



WASH Fact Sheet FSI13/2021

SDG 6+5 Review of Routine Monitoring for WASH in Eastern and Southern Africa – A Uganda Case study.

SUMMARY

Five years after the introduction of the Sustainable Development Goals (SDGs), and with the SDG midterm review approaching in 2022/23 marks a critical point for the WASH sector in Eastern and Southern Africa, with many countries not on-track to achieve the SDG 6 targets. UNICEF, as the lead agency of a multi-partner approach across 21 member states in Eastern and Southern Africa identified that this point represents a moment for the WASH sector to take stock of progress towards SDG 6, understand the gaps in our current knowledge on levels of access, and take course-corrective action to ensure that SDG 6 is met in the 10 years left to 2030.

As part of this broader SDG 6+5 review, UNICEF commissioned ITAD to explore and document the current state of monitoring for SDG 6 across all countries in Eastern and Southern Africa. This includes:

- A rapid assessment summarising the status of WASH monitoring systems in all countries;
- Five case studies, on Ethiopia, South Africa, Tanzania, Zimbabwe and Uganda, to provide a deeper analysis of the monitoring frameworks and systems, and to capture key learnings for the sector and region.
- Uganda was selected as one of the five case study countries, because:
- The country monitoring systems align well with the SDG 6 indicators;
- Progress against SDG 6 targets is monitored in-country; and
- The country-led WASH monitoring systems are perceived to be very strong.

1 Introduction

Uganda performed strongly across many of the criteria applied during the Rapid Assessment, and there are well-established systems for monitoring and reporting on SDG 6. There are also some interesting areas which would warrant further investigation. There are multiple monitoring

systems with different levels of performance.
Understanding the reasons for these differences
(particularly between the Health Management
Information System (HMIS) and Water MIS
provides useful learning for the sector. In addition,
there appears to be a strong MIS based on utility
data—UPMIS, yet it is not well documented, and

does not cover all utilities. Including this in a case study will help fill gaps in sector knowledge on the use of utility data.

The five case studies build on a rapid assessment of the enabling environment and monitoring systems for SDG 6 undertaken in 21 countries across Eastern and Southern Africa in late 2020, as summarised for Uganda in Box 1. From these 21 countries, five case studies were selected based on the specific lessons they would provide on monitoring for SDG 6, including Ethiopia, South Africa, Tanzania, Zimbabwe and Uganda.

KEY FINDINGS

Uganda's water sector is shaped by a successful sector wide approach (SWAp), led by Government of Uganda (GoU) and backed by sector budget support and basket funding. The SWAp contributed to joint monitoring through funds, policy dialogue, and capacity building. As a result, the sector monitoring framework is well developed and incorporated in the routine activities in the Ministry of Water and Environment (MWE).

Government has changed focus from poverty alleviation to wealth creation through industrial development resulting in reduced funding for basic services. With the current funding levels, very few sub-sectors will achieve any of the WASH targets set for 2030.

• Routine monitoring requirements may diverge from SDG monitoring needs. The existing monitoring systems are therefore still partially based on the monitoring requirements for the less stringent MDG indicators, and SDG indicators are not accurately determined according to their definition. Specifically, there is no system yet in place for reporting against the SDG ladder for School WASH and Institutional WASH though initial steps are being undertaken.

KEY OPPORTUNITIES FOR IMPROVED DATA

The existing monitoring framework needs to be refined to fully align with the SDG ladder in all areas. The UNICEF country office currently provides technical support to all three ministries MWE, Ministry of Health (MoH) and Ministry of Education and Sports (MoES) to enable improved sector reporting using the SDGs, which is expected to be completed by 2021. Quick wins for improving WASH monitoring in Uganda include:

- Monitoring safely managed rural water supply using the available information;
- Monitoring unimproved water supply, as a category in the Joint Monitoring Programme (JMP) ladder above 'no service';
- Monitoring the presence of handwashing facilities without water and soap to improve alignment with the JMP limited hygiene indicator; and
- Training of environmental health workers and extension staff, including data collectors for hygiene and sanitation in the internalisation and application of the JMP indicators.

1.1 Methodology and data sources

Based on the findings of the rapid assessment (see Box 1), priority topics for further enquiry were mapped out for all five case studies against three broad areas of the monitoring system:

- The strength of the enabling environment for WASH monitoring;
- The availability of data for monitoring WASH;
- The alignment with SDG 6 indicators.

These areas of enquiry were validated with WASH specialists in the UNICEF country office.

Table 1: WASH MIS Assessment for Uganda

The alignment of country monitoring systems with SDG6 indicators	The country monitoring systems are aligned with JMP indicators for access to basic services for water, sanitation and hygiene. At present national systems are not aligned with the indicators for safely managed services, although some elements of these indicators (for example whether water is available on-premises and sewer connections which reach treatment plants) are available for urban areas.
The localization of SDG6 targets	Uganda has clearly defined national targets for WASH (included in the NDP) but the alignment of these targets to JMP indicators is not well defined with an unclear use of language ('access to safe water').
The extent to which progress against SDG6 targets is monitored in-country	Uganda performs very strongly in this area – there is a comprehensive, annual sector performance report (with uninterrupted publication for the last seven years) which tracks progress in improving access to WASH services – although due to the data collected this only covers access to improved facilities (SDG Basic) rather than safely managed services. There additional annual surveys (PMA) which provide additional data on levels of access.
The perceived strength of the country-led WASH monitoring systems	Uganda is perceived to have one of the strongest country-led systems for WASH monitoring. The enabling environment is strong across all areas except for sector financing, with well-established processes for monitoring and reporting. There are well-established systems for monitoring all aspects of WASH, with regular data updating in most areas (rural water appears to be the weakest area).
Overall Remarks	Uganda performs strongly across the majority of our criteria, and our assessment shows that there are well-established systems for monitoring and reporting on SDG6. There are also some interesting areas which would warrant further investigation—there are multiple monitoring systems with different levels of performance. Understanding the reasons for these differences (particularly between the HMIS and water MIS) could provide useful learning for the sector. In addition, there appears to be a strong MIS based on utility data—UPMIS. Our assessment only collected limited data on this system, and there is little publicly available documentation. Including this in a case study could help fill gaps in sector knowledge on the use of utility data.

Source: Understanding monitoring for SDG 6 across Eastern and Southern Africa Regional Review, UNICEF WASH Technical Paper, March 2021

Data was collected from a review of key documentation and nine key informant interviews (KIIs) with officials from government (including WASH line ministries, and statistical and planning bodies) utilities, and key development partners (including UNICEF). Findings based on this data

were validated with UNICEF and synthesised in this report.

Data sources include the latest annual Sector Performance Report of Uganda's Ministry of Water and Environment (2020), the Framework for Performance Monitoring for the Water and Environment Sector and the information from the Joint Monitoring Programme for Uganda (2019); see Box 2. Other valuable information stems from the guide to monitoring sector indicators, as developed by MWE with support from UNICEF in 2019. Furthermore, key informant interviews were held with several stakeholders from the Ministry of Water and Environment (covering separately rural sanitation, urban sanitation, the data collection for the Uganda Rural Water Supply Atlas, and Utility Performance of the Umbrella Authorities for Water and Sanitation), with UNHCR covering refugee WASH monitoring, and UNICEF country office.

BOX 1.

PMA DATABASE ON JMP INDICATORS FOR WASH

Performance Monitoring and Accountability 2020 (PMA2020) is an external organisation working in 11 countries that uses innovative mobile technology to support low-cost, rapidturnaround surveys monitoring key health and development indicators for the WHO/UNICEF Joint Monitoring Programme. Surveys are completed by resident enumerators, uploaded to a central server via a mobile data network, cleaned and analysed. Results are disseminated shortly after. PMA2020/Uganda is led by the Makerere University's School of Public Health at the College of Health Sciences, in collaboration with the Uganda Bureau of Statistics (UBOS) and the Ministry of Health. Though used by JMP, it is otherwise not known or at all referred to at sector level. Access to the database can be obtained through the website https://www.pmadata.org.

