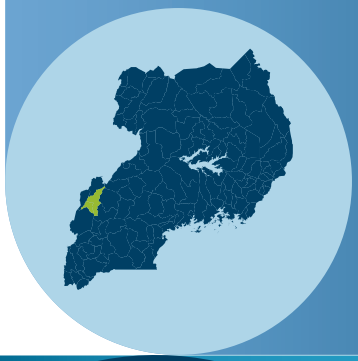
Uganda Synthesis Report

Review of the Conrad N. Hilton Foundation's Investments in Service Delivery Models for Rural Water Provision



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Executive Summary

As part of its Safe Water Initiative (SWI), the Conrad N. Hilton Foundation commissioned a review of its investments in Ethiopia, Ghana, and Uganda. The review's primary aim is to investigate the effectiveness and sustainability of different service delivery models (SDMs) for rural water supplies, including community-based management, publicly-owned utilities, and private-sector approaches, and the relevance of the Conrad N. Hilton Foundation's investments to support rural water service provision. This report presents the findings of the review in Uganda.

Since 2019, the Conrad N. Hilton Foundation has invested US$ 13 million in Uganda through the SWI, making it the smallest recipient of funding (19.4% of the total) out of the three focus countries. Over half (53%) of the funding has been to interventions to strengthen the WASH system, with the majority focused on the district-level WASH system in Kabarole. Most of the remaining funding (40%) has supported SDMs, almost exclusively the Mid-Western Umbrella for Water and Sanitation (MW-UWS). The Conrad N. Hilton Foundation has indirectly supported the community-based management system (CBMS) SDM in Uganda through strengthening the district WASH system and national engagement and policy development.

The MW-UWS performed strongly on key sustainability criteria and is making progress towards being a high-performing utility, albeit with continued external support. The experience of the MW UWS is a strong example of how emerging public water utilities in Sub-Saharan Africa can be supported by development partners. However, the services provided by the water facilities managed by MW-UWS in Kabarole are still of variable quality, with particular challenges around reliability and water quality. The effectiveness of this SDM is constrained by shortcomings in the ongoing technical management of individual schemes and the physical quality of pre-existing infrastructure.

In Kabarole, CBMS remains an inherently poorly supported and applied SDM, and Water and Sanitation Committees are essentially non-existent as service providers or true community institutions. The result is poor quality services, with high levels of non-functionality in the water points included in this review. Despite the long-term support to strengthen the district WASH system, there are still insufficient financial resources and capacity in the District or Sub-County structures to support communities effectively. These systemic weaknesses are similar to what might be expected of CBMS across Uganda, including in districts that have not benefitted from the same levels or duration of support for WASH systems strengthening.

The grants representing the majority of the Conrad N. Hilton Foundation portfolio in Uganda have been highly relevant to some of the critical challenges of delivering rural water services in Kabarole, both through strengthening the political leadership and institutional arrangements at the district level,

and through supporting the progress of the MW-UWS towards being a high-functioning public utility. Whilst some other Conrad N. Hilton Foundation-funded interventions have supported specific aspects of strengthening the WASH system, there are also grants that are significantly less relevant, with limited local leadership or prospects for replication.

Whilst there are good examples of interventions supporting collective action with local and national stakeholders, coordination and collaboration between grantees is minimal, with only isolated examples of grantees working together in a limited way. Opportunities for more extensive collective action have been missed, and this has limited the ability of the Conrad N. Hilton Foundation to leverage its position as a relatively large WASH donor in Uganda and influence and support more widespread change in the sector. More extensive collaboration and coordination between grantees will require more proactive leadership from the Conrad N. Hilton Foundation.

The work to support the MW-UWS and learning from district-level systems strengthening have been documented and influenced government strategies and policies at a national level. However, the focus on a single district has constrained the scope for wider replication and learning.

The report provides forward-looking commentary and suggests opportunities for evolving the Conrad N. Hilton Foundation portfolio in Uganda, including support for the “CBMS+” SDM and expanding the portfolio focus beyond the district scale.

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Acronyms

ASP	Area Service Provider
CBM	Community-based management
CBMS	Community-based management system
DWO	District Water Office
GoU	Government of Uganda
HCF	Healthcare facilities
JMP	Joint Monitoring Programme
KII	Key Informant Interview
MWE	Ministry of Water and Environment
MW-UWS	Mid-Western Umbrella Water and Sanitation
NRW	Non-revenue water
NWSC	National Water and Sanitation Corporation
RWSRC	Rural Water and Sanitation Regional Centre
SCAP100	100% service coverage acceleration project
SDM	Service Delivery Model
SP	Service provider
SWA	Sanitation and Water for All
SWE	Safe Water Enterprises
SWI	Safe Water Initiative
UPMIS	Utility Performance Monitoring & Information System
UWS	Umbrella Water and Sanitation
VSLA	Village-Saving Loan Association
WSC	Water and Sanitation Committee
WSUP	Water and Sanitation for the Urban Poor
WURD	Water Utility and Regulation Department

1. Introduction

The Conrad N. Hilton Foundation funds the Safe Water Initiative (SWI) to ensure reliable and safe water for one million people in low-income households, health facilities, and schools in sub-Saharan Africa. As part of the SWI's five-year strategic plan, the Conrad N. Hilton Foundation commissioned a review of its portfolio investments in the target geographies of Ethiopia, Ghana, and Uganda. The review's primary aim is to investigate the relevance of the Conrad N. Hilton Foundation portfolio and the effectiveness and sustainability of supported service delivery models (SDMs), including community-based management (CBM) and publicly owned water utilities since 2019.

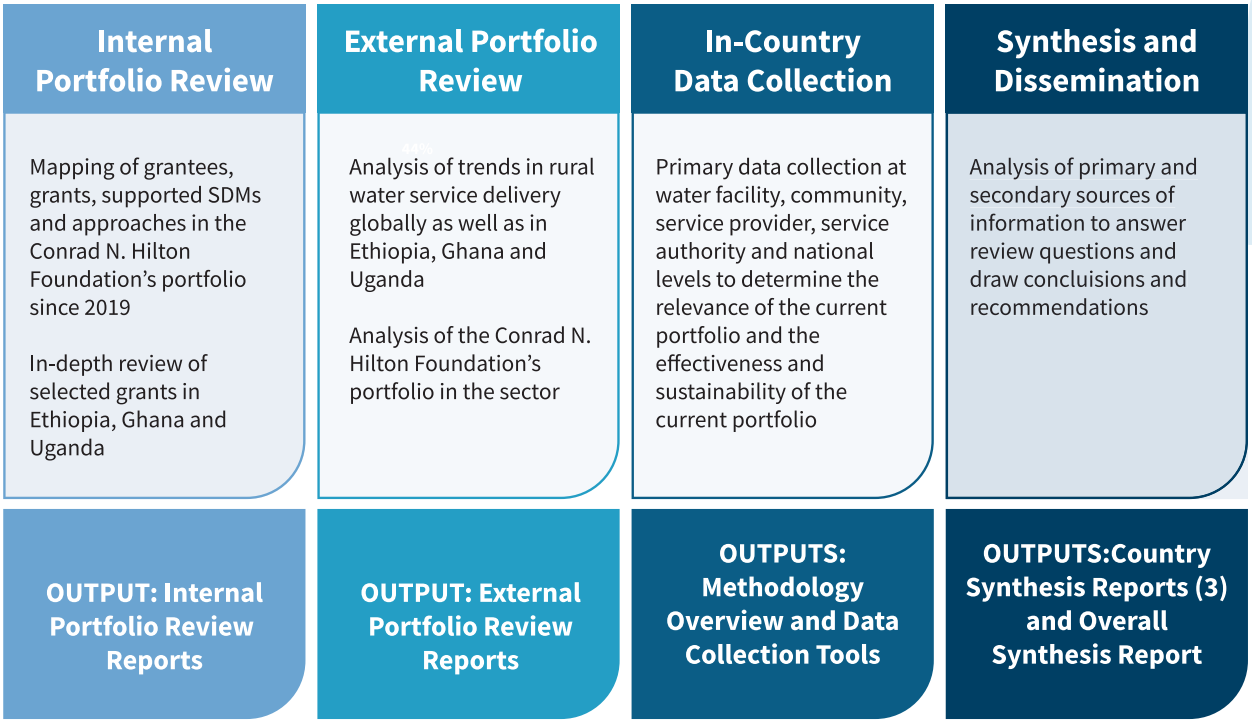
The review was conducted in four steps (see Figure 1). The internal portfolio review mapped and categorized the grants under the SWI in the three countries (Step 1) and was followed by an external review, which identified trends in rural water service delivery globally and in Ethiopia, Ghana, and Uganda (Step 2). Primary data was subsequently collected in all three countries to further determine the relevance of the portfolio in each target district and the effectiveness and sustainability of supported SDMs (Step 3). Findings from each step were analyzed to answer the overarching review questions and draw conclusions and recommendations (Step 4).

The report presents the findings of the review in Uganda and is structured as follows:

- Section 2 presents the methodology followed to answer the review questions.
- Section 3 provides an overview of Uganda's water sector and, within this context, the Conrad N. Hilton Foundation's portfolio of grants.
- Section 4 summarizes the review findings in relation to the portfolio's relevance to the context and the effectiveness and sustainability of supported SDMs.
- Section 5 highlights key conclusions emerging from the analysis.

Annex 1 contains the full review matrix, while Annex 2 contains the list of grants included and excluded from the review. Similar reports are available for Ethiopia and Ghana, and a global synthesis report has also been produced.

Figure 1: Key Review Steps and Deliverables



2. Methodology

The review focused on assessing the relevance of the overall portfolio in strengthening district WASH systems and supporting the delivery of effective and sustainable services through capacity building of service providers (SP) and system strengthening of district-wide institutional support. Accordingly, the review did not focus on analyzing the effectiveness of individual grants or grantees but rather determined the strengths and weaknesses of collective efforts across the portfolio in Uganda. See Annex 2 for an overview of the grants included in the portfolio review.

The methodology reflects the Conrad N. Hilton Foundation's vision, articulated in its Strategy 25, while accounting for the reality of SDMs in the three countries and the scope of the current portfolio. Specifically, the methodology was developed around the broader SWI approach using the district as the predominant unit of scale, its commitment to seven target districts, and recognition of the need to strengthen WASH systems and the importance of strong partnerships with national and sub-national government, grantees, collaborators, and communities to achieve SDG 6.1. At the same time, the methodology accounts for the fact that some of the SDMs, for example, public utilities in Ghana and Uganda, operate at a larger scale than individual districts. It also accounts for indirect support provided to SDMs not currently present in the target districts but which are important for rural water service provision at scale (i.e., Area Service Providers, ASPs, in Uganda).

Annex 1 provides the comprehensive review matrix and overarching framework for conducting the assessment; further details on the methodology are available in an internal methodology overview note.

Service Delivery Models (SDMs) are defined as a combination of infrastructure (either a waterpoint fitted with handpump or piped water facilities to either individual households or standpipes) and the management arrangement required to ensure and deliver safe and affordable water services for users, which combines a service provider, a service authority, and the associated regulatory mechanisms at the national level.

The review matrix comprises nine review questions and 35 sub-questions focused on three strategic questions that relate to relevance, effectiveness, and sustainability:

- **Strategic question 1: Have the Conrad N. Hilton Foundation's investments been relevant to the challenges of delivering rural water services in the target districts and countries?** This question analyzed the relevance of the portfolio to strengthen district-wide systems by determining whether these are targeting key gaps, have

been designed and managed according to the principles of collective action, and are being replicated in other non-target districts.[1]

- **Strategic question 2: To what extent are SDMs supported by the Conrad N. Hilton Foundation delivering safe water services?** This question focused on the effectiveness of rural water services in terms of their functionality, reliability, seasonality, water quality, accessibility, affordability, and inclusivity across all SDMs.
- **Strategic question 3: Are SDMs supported by the Conrad N. Hilton Foundation sustainable?** This question aimed at determining the likely sustainability of various SDMs, taking into account financial viability, the performance of key technical functions, the existence of sufficient institutional capacity at the service provider and service authority levels to fulfill key functions, water resource management, and accountability measures.[2]

To answer these questions, multiple sources of primary and secondary data were utilized. All available documentation was reviewed and complemented by Key Informant Interviews (KII) at the grantee HQ level and national, sub-national, and service provider levels,[3] as well as community transect walks and direct water facility inspections.

To assess effectiveness and sustainability, an SDM-specific sampling approach that focused on water supply facilities within target districts was adopted. **Table 1** provides an overview of sampled water supply facilities visited as part of primary data collection. All MW-UWS-managed piped facilities in Kabarole were selected. Due to the significant number of water facilities operating under the CBMS model, purposeful random sampling was conducted. In Uganda, the Conrad. N. Hilton Foundation has not directly supported the CBMS model at scale, with the exception of the implementation of a limited number of Village-Saving Loan Associations (VSLA). Therefore, although the review in Ethiopia and Ghana was limited to facilities directly supported by the Conrad N. Hilton Foundation, in Uganda, non-VSLA community-based managed facilities were still included to increase the size of the sampling. Overall, this sampling strategy ensured representation across different grantees, technologies, and users (communities, schools, health care facilities (HCF)). The final sample reviewed in Uganda is presented in Table 1 below.

