WASH Technical Paper TP/17/2021

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Understanding monitoring for SDG6 across Eastern and Southern Africa

Regional Review

Executive Summary: SDG6 +5 regional review of monitoring systems across Eastern and Southern Africa

The Sustainable Development Goals (SDG) Goal 6 establishes a commitment to 'Ensure availability and sustainable management of water and sanitation for all.'

The year 2020 marked five years into SDG implementation with the SDG Mid-term review due in 2022/23. UNICEF ESARO recognizes that, after five years of the SDGs, it is necessary to assess the progress made toward achieving SDG6 and assess how well progress is being measured by member states. The SDG6 +5 presented here review takes the opportunity to identify key gaps and opportunities ahead of the SDG mid-term review. Taking action now will better position member states to advocate for financing for WASH as part of the SDG mid-term review and provide time for required course correction measures to be effective ahead of 2030.

Purpose

The purpose of the SDG6 +5 review was to undertake an inventory of existing institutional monitoring systems and their ability to track SDG 6.1 and 6.2 at the national level. The review also provided regional insights into the extent to which countries in ESAR have advanced in terms of SDG6 localization and implementation and considered the underlying strengths and weaknesses of the enabling environment for monitoring sustainable WASH programming and post-pandemic recovery in the region.

The SDG6 +5 review will support targeted advocacy and help identify barriers and enablers to securing additional resources and financing for enhanced WASH service delivery. It documents best practices and facilitates knowledge sharing across countries, teams and organizations. The methodology implemented for SDG6 review is intended to be replicated in other regions or periodically when required.

Methodology

The review was conducted as a 'rapid' assessment of country monitoring systems, across all countries in ESAR[1]. The assessment considered four aspects of monitoring for SDG6:

[1] Data was initially collected in 20 out of 21 countries. Data on Comoros was collected at a later stage and – although it is included as an annex to this report – did not inform the analysis and narrative of the report.

1. The strength of the enabling environment for WASH monitoring, based on the SWA building blocks for strong WASH systems, and additional elements linked to localization of SDG6, and use of data in sector processes.

2. The availability of data for monitoring WASH, and alignment with SDG6 indicators

3. Details on how WASH monitoring systems are structured and managed

4. How well WASH monitoring links to other priority areas, including integrated water resources management (IWRM), climate resilience, and humanitarian interventions.

The report findings are available on a regional dashboard (https://esaro.mwater.co/#/sdg6) which allows users to explore the same information included in the report. The dashboard presents unique information on the status of monitoring and achievement of SDG6.

Strengths and challenges in monitoring for SDG6

There are significant gaps in data availability to monitor progress towards SDG6 at a national level

Countries do not yet have the data to fully understand gaps in WASH service provision and progress towards SDG6. There is a need for better data to help countries understand if they are achieving national targets and where investment is needed to address gaps in provision and ensure that no-one is left behind. No countries have fully included the data needed to report against the JMP indicators for safely managed services in their monitoring systems.

Only a few systems are aligned with JMP indicators for SDG basic services, and several countries were found to have not yet evolved data systems that were designed for the MDG era and indicators. In addition, where monitoring systems exist, there are still substantial challenges in ensuring data collection is frequent and comprehensive—with notable exceptions for those systems managed by the health sector.

There are gaps in monitoring across water, sanitation, and hygiene – but hygiene is by far the weakest area. This represents a significant area for improvement, as monitoring hygiene is less demanding (in terms of data collection) than elements of safely managed water and sanitation services.

Most countries have set local targets for SDG 6 – and all the countries which responded to GLAAS have some WASH targets aligned with SDG6 targets. However, **no country collects routine data which allows it to fully monitor progress towards the targets it has set**. For example, the target may be set for access to basic water services, but there is no information on typical collection times. This means that countries may be reporting progress using misleading data which overstates the progress towards the higher service levels of the JMP ladders for drinking water and sanitation.

Much of the data on WASH collected is not accessible

Where data is collected on progress towards SDG, too much of data sits in inaccessible systems or nonfunctional. As a result, there is a lack of awareness among stakeholders of what data exists, and how it can be used and integrated. The assessment found very few monitoring systems open to all stakeholders: either access was restricted to select users or entirely closed. This can be due to administrative policies and hurdles, or due to the design and implementation of the system not facilitating interrogability and data sharing - for example

where data is collated and analyzed in spreadsheets, and there is no clear record of what the most up-to-date information is. This presents a missed opportunity for improving the planning and targeting of WASH.