1.2 Limitations

This case study analysis is based more on the outputs from the databases respective stakeholders with than on the underlying data. Urban water is mostly provided by the national utility National Water and Sewerage Corporation (NWSC), yet their database was not available to

the consultants' team; urban water supply indicators were thus analysed at the level of the annual sector performance report only. This case study did not include sub-national and project databases; however, they would be useful for designing subsequent improvements in the monitoring systems.

The limited scope of this assignment restricted key informant interviews to actors reporting directly in the Sector Performance Report. As such, information from ministries outside MWE, including Health, Finance, Local Government and Education & Sports was based on documentary data and insights from third parties. Although Uganda Water and Sanitation non-governmental organisation (NGO) Network (UWASNET) was not consulted specifically for this assignment, the author is conversant with its monitoring and evaluation systems as annual contributor to UWASNET's WASH database.

1.3 Structure of the report

This report first describes the overall set up of WASH monitoring in Uganda, including institutional arrangements for WASH monitoring, the national routine monitoring systems for WASH, and the localisation and alignment of national WASH indicators with the SDG indicators. The concept of 'localisation' refers to Uganda taking ownership of SDG targets by setting realistic goals, rather than adopting global targets, and ensuring the monitoring of the targets in-country. The next chapter provides the main findings of the Deep Dive. Finally, the report highlights the opportunities moving forward, and lessons learnt for WASH monitoring in the region.

2 The landscape of WASH monitoring in Uganda

2.1 Institutional arrangements for WASH monitoring

Development of WASH sub-sector performance monitoring in Uganda

Uganda's water and sanitation sector performance monitoring framework is mature with two decades of regular joint review gatherings and sector performance reporting. Compared to other Sub-Saharan African countries, Uganda has the longest history of review meetings – one or two per year, since 2001.

The developments in performance monitoring were connected to the process of establishing a Sector Wide Approach (SWAp) including, for instance, establishment of joint financing modalities and joint programming processes starting in water and sanitation but incorporating environment and natural resources when the two subsectors fell under one ministry. The SWAp has been supported through sector budget support and other joint aid modalities including basket funds. Budget support has specifically contributed through funds, policy dialogue, and capacity building, which enhanced sector policy design and implementation. As such, the development of SWAps has proven to be a suitable avenue to ensure effective, implementation-driven dialogue between government and development partners, including their harmonisation and alignment. The milestones of this development are depicted below.

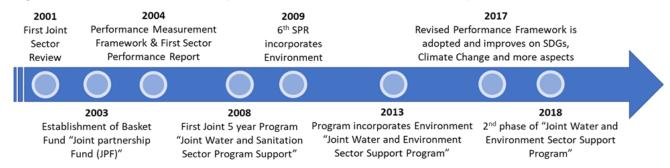
cycle is marked by MWE drafting of the annual Sector Performance Report (SPR) in advance of the Joint Sector Review (JSR – by the time of the third JSR). The SPR measures progress using a set of 42 sector indicators.

Annual Joint Sector Review and Joint Technical Review

The annual JSR, usually in September/October at the onset of the annual budgeting process, is a forum for assessing the overall performance of the sector based on an annual Water and Environment Sector Performance Report. The JSR participation has a broad spectrum of sector stakeholders including central and local government, development partners, civil society, private sector and the media. The JSR theme and agenda is developed by a secretariat through a participatory process.

The JSR makes recommendations on the emerging key policy and strategic issues in the sector and formulates undertakings to address key challenges, which are implemented by an existing sub-group or committee of the WESWG or a temporary thematic team.

Figure 1: Milestones in sector performance measurement development



Source: Joint Sector Review

Annual Sector Monitoring Cycle

Sector Performance Monitoring in Uganda is marked by a well-developed annual cycle. Since 2004, the annual sector performance monitoring The Joint Technical Review (JTR) is a forum for a midterm assessment or review of the progress of implementing the undertakings agreed in the JSR. It is held approximately six months after the JSR (usually in March/April).

Data collection and aggregation

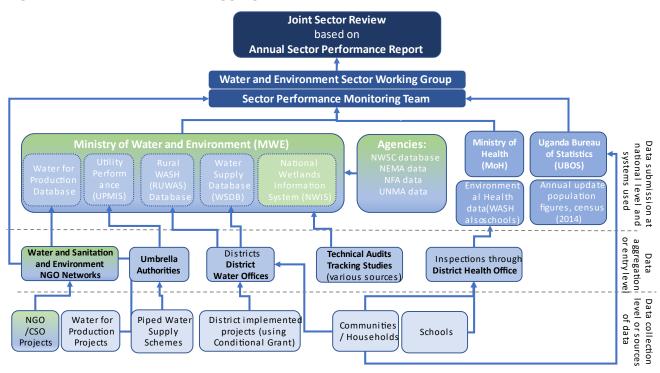
The reporting against the sector indicators is a complex task that involves collection of data and information from various sources that is aggregated by different units or through initiatives like studies. To analyse the data, tailored monitoring systems are used that are described in greater detail in Section 3.2. This is necessary since the sector reporting is supposed to cover a wide range of areas. The systems support the drafting of the elements of the annual report that are consolidated by the Sector Performance Monitoring Team under the Water and Environment Sector Working Group as depicted in the figure below.

of Water and Environment. In Uganda, users are responsible for household sanitation and hygiene infrastructure, and the DWO only have a budget for sensitisation of the population on sanitation and hygiene. The MWE oversees and monitors the utilisation of these grants using the Rural Water and Sanitation Database (RUWAS).

Performance monitoring indicators

The water sector has been preparing annual sector performance reports since 2004 using a set of 11 golden indicators for WASH. In Financial Year 2015/16, the Ministry of Water and Environment (MWE) conducted a review of its performance measurement framework, amongst





Source: Framework for Performance Monitoring for the Water and Environment Sector (MWE, 2018)

The District Water Offices (DWO) exist as decentralised structures for service delivery. The DWOs implement water supply infrastructure utilising the grants disbursed on behalf of Ministry

others, to incorporate sector specific SDGs. This in-depth review resulted in WASH indicator monitoring improvements as indicated in Table 1,

Table 2: Comparison of old and new set of WASH indicators in the water sector in Uganda

Old (Golden) indicators for WASH, linked to current SDG monitoring	New WASH Performance Indicators (in bold SDG aligned indicators) – since Water and Environment Sector Performance Report 2018		
Water Supply			
1. Access: % of people within 1 km (rural) and 0.2 km (urban) of an improved water	Basic water: Percentage of population using an improved drinking water source	Rural	
source	uniking water source	Urban	
	Safely managed water: Percentage of population using safely managed drinking water services located on	Rural	
	premises	Small Towns	
		NWSC	
2. Functionality: % of improved water sources that are functional at time of spotcheck (rural/water for production). Ratio of	5a. Functionality, rural: % of water sources functional at time of spot-check	Rural	
the actual hours of water supply to the required hours (urban)	5b. Functionality, urban: % piped water service availability	STs	
, ,		NWSC	
5. Water Quality: % of water samples taken at the point of water collection, waste	10. Drinking water quality: % of water samples taken that comply with national standards (Point water sources / Piped	Rural	
discharge point that comply with national standards.	schemes)		
		NWSC	
Sanitation and Hygiene			
4.1 Sanitation: % of people with access to improved sanitation (Households).	11. Basic sanitation: Percentage of population using an improved sanitation facility not shared with other households	Rural	
4.2 Sanitation: Pupil to latrine/toilet stance	improved samitation radiity not shared with other households	Urban	
ratio – schools	12. Safely managed sanitation: Percentage of population using safely managed sanitation services	Rural	
	acing care, manager cumulation rives	Urban	
8. Handwashing: % of people with access to (and using) handwashing facilities.	14a. Handwashing: Percentage of population with handwashing facilities (HWF) with soap and water at home	Rural	
(and using) nandwashing facilities.	manuwashing racinities (river) with soap and water at nome		
	14b. Percentage of pupils enrolled in schools with basic HWF	Schools	

N.B. note that indicator numbering follows that of the golden indicators, and current WASH indicators, respectively.

which only lists sector indicators that are related to SDGs 6.1 and 6.2 monitoring.

