Governance conundrum in pursuit of the human right to water and sanitation: tracking the progress of the leave-no-one-behind principle in Uganda

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ABSTRACT

The Government of Uganda is a party to numerous international and national commitments, laws and regulatory frameworks to deliver the socio-economic transformation of its citizens. Sustainable Development Goals (SDGs) commit states, Uganda inclusive, to achieve a better and more sustainable future for all by 2030. According to the SDG 6 resolutions, the rights to water and sanitation are legally binding upon states, which have the primary responsibility to ensure their full realization, including unserved and undeserved areas. While the SDGs came into force after 2015, it is not clear the extent to which Uganda’s policies, legal instruments and practice are aligned to the SDGs. A combined methodology was adopted to undertake the study under a cross-sectional design. The study reviewed relevant literature such as sector performance reports on water and sanitation. Purposive sampling was used to select relevant informants for primary data. Key informant interviews were held with representatives of relevant government agencies, United Nations agencies, civil society organisations, indigenous communities and the private sector. Findings indicate that while the Government of Uganda has made tremendous efforts regarding the right to water and sanitation, enormous challenges and gaps remain. For instance, the pro-poor strategies to access safe water, sanitation and hygiene facilities are largely insignificant.

Key words: human rights, leave-no-one-behind, sanitation, vulnerable groups, water

HIGHLIGHTS

- This paper shows the evidence that the rights-based approach is not yet understood by many Ugandans.
- This paper highlights the mismatch between policy and practice.
- This research showcases the gaps in data capture to inform effective monitoring and evaluation.
- This research also demonstrates the progress that the Government of Uganda has made in ensuring water access to all.

INTRODUCTION

The United Nations (UN) General Assembly Resolution 70/1 (2015) that adopted the Sustainable Development Goal (SDG) frameworks that put emphasis affirms that these goals seek to realize the human rights of all and to achieve gender equality’. Resolution 70/1 mentions explicitly the Universal Declaration of Human Rights (UDHR). Goal 6 specifically relates to the realization of the Human Rights to Water and Sanitation (HRWS) by calling for the realization of universal and equitable access to safe and affordable drinking water and to adequate and equitable sanitation and hygiene for all by 2030 (Goals 6.1 and 6.2). Uganda is a signatory to this resolution.

Understanding both water and sanitation governance is a challenging exercise, as there are multiple governance processes in which different roles and power relations among different interest groups and stakeholders are rehearsed (Pahl-Wostl 1995). The chain of actors and attendant policies are quite varied from national – at the macro level to districts at the meso level which often includes health inspectors and private sector entities to communities and individual households at the micro level. The HRWS are derived from international instruments to which states have signed up, such as the UN General Assembly Resolution 64/292 (2010) or the UN General Assembly Resolution 74/141. According to these resolutions, the rights to water and sanitation are legally binding upon states, which have the primary responsibility to ensure their full realization, including unserved and undeserved areas.

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Globally, the HRWS remains far-fetched for many people. While the system of human rights in the UN was introduced by the UDHR in 1948, the HRWS was not explicitly recognized until 28 July 2010 when the UN General Assembly and the Human Rights Council recognized HRWS through Resolution 64/292.

Uganda has adopted a number of instruments, legislation/laws, policies, strategic and development plans, and regulatory frameworks at the national, sub-national/local government, regional and international levels concerning the HRWS in Uganda. International bodies have risen to promote HRWS in Uganda through cooperating with the Ministry of Water and Environment (MWE), umbrella organizations under the ministry as well as non-governmental organizations (NGOs) to help in the supply of water and improving access to sanitation. This has been through funding programmes and projects of water and sanitation. Uganda is a signatory to the UN SDGs regarding water and sanitation, making these programmes part of the international aid in the fight for HRWS, leaving no one behind (LNOB) and gender equality. The HRWS have been incorporated in the legislation, national frameworks, strategies, SDGs, policies, projects and programmes at both national and sub-national levels. Uganda is good at policymaking. Indeed, many laws, policies and institutional frameworks are in place, right from the constitution of the Government of Uganda.

In Uganda, categories of left-behind groups or vulnerable populations include the elderly, women, children and students, nomadic populations, extreme poor populations, refugees and internally displaced people, people with physical or developmental disabilities, geographically dispersed or hard-to-reach populations as well as groups excluded based on sexual orientation such as Lesbian, Gay, Bisexual, Transgender and Questioning (or queer) (LGBTQ). This paper examined the link between policy and practice in fulfilling the HRWS and the leave-no-one-behind (LNOB) principle for the vulnerable and marginalized people in Uganda. The purpose of the reviews is to take stock of the national integration of the HRWS in target countries, identify gaps and challenges, and related recommendations, as well as suggest best practices in ‘LNOB’.

Specifically, the study examined the role and responsibilities of various institutions – public and private – including ministries, local governments, water & sanitation supply providers, and water users associations in the provision of water, sanitation and hygiene (WASH) services. Secondly, the study examined the activities of these institutional actors in the achievement and implementation of HRWS principles (availability, acceptability, accessibility, affordability, quality and safety, dignity and privacy, participatory action, non-discrimination and sustainability). The study will assess whether adequate WASH services are provided in public spaces such as schools and markets and whether these are convenient for both children and the elderly. Thirdly, the study examined the extent of the vulnerable and marginalized people’s population’s participation (functional, instrumental, consultative and transformational) in decision-making and their contribution to leadership and accountability (in a form of monitoring and evaluation) at national and sub-national levels. Fourthly, it was also important to look at informational asymmetries, thus examining whether information, for example, on women’s rights to water, hygiene and sanitation is culturally appropriate and accessible since power asymmetries affect vulnerable groups’ ability to seek justice with regard to violations of their HRWS.

