information from each actor supporting and contributing to the MPS focusing on IWRM/WASH and gather information on their actual and planned financial commitments for the period of the MPS. Information will be entered, either by the interviewer or the respondent directly, into the data collection tool/form.

The data will be processed and presented at a validation workshop, followed by the preparation of the final report, endorsement and dissemination.

A. General question.

1. What are the causes of limited financing for IWRM and WASH in your institutions?
2. What are the possible solutions to the above highlighted causes?

B. Government of Uganda and other development partners have been implementing IWRM/WASH projects for some time now.

1. Are you aware of any IWRM/WASH interventions by government or other development partners? (yes/no)?
2. If yes what are the positive/negative impacts that have derived from the projects?
3. At what scale have they been implemented (national, regional, District, community, village or household level)?
4. What are the gaps that you have identified in terms of policy, legislation, implementation, benefit, financing, among others?
5. How can these gaps be purged?
6. What improvement do you like to see in the IWRM/WASH implementation.

C. In your opinion, what are the achievements and impacts of IWRM/WASH projects that we, as a country, have made over the years?

D. Questionnaire Checklist:

Do you have any questions about this data collection?

Question 1: What IWRM/WASH activities is your agency financing? Among these activities, what are gender and social inclusion interventions included IWRM/WASH interventions being financed?

Question 2: Highlight strategic objectives, results and indicators that are covered through these IWRM/WASH activities? Are these strategies, results, indicators gender responsive?

Question 3: Highlight what your actual and planned commitments are for Strategic Objective 1 during the year of the MPS? Are commitments gender responsive?

Question 4: Highlight what your actual and planned commitments are for Strategic Objective 2 during the year of the MPS? Are commitments gender responsive?

Question 5: Highlight what your actual and planned commitments are for Strategic Objective 3 during the year of the MPS? Are commitments gender responsive?

Question 6: What is the available financing for both IWRM/WASH for your institution (midterm) in line with government budget cycle? What available financing for gender in IWRM/WASH interventions?

Question 7: How much finances are allocated to strategic objectives of the budget in your institution -district and zonal level (quarterly, annually)? How much do you allocate for gender related interventions?

Question 8: What are the different sources of finance and how much is allocated IWRM/WASH?

Question 9: How much would you like your institution to be allocated (quarterly, annually)?

Question 10: How do you think this gap (financial allocation) can be addressed?

Question 11: If you were to project your institution income. Do you expect an increase or decrease in the financial flow?

Question 12: In case of a decrease, what alternative funding measures for IWRM/WASH do you think could be exploited?

Question 13: How often does the staff in your institution participate in resource mobilization for IWRM/WASH activities? What capacity needs do you require to enhance your resource mobilization for IWRM and WASH?

Question 14: What is the level of other resources (technology, machinery, and equipment) allocated to IWRM/WASH activities? What are the gaps in technology, Machinery and equipment for IWRM & WASH you as a practitioner you have identified What Enterprises Can Be Combined to Achieve IWRM & WASH?

Question 15: Does your institution participate in financial forecasting to determine how the institution should allocate their budgets for a future period. Are your financial forecasts integrated in the development plans and budgets as you propose them?

Question 16: Do you or your institution consult previous cash flow/income statement to create a financial forecast?

Question 17: Do you have partners that support your institution to achieve its IWRM/WASH goals? Do you have a framework for joint or inclusive planning and budget for IWRM and WASH.

Question 18: How regularly does your partner support your IWRM/WASH activities? Would you consider this funding sustainable?

Question 19: How best would you like your institution to be supported in building internal capacity for sustainable financing?

Question 20: Are you involved as an institution in the budgeting process (quantification of works and cost estimates) in line with government budget cycle? Are gender issues in IWRM and WASH prioritized in budgeting? If yes, which gender issues are considered in the budget? Do women and men equally participate in budgeting processes at all levels? If yes, how do they participate and what is the percentage?

Question 21: Do you have robust financial controls and disbursement process within the management system that allows for efficient finance utilization?

Question 22: Do you have a functional committee(S) on IWRM/WASH, if yes what is the composition in terms of gender? Are the roles of the water committees clear? What gaps have you identified in respect to committees exercising their roles and within the committees themselves?

Question 23: How much percentage of the water management zones is planned (Catchment Management plans)?

Thank you for your assistance with this data collection.