In 2019, UNICEF Uganda Country Office facilitated the operationalisation of the WASH indicators against the background of the overall SDG piloting initiative in Uganda but initially focusing on water supply, sanitation and hygiene. This resulted in a standardised tool to monitor progress of the indicator set, called Guide to Monitoring of Water, Sanitation and Hygiene Sector Indicators - Definitions, Methodology & Calculations (MWE, 2019).

<u>Disaggregation of performance indicators in urban</u> <u>and rural indicators</u>

Rural water supply is provided by MWE's rural water and sanitation department and monitored by MWE's water sector liaison department. Urban water supply is provided by MWE's urban department and by NWSC and monitored by the latter two entities as well as by MWE's regulation department.

Until twenty years ago, NWSC was the utility providing piped water to the large towns, and MWE's urban department oversaw the (piped) water supply of the small towns, and the fast-growing villages, referred to as rural growth centres.

Regional structures of the Ministry of Water and Environment were established in 2002, called Umbrella Organisations, to regionally support operation and maintenance of all piped water supply schemes that were not under NWSC's mandate. Since 2017, Umbrella Organisations, monitored by MWE, have assumed direct management responsibilities and have been gazetted as water authorities; managing 498 schemes, whereas NWSC manages 258.

Every year, NWSC takes over the management of new small-town water supplies, the Umbrella Organisations also take on new schemes every year. This means that the clear-cut mandates between NWSC and UAs/MWE have disappeared and in practice they both monitor urban water supply for their schemes in similar urban settings,

though overall NWSC manages the relatively bigger and more profitable urban water schemes (see Box 6).

Institutional WASH

WASH improvements in schools are the mandate of Ministry of Education and Sports (MoES), and WASH in health care facilities are the mandate of the Ministry of Health. The extensive structures at community level used to monitor institutional sanitation and hygiene include the Village Health Teams, supported by the extension staff, including health assistants at sub-county level and at Health Centre Levels III, health inspectors at county level and district health staff at district level. All government interventions in community sanitation use these structures and interventions in health centres and schools are highly dependent on these structures. Performance monitoring of institutional WASH is restricted to monitoring of pupil to stance ratios in schools by MWE. There is no system yet in place for reporting against the SDG ladder for School WASH and Institutional WASH. Some initial steps towards institutional SDG 6 monitoring have been taken with support from UNICEF; these include the implementation of national microplanning for WASH in schools by the MoES, and national microplanning for WASH in health facilities by the Ministry of Health (MoH); both datasets will help in setting up a monitoring system to report against SDGs related to WASH in Institutions.

WASH in the overall planning and monitoring frameworks in Uganda

The National Development Plan (NDP) stipulates the country's medium-term strategic direction, development priorities and implementation strategies. In addition, it details Uganda's current development status, challenges and opportunities.

The current plan, NDPIII, has rearranged the structure of planning from sectors to 18 multisector programmes. WASH is now a subprogramme under the Human Capital

Development (HCD) Programme (instead of the three ministries Water & Environment, Health, and Education & Sports), and each programme has its own implementation plan, whereby WASH is covered under the NDPIII HCD Programme Implementation Action Plan (PIAP). The MoES as programme lead, and MoH as the co-programme lead will be responsible for planning.

The water and environment sector encompasses several key areas of development identified in the NDPIII. With its theme: "Sustainable Industrialisation for inclusive growth, employment and wealth creation" the NDP represents a focus towards economic growth through industrialisation.

The HCD PIAP has a large set of monitoring indicators, which have been supplied by various sectors. For water and sanitation, these have been supplied by MWE (see chapter 3). The SDG 6.1.1 and SDG 6.2.1 are included in the monitoring plan of the HCD PIAP, in a 'localised' way. For example, safely managed drinking water is clarified as appropriately treated water for drinking without the requirement that it must be on the premises. Safely managed sanitation with handwashing facilities with soap and water at home is phrased like SDG 6.2.2. However, it is important to note that the target setting in the PIAP for these indicators is more for target setting of the activities envisaged to be implemented to affect the indicator value.

Uganda Bureau of Statistics (UBOS) monitors the progress of the country and reports through the annual Statistical Abstracts. These statistical abstracts also include the SDG 6.1.1 and SDG 6.2.1, using the data from the most recent UDHS; for the Statistical Abstract 2020, the UDHS of 2016 has been used, and not the value as provided by MWE.

2.2 Routine monitoring systems for WASH

Routine WASH monitoring in Uganda is characterised by a complex and partially overlapping set of systems and databases. This chapter lists the systems used for performance monitoring and reporting in the WASH sector. Each sub-section summarises the nature and use as well as the updating and quality assurance procedures of the systems. Most of the databases are managed at the MWE's Directorate of Water Development, whereas data is supplied through district local governments. The Health MIS data are provided by MoH.

There are also national databases monitoring WASH related information, though not directly related to access to water and sanitation. These databases are mentioned briefly at the end of this section. Databases that are restricted to monitoring progress of WASH projects or (groups of) organisations have not been included in this section, unless they are very large, or not monitored by the national databases described in this section. The latter include JMP monitoring data, and monitoring of WASH for refugees.

A specific database mostly used by international NGOs providing WASH support to the large refugee population in Uganda to monitor WASH achievements in refugee settlements is summarised in Box 4. SPHERE standards (a set of principles and minimum humanitarian standards in the field of WASH) are used for monitoring as the NGOs' support is seen as emergency humanitarian support. Therefore, some of the refugee water schemes are handed over to NWSC. However, because some refugees settle amongst the Ugandan population, they to an unknown extent become part of the population monitored within the national WASH monitoring indicator set.

Table 3: Overview of routine monitoring systems for WASH

Database for routine WASH monitoring	Description
Water Information System (WIS)	Encompasses all water-related databases and information in the water and environment sub sectors listed below, including also databases needed for water resources planning and management.
Water Supply Database (WSDB)	Nationwide rural water supply monitoring tool, updated on a quarterly basis
	Based on (1) the inputs of MWE's rural water department for centrally implemented projects and (2) the quarterly reports by District Water Officers (DWOs)
	DWOs to give the updates in terms of new water sources both implemented by the DWO and other sector players (NGOs, other programmes).
	Online database to monitor and report on water supply indicators and to produce the Water Atlas; can be accessed through the MWE website.
	Both individual (point) water sources and piped schemes in rural areas except those covered by NWSC and water schemes in refugee areas.
	Indicators include the pre-SDG 6 indicators Water access, Functionality, Management, Gender, Equity and Source per Village.
	Reports are displayed in real time online (whereby population figures are automatically updated daily), but major updates are done on a quarterly basis, and annually they are reflected in the Sector Performance Report.
Utility Performance Monitoring and Information System (UPMIS)	Piped schemes database with nationwide information on the technical characteristics, functionality, financial, management and water quality situation as well as asset registers for all piped water schemes, urban or rural, that are not managed by NWSC.
	Its publicly accessible data can be viewed using a link on the front page of the MWE website. UPMIS does not provide safe water coverage information as service areas with its specific population data are not defined. An example of the outputs from the UPMIS database is provided in Box 3.
NWSC database	Piped scheme database with nationwide information on various urban sector performance indicators as well as a whole range of organisational performance indicators, all for NWSC managed schemes only. This database is not yet linked to the databases of MWE, and more specifically not to UPMIS.
Health Management Information System (HMIS)	National system for analysing and reporting on household and institutional WASH indicators for the sector performance report. In addition:

Some indicators that are reported by JMP, but not reported in the SPR because they are not national sector performance indicators, and therefore cannot be included in Annex 3 of this report; these include Limited Sanitation, and Unimproved Sanitation on the JMP Sanitation Ladder.