The working hypothesis for this study was that harmonizing policy and practice is a prerequisite for Uganda’s trajectory to achieving the right to water and sanitation for all. Consequently, the research questions, this study sought to answer three research questions: what are Uganda’s WASH policy and institutional arrangements in place to operationalize the SDG agenda, what are the current practices in operationalizing the SDG framework and what needs to be done to fast track the realization of the HRWS and the LNOB principle.

**METHODS**

This study adopted a cross-sectional study design to address the research questions of the study. This type of research design selects a representative subset of a given population to collect data about research questions of interest. It is called cross-sectional because the information gathered about the study problem represents a snapshot of what is going on at only one point in time (Olsen & Marie 2004). The purposive sampling technique was adopted to enable the researcher to select respondents who have knowledge and experience about the subject of study. Qualitative data collection was applied and it involved key informant interviews and focus group discussions.

This study adopted the principle of data saturation in determining the key informant sample size. The key WASH service providers, in Uganda, were listed. Thereafter, data collection started with the key informants from government and development partners. Additional key informants were enrolled until a point was reached where no new information was coming out (data saturation point). A similar approach was adopted for the left-behind and vulnerable groups. Human rights advocacy
organizations are few in Uganda, and the Human Rights Network (HURINET) was targeted for this information source category. The Uganda human rights commission was in particular targeted for issues regarding the HRWS and the LNOB groups.

A mix of data collection was employed. Primary data were collected from interviews of the key informants from government ministries, departments and agencies (MDAs); UN agencies; civil society organisations, comprising largely of NGOs (local and international NGOs); faith-based organisations; nomadic and indigenous communities; and the private sector. The majority of the key informants were interviewed on Skype/Zoom, while it was possible to organize one-on-one meetings with a few of them. Focus group discussions were held with representatives of left-behind groups, in informal settlements, mainly from Kampala. Secondary data were obtained from a review of unpublished and published documents, reports and journals at both the local/national and international levels. A review of the policies, laws and legislative frameworks was undertaken.

A variety of key informants were interviewed. Table 1 presents the category of key informants, and the specific organization or detail concerning each category of respondent. The informants are structured into three main categories. Category 1 comprises government MDAs. Category 2 comprises donor agencies, UN agencies, international organizations, NGOs, civil society agencies and private service providers. Category 3 comprises human rights advocacy organizations, LNOB and vulnerable groups.

Due to the prevailing lockdown situation caused by the COVID-19 pandemic, some of the interviews were done virtually. This affected the findings of the study, since the interaction that could have occurred in physical interviews was not realized during the online interactions. In the interviews which took place physically, more information in terms of literature/documents were availed. During the online interviews, the interviewees often promised sending more information in the form of literature and documents and that information took long to be sent, and after several reminders, other information were not sent at all. This work was largely qualitative. The quantitative data that were possible in this work were collected from the literature (documents and reports). No statistical analysis was adopted. For the qualitative data, content analysis was adopted.

RESULTS

The institutional framework for water and sanitation in Uganda has three levels: national, district and community. The national level comprises seven ministries, which are responsible for policy formulation, regulation, monitoring, planning and coordination, quality assurance and guidance, and capacity building. The ministries have several but joint liability to deliver water and sanitation. Uganda’s MWE is principally responsible for setting national policies and standards, managing and regulating water resources, and determining priorities for water development and management. Working in conjunction with the MWE is the National Water and Sewerage Corporation (NWSC), a parastatal that is responsible for providing water and sewerage services to about 256 towns in urban centres across the country.

While the MWE bears the primary responsibility for delivering access to water and sanitation, it works together with seven other strategic ministries to realize its mandate, as follows:

i. the Ministry of Health (MoH), which is responsible for the promotion of hygiene and sanitation in households through its department of environmental health;
ii. the Ministry of Education and Sports (MoES), which is responsible for education in hygiene and the provision of sanitation facilities, as well as the handwashing after latrine use promotion in primary schools;
iii. the Ministry of Gender, Labour and Social Development (MoGLSD), which is responsible for gender responsiveness and community development/mobilization;
iv. the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), which is responsible for water use on farms and the management of water for farm production, including irrigation, animal husbandry and aquaculture;
v. the Ministry of Finance, Planning and Economic Development (MoFPED), which mobilizes and allocates funds to the different ministries;
vi. the Ministry of Local Government (MoLG), which is responsible for the creation, supervision and guidance of sustainable, efficient and effective service delivery in the decentralized system of governance; and
vii. the Ministry of Lands, Housing and Urban Development (MoLHUD), which is responsible for providing policy direction, national standards and coordination of all matters concerning lands, housing and urban development.
In addition, at the national level, within the sector-wide approach to water and sanitation, there is a Water Policy Committee and the Water and Sanitation Sector Working Group, mainly for facilitating the coordination of all activities on water and sanitation in the country. The members of the Water Policy Committee, established under the Water Statute of 1995, comprise representatives from government ministries, local government, the private sector and NGOs. The committee’s basic mandate is to advise on water policy, standards for service delivery and priorities for water resources management. The Water and Sanitation Sector Working Group has the mandate of developing policy and then providing technical guidance.