Figure 2 shows that the age of the infrastructure of the sampled facilities widely varies. Most of the facilities managed by CBMS are old, typically 10 to 30 years old. As for MW-UWS-managed facilities, two of them are relatively old, while the two others are recent (less than six years old).

1 Replication was conceptualized in four broad, often overlapping and not always linear steps: (i) initial grantee-led piloting of interventions; (ii) grantee-led replication through intervention uptake by other grantees or leveraging external funding for replication in other districts; (iii) comparatively ad-hoc government-led replication; and (iv) the final step of government uptake and promotion in sector documents (i.e., plans, policies, strategies, legal instruments) and roll-out at scale (either directly through government program or indirectly through other actors such as the private sectors).

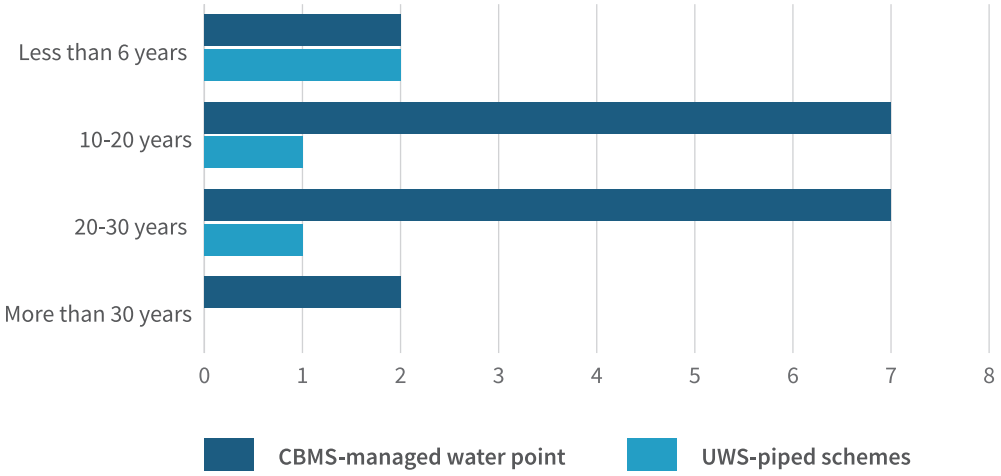
2 Sustainability in relation to water management was encapsulated by using the framework denoted as "FIETS" (Financial, Institutional, Environmental, Technical, and Social). A multi-tiered approach that recognizes the inter-connectedness between three pivotal levels was also used: the water facility itself, the service provider overseeing its operations, and the governing authority responsible for regulation. The sustainability findings are presented accordingly.

3 For MW-UWS-managed facilities, service provider KIIs were separated into two (one at the scheme level and one at the area manager level) in order to align with the structure of the UWS and collect the necessary information. For service authority KIIs, one was conducted at Kabarole district and one at UWS Head Office.

Table 1: Overview of water facilities sampled in Kabarole

SDM	Facility	Total sampled
CBMS - Water Sanitation Committee (WSC) -managed water points	1 deep borehole	20 facilities (including 4 that are VSLAs (out of the 35 supported))
	7 protected springs	
	12 shallow wells	
MW-UWS -managed piped water facility	1 Solar-powered scheme using groundwater	4 schemes (100% of the piped facilities in Kabarole) with 3 samples collected per scheme
	3 schemes using spring water (one gravity flow scheme, one grid electricity powered and one hybrid (gravity and solar-powered))	

Figure 2: Age of the visited facilities[4]



4 Although the team visited 20 WSC-managed facilities, age was provided for only 18 of them.

3. Country Context and Portfolio Overview

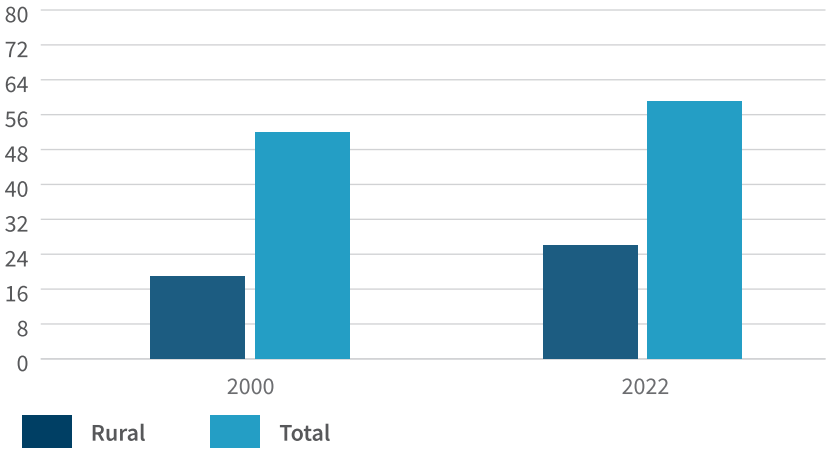
3.1. Socio-Economic Context

Uganda is a landlocked, low-income country in Eastern Africa. It has a population of 45.8 million (World Bank, 2022), which is predominantly rural (74%). The economy grew strongly in the 2000s when per capita Gross National Income (GNI) increased from USD 240 in 2000 to USD 860 in 2011 (World Bank, 2022). However, since 2011, economic growth has slowed considerably, with a slowdown in the reform agenda and exogenous shocks like droughts, resulting in GNI per capita falling back to USD 750 by 2019 (World Bank, 2022). Its Human Development Index (HDI) value is 0.525 and ranks 166 out of 191 countries (UNDP , 2022).

3.2. Rural Water Supply Management in Uganda

In recent decades, Uganda has made consistent progress in expanding access to water supply services. As shown in Figure 3, access to basic water services, both nationally and in rural areas, more than doubled between 2000 and 2022. However, access to safely managed water services in rural areas across the country remains very low, at 8% in 2020. The key constraint to increasing access to safely managed services is the accessibility of water on premises. Only nine percent of the population has access to drinking water on premises. In comparison, 70% of the population has water available when needed, and 56% of water is free from

Figure 3: Access to at least basic water supply between 2000 and 2022 (WHO/UNICEF, 2022)



contamination. Only 10.9% of rural water facilities are piped water supply schemes. The main technologies used for rural water supply continue to be point sources, including deep boreholes (44.3%), shallow wells (23.4%), and protected springs (21%) (MWE, 2020).

In Kabarole, Conrad N. Hilton Foundation's target district, with a population of about 325,500 people, 67.7% of which is rural, access to basic water services is at 78%, above the estimated national average of 70% (MWE, 2023). Most of the rural population in Kabarole (58%) access water through shallow wells and 27% through protected springs (MWE, 2023). Draft data on functionality collected by IRC-WASH and the Kabarole District Water Office (DWO) indicate that 74% of all water points are functional, but this drops to 42% for boreholes and 66% for shallow protected wells (IRC Uganda, 2022).

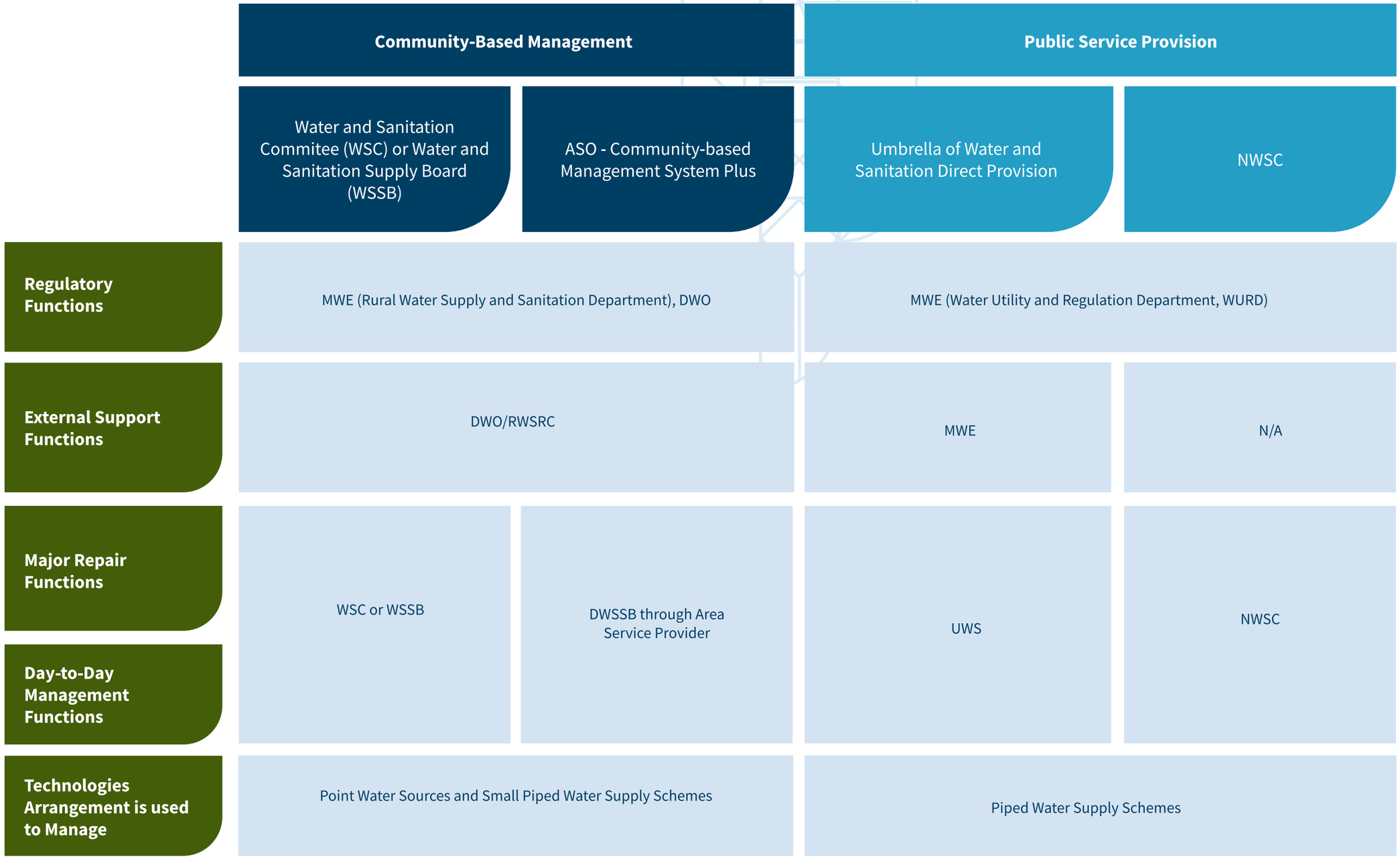
The Government of Uganda's strategies in relation to water supply are clear and ambitious. The Government of Uganda's (GoU) goal is to achieve universal access through piped water supplies by 2040, as set out in its "Uganda Vision 2040" strategy. The mid-term target is to increase safe water supply services to 85% in rural areas and 100% in urban areas by 2025, as per the National Development Plan III 2020-2025 (National Planning Authority, 2020). Although predominantly rural, Uganda's population is growing at a rate of 3.2% and rapidly urbanizing (annual average urban population growth is over 4.5%), with the urban population predicted to double by 2040. This rapid urbanization creates considerable pressure to develop new or extended water supply services. Moreover, the constant administrative restructuring of districts, cities, municipalities, and town councils impacts the institutional arrangements for water and sanitation, making institutional strengthening challenging (Huston, Susan, Moriarty, & Watsisi, 2021).

Over the last six years, there have been significant reforms to the management of rural water services, resulting in a relatively stable and clear policy environment supporting two main trends in the provision of rural water services. The first is a significant emphasis on expanding public utilities' role in rural water service provision and leveraging economies of scale. Umbrella Organizations were granted service authority status and became Umbrella Authorities in 2017 (Huston et al., 2021), now termed Umbrellas of Water and Sanitation (UWS). The role of UWS was expanded to direct provision of clustered rural piped water supply services. As of June 2022, out of the 1,085 rural schemes in the country,[5] the six UWS have taken over 299 schemes for direct management and provide technical support to a further 298, serving about 4.5 million people in total (MWE, 2022). Eighty-three percent of the registered schemes are fully functional, and the operating cost coverage ratio is greater than 100% in 71% of cases. Non-revenue water (NRW) remains high at 30% on average across schemes (MWE, 2022). The National Water and Sanitation Corporation (NWSC) also plays a growing role in serving rural areas. Although its mandate is to serve gazetted urban towns, as service expands to smaller towns, this increasingly encompasses adjacent rural areas and villages. This is reflected in NWSC's 100% service coverage acceleration project (SCAP100) to provide piped water to all villages with NWSC-mandated areas. Between 2017 and 2022, SCAP 100 saw the construction of 20,000 standposts in 12,000 villages, with 58% of capital investment coming from NWSC (NWSC, 2022).