Indicators that are used for benchmarking districts' sanitation and hygiene performance and then shared in the annual sector performance report; examples of these include annual reporting, mobilisation costs per household toilet, latrine: pupil stance ratio, and number of ODF villages.

MoH provides the basic human resource structure for planning, implementation and monitoring and reporting of sanitation and hygiene. Data is shared between MoH and MWE and analysed in MS Excel on an annual basis for the sector performance report.

Uganda Sanitation Fund Monitoring Information System (USFMIS)

Web-based monitoring system for sanitation developed and in use by the Ministry of Health.

Captures sanitation data from 44 districts where Uganda Sanitation Fund implements sanitation improvements. The system aggregates data from the village to the district levels, providing trends of triggered and ODF communities.

UWASNET database

Database including WASH implementation performance by NGOs under UWASNET, the national umbrella organisation for close to 200 member CSOs and NGOs implementing WASH activities in Uganda.

Input is provided by the implementing NGOs

Analysed for input in UWASNET's annual performance report, which is used as input for the sector performance report in a separate chapter for CSO/NGO achievements.

Most CSOs work in the rural areas.

Data includes number of water sources and sanitation structures completed and rehabilitated against the planned number including also costs.

Includes qualitative information e.g. on gender promotion, advocacy and networking.

In 2020, an online data collection tool was set up for annual assessment of CSOs performance.

The UWASNET dataset is not used as additional input for the national indicator monitoring set for sector performance, as CSOs' contributions to the indicators are assumed to be part of the facilities monitored in the HMIS and WSDB figures.

Other WASH related monitoring systems that are not monitoring access:

PEGASUS software

MWE's internal billing and payment software.

All payments for water to the Umbrella Authorities are now handled using that software.

	National Indicator on percentage of villages with a source of safe water supply in urban areas is determined for the fraction of urban villages that are served by the Umbrella Authorities.
Rural Water and Sanitation (RUWAS) Database	Online reporting database for District Local Governments for planning and reporting for the District Water and Sanitation Conditional Grant and District Hygiene and Sanitation Conditional Grant.
	Each district through the DWO is given login credentials to access the system. The district water officer is therefore charged with entry of data directly to the system. This applies to the work plans and quarterly reports.

Figure 3: Example of UPMIS output

Schomor managed by Umbrellar

Umbrella Performance Summary

Selection:

⚠ UPMiS

KPI	Unit	Lart Quart	Munthly Performance Trends				
			Janiel Poblik Mariel Agriel Magiel Janiel Jaliel Augel Soyiel Culti Maniel Doniel				
No. of active connections	No.	39733	50,000 41,225 41,257 41,411 40,000 40,100 30,506 31,000 30,652 30,562 30,006 30,000				
Watorsalos (uator billod)	m'por manth	158224	200,000 200,000 200,000 242,512 214,790 207,000 197,000 198,000 198,000 180,941 170,200 123,615				
Non-rovonuo wator	х	29.37	50.00 27,58 20.43 20.00 \$2.08 \$6.05 \$2.02 \$0.16 \$26.55 \$2.43 \$0.45 \$6.97 \$0.07				
Cantinuity of rupply	х	93.65	100.00 W2.13 W2.56 G1.44 G4.15 G1.76 G1.97 G1.65 G1.91 G2.24 G2.08 D2.74 D2.15 g0.00				
Revenue collections	mUGX per manth	388.56	1,000.00 GRI-30 E12.31 483.29 MA-DB 404.03 172.10 415.40 425.60 MA-DB 462.83 432.30 206.14				
Calloctian officioncy	и	88.12	100.00 15/12 15/77 71.21 15.00 15.01 16.00 15/31 12/31 12/31 12/31 16/37 16/00 0.00				
Oporatiną cart cavorago ratia	х	181.51	19825 170.00 138.30 133.50 133.51 107.32 170.74 187.71 102.05 102.88 170.85 170.00				

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BOX 4.

DATA ON WASH FOR REFUGEES IN UGANDA

There are currently 1.45 million refugees registered through Office of the Prime Minister (OPM) in Uganda, but these are not all in refugee settlements. UNHCR coordinates the monitoring of WASH service provision by all stakeholders for refugees in the settlements. UNHCR provides this information to the District Water Officers, and to UWASNET, who reports it in the chapter of NGO support to the sector in the annual sector performance report. Because of the set-up of the settlements, 5%-30% of the settlements include the host community.

Progress monitoring by UNHCR is based on amongst others per capita volume, free residual chlorine, the energy for pumping and the walking distance, and percentage of water from utilities, household latrine coverage, and presence of institutional latrines, communal latrines, handwashing stations at communal and household level. The indicators are collected monthly (not online) and on a quarterly basis they are added to the dashboard on the Uganda Refugees Portal. Annual KAP surveys are carried out and food security and nutrition assessments are carried out every two years; these assessments also include WASH questions.

A Water and Environment Refugee Response Plan has been developed by MWE with support of UNHCR in a sector-wide effort, involving the line ministries, Development Partners and NGOs. The Refugee Response Plan was launched in March 2020, but because of Covid restrictions, it is not yet implemented. The Terms of Reference of the monitoring and evaluation structure for the Response Plan is currently being developed. The current UNHCR indicators are still used, so harmonisation with the sector monitoring still needs to take place.[Callout copy]

2.3 Localisation and alignment of national WASH targets

Localisation of national WASH SDG targets

The WASH targets are localised with national WASH data and targets listed in the third National Development Plan for Financial Year 2020/21—2024/25, as prepared by the National Planning Authority under the Ministry of Finance, Planning and Economic Development. There are four WASH indicators in the NDPIII: 'Rural safe water coverage', 'Urban safe water coverage', 'Sanitation coverage (Improved toilet)', and 'Hygiene (Handwashing)'; without a further elaboration of the definition of these indicators. A baseline, and intermediate yearly targets have been set in the NDPIII.

Alignment of national WASH indicators with SDG WASH indicators

Without interpretation of the wording of the four NDPIII WASH indicators, alignment with the SDG indicators through the JMP monitoring with its sub-indicators (safely managed, basic service, limited service, unimproved, and no service) is poor. However, the indicators as used in the NDPIII are derived from the country's sector indicators. There is a strong alignment of the sector performance monitoring framework with the SDGs; the SDGs 6.1 and 6.2 form part of the set of monitoring indicators that is reported on annually. So far, they are not all being actively monitored because of lack of monitoring of aspects of the SDGs. The country monitoring systems are aligned with JMP indicators for access to basic services for water, sanitation and hygiene (see Box 5).

Currently, monitoring by MWE is still generally restricted to monitoring of MDGs rather than SDGs, with a focus and provision of facilities for

water supply. It should be noted that progress monitoring in the sector is focused on the outputs that the various ministries are supposed to achieve with the funding that they have been provided. These sector outputs are focused on the construction and maintenance of WASH facilities rather than the reaching of SDG 5 targets. Nevertheless, the SDG indicators that are part of the set of new indicators cannot yet be determined because of the lack of monitoring of water collection time, which makes measuring of basic access vis-à-vis limited access impossible (see Box 5). Instead, the sector monitors basic access without water collection time, and refers to it as 'percentage of population using an improved water source'. This indicator assumes standard service levels per type of improved water source, e.g. 300 people served per borehole, then divides the number of people served by the total population at sub-county level, and capped at 95% coverage, and aggregated up to county, then district level. For piped schemes, standard service levels are six people per house connection, 100 per institution and 24 for a public yard tap.

BOX 5.

MONITORING SAFELY MANAGED WASH IN UGANDA

Safely managed water has various components that are not yet monitored: (1) on the premises: this is defined as being either a yard tap or an in-house connection, which in practice can only be derived from a piped scheme, whereas most of the rural water supply in Uganda is through point sources; (2) available when needed, which is loosely defined in the sector as 'functional'; and (3) free of faecal and priority chemical contamination, which is localised as free from faecal contamination only, but not monitored regularly. In the urban context, the definition was localised to 'overall urban access' (which is defined in the Ugandan water sector as the percentage of people within 200 metres of an improved water source) times the overall functionality percentage of improved water

sources in urban settings. The functionality is interpreted as 'the percentage of piped water service availability, or the percentage of schemes with satisfactory water quality, water quantity, and service reliability'.