Only six countries fully integrated utility data into sector monitoring and reporting for SDG6. For example, Uganda Sector Performance Report (SPR) includes clear data from the National Water and Sewerage Corporation. But too often utilities were seen as somehow separate from sector reporting processes, and this was found for both UNICEF CO staff and government counterparts.

No country is on track to fully achieve SDG6

No country is on track to achieve universal access to basic services by 2030 for SDG 6 considering the current rates of progress and gaps in access. Only Botswana is on track to achieve universal access to Water. Some countries are on track to achieve some areas of SG6 by 2050 (20 years after the target date) but many will not even achieve this. Some countries, either close to zero or facing declining levels of access to services, **are projected to never achieve SDG6** at the current rate of progress. This is before impacts on access to WASH as a result of the COVID-19 crisis have been reflected in data.

A strong enabling environment is linked to strong monitoring systems

Perhaps not surprisingly, a clear trend emerged between strong monitoring systems and a strong enabling environment for WASH monitoring. Countries with good data availability had a strong enabling environment, whereas countries that lacked progress on sector policy and strategy, sector financing, JSRs and annual performance reports, elements of a weak enabling environment lacked routine monitoring systems. It was not clear if any aspect of the enabling environment was an essential pre-requisite for strong monitoring systems; rather that broad strength in the enabling environment is a good indicator that monitoring will be strong.

There are still gaps in existing national monitoring systems

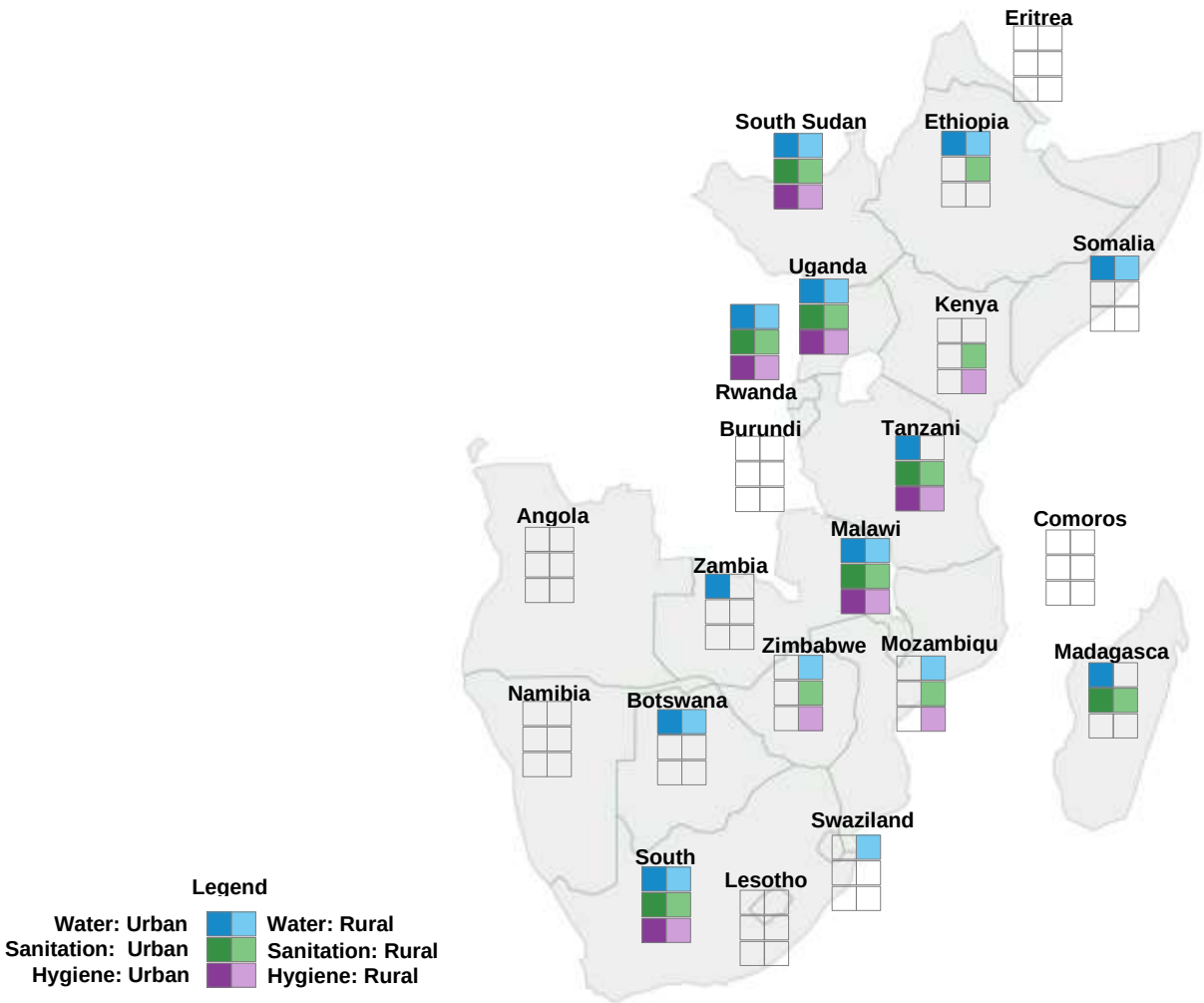
The assessment identified 22 monitoring systems across 15 countries – many countries had multiple systems covering different areas of WASH, or urban and rural areas. The majority of countries rely on some form of MIS with only two countries relying almost exclusively on nationwide surveys to monitor WASH access.