The second policy direction adopted by the GoU is to recognize the need to professionalize the CBMS for point sources and piped supplies outside Umbrella or NWSC areas. The GoU approved a national framework for Operation and Maintenance (O&M) for rural water supply services in 2020 (MWE, 2020), institutionalizing a new management

5 In small towns and Rural Growth Centers, excluding piped water schemes managed and operated by NWSC.

Figure 4: Overview of rural water supply management arrangements in Uganda



arrangement in which an Area Service Provider (ASP), which could be a private operator, a handpump mechanics association, or an NGO, can be contracted by the District authorities to perform preventive maintenance and repairs of water facilities in their district on behalf of communities (MWE, 2020). Currently, DWOs are working towards implementing the framework by establishing appropriate structures - District Water Supply Services Boards and Sub-County Water Supply and Sanitation Boards (SWSSB) - and contracting ASPs. This process is still at an early stage in many districts (in Kabarole, training of SWSSBs was ongoing as of May 2023), meaning that outside of established pilot schemes, most point water sources in rural areas remain directly managed and maintained by (Water and Sanitation Committees) WSCs under the 'old' CBMS model. However, the institutional and financial capacities of WSC are extremely weak, which impacts the ongoing O&M of facilities and results in poor quality and unreliable water services (MWE, 2020). Figure 4 displays the applied (or to be applied) management arrangements for rural water supply service provision in Uganda.

3.3. Conrad N. Hilton Foundation's Portfolio Overview

Out of the whole SWI portfolio, Uganda has received the smallest share of funding compared to Ghana and Ethiopia. The Conrad N. Hilton Foundation has invested a total of US$91,983,557 in its global SWI portfolio between 2019 and 2022. The present review focuses on a sub-set of this portfolio in Ghana, Uganda, and Ethiopia in the six target districts, corresponding to a total of US$64,872,368, with 53% allocated to activities in Ghana, 27% in Ethiopia, and 20% in Uganda. Within each country, grants were classified into one of three groups:[6]

i. **Support to SDMs.** The main objective of these grants is to support and improve rural water service delivery models.

ii. **Strengthening of WASH Systems.** The primary objective of these grants is to improve the enabling environment and elements of the WASH system, with the specific objective of achieving district-level improvements.

iii. **National-Level Advocacy.** This classification of grants aims to mobilize political will, strengthen stakeholder coordination and communication, and increase accountability at the national level.

As shown in Figure 5, in Uganda, over half of the SWI investments (53%) supported district-level WASH systems strengthening, with a further significant proportion of investments allocated to supporting SDMs (40%). The Uganda portfolio included significantly less funding (as a proportion of total funding) for supporting SDMs than either Ghana (76%) or Ethiopia (63%). A small proportion of the total investment (7%) supported advocacy for national actions. Although this review covered investments channeled through 11 grantees, 58% of the total investment was made through just two grantees (Water and Sanitation for the Urban Poor Advisory (WSUP Advisory) and IRC-WASH).

Kabarole district is the focus of the Conrad N. Hilton Foundation's funding support during the period of the portfolio review.[7] The Conrad N. Hilton Foundation and its grantees have been actively supporting Kabarole since

6 The categorization of grants is based on the type of intervention and overall focus. In a number of cases, particularly for larger grants, not all interventions neatly fall into these categories, therefore the distribution of funding should be taken as indicative of the breakdown by grantee and by focus area.

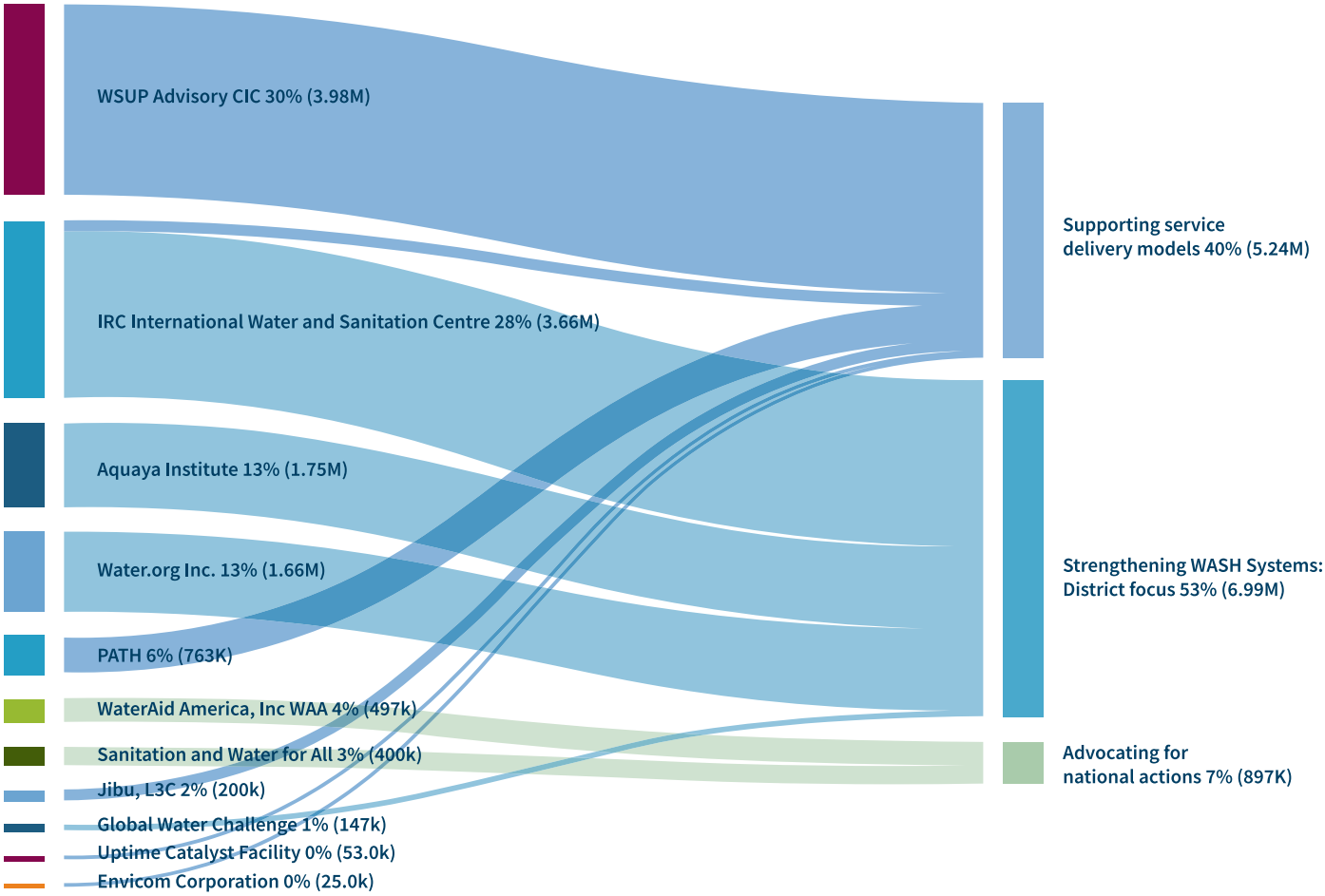
7 Kabarole was split into two districts (Kabarole and Bunyangabu) in 2017, and Fort Portal was granted city status (removing it from the district administration) in 2020. In this report, Kabarole is taken to refer to the current district boundaries.

2008.[8] An extensive set of interventions has been funded to strengthen the WASH system in the district and support the District Water Office (DWO). These include work on district WASH planning, political engagement and accountability for WASH, data collection and monitoring, plus efforts to improve water resources and water quality. In addition to specific interventions, the prolonged presence of multiple WASH organizations in Kabarole has meant that there is extensive, *ad-hoc* support to the District WASH sector.

In terms of advocacy efforts at the national level, it is estimated that Conrad N. Hilton Foundation invested about 7% of the Ugandan portfolio through two main grants, Sanitation and Water for All (SWA) and WaterAid (granted across the three countries). SWA aims to facilitate high-level dialogues that mobilize political will, strengthen government-led multi-stakeholder platforms, and promote mutual accountability mechanisms while also supporting the three countries in enhancing their financial systems. WaterAid aims to focus on advocating for increased access to basic water services in healthcare facilities (HCFs) at both the global and national levels. Other grants also included components related to similar advocacy efforts, though

8 Conrad N. Hilton Foundation has previously funded grantees focusing on Kamwenge district and now funds activities in Lira district; however, since interventions only started during 2023, Lira district is not included in the scope of this review.

Figure 5: Funding Allocated per Focus Area in Uganda



it is not possible to disaggregate the funding allocated to national-level interventions. For example, Aquaya Institute and Water.org included interventions to strengthen financial mechanisms and promote innovative approaches to financing service delivery. IRC-WASH also undertakes extensive national advocacy and serves as a key partner in policy and institutional reform at the national level.

Three grantees focused on interventions to strengthen systems in Uganda: two of these included a focus on strengthening district WASH systems in Kabarole, with the third focusing on nationwide interventions.

- IRC-WASH's 'hub' role is to **facilitate collective action and coordination** between grantees and the district, monitor progress against the goals and targets outlined in district Master Plans,[9] document lessons learned from the implementation of these plans, and disseminate this knowledge to inform engagement within the sector.
- Funding was granted to Aquaya Institute to pilot both the use of village saving and loan associations (VLSAs) in improving the financial sustainability of CBMS in Kabarole and their existing **Water Quality Assurance Fund** in Kabarole.
- Water.org was awarded funding to **develop and improve financing mechanism**s (primarily micro-finance products for WASH) and focused on working with national financial institutions to create and expand loan products for integrated water solutions for households and businesses. Although financial institutions provided some loans to households in Kabarole as a result of work, there was no specific geographic focus. Water.org also engaged in national-level advocacy to create links between the MWE and financial institutions and raise awareness of water financing approaches.

In Uganda, the Conrad N. Hilton Foundation's support of SDMs has focused on strengthening public utility provision, with 94% of the funding to SDMs benefitting the MW-UWS. This funding was channeled through WSUP Advisory, providing technical support to MW-UWS, with a focus on supporting improvements in O&M cost recovery, operational autonomy, customer centricity, operational efficiency, strategic planning, and the motivation and commitment of its workforce. Even though the CBMS model continues to manage a significant portion of water points in Kabarole, it is estimated that only 1% of the total support to SDMs went directly towards CBMS. The Conrad N. Hilton Foundation directly supported ten communities by creating VSLAs to improve revenue collection (which ultimately covers O&M expenditure) and financial accountability of WSCs. Aquaya Institute subsequently supported Kabarole district to extend the model to an additional 25 communities.

9 Kabarole District, with the support from IRC-WASH, has developed a master plan that provides a framework for long-term planning, coordination of investments, and guidance for implementation of the vision, and policy objectives for water and sanitation delivery. The overall objective is the extension of piped water services rather than point water sources, which is to be achieved by partnering with NWSC and the Umbrella Authority and applying the national O&M Framework, prioritizing sub-counties and areas in which coverage is below average ((Kabarole District Council, 2018).

Figure 6: Fundings per approach for systems strengthening in Uganda

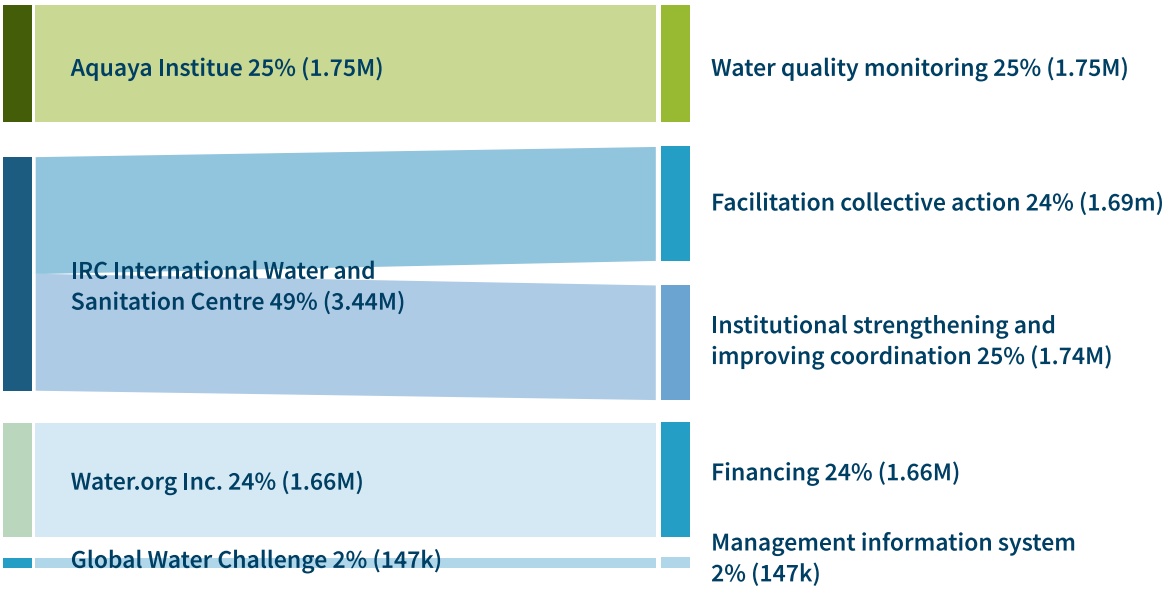


Figure 7: Overview of Grantees included in this review and their Top-Level Focus[10]

10 Only IRC and Aquaya Institute focused on Kabarole district.

4. Review Findings

This section of the report focuses on the relevance of the Conrad N. Hilton Foundation's portfolio in Uganda and the effectiveness and sustainability of supported SDMs. When reviewing the findings presented against each of these dimensions, especially those concerning effectiveness and sustainability, the following key contextual considerations are required:

- MW-UWS direct provision has received the most funding and direct technical support.
- Facilities managed by CBMS are water points (protected springs, shallow wells, deep boreholes), but those managed by MW-UWS are piped water supply facilities.
- The age of facilities varies widely across both SDMs, from 2 years old to more than 40 years old.