At the district level, the institutional water and sanitation framework includes local governments empowered to they are responsible for appointing and managing private operators for urban piped water schemes that lie outside the jurisdiction of the NWSC. At the very tail-end at the community level, the community is responsible for demanding water supply and sanitation facilities. Water User Committees (WUCs) at the community level are responsible for mobilizing users to contribute to WASH governance. A summary of the national instruments and frameworks are presented in Table 2.

Table 1 | Categories of key informants and specific organizations or other details of respondents

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<tr>
<th>No.</th>
<th>Category</th>
<th>Specific organization or other detail</th>
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| 1   | Government MDAs | MWE  
|     |            | MoGLSD  
|     |            | Uganda Human Rights Commission  
|     |            | KCCA  |
| 2   | Donor agencies, UN agencies, international organizations, non-governmental organizations, civil society agencies and private service providers. | UN agencies  
|     |            | World Health Organization (WHO)  
|     |            | United Nations High Commission for Refugees (UNHCR)  
|     | Development partners | Danish International Development Cooperation Agency (DANIDA)  
|     |            | United States Agency for International Development (USAID)  
|     | Civil society organizations | Uganda Water and Sanitation NGO Network (UWASNET)  
|     |            | Human Rights Network (HURINET)  
|     | NGO | Water For People  
|     |            | IRC (Country Director of IRC is country focal person for WSSCC)  
|     | Faith-based organization | Diocese of Kigezi-Water Programme  
|     | Private sector | Hydraulic and Sanitation Limited  
| 3   | LNOB, vulnerable groups | Elderly, women/girls, poor people in informal settlements, hospitals, Universal Secondary Schools, HIV/AIDS patients, Muslims at a mosque, sex workers; LGBTQ could not be found in Uganda  
|     | Nomadic communities/indigenous communities | Karenga District Local Government, Karamoja Region  
|     |            | Slum dwellers in Kampala  

In Uganda, the law does not recognize LGBTQ groups. The societal norms do not accept this and they are ostracized. Consequently, these groups could not be found in Uganda and were not included.
Development plans and regulations (local government)

The Local Governments Act\(^1\) Section 31 provides for services to be provided at the request of a council. This gives authority to the Council (District Council, City Council, Municipal Council or Town Council) to give the people social services as delegated by the state in any sector concerned, including water and sanitation to ensure a suitable living environment without discrimination of any kind. To this end, the councils may pass local bylaws, ordinances, which apply only in their area of jurisdiction. These local laws must be aligned to the national laws and where there is conflict, the national laws prevail. A typical example of the local laws/ordinance is that of the Kampala Capital City on Sewage and Faecal Sludge Management. Local authorities can also prepare their strategies and plans aligned to the National Development Goals and aligned to the national annual budgets. An example of information relevant to the HRWS and the LNOB from the Kampala Sanitation Improvement and Financing Strategy is presented in Table 3 alongside information from the Kampala Sewerage and Faecal Sludge Management (FSM) Ordinance.

Regional and international instruments

SDG 6

The Government of Uganda, as a signatory to the UN SDGs, is working towards achieving SDG 6 by the year 2030. The MWE, with the support of UNICEF, has unpacked sector performance monitoring indicators (that included SDG 6.1 and 6.2 indicators) through a clear formulation of data collection tools and reporting templates. The indicators cover six themes (urban water supply, urban sanitation, rural water supply, rural sanitation, water for production and cross-cutting issues). In total, data are collected and reported on 42 indicators. Jointly with the MWE and MoH, GIZ developed a management information system to monitor safely managed/basic sanitation through the local government structures in urban areas. The tool was tested in municipalities in Northern Uganda. Along the way, some emerging issues were identified, requiring urgent attention if the sanitation sub-sector is going to achieve SDG 6.2:

i. Dissemination of the revised performance indicators for sanitation and hygiene to enable all stakeholders at different levels (planning, implementation, monitoring and data collection levels) to appreciate what is being measured and thus plan interventions accordingly.

ii. Migration from paper-based to computer-based management information system for sanitation and hygiene to achieve timely collection of data, ease analysis and ultimately improve the accuracy and reliability of the data.

iii. Menstrual hygiene management (MHM) has remained largely unattended to yet it is critical especially to the retention of the girl child in school.

iv. Sanitation and hygiene at institutions like schools, healthcare facilities, prisons and barracks need urgent attention if the country is to attain universal access and ‘LNOB’.

Mutual accountability mechanism

The government of the Republic of Uganda put in place the mutual accountability mechanism in place in 2010. Since then, the long-term National Development Strategy currently outlines several priority areas and strategies to improve the effectiveness of development assistance. Existing country mechanisms permit the joint assessment of progress in implementing some of the agreed Paris Agreement commitments on aid effectiveness. Additionally, donor-government forums, such as the Joint Budget Support Framework (JBSF), foster dialogue and mutual accountability.