The majority of MIS systems identified were nationwide, but there was substantially more coverage or rural areas than urban. Only 40% of systems covered all areas of WASH – more often there was a split between water (managed by the water ministry) and sanitation and hygiene (managed by the health ministry). There are some positive examples where good coverage and updating frequency of sanitation and hygiene data

has been achieved where this is collected through health MIS systems which are able to leverage extensive health outreach worker networks.

In general, routine monitoring systems have significantly less alignment that JMP data estimates. No country has monitoring data for access to water services which aligns fully with the JMP indicators for safely managed services and 12 countries have no routine monitoring data on hygiene. In both JMP data and routine monitoring systems, monitoring data is absent for water quality data, and elements of fecal sludge management (FSM). Where hygiene data is available in routine monitoring systems it was found there is generally strong alignment with the JMP indicators with seven countries collecting monitoring data which aligns with the JMP indicator for basic services.

Currently, there is only limited data in national systems for WASH in institutions – both education and health care facilities. This is typically collected through MIS systems managed by the relevant line ministry. For education, only three countries fully align with SDG basic indicators - which includes indicators for water, sanitation and hygiene. In health, out of the 17 with some data, only Madagascar's system aligns fully with SDG basic indicators - which includes indicators for water, sanitation, hygiene, waste management and environmental cleaning.



There is no single 'correct' answer to how to collect data to monitor SDG6, the key is that data is high quality, useable and accessible. We found the strongest routine monitoring systems were diverse, combining MIS and surveys and identifying solutions that worked for them.

The most **successful systems were those designed around the needs of the WASH sector**, and there were several examples of where significant external investment in monitoring systems has not been sustainable.

What are the key recommendations we can make?

Four key recommendations which are relevant to different stakeholder groups identified as (1) UNICEF COs, (2) Governments, (3) Financing Partners and, (4) Institutional Partners in the report. The recommendations identify and set out how each actor has an important role to play in strengthening WASH sector monitoring across the ESAR region.

1. Focus on quick-wins and improvements which can be achieved more easily

Relatively minor changes to monitoring questions could significantly improve alignment of national monitoring systems with JMP indicators for safely managed WASH services. In particular, there is a clear opportunity to incorporate hygiene indicators into existing monitoring systems (such as HMIS) and lead to additional data availability with minimal additional resources.

2. Build the Enabling Environment for Monitoring

The starting point for good monitoring is a strong enabling environment. Building the enabling environments will require putting in place the building blocks at national and district level for a strong WASH system which will help create conditions for robust monitoring.

3. 'Data dialogues' to break down data silos and open up data accessibility and availability

There is a clear opportunity to open up existing data to a wider set of sector stakeholders – enhancing use and uptake. Extending access to existing data is a relatively low cost compared with other monitoring activities such as new data collection. Sector leaders should bring together stakeholders and technical support to ensure systems are in place to make the data available and increase interrogability.