For urban areas, three main assumptions are applied to confirm evidence of access to safely managed sanitation services in institutions, household and business premises. These are: (1) the Institutions, households and business premises must have a functional drainable sanitation facility without evidence of any form of Open Defecation. (2) institutions, households and business premises must practice safe emptying with transportation done by licensed service providers. (3) Having a connection to a sewerage network. Every household/institution or business premise must fulfil condition 1, and either 2 or 3 in order to be considered safely managed.

3 Key Findings

3.1 Sector Wide Approach driving annual review process

Uganda's strong monitoring systems have been built upon good donor coordination and government-led alignment.

Uganda's water sector has been characterised by a successful SWAp, where donor support contributed to joint monitoring through funds, policy dialogue, and capacity building, which enhanced sector policy design and implementation. Regular and constructive dialogue amongst government and sector stakeholders improved policy formulation and implementation, identified capacity gaps, and ensured the complementarity of the different aid modalities and programmes.

As a result, the sector monitoring framework is well developed and incorporated in MWE, who takes the lead in progress monitoring and reporting, specifically on water supply. The MoH monitors household sanitation and hygiene

coverage, and collects the information from the MoES for the sanitation and hygiene coverage in schools; this information is fed to MWE on an annual basis for analysis in the SPR. The sector performance monitoring report forms the input for the annual JSR, that is well attended and the discussions there shape the direction of the sector in the following year. The SDGs for WASH have been incorporated in the sector indicators and have been costed in the Strategic Sector Investment Plan.

3.2 Sector goals, and a reality check

Government has changed focus from poverty alleviation to wealth creation through industrial development resulting in reduced funding for basic services which in turn has slowed progress in WASH.

MWE and the GoU have agreed to achieve various targets in the areas of water supply, sanitation and hygiene, as formulated in the national development plans as well as international agreements in the fields of human rights and gender equality. Current funding levels to WASH are insufficient. Previous WASH subsector performance was based on strong political support, However, the government changed funding focus from poverty alleviation towards economic infrastructure development since 2010, relegating social services sectors to secondary priority. The development partners reduced their engagement and volumes of budget support in response to diverging objectives from the government, though they continued to focus their operations on social sectors. In recent years, development partners have gradually further reduced sector budget support and joint sector support programmes in the sector ended by 2018. Anticipating a limited growth in future funding and a rapidly growing population, reaching the more ambitious international targets will be extremely challenging, and a less ambitious target setting would be opportune.

Based on these constraints, a consolidated Strategic Sector Investment Plan (SSIP) was

developed in 2017-2018, where three budget scenarios are worked out – all of which are considerably below what is needed to achieve 2030 indicator targets—with spending pathways for sector investments that are aligned with sector priorities. Although much effort was spent on this SSIP, implemented through a highly participatory process, the product is used to advocate for more funding rather than used as an implementing tool for targeted funding or amended target setting. This may be partially due to the fact that with the current funding levels, very few subsectors will achieve any of the targets set for 2030.

Monitoring of WASH is carried out by multiple organisations, leading to overlaps and gaps in data collection and coordination.

Whilst the structure for annual monitoring and reporting is well established, there are gaps in the monitoring processes. Data collection on sanitation and hygiene is carried out by the MoH, which delegates it to the health assistants that are not trained in monitoring the indicators, using paper-based monitoring on an ad-hoc basis. Annual data aggregation is done by MoH and analysed in Excel by MWE for the SPR; this database is not accessible to the public.

Urban water supply is not effectively monitored as NWSC, the utility providing water to the larger part of the urban population, works in parallel to MWE's Umbrella Authorities (UAs) and the Water Supply Development Facilities in charge of utility management and water supply construction to the urban population in the smaller towns, respectively. The urban sub-sector therefore does not monitor and report using the same management tools. As a result, the MWE's regulation department is not able to monitor the performance of NWSC and the UAs using a standardised tool for the whole urban sub-sector. Also, the monitoring of urban water is supplybased rather than monitoring actual people served.

BOX 6.

URBANISATION AND ITS IMPACT ON MONITORING WASH INDICATORS

Monitoring of the WASH indicators in Uganda is disaggregated to the target populations being complementary, either rural or urban population. However, these two categories are in practice not mutually exclusive but overlapping differently depending on the definitions used by the monitoring entities, whereas their population sizes also change over the years, which makes aggregation to national overall indicator values impossible.

During the 2002 and 2014 censuses, urban areas constituted of only the gazetted towns (approved by the responsible authority) while in the earlier censuses both the gazetted and ungazetted urban areas were included. Any trading centre with more than 1,000 people was considered urban. The urban population increased from less than one million persons in 1980 to about three million in 2002, representing a nearly threefold increase and further increased to 7.4 million in 2014. It is projected at 10.6 million persons in the year 2020. The high increase is attributed to four factors; 1) gazetting of new urban areas; 2) natural growth; 3) re-demarcation of the boundaries of selected urban areas; and 4) rural-urban migration.

Urban areas, according to the definition used by UBOS, are gazetted urban councils such as Kampala Capital City, municipalities, town councils and town boards. Because of the service provision approach through both NWSC and UAs, MWE's sector performance report uses a different approach: the chapter covering urban water supply calculates the whole population in NWSC or UAs' service areas as urban population, and records an urban population of 16.8 million in NWSC towns and 1.5 million people in towns served under the UAs, all in all 18.3 million people rather than the 10.6 million estimated by UBOS. Rural growth centres are considered rural when they are in a rural sub-county. These definitions are used to calculate urban and rural access to safe water supply.

An explanation for this is that all the actors in the urban water supply extend their services into rural areas with a mix of mandates for service providers (NWSC or UAs), resulting also in double counting of indicators that disaggregate for rural and urban populations.

Additionally, every couple of years, a nationwide data collection exercise has been carried out by MWE, that resulted in substantial additions to the number and functionality of water sources. This indicates that the regular updates by the DWOs are far from exhaustive. Other challenges include the continued administrative fragmentation of districts, leading to challenges in trend monitoring per administrative unit.

3.3 Going beyond SDG 6 indicators

Routine monitoring requirements may diverge from SDG monitoring needs.

The WSDB now reports one of the new indicators since FY 2016/17, i.e. 'percentage of villages with a source of safe water supply'. This indicator is useful in planning services and ensuring 100% coverage, and as such, is of national interest to help plan services and meet political priorities etc.

3.4 Status in terms of monitoring safely managed WASH

So far, Uganda is only monitoring part of its SDG 6 indicators, and steps to improve this need to be undertaken (see Figure 4). Below we identify the main data shortcomings and suggest ways of closing the gap.

The national WASH indicators as listed in the NDPIII do not include SDG goals, and there is a disconnect with the WASH sector, as evidenced by the differences in formulation of WASH indicators and differences in baseline values for these indicators. The current JMP indicator data are based on the Performance, Monitoring and Accountability of 2017 for water and sanitation, which is unknown and not used in the WASH sub-

sector in Uganda. Hygiene data in the JMP are based on the outdated DHS of 2016.

The monitoring system for SDG 6.1.1 for rural water supply is not yet in place and therefore not monitored, and the less stringent indicator on basic water access is based on (a) a not fully up to date WSDB and (b) underestimated because part of urban water supply is extending into rural areas. In addition, collection time is not yet monitored, and therefore, the currently monitored access to safe water in rural areas is a combination of basic and limited access in the JMP ladder. Monitoring of rural safely managed water supply may be done using the WSDB, by combining the information on (a) water provided through yard taps or in-house connections, and (b) functionality at time of monitoring.

Drinking water quality is not yet regularly monitored at the level of the yard taps. Regularly monitoring water quality would need to become a procedure for all rural piped schemes, to monitor the safely managed aspect 'free from contamination'.