4.1. Are Interventions Relevant to the Context?

- A core set of interventions aiming to address key gaps in the district WASH system has been highly relevant. These interventions have contributed to some improvements in specific building blocks, though critical weaknesses remain.
- A broader set of interventions have had less relevance. In a number of cases, interventions are relevant in addressing specific challenges in the Ugandan WASH sector but may not have a strong link to improving rural water services in Kabarole.
- The most relevant interventions are implemented by grantees with working cultures and approaches that already prioritize local leadership and allow for flexibility in programming. Grant design and/or the requirements of the Conrad N. Hilton Foundation had no influence on these outcomes.
- While organizations with a continued presence and relationships with local actors in Kabarole support collective action, coordination between grantees is practically non-existent, and opportunities for collaboration between grantees have not been realized.
- The Conrad N. Hilton Foundation's focus on and extensive support to a single district as the unit of scale has limited the scope for replication. The depth and breadth of support provided are challenging for organizations to replicate in other districts, and a relative lack of interventions at the regional level creates fewer opportunities to demonstrate change at scale.

4.1.1. Are Interventions Addressing Key District Gaps?

The WASH system in Kabarole is characterized by moderate strength, with improvements across many of the building blocks since 2019, particularly in the institutional arrangements and political will for WASH. Political will for WASH is particularly strong, with political leadership in the district seen as the driving force behind the WASH Masterplan for Universal Access. This includes being proactive in seeking partnerships with NWSC and MW-UWS to transition point water sources (e.g., handpumps) to professionally managed piped supplies. The perceived strength of the Institutional Arrangements and Coordination building block reflects the process and structures that have been put in place, such as the WASH Task Team, which brings together political leaders and technical officers of the local government, as well as private sector, civil society, religious institutions, and the media.

Table 2 presents a summary of the findings of the building block workshop[11] undertaken in May 2023 with key district stakeholders for the purpose of this review. This workshop used a building block diagnostic tool to assess participants' perceptions of the current status of the district WASH system (right-hand column) and the change in the strength of the WASH system since 2019 (left-hand column).

11 The building block scoring process is described in the building block analysis for Kabarole district. The scores for the current strength and the changes between 2019 and 2023 are based on a combination of workshop discussions, available sector documentation, and professional opinion.

Table 2: Results of building block diagnostic in Kabarole District

Building Block	Perceived change 2019 - 2023	Current Situation (2023)
Institutional Arrangements and Coordination	▲▲	Desired
Service Delivery and Infrastructure	▲	Emerging
Regulation and Accountability	▲	Emerging
Inclusive and Connected Planning	▲	Desired
Finance	▲	Weak
Monitoring	▲	Desired
Water Resources and Environment	▶	Desired
Learning and Adaptation	▲	Emerging
Demand and Political Will	▲▲	Desired

Current Strength

Weak | Emerging | Strengthening | Desired

Evolution Since 2019

▼ Deterioration ▶ No Change ▲ Some Improvement ▲▲ Substantial Improvement

There are still weaknesses in many aspects of the district WASH system in Kabarole, and in some cases, improvements in processes and policies have not led to substantive changes in the strength of the WASH system. Finance is, by some distance, perceived by stakeholders as the weakest building block in Kabarole district, with ongoing challenges in the availability of funds to support CBMS, both from district allocations for support and communities themselves through tariff revenues. Service delivery and infrastructure remain a weaker building block, with poor quality infrastructure and inadequate O&M arrangements. However, changes in national policies and frameworks and the emergence and expansion of the MW-UWS and NWSC, respectively, are seen as having contributed to moderate improvements in this building block. Monitoring was perceived by stakeholders as a relatively strong building block, as there are processes in place for regular data collection and support for periodic water supply censuses. Despite these improvements, there are still challenges with monitoring; for example, there is not a single, up-to-date dataset on rural water access and service levels in the district.

The variable strength of building blocks across the WASH system affects the two SDMs differently due to their respective and unique institutional arrangements. For both service delivery and infrastructure, and regulation and accountability the strength of the building block[12] varies drastically between the MW-UWS and CBMS. For example, the MW-UWS is seen as having a relatively strong O&M capacity with clearly defined responsibilities and preventative maintenance undertaken. However, this is not the case for CBMS where (pending the rollout of CMBS+) there is an ongoing lack of clarity over O&M responsibilities and, except in the cases of communities where VSLAs have been established, limited preventative maintenance capacity. For regulation, while the MW-UWS has a clear legal status and is regulated, the majority of WSCs have no legal recognition and are effectively unregulated by the DWO. In some cases, an oversight role is played by the Local Council One chairperson (LC1)[13] or Sub-Counties, but this is inconsistent and depends heavily on the initiative of individuals.

Although there have been improvements across many of the building blocks of the WASH system in Kabarole since 2019, these improvements have been typified by gradual change only. The building blocks that have improved the most, namely institutional arrangements and coordination, and demand and political will, align strongly with some of the interventions supported by the Conrad N. Hilton Foundation. A large focus of the district-level investments has been strengthening district-level institutions and coordination (through the District Water and Sanitation Coordination Committee), planning (through the District Master Plan), and supporting the political leadership (including through the district WASH task team). All these areas are seen as strong and as having evolved considerably in recent years, with local stakeholders identifying some Conrad N. Hilton Foundation-funded interventions as contributing to this.

There are a number of building blocks that remain weaker, and support to the district WASH system has not addressed some of the deep-rooted, systemic challenges or resulted in the provision of high-quality drinking water services. While the interventions supported by the Conrad N. Hilton Foundation in Kabarole are broad, there are a number of critical challenges that have been engaged with in less depth. For service delivery and infrastructure, there has been little direct

12 For this review a single building block assessment was carried out covering the overall system for rural water services in Kabarole. This assessment included an in-depth discussion, reflected in the assessment notes, of the differences between the two SDMs although a single score was agreed upon for each building block reflecting the overall situation in the district.

13 LC1 is the lowest administrative unit in Uganda and typically aligns with a village. LC1 can refer both to the administrative unit, and the chairperson of this unit.

support for the professionalization of service delivery at rural water points under CBMS (distinct from the piped schemes managed by the MW-UWS), with efforts focused on the broader district WASH system. In the area of finance, while there has been work on specific issues (including establishing VSLAs in Kabarole district or supporting national financial institutions to launch WASH microfinance products), the fundamental challenge of insufficient resource allocation for rural water supply services remains unchanged. While the finance challenge is clearly beyond the immediate sphere of influence of the Conrad N. Hilton Foundation or grantees, there has not been a concerted approach to using SWI investments to contribute to advocacy for improved financing for the sector.

4.1.2. Are Interventions Designed and Managed according to Collective Action Principles?

The most significant interventions in the Conrad N. Hilton Foundation portfolio where there is long-term engagement with the district or service providers, have clearly supported collective action with local and national stakeholders and are aligned with sector trends. Specifically, IRC-WASH, Aquaya Institute, and WSUP Advisory could all clearly articulate what district or local leadership meant for their interventions. All three either had a significant long-term presence in Kabarole or, in the case of WSUP

New Service Delivery Models for rural water supply in Uganda.

As outlined in section 3.1, management of point sources and small piped systems in Uganda will progressively be taken over by ASPs contracted by the DWB to provide services across one or more entire sub-counties. Although the O&M framework is still being rolled out, there are a number of organizations in Uganda that have piloted (at an increasing scale) this approach to O&M of rural water supplies. They include Whave and Water Mission, both members of Uptime, an organization that links professional management of rural water supplies to results-based financing.

Although these organizations do not work in exactly the same way as is envisaged for ASPs - for example, they are not contracted by District Water Boards (DWBs) as ASPs will be - they do typically have a Memorandum of Understanding or similar with the relevant districts and share many of the same features. This management model was not included in data collection for this review because no ASPs have yet been established in Kabarole, and until mid-2023, the Conrad N. Hilton Foundation had not directly funded one of these service providers. However, these service providers are active in other regions of Uganda, and their performance to date provides indications that professionalized O&M can offer significantly better functionality than traditional CBMS. However, there is considerable work remaining to scale this approach, reduce costs per water point, and move towards financial viability.

The table below presents a selection of key performance metrics for Whave and Water Mission for Q1 2023.

	Whave	Water Mission
# water points	**1,120** 1,116 handpumps 4 kiosks	**226** 138 shared taps 88 household connections
Uptime	**99%**	**100%**
Revenue Collected	**US$ 17,539**	**US$ 8,511**
Working Ratio	**15%**	**42.8%**

[Source: all data for Q1 2023, Uptime Global].

Advisory, a close relationship with the MW-UWS developed over several years. These organizations had either received grants to support formative research or scoping (fully involving local stakeholders) or had developed an understanding of district needs and power dynamics over an extended period. The key recent developments in the Ugandan rural water sector have been the establishment of the Umbrella Authorities and the O&M framework for rural water in 2020. The grants to IRC-WASH and WSUP Advisory have directly supported these shifts, with a key focus being on the practical realization of frameworks and policies. At the time of this review, the Conrad N. Hilton Foundation has not directly supported the ASPs envisaged under the O&M framework;[14] the box below highlights the performance, to date, of such rural water utilities that are being piloted in Uganda.

However, taken as a whole, the Uganda SWI portfolio is a disparate collection of individual grants rather than a cohesive contribution to supporting rural water services in Kabarole or Uganda. The extent to which interventions adhere to principles of collective action or align with sector trends is highly dependent on individual grantees and is largely the result of pre-existing organizational cultures and ways of working. In the three examples highlighted above, it is apparent that the organizations and the individuals within them work in ways that support collective action by default. Where organizations did not already work in this way as a matter of course, there was no clear requirement or incentive for them to do so as part of the Conrad N. Hilton Foundation grant-making under the SWI. While the positive examples reflect well on the choice of grantees in these cases, the lack of a strong mechanism to ensure collective action and sector alignment means that there is a risk that interventions are less relevant when funding is channeled through grantees who do not already work in this way.

The disparate nature of the portfolio means that there are examples of interventions with more limited, if any, alignment with sector trends. Beyond the positive examples cited above, alignment with sector trends is inconsistent. There are examples of interventions where, although there is currently not full alignment with the sector trajectory, there is clear scope to improve this. For example, the work of Aquaya Institute to support VSLAs or Water.org establishing microfinance options could potentially align closely with and support the GoU's O&M framework for CBMS+ to help improve the availability of funds for WASH at a local level. However, while grantees are often aware of these opportunities, it is recognized that work must be done to articulate these linkages and develop interventions that support better alignment. There are also examples of interventions working largely in parallel to the sector trajectory and where it is less obvious how linkages could be established. For example, the choice to support a franchising model for bottled water sales appears at odds with the GoU's priority to achieve universal access to safe drinking water through piped supplies.

There are multiple examples of interventions where district leadership was either not prioritized or neglected. In these cases, district government involvement in grant activities is limited to merely being informed and basic consultation rather than a genuine partnership or full district leadership. For example, it was notable that for two grantees, the workshop organized as part of this review was the first opportunity to engage with key individuals at the district level. WaterAid's work in Kabarole (a district where they have not historically operated) built on previous work at a national level and in other districts. However, the district was unaware of the planned interventions when implementation started. There was also a subset of grantees, including PATH, Jibu, and Water.org, who did

14 The Conrad N. Hilton Foundation did make a grant to Uptime Global, but the majority of this was for global organizational support and development, with a small sum for pooled results-based financing. Although the latter will have flowed in part to organizations in Uganda, Hilton was not directly funding Ugandan service providers. The Conrad N. Hilton Foundation began grant funding to Whave in July 2023.

