



Sustainable WASH Systems Learning Partnership

Context Analysis Uganda



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Learning Partnership
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1. Introduction and background to the SWS

Sustainable service delivery remains a huge challenge in the Water, Sanitation, and Hygiene (WASH) Sector. Achieving sustainable WASH, as defined by USAID, is when country partners and communities take ownership of the service, and there are local systems to deliver inputs needed to maintain results and deliver impacts beyond the life of projects (USAID; 2013). In order to achieve this goal at scale, new approaches to WASH service delivery and sustainability are needed. The multi-year Sustainable WASH Systems Initiative (SWS) aims to develop, test, and document high potential approaches to engaging local WASH systems across multiple countries and contexts to advance sector knowledge in the development, application and scaling up of local systems in WASH while also providing concrete improvements to service delivery within the countries, districts and cities involved. To achieve the goal, the Partnership will work to:

- Improve decentralized WASH service delivery by understanding and influencing local systems;
- Develop a locally-led infrastructure to coordinate WASH sector (particularly donor financed) activities in the implementation of national strategies and action plans; and
- Test, revise, and scale up public-private partnership models that improve WASH service delivery.

In Uganda, the SWS partnership seeks to develop and test a structured and replicable approach to understanding, engaging with, and strengthening district (rural) and small-town level systems for water and sanitation service delivery. The initiatives will build on existing coordination platforms and bring together all critical stakeholders, especially local government, to improve understanding and find systems-level solutions to overcome service delivery constraints.

Together, these activities are expected to lead to a stronger system that better engages networks of local actors for rural water and small town sanitation service delivery, resulting in better coordinated investment, improved uptake of good practices, and sustained service delivery. Ultimately, this will lead to improved health and development outcomes for communities involved in the pilot locations. While the main goal of the initiative is to help improve USAID WASH programming, once results are made available, these are also expected to catalyze national and international uptake of the different approaches tested.

The initiative consists of a global learning component and four concept teams applying systems approaches in different countries, namely Cambodia, Ethiopia, Kenya and Uganda. This document presents the context analysis for the Concept 1 team working in Uganda, comprising of IRC (Netherlands), Tetra Tech (USA) technical support from Aguaconsult (UK). The purpose of the context analysis is to provide a summary overview of the current situation in Uganda and a background on Kabarole, the selected district for the initiative's interventions. The context analysis is one of the inputs for the design and start-up of the SWS Learning Partnership in the country. The document is organized as follows:

- The next section presents the broader national context within which the WASH sector operates (i.e. administrative and governance issues, decentralization, aid dependency etc.);
- Section 3 presents an overview of the institutional landscape for urban and rural WASH service delivery and highlights the current status of important dimensions such as financing, monitoring and regulation;
- Section 4 concludes by assessing experiences to date with adopting systems approaches in the country, including for WASH, the role of USAID in the sector and how its new country strategy embraces systems-based approaches and closes with a brief analysis of the implications and most salient opportunities and challenges facing the start-up of the SWS initiative in the country.

2. National context

2.1 Socio-economic context

Uganda has a population of 41.49 million¹ and has one of the world's youngest populations, half of them under the age of 15 years, 84% of whom live in rural areas, but urban growth rates are currently 5.35%. Although only around 17% of Ugandans live in cities at present, Uganda's urban growth rate suggests a tripling of its urban population by 20252. The fertility rate is estimated at 5.7 children per woman (2015), with a 3.3% population growth which is forecasted to remain high in the next decades, meaning a high dependency ratio with significant consequences for national development. This growth will add a significant pressure on an already very densely populated country with an average of 155.6 inhabitants/km². The population is concentrated on the shores of Lake Victoria, Albert, Edward and George. Economic reforms since 1990 have resulted in strong economic growth based on Uganda's focus on investment in infrastructure and better domestic security. Gross Domestic Product (GNP) per capita in Uganda was last recorded at USD 672.81 in 2015 (translating into a GDP per capita of USD 1,738.46), (World Bank; 2015; World Bank, 2017).

Uganda surpassed the Millennium Development Goals (MDGs) target on halving poverty by 2015, but remains one of the world's poorest countries, with a per capita annual income of just over USD 700 in 2015, with almost a quarter of the population living on less than USD 1.25 a day³. Poverty reduction has mainly been driven by agriculture, urbanization, and education. Despite progress, poverty and vulnerability remain in the northern and eastern regions, which account for 84% of those living beneath the national poverty line. The poorest households have less diversified sources of income and are more reliant on agriculture; 75% of income of the bottom 40% of households comes from this source. For every three Ugandans who get out of poverty, two fall back into poverty, demonstrating the fragile gains in the country's poverty success (World Bank 2016).

Uganda now hosts over 1 million South Sudanese refugees, according to the UN Refugee Agency (2017). This is putting a strain on host communities, with local government authorities and agencies unable to cope or provide basic and essential services.

Table 1: Key country statistics: Uganda

Indicator	Value
Total population (World Bank, 2017)	41.49 million
Rural population (% of the total, JMP 2015)	83.89%
Urbanization rate (% , 2015) (World Bank, 2015)	3.5%
GNI/capita atlas method in USD (World Bank, 2015)	1,738.46
Income status 2015 (World Bank, 2015)	Low income
Net ODA received (% of central government expense) (World Bank, 2014)	48.28%
Net ODA received (% of GNI) (World Bank, 2014)	6.014%
Rural Poverty Headcount Ratio (% of rural population) (World Bank, 2012)	22.4%
2016 HDI score and ranking (/188 countries) (UNDP, 2015)	0.483 / 163
Ease of Doing Business Ranking (World Bank 2016)	115

2.2 Administrative set-up

The country has one of the longest experiences with decentralization in Africa and started pursuing major decentralization reforms from the late 1980s onwards when a highly-centralized state gradually turned into a decentralized one following the transfer of powers, functions and services from central government to local governments. The Local Government Act (1997) specifies decentralized functions and services for central government, District Councils, Urban Councils and those to be devolved by the District Council to lower government councils. Line ministries are to provide technical advice, financial, coordination and other support, supervision and training in their respective sectors to local governments (LGA, 1997). Districts in Uganda are empowered by the Local Government Act to deliver services to communities. Since the Fiscal Decentralization Strategy (FDS) was developed, budgets are

¹ <https://data.worldbank.org/country/uganda>

² World Bank. 2013. Improving service delivery in Uganda's secondary cities. Cities alliance in action. Washington DC; World Bank. <http://documents.worldbank.org/curated/en/2013/01/18203683/improving-service-delivery-ugandas-secondary-cities>

³ <http://data.worldbank.org/indicator/SI.POV.DDAY>

managed at district level through a number of different inter-governmental transfer mechanisms. Currently, Uganda is comprised of the following administrative units:

- Four main administrative regions - central, western, eastern, and northern.
- Over 16 sub-regions including Acholi, Ankole, Buganda, Bugisu, Bukedi, Bunyoro, Busoga, Elgon, Karamoja, Kigezi, Lango, Rwenzori, Sebei, Teso, Toro, and West Nile.
- 111 districts which are the main units of decentralization, which are further divided into counties (146), sub-counties, parishes and villages;
- One capital city council (Kampala); and
- 13 municipalities.

In parallel with the state administration, five traditional Bantu kingdoms have some degree of mainly cultural autonomy. These kingdoms are Toro, Busoga, Bunyoro, Buganda, and Rwenzururu.

The Uganda Bureau of Statistics defines urban areas as cities, municipalities and towns with a population over 2,000 persons; all other areas can be considered as being rural. Uganda has an urban population of 9.43 million living in the capital city, 41 municipalities, and 256 small towns (MWE 2017).

2.3 National development frameworks

In 2007, government approved the Vision 2040, a Comprehensive National Development Planning Framework policy (CNDPF) which provides for the development of a 30-year vision to be implemented through: three 10-year plans; six 5-year National Development Plans (NDPs); Sector Investment Plans (SIPs); Local Government Development Plans (LGDPs), annual work plans and budgets. The National Vision Statement is "A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years". Vision 2040 builds on recent progress, but with a focus on strengthening the fundamentals of the economy to harness the abundant opportunities including; oil and gas, tourism, minerals, ICT business, abundant labor force, geographical location and trade, water resources, industrialization and agriculture among others that are to date considerably under-exploited.

The country is currently in the second phase of a series of six 5-year plans aimed at achieving the Uganda Vision 2040. The goal of the current National Development Plan II (2015/16 – 2019/2020) is to put the country on the path towards middle income status by 2020 through strengthening the country's competitiveness for sustainable wealth creation, employment and inclusive growth, with a focus on; agriculture, tourism, minerals, oil and gas, infrastructure development and human capital development. With ambitious public sector reforms introduced the past two decades, the last three years have seen an improvement in government effectiveness. At the same time, voice and accountability, which improved between 2003 and 2008, have declined⁴. The policy and legal frameworks continue to improve, notably through the Public Financial Management Act (2015), albeit implementation gaps in key areas of procurement and anti-corruption remain⁵. The country strategies, guidelines and programs are generally sound, but there are weaknesses in applying sanctions, and public service effectiveness constrains implementation and service delivery.

2.4 Public financing and the role of aid

Uganda's economy has remained relatively resilient amidst a volatile global environment. According to the 2016/17 Economic Performance Report, the total national economic output expanded by 4.6%, 0.4% lower than the expected 5.0% growth target. Services grew to 6.6% from 4.5% in 2015/16. The import bill for the period ending March 2016 was USD 4,618 million compared to USD 5,095 million a year before. Domestic revenue was USD 3,313 million (Shs. 11,598 billion) equivalent to 13.2% of GDP and higher than the planned target of USD 3,238 million (Shs. 11,333 billion). The water and environment sector is slated to receive 3.1% of the public budget in 2017/18 (see section 3.5 below).

The fiscal deficit was estimated at 6.4% of GDP in FY 2015/16 and was largely financed by external borrowing both concessional and non-concessional, and to a lesser extent by domestic borrowing equivalent to 1.6% of GDP. Given financing requirements for infrastructure development coupled with limited availability of concessional loans, non-concessional borrowing, the gross nominal public debt was estimated at Shs. 29,984 billion (USD 8, 566 million) by 30th of June 2016, out of which Shs. 18,665.7 billion was external debt (equivalent to USD 5,382.9 million)

⁴ <http://www.worldbank.org/en/country/uganda/overview> viewed 10th October 2017

⁵ Ibid

and Shs. 11,319 billion (USD 3,234 million) was domestic debt.

A significant reduction in direct budget support is expected in the next two years. According to a recent analysis of the national budget by the Civil Society Budget Advocacy Group the medium-term expenditure framework for financial years 2017/18, the Government of Uganda plans to spend UGX 23.446 trillion (USD 6,704 billion) but can only raise 15.933 trillion (USD 4,553 billion), or only around 68% of the required funding. The resulting UGX 7.513 trillion (USD 2.146 billion) budget deficit will be financed through domestic borrowing (UGX 1.477 trillion (USD 422 billion)), up from UGX 677 billion (USD 193.428 million) in FY 2016/17) and external borrowing UGX 6.036 billion (USD 1.724 million). What is more significant for social investment is that budget support from development partners is expected to drop off drastically in the coming year, which will have an enormous impact on social sectors which cannot generate returns on loan investments. The sudden drop off in funding is primarily because most development partners are not willing to continue with a joint funding mechanism due to the weakness of the institutions in terms of accountability, consumption rates, quality assurance, though they would like to support a joint program to address sector issues⁶.

2.5 Physical environment and water resources

Uganda is a landlocked country bordered by Kenya in the east, Tanzania and Rwanda in the south, the Democratic Republic of Congo in the west and South Sudan in the north. It covers a total area of 241,038 sq. km, (land: 197,100 sq. km and water: 43,938 sq. km). Uganda has a tropical climate, with temperatures ranging from 21-25°C, apart from the mountainous areas, which are much cooler; the top of Mount Rwenzori is often covered with snow.

Uganda's water resources are quite abundant with a mean annual rainfall of around 1,200 mm, the River Nile with a flow exceeding 25 km³ per year, and large combined active storage capacity in Lakes Victoria, Albert, Edward, and Kyoga. Most regions of Uganda, apart from the dry area in the north, have an annual rainfall of between 1,000 mm and 2,000 mm. There is heavy rain between March and May and between October and November. The present demand for water in rural and urban areas is around 21 and 47 litres per head per day, respectively, but it is expected to rise to 22 and 58 liters by 2030 according to the National Water Resources Assessment report 2013. The report suggests that by 2030 the demand for domestic water in rural areas and small towns can safely be met. Despite these projections, other reports suggest that population growth and contamination threaten water resources despite the natural abundance. Overall, there are increasing perceptions that water resources must be protected but it has not emerged as a priority issue in the sector.

2.6 Political context

The Republic of Uganda has a presidential system of government with one parliamentary body (unicameral) which acts as the main legislative mechanism. Although the country is formally based on a democratic system of governance, it has been led by the same party and president (Museveni), who came to power in 1986. The first multiparty general elections (following the coming into power of President Yoweri Museveni in 1986) were held in 2006, and were won by the National Resistance Movement (NRM) with the Forum for Democratic Change (FDC) emerging as the major challengers. NRM still remains the leading political party, enjoying the benefit of over 20 years in power.

Over the last few years, and in particular with the ending of the war in northern Uganda against the Lord's Resistance Army (in 2008), Uganda has attained a degree of stability and security not previously seen in its post-independence period. The risk of renewed widespread armed rebellion or insurgency is considered unlikely, although the ADF-NALU group operating in eastern DR Congo remain a threat in western Uganda.