DISCUSSION

A review was undertaken, of the instruments, legislation/laws, policies, strategic and development plans and regulatory frameworks at the national, local government, regional and international instruments concerning the HRWS in Uganda. Development partners have also been active in promoting HRWS in Uganda through cooperating with the MWE, umbrella organizations under the ministry as well as NGOs to help in the supply of water and improving access to sanitation. This has been through funding programmes and projects of water and sanitation. The current programmes are being funded by a number of international bodies like the African Development Bank (AfDB), Austrian Development Agency and others in the Joint Water and Environment Sector Support Programme phase two (JWESSP II). This programme is under

\(^1\) Act 1997 as amended.
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<th>Provisions and analysis</th>
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<tr>
<td>1</td>
<td>Constitution of the Republic of Uganda</td>
<td>This is the Supreme legislation and has some articles that provide for the access to water and sanitation as human rights. Article 39 provides 'A right to a clean and healthy environment'. Articles 20 and 21 provides for the fundamental and other human rights and freedoms plus equality and from discrimination.</td>
<td>1995 and amended in 2005 and 2018</td>
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<td>2</td>
<td>The Water Act, Cap 152</td>
<td>Section 4(b) ‘to promote a clean, safe and sufficient supply of water for domestic use for all purposes to people’. The whole of Section 7 is under the subtitle of ‘General rights to use to water’. Section 16 ‘National water action plan’ this section provides for the water action plan that is to be revised annually. Section 16 (1)(a) ‘coordinate the preparation, revision and keeping up-to-date of a comprehensive action plan for the investigation, use, control, protection, management and administration of water for the nation’. Section 47 addresses the functions of water and sewerage authorities and the major function is provided in Section 47(1) (1)(a) ‘to provide water supply services for domestic, stock, horticultural, industrial, commercial, recreational, environmental, and other beneficial uses as is required by the declaration establishing the authority or the performance contract’. Section 51 provides for water user associations that give powers for the operation of a water and sanitation committee in order to ensure communal supply of clean water leaving no person behind. Section 51(1) ‘Where a water supply system is established by and serving more than one water user group, each operating through water and sanitation committee, the committees involved shall form a water user association which shall consist of an agreed representative of each committee.’</td>
<td>1997</td>
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<td>3</td>
<td>Penal Code Act Cap 120</td>
<td>Section 176 provides for a punishment fouling water ‘Any person who voluntarily corrupts or fouls the water of any public spring or reservoir, so as to render it less fit for purposes for which it is ordinarily used, commits a misdemeanour.’</td>
<td>2007</td>
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<td>4</td>
<td>The Equal Opportunity Act</td>
<td>Section 14 provides for the functions of the equal opportunity commission. That is ‘to monitor, evaluate and ensure that the policies, laws, plans, programs, activities, practices, traditions cultures, usages and customs of; organs of state at all levels, statutory bodies and agencies, public bodies and authorities, private businesses and enterprises, non-governmental organizations, and social and cultural communities, are compliant with equal opportunities and affirmative action in favour of groups marginalized on the basis of sex, race, colour, ethnic origin, tribe, creed, religion, social or economic standing, political opinion, disability, gender, age or any other reason created by history, tradition or custom’.</td>
<td>2007</td>
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<td>5</td>
<td>Occupational Safety and Health Act</td>
<td>Section 51 (1) ‘an employer shall provide and maintain for the use of workers, adequate and suitable washing facilities for washing, which shall be conveniently accessible and kept in a clean condition’.</td>
<td>2007</td>
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implementation and will end in 2023. It is aiming at many projects. However, one of the core projects is to promote and provide clean safe water for all, thereby LNOB. It also focuses on gender balance in relation to WASH policies. The funding bodies are free to fund a project of their choice, for example, the AfDB is among the funders of community management.²

Table 2 | Continued

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<td>6</td>
<td>Environment and Social Safeguards Policy</td>
<td>This policy is guided by 15 principles and 4 of these major principles up hold the ideas of LNOB to water and sanitation, human rights and gender equality in all the developments and projects. Principles 3, 4, 5 and 7 ‘Marginalized groups and vulnerable groups, human rights, Gender equality and women empowerment and indigenous groups’ in order.</td>
<td>2018</td>
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<td>7</td>
<td>NDP III</td>
<td>This is the third NDP for the period 2010/2021 to 2024/2025. Section 4.5.6 HRBA states that ‘To ensure inclusive sustainable development, the NDP II has adopted the HRBA with particular attention to human rights principles of equality and non-discrimination, empowerment and participation and attention to vulnerable groups.’ It states further, that ‘Application of this approach will contribute to bringing the government closer to the people in order to effectively address their development needs, advance equality and leave no one behind. All sectors, ministries, departments, agencies and local governments are expected to adopt the HRBA in their respective policies, programs, legislation and plans.’</td>
<td>2020</td>
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<td>8</td>
<td>Water and Environment Sector Budget</td>
<td>Parts C and K of the vote strategic objectives, on Page 1 of the National Water and Environment Sector Budget addresses ‘Promotion of WASH in both rural and urban areas and promotion of gender equality’. Part C states ‘To promote improved sanitation services in rural and urban areas including the promotion of handwashing with soap’. Part K addresses gender equality, stating ‘To promote gender and equity considerations’.</td>
<td>2020</td>
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<td>9</td>
<td>MWE Communication, Education, Participation and Awareness (CEPA)</td>
<td>The CEPA for the MWE is developed for the period 2019–2023. Section 1.1.1 provides for the vision of CEPA ‘Sound management and sustainable utilization of water and environment resources for the betterment of the population of Uganda’. Section 1.3.2 gives the roles of CEPA, for example, ‘Give voice to less powerful groups, minorities or disadvantaged groups’ in the water and environment sector. This is very well aligned to the ideas of LNOB.</td>
<td>2019</td>
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<td>10</td>
<td>Water and Environment Sector Strategic Investment Plan (SSIP)</td>
<td>The SSIP is for the period 2018–2030. It lists down 24 indicators and 7 of them are in line with LNOB, human rights and gender equality in water and sanitation. Indicator 1 is ‘Village water supply’; Indicator 3 ‘Improved drinking water; Indicator 7 ‘Solid waste disposal’; Indicator 8 ‘Improved sanitation’; Indicator 9 ‘Safely managed sanitation’; Indicator 10 ‘Handwashing at home’ and lastly Indicator 11 ‘handwashing at school’.</td>
<td>2018</td>
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² JWESSP document.
Regarding equity in accessing WASH services, there is a Presidential Directive to ensure that there is a water source per village, recognized a Local Council I, irrespective of the size or population of the village in Uganda. This has been put in place to ensure that water supplies reach every village, thereby LNOB.