4. Technical support for country led design of routine monitoring systems

To properly monitor and track progress of SDG 6, country-led monitoring needs to be scaled up significantly. Countries need technical support to understand what information is needed to fully monitor progress towards SDG6 and to design and implement monitoring systems that work for them.

SDG6 +5 Regional Review:

SUMMARY

UNICEF ESARO has recognized that, after five years of the SDGs, it is necessary to assess the progress made toward achieving SDG6 and—perhaps more importantly—to assess how well progress is being measured by member states. The timing of this review recognizes that if progress is behind track or data is not available, now—while there are still 10 years before the SDG deadline of 2030—is the time to put in place course correction measures. Doing so will better position member states to advocate for financing for WASH as part of the SDG midterm review. The first step as part of this 'SDG6 +5 review' is a rapid assessment provides an overview of how well countries understand current levels of access to WASH services and the gap to achieving universal access. This summary report presents the findings of that rapid assessment, and outlines the next steps in the review process.

The Sustainable Development Goals (SDGs) were adopted in 2015 including SDG6, 'Ensure availability and sustainable management of water and sanitation for all.'

Five years on the transition from the Millennium Development Goals (MDGs) still represents a step-change for the water, sanitation and hygiene (WASH) WASH sector. The SDGs introduced a stand-alone goal for water and sanitation (including hygiene).[2] This includes a significantly higher level of ambition for both levels of access to WASH services—an aspiration to universal access; and the quality of those services—with the target being for 'safely managed services' and not simply access to an improved facility. All countries are expected to set national targets for WASH, guided by the ambition of the global targets and taking into account local context, and to collect the data required to report on the global indicators.

This increase in ambition presents significant challenges to countries. First in the scale of investment which is needed to achieve universal access. Analysis by the UNICEF/WHO Joint Monitoring Project (JMP) shows that across Eastern and Southern Africa (ESAR) only one country (Botswana) is on track to achieve universal access to basic (not safely managed) water services by 2030, and no countries are on track to achieve universal access to basic sanitation services. Several countries are making negative progress—as improvements in WASH services cannot keep up with increasing needs. This underlines that business as usual is not an option if the goals are to be achieved.

The second challenge in monitoring progress against SDG6: Reporting against the JMP indicators for safely managed services requires significantly more detailed data, particularly on water quality and management of fecal waste. At present only two countries in ESAR have JMP estimates for safely managed water and only one for safely managed sanitation. This situation will improve as additional countries undertake the latest revision of the Multiple Indicator Cluster Survey (MICS6) which new questions and indicators on the availability and quality of drinking water and emptying and disposal of waste from on-site sanitation facilities.[3] But these surveys are

[2] The MDG targets for water and sanitation (there was no hygiene target) were included in Goal 7: Ensure environmental sustainability.

[3] MICS6 does not provide information on treatment of wastes which are emptied and removed off-site. This needs to come from local authorities, service providers or regulators

not comprehensive and are only undertaken periodically, and keeping track of progress will require more detailed assessments and more frequent data updates.

The two challenges are interlinked: Progress against SDG6 can only be made with increased investment in WASH services, and if that investment is targeted where gaps in access to services persist. But to secure significant increases in investment will require robust data both to demonstrate need and to properly target investment.

Taking stock of progress toward achieving SDG6 after the first five years

UNICEF ESARO has recognized that, after five years of the SDGs, it is necessary to assess the progress made toward achieving SDG6 and—perhaps more importantly—to assess how well progress is being measured by member states. The timing of this review recognizes that if progress is behind track or data is not available, now—while there are still 10 years before the SDG deadline of 2030—is the time to put in place course correction measures. Doing so will better position member states to advocate for financing for WASH as part of the SDG midterm review. The first step as part of this 'SDG6 +5 review' is a rapid assessment provides an overview of how well countries understand current levels of access to WASH services and the gap to achieving universal access. This summary report presents the findings of that rapid assessment, and outlines the next steps in the review process.