For urban water supply, the SDG 6.1.1 is not being monitored yet. However, the indicator may be approximated by assuming that the functionality and water quality of the whole scheme is representative for the individual yard taps/in-house connection. Though in practice, many piped schemes have sections and connections that are dry for parts of the day, or where the yard taps water quality is not regularly/at all monitored.

The SDG 6.2.1 indicator on safely managed sanitation has recently improved from monitoring 'limited sanitation', where sharing of latrines was not monitored, to 'basic sanitation', as sharing of latrines is currently monitored. In addition, in rural areas, burying the excreta of non-lined pits and then digging a new pit is seen as 'safely managed sanitation', so safely disposing of excreta is taken to apply to all to non-drainable latrines. However, for drainable facilities, monitoring safe disposal off-site of sewage is not tracked, nor the safe treatment and re-use, whereas standards are lacking especially for final effluent and sludge cake after treatment. Hence, SDG 6.2.1 can be monitored for rural sanitation only.

Water Sanitation Hygiene Piped Supply **Rural and Urban** Rural Rural and Urban Limited Handwashing Data available and aligned to JMP Source type Source type Facility type Facility Some data but not aligned to JMP Basic Soap and Water Collection time Collection time Shared No data Sewer connection Safely On- premises On- premises and treatment Managed When needed Treated on site When needed **HMIS** Water Quality Treated off-site Water Quality OD prevalence **WSDB UPMIS** If connected to larger Yes Schools Yes town schemes If connected to larger HCF Yes No

Figure 4: Routine monitoring systems and alignment to JMP

town schemes

4 Opportunities going forward

4.1 Quick wins

Safely managed water supply: we recommend monitoring both safely managed rural and urban water supply by establishing use of water provided through yard taps or in-house connections only, and assuming that the functionality and water quality of the whole scheme is representative of the individual yard taps/in-house connections, while multiplying the number of users per yard tap with a standard number of users. For rural safely managed water supply, the WSDB may be used, whereas for urban water supply, the information from UPMIS and NWSC should be combined.

Unimproved water supply, defined as 'unprotected wells and springs' is currently not monitored in the WSDB, yet it is a category in the JMP ladder above 'No service'. Incorporating this category in the WSDB may be implemented during a next nationwide updating exercise of the WSDB/Atlas and would help in targeting subsequent improvements.

Handwashing with soap and water is now based on the availability of water and soap, the presence of only a handwashing facility is not monitored. Handwashing could be an additional indicator to be monitored through the HMIS; to improve alignment with the JMP Limited Hygiene indicator.

Both **sanitation and hygiene** indicators are collected by health assistants who, as indicated in Section 4.3, have not been trained in collecting the right information for the sanitation and hygiene indicators. Thus, it is recommended that the data collectors are regularly trained.

4.2 Suggestions for improvements in the longer term

Basic water supply and limited water supply indicators cannot be established using the routine monitoring systems, as the routine monitoring

systems do not measure water collection time. We recommend exploring how existing countrywide surveys may be used to bring this information together.

For safely managed piped rural water supply, the parameter water quality is not yet monitored. If all rural water available on the premises comes from piped schemes, all these schemes need to be monitored for faecal coliforms (at every connection) when establishing the value for this indicator. Thus it is recommended that water quality monitoring procedures become integral for scheme managers so that it becomes part of the running costs as simple and inexpensive toolkits may need to be used to determine water quality. However, it should be noted that this still leaves a gap for point sources.

All components for **safely managed urban water supply** are being monitored, but the data is monitored by different sector actors and different databases. The WSDB incorporates the information from urban piped schemes from the urban department though excluding NWSC schemes, but the information is currently not used to determine urban indicators. NWSC has its own data but has not been monitoring coverage but rather connections. A further challenge is that the NWSC data includes safely managed rural water supply. UPMIS analyses the number of connections on the premises and the scheme's water quality but does not measure the total population in a town.

Recommendations:

- 1. Ensure one definition of 'urban population', and 'urban area' used by both the rural and urban water supply department of MWE, and NWSC.
- 2. Ensure that the population data for these areas can be monitored and tallies with the monitoring of the rural population, as determined in the WSDB. This will enable a calculation of the national overall indicator (rather than only urban

and rural separately) and avoids overlaps between rural water supply and urban water supply values.

- 3. Ensure one urban water database is being used to monitor progress in urban indicators.
- 4. Incorporate the NWSC utility database in the WIS and combine UPMIS with NWSC databases into one urban utility MIS.

The data on sanitation and hygiene for **health centres** is currently not included in the HMIS and is not yet monitored by MWE. Institutional WASH monitoring is restricted to schools, and neither does sanitation and hygiene for health centres feature in the sector performance. Lobbying to incorporate this in routine monitoring may be a future aspiration of the sector.

Finally, and ultimately, it is recommended that the HMIS is turned from a simple Excel database into a real management information system with a set of procedures which, when executed, provide information to support decision making; this MIS should subsequently be accommodated as part of the WIS of the MWE.

BOX 7.

UNICEF CO'S SUPPORT TO ENHANCING SANITATION AND HYGIENE MONITORING

In June 2020, UNICEF procured a consultant to support the Ministry of Water and Environment (MWE), Ministry of Health (MoH) and Ministry of Education and Sports (MoES) in upgrading and expanding the existing systems to include additional features which will enable the monitoring and reporting on SDG indicator 6.1 and 6.2.

Specifically for sanitation and hygiene, the UNICEF country office supports the MoH with improving and harmonising its routine data

collection, including lessons learnt from the Uganda Sanitation Fund (USF) monitoring. To facilitate countrywide application of the USF monitoring system, a consultant is further expanding the existing system and introducing additional features to report fully on SDG 6.2. Other features will include partner contributions, human resource availability and capacity and linkages to the existing Health Management Information System (HMIS). The current monitoring system is being upgraded to satisfy information needs of the MoH at various levels, especially in view of the devolved governance and specific information needs at the district level for decision making for a strengthened implementation of sanitation programme.

The HMIS has undergone a consultative process of development of monitoring framework, including identification of sector indicators for schools, health centres and community. The system will be able to provide the status of sanitation at various levels, provide automated graphical and spatial reports and interact with other systems. System review and developing/refining/strengthening the system is ongoing. It is expected that by November 2021 the final system will be presented and installed on national IT infrastructure, after which training of staff on the monitoring and evaluation system will be done.

4.3 Learning points for WASH monitoring in Eastern and Southern Africa

Uganda's water and sanitation achievements are a result of a long-standing cooperation between MWE, MoH and development partners, mainly because of joint sector support funding for a long period. The joint sector funding required strong collaboration among the development partners and with MWE and the Ministry of Finance, and a strategic direction that was supported by the whole sector, necessitating sector indicators that were regularly and adequately monitored. This resulted in the strong monitoring framework that Uganda has today. Directly linked to this was the

formation of UWASNET, an umbrella organisation of NGOs and community-based organisations in the WASH sector that collaborates in the achievements of the strategic direction of the sector, and directly contributes to the annual sector performance report.

Structures that have contributed to the thriving sector include:

- A Water Supply and Sanitation Development Partner Group, run on a rotational basis by a development partner that becomes in that year the Lead DP, and interacts on behalf of the DPs in all important sector meetings.
- A Sector Working Group meeting twice a year, in which all important sector players participate.
- An annual JSR at the beginning of a financial year to discuss the progress of the whole sector and the strategic actions to take in the next year, referred to as sector undertakings, and an annual Joint Technical Review to discuss progress on the Undertakings and including a joint field trip to get acquainted to the sector issues at hand.
- The databases that have been developed partially with donor funding are now run by the ministry as routine monitoring systems, and measuring progress is done as an activity of the ministry and therefore is a sustained activity.

The focus on at least annual monitoring of sector indicators has helped implementers including the district local governments and civil society organisations (CSOs) to target their limited resources on where it matters most, resulting in a slow but steady increase in sector indicators and increased regional equity.