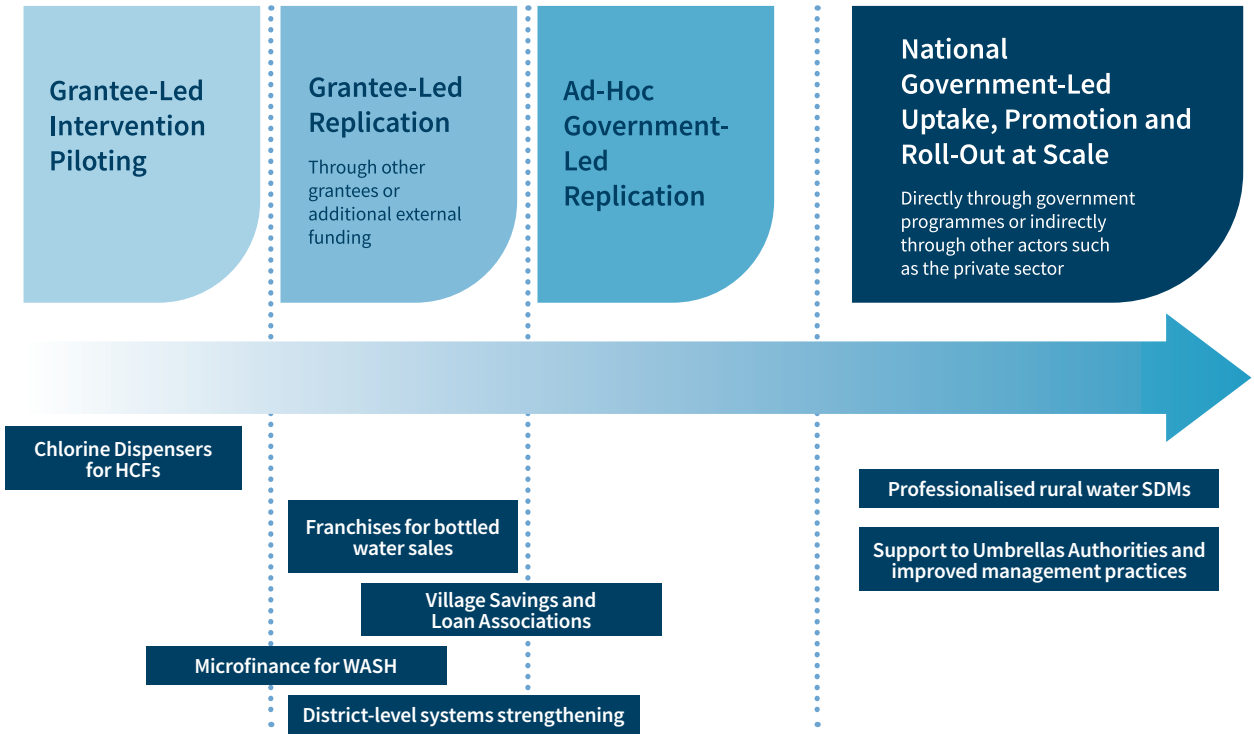
not view district leadership as valuable to their work, with involvement either non-existent or limited to the identification of project sites and joint monitoring. In some cases, but not all, there has been engagement with other levels of government. For example, PATH has worked closely with national authorities on piloting chlorine generators, and Water.org has engaged with the MWE on WASH financing.

Collective action between grantees was minimal, with only isolated examples of grantees working together in a limited way. Coordination between grantees is absent at the most basic level, with most grantees unaware of what other interventions or even which other organizations are funded by the Conrad N. Hilton Foundation in Uganda. Without this basic information, it has been challenging for grantees to identify opportunities for collaboration, even where there are clear synergies between the work of different grantees. Where there are examples of grantees working together, the depth of this collaboration is typically very limited, for example, through the exchange of information on specific topics. There are cases where clear opportunities for collective action between grantees have been missed. For instance, IRC-WASH is currently working with Kabarole District to use mWater (as a free data platform) to develop district-level WASH monitoring, but there is no awareness of or engagement with the work the Conrad N. Hilton Foundation is funding mWater to do at a district level in Lira, or nationally.

The Conrad N. Hilton Foundation did not sufficiently define the 'hub' role when it delegated this to IRC-WASH. As a result, the hub role has not worked in practice. There is consensus amongst grantees, including IRC-WASH, that shortcomings in grantee collection action and the hub role stem from the absence of a framework for collaboration or clarity over what the expectations of grantees are in this regard. The SWI portfolio in Uganda is diverse and features grantees who have established a clear niche and organizational identity in the WASH sector. For example, IRC-WASH, WSUP Advisory, and Water.org could all justifiably claim to have a distinctive approach to WASH programming. As a result, grantees do not see themselves as partners under one program, merely that they share the same funder. Grantees were unanimous in the view that if collaboration between grantees was a priority for the Conrad N. Hilton Foundation, it would have to take the lead in establishing a framework within which this could happen. At a more basic level, grantees also had a clear request for information on the activities of other grantees to be shared more openly where possible, which has been lacking to date.

Alignment with the rural water supply sector trajectory was constrained by the limited number of interventions with in-depth engagement at the national level and on advocacy with the GoU. Very few Conrad N. Hilton Foundation-funded interventions contained substantive work to engage with national-level stakeholders, a limitation raised by grantees themselves, identified in previous evaluations. While national-level engagement is a core part of IRC-WASH's broader program in Uganda, in most other grants, this was more limited and fragmented, such as PATH's work with the Ministry of Health on chlorine dispensers in HCFs or Water.org's advocacy to build links between the MWE and financial institutions. Stronger and more strategic engagement at a national level would mean that grantees would be more aware of the latest developments in the trajectory of the rural water sector.

Figure 8: Replication Continuum for selected interventions



4.1.3. Are Interventions Being Replicated?

Where interventions have supported and built on existing sector processes, they have been particularly successful in influencing and informing sector direction and have subsequently been anchored in national WASH systems. Specifically, this includes the interventions implemented by WSUP Advisory and IRC-WASH: the two grantees comprising the majority of funding included in this review. The most striking example of this has been WSUP Advisory's support to MW-UWS, which has been recognized by the MWE as an effective model of how to support Umbrella Authorities to become more professionalized utilities. This influence was directly visible as WSUP Advisory co-convened a masterclass with MWE on 'Umbrella Inclusive Service Provision.' More broadly, some of the interventions and initiatives from WSUP Advisory's support to MW-UWS are being scaled up across other Umbrella Authorities through the seven-year World Bank-funded Integrated Water Management and Development Project. Equally, IRC-WASH's work on systems approaches can justifiably claim its contribution to shifts in stakeholder perceptions about how rural water services should be supported and strengthened. This includes contributing to the development of the O&M framework, which means that some aspects of IRC-WASH's ways of working are now embedded in national policies.

Where the portfolio had included piloting specific innovations or interventions there has been limited replication to date. The clearest example of direct replication has been the local government-requested scale-up of the VSLA model. This expanded from the 10 VSLAs directly established by Aquaya Institute to an additional 25 VSLAs established by the Kabarole district DWO and sub-counties with support from Aquaya Institute. Although a clear replication of funded interventions, this remains at a very modest scale, both within Kabarole and compared to work in other districts to establish VSLAs to support

O&M of water points.[15] The work of PATH to pilot chlorine dispensers in HCFs has a clear path to replication if the Ministry of Health approves the results, but, for now, this remains at an advanced pilot stage. For most other interventions, replication, if any, remains heavily grantee-led. Figure 8 illustrates where the replication of selected Hilton grants falls on the replication continuum.[16]

There are two key barriers to replication of Conrad N. Hilton Foundation-funded interventions:

1. **The lack of specific interventions to replicate.** The most relevant interventions in Kabarole are not specific activities or approaches but a broader package of work to support service providers or the district WASH system. As a result, there are not neatly defined interventions that can be packaged for replication by the same (or other) organizations, but more an approach to working and supporting the WASH system, which is challenging.
2. **The scale and levels of Conrad N. Hilton Foundation's funding in Kabarole.** By committing considerable sums to multiple organizations in the same district over a prolonged period, the Conrad N. Hilton Foundation has created a challenge for replicating the approach to supporting the district and service providers elsewhere. It is unreasonable to expect a similarly high level of support to be provided in other districts, and certainly not possible across all 135 districts in Uganda. At the same time, the high level of support makes it more challenging to identify aspects of the work that could be scaled more widely, as there is a perception (justified or otherwise) that much of the progress is only possible with similarly high levels of (financial) support.

4.2. How Do Water Facilities Perform?

- The service provided by WSC-managed facilities under the CBMS model is poor, with less than half of the facilities reported as being reliable and delivering the expected yield of water. This is driven by poor O&M practices rather than the availability of water resources.
- The reliability of MW-UWS-provided services is highly variable, with frequent (if short-lived) interruptions in service provision for technical and water resources issues.
- While sampled water quality was acceptable for WSC-managed facilities, it was poor for MW-UWS-managed facilities, with levels of bacteriological contamination posing a risk to users.
- The level of inclusivity of services varies across SDMs, with MW-UWS-managed facilities offering more accessible but less affordable services.

Note: because of fundamental differences in the nature of the facilities managed and the level of services provided by the two SDMs in Uganda, this report does not present the results of the SDMs comparatively. Instead, each aspect of how water facilities perform is presented separately, firstly for CBMS and secondly for public utility (MW-UWS)- managed facilities.

15 Over 700 'self-help groups' linked to waterpoints have been established across three districts, see https://www.watertrust.org/_files/ugd/929735_589dadc01b9c4766b9b1407156835a7c.pdf

16 Innovations were determined based on KIIs with grantees, and the relative positioning of the innovations along the continuum was determined based on insights from the external portfolio review and consultations with grantees.

4.2.1. How Reliable are the Services?

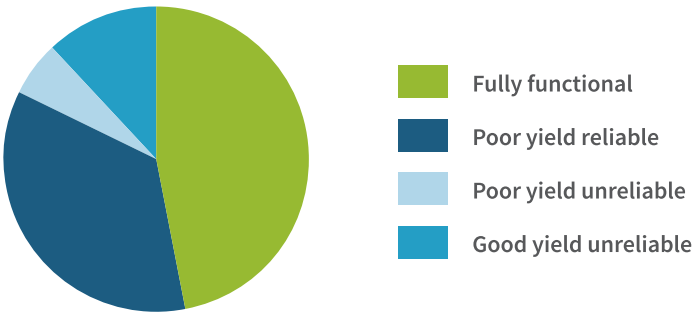
CBMS: WSC-managed facilities

Most of the WSC-managed facilities (85%) were found to be functional. Based on a binary (yes/no) criterion of whether facilities were functional on the day of the visit, only three were found to be non-functional. Two shallow wells, which were 25 years old, were non-functional because of poor maintenance and stolen parts, and one protected spring had been rendered unusable by landslides 15 years ago. All functional facilities provide water to users all day, every day (24/7). Users reported fetching sufficient water to meet their daily needs (between 2-6 jerrycans (40-120 liters) per household per day).

However, even functional facilities are frequently unreliable. In the two weeks preceding data collection, 18% (3 out of 17) of the water facilities experienced an unexpected breakdown of two months, one month, and a few days, respectively. Although no breakdowns within the last two weeks were reported for the rest of the facilities, some users reported breakdowns that took several months (and, in one case, up to two years) before being repaired. Only 59% of facilities have a yield that complies with the national standard of at least 10 liters/minute.[17] Less than half of the facilities had a sufficient yield and no report of a breakdown in the last two weeks. Seasonality issues did not appear to be a major factor impacting the reliability of the WSC-managed facilities,[18] with only three facilities reported facing seasonality issues, such as source water shortages during certain times of the year.

Figure 9 provides an overall picture of the functionality (whether facilities were working or not) and reliability of facilities (whether their yield was sufficient and whether facilities had had a breakdown in the two weeks preceding data collection) at the time of visit.

Figure 9: Functionality and Reliability of facilities managed by WSC



17 No correlation was found between the age of infrastructure and the yield (liters/minute), therefore, the oldest facilities do not necessarily have a worse water yield.

18 Data was collected at the end of the wet season/beginning of the dry season, so the results in terms of yield do not capture seasonality issues.

Public utility: MW-UWS-managed facilities

While all MW-UWS managed facilities were functional at the time of inspection,[19] the reliability of services varies between schemes and water access points within a scheme. For most schemes, water is available seven days a week, except for Kasenda, where hours of supply vary across the scheme between three to seven days a week. However, almost half of the points visited do not supply water for the required number of hours per day (minimum 12 hours a day as per MWE standards) (see Figure 10). Moreover, the average yield at access points visited was very low for Kasenda scheme (one of the oldest, dating from 2007), as shown in Figure 11. Moreover, in all four schemes, there was at least one collection point where it was reported that there had been an unexpected breakdown or water was not available when expected during the preceding two weeks. Finally, seasonality issues were reported for three facilities, with water source shortages being the main reason.

Figure 10: Functionality and Reliability of facilities managed by MW-UWS

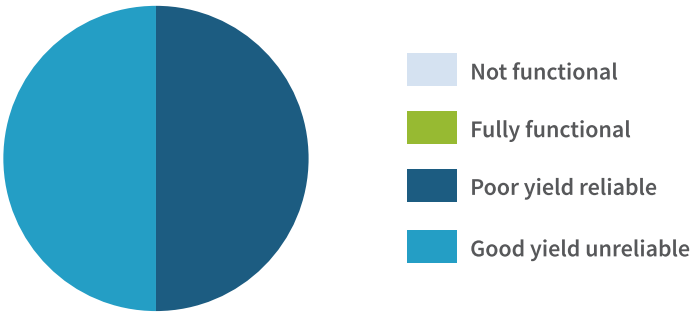
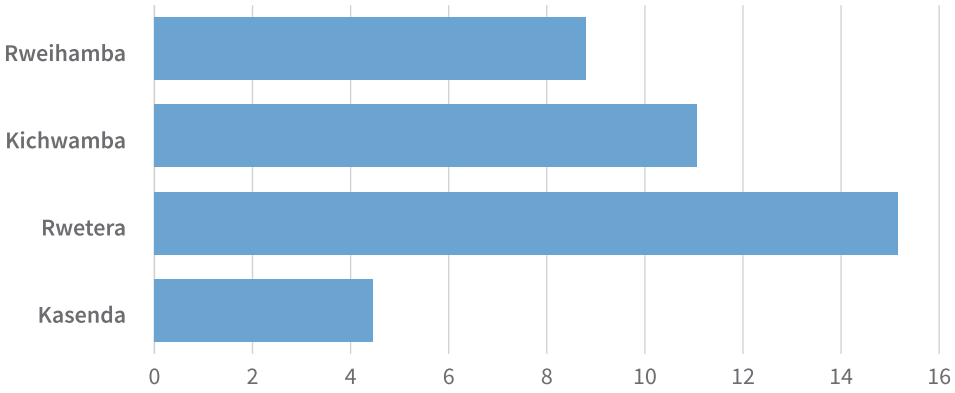


Figure 11: MW-UWS - Average yield (liters/minute) per scheme



19 Although functional, one point of Rweihamba scheme was shut down due to affordability issues, so it was not fully tested in terms of yield and water quality.