In the capital and other cities, municipalities and towns, there are deliberate efforts to reach out to everyone in terms of water supply and sanitation. The NWSC, a water and sewerage utility, 100% owned by the government of the Republic of Uganda, has pro-poor strategies of connecting low-income communities and vulnerable groups with a subsidized tariff structure. In so doing, they eliminate the middle-men, for instance water vendors, by installing pre-paid water meters in the slum areas. This is widespread in informal settlements in Kampala, mainly in Ndeeba, Bwaise, Kinawataka, Kisenyi, Banda, Kibuye and Kamwokya, to mention but a few, but it is not yet rolled out to other cities, municipalities and towns. The MWE embarked on the pro-poor policy in 2006 and the NWSC started implementing it in the same year. It is being rolled to all 256 towns where the NWSC operated. In rural areas, it is implemented by the MWE, and in small towns, by the Water and Sanitation Development Facility.

The local authorities, for instance Kampala Capital City Authority (KCCA), are implementing an FSM programme which promotes the construction of safely managed sanitation facilities in low-income households, public schools, public health centres and markets, targeting vulnerable and left-behind groups. In these areas, besides the construction of safely managed sanitation facilities, KCCA dislodges latrines and septic tanks serving left-behind and vulnerable groups for free. KCCA operates one faecal sludge truck for each of the five divisions that make up Kampala. KCCA works with the private sector and the NWSC to ensure that the coverage of water supply and sanitation is expanded in order to reduce/limit travel distances to access these critical services. NWSC hires private companies in the water supply network to left-behind and vulnerable groups. The private sector is mainly operating in the collection and transport of faecal sludge at a fee regulated by KCCA. In Kampala, there are more than 100 trucks owned and operated by the private sector, which empty faecal sludge on a daily basis and transport it for treatment to the NWSC operated treatment plants. KCCA together with the National Environment Management Authority (NEMA) is responsible for licensing and regulating the truck operators dealing in the business of collection and transportation of faecal sludge. While the other cities, municipalities and towns do not have a faecal sludge management programme, they do have the private sectors who build sanitation facilities and those that collect and transport

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<tr>
<td>1</td>
<td>KCCA Sewage and FSM Ordinance</td>
<td>Section 6(2) ‘The Minimum Standards for onsite sanitation technology options shall require that every onsite sanitation technology: (b) ‘has a handwashing facility with detergent’ (e) ‘allows for inclusiveness including provisions for persons with disabilities’ (f) ‘provides for menstrual hygiene management’ (j) ‘is kept clean and hygienic’. These provisions are in line with the LNOB ideas.</td>
<td>2019</td>
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<td>2</td>
<td>Kampala Sanitation Improvement and Financing Strategy</td>
<td>Section 1.2 states the purpose of this strategy as ‘achieving target 6.2 of the SDG that is, achieving safely managed sanitation for all’. Section 1.2 states that ‘The strategy aims to achieve specifically Sustainable Development Goals that is achieving safely managed sanitation in homes, schools, health centers and public places.’ ‘Gender equality, poverty and other inequality are also to be addressed.’ Section 2.1 of the Strategy addresses the objectives of this Strategy of which two of them relate to LNOB ideas. Objective 1 ‘To achieve equitable and universal access to improved sanitation and hygiene and safe management of faecal sludge (FS) and sewerage along the entire sanitation chain in Kampala by the year 2030, where in “Equitable implies progressive reduction and elimination of inequalities between population subgroups and universal implies facilities close to homes that can be easily reached and used when needed”’. Section 2.2 addresses the principles of the strategy. Principles 1 and 2 are outstanding in regard to LNOB. That is ‘Systems approach to sanitation’ and ‘inclusiveness’. These principles advocate for ‘Development of approaches and measures to reach the most vulnerable, especially focussing on urban poor, gender and the disabled’.</td>
<td>2020</td>
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faecal sludge at a fee. In towns other than Kampala, there is no involvement of the local authority (city/municipality/town council authorities) in regulating prices. In some cases, these are exorbitantly high and therefore prohibiting residents to hire these services.

MHM is clearly a left-out issue, especially among the LNOB groups. Nearly all responses from all groups fetched no, or to a limited extent, little data pertaining to ongoing MHM initiatives. There is therefore need to identify and put in place measures for the management of MHM products. While incinerators are being promoted in schools and health centres for the destruction of MHM products, there are cultural taboos related to the burning of MHM products. In some communities in Uganda, especially in the Eastern part of the country (Busoga sub-region), incinerating menstrual pads is considered taboo, as it is tantamount to incinerating ‘one’s soul’. It is therefore important to involve the women and girls in identifying and determining how their MHM products should be disposed of. Socio-cultural myths should be clearly understood and unpacked prior to investing in sanitation facilities. Community leaders should be involved in mobilizing the community members to participate in home and village improvement campaigns as well as a campaign at the schools and other institutions to improve upon hygiene.