What has not worked is the effective regulation of urban piped schemes in that progress monitoring is not done in an effective joint manner, and UAs and NWSC are working in parallel.

What has had limited success is the fact that every department in the ministry carried out its own monitoring, which has resulted in overlapping data collection and different interpretations of functionality, access and use of WASH indicators.

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Annex 1 – Details of routine WASH monitoring systems

Dead organisation Water Sector Liaison Department of Ministry of Water and Environment Department of Ministry of Water and Environment Piped Water Milistry of Health Piped Water Piped	Routine Monitoring Systems	Water Supply Data Base (Water Atlas)	Environmental Health data collection (HMIS)	UPMIS
Type of system MIS / surveys / etc MIS / surveys / etc MIS / surveys / etc MIS (in fact excel data sheet compiled, analysed by MWE from paper-based surveys by Health Assistants) Basic Water Supply: Percentage of population using an improved drinking water source (based on standard service levels per type of improved water source multiplied by respective amounts of different types of improved water source water source sper administrative area (distance or collection time not monitored)) Safely Managed Water Supply: Percentage of population using an improved drinking water sources (based on shared) Safely Managed Water Supply: Percentage of population using an improved drinking water source (bat urban oppulation using an improved drinking water sources (defined as basic sanitation: Percentage of population using safely managed drinking water sare safely disposed in-situ or transported and treated off site) Functionality: rural: % of water sources functional at time of spot-check – as input for SDG 6.1.1. MIS MIS MIS MIS Basic Water Supply: Percentage of population using an improved drinking water source (based on population using an improved drinking water sources (based on population pare safely managed drinking water services located on premises (indicator not yet monitored) Functionality: rural: % of water sources functional at time of spot-check – as input for SDG 6.1.1. MIS MIS MIS MIS Basic Water Supply: Percentage of population using an improved drinking water sources functional at time of spot-check – as input for SDG 6.1.1. MIS Basic Water Supply: Percentage of population using an improved drinking water sources functional at time of spot-check – as input for SDG 6.1.1. MIS Basic Water Supply: Percentage of population using an improved drinking water source functional at time of spot-check – as input for SDG 6.1.1. MIS Basic Water Supply: Percentage of population using an improved drinking water source functional tin the for spot factor to the formation provided fine to the forma	Lead organisation	Department of Ministry of	Department of Ministry	of Ministry of Water and
Indicator(s) used Basic Water Supply: Percentage of population using an improved drinking water source (based on standard service levels per type of improved water sources per administrative area (distance or collection time not monitored)) Safely Managed Water Supply: Percentage of population using an improved drinking water source multiplied by respective amounts of different types of improved water sources per administrative area (distance or collection time not monitored)) Safely Managed Water Supply: Percentage of population using safely managed drinking water services located on premises (indicator not yet monitored) Functionality: rural: % of water sources functional at time of spot-check – as input for SDG 6.1.1. should be a spot of population with handwashing: Percentage of population with handwashing facilities with soap and water at water staken that comply with tandwashing facilities with soap and water at staken that comply with tandwashing facilities at saken that comply with tandwashing talken that comply with table to make the propulation with handwashing facilities with soap and water at taken that comply with table to make the population with handwashing facilities with soap and water at taken that comply with table to make the propulation water and water saken that comply with table to make the propulation water and water and water and water and water and water and water quality: % of water samples taken that comply with table water and w		(Rural) Water	Sanitation and Hygiene	Piped Water
Percentage of population using an improved drinking water source (based on standard service levels per type of improved water source multiplied by respective amounts of different types of improved water sources per administrative area (distance or collection time not monitored)) Safely Managed Water Supply: Percentage of population using safely managed drinking water services located on premises (indicator not yet monitored) Functionality: rural: % of water sources functional at time of spot-check – as input for SDG 6.1.1. Percentage of population using an improved drinking water source (but urban population distribution in rural /urban areas is missing; NWSC not yet linked to UPMIS). Safely Managed Sanitation: Percentage of population using safely managed sanitation plus: where the excreta are safely disposed in-situ or transported and treated off site) Open Defecation: Percentage of population premises (based on premises (indicator not yet monitored) Functionality: rural: % of water sources functional at time of spot-check – as input for SDG 6.1.1. Open Defecation: Percentage of population practicing open defecation (defined as All households without sanitation facilities are practicing open defecation) Handwashing: Percentage of population with handwashing facilities with soap and water at taken that comply with		MIS	sheet compiled, analysed by MWE from paper-based surveys by	MIS
1 - 1	Indicator(s) used	Percentage of population using an improved drinking water source (based on standard service levels per type of improved water source multiplied by respective amounts of different types of improved water sources per administrative area (distance or collection time not monitored)) Safely Managed Water Supply: Percentage of population using safely managed drinking water services located on premises (indicator not yet monitored) Functionality: rural: % of water sources functional at time of spot-check — as	Percentage of population using an improved sanitation facility not shared with other households (defined as improved, not shared) Safely Managed Sanitation: Percentage of population using safely managed sanitation services (defined as basic sanitation plus: where the excreta are safely disposed in-situ or transported and treated off site) Open Defecation: Percentage of population practicing open defecation (defined as All households without sanitation facilities are practicing open defecation) Handwashing: Percentage of population with handwashing facilities with soap and water at	Percentage of population using an improved drinking water source (but urban population figures and population distribution in rural /urban areas is missing; NWSC not yet linked to UPMIS). Safely Managed Water Supply: Percentage of population using safely managed drinking water services located on premises (based on %age of house and yard connections x percentage functionality (see below) x %good water quality; all piped water quality; all piped water quality: % piped water service availability: % functionality based on continuity of supply (days of supply/total days) Drinking water quality: % of water samples taken that comply with

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Routine Monitoring Systems	Water Supply Data Base (Water Atlas)	Environmental Health data collection (HMIS)	UPMIS
		functional HWFs in households must have clean water and ash/soap)	well as taps from piped schemes) Based on absence of E. coli.
		Schools: percentage of pupils enrolled in schools with basic handwashing facilities (monitored at the time of spot-check).	
Alignment with SDG 6	Alignment with SDG Basic+ Database is to be combined with data on drinking water quality: Based on absence of E. coli. Limited annual spot check analyses are now done by DWRM/Water Quality Department as reported in SPR, for urban water supply, based on UPMIS, for NWSC: based on frequently tested own data (no regulator) as reported in SPR	Alignment with SDG Basic+	Fully aligned with SDG 6
National coverage	100%	100%	Partial urban, partial rural
Rural/Urban	Rural	Rural and urban	Rural and urban
Frequency of data collection	Quarterly (population extrapolated daily)	Routine data collection, but yearly compilation of paper-based data and reporting at MWE	Routine data collection
Data collection process	Data updates done by district water officers from their quarterly reporting and entered at MIS Unit at MWE's water sector liaison department. Annually, data are used to provide updated indicator values for the rural water (and sanitation) department. Every 10 years (or less) an extensive field update is	Data collection forms are sent to the districts and followed up by the regional structures (Regional Technical Support Units and Uganda Sanitation Fund staff) for submission to the MWE/MOH. Data entry and analysis is done jointly between the MWE and MOH to	Operational data is submitted by the piped scheme management staff to the Umbrella Authority and then uploaded into UPMIS
	arranged by MWE.	produce the final report.	