4.2.2. How Safe is the Water?

Figure 12 details the performance of the two SDM against WHO standards for free chlorine (above 0.5 mg/l, but below 2.0 mg/L), fecal coliforms (undetectable colony forming units (CFUs) in 100 milliliters), nitrates (<50 milligram/liter), nitrites (<3 milligram/liter), arsenic (0 milligram/liter), turbidity (<1 Nephelometric Turbidity unit (NTU)), and PH (between 6.5 and 8.5).

CBMS: WSC-managed facilities

The water quality of WSC-managed facilities is moderate. Only 35% of the water facilities complied with all water quality standards for the samples tested. Five facilities (out of 17) contained high levels of fecal coliforms (from samples with four colony forming units (CFUs) to samples with CFUs that were too numerous to count), suggesting water that could lead to illness if consumed without treatment.[20] Most physicochemical standards were met in all schemes, although half the facilities had pH levels outside WHO norms (see Figure 11). A third of the communities visited perceived the water as very good, with no need for treatment or boiling. Only one community perceived the water as unsafe for consumption without boiling, but issues were frequently raised around appearance and taste.

Public utility: MW-UWS managed facilities

The water quality of MW-UWS facilities is poor. None of the water facilities comply with all water quality standards. Eight out of eleven samples contained fecal coliforms (from samples with one or two CFUs to samples with CFUs that were too numerous to count), presenting a significant risk to health if consumed without treatment (see Figure 12). None of the samples had measurable levels of free chlorine, suggesting systematic defects in the adequacy of water treatment measures in the schemes. The majority of samples met physicochemical standards, except 27% of samples, where pH levels were not within the norms.

4.2.3. How inclusive are the Services?

CBMS: WSC-managed facilities

Many community members do not use WSC-managed facilities because of accessibility issues. In many communities, users face long collection times at water facilities: in 61% of cases, users take more than 30 minutes round trip to collect water. In some cases, the furthest users can take up to 60 minutes to reach the facility. Users further away from water facilities report accessing water from an alternative surface water source or buying tap water from community members connected to NWSC services. Only one facility is equipped for people with disabilities, and a third of the facilities visited are located at the bottom of a hill, meaning that people with limited mobility will face additional access issues. There were no examples given where community members were excluded from using the services because they came from a marginalized or vulnerable population.

The affordability of WSC-managed services was not raised as an issue because the vast majority of users do not pay for water. Only one WSC (with a VSLA) collects a regular monthly tariff. In all other communities, money is only raised when necessary, for example, in the event of a breakdown.

Public utility: MW-UWS managed facilities

There were no examples of community members being actively excluded from using MW-UWS water facilities. All tap stands visited comply with the acceptable time for water collection (maximum 30 minutes round-trip, including queuing time), and all are disabled-accessible facilities. There was one example (Rweihamba) where excessive use of water by a single agricultural customer resulted in limited availability of water for other users.

20 WSCs are not required to chlorinate the water, so chlorine was not tested.

Despite the MWE having a pro-poor policy in place the affordability of MW-UWS managed services is an issue. Around 11% of active connections in Kabarole schemes are pro-poor (Figure 13) and households that cannot afford a household connection can fetch water from public standpipes at a subsidized price of 100 Ugandan Shillings per 20L jerrycan. However, affordability issues were repeatedly raised by healthcare facilities and schools, which often use local boreholes and rainwater tanks so they can cut expenditures on piped water.

Figure 12: Percentage of Water points under each SDM that meet who water quality standards[21]

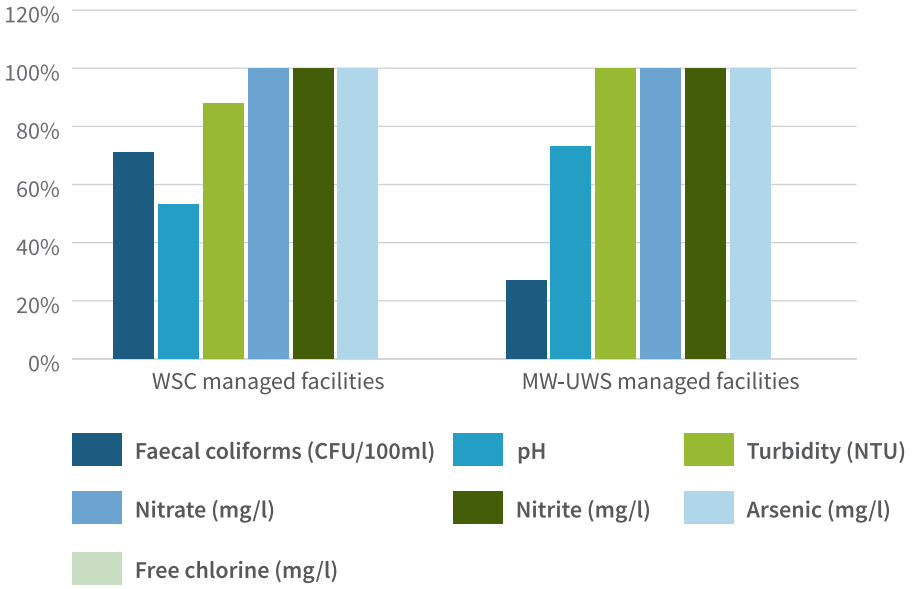
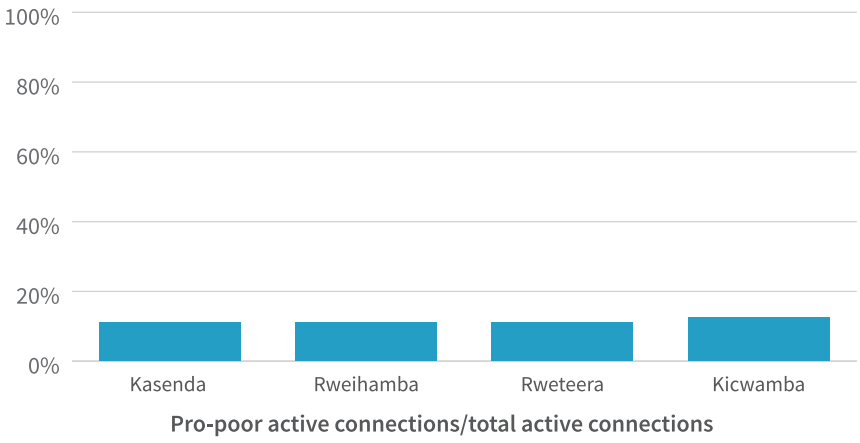


Figure 13: Pro-poor connections for Q3 FY2022/2023 (MW-UWS, March 2023)



21 Water was tested on 17 WSC-managed facilities and 11 samples were taken across 4 UWS-managed schemes.

4.3. How Sustainable are the Service Delivery Models?

- CBMS in Kabarole remains a chronically weak and poorly applied SDM, profoundly lacking the institutional capacities, skills, or support from service authorities to deliver sustainable services.
- The MW-UWS is making substantial progress towards becoming a high-performing and self-sustaining public utility. However, effective scheme-level technical management remains challenging, and aging infrastructure is a limiting factor in the sustainability of services.
- The MW-UWS can cover operational expenditure costs from income, although this includes extensive support from the government. However, there are insufficient funds for capital maintenance and development, particularly for aging infrastructure.
- Both SDMs lack strong measures for water safety or water resources management. Even in piped schemes, there are insufficient water treatment measures to ensure water safety.
- The chronic informality of the CBMS model means there is little accountability to users. Basic measures to provide accountability to users are in place within the MW-UWS.

4.3.1. Are Institutional Capacities in Place?

CBMS: WSC-managed facilities

CBMS remains an inherently poorly applied SDM, and WSCs are largely non-existent as service providers or true community institutions. Despite the long-term support to strengthen the district WASH system, at present, there is still effectively no functional CBMS service delivery model in Kabarole. In reality, with few exceptions, service delivery is "managed" by one person, a caretaker, the landowner, a volunteer within the community, a headteacher, or a chairman, on an ad-hoc basis. There is frequently no formal management structure and no involvement of the community at large. Out of eighteen functional facilities visited that are, in theory, managed by a WSC, only six were managed by an active WSC. Four of these were WSCs in communities where Aquaya Institute had supported the establishment of a VSLA. At 11 water facilities, informants reported that the WSC had never existed or was non-active. Only one WSC (VSLA) is legally registered and is composed of the stipulated seven members.

WSCs profoundly lack the internal capacity and skills to fulfill the service provider role. Only 17% (3 out of 17) reported having adequate technical and financial skills and knowledge on functionality and maintenance skills. However, even in these cases, two of the three WSCs highlighted the limitations of their understanding of the functioning of the water point, which impacted day-to-day operations. Only two WSCs reported having received training in the management of the borehole. WSCs operating under the VSLA model did report better financial skills thanks to the training provided through the Conrad N. Hilton Foundation-funded intervention.

There is little or no ongoing support function for the CBMS model, and the DWO has insufficient resources and capacity to support individual WSCs. Although the DWO reported having sufficient staffing

levels (as of May 2023, all required staffing posts were filled), WSCs receive barely any ongoing support for their role as service providers. Only one formally registered WSC (with a VSLA) reported receiving support from the Sub-County and Aquaya Institute, with two additional WSC identifying ad-hoc support from Aquaya Institute and the LC1, respectively. District stakeholders emphasized the role of the Sub-County in supporting WSCs, but this was not apparent in the water facilities visited for this review. In addition to the very limited support for WSCs, the DWO reported gaps in capacity around the ability of the office in data collection and collation and presenting information for decision-making and for developing appropriate work plans to implement required activities.

Public utility: MW-UWS managed facilities

The MW-UWS has developed strong institutional capacities at a utility level, but significant gaps remain at the area[22] and individual water supply scheme levels. As a utility, the MW-UWS has introduced multiple new processes and systems to strengthen its core institutional capacities. One of the most significant steps has been establishing the Area Performance Management Framework to set and track performance targets for operational areas (clusters of schemes in a defined geographic area) and incentivize strong performance by area and scheme managers. The MW-UWS has also recently introduced a new accounting system and is moving towards developing standard operating procedures across all its areas. There is evidence of investment in staff capacity across the organization, with all staff members having received training on utility and financial management. However, despite this, all area managers and individual scheme managers reported having inadequate skills in water system management, highlighting gaps in accounting, business management, and maintenance. It is possible that increasing professionalization within the MW-UWS has made individual scheme managers more aware of gaps in skills and capacities. There is strong internal support for scheme managers, with all schemes reporting some support from the head office. In two cases, this was regular (monthly or bimonthly) support, and in the remaining instances, ad-hoc support over the last year. Three out of four reported being technically supported to address maintenance issues. The MW-UWS has also demonstrated the capacity to devote increased institutional resources to resolve scheme-specific issues or conflicts in its response to the ongoing challenges to establish MW-UWS management of the Kichwamba scheme. All schemes reported a lack of office space and vehicles and access to spare parts, which impacted the performance of the services.

The institutional capacity of the MW-UWS is supported by a clear framework for the Umbrella Authority arrangement. The existence of a performance contract, defining the operation and management responsibilities and targets for technical, commercial, financial, and customer performance, provides a strong foundation for professional institutional capacities. Data on a broad range of indicators (e.g., water connections, water supplied, billing rate) is made available through the Utility Performance Monitoring & Information System (UPMIS), and quarterly performance reports are submitted to the MWE. The Water Utility and Regulation Department (WURD) then reviews the reports against the performance contracts signed by the Umbrella Authority. Some progress has been made regarding water source protection, where guidelines have been developed by MWE but have not been fully operationalized at the scheme level. However, the application of regulations and the monitoring of service delivery are constrained by the time it takes to institutionalize more formal systems and harmonized tariffs, as is the case for Kicwamba scheme.

22 UWS-managed schemes are clustered into areas managed by an area manager. There is also one scheme manager per scheme.

Table 3: Institutional capacities per SDM[23]

	Service providers with adequate skills and equipment to fulfill functions	Service providers that receive regular technical support from the service authority	Registered service providers that submitted financial and service provision data in the last year	Service providers that have been incentivized/ sanctioned by the service authority
WSC DIRECT PROVISION	16.7%	5%	5%	0%
MW-UWS DIRECT PROVISION	0/4	2/4	3/4	4/4

4.3.2. Are SDMs Financially Viable?

CBMS: WSC-managed facilities

The lack of functional WSCs at the water points sampled for this review means that it is impossible to reach conclusions on the financial viability of this SDM. The methodology for this component of the review was predicated on the availability of financial information, however basic, to understand operational and capital maintenance expenditure and income. Of the 20 WSCs included in the sample, only four (all with VSLAs) were able to provide any information on income, while eight had some records of expenditure. The minimal data set and extreme variations in the data mean calculating averages for this SDM is not credible. For example, seven WSCs provided information that suggested a financial deficit with little or no savings. This situation, by definition, cannot be sustained over multiple years, so the information is either incorrect or captures exceptional circumstances that do not reflect the true financial position of the WSC.