More so, existing strategies for sanitation provision leave out some groups and/or situations, for instance public – roadside sanitation – markets. Besides, there is need to determine the access levels, in terms of safely managed sanitation for communities in informal settlements; institutions (schools, healthcare facilities, offices, hotels and prisons) and households in both rural and urban areas.

There are some efforts in place to operationalize the LNOB principle in water governance. For instance, the Third National Development Plan (NDP III) (NDP 2020) recognizes the human rights-based approach (HRBA) as a way of bringing the government closer to the people in order to effectively address their development needs, advance equality and LNOB. Accordingly, the NDP III implores upon all sectors, MDAs and local governments to adopt the HRBA in their respective policies, programmes, legislation and plans.

In terms of budgeting and financing, the government ensures community participation in planning, budgeting and service provision. There exists an administrative structure, which ensures the collection of information right from the village, through the sub-national level to the national level. In Uganda, local governments feed into the budgeting process (MoFPED 2009). The budgeting starts with the issuance of the budget framework by the MoFPED, which gives ceilings for each accounting unit. Although the accounting units are districts and municipal local governments, there are also lower-level local governments, that is, the sub-counties, which account to the districts and the districts account to the national government. A budget framework paper is presented at the district/municipal level. The elected representatives of the district or municipal council, who include representatives from each sub-county, reveal the allocations to their sub-counties and request for input from village leaders on what they need to be included/prioritized in the budget. The village council leadership prepares a meeting of the village members to give input into their proprieties to be included in the budget. Communities contribute to their WASH projects, in terms of co-financing or in-kind for those who cannot afford. The MWE started reporting the HRWS in 2018.

The reporting on HRWS is embedded in the 42 indicators, which the Water and Environment Sector is mandated to report upon annually. The HRWS- and LNOB-related indicators include, but are not limited to: access to safely managed water in terms of the percentage of population using safely managed drinking water services located on premises; the percentage of villages with a source of safe water supply; access to safely managed sanitation in terms of the percentage of population using safely managed sanitation services; and gender in terms of the percentage of WUCs/water boards/environmental management/water catchment management committees (CMCs) with women holding key positions. The budgets on the HRWS are integrated into the entire Ministry’s budget. According to the information availed by the MWE, there is no single budget line allocated to HRWS, because the budget that addresses HRWS is integrated into many indicators, which are elucidated above.

As far as a quality management system (QMS) is concerned, the MWE has a QMS integrated into the Sector Performance Measurement Framework. However, information on this could not be easily found from any source. The most recent Water and Environment Sector Performance Report (WESPR) of 2019 mentions a water QMS. In relation to the QMS, the WESPR (2019) indicated that the government is continuing to implement the National Water Quality Management Strategy through the upgrading of the Entebbe water quality laboratory to a national reference laboratory, the establishment and operation of regional laboratories in the water management zones (WMZs) and the development of water quality guidelines and standards for various emerging issues such as oil drilling and emergency response.
In terms of capacity, this study established that mindset change is promoted and accomplished through awareness-raising. The awareness is being raised on the gender mainstreaming guidelines, performance measurement framework, and vulnerable groups. All unserved communities are considered vulnerable groups. The capacity of women is being built to become members of the water users’ association and CMCs. According to the gender strategy of the MWE, the target is to reach a membership of 50% women. Currently, 35% of CMCs have women holding key positions (WESPR, 2019). In the financial year (FY) 2018/2019, it was established that 75% of the water user management committees had women in key positions and 49% of water dams had women in key positions (Chairperson, Vice-Chairperson, Secretary and Treasurer). In the WMZs, out of the nine sub-CMCs formed, 78% have women occupying key positions. The SMCs without women in key positions include Opeta Bisina and Agago.

In the FY 2018/2019, the MWE in conjunction with the Nile Basin Initiative Secretariat coordinated and participated in the training of 30 decision-makers (7 women and 23 men) in Transboundary Water Cooperation, Hydrodiplomacy and International Water Law. Participants were drawn from the Sector and other line ministries and agencies of: Foreign Affairs, Internal Affairs, Defence and Veteran Affairs, East African Community Affairs, Finance, Planning and Economic Development, Works and Transport, Local Government, and Energy and Mineral Development. This helped in the building of the national capacities for the coordination of the transboundary water resources activities. Furthermore, in the FY 2018/2019, capacity building and training in gender-inclusive integrated water resources management and effective catchment management were conducted with a total of 3,301 participants (58% being women).

Regarding gender analysis in terms of staffing in the MWE, the senior management position indicates that there are 38 staff members in management positions, out of which 16% (6) are female. At the middle management level, there are 125 staff members, of which 26% (31) are female and 74% (90) male. The percentage of females in this category has increased from 23% reported in FY 2017/2018 to 26% in FY 2018/2019. At the operational level, women are fairly represented with females constituting 46% out of the 85 staff under this category.