Uganda is a largely democratic country with regular elections held from the lowest village to the presidential levels. The fairness of this process, human rights violation and meaningful citizen engagement have been questioned by the opposition and other observers. They point to traces of dominance and possible manipulation by the ruling party. However, courts of law have held their position that such irregularities could not substantially affect the overall results.

Despite the relative stability and Uganda becoming a multi-party state, many would argue that political space, tolerance of dissent and freedom of expression have reduced in recent years. Certainly, political space has become more contested both between the ruling party and opposition and within the ruling party itself where issues related to the presidential succession have become a key point of tension. The overall impact of the above over the medium term is likely to be the stagnation of political processes and policy reforms and the contestation of political power both between and within political groupings will in itself probably become the major focus of political activity for a period of time. As a result, both government and other political groups may be expected to spend increasingly less time and resources on issues related to the tackling of poverty and vulnerability and far more energy on short-term

⁶ Water and Sanitation Development Partners' remarks at the April 2017 Joint Technical Review in Mbale district

measures intended to gain the support of or control over key constituencies and groups. Periods of tension and civil unrest are increasingly likely in major urban areas particularly around electoral processes or events.

3. WASH sector analysis

The Ministry of Water and Environment is responsible for ensuring availability and access to safe and clean water and hygienic sanitation facilities in rural and urban areas, as well as delivering viable sewerage/sanitation systems for domestic, industrial and commercial use. The sector is composed of various state and non-state actors. The sector working group fosters joint resource mobilization, planning and budgeting, harmonization coupled with playing an advisory role.

3.1 Legislative, policy and strategy frameworks

Within the overall framework of the Constitution of Uganda (1995), the policy framework for the management and development of water resources in Uganda is governed by a set of policies and laws, the most notable of which include; the Uganda Water Action Plan (1995), the National Water Policy (1999), the National Environmental Management Policy (1994), the Water Statute (1995); the National Water and Sewerage Corporation Statute (1995), the Local Government Act (1997) and more recently the Climate Change Policy (2015).

The National Water Policy promotes an integrated approach to the management of water resources in ways that are sustainable and most beneficial to the country. The approach is based on the continuing recognition of the use of water for domestic and production activities. The other policy documents which complement the above policies are: National Environment Management Policy (1994); the Wetlands Policy (1995), the upcoming Land Use Policy; National Health Policy and Health Sector Strategic Plan (1999); National Environmental Health Policy (2005); the School Health Policy (2006); and the National Gender Policy (1997).

The legal framework⁷ outlines the rights and responsibilities of different stakeholders as well as the basis for water resources management and regulation. These policies also provide the principles of action to be followed in the implementation of activities in the sub-sector while the institutional framework provides details with regard to the roles and responsibilities of key sector players. Though most of the above policies and legislation have been enforced for more than five years, a number of provisions are not yet fully operational, especially at the local government and local community levels. Furthermore, some of the legislation needs to be revised to address the emerging issues in the sector like private sector participation.

To streamline financing for WASH, the Ministry of Water and Environment commissioned the review of the Sector Investment Plan (SIP) as well as a review of the Water Policy and Water Act in 2017. The SIP will establish the investment requirements for universal access to WASH services by 2030 as stipulated in the Sustainable Development Goals. As part of this process, districts will need support (from TSUs) to enable them to develop their respective District Investment Plans for Universal Coverage of WASH services. The plan could then be used as tool to guide coordination and resource allocation at district level.

3.2 Institutional arrangements and frameworks

The Water and Environment sector in Uganda includes government institutions and agencies, civil society organizations, development partners, private sector companies, academic and research institutions. All the actors with the exception of the private sector have entities that promote their interests.

National level

The Water and Environment sector consists of two sub-sectors: the Water Supply & Sanitation (WSS) sub-sector and the Environment & Natural Resources (ENR) sub-sector. The WSS sub-sector comprises water resources management, rural water supply and sanitation, urban water supply and sanitation, and water for production (see [Figure 2](#)).

The Ministry of Water and Environment is the apex sector body and responsible for policy development, planning and coordination; its mission is: "To promote and ensure the rational and sustainable utilization, development and effective management of water and environment resources for socio-economic development of the country". The Ministry also has the overall responsibility for setting national policies and standards, managing and regulating water resources and determining priorities for water development and management. It also monitors and evaluates sector development programs to keep track of their performance, efficiency and effectiveness in service delivery.

⁷ The laws and policies; Water Statute (1995), Local Government Act (1997)

The Ministry has three Directorates that include:

- **The Directorate of Water Development (DWD)** comprises four departments; Rural Water Supply and Sanitation, Urban Water Supply and Sanitation, Water for Production, and Water and Environment Sector Liaison. DWD is responsible for providing overall technical oversight for the planning, implementation and supervision of the delivery of urban and rural water and sanitation services across the country, including water for production, regulation of provision of water supply and sanitation and the provision of capacity development and other support services to local governments, private operators and other service providers.
- **The Directorate of Water Resources Management (DWRM)** comprises four departments: Water Resources Monitoring and Assessments, Water Resources Regulation, Water Quality Management and Transboundary Water Resources Management. DWRM is responsible for managing, monitoring and regulation of water resources through issuing water use, abstraction and wastewater discharge permits.
- **The Directorate of Environmental Affairs (DEA)** comprises four departments: Environmental Support Services (DESS), Forestry Sector Support Department (FSSD), Wetlands Management (WMD) and the Department of Meteorology (DOM). DEA works in collaboration with the National Environmental Management Authority (NEMA) and the National Forestry Authority (NFA). DEA is responsible for environmental policy, regulation, coordination, inspection, supervision and monitoring of the environment and natural resources as well as the restoration of degraded ecosystems and mitigating and adapting to climate change.

A number of deconcentrated support structures related to MWE, at different stages of institutional establishment, exist including ten regional Technical Support Units (TSUs) which play a critical role in providing technical support to district water and sanitation teams; Water Supply Development Facilities (WSDFs) that manage investments in water supply in small towns; Umbrella Organizations (OU) that are regional associations of Water Supply & Sanitation Boards aiming to enhance operational performance and sustainability of piped water schemes and sanitation facilities in small towns and rural growth centers; and Water Management Zones (WMZs) which oversee management of water resources.

There are four semi-autonomous agencies active in the sector, namely:

- **The National Water and Sewerage Corporation (NWSC)** is a parastatal organization that operates and provides water and sewerage services for large urban centers across the country including Kampala. NWSC's activities are aimed at expanding service coverage, improving efficiency in service delivery and increasing labour productivity. Key among its objectives is to plough back generated surpluses for infrastructure improvements and new investments.
- **The National Environment Management Authority (NEMA)** is responsible for the regulatory functions and activities that focus on compliance and enforcement of the existing legal and institutional frameworks on environmental management in Uganda. NEMA's mandate covers both green and brown issues of environmental management. It oversees the implementation of all environment conservation programs and activities of the relevant agencies both at the national and local government level.
- **The National Forestry Authority (NFA)** is responsible for sustainable management of Central Forest Reserves (CFRs), supply of seed and seedlings, and provision of technical support to stakeholders in the forestry sub-sector on contract. NFA is a semi-autonomous business entity and generates most of its own revenues and finances its activities, i.e. NFA's support is contingent upon payment for its services.
- **The Uganda National Meteorological Authority (UNMA)** is mandated under the UNMA Act, 2012 to promote, monitor weather and climate as well as provide weather predictions and advisories to government and other stakeholders for use in sustainable development of the country. UNMA is responsible for establishing and maintaining the weather and climate observing stations network, collection, analysis and production of weather and climate information (including warnings/advisories) to support social and economic development.

A number of other line ministries have important roles in the sector as described briefly below:

- The **Ministry of Health (MoH)** is responsible for hygiene and sanitation promotion for households through the Environmental Health Division (EHD).

- The **Ministry of Education and Sports** (MoES) is responsible for hygiene education and provision of sanitation facilities in primary schools. It also promotes handwashing after latrine use in schools.
- The **Ministry of Gender, Labour and Social Development** (MGLSD) is responsible for gender responsiveness and community development/mobilization. It assists the sector in gender responsive policy development, and supports districts to build staff capacity to implement sector programs.
- The **Ministry of Agriculture, Animal Industry and Fisheries** (MAAIF) spearheads agricultural development. This includes the on-farm use and management of water for production (irrigation, animal production and aquaculture).
- The **Ministry of Lands, Housing and Urban Development** was created in June 2006 and is responsible for the management of land affairs including physical planning, surveys and mapping, valuation, land registration, urban development and housing as well as the Uganda Land Commission.
- The **Ministry of Finance, Planning and Economic Development** (MoFPED), mobilizes funds, allocates them to sectors and coordinates development partner inputs. MoFPED reviews sector plans as a basis for allocation and release of funds, and reports on compliance with sector and national objectives.

District level

In Uganda, the government has developed and implemented policies and an institutional framework that provides clarity and separation of functional roles and responsibilities. Within this structure, service provision and management is undertaken at the lowest appropriate level and procurement has been devolved to district levels, accompanied by regular audit, capacity building, follow-up monitoring and enforcement of findings, and feedback for learning lessons. At the district level local governments (districts, sub counties, municipalities and town councils) are empowered by the Local Governments Act (2000) to provide water services and manage the environment and natural resource base. Local governments, in consultation with MWE appoint and manage private operators for urban piped water schemes that are outside the jurisdiction of NWSC. Given the decentralized and participatory policymaking model, local governments and water users play a much stronger role in the WASH policymaking process.

Box 1: Uganda's hybrid approach to decentralization

Jurisdictional devolution:

In 1997, the Local Government Act provided for the devolution of powers, responsibilities, functions and funds from the central government agency responsible for RWSS, the Directorate of Water Development (DWD) to local level, or district, government in order to increase local democratic control and participation in decision making. The DWD retains overall responsibility for sector planning and supervision of RWSS in the country.

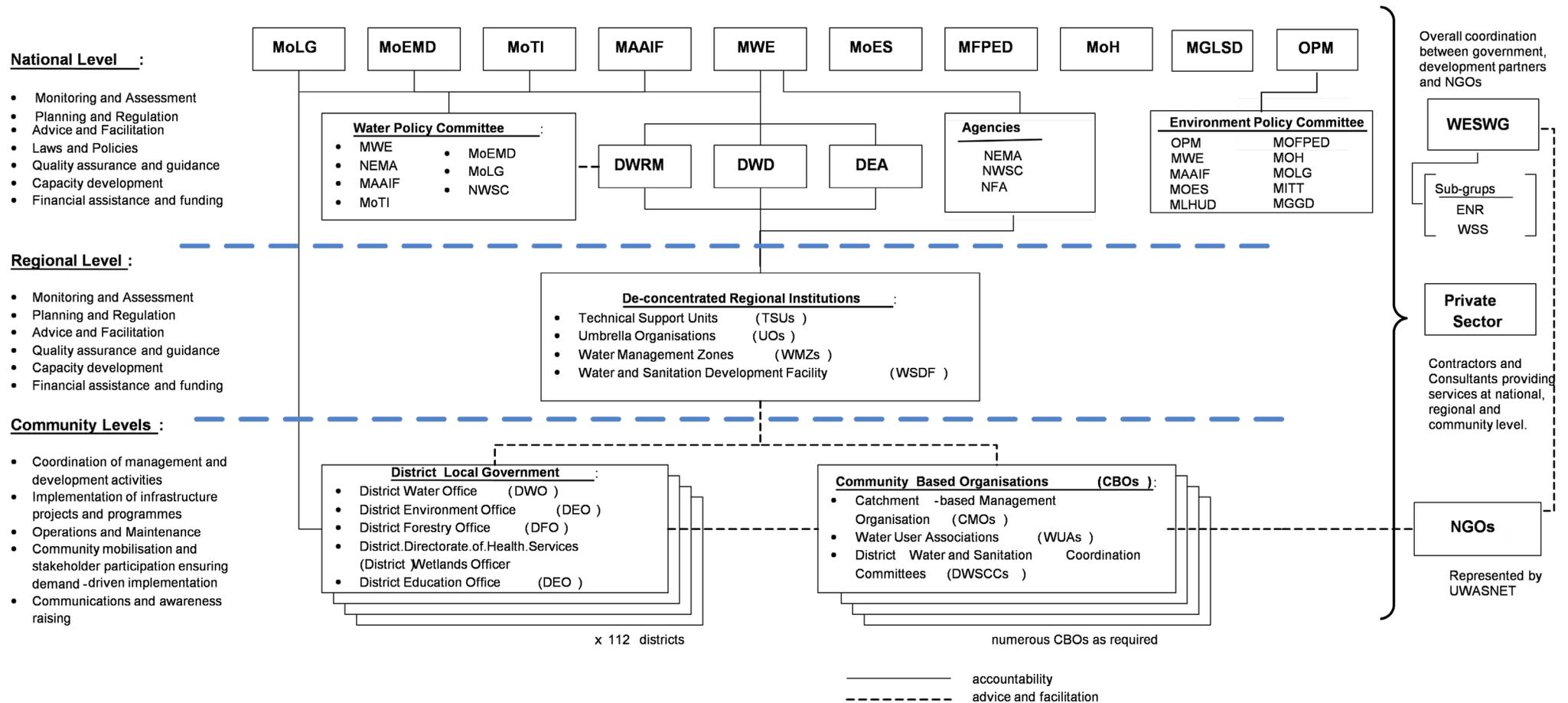
Functional de-concentration:

By 2000, it became clear that district governments did not have sufficient capacity to implement effective WSS programs, and the central government stepped in to create regional technical support units (TSUs) to provide the required technical and management back-up for groups of districts. The TSUs are not regional government structures, but a de-concentration of the Directorate of Water Development capacity to lower levels.

Source: Kimanzi, WEDC 2003, pg 251 – 252.

The key local government WASH institutions or structures include the District Water Office (DWO) that manages water and sanitation development and oversees the operation and maintenance of existing water supplies and the District Water and Sanitation Coordination Committees (DWSCCs) comprised of administrative and political leaders, technocrats and NGO/CBO representatives at district level. The DWSCC co-ordinates planning and implementation of water and sanitation activities, reviews all district work plans and budgets for water and sanitation and advises the district council through the Sectoral Committee.

Figure 2: Institutional arrangements for WASH in Uganda



Funding for WASH in the districts is mainly through the District Water and Sanitation Development Conditional Grant (DWSDCG) from central government which is used for development and in theory is split into a number of pre-defined categories of expenditure, i.e. hardware (80%), rehabilitation (15%) investment servicing (5%) and non-wage recurrent costs which is 4% of the total Grant and includes; software activities up to 50%, supervision, monitoring and DWO operations up to 14%, coordination 26% and flexibility 10%. The DWSCG guidelines provide a clear process for planning and budgeting for water and sanitation activities, with an explicit formula for allocation of resources for different cost categories i.e. capital expenditure, operation and maintenance, capital maintenance expenditure and direct support. However, there is no strict adherence to the guidelines.

NGOs, CBOs and communities

There are over 200 NGOs - both local and international - working in water supply and sanitation. The Uganda Water and Sanitation NGO Network (UWASNET) is a national network organization established in 2000, with the aim of strengthening the contribution of NGOs/CBOs in achieving the water and sanitation sector goals. Most of the local NGOs/CBOs working in the environment and forestry sub-sector operate under an umbrella organization, the Uganda Forestry Working Group (UFWG), with Environmental Alert housing UFWG's Secretariat. Civil society organizations are active in service delivery and advocacy for sustainable forest sector development. They work especially at the grassroots levels, mobilizing and sensitizing local people, supporting active local participation in managing forests and trees, providing forestry advisory services, and advocating for the concerns of the underprivileged in national development processes. All NGOs and CBOs are in theory supposed to coordinate their activities with the relevant local level authorities to avoid duplication and ensure the most effective coverage in service delivery. However, in practice not all of these non-state actors do properly coordinate or even inform the DWO or the DWSCCs and it is not infrequent to find conflicts or disagreements between these two sets of actors at local level. The WASH Agenda for Change initiative supported by IRC, Water For People, and WaterAid seeks to support additional coordination for national level advocacy and increase learning within the sector and is further discussed in [Section 5](#).

CSOs complement the work of local government through direct service provision, capacity building of actors, and sometimes lobby and advocate on behalf of users for better services. CSOs involved in implementation of WASH activities are required to register with UWASNET. By October 2017 UWASNET had 200 registered CSOs operating at both national and district level. Some of the key CSOs operating at national level include; IRC, WaterAid, Water For People, SNV, GOAL, World Vision among others. These CSOs have a number of lobby groups that are championing different causes. The groups include the Civil Society Budget Advocacy Group, which is a coalition of CSOs formed in 2004 to influence government decisions on resource mobilization and utilization for equitable and sustainable development. Its seeks to ensure that budgets at local and national levels are financed, designed, implemented and monitored to promote prudent and transparent allocation of national resources for the benefit of marginalized groups.

Communities are responsible for demanding, planning, contributing a cash contribution to capital cost, and operating and maintaining rural water supply and sanitation facilities. A Water Source Committee, which is sometimes referred to as a Water and Sanitation Committee (WSC) should ideally be established at each water point.

The private sector

Firms and/or individuals are present in the sector and undertake design and construction in water supply and sanitation under contract to local and central government. These include water and sanitation infrastructure operators, contractors, consultants and goods suppliers, private hand pump mechanics and scheme attendants who provide maintenance services to water users in rural and peri-urban areas and also manage piped water services in small towns and rural growth centers. The Rural Water Supply Department in the Ministry of Water and Environment is promoting the use of Output Based Aid (OBA) to support and improve the private sector management of water supply services, specifically expanding access to piped water supply so that the poor can be connected. Over the last ten years or so this has increased the number of active connections and extended the distribution pipe network and where appropriate increased water production and storage capacity. In rural growth centers (RGCs), OBA is being used to construct green field sites to supply water to households. In both small towns and RGCs, private operators are largely paid after delivery of agreed outputs of an agreed quality (i.e. based on performance benchmarking). The outputs take the form of household yard taps and public standpoints or water points. Between 2008-2015, over 2,000 new water connections targeting over 45,000 consumers in 6 small towns and 4 rural growth centers have been installed. Tariffs were embedded in contracts and consumers were sensitized on the payment processes and requirements.

3.3 WASH service delivery

Service delivery status is discussed by sub-sector in the following sections. **Table 2** provides a snapshot summary of the key indicators for WASH in Uganda, both as collated by the JMP and by MWE (for selected indicators only).

3.4 Rural water supply

The rural water supply sub-sector is defined to include all those areas under the jurisdiction of districts, local councils and rural growth centers, but excluding those urban areas governed by town boards, town councils, municipalities and the cities. In practice this means that rural water supply covers those communities and villages with populations up to 1,500 and rural growth centers (RGCs) with populations between 1,500 and 5,000.

The shift to new SDGs has enormous implications for Uganda, within the new targets and definitions, safely managed access to water supply falls from 70%, to 39%; see **Table 2** and **Figure 3**. The MWE sector performance report 2017 shows that access to rural water is 70% according to the sector 'pre SDG definition' (% of people within 1 km of an improved water supply system), but this number is significantly reduced according to the SDG definition (number of people with water located on premises, available when needed, and free of fecal and priority chemical contamination⁸). Access to safe water only increased by 5% over the last 10 years (2007 – 2017). Achieving universal access to safely managed water supply is an uphill task that the rural water sub-sector will not be able to achieve using existing standard implementation approaches.

According to the **Water Supply Atlas**, Uganda has 125,057 domestic water points which serve a total of 25,819,069 people of which 21,107,703 live in rural areas. The main technology options used for water supply improvements in rural areas include protected springs (23%), shallow wells (25%), deep boreholes (41%), piped water schemes (gravity-fed) and piped water schemes (pumped) (11%), valley tanks and rainwater tanks.

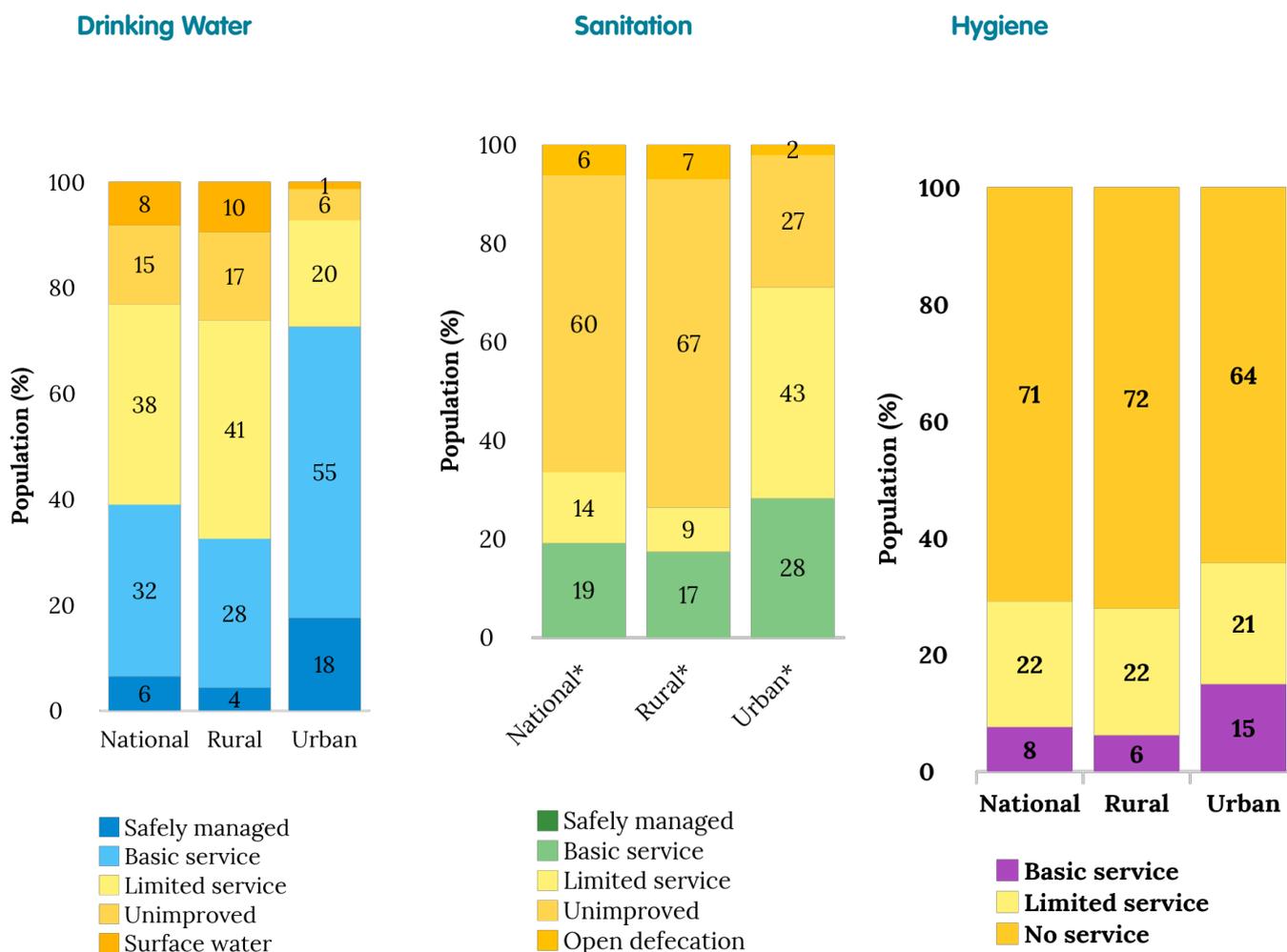
Table 2: Water and Sanitation service coverage according to MDG definitions

(see Figure 3 for coverage according to SDG definitions)

Indicator		Value
Coverage (JMP, 2015)	Safely Managed Drinking Water (National)	39%
	Safely Managed Drinking Water (Rural)	32%
	Safely Managed Drinking Water (Urban)	18%
	Rural piped on premises water	1.5%
	Urban total improved sanitation	28.5%
	Urban improved shared sanitation	43.7%
	Urban open defecation	2.2%
	Rural total improved sanitation	17.3%
	Rural improved shared sanitation	8.8%
	Rural open defecation	8.1%
Coverage (MWE, 2017)	Urban total improved water	71%
	Rural total improved water	70%
	Functionality (rural)	85%

⁸ SDG indicator definitions from the JMP. Available http://www.who.int/water_sanitation_health/monitoring/coverage/indicator-6-1-1-safely-managed-drinking-water.pdf.

Figure 3 Water and Sanitation coverage in Uganda according to SDG definitions (2017)



Service delivery models

Service delivery models are defined as institutional mechanisms for planning, implementing and managing water supply systems in order to provide a specific level and type of service. Uganda has three service delivery models for rural water supply. These include two models under the Community Based Management System (CBMS) – one for point sources, managed by Water and Sanitation Committees, and one for piped schemes, managed by Water Supply and Sanitation Boards (WSSBs), and the self-supply model. CBMS was introduced in the country in 1986 under a national program supported by UNICEF. CBMS emphasizes communities’ responsibility and authority over the development and operation and maintenance (O&M) of their facilities. The Operation and Maintenance Framework (2011) recognizes this approach as the option for O&M of communal water supply facilities in rural areas and rural growth centers.

For the last two decades, MWE has promoted CBMS in rural areas (for domestic water supply and water for production facilities). As part of CBMS, district local governments undertake advocacy, sensitization and training, and back-up support activities. This encourages community ownership and management of water facilities by users through elected Water and Sanitation Committees. Formation of Water and Sanitation Committees for each improved communal water supply facility is a requirement stipulated by MWE.

However, the model has been heavily criticized by sector professionals due to; low levels of service delivered, inadequate capacity of Water and Sanitation Committees/Water Supply and Sanitation Boards to manage water supply systems, and lack of sufficient technical support from district authorities. A study conducted by IRC in 8 districts in 2014 showed that 88% of households accessed a sub-standard water service that did not meet the basic norm for at least one of the four water parameters (quality, quantity, accessibility and reliability).

The WSSBs are mainly for the piped water supplies in small towns. A performance contract mandates a Water Authority to constitute a Water Supply and Sewerage Board (WSSB) to supervise management and operations of the schemes. A WSSB has a composition of five members which include the town clerk/sub-county chief, a councilor in charge of social services and three members drawn from the various categories of water users (institutional,

commercial and household). The key role of the WSSB is to carry out management and oversight of the services provided by the private operator.

Regarding self-supply the GoU and its development partners have been exploring options for greater investments in water supply by users themselves (self-supply) to complement government efforts in water provision. Over the past 14 years, several activities to promote self-supply including research, demonstration studies, and communication and promotion campaigns have been undertaken. Self-supply is increasingly being accepted as a complementary option for water provision mainly due to the slow progress to reach national targets for rural water supply. The fact that people are already investing in their own water supplies and are aware that self-supply can reduce pressure on community supplies (hand pumps and piped schemes) and it is easier to use water for production through self-supply.

Challenges and critical issues facing rural water supply

There are multiple challenges facing water supply and sanitation service delivery in rural areas in Uganda as recognized by GoU and other stakeholders⁹. These include rapid population growth resulting in congested and informal settlements and a continuously increasing need for new safe water sources on the one hand, compounded by lack of funding to meet recurrent costs of sustaining facilities on the other. Rural water services suffer disruption due to unreliable operation and maintenance regimes, which in turn are undermined by low willingness to pay water tariffs, as well as poor protection of water sources resulting in low and decreasing water quality. This often results in delivery of substandard and low levels of service.

Specifically, for the community managed systems, the failure of O&M regimes relatively soon after WSCs are established is mainly due to limited budgets from government for follow-up support and user fees. The water users are only provided with orientation about ownership, benefits of safe water, correlation of safe water to sanitation, for one or two days. Sub-counties only monitor initially for three to four months after construction is complete. As time passes, illicit behavior such as embezzlement of collected water user fee by WSC members and illegal intervention by politicians can occur, thereby undermining the financial viability of the scheme. This results in users losing trust in WSCs and withholding payment of water fees as well as delays in repairing broken down sources. When services are disrupted through failed physical facilities a cycle of lack of trust from users, WSCs become non-functional and the non-collection of user fees is set into motion. The entire O&M system then breaks down.

WSSBs also face several challenges that affect their functionality, including:

- Lack of motivation by WSSB members; the work of the WSSB is voluntary and the 5% of the total collection from the scheme intended to facilitate their activities is small and sometimes not forthcoming;
- Information flow from private operators is sometimes inadequate and results in conflicts; and
- In some towns, it is difficult to attract people with the requisite qualities onto the Water Boards.

To address the identified challenges, the Ministry of Water and Environment will focus on increasing access to safe water in rural areas and increasing functionality of water supply systems during the period 2015/16 – 2019/20. Key interventions are to include:

- Constructing, operating and maintaining appropriate community safe water supply systems in rural areas focusing on unserved areas;
- Targeting investments in water stressed areas abstracting from production wells as well as large Gravity Flow Schemes (GfS) where appropriate to serve the rural areas;
- Promoting and scaling up self-supply including rainwater harvesting at household, public institutions and community level taking into account the impact of climate change;
- Promoting water, sanitation and hygiene humanitarian preparedness and response especially in settlements for poor communities, refugees and displaced persons;
- Improving functionality, sustainability, resilience and source protection of water supply systems in rural areas; and
- Promoting Public Private Partnership arrangements to increase accessibility of water sources.

⁹ The Second National Development Plan (NDPII) 2015/16 – 2019/20

3.5 Urban water supply

As of 2016 there were 274 gazetted urban areas in Uganda (JSR SPR 2016)¹⁰. Access to drinking water in urban areas currently stands at 71%. Responsibility for water and sanitation services in 112 of these areas falls under the National Water and Sewerage Corporation (NWSC). The NWSC is a public utility that operates on a commercial basis. It was established with the responsibility of water supply and sanitation services in large towns but recently this mandate has been expanded to cover select small towns. The remaining 162 areas, which are not covered by NWSC, are managed by the Urban Water Supply & Sewerage Department (of the Ministry of Water and Environment) through the various Water Authorities and/or private operators. The UWSD established (2015) to ensure provision of water and sanitation services in small and large towns and is responsible for the overall coordination and other respective functions in urban areas, i.e. city- municipal- and town councils. However, 60 of the 162 (~37%) of towns currently under MWE, do not have piped water supply schemes.

Two types of deconcentrated units exist at regional level (South West, North, East, Centre) – 1) Water and Sanitation Development Facilities (WSDF) implement new water supply and sanitation schemes and undertake major rehabilitation activities requiring significant investment (beyond community capacity and responsibility for minor maintenance) 2) Umbrella Water Authorities provide support to Water Authorities/Boards, appointed by local governments, on the operation and maintenance of existing piped water schemes. Water Authorities operate under performance contracts with their respective local governments, with responsibility of 1) appointing Water Boards; 2) contracting private operators for the day-to-day management of the water supply services; and 3) undertaking service delivery and asset management.

Critical issues facing water supply in urban areas

Uganda is experiencing relatively rapid urban growth rates, and reportedly higher than the sub-Saharan region average of 3.7% (MWE, 2016). The national regulatory framework for water and sanitation has been inadequate in the face of this growing population. Furthermore, it does not effectively provide for all stakeholders i.e. consumers, public and private parties. Inadequacies in the regulatory framework have become more apparent as the NWSC assumes management of additional towns which 1) do not have established regulatory modalities; 2) lack adequate provisions for wastewater treatment; and 3) have deteriorating quality of water resources. The GoU has a long-term plan to establish an independent water and sewerage services regulator. But in the interim, MWE is deconcentrating some regulatory functions to regional Regulation Units in four regions (South West, North, East, Centre) with existing and operational MWE deconcentrated structures.

While some progress has been made in increasing access to and functionality of improved water supply facilities, the sub-sector requires alternative funding sources to expand and improve the sustainability of piped water schemes in small towns. Efforts to address these are underway through the roll out of an “Improved Scheme Operator Model” which has been piloted in two areas. Additionally, the GoU is developing a “Revolving Facility” fund to finance the repair and renewal of systems, extension of schemes, metering and source protection measures. It is envisioned that funding for the Revolving Facility will comprise a mix of local savings and government subsidies. Furthermore, it is expected that innovative systems for revenue collection will be introduced through the Revolving Facility fund.

3.6 Sanitation in urban areas

According to the Water and Environment Sector Review data for 2017, for urban areas outside Kampala, 84.6% of the urban population has access to sanitation. An estimated 39% of the urban population have access to toilets installed with a handwashing facility, although this is not an indication of actual use. Some of the handwashing facilities lack soap and/or water. However, the JMP 2017 data shows that total improved urban sanitation is 28.5%. The difference is because the metrics used for Water and Environment Sector Review data focus on access to toilets with water and soap where as JMP data looks at safely managed sanitation services defined as; private improved facility where fecal wastes are safely disposed on site or transported and treated offsite; plus a handwashing facility with soap and water.

The GoU recognises that comparable progress has not been made in addressing sanitation. In light of the NDP II and SDGs, it has established the Division of Sewerage and Sanitation Services, within the Urban Water and Sewerage Department, that is responsible for *“[ensuring] appropriate, efficient and economical provision of viable sanitation and sewerage systems for domestic, public, institutional, industrial and commercial use in small towns...”*. Small towns have been grouped into fifty clusters and in order to ensure efficient delivery of services, each cluster will be served by fecal sludge treatment facilities with a capacity of 1-10m³/day.

Fecal sludge management (FSM) in Uganda is still poorly developed. Less than 10% of the toilet facilities in towns can be emptied, making the demand for fecal sludge removal low. There are no sludge disposal/treatment facilities

¹⁰ <http://www.mwe.go.ug/sites/default/files/library/SPR%202016.pdf>

in most towns. As a result, the few service providers available have to levy relatively high charges as they cannot realize economies of scale. The high charges in turn lead to illicit disposal of collected fecal sludge in swamps, quarries and water bodies, with detrimental environmental and public health consequences.

The GoU is prioritizing FSM by setting up designated areas divided into 50 clusters to increase demand and efficiency of proposed services. The MWE is piloting integration of the fecal sludge service chain – collection, transportation, and disposal – in two clusters. In this arrangement NWSC operates disposal facilities and the private sector own and operate emptying trucks under MoUs that stipulate the roles of NWSC, private sector and local government. An alternative management model for disposal facilities is planned for areas outside of NWSC jurisdiction. In this arrangement, local government will expand existing contracts for management of water supply systems with private operators to include management of disposal facilities. In these areas, transportation of fecal sludge has largely been undertaken by private operators with the exception of areas where services were directly procured by MWE and managed by umbrella organizations.

Status of sanitation in Kabarole

The sanitation and hygiene levels in Kabarole are generally considered good at 85%, as of June 2017 and are comparable to the national average (SPR, 2017). Disaggregated data was not available on the sanitation status according to the JMP definition.

National Water and Sewerage Corporation operates a fecal sludge management plant in Fort Portal town, the main town in Kabarole District. The plant has a design capacity of 200 cubic meters of waste water and sludge per day but is currently treating 280 cubic meters. Only a few households in the Fort Portal municipality (approx. 1.6%) are connected to the sewer line. Connections are gradually being made for households in the town. On the periphery of the town, it is difficult to connect to the sewer line due to the hilly terrain that requires huge investments to have the lines extended uphill. The dumping ponds are also overwhelmed. According to the rapid sanitation marketing assessment conducted by IRC Uganda in 2017, 95% of the households in Fort Portal have non-drainable latrines. Fecal sludge is only emptied by one cesspool operator who serves the town and surrounding districts of Kamwenge, Ntoroko, Hoima, Bundibugyo and Kyenjojo that are in a radius of 80 – 190 km from the plant. NWSC has plans to construct an additional 400 cubic meters per day modern compact waste water treatment plant by end of 2018 to counter the current inefficient pond system. In addition, NWSC is planning to buy a cesspool truck to serve the entire western region.

In 2016, MWE, established an undertaking to develop a strategy to scaling up town sanitation planning in a phased approach, harmonized with District Investment Plans (MWE, 2017). A pilot town sanitation planning initiative was conducted in six (06) town councils in northern Uganda. Lessons learned from the pilot study have been documented and there are plans to roll out these town sanitation planning strategies nationally.

3.7 Water resources management

The main framework includes catchment-based integrated water resources management through the four Water Management Zones (WMZs), i.e. supporting the preparation of Catchment Management Plans and establishment of Catchment Management Organizations (CMOs) to promote coordination and collaboration among the various stakeholders. Nine catchments (Rwizi, Mpanga, Aswa, Maziba, Ruhenzenda, Awoja, Katonga, Mpologoma, and Victoria Nile) now have CMOs and the process of forming another four (Albert Nile, Semliki, Lokok, and Lokere) is still ongoing. The use of Water Source Protection guidelines was promoted to secure the quality and quantity of water resources for water related infrastructure projects.

The sector is not able to meet the current demand for water for domestic consumption, production and industrial use. The current demand for water is estimated at 408 million cubic meters per year and the unmet demand is 3.7 million cubic meters per year which is expected to increase to 1,651 million cubic meters per year by 2050. This rapid increase in demand is explained by high population growth and urbanization¹¹. Government of Uganda also intends to roll out a Master Plan for investment in irrigation that will further increase demand of water for production.

The quality of drinking water supplied in rural areas has shown a declining trend over the last five years 2011/12 – 2015/16). A rapid assessment of the quality of drinking water was undertaken for rural water supplies in 45 districts between August 2015 and February 2016, which indicated that only 41% of the sources sampled were found to be safe; 59% were contaminated with E.coli. Only 29% of household samples were safe; 71% were contaminated. The main factors affecting quality of water were; poor sanitation and hygiene at the source and poor storage methods. Protected springs and shallow wells are more prone to contamination.¹² As a result MWE has extended water safety planning to point water sources and is considering a change in policy to stop investment in protected springs

¹¹ Climate and Development Knowledge Network (2014), Economic Assessment of Impact of Climate Change in Uganda,

¹² MWE Sector Performance report 2016

and shallow wells. Behavioral change campaigns have also been intensified to promote safe management at household level.

3.8 Coordination mechanisms

A number of platforms and instruments exist at various levels to promote coordination, sharing of information, lesson learning and to promote transparency in decision-making in the sector; see **Figure 4** which gives a schematic overview of how these link together.

National level coordination

The **Sector Wide Approach** to planning (SWAp) is the primary mechanism used in Uganda to promote joint planning, financing, coordinated funds disbursement, implementation and monitoring of development assistance and program rather than at project level. The MWE and development partners funding water and environment programs agree on a strategy to achieve improvement in sector performance and aid effectiveness with the intention of reducing transaction costs and efficient use of financial resources. The SWAp has aligned MWE, development partners, and civil society to a common policy, development plan and expenditure program¹³. The approach promotes harmonization of policies, strategies and provides an institutional framework for stakeholder coordination, joint monitoring, review and sector learning. The decentralization of service delivery to local governments also provides structures for stakeholder coordination, sector review and learning. The SWAp has had a positive impact on sector governance and government has endeavored to establish appropriate institutional capacity to effectively manage the processes. However, this has not been smooth sailing given that the effectiveness of the structures varies with the local government structures having relatively weak coordination mechanisms.

The **Joint Water and Environment Sector Support Programme** (JWESSP) is a joint GoU and development partners (commonly called DPs in Uganda) instrument for implementing joint support in the context of the SWAp for the Water and Environment Sector over the period from mid-2013 to mid-2018. The objective of the JWESSP is to support the Water and Environment Sector to achieve its targets and improve its efficiency through a consistent, harmonized sector program that is aligned to government objectives, policies and delivery modalities. JWESSP is fully in line with the goals and targets of NDP II and follows a holistic approach, strengthening the linkages water – food security (water for production), water – health (sanitation) and in particular water resources – environment management – ecosystem services – climate change.

JWESSP support is provided through a combination of capacity development at all levels and support to physical implementation focusing on a number of program components including sector program support, water for production, WRM (central level activities), Water Management Zones that promote catchment-based integrated water resources management and climate change.

The **Water Policy Committee** (WPC) was established under the Water Act Cap 152 and Water Resources Regulations (1998) of Uganda to assist and advise the Minister of Water and Environment and to promote inter-ministerial and inter-sectoral coordination over a wide range of water resources management and development issues. The WPC provides an avenue for promoting IWRM at national level and guiding the strategic management and development of water resources of the country. The WPC also coordinates the preparation of national water quality standards; and mediates in conflicts between national authorities on water resources matters.

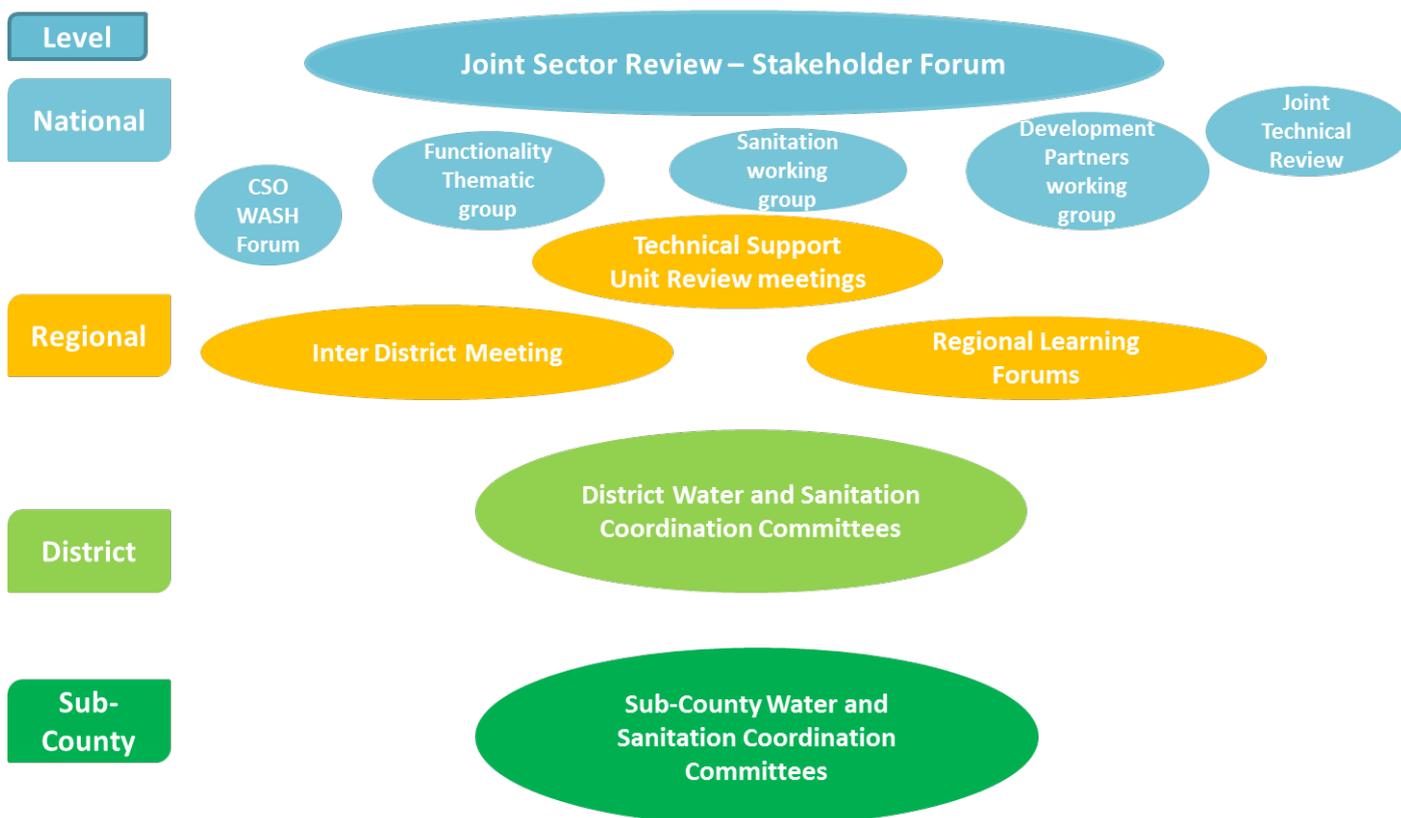
Sector Working Groups (SWG) comprising stakeholders from GoU institutions within a sector, civil society organizations and development partners, meet to agree sector budget submissions and new projects proposed for the sector, as well as to review sector performance and to deliberate on key sectoral policies. There are several SWGs including the **Water and Environment Sector Working Group** (WESWG), which is a platform at national level to provide overall coordination and technical and policy guidance for sector development. All new support programs are vetted by the Water and Environment Sector Working Group before they are approved for funding and implementation, to ensure alignment with sector policies, plans and strategies.

The WESWG has sub-sector working groups responsible for coordinating particular thematic areas in the sector including; **National Sanitation Working Group** (NSWG), the **Functionality Working Group**, **Good Governance Working Group**, **Water and Sanitation Working Group**, **Self-Supply Working Group**, the recently formed **Sector Performance Working Group**, and the **Sector Finance Working Group**. These working groups are characterized by reporting and information sharing. However, a few of the working groups have adopted the practice of organizing separate learning sessions/journeys to further analyze thematic issues in the group e.g., the NSWG has organized several learning sessions on CLTS and sanitation marketing in the recent past, the self-supply working group is organizing learning sessions as well around the self-supply approach and related interventions in the sector.

¹³ Water and Environment Sector Performance Report (SPR) 2009

The WESWG and WSSWG meetings deal with policy and strategic aspects of the sector while district and regional coordination meetings deal with operational issues. The national level forums are, increasingly, linked to regional forums of the TSUs, WSDFs and WMZs. The linkage of these processes is not clear and is work in progress.

Figure 4: Schematic overview of sector coordination bodies at different levels



Water and Environment Joint Sector Reviews

The Joint Sector Review (JSR) is an annual forum for the government and donors for sector performance assessment which meets every year, around October. The JSR brings together between 200 to 400 stakeholders from the government, MPs, technical and political leaders from districts, representatives of CSOs (CBOs and NGOs), development partners and officials from the Ministry of Water and Environment and from other line ministries, and private sector service providers. This forum is convened for three days and provides information on sector performance and accountability related issues, with the overall aim of promoting dialogue on sector issues and challenges and to support transparency in decision-making.

The JSR is based on the **Annual Sector Performance Report** for the year. Other objectives of the JSR are to enhance involvement of different central government ministries, local governments, civil society, development partners and service providers in the sector management processes in the review of the performance, to share the lessons and challenges and search for improvements.

Water and Environment Joint Technical Reviews

Like the JSR, the Joint Technical Review (JTR) is an annual event. It is held half-way during the financial year (usually in March/April) to follow up on the progress of implementation of the agreed key actions from the previous JSR, recommend actions for improved sector performance, and assess any other pertinent issues affecting the sector. Each year presentations and contributions are guided by a pre-determined theme originating from recent sector policies and implementation experiences. Formal decisions during JTRs such as revisions of undertakings and action plans are taken up by the Water and Environment Sector Working Group (WESWG).

Coordination at decentralized/sub-national level

The coordination of WASH in the districts is through the District Water and Sanitation Coordination Committees (DWSCCs), comprised of administrative and political leaders, technocrats and NGO/CBO representatives at district

level. The DWSCC is chaired by the District Chief Administrative Officer (CAO) and hosted by the District Water Office. It coordinates planning and implementation of water and sanitation activities, reviews all district work plans and budgets for water and sanitation and advises the district council through the Sectoral Committee.

The political cadre in the district led by the Secretary for Works and Technical Services and includes the Resident District Commissioner and councilors on the Technical and Works Committee; collectively these actors provide the political direction related to WASH in the district. This is based on national policy priorities, as well as the ruling party's manifesto and the district development plan. Although these actors are often accused of political interference, making bad political decisions or simply politicizing WASH issues, they nonetheless play a pivotal role in improving WASH in the district and form the district political fabric that makes decisions and influences allocation of resources for WASH. These politicians also participate in the budgeting process and check through sector budgets with a fine-tooth comb to ensure that key sectors like WASH have been prioritized. Members of Parliament from the district also ensure that WASH funding for the districts is provided. The political leaders also participate in monitoring and ensure that services reach the people and are sustainable. The coordination of NGOs, CBOs and community groups is led by UWASNET and Water Source Committees. Water Source Committees are sometimes referred to as Water and Sanitation Committees (WSCs) which should ideally be established at each water point.

4. Sector financing

Financing for the water and environment sector in Uganda has shown a declining trend over the years. The proportion of budget allocation to the sector declined from 5.6% to 3% over the period 2008 - 2014 years (MWE 2014) while the allocation in absolute terms increased from Shs. 193 billion (USD 64 million) to Shs. 440 billion (USD 125 million). Despite the increasing volume of financing to the sector, there is concern among sector stakeholders that the financing is not in sync with population growth, estimated at 3% per annum and the national development targets for delivering safe water. There is contention over the allocation of funds between investments in new water supply facilities as opposed to covering recurrent costs of operation and maintenance and the additional costs of direct support to service providers.

Within the SWAp arrangement, and led by the Ministry of Finance, Planning and Economic Development (MoFPED), Uganda uses the Medium-Term Expenditure Frameworks (MTEFs), the Medium-Term Budget Frameworks (MTBFs) and Medium-Term Fiscal Frameworks (MTFF) and formula-based allocations for WASH to local governments. The MTEF is used to develop multi-year projections of sector expenditures. These provide stakeholders and local governments with reasonable and reliable estimates of future budget allocations, which enable them to develop their own relatively accurate three-year rolling plans. Allocation formulae were developed in Uganda by consensus and are said to reflect local level needs, although it has taken several years to have them used on a consistent basis¹⁴.

The MWE has the overall responsibility for sector planning and budgeting. Funding for the water and sanitation sector comes from two primary sources, namely On-Budget and Off-Budget Support:

- **On-Budget Support** includes government funding from treasury, comprising both GoU's local resources, and grants and loans from development partners operating under the sector budget support framework. Partner funding is channeled through two main funding mechanisms: the **Joint Partnership Fund (JPF)**, a basket funding arrangement that is largely aligned to government systems, and **Sector Budget Support**, most of which is allocated to the district local governments through District Water and Sanitation Conditional Grants; and
- **Off-Budget Support** includes all investments from NGOs, and revenue generated from water sales and sewerage services, and environmental services to the general public.

4.1 Sector financing trends

In the FY2016/17, the total financing to the sector (including both off-budget and on-budget resources), totaled to Shs. 1,098 billion (USD 311,224 million), of which Shs. 1,043 billion (USD 295,634 million) was on-budget (appropriated by parliament), while Shs. 54.93 billion (USD 15.569 million) was off-budget. The off-budget financing includes Shs. 285.04 billion (USD 81.440 million) as internally generated revenue by the National Water & Sewerage Corporation (NWSC) from water sales, and Shs. 59.13 billion (USD 16.894 million) mobilized by Civil Society Organizations (CSOs) in the water and environment sub-sectors. The external funding from donors accounted for 33% of the sector budget.

In total, 62% of the total sector allocation was in the form of on-budget support, while 38% was off-budget support. In terms of releases of the allocated budget, the performance by GoU was 92%, while only 45% of the overall development partner budget was actually released.

The Ministry of Water and Environment was allocated 53.8% of the sector budget and 46.2% was allocated to Environment, Forestry, and Metrology Authorities, and National Water and Sewerage Corporation and conditional grants. **Table 3** shows a breakdown of the Water Supply and Sanitation Budget.

Budget and off-budget support

Over the five years 2011/12 – 2015/16 the average proportion of off-budget support to the overall budget was 34% with the highest proportion of 48% in the financial year 2014/15 (see **Table 3**).

¹⁴ Water Sector Governance in Africa, Africa Development Bank, Volume 1 Theory and Practice; AFDB, 2010

Table 3: Balance between on- and off -budget financing FYs 2011 – 2016

(see detailed information for 2016/2017 in Table 4)

Financial Year	On-Budget	Off-Budget
2015/16	62%	38%
2014/15	52%	48%
2013/14	80%	20%
2012/13	80%	20%
2011/12	58%	42%

Over the five years (2011/12 – 2015/16), funding allocation to the sector has been increasing both from government and the development partners but compared to the overall budget, the sector has maintained a stable share of approximately 3.0% of the national budget. Actual annual releases have also been less than budget estimates. This has greatly affected planned outputs and the sector's targets over the years. This under-release is more pronounced on the part provided by development partners, as shown in **Figure 5**.

Water and environment budget breakdown

The sector budget for the financial year 2016/17 was distributed as follows; water supply and sanitation Shs. 854.45 billion, environment and national resources Shs. 158.56 billion and sector support services Shs. 30.72 billion. The table below shows the breakdown of the water supply and sanitation budget.

Table 4: Breakdown of water supply and sanitation budget 2016/17

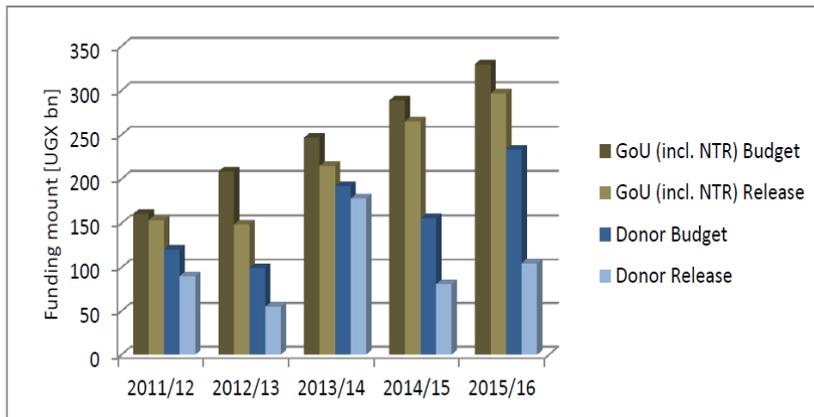
Sub Categories	Approved Budget in billion shillings	Percentage
Rural Water Supply and Sanitation	92.95	10.88
Urban Water Supply and Sanitation	289.1	33.83
Water for Production	47.5	5.56
Water Resources Management	44.54	5.21
National Water & Sewerage Corporation	322.91	37.79
Local Government Grants	57.44	6.72
Kampala City Council Authority (Sanitation)	0.01	0.00
Total Water Supply and Sanitation Budget	854.45	

Trends in conditional grants

District level implementation for both urban and rural WASH is financed through four conditional grants to local government; in summary, these are:

1. The District Water and Sanitation Conditional Grant
2. The Urban Operation and Maintenance Grant
3. The District Health and Sanitation Conditional Grant
4. The Natural Resources and Wetlands Grant

Figure 5: Trends in GoU and development partner support in the medium-term (FYs 12 - 16)



Source: MWE Sector Performance Report 2016

The proportion of the condition grants of the on-budget support showed a declining trend from 21% in 2012 to 12% in 2016. However, the actual on-budget support in nominal terms increased by 50% over the period 2012 to 2016. This implies that districts have more resources from public finance to spend than they had four years ago, although as noted above, on-budget funding is heavily supported by grants and loans from development partners through sector budget support frameworks and as such is highly exposed to any (downward) trends in DP financing (see below).

4.2 Financing rural water supply and sanitation - Kabarole District

Rural water supply and sanitation is financed through the District Water and Sanitation Conditional Grants. The grant has two budget lines; 1) development and non-wage recurrent budget.

Development budget

Currently, a minimum of 80% of the sector development budget is allocated to capital-infrastructure, facilities and equipment, as well as maintenance of district specific access and O&M needs. Such facilities include: water sources/points, public toilets and sewerage disposal. Districts can use part of the sector development grant for office construction and other administrative investments upon request and authorization by MWE.

Overall, a maximum of 15% of the Sector Development Budget can be allocated to rehabilitation and major repair of water sources at both the sub-county and district levels and up to 5% of the development budget line can be allocated to investment servicing costs, including feasibility studies, procurement and monitoring costs. All WASH actors in Kabarole District have to adhere to the current equity distribution in order to attain universal access to WASH in 2030.

Non-wage recurrent budget

Under the non-wage recurrent budget line, software activities are allocated up to 50%; supervision, monitoring & District Water Office operations up to 14%; coordination up to 26% and a flexibility of 10% is allowed for discretion by the district. The non-wage recurrent budget line is meant to ensure sustainability of investments through regular supervision and monitoring. It is also meant to cater for construction and maintenance of the Water Offices and procurement of vehicles.

District sanitation & hygiene conditional grant (DSHCG)

Kabarole District over the last four (4) years has been accessing UGX 22 million (USD 6,111) as the DSHCG, to support sanitation and hygiene improvement in two selected sub-counties, targeting 25 villages annually. The allocation of funds to cater for sanitation and hygiene is minimal (only 3% allocated for sanitation hardware, under the DWSCDG). In addition to the low level financing, the rural communities have many competing needs with very little disposable income to spend on sanitation. Communities are reluctant to mobilize their own resources for improved sanitation;

e.g. through financial institutions.

The district environment and natural resource (wetlands) conditional grant

This grant is disbursed to the Natural Resources Department of Kabarole District annually and it's aimed at funding protection of natural resources, including forests and wetlands activities. Over the last five (5) years, Kabarole has been receiving UGX 6,012,207 annually.

Civil society organizations WASH financing

CSOs operate with off-budget resources from private sources or development partners (donors). It is important to note that their budget cycles normally follow a calendar year and do not always match the government financial year (July – June).

The financial flows of these grants, including CSOs in Kabarole District, over the last five calendar years are summarized in **Table 5**. The district conditional grant allocations have been received consistently over the past five years. Contributions from CSOs, on the other hand, have been fluctuating and unpredictable. This trend is similar to the analysis of the GoU and development partner budget releases presented in **Table 5** and reaffirms the 'non-negotiable' role of public financing in WASH service delivery.

Table 5: Financial Flows to Kabarole District

Funder & Contribution	Calendar Year					
	2012	2013	2014	2015	2016	2017
District Water & Sanitation Conditional Grant	467,253,000	467,253,000	467,253,000	467,253,000	467,253,000	492,566,625
District Sanitation & Hygiene Conditional Grant	22,000,000	22,000,000	22,000,000	22,000,000	22,000,000	20,637,899
Community Capital Cost Contribution					1,350,000	
Natural Resources Grant	6,012,207	6,012,207	6,012,207	6,012,207	6,012,207	6,012,207
Simavi	56,911,000	58,311,000	52,302,300	10,100,300	55,200,000	
SNV	-	-	16,200,000	32,000,000	46,110,000	
Aqua for all	-	-	-	-	78,000,200	
Stars Foundation	-	-	-	42,360,000	42,360,000	78,000,200
AAID					240,000,000	
IRC, Uganda	250,000,000	200,000,000	160,000,000		200,263,000	250,000,000
HEWASA	2,600,000,000	260,000,000	260,000,000	260,000,000	260,000,000	260,000,000
Totals	3,402,176,207	1,013,576,207	983,767,507	839,725,507	1,418,548,407	857,216,931

Source: Draft Kabarole District WASH Investment Plan for Universal Access 2017 - 2030

4.3 Private sector entities at district level

Private sector entities are normally involved in design, construction, repair and maintenance of water supply facilities, stocking and distribution of spare parts. The private sectors are mainly attracted to construction and rehabilitation of water supply systems. Stocking and distribution of spare parts is not lucrative for local private sector entities. Spare parts are often sourced from the capital. The high transport costs for supplying small units have to be met by water users. This makes the repairs expensive.

The private sector entities at the district level with regards to sanitation are mostly masons and hardware dealers, and financial institutions (HOFOKAM and Postbank). The banks provide different loan products for investment in sanitation products at household level. There is only one entrepreneur who provides cesspool emptying services.

Hand pump mechanics and scheme attendants provide repair and maintenance services for water supply facilities in rural and peri-urban areas. MWE and other stakeholders have invested in training of hand pump mechanics on operation and maintenance of rural water supply facilities. At least one mechanic based in each sub-county has been trained in all rural districts in Uganda. It is noted that the mechanics have played an important role in ensuring functionality of water supply facilities through timely repair and maintenance. As a result they have formed district-based associations, Hand Pump Mechanics Associations (HPMAs). The purpose of forming the associations is to coordinate, promote networking, continuous capacity development and regulation of individual mechanics. HPMAs have been established in 111 rural districts in Uganda.

Tariff revenue and affordability issues

There is limited data on actual revenue derived from consumers, particularly for rural schemes, but there is a trend of non-payment of tariffs, often due to poor service delivery and absolute poverty levels. However, it is possible to draw some conclusions about overall levels of affordability, based on a recent analysis carried out by the Ministry of Finance, Planning and Economic Development looking specifically at piped water supplies. The tariffs charged by the NWSC are in a range depending on type of source and customer category (see [Table 6](#)). Other private operators appointed by local government authorities often charge tariffs that exceed those stipulated by the NWSC (MoFPED; 2016).

Table 6: Summary of NWSC tariff structure (February 2017)

Customer Category	Tariff excl. VAT for FY 2016/17	Price per 20 liter jerrycan
Public Standpipe	\$0.43	\$0.01
Domestic	\$0.74	\$0.02
Institution/Government	\$0.91	\$0.02
Comm <500m ³ /Month	\$1.11	\$0.03
Comm <500- 1500m ³ /Month	\$1.11	\$0.03
Comm >1500m ³ /Month	\$0.89	\$0.02

Average forex rate for 2017: USD 1= Shs. 3,680

With average household water consumption calculated to be at around 3 m³ per month and average monthly costs ranging from Shs. 10,461.51 (USD 2.84) to Shs. 15,896 (USD 4.32) depending on the type of operator, the MoFPED analysis concludes that piped water supply is unaffordable for households earning around Shs. 500,000 per month, or USD 136. Given that half (54%) of rural households earn less than Shs. 200,000 per month (compared to 20% urban), this means that many households cannot afford piped water (MoFPED; 2016).

4.4 Asset management

Asset management¹⁵ is not common practice in the WASH sector in Uganda. Service delivery and asset management in water supply areas outside the jurisdiction of NWSC is the responsibility of local governments. Normally these are appointed as Water Authorities and receive performance contracts which require them to appoint a Water Board and contract a private operator (company) for day-to-day management of the water scheme. Currently, approximately 50 small towns and rural growth centers have actually sub-contracted scheme management to a private operator. Others manage their water supply directly or have contracted an individual scheme operator

¹⁵ Infrastructure asset management is defined as a series of "systematic and coordinated activities and practices, such as a regularly updated registry, through which an organization optimally and sustainably manages its assets and asset systems, their associated performance, risks and expenditures over their life cycles".

With support from GIZ and working with Vitens, the Ministry of Water and Environment established asset information systems in 10 small towns. This included the development and implementation of asset registers and GIS network maps, capacity development of the regional asset-information hosting organizations and improved asset management, through: capacity development of water operators on preventive maintenance, vocational training for industrial plumbers and electro-mechanical technicians, capacity development of water operators in billing systems and capacity development of relevant actors on investment planning

In the rural water sector there is no systematic registry of the component elements of rural water supply schemes or any projection of likely time of failure based on any standard calculations or approaches. Asset management therefore remains at a nascent stage in rural water supply in Uganda. It is, however, somewhat more advanced in Kabarole district due to IRC Uganda's support to develop asset management plans for piped water systems. The support provided includes training on asset management and development of asset information systems. The initiative seeks to enhance capacity of the district water office in planning for asset management and to ensure that investments match the expected service levels.

4.5 Monitoring, regulation and accountability

Monitoring and accountability

Uganda has what is a relatively well developed and long experience in national monitoring compared to other countries in the region. The Danish aid agency, DANIDA, first started work in support to the sector in Uganda in 1991 moving from area-based programming to broader sector support and since 2003, along with other development partners, notably the UK government's DFID, was one of the key donors supporting the development of the national monitoring framework. Over a period of some ten years or more, the government and its DPs developed what are now termed as 'golden indicators' which are a standard set of metrics against which all district governments must report (Ssozi, D. and Danert, K., 2012). These 11 golden indicators are reported on and collated annually to update the Water Supply Database at MWE (see **Box 2**). District water officers with support from TSUs are responsible for the data collection process. The MWE publishes results in an annual Sector Performance Report.

Part of the output from the national monitoring framework is now available as an **open source data set** which in theory is available to any stakeholder in the country (and outside).

The 11 golden indicators and milestones of the Joint Water and Environment Sector Support Programme (JWESSP) provide the framework for review of the WASH sub-sector. Priority actions referred to as undertakings are agreed upon for implementation in the subsequent financial year. These actions are reviewed mid-year (April) at the Joint Water and Environment Technical Review meeting. In 2016, MWE embarked on a process of reviewing the Sector Performance Framework to align it to the National Development Plan II (2015/16 – 2019/20) and the Sustainable Development Goals. The new indicators proposed seek to strengthen metrics from measuring equity, good governance aspects (procurement, audit queries), contribution of CSOs to budgets at district level among others.

Although very helpful for national stakeholders to track general progress in the sector, the golden indicators have a number of limitations;

- The golden indicators do not include information on important aspects of water supply, such as likelihood of sustainability of water services, the actual service levels, reliability of services, user satisfaction, or technical backstopping provided to water service providers.
- The golden indicators cannot be used to provide a clear diagnosis of the WASH system at district level. They capture insufficient information and provide limited space for decentralized actors to make informed decisions and take remedial actions at local level.
- Development and adoption of the SDG monitoring framework influenced the review of the sector monitoring framework in Uganda. In 2017, the Ministry of Water and Environment developed a new sector performance monitoring framework that is aligned with the SDGs and incorporates new indicators on; sector financing, and accountability. The framework will be rolled out in the financial year 2017/2018. A copy of the framework is presented in Annex I.

Regulation of water service provision

There is no independent institution mandated to regulate delivery of water and sewerage services in Uganda. This role is fulfilled by the Water Utilities Regulation Department of MWE. The current regime of regulation mainly targets urban water and sanitation service provision. Distinct regulatory frameworks have been established for two main categories of service provision in towns and RGCs;

1. Utility – NWSC service provision to large towns; and
2. The small towns that are not part of the NWSC's service area and are managed directly by Water Supply and Sewerage Authorities (WSSA).

NWSC is regulated through a dedicated Act, the NWSC Act adopted in 1995, and through a performance contract signed directly with the Ministry of Water and Environment. This contract allows aligning of NWSC's corporate goals with overall sector goals set by MWE. For small towns outside NWSC service areas, MWE develops performance contracts with the designated Water Service Authority. The performance contracts set out the service standards required. Actual performance is monitored through quarterly reports and field verification visits with performance and management contracts used to ensure the commitment of the MWE small towns to improve utility performance and service quality.

Box 2: The '11 golden indicators' as part of the national monitoring framework

1. Access: % of people within 1000 meters (for rural areas), 200 meters (urban areas) of an improved water source
2. Functionality: % of improved water sources that are functional at time of spot-check
3. Per capital investment cost: average cost per beneficiary of new water and sanitation schemes
4. Sanitation: % of people with access to improved sanitation
5. Water quality: % of water samples taken at the point of water collection, that comply with national standards (for rural protected sources, E.coli)
6. Water for production: cumulative water for production storage capacity (million m3)
7. Equity: mean sub-county deviation from the national average in persons per improved waterpoint
8. Handwashing: % of people with access to (and using) handwashing facilities
9. Management: % of water points with actively functioning Water Source Committees
10. Gender: % of Water Source Committees with women holding key positions
11. Water resources management: compliance % of water abstraction permits holders complying with permit conditions

Whereas NWSC is in charge of gathering its own data about tariffs and preparing tariff modifications, WSSAs are obliged to seek approval from the Minister before any changes can be made. An analysis of the weaknesses in the current regulation regime conducted by the SUWASA in 2013 are presented in **Box 3** below. These weaknesses have been the basis for stimulating dialogue among sector actors and advocating for an Independent Regulator; the Water and Sewerage Regulatory Authority. A bill to support the establishment of the authority as an autonomous institution was developed and is yet to be tabled in Parliament.

Delay in ministerial approval of tariffs for all WSSAs create financial hardships for WSSAs

In the case of NWSC, there is no regulatory financial model on which to base tariff discussions. In addition, there are no mechanisms to involve multiple stakeholders in the tariff review process.

The service levels were self-monitored in the case of NWSC towns and regulatory tools for small towns, although better defined, were insufficiently applied on the ground due to a weak representation on the ground of the regulatory unit.

Uneven level playing field and negotiation position in the performance contracts– for large towns, NWSC is in a stronger negotiating position to influence the terms and conditions of the performance contract.

Lack of representation of customers' interests customers have very limited means to make their voices heard at present. In the different regulatory regimes, there is no explicit mechanism for receiving customer complaints.

Inadequate provisions for competition regulation the Minister currently has to decide whether small town systems are going to be entrusted to NWSC, or newly-created, WSSA.

5. Adopting systems-based approaches in Uganda

5.1 Existing experiences with taking systems approach to WASH

Although to date there has been limited experience with what can be explicitly labeled as ‘systems-based approaches’ to WASH in Uganda, there have been a number of initiatives over the last five years or so which have included elements of such approaches. These include the work of GIZ and the Kampala Capital City Authority in their efforts to understand and improve fecal sludge management, which involved the development of a detailed mapping of stakeholders, roles and responsibilities as well as key processes, within each context of operation. The inclusion of performance targets related to the delivery of sanitation services for government staff and applying service monitoring as an entry point into delivering better services and strengthening sector accountability have all been key elements of this more holistic approach (rather than only a focus on sanitation infrastructure).

It is also important to recognize that even with the limitations of the operating environment and the political economy of WASH in Uganda, the technical arm of government (in the form of the MWE and its departments), does have a strong understanding of systems ‘arrangement’ in thinking through what they do, although they do not necessarily use the language or taxonomy of systems-based approaches. For example, the Joint Sector Review (JSR) process is a way of ensuring alignment and coordination, but also about learning and information sharing and using an evidence base (from the monitoring framework) to try and diagnose problem areas in a collective manner.

Probably the initiative that has come closest to a systems approach in the WASH sector in Uganda was the IRC-led Sustainable Services at Scale (or Triple-S) project which ended in 2015, and which had an emphasis on the building blocks for sustainability (both at local and national level), investment in strengthening the enabling environment and its work around service models, which again included service performance monitoring. Building on from the learning of Triple-S in Uganda IRC, together with the MWE and other member organizations of the sustainableWASH.org group co-hosted a global symposium in 2015 in Kampala that challenged the notion of “business as usual” approaches to implementing projects that have largely remained focused on the project and under-emphasized the broader context¹⁶. The symposium had a specific focus on collaboration to break down the silos of WASH projects by exploring methods for evaluating the context in which these interventions are situated, exploring political economy topics and examining how this whole system can be engaged with to ensure that services last over time (see **Box 4**).

Box 4: Taking a systems-based approach to WASH; Kampala Symposium, 2015

Practical ways in which governments, individuals and organizations can start to shift their thinking and actions include:

- Mapping the system and locating your place within it; understanding what others are doing and engaging actively and constructively with them;
- Realizing that your presence and actions – either as a permanent actor, or a ‘temporary’ development partner – implies you are already part of that system;
- Recognizing and working to support – and never displace or duplicate – national and local leadership and systems (especially national monitoring systems);
- Being open to, and collaborating with, collective action that starts by developing a shared understanding of both vision and challenges with as wide a group as possible – and then moving to a shared program of learning and adaptation.

5.2 Achievements and lessons from IRC’s experience in Uganda

IRC has been working on systems strengthening in Kabarole since 2010, engaging with the WASH sector in the district and introducing and testing several approaches and tools to improve WASH service delivery. Kabarole District has a dynamic alliance of actors including; CSOs, District Local Government (DLG), and local private sector that contribute to the development of new approaches for improving service delivery and to learning about how to adapt and scale up successes. Core to understanding the systems strengthening process in Uganda is understanding the multi-level learning alliance approach that IRC has supported.

¹⁶ For more information on the symposium held in Kampala in 2015 see: <http://www.kampalawashsymposium.org/>

The Learning Alliance approach in Uganda

The Triple-S program was based on adoption of a learning alliance approach in Kabarole District as well as at regional and national level. A learning alliance brings together a group of stakeholders with a common vision, purpose and desire to work together to change how things are done. The learning alliance is one of IRC's core strategies that has been instrumental in building partnerships, and trust among WASH actors, initiating action research to address challenges in sustaining rural WASH services and to scaling up promising approaches.

In Uganda, the learning alliance works as a unit of interconnected platforms at district, regional and national level;

At district level, the District Water and Sanitation Coordination Committee works as the learning alliance that also serves as a 'laboratory' where action-research experiments to improve different aspects of the WASH system are initiated.

At regional level, IRC in collaboration with the CSOs in Kabarole and the Technical Support Unit 6 of the MWE established a regional learning forum that brings together 16 different districts and provides a critical mass for further interrogation, scaling up and adaptation of experiences in Kabarole and other districts. Lessons from regional level can then be fed into national level platforms.

At national level, the sector thematic working groups serve as platforms to initiate dialogue on policy and shape directives. IRC supported the MWE with coordination of the functionality working group which has been central to learning and uptake of initiatives for improving the sustainability of rural water.

The multilevel learning alliance has served as a foundation for several new approaches and innovations in Kabarole, particularly targeting improved financing mechanisms for operation and maintenance and reviewing sector policy and guidelines to improve the enabling environment to scale up successes and improve service sustainability.

Hand Pump Mechanics Associations (HPMAs)

One particularly successful action-research initiative in Kabarole is the establishment of functional HPMAs that are supported by legislation and institutional mechanisms critical for sustainability. In 2011, the MWE introduced HPMAs as a possible solution to low functionality, however low capacity and resources for HPMAs hindered uptake and the effectiveness of these associations. During Triple-S, IRC engaged with DLGs and local actors to identify the necessary conditions for HPMAs to work and was successful in developing business models to address inefficiencies and regulatory guidance for assuring the quality of work. By 2014 the association in Kabarole had developed into a local private company with capacity to manage rehabilitation contracts from the local government and NGOs. The association today is able to rehabilitate at least 30 handpumps every year, and new business models for pump mechanics repair have become a key innovation addressing the challenge of low functionality of rural water points. SWS Concept 3 in Uganda (Whave) has elaborated on this approach for a more sophisticated model of preventative maintenance which is discussed in the subsequent section.

The regional learning forum was instrumental in facilitating scaling up and peer learning among Hand Pump Mechanics Associations in the region and a series of community financing options for operation and maintenance. To date the forum has been incorporated in the WASH sector calendar for actors in the region and is co-financed by the district local governments and CSOs—showing sustainability and continued demand for the learning platform.

At National level IRC supported MWE coordinate the functionality thematic group that was implementing one of the undertakings on operationalization of HPMAs from 2011 - 2013. The group included; CSOs, technocrats from MWE, and donor representatives that were implementing or supporting initiatives on operation and maintenance of rural water systems, such as the action research undertaken in Kabarole. By 2013 functioning HPMAs had been established in all 111 rural districts in Uganda and policy guidelines had been developed for district local governments on how to engage the associations.

Figure 6: Learning Alliances are multiscalar



Review of sector policies and guidelines

IRC has contributed to the review, update and development of several sector policies and guidelines, such as the District WASH Implementation Manual and Guidelines for Local Government for establishing and contracting HPMA. The WASH implementation manual was reviewed and used as an entry point to harmonize and update the overall coordination framework at decentralized level. This policy review served to respond to changes in context at decentralized level since the previous version published in 2010.

5.3 Current and ongoing work

The harmonization and coordination efforts started in Triple-S have been followed up with a process of development of a District Master Plan for Universal Access to WASH services that started in 2017 as part of IRC's systems strengthening work in Kabarole.¹⁷ The master plan will be the main tool in the district for operationalizing the SDGs, serving as the road map for universal access including tracking financial allocations of different actors.

WASH Agenda For Change

Building on the legacy of Triple-S, IRC Uganda continues to work at district level to support local government create sustainable water and sanitation services and assisting to sustain them, and at the regional and national level to advocate for policy and sector strengthening activities based on lessons learned in the district. One of the direct outputs of the Triple-S experience (also globally) has been the development of the Agenda for Change movement.

IRC Uganda, in partnership with WaterAid and Water For People together with the Ministry of Water and Environment and other local partners are engaging with national and local governments of Kabarole, Kamwenge and Napak to develop a national WASH Agenda for Change (WA4C) program aimed at supporting the national and decentralized vision of universal access by 2030.

WA4C is a response to some persistent weaknesses of existing approaches to aid and national investments in the WASH sector. WA4C seeks to demonstrate how close collaboration of CSOs, national, and district local government guided by a common road map can build the foundation and conditions required for achieving universal access to WASH services. The coalition plans to have these conditions in place by 2020 to ensure universal access by 2030.

The main goals of the WA4C are as follows;

- Achieve universal access to sustained services – for everyone, everywhere, forever – at the fastest pace consistent with effective and fully sustainable service delivery;
- Take a systems approach to WASH, going beyond the provision of infrastructure only, and supporting national systems and the enabling environment for service delivery at all levels;

¹⁷ This work is supported by the Conrad N. Hilton Foundation as a part of their Safe Water Strategy.

- Support government at all levels to be the leader and driver of this vision.
- The partners are working together with national and local government partners and other stakeholders, and are attempting to take a system-wide approach that tackles all dimensions of the WASH sector. This starts with the point that investments must be made in service delivery (as opposed to infrastructure) and that services should progressively reach everyone in a given unit of scale (this equates to the district in Uganda). The approach considers all actors and systems operating 'district-wide' that are required to be in place, and capacitated, to ensure service delivery, including for both new infrastructure delivery (coverage 'for all') and the financing, planning, monitoring and support capacity required to ensure services are maintained over time.

The untold story of WASH

The partners have also worked together to establish a documentation series called The Untold Story of WASH, to increase advocacy for public and alternative financing for the sector, engage with the media on strong cases of WASH, organize learning alliance meetings for different stakeholders, develop a road map for implementing SDG 6 at the national and district level, rehabilitation and metering of boreholes, and engage with political leaders at national and district level on WASH issues.

Pay-as-you-fetch model

Despite the capacity development interventions for operation and maintenance of rural water supply, preventive maintenance is still a big challenge. In 2017, IRC Uganda started piloting the pay-as-you-fetch model to promote consistent collection of water user fees and ensure availability of funds for conducting preventive maintenance. The model is being piloted with 15 hand pumps in Kabarole. It continues to be improved and documented and outcomes of the pilot serve as the seed for further action-research initiatives, including possible scale up.

Whave Uganda

In addition to the work by IRC, **Whave** has used systems thinking to address the issue of rural water supply sustainability in eight districts of Uganda through development of district-level and national-level public-private partnerships. In line with the thinking behind the HPMAs, Whave has developed a new model for service delivery and preventive infrastructure maintenance. Also taking a learning approach through partnerships with communities, civil society organizations and authorities, they have focused on "supporting district level institutional arrangements which underpin permanent and self-sustaining solutions for reliable services" (Whave, 2017). Recognizing the importance of monitoring and regulation in particular, they have introduced new performance indicators, affordable monitoring procedures, and performance-payment contracts, in order to increase accountability and professionalism in the rural sector. Whave is also committed to increasing learning in the sector and working with others to promote scaling up of successes and refinement of the model to fit the needs of different contexts. As partners of IRC both in the WASH Agenda for Change and the SWS Learning Partnership there is potential to work together for increased cross-learning and to promote sharing and scaling up of experiences from different districts (Whave, 2017).

5.4 USAID Uganda programming in WASH

USAID has a history of supporting the WASH sector in Uganda, including direct service provision through various NGO implemented programs. Over the last five financial years, the Agency has invested almost USD 18 million in WASH with a focus on helping to rebuild the northern part of the country, which was devastated by decades of conflict¹⁸. Investments have focused on repairing and improving access to clean water by rehabilitating damaged infrastructure, establishing community operation and maintenance plans, and more intensively, in the last two years or so, a growing focus on sanitation interventions.

More recently, USAID has made a two-year investment in small town sanitation in four town councils through a collaboration with GIZ, partnering with the MWE, Water and Sanitation Development Facility North, the NWSC, Kampala Capital City Authority and various town councils and private operators. Building on this progress in the sanitation sub-sector, USAID Uganda is in the final stages of issuing a major new investment program in sanitation and hygiene for rural areas and small towns. This will be implemented in conjunction with both the Ministry of Health and MWE and will be a major contribution to improving public health conditions in these intervention areas; this is expected to start in 2017.

¹⁸ Source: <https://results.usaid.gov/uganda/health/water-supply-and-sanitation#fy2015>

Under the Improved Economic Regulation for Urban Water Services project in Uganda, USAID support has also been focused on a collaborative process for the design of a regulatory framework for the urban water and sanitation sector. This project was a component of the USAID-funded Sustainable Water and Sanitation in Africa (SUWASA) project implemented in nine sub-Saharan African countries.

USAID Uganda has recently issued a new **Country Development Cooperation Strategy** (CDCS, 2016), which reinforces its programming commitment to WASH related investments, specifically in terms of the following;

- Enabling communities, households and key populations to identify vulnerabilities, strengthen household behaviors (around, for example, WASH, health, education, fuel generation, management of natural resources).
- Integrating key hygiene actions (safe drinking water, handwashing with soap, safe disposal of excreta and food hygiene) into its nutrition initiatives.
- Supporting implementation of girls' education activities that will seek to leverage WASH interventions so as to provide water to households around targeted schools to maximize schooling time and improve the learning environment.

More broadly than only the WASH sector, the new CDCS recognizes structural problems in Uganda that are associated with weak national systems and the partial, and slow, application of policies, which on paper at least are relatively well thought through. The strategy document goes on to identify causes of these weak national systems, rooted in challenges of corruption, patronage and neo-patrimonialism that generate high levels of inefficiency, public distrust, and poor service delivery on the ground. This negative cycle is then reinforced by lack of engagement of citizens and lack of willingness of consumers to pay for poorly functioning services. In responding to these challenges, USAID Uganda sets out a strategy for supporting integrated approaches with tailored innovations at the local level that are both evidence-based and adaptively managed, in responding to emergent results (both negative and positive). There is therefore an explicit understanding of the complexity of (social) development and the role of aid financing in USAID Uganda's strategy which aligns well with the SWS initiative and its proposed work on strengthening local systems. SWS in Uganda is focused on learning about and documenting of systems approaches, and the learning alliance approach specifically is well-suited to promoting scale up of successes both in the WASH sector and other related sectors.

5.5 Implications for the SWS project in Uganda

The preceding chapters of this document presented a brief overview of the national context and the status of the WASH sector which operates within this broader political, institutional and socio-economic environment. It is not meant to be exhaustive, but it does provide some pointers and flags important issues to bear in mind as the new USAID-funded SWS project is being designed and rolled out in Uganda.

In one sense the WASH sector in Uganda presents a paradox in terms of its relative maturity. In certain respects it is well developed, with sound policy frameworks, strong institutions and one of the longest and most fully tested experiences with a SWAp and related sector coordination mechanisms on the continent. There are systems in place for regular audits, capacity building, follow-up monitoring and enforcement of findings, and feedback for learning lessons. The government has also developed an institutional framework that provides clarity and separation of functional roles and responsibilities with minimum overlap, gaps and duplication. The long political stability afforded by single party rule over many years has also benefited continuity of technocratic and civil service staff and policy reform.

However, on the other hand - and despite these impressive advances - access remains limited (especially so for sanitation) and the sector still faces significant challenges, particularly in financing for recurrent costs and political barriers (at local and national levels) to improving service delivery, both in terms of increasing access rates (to universal) and in sustaining services. There is political influence over the allocation of resources and at the local level there is often tension between the technical staff and the political staff that are elected and form the district council that scrutinizes and approves budgets. High population rates and limited household incomes, especially in rural areas, are constraining factors. As a learning initiative that seeks to identify locally-driven solutions to the challenge of partial and poor service delivery the implications of this operating environment for the SWS project in Uganda include the following;

- To generate a clear understanding of the specific dynamics within the WASH sector at local level and map the key stakeholders and factors, with an emphasis on political dynamics (i.e. to go beyond the conventional set of actors and dynamics to truly understand why service delivery fails);

- Assessing lack of demand of consumers and the low privatization for (paying for) WASH services and how this can be addressed, along with new approaches to management and unlocking other potential local sources of financing;
- The local systems at district level are already working with some level of success. Analysis of institutions and capacities in line with the SDG ambition of universal access will provide an opportunity to investigate and model minimum institutional conditions required to support these processes;
- The political leadership at district level is very strong, influential in allocation of resources and shaping public opinion. Building on the initial mapping, it will be necessary to devise strategies to tap into the power and influence of political leadership to unlock local resources from public finance, private sector, and trigger shifts in the flow of finances to support service delivery over time;
- The existing mechanisms for coordinating WASH actors at district level provide opportunity for facilitating a collaborative process to understand what it will take to achieve sustainable WASH services (e.g. road map, finances and tools), as well as to align actors with a common investment plan to leverage resources of all WASH actors in the district; and
- The WASH sector in Uganda is open to innovations and has provided space for actors to pilot a number of models with varying levels of success in isolated communities. It will be pertinent for the project to investigate and interrogate models that have proved to be successful whether private, sector-led or PPPs, understand the principles and contexts that make them thrive, future proof them and initiate collaborations for their scale up.

It is worth highlighting that the approaches and methods that the SWS Learning Partnership intends to use for learning and testing around these key challenges are based on systems thinking, beginning with the initial stakeholder and factor mapping to be carried out in the intervention district(s). This approach is fully aligned with the analysis presented in the USAID Uganda CDCS of taking a more holistic approach to understanding current failures, and in seeking new, innovative solutions that seek to strengthen systems in place at local and national levels. The SWS team in Uganda therefore sees this as a unique opportunity to share learning on these approaches and their application as part of the broader systems strengthening efforts being undertaken by USAID in Uganda.

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7. Annex 1: Revision of sector performance indicators

Details on Proposed Indicators – Water Supply

Theme	Proposed indicator (blue: new indicator; red: issues to be discussed/clarified)	Reference to SDGs, NDP II etc.	Current Golden Indicator	Definition Calculation method	Data source(s) and availability	Responsibility for monitoring ("custodian" of the indicator)	Challenges / matters for discussion
Use of safe water	1. Basic water: Percentage of population using an improved drinking water source Rural / Urban	SDG 6.1.1 (Basic water) NDP II: Rural and urban safe water coverage	1. Access: % of people within 1,000m (rural) and 200m (urban) of an improved water source	<ul style="list-style-type: none"> •% of population using an improved water source with a total collection time of no more than 30 minutes (distance no more than 1 km) •Infrastructure data (water points, connections) to be combined with UBOS census (2014) and household survey data •Calculation method for use still to be defined based on Census 2014, household surveys, and interpolation with Atlas data. 	UBOS census 2014 and household surveys (every 5 years max.) Annual updates based on: 1. Water Atlas (water points) 2. WSDF/project data (piped water) 3. NWSC connection data 4. UPMIS	DWD (RWSD, UWSD, WURD), WESLD	<ul style="list-style-type: none"> •More work to be done on relationship between access (infrastructure based) and usage (household survey based) •Check availability of detailed, disaggregated census data with UBOS •Methodology for linking UBOS, Water Atlas and NWSC data to be developed •Town Boards to be considered as urban.

<p>Use of safe water</p>	<p>2. Safely managed water:</p> <p>Percentage of population using safely managed drinking water services located on premises Rural / Urban</p>	<p>SDG-6.1.1</p> <p>(Safely managed water)</p>	<p>-</p>	<p>% of population using an improved drinking water source which is located on premises, available when needed and free of fecal contamination</p> <p>Formula:</p> <p>% safely managed = (% on premises) * (% functionality) * (% complying with WQ standards) to be calculated separately for NWSC, small towns/piped water (from UPMIS) and rural (Water Atlas, WQ sample testing)</p>	<p>As above</p> <p>In addition:</p> <p>UPMIS (functionality, water quality)</p> <p>NWSC water quality data</p> <p>DWRM rural water quality data</p> <p>In future: Service quality data from Regulator</p>	<p>DWD (RWSD, UWSD, WURD WESLD)</p>	<ul style="list-style-type: none"> •How to determine adequacy of quantity? •Safely managed source (not supply chain, which is a public health issue) •Methodology for combining access, functionality and water quality by linking UBOS, UPMIS and NWSC data to be developed •Rainwater on premises to be considered as acceptable •Disaggregation by wealth quintiles and for informal settlements desirable •Consider current work of WB/ WSP for the methodology
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Use of safe water	3. Percentage of villages with a source of safe water supply Rural / Urban	Presidential directive	-Equity indicator "Mean Sub-County deviation from the national average in persons per improved water point" to be replaced by this indicator	<ul style="list-style-type: none"> •Water Atlas GIS analysis using list of villages provided by UBOS •Number of villages with an improved water point / all villages 	Water Atlas NWSC block mapping and reports (?)	DWD (RWSD, UWSD, WURD WESLD)	<ul style="list-style-type: none"> •Maintain old Equity indicator in addition to the new one? Or look at the regional equity / inequity of our new indicator(s) or adequacy of sector funding •Check whether Water Atlas data can be used for urban areas (in particular large towns) •Village population not provided by UBOS, so full coverage not guaranteed
	4. Pro-poor/ Affordability: % of towns pro-poor facilities where people pay less or equal to the house connection tariff in the service area	Monitoring Governance Report (2016) WaterLex study (2015) JWESSP Outcome UWSS 1.3	-	<ul style="list-style-type: none"> •Water Atlas GIS analysis combined with UPMIS information on actual prices paid at public standposts/water kiosks •Conditions A or B to be calculated from UPMIS •Average sum of PSPs that charge below or equal to in-house tariff per town over total number of towns. 	Water Atlas UPMIS NWSC information?	DWD (UWSD) WESLD	<ul style="list-style-type: none"> •Implement automatic calculation in Water Atlas and UPMIS •Information of NWSC towns to be included in UPMIS? •Selling price at NWSC service areas not known.

O&M / sustainable management	<p>5a. Functionality (point water sources):</p> <p>% of point water sources functional at time of spot-check</p>	<p>Functionality implied in SDG-6.1.1 ("safely managed")</p>	<p>2. Functionality (rural): no change</p>	<p>Calculation by Water Atlas software (already implemented)</p>	<p>•Calculation by Water Atlas software (already implemented)</p>	<p>DWD (RWSD) WESLD</p>	<p>•Better monitoring & reporting mechanisms needed to ensure regular updates</p> <p>•Alternative monitoring using mobile phones for example</p>
	<p>5b. Functionality (piped water):</p> <p>% piped water service availability in small towns</p> <p>or:</p> <p>Percentage of schemes with satisfactory water quantity, quality and service reliability</p> <p>Piped water/NWSC</p>	<p>Functionality implied in SDG-6.1.1 ("safely managed")</p>	<p>2. Functionality (small towns): Ratio of actual to required hours of water supply</p>	<p>Calculation from UPMIS</p> <p>Two possible definitions:</p> <p>•Service availability = 100% minus (% non-functional schemes) minus (% days without water of all other schemes) minus (% of dry connections)</p> <p>or:</p> <p>•Percentage of schemes that satisfy three criteria:</p> <p>1. Sufficient water quantity (20 l/day per capita)</p> <p>2. Compliance with water quality standards (no contamination)</p> <p>3. Adequate service reliability, e.g. no more than 1 day per month without service</p>	<p>•All data available from UPMIS NWSC information</p>	<p>DWD (UWSD/ WURD)</p>	<p>•Decision to be made on final definition of functionality of piped water supply</p> <p>•Only urban or also rural piped schemes?</p> <p>•Implement automatic calculation in Water Atlas and UPMIS</p> <p>•Information of NWSC towns to be included in UPMIS?</p>
	<p>6a. Management (rural): % of water points with actively functioning Water & Sanit. Committees</p>	<p>Management implied in SDG-6.1.1 ("safely managed")</p>	<p>7. Management (rural): no change</p>	<p>Calculation by Water Atlas software (already implemented)</p>	<p>Water Atlas; data to be updated by District Water Offices</p>	<p>DWD (RWSD) WESLD</p>	<p>-</p>

O&M / sustainable management

<p>6b. Management (piped water): % of piped water schemes with formal contract-based management structure</p>	<p>Management implied in SDG-6.1.1 ("safely managed")</p>	<p>7. Management (urban): % of water points with actively functioning Water & Sanitation Boards</p>	<p>Percentage of schemes with one of the following arrangements: -Managed by Public Utility -Managed by gazetted Water Authority with a valid contract and a formally established and active Board</p>	<p>Data available from UPMIS</p>	<p>DWD (UWSD/ WURD)</p>	<ul style="list-style-type: none"> •Implement automatic calculation in UPMIS •An active board meets regularly, making key decisions and implementing them.
<p>7.a % Non-revenue water Piped schemes</p>	<p>NWSC PC 5 Target Common international indicator for management efficiency</p>	<p>-</p>	<p>Water billed divided by water produced Aggregated from the totals of all small towns / NWSC towns</p>	<p>UPMIS Annual NWSC report</p>	<p>DWD (UWSD/ WURD)</p>	<ul style="list-style-type: none"> •Percentage for metered schemes; with a formal management contract only? •The division of rural and urban is disappearing.
<p>7.b customer satisfaction: NSWC's customer satisfaction index</p>	<p>GGWG</p>	<p>-</p>	<p>Weighted customer satisfaction score weighted over 7 service attributes for each of the operation areas/branches</p>	<p>NWSC Customer satisfaction Survey report</p>	<p>NWSC</p>	<ul style="list-style-type: none"> •The 7 attributes are reliability, water quality, timely and accurate monthly bill administration, responsiveness to complaints, customer care, convenience in bills payment, and regular updates on services and plans.

<p>O&M / sustainable management</p>	<p>8. Financial Sustainability: Ratio between total revenue collection and O&M costs Piped schemes.</p>	<p>JWESSP Outcome UWSS 2.2</p>	<p>-</p>	<p>Total revenue collection divided by total O&M costs Calculation for small towns from UPMIS Also to be calculated for NWSC</p>	<p>UPMIS</p>	<p>DWD (UWSD/ WURD)</p>	<ul style="list-style-type: none"> •Only urban or also rural piped schemes? •Implement automatic calculation in UPMIS •Include data from NWSC if possible
<p>Investment Efficiency</p>	<p>9. Per Capita Investment Cost: Average cost per additional beneficiary served of water and sanitation schemes (USD) Rural / Urban</p>	<p>-</p>	<p>3. Per Capita Investment Cost (no change)</p>	<p>Total cost of schemes (design, construction and software) divided by total design population</p>	<p>RWSD information system WSDF and UWSD project reports</p>	<p>DWD (RWSD) DWD (UWSD)</p>	<ul style="list-style-type: none"> •Sanitation to be reported separately •Clear guidelines for allocation of overhead costs (including WSDF staff costs) needed •Need to distinguish between new schemes, extensions and rehabilitations