Based on the limited data available, WSCs with VSLAs display some ability to generate regular revenue and pay for preventative maintenance, but for other water points, payments are made on an ad-hoc basis only. All four WSCs under the VSLA model had some evidence of income over the past year, ranging widely from UGX 576 to UGX 5,000 (US$ 0.15 to US$ 1.32)[24] per household served. Only in the WSC with the highest income was this sufficient to cover the reported expenditure for the year, with other WSCs covering operational expenditure from savings or additional payments from users. Three of the WSCs had spent at least UGX 176,000 on repairs, an amount that allows for some form of service and repair by a hand pump mechanic. Although the data collected shows that even with VSLAs, WSCs are a long way from financial viability and only in the case of a small number of WSCs, it does suggest that WSCs with VSLAs outperform other WSCs. This finding was echoed by research undertaken by Aquaya Institute into the income and expenditure of water point upkeep for the 10 VSLAs it supported directly (Marshall, et al., 2023).

There is little or no ability to cover CapManEx for CBMS. The only source of CapManEx (in addition to ad hoc interventions by NGOs) is the conditional grant allocated to the DWO. This annual grant allows for the rehabilitation of approximately 15 shallow wells per year, significantly below the total requirements

23 Results are shown as a percentage for CBMS and a number out of 4 for UWS-managed schemes to avoid misleading comparisons between the two SDMs (the same logic applies to the rest of the tables).

24 All US$ equivalents are based on October 2023 exchange rates.

for point water source rehabilitation in the district.[25] Critically, this CapManEx is principally for hardware interventions, with little additional funding available for supporting WSCs. For example, although both the DWO and Aquaya reported that the district is keen to expand the VSLA model and establish VSLAs alongside every rehabilitated water point, this is seen as unfeasible as there is no allocation in district budgets.

Public utility: MW-UWS managed facilities

All MW-UWS schemes in Kabarole have a cost recovery ratio of more than 100%. Financial data[26] for FY 2021-22 (**Table 4**) shows that the three[27] MW-UWS schemes in Kabarole are in a healthy financial position. They are able to charge a tariff that meets or exceeds the cost of production, and total scheme-specific operating costs are more than met by total income despite high levels of non-revenue water (NRW) across all three schemes. Preliminary quarterly data for FY2022-23 shows a similarly strong picture, with improvements across the majority of indicators.

At an aggregated utility level, the MW-UWS performs similarly strongly in terms of operational financial viability. Financial data for the last three financial years (MWE-WURD, 2023) show that the MW-UWS has consistently been able to achieve an operational cost coverage ratio of 80-90% (see Figure 14). Although still reliant on funding from the central government for recurrent and capital expenditure (only 31% of total revenue came from collections in FY 2021-22), this clearly illustrates that the utility is potentially financially self-sustaining. This financial performance has been driven by a significant increase in sales volumes, from UGX40 million in 2017 to UGX 250 million (US$ 10,600 to US$ 66,100) in 2022.

The MW-UWS is able to finance some capital maintenance, but this is insufficient to meet the need to replace and rehabilitate infrastructure in Kabarole. In 2021-22, the MW-UWS was able to undertake UGX 7.3 billion (US$ 1.9 million) of CapManEx, but there is no breakdown of which schemes or specific interventions this expenditure covered. Separately, the MW- UWS quarterly reports detail specific Capital Development Projects, which include a mixture of CapManEx and CapEx. However, there are significant CapEx and CapManEx needs across the umbrella schemes, largely as a result of the age of infrastructure and poor maintenance practices before schemes were taken over by the MW-UWS. The condition of the infrastructure in the Kabarole schemes was highlighted as particularly poor by MW-UWS management, but in FY2021-22, there was no capital development project in Kabarole, while in FY2022-23, the only capital development project was installing metering in Kicwamba.

The MW-UWs schemes perform strongly on the indicators for adoption of improved financial practices, but challenges remain in ensuring effective financial management. Of the four MW-UWS in Kabarole, all three fully operational schemes met all the indicators for financial management practices (table 8). Only in Kicwamba, where there are ongoing local challenges with the MW-UWS taking full control of the scheme, were these indicators not met. The MW-UWS has, with support from WSUP Advisory, made significant progress in adopting good accounting practices, including audited accounts and a new accounting system. In addition, there is quarterly reporting to the MWE of key financial metrics as part of the performance contract. There are ongoing challenges to fully utilizing these systems; for example, it is not always possible to extract data from UPMIS in a format useful for analysis, and there are inconsistencies in the financial data provided by different sources. For example, the quarterly reports, annual utilities regulation reports, and UPMIS include inconsistent data for the same indicators.

25 The draft 2022 Kabarole Service Level Report identified 349 water points for potential rehabilitation.

26 Financial data for Kabarole Schemes is taken from UPMIS reports provided by the MW-UWS

27 Data for Kichwamba is not available for this year as it had not been fully taken over by the MW-UWS.

Table 4: Financial viability of the MW-UWS per year (FY2019/20 – 2021/22)

	O&M cost recovery ratio	Total operating cost/ connection (UGX)	Operating cost of water produced (UGX/m3)	Average billed Tariff (UGX/m3)	NRW
Kasenda	231 %	80,000	1,260	2,997	36 %
Rweihamba	106 %	158,000	2,645	3,103	57 %
Rweteera	108 %	170,000	3,006	2,988	19 %

Figure 14: Financial viability of the MW-UWS per year (FY2019/20 – 2021/22)

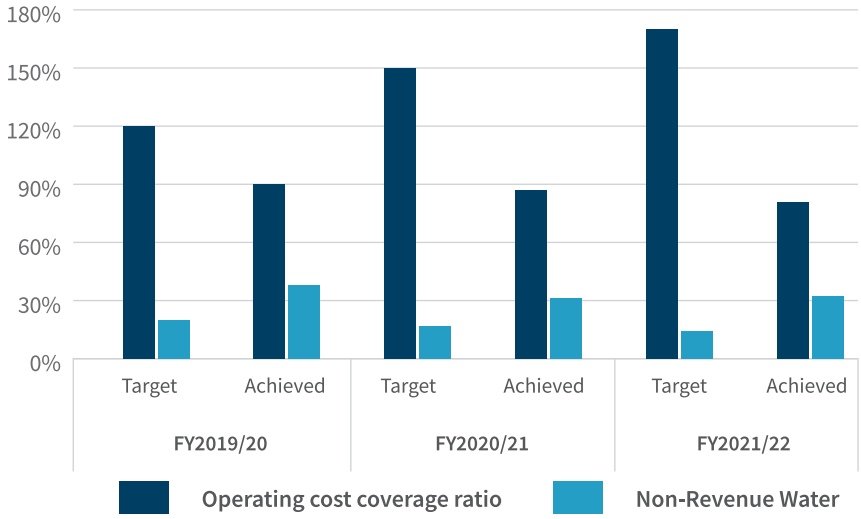


Table 5: Adoption of financial management practices per SDM

	Water facilities with appropriate and revised tariff	Water facilities with an agreed annual budget	Water facilities with compiled financial reports
WSC DIRECT PROVISION	0%	0%	38%
UWS DIRECT PROVISION	3/4	3/4	3/4

4.3.3. Are Technical Functions Performed by Service Providers?

CBMS: WSC-managed facilities

Most WSCs do not conduct any regular O&M functions for the water facilities. None of the WSC have O&M plans (documented or not), and only two WSC (one active WSC and one WSC with a VLSA) report having undertaken expected maintenance of the water facility. However, this is limited to checking leakages, cleaning, and clearing grass around the facility, with less evidence of technical interventions to the water point, such as replacing seals or bearings where needed. Most of the facilities were in a poorly maintained state at the time of inspection, with no evidence of even basic cleaning or maintenance. Beyond the direct role of the WSCs, there is a lack of technicians and funds available within communities and the district more broadly to perform repairs. Only 25% of WUCs reported being able to undertake repairs, when necessary, on a case-by-case basis. In most of these cases, the village leader would pay a mechanic to conduct the repair, or a community member with some technical skills would volunteer to support the WSC technically. None of the WSCs had water safety plans or undertook any steps to ensure water quality, with sporadic household water treatment (boiling) taking place in some communities.

Public utility: MW-UWS managed facilities

Operation and maintenance activities are increasingly being performed at the MW-UWS scheme level but are constrained by a lack of resources. Half of the schemes managed by the MW-UWS in Kabarole have a formally documented O&M plan and undertake activities in line with these plans, and all schemes reported undertaking expected maintenance of key infrastructure[28] in the last year. When repairs are needed, they are typically carried out by a technician or plumber employed by the MW-UWS within one to seven days. Staff members reported being equipped with the right tools, but the performance of technical functions remains challenged by the lack of vehicles, fuel, and poor availability of spare parts in the local area.

Water quality treatment remains inconsistent for MW-UWS schemes. Only one of the four MW-UWS schemes in Kabarole has a water safety plan, which is not yet implemented in practice, and key functions to ensure water quality are not being performed. Two of the schemes reported chlorinating the water, but scheme managers reported struggling to get the correct chlorine dosage because of the changes in the flow and the variation in water quality across the scheme. Utility performance data for the MW-UWS shows that for FY2021-22, there was 93.8% compliance with water quality across the entire utility. However, scheme-level data for the Kabarole schemes shows that only one scheme (Kasenda) had reported microbiological[29] tests in the 12 months to March 2023, with only 75% of these tests complying with standards.

4.3.4. Are Water Resources Effectively Managed?

CBMS: WSC-managed facilities

Only the most rudimentary water resource management measures are in place for CBMS water supplies. Only two WSCs (both with VSLAs) have put in place basic source protection measures, such as constructing a drainage channel fence around the facility and ensuring that the water source is away from latrines and animals. While WSCs would not be expected to monitor abstraction from water sources, there is no regular monitoring of source yields nor the overall status of water resources by any other body.

28 Checking of leakages (daily or ad hoc), maintenance of electromechanical equipment and storage tanks every three months, and pipeline checking on an ad hoc basis.

29 There were no reported physio-chemical tests carried out.

Table 6: Adoption of technical management practices per SDM

	Water facilities where service providers are performing functions to ensure water quality	Service providers with evidence that O&M is carried out according to plan	Service providers which have undertaken expected maintenance of key infrastructure in the last year
WSC DIRECT PROVISION	0%	0%	11%
UWS DIRECT PROVISION	0/4	2/4	4/4

Table 7: Water resource management practices

	Service providers with information on water resource availability for all water sources	Service providers that monitor and report water abstraction from all water sources	Service providers with documented measures for protecting water resources
WSC DIRECT PROVISION	0%	0%	11%
UWS DIRECT PROVISION	0/4	0/4	2/4

Table 8: Accountability of service providers per SDM

	Service providers with formal mechanisms for involving users in decision-making	Service providers with effective complaint-handling mechanisms in place	Service providers sharing performance data with users
WSC DIRECT PROVISION	38%	5%	16%
UWS DIRECT PROVISION	0/4	0/4	3/4

Public utility: MW-UWS managed facilities

Water resource management at the scheme level is constrained by the lack of information and the absence of plans and documents to implement measures. Increasing urbanization and population growth means encroachment onto water resources (particularly surface water resources) is an increasing challenge. However, while the MW-UWS uses the source protection guidelines developed by the MWE, they have not yet been operationalized at the scheme level. Basic measures against encroachment protection have been put in place at only two of the four MW-UWS schemes in Kabarole. The volume of water produced by each scheme is monitored daily and reported through UPMIS, but there is no monitoring of the volume of raw water abstracted and how this compares to available resources.

4.3.5. Are Service Providers Accountable?

CBMS: WSC-managed facilities

Under the CBMS model, the absence of formal management structures means that there are limited accountability measures in place. The involvement of users in decision-making varies across communities. Only 38% of WSCs reported having community meetings and ensuring open communication, frequently facilitated by the village leaders to include users. Only one WSC (which includes a VSLA) appears to be addressing complaints directly and effectively. For all other water points, issues are addressed on a case-by-case basis by the person overseeing the facility, who may be a self-appointed caretaker with no broader accountability. Only three WSCs (of which two included a VSLA) reported sharing financial and/or technical performance data with users, particularly regarding revenues and fees, water quality, functionality, and reliability. The others only share performance data when there is a breakdown or when there is a need to collect money to repair the facility.

Public utility: MW-UWS-managed facilities

Under the public utility model, there are basic accountability measures in place, but these need to be further developed. There is a simple complaints mechanism in place for consumers of the MW-UWS, but there is not yet a formal body representing users. The utility has a toll-free line that customers can use to report complaints, which they are promoting to boost communication. At the umbrella level, it is reported that the average time taken to resolve technical or commercial complaints is between one and a half and three and a half days. However, a lack of staff and resources is impeding the capacity to address complaints, and there is not yet a dedicated system or solution for capturing, analyzing, and handling customer complaints to understand overall customer satisfaction. The MW-UWS is transparent in sharing data with users. The MWE utility performance reports contain key performance and financial information and are publicly available on UPMIS[30] and in the annual Natural Resources, Environment, Climate Change, Lands and Water Management Programme Performance Report.[31] In addition, the schemes share financial and technical performance data[32] with users for three out of the four schemes in Kabarole.