The rapid assessment has involved us collecting information to understand:

- **The strength of the enabling environment for WASH monitoring,** whether the country has the necessary institutions, policies, financing and capacity are in place to support a strong WASH monitoring system, and the extent to which the country has localized the SDGs.
- **The availability of data for monitoring WASH** in each country, whether this data is up to date and how closely the data aligns with the JMP service level indicators used to monitor SDG6.
- **How the systems for monitoring WASH are structured,** including who is responsible for them, the extent of coverage, and whether those systems are functional, accessible to stakeholders and provided with the appropriate resources (both financial and human capacity).
- **How well WASH monitoring links to other priority areas,** including humanitarian WASH monitoring systems, climate resilience and integrated water resource management, and understanding inequalities in WASH services.

This report follows the same structure—with each section focusing on a separate aspect of our assessment, and a final section identifying issues for further exploration as part of more detailed case studies in five countries (see Box 1).

Assessment methodology

This rapid systems assessment is intended to provide an overview of the current state of monitoring for SDG6 across ESAR. The primary data for this assessment was collected during a single, 90-minute long, structured key informant interview (KII) with in-country informants. This KII always included at least one member of the UNICEF WASH country team (often someone with responsibility for UNICEF's work on strengthening WASH systems.) The majority of KIIs also included government counterparts who had responsibility for managing or overseeing WASH monitoring systems (including where this responsibility was split across multiple ministries.) Finally, where relevant, we included representatives of the WASH Cluster.

Each KII followed the same format based on a series of questions on each area of the assessment, with responses captured by the assessment team in a standard template (available on request). Where there were gaps in

the responses, this was followed up through supplementary questions (via email) with the KII participants or through document review.

Following the completion of all KIIs, the full question responses were summarized into a smaller number of key metrics and descriptions (the information which is included in summary sheets in Annex 3). In this report we have presented the routine monitoring data available in country in terms of the alignment with JMP service level indicators. This is based on an in-depth assessment of whether or not countries collect data on each element of the JMP indicators.

Synthesis and analysis for this report was based on the data included in the summary sheets.

The limitations of this assessment and what comes next

This report is based on a rapid assessment of the ability of countries to monitor progress against SDG6 and the strength of monitoring systems. The information behind this assessment is largely taken from structured discussions with key UNICEF Country Office staff and (where available) government counterparts responsible for WASH monitoring, supplemented where possible by reviews of documentation and attempting viewing the actual data included in the monitoring systems. Each country has a distinct monitoring system; and attempting to collect data in a way which allows comparison across countries has meant that some of the nuances of individual systems have been lost, particularly in complex cases (e.g. with multiple overlapping systems.)

There may also be a gap in information where we were unable to talk to key informants with the right knowledge. This gap is most likely for data collected and managed by utilities, which often fall outside the direct responsibility of the Ministry of Water and may not be the principal focus of UNICEF WASH programming.

We have been able to view the data in the monitoring systems in only a small number of cases, so have not been able to verify that our assessment of the availability of monitoring is fully accurate.

The next step is to undertake five deep-dive case studies (see Annex 1 for details) which will build on the findings of this rapid systems assessment but establish in more detail the extent of the data included in the monitoring systems and seek to identify and explain some of the reasons behind the strongest performing monitoring systems in more detail.

BOX 1. ONGOING MONITORING INITIATIVES BY OTHER SECTOR ACTORS

This report covers country-led monitoring systems for SDG6 across Eastern and Southern Africa, but there are also multiple parallel monitoring initiatives for WASH being led by other sector actors.

In 2008, the 3rd AfricaSan Conference adopted the eThekwini Declaration and AfricaSan Plan of Action on sanitation and hygiene, which was later endorsed by the Sharm el Sheikh AU Summit on Water and Sanitation. The 4th AfricaSan Conference (Dakar, 2015) adopted the Ngor vision and commitments, articulated by African Ministers, to achieve universal access to adequate and sustainable sanitation and hygiene services and eliminate open defecation by 2030, and as such reflects the paradigm shift of the SDGs.

The African Ministers' Council on Water (AMCOW) has since been working with multiple stakeholders to track and monitor progress by African countries towards achieving this vision. Through the AfricaSan International Taskforce, a system for tracking progress against the Ngor Declaration and commitments has been established. Indicators for monitoring Ngor commitments are staged to show the progressive realization of each commitment. The first stage indicators track the enabling environment, and progress is assessed by looking at whether foundational structures

exist in each country. The second stage indicators track the achievement of published country targets.