As for monitoring and evaluation, the sector performance management framework is in place; and every year, there is the water and environment review. Since 2005, a WESPR is produced by September every year. Data are collected, although not in a disaggregated way. Since 2018, UNICEF supported the MWE to report on SDG 6. Data are collected on 42 indicators, covering SDG 6 and they include HRWS and LNOB groups. Real-time data collection is problematic and non-existent. Existing data collection systems are largely manual, do not collect and update real-time data and are largely inefficient. Quite often, the village health teams who collect data at the village level lack facilitation in terms of physical transportation (car, motorcycle or bicycle) to transmit data for management, to sub-county, for onward transmission to the district or the national level, wherever it is needed. They lack modern methods of data collection and transmission, for instance by mobile phones. Large-scale water supply systems in Kampala are equipped with supervisory control and data acquisition (SCADA), which enable the collection of real-time data on the water treatment plant operational parameters including, for instance, water treated and pumped into distribution. Such systems are lacking in small water supply systems and have not been deployed to collect information on sanitation and hygiene.

In terms of tariff subsidies, according to a study by the International Bank for Reconstruction and Development/the World Bank of 2015, Uganda has been remarkably effective in delivering services to the poor and economically disadvantaged people. However, the fiscal and political context that facilitated this success changed, and the bias against rural water services seems likely to continue as a result. This was found to disproportionately harm poor and economically disadvantaged people, as they live overwhelmingly in rural areas (IBRD/WB 2015). The study by the World Bank recommended that the pro-poor strategy be overhauled to put in place measurable objectives and outcomes, and a monitoring system to hold the Directorate of Water Development (DWD) accountable for implementation; and align these outcomes to the SDGs. The second recommendation comprised a set of suggestions to the content of the new strategy, to target: (1) reducing piped scheme tariff subsidies; (2) assisting local water authorities and local private operators and individuals to integrate the management of hand-pumped supplies and piped schemes and (3) developing targeted programmes to improve access and other aspects of improved water services to both the poor and the bottom 40%. The pro-poor strategy has not been updated or overhauled in line with the IBRD/World Bank Study, and hence the study recommendations have not been implemented.

Action number eight in the pro-poor strategy calls for empowering communities through participation to ensure cross-subsidy in cost recovery, arguing that “Communities themselves are in the best position to define who is poor and the most appropriate way to assist them (e.g., support in-kind and cross subsidy for capital and O&M contributions). If the communities are empowered by being involved in key decisions and trained to undertake the main responsibilities, the facilities...
will be better managed and will be more effective in serving the poor.’ The IBD/World Bank study in 2015 found that community participation was lower than hoped, despite participatory procedures put in place by the DWD. In a survey commissioned by DWD (2009), which looked at community participation throughout the project cycle for 160 water supplies, unexpectedly low levels of participation, particularly, in respect to the choice of technology were encountered. That could mean that community members wished for a more expensive level of service, but instead received a less costly one, for example, a borehole instead of a piped scheme, or a protected source instead of a borehole. Furthermore, the DWD survey (2009) provided some evidence of the ‘cross-subsidy’ called for in Action number eight, although not to the extent intended. Interviews with water committee members did reveal that certain vulnerable groups were exempted from operation and maintenance contributions, but poverty was generally not a reason for exemption, unless it was combined with elderliness or disabilities. Only 15% of respondents said that poor people were subsidized by virtue of being poor.

USAID is embarking on a programme to support the Water and Sanitation Umbrella organizations to reduce water connection fees for poor households. USAID is supporting the construction of sanitation facilities in schools, using the MoH guidelines to cater for access by the persons with disabilities. USAID is supporting the institutional strengthening using the scorecard adopted by the Government of Uganda, to assess the sanitation situation in institutions.

The private sector is also not left behind in supporting inclusive WASH services. WASH equipment, for instance the rainwater harvesting equipment, is readily available on the market, the high costs notwithstanding. The private sector is also actively engaged in innovation to develop appropriate WASH solutions such as compact mini water treatment suitable for small users such as a hotel. This is especially for hotels and schools located in areas off-grid, where no existing piped water supply systems are in place. The collection and transportation of faecal sludge to treatment plants is private sector-led. There are more than 100 vacuum trucks belonging to the private sector, which collect and transport faecal sludge in Kampala on a daily basis. Each of these trucks is able to make at three to four trips per day, thereby enabling them to make a profit of at least UGX 150,000–200,000 per day. Some towns within Uganda lack vacuum trucks. Consequently, customers needing to empty their sanitation containment systems (pits and septic tanks) are outsourced from other towns and the distances sometimes exceed 100 km one way, making it 200 km of a return journey. This makes the collection and transport of faecal sludge extremely expensive. Small-scale private emptiers using semi-mechanized emptying equipment such as gulpers can fill in the gap, where mechanized/vacuum trucks are not available. However, small-scale emptying equipment is limited in terms of how far the accompanying transportation may reach. Unfortunately, a number of towns do not have faecal sludge treatment plants, necessitating the transfer of sludge from one town to another.

**DISCUSSION AND CONCLUSION**

While Uganda is a signatory to the UN resolution that seeks to achieve the UDHR including the right to water and sanitation, there are still many categories of society who are glaringly left behind in access to water and sanitation. There exists a wide inequality in water access service levels between rural and urban areas of Uganda (WHO/UNICEF, 2019). There also exist disparities in access between different interest groups. Categories of left-behind groups or vulnerable populations include the elderly, women, children and students, nomadic populations, extreme poor populations, refugees and internally displaced people, people with physical or developmental disabilities, geographically dispersed or hard-to-reach populations and groups excluded based on sexual orientation such as LGBTQ. Despite the glaring gaps in universal water access, the first line of defence in the prevention strategies for the current COVID-19 pandemic is frequent handwashing with soap. Therefore, there is need to deliberately put in place efforts pursuing the right to access. At the level of the MWE, and the NWSC, this should have measurable indicators, for instance, how many people to serve per year and there should be incentives for meeting the intended targets and disincentives for failure to achieve the targets.