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Routine Monitoring Systems	Water Supply Data Base (Water Atlas)	Environmental Health data collection (HMIS)	UPMIS
	Piped scheme data are also collected apart from schemes managed by NWSC; this creates potential overlap with UPMIS access data.	Data is being received from district health assistance for rural sanitation, and from town councils for urban sanitation.	
Data accessibility and use	Open access. Data (in at least summary form) is available to the public.	Data is not accessible. No access possible beyond the department managing the data.	Restricted access. Data is accessible to approved partners only.
	Up to date national, district and annual reports can be accessed through MWE's website.	Summary of information is produced in the annual sector performance report as text and information per district in annex. Excludes info in areas managed by Umbrella Authorities and NWSC.	UPMIS is used by the urban utilities to report management indicators. UPMIS is not used by / part of NWSC, who have their own database not shared nor linked with UPMIS.
Non-community settings	Schools / health care facilities / other institutions are included	Per administrative unit, and schools	Yes, if connected to the piped scheme
WinHCF	Yes	No	If connected to larger town schemes
WinS	Yes	Yes	If connected to larger town schemes

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Annex 2 – National WASH targets and indicators

SDG	Water	Sanitation	Hygiene			
National WASH Targets and Indicators						
Indicator	'Rural safe water coverage', and 'Urban safe water coverage'	'Sanitation coverage (Improved toilet)'	'Hygiene (Handwashing)'			
Target	85%, and 100%, resp. (FY2024/25)	45% (FY2024/25)	50% (FY2024/25)			
Source for target	Third National Development Plan (NDPIII) 2020/21 - 2024/25	Third National Development Plan (NDPIII) 2020/21 - 2024/25	Third National Development Plan (NDPIII) 2020/21 - 2024/25			
Reporting data						
Source(s) of data	WSDB, UPMIS	HMIS	HMIS			
Indicator included in data	Urban safe water coverage is not measured by a single database. WSDB has the data for rural water supply coverage, but only has urban coverage data excluding for towns managed by NWSC. UPMIS does not provide urban coverage data, nor does it have utility data for NWSC towns.	Included, but only disaggregated in rural and in urban coverage, not aggregated to nationwide coverage.	Included, but only disaggregated in rural and in urban handwashing, not aggregated to nationwide handwashing.			
Alignment						
Is target aligned with available data	No (data is insufficient to report against target) Urban coverage needs to be established from WSDB, UPMIS and info from NWSC, whereby UPMIS and NWSC do not use updated census data nor know the population in their service areas nor the subdivision in urban or rural populations, with likely overestimations through overlaps in sub-	No (data is insufficient to report against target) It is not possible to aggregate rural sanitation coverage and urban sanitation coverage per administrative unit to a nationwide coverage in the absence of rural versus urban population data.	No (data is insufficient to report against target) It is not possible to aggregate rural sanitation coverage and urban sanitation coverage per administrative unit to a nationwide coverage in the absence of rural versus urban population data.			

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	indicators for rural and urban components)						
Tracking progress							
Baseline established*	Yes (FY 2017/18) Rural: 73% (NDPIII) Urban: 74% (NDPIII) Rural: 70% Urban: 77% (SPR2018) Rural (Basic + Limited service): 73% Urban (Basic + Limited service): 77% JMP (2019, data for 2017)	Yes (FY 2017/18) 19% (NDPIII) Rural improved sanitation facility not shared: not determined Urban improved sanitation facility not shared: 36% Rural safely managed sanitation: ND Urban safely managed sanitation: 26% (SPR2018) Basic service, nationwide: 19% (JMP, 2019, data for 2017)	Yes (FY 2017/18) Handwashing coverage 34% (NDPIII) Handwashing: Percentage of population with handwashing facilities with soap and water at home, rural: 37% Handwashing: Percentage of population with handwashing facilities with soap and water at home, urban: 40% (SPR 2018) Basic service, nation-wide: 21% (JMP, 2019, data for 2017)				
Frequency of progress reporting	Yearly	Yearly. Target is to have a full update, but some TCs / districts don't send the feedback. Hence MWE reports on whatever percentage that has sent the data.	Yearly. Target is to have a full update, but some TCs / districts don't send the feedback. Hence MWE reports on whatever percentage that has sent the data				
Most recent update to progress reporting	Rural: 68% Urban: 71% (SPR, 2020)	Rural: 18% Urban: 45% (SPR, 2020)	Rural: 38% Urban: 61% (SPR, 2020)				

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However, the base table differ from th	res from NDPIII are eline figures in the N ne data in the SPR 2 PIII indicators, whic d.	NDPIII, mentioned t 2018. The challenge	o be from FY2017 e with the data is s	7/18, that have bee strongly related with	n inserted in this h the inaccurate

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Annex 3 – JMP and routine data

		Water		Sanitation		Hygiene	
Service Level (ND=not determined)		Routine Monitoring (SPR 2020, WSDB, UPMIS)	JMP (2019)	Routine Monitoring (SPR 2020, HMIS)	JMP (2019)	Routine Monitoring (SPR 2020, HMIS)	JMP (2019)
Safely Managed	Value	National: ND Rural: ND Urban:57%	National: 7% Rural: 4% Urban: 16%	National: ND Rural: 7% Urban:39%	National: ND Rural: ND Urban: ND		
	Most recent data point	2020	PMA, 2017	2020	ND		
Basic	Value	ND	National: 42% Rural: 37% Urban: 59%	National: ND Rural: 18% Urban: 45%	National: 18% Rural: 16% Urban: 26%	National: ND Rural: 38% Urban:61% Schools:58%	National: ND Rural: 20% Urban: 40%
	Most recent data point	ND	PMA, 2017	2020	PMA, 2017	2020	DHS, 2016
Limited	Value	National: ND Rural: 68% Urban: 70.5% (at least limited – derived from % of population using an improved water source)	National: 32% Rural: 36% Urban: 18%	ND (collected but not analysed and reported on)	National: 18% Rural: 10% Urban:42%	ND	National: ND Rural: 57% Urban:71%
	Most recent data	2020	PMA, 2017	2020	PMA, 2017	ND	DHS, 2016

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		Water		Sanitation		Hygiene	
Service Level (ND=not determined)		Routine Monitoring (SPR 2020, WSDB, UPMIS)	JMP (2019)	Routine Monitoring (SPR 2020, HMIS)	JMP (2019)	Routine Monitoring (SPR 2020, HMIS)	JMP (2019)
Unimproved	Value	ND	National: 12% Rural: 14% Urban: 6%	ND (collected but not analysed and reported on)	National: 58% Rural: 67% Urban: 30%		
	Most recent data point	ND	National: 13% Rural: 15% Urban: 5%	2020	PMA, 2017		
Surface water/ Open Defecation / no facility	Value	ND	National: ND Rural: 7% Urban: 0%	National: ND Rural: 22% Urban:12%	National: 6% Rural: 7% Urban:2%	ND	National: ND Rural: 43% Urban: 29% (taken as 100-% with handwashing facility)
	Most recent data point	ND	PMA, 2017	2020	PMA, 2017	ND	DHS, 2016

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Annex 4 – Details of key informants

Name	Organisation	Role	
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Shiva Narain Singh	UNICEF Uganda office	Chief WASH	
Martin Akonya	Rural Water Supply and Sanitation Dept. of Ministry of Water & Environment	Senior Environmental Health Officer	
Harriet Nattabi	World Bank Uganda office	Water Resources Specialist, formerly (until 2016) Environmental Health Specialist with WSP/World Bank, Uganda	
David Njoroge	UNHCR Uganda office	Technical Coordinator/WASH	
Trinah Kyomugisha	Urban Water Supply and Sanitation Dept. of Ministry of Water & Environment	Senior Environmental Health Officer	
Harriet Kyomuhendo	Policy & Planning Dept. of Ministry of Water & Environment	Principal Policy Analyst	
Loy Asiimwe	MIS Unit, Water Sector Liaison Dept. of Ministry of Water & Environment	Consultant	
Reinold Seidelmann	Urban Water Supply and Sanitation Dept. of Ministry of Water & Environment	Consultant, Former O&M Adviser	

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About the Series

UNICEF's water, sanitation and hygiene (WASH) country teams work inclusively with governments, civil society partners and donors, to improve WASH services for children and adolescents, and the families and caregivers who support them. UNICEF works in over 100 countries worldwide to improve water and sanitation services, as well as basic hygiene practices. This publication is part of the UNICEF WASH Learning Series, designed to contribute to knowledge of good practice across UNICEF's WASH programming. In this series:

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