In 2019, AMCOW commissioned a baseline report,[4] which summarizes the Ngor Commitment Monitoring carried out by 39 countries. The report finds that there has been progress across Africa in establishing and using government-led monitoring and review systems. Sanitation and hygiene monitoring systems have been established in most (31/39) countries, and most countries also have a government-led sector review process in place and the majority of these reviews track all sanitation and hygiene SDG targets. However, the report also finds that only 10 countries make data from these systems available to all government stakeholders and partners, which broadly aligns with the findings in this routine monitoring systems appraisal.

The UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) provides policy and decision-makers with a reliable, accessible, comprehensive, and global analysis of the investments and enabling environment to make informed decisions for water, sanitation and hygiene. The 2019 Global Status Report[5] on national systems to support drinking-water, sanitation, and hygiene, finds 79% of countries have established government-led processes for monitoring and validating progress towards national targets, but only 10% have sufficient human resources to do so. Of the responding countries, 64% indicated that progress towards national targets is assessed annually whilst 17% have no regular process for assessing progress. These findings, on the progress of the establishment of monitoring systems but constraints in operationalizing them, are in broad alignment with the findings of this appraisal of routine monitoring systems.

The enabling environment for monitoring SDG6

We used our discussions with countries to explore the strength of the enabling environment for WASH monitoring—that is how other aspects of the in-country WASH sector and systems support (or hinder) effective monitoring for SDG6—this is not an assessment of the broader enabling environment for the WASH sector in-country (e.g. financing refers to financing for monitoring, not for capital or operational expenditure.)

We based our assessment of the enabling environment for monitoring around the Sanitation and Water for All (SWA) Building Blocks (see Box 2).

BOX 2. SWA BUILDING BLOCKS

The five SWA Building Blocks[6] capture the key elements that the sector must have in place to be able to deliver sustainable services and progressively eliminate inequalities in access.

[4] https://www.speakupafrica.org/wp-content/uploads/2019/09/Is-Africa-on-track-to-achieve-the-SDGs-on-Sanitation.pdf

[5] https://www.unwater.org/publications/un-water-glaas-2019-national-systems-to-support-drinking-water-sanitation-and-hygiene-global-status-report-2019/

[6] See https://www.sanitationandwaterforall.org/about/our-work/priority-areas/building-blocks for full descriptions

We took the elements of the SWA building blocks which were most relevant to understanding monitoring for SDG6 (and which we could capture information on in the time frame) and also added specific questions on Joint Sector Review (JSR) processes and localization (see Box 3) to come up with six aspects of the enabling environment to report against (see Table 1).

For five of these elements, we have presented the assessment in a Red-Amber-Green (RAG) format. Green indicates that all or most of the requirements for the element are in place and red that few or none of the requirements are in place.

However, for institutional arrangements, although we collected information on the institutional arrangements for WASH and monitoring in each country, we have not attempted to score this specific element of the enabling environment on a RAG scale. The diversity of institutional arrangements—each country takes a unique approach—makes it difficult to compare meaningfully across countries. At the same time, an institutional arrangement which appears to be sub-optimal at first may be well suited to the particular context of that country. We did not feel—particularly given the depth of our data collection—that we were in a position to judge these arrangements. Instead, we have presented a simple typology of how responsibility for WASH is organized in-country.

Table 1: Elements of the enabling environment

	Indicator
Institutional arrangements	What are the institutional arrangements for WASH and monitoring in-country?
Sector policy and strategy	Is there a national WASH monitoring and evaluation (M&E) framework? Is this included in WASH policies?
Sector financing	Are M&E activities costed and budgeted for? Are there sufficient resources to meet the budget?
JSR process	Is there are regular JSR process in the country? Is this process informed by available data, and do the results feed into resource allocation processes?
Sector reporting	Is there an annual sector performance report (or similar)? How comprehensive is this report?
Localization	Has the country established national targets for SDG6? Are these targets aligned with the JMP indicators?

BOX 3. LOCALIZING SDG6 TARGETS AND INDICATORS

As part of this process, we explored the extent to which countries have 'localized' SDG 6.1 and 6.2. We considered the following as aspects of localization:

- *Whether countries have set national targets for WASH services, clearly defining them, and including them in national policies, plans or strategies.*
- *The extent to which the national target indicators are aligned with the JMP service level indicators used for global SDG6 monitoring (6.1.1, 6.2.1a and 6.2.1b).*
- *Whether a national baseline for the target indicators has been established and whether there is regular data collection to measure progress against the targets.[Callout copy]*

A summary of our assessment of the enabling environment for WASH monitoring is given in Table 2.

Institutional arrangements for WASH and monitoring

As a result of our discussions with UNICEF staff and government officials, we identified four broad types of institutional arrangements for WASH.

1. A single ministry is responsible for all WASH areas and related monitoring (two countries)

This was the least common institutional arrangement, with only two countries concentrating responsibility for all areas of WASH in a single ministry.

2. Responsibility for WASH is split across multiple ministries, but with clearly identified lead ministry or coordination office which coordinates monitoring (nine countries)

In most countries, responsibility for WASH was split across multiple ministries—typically hygiene was the responsibility of the Ministry of Health (MoH), with a variation on whether the health sector also included sanitation. In just over half of countries with this arrangement there was a clear coordination and reporting function which either sat with a lead ministry (e.g. in Uganda where the Ministry of Water and Environment collates the Sector Performance Report including data from the Health Management Information Service–HMIS) or with a separate coordination unit.

3. Responsibility for WASH is split across multiple ministries and monitoring is highly devolved (to ministries or local areas) with no central coordinating function (seven countries)

In the remaining countries with split responsibilities for WASH, we found there was no such coordinating function, with individual ministries (or in some cases local areas) undertaking monitoring, but little or no mechanism for this to be coordinated and collated.

4. There is no coordination of monitoring by government, with humanitarian agencies undertaking most if not all monitoring (two countries)

This was only the case in fragile states—Somalia and South Sudan—where government capacity was extremely limited. In both countries, multilateral organizations (for example the Food and Agricultural Organization (FAO) and World Food Program (WFP)) were managing data collection and monitoring related to WASH.

Table 2: Assessment of the enabling environment for WASH monitoring

Country	Sector policy and strategy	Sector financing	JSR processes	Sector reporting	Localization
Angola	Amber	Amber	Amber	Amber	Green
Botswana	Amber	Amber	Amber	Red	Green
Burundi	Red	Red	Red	Red	Amber
Comoros					
Eritrea	Red	Red	Red	Red	Amber
Eswatini	Red	Red	Amber	Red	Amber
Ethiopia	Green	Green	Green	Green	Green
Kenya	Green	Amber	Amber	Green	Amber
Lesotho	Red	Red	Red	Red	Amber
Madagascar	Green	Amber	Green	Green	Amber
Malawi	Green	Amber	Green	Green	Amber
Mozambique	Amber	Amber	Green	Green	Green
Namibia	Amber	Red	Red	Red	Amber
Rwanda	Amber	Green	Amber	Red	Green
Somalia	Amber	Amber	Red	Red	Red
South Africa	Green	Green	Red	Amber	Green
South Sudan	Red	Red	Red	Red	Red
Tanzania	Amber	Amber	Amber	Red	Amber
Uganda	Green	Amber	Green	Green	Amber
Zambia	Amber	Green	Green	Amber	Green
Zimbabwe	Green	Green	Green	Green	Amber

Key

Green	Good
Amber	Satisfactory
Red	Limited
Grey	Could not be scored

BOX 4. THE ROLE OF NATIONAL STATISTICS OFFICES IN MONITORING SDG6

Our overview of the institutional arrangements for WASH and monitoring largely focuses on the role played by line ministries for water, health and education. However, in many countries the National Statistics Office(NSO) also has a responsibility: either in directly monitoring the SDGs, or coordinating monitoring undertaken by other ministries. In our discussions with UNICEF staff and government officials, references to the role of the NSOs were limited to the responsibility for undertaking large scale periodic surveys (such as MICS) or national census. These data are typically already included in JMP estimates and are not part of routine

monitoring. South Africa was the only country where we found that the NSO is responsible for routine WASH monitoring – in the form of annual surveys.

We will explore the role on NSOs, and links to line ministries responsible for WASH in the five deep-dive case studies.

Sector policy for monitoring

The majority of countries (15) have a WASH M&E framework of some description in place. However, this framework is only up to date and included in national WASH policies in seven of these countries. In the remaining eight, the M&E framework is either out of date (for the M&E framework in Rwanda does not reflect recent developments to the WASH MIS system) or is not included in the national WASH policy, so has no formal basis for implementation.

Five countries have no M&