One potential gap in accountability is between the MW-UWS and local political and administrative authorities. Water Boards in gazetted towns have a mandate to oversee public utilities at the district level but are not currently actively holding the MW-UWS accountable. The ongoing dispute in Kichwamba over the MW-UWS taking over the management of the water supply illustrates the challenges posed by the perceived (or real) lack of accountability of the MW-UWS to local leaders, including technocrats and politicians.

30 See https://upmis.geocodis.com/

31 See https://www.mwe.go.ug/library/sector-performance-reports

32 Hours of supply, functionality, maintenance performed, and tariffs.

5. Conclusion

The most significant interventions (by funding) of the Conrad N. Hilton Foundation have contributed to strengthening aspects of the Kabarole district WASH system and building the capacity of the MW-UWS. Funding support has been key in developing political leadership and institutional strength for WASH in Kabarole and helping the MW-UWS establish a viable path toward becoming a high-functioning public utility. Other interventions have contributed to more specific aspects of the WASH system, including awareness around water quality issues, and community financing for WASH and WASH in HCF, though typically on a smaller scale. There are a small number of interventions that have only very limited relevance to the critical challenges of improving rural drinking water services.

The Conrad N. Hilton Foundation's extensive support to Kabarole has supported district-level change but has not led to a wider impact beyond this level nor addressed broader systemic weaknesses. While the district holds critical responsibilities for rural water services, working at the district level alone provides an insufficient scale to support broader change in the rural water sector. The trajectory of the rural water sector in Uganda, with the creation of regional Umbrella Authorities and the increased role of Rural Water and Sanitation Regional Centres (RWSRCs), provides a clear opportunity for increased interventions at a regional level, supporting the delivery of safe water services across multiple districts. To date, except for the support to MW-UWS, interventions have not fully engaged at the regional level: a natural consequence of the SWI strategy to focus on the district as the unit of scale. In addition, there is a risk that the intensive focus on Kabarole sets a precedent, in terms of depth and breadth of support, that cannot be scaled up across multiple districts. Any shift in emphasis to address more systemic issues would require a different strategy and mandate for grantees and potentially new grantees with different skill sets to engage more effectively at regional and national levels.

The effectiveness and sustainability of the two SDMs supported by the Conrad N. Hilton Foundation in Kabarole district is a case study in contrasts. The MW-UWS public utility is, with direct and intensive support from grantees, making strong progress toward being a high-performing utility. By contrast, the CBMS model, which has been supported indirectly through work to strengthen the district WASH system, remains a chronically under-resourced and poorly implemented SDM, with most water points lacking a functional or legally constituted service provider.

Investments in the institutional capacity of the MW-UWS have helped create a stronger utility. Although substantial efforts are still required before it can deliver consistently high-quality services, progress, to date, demonstrates that further support and investment in this SDM is justified and likely to be effective. The investment in the institutional capacity of the MW-UWS has clearly contributed to improved systems, processes, and leadership, and, as a result, this SDM is in a better position to provide sustainable services. Despite this improved institutional capacity, there are still constraints in providing high-quality services, particularly in the ongoing technical management of individual schemes and the quality of the

infrastructure. The availability of funds for CapManEx is a significant bottleneck to improving infrastructure. The desire of MW-UWS to improve its institutional capacity strongly suggests that additional support to this SDM is justified and highly relevant to the challenges of delivering safe drinking water. Beyond the Mid-Western region, the enthusiasm of the MWE to replicate the type of support provided by WSUP Advisory more widely and scale up some key management improvements made by the MW-UWS presents an opportunity for this investment to lead to much greater impact at a national scale.

Community-managed water supplies in Kabarole display many of the same weaknesses that would be expected across Uganda, including in districts that have not benefitted from the same levels or duration of support for systems strengthening. While this review highlights weaknesses in the effectiveness and sustainability of this SDM, in truth, there is no functional 'model' for CBMS until the CBMS+ model is fully established. WSCs are still chronically informal or nonexistent, there is a lack of clarity over key institutional functions, and there is little or no budgeting for ongoing O&M, capital maintenance, or support from Districts. The only cases where there was some evidence of a more viable service delivery model was where a VSLA had been established with direct support from Conrad N. Hilton Foundation grantees. Beyond this small number of VSLAs, the challenges facing WSC and the levels of service provided to communities correspond with what would be expected of this model across Uganda.

Beyond support for system strengthening at the district level, there has been a gap in supporting the establishment and development of viable rural water service providers for point water sources. The Conrad N. Hilton Foundation has indirectly supported the CBMS model through strengthening the district WASH system and national engagement and policy development. However, there has been less focus on direct support for professional service providers for point water sources. Although the CBMS+ approach will see the introduction of ASPs, there are considerable challenges to operationalizing this model both in technical and administrative terms. The former includes identifying entities that are able and willing to take on the ASP role at a scale where profitability is not guaranteed. The latter is as much a political process to establish Sub-County and District Water Boards and secure long-term financing, enabling them to effectively contract ASPs and monitor service provision for accountability purposes. The experience of MW-UWS illustrates the value of working directly to support a service provider and demonstrates how sector reforms can be put into practice as a principle.

The impact of support to service providers and the WASH system is, or will be, constrained by the age and continuing poor quality of water supply infrastructure. As service providers professionalize and move towards more sustainable service delivery, the quality of physical infrastructure is likely to become a key bottleneck to delivering high-quality services. The portfolio in Uganda has contained relatively little support for new infrastructure or remedial actions for existing infrastructure. The Conrad N. Hilton Foundation has not made a strategic effort to leverage external funding from other stakeholders for investment in new infrastructure under SDMs that it is actively supporting in Uganda.

The portfolio of grants in Uganda does not fully maximize its potential to support safe water services due to a lack of collective action between grantees and the existence of interventions that are less relevant to the challenges of providing drinking water services at local and national levels. The Conrad N. Hilton Foundation did not sufficiently define or articulate the role of the 'hub' and has not consistently facilitated collaboration between grantees. As a result, the hub role has not worked effectively in practice, and the

portfolio in Uganda is essentially a collection of separate grants, with minimal collaboration or coordination between grantees. While this portfolio includes highly relevant interventions, the lack of collective action means that the Conrad N. Hilton Foundation cannot leverage its position as a relatively large WASH donor in Uganda to influence and support wider change. The funding of interventions, which have only tangential, if any, relevance to supporting the core SDMs for rural water supply, also dilutes the potential to contribute to strategic change.

Several opportunities exist to evolve the portfolio in Uganda to address the challenges identified in the portfolio review and build on the successes achieved to date. Looking forward, key priorities for the Conrad N. Hilton Foundation portfolio in Uganda include:

- **Supporting the implementation of the CBMS+ SDM**, with a focus on the development of entities that can take on the ASP role at scale, and helping to demonstrate how the institutional and governance requirements of the framework can be realized in practice.
- **Continuing to support the development and operationalization of the Umbrella Authority SDM.** This should include continued support for the capacity development of the MW-UWS but with an increased focus on engaging at a national level to address bottlenecks extending beyond the mid-Western region and to support change at a national scale. Where the Conrad N. Hilton Foundation is expanding to new districts and regions, consideration should be given to how to support the relevant Umbrella Authority, although care will be needed to avoid overlap and duplication with other government and donor-funded initiatives.
- **Expanding the focus of the portfolio in Uganda beyond the single district scale.** This should not only include working in additional individual districts but also supporting actors who can influence change on a wider, regional scale. This includes the MW-UWS (as above) but also leveraging the expanded mandate of the RWSRCs.
- **Supporting improved coordination and collaboration between grantees.** At a minimum, this must include improving the information shared about Conrad N. Hilton Foundation-funded interventions to enable grantees to identify collaboration opportunities. In addition, the Conrad N. Hilton Foundation should be more explicit about its objectives for collective action and how proactive a role it wishes to play vis-a-vis grantees.
- **Focusing on interventions implemented by organizations that have, or are committed to developing, long-term relationships with the relevant district, regional, and national actors.**
- **Funding strategic improvements to infrastructure or using Conrad N. Hilton Foundation funding to leverage large-scale investments in infrastructure by other funders**, including the development banks and larger bilateral donors.
- **Develop country-level strategy for the SWI in Uganda**, in collaboration with grantees and local and national stakeholders, to provide clarity on its role and added value in supporting rural water services in Uganda and the design of relevant interventions.

Annex 1: Review Matrix

CRITERIA	CODE	REVIEW QUESTION	SUB-QUESTION
RELEVANCE	R.1.1	Are interventions strengthening key district-wide gaps?	What are the key strengths and gaps of the district-wide WASH system?
			Are interventions in each target district designed to address these gaps?
	R.1.2	Are interventions designed and managed by the principles of collective action?	Are interventions in the target districts based on an assessment of the WASH system?
			Are interventions coordinated/designed under the leadership of the district?
			To what extent is the support provided to the service delivery models complementary to other Conrad N. Hilton Foundation (CNHF) grants in the district and the support of other development partners where relevant?
			Are interventions aligned to the trajectory of the rural water supply sub-sector?
	R.1. 3	What stage of replication are the interventions currently at?	Have grantees mobilized external funding to replicate interventions in other districts or countries?
			Have local or national governments anchored interventions in their systems (vision, policy, funding) and mobilized funding to replicate in other districts?
			What are the barriers to replication and external funding leveraging?
EFFECTIVENESS	E.2.1	How do water facilities perform in terms of service delivery?	To what extent are water facilities functional?

Annex 1: Review Matrix

CRITERIA	CODE	REVIEW QUESTION	SUB-QUESTION
EFFECTIVENESS	E.2.1	How do water facilities perform in terms of service delivery?	To what extent does the water facility meet the national criteria for continuity, reliability, and seasonality?
			To what extent do water facilities provide water services that meet safe water quality standards and targets?
			To what extent do water facilities meet accessibility criteria?
			To what extent are water facilities accessible to disabled users?
			To what extent are water services affordable to users?
			To what extent are water facilities serving vulnerable groups?
SUSTAINABILITY	S.3.1	Are the service delivery models financially viable?	To what extent are service providers performing key financial management practices?
			To what extent are the service delivery models able to cover operational expenditure (OpEx)?
			To what extent are service delivery models able to cover capital maintenance expenditure (CapManEx)?
			What are the key barriers to reaching the financial viability of service delivery models?
	S.3.2	Are key technical functions performed for the water supply facilities across SDMs?	To what extent are operations, minor, and major maintenance activities regularly carried out?
			To what extent is water being treated and its quality monitored routinely?
			What are the key barriers to ensuring the proper technical management of service delivery models?

Annex 1: Review Matrix

CRITERIA	CODE	REVIEW QUESTION	SUB-QUESTION
SUSTAINABILITY	S. 3.3	What is the level of institutional capacity across the service delivery models?	To what extent are service authorities and service providers equipped with the relevant technical and financial skills?
			To what extent does the service authority provide regular technical support to service providers?
			To what extent does the service authority monitor the performance of the service provider?
			To what extent are resources (vehicles, cash, personnel, time, etc.) available to fulfill key functions at the service provider and service authority levels?
			To what extent are key governance requirements (i.e., leadership, committed workforce) met at the service provider and service authority levels?
			To what extent are appropriate regulatory measures in place, adhered to, and enforced?
			What are the barriers to strengthening the institutional capacity of service delivery models?
	S.3.4	How are water resources managed across the service delivery models?	To what extent are appropriate measures adopted to protect water resources?
			What are the barriers to managing water resources adequately?
	S.3.5	To what extent are service providers accountable?	To what extent are users represented in the decision-making structures of the service provider?
			To what extent are service providers accountable to users and local and national governments?

Annex 2: Reviewed Portfolio – Uganda

Grant Number	Grantee
17284	Aquaya Institute
27064	Aquaya Institute
25056	Envicom Corporation
24917	Global Water Challenge
17393	IRC International Water and Sanitation Centre
25509	IRC International Water and Sanitation Centre
26631	IRC International Water and Sanitation Centre
26628	Jibu, L3C
18205	PATH
18205	PATH
28459	Sanitation and Water for All
26913	Uptime Catalyst Facility
18207	WSUP Advisory CIC
26634	Water.org Inc.
28123	WaterAid America, Inc. WAA
25733	WSUP Advisory CIC
25733	WSUP Advisory CIC
27062	WSUP Advisory CIC

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Conrad N. Hilton Foundation: Safe Water Initiative

The Conrad N. Hilton Foundation's Safe Water Initiative, using the district as a unit of scale, focuses on system-strengthening and service delivery to ensure reliable, affordable, and safely managed water to 1 million people in low-income households, health facilities, and schools in sub-Saharan Africa. The Safe Water Initiative contributes to building local capacity, narrowing gaps between those living in disadvantage and others, and generating evidence to inform regional, national, and global actors—with the end goal of improved health and socioeconomic outcomes for all.

Learn more about the Hilton Foundation's Safe Water Initiative