The challenge is, and has always been, in implementation. One of the key bottlenecks identified virtually by all key informants is the issue of inadequate funding for the sector. Critical issues for the Water and Environment Sector still include inadequate financing, capacity gaps and lack of subsidy arrangement to support the acquisition of sanitation facilities as well as adequate and safely managed water supplies for the poorest of the poor. Inadequate financing of the Water and Environment Sector is considered a major challenge hindering the fulfilment of their functions. As a result, the targets under the Strategic Sector Investment Plan (2018–2030) and Presidential Directives (e.g. one water source per village) are unlikely to be met. Capacity gaps in the sector are critical issues, particularly, in newly created local governments. Furthermore, subsidies for household sanitation are seen to be critical for attaining full sanitation coverage. However, for the past
two decades, the government has maintained the policy of no subsidy for household sanitation. Although this policy has had varying successes with some areas attaining high basic sanitation coverage, others have remained behind, especially in areas with extremely poor households such as informal settlements.

While the Government of Uganda has made tremendous efforts in pushing for access improvement, enormous challenges and gaps remain. For instance, the pro-poor strategies to access safe WASH facilities are largely insignificant, as they do not address tariff reduction measures; yet, the tariff is still by and large prohibitive. Secondly, the private sector decried limited support from the government first, in providing adequate incentives for doing business, and secondly in providing the required market. Instead, government reportedly prefers imported technologies over and above local content. Thirdly, there are also concerns about efficiency gains. While prior to 2005, government investments in the water sector were guided by Strategic Investment Plans which were guided by real need and demand. However, this approach has later to be abandoned, as it was not politically appealing. The government investments in WASH since 2001 are now largely directed by political decisions. Nobody seems to be asking questions of expenditure per capita in WASH investments to underscore efficiency.

It should be noted that the existing tariff structure is not favourable to the poorest. The cross-subsidy is small and has a very low trickledown effect on the poor unless they are elderly or with disabilities. While on paper the HRWS features prominently, in reality, water is considered an economic good where users must pay for cost recovery.

Governance challenges of the WASH facilities remain enormous. Sustainable O&M is still elusive. For instance, in Amuru district in northern Uganda, a recent audit supported by USAID found that 34% of the water sources were no longer functional. Moreover, when it comes to sanitation, the challenges and gaps are even more pronounced. Water and sanitation interventions are normally combined within the same projects, with the water component taking the lion’s share.

While WASH-sector players easily produce data on water supply, this is not the case for sanitation and hygiene because these are majorly practised at the household level and data are captured mainly through surveys. Moreover, research is mainly promoted by non-state actors. The government ministries hardly allocate funds to do research on WASH issues. The collection of real-time disaggregated data is not happening. There is need for capacity (both human), and equipment to undertake real-time collection of disaggregated data as well as more investment in research to inform policy and practice, as well as to collect disaggregated data. There is need to promote local content and use locally available technologies such as simplified SCADA systems to enhance real-time data acquisition.

The HRWS and the LNOB are not yet known by many practitioners within the sector. Moreover, even those who know it, it is not clear what these embed. The available strategies have very few statements on gender and HIV/AIDS. The ministry of education lacks an MHM strategy. There exist sufficient policies, laws and legislation and enforcement frameworks, which should be updated in the context of the HRWS and the LNOB. Most existing laws, policies and legislation were promulgated before or during the predecessor Millennium Development Goal time. SDGs are more stringent and therefore, the laws, policies and legislative frameworks to deliver them, should be aligned. Community dialogue to create sensitization, awareness and understanding of the HRWS is therefore critical. Targeted advocacy and sensitization should now focus on the politicians, since they are the decision-makers in the allocation of resources both at national and district levels such as the Members of Parliament and the district councillors.

Climate change is an emerging concern that influences the design and functioning of WASH infrastructure. In hard-to-reach areas in mountains in north-eastern and western Uganda, flooding separates villages and interrupts water supply. Some intake works of gravity flow schemes are totally destroyed, resulting in lack of supply service for many months. There is a concern that the rising groundwater levels due to climate change limit the vertical separation distance between groundwater levels and pit latrines. Local governments, with the support of the MWE, should zone their areas of jurisdiction, with guidance on how deep sanitation containment systems should be sunk. In general terms, the current environmental conditions are characterized by population pressure forcing settlement in marginal areas, both in the rural and urban areas. In the rural areas, population pressure manifests in overgrazing, severe soil erosion and soil exhaustion. In urban areas, this manifests in the occupation of wetlands and the proliferation of slums/informal settlements in these marginal areas. Compounded with the climate change-related effects such as periodic floods and droughts, in the different parts of the country, the impacts on the bio-physical environment have brought a lot of suffering to the Ugandan population living in rural and urban areas. Moreover, hard-to-reach areas, such as mountainous areas, the technologies for the supply of WASH services become expensive, leaving them behind. In this regard, climate change needs to be embedded in existing documents and, most importantly, to fund their implementation, including enforcement.
DATA AVAILABILITY STATEMENT

All relevant data are included in the paper or its Supplementary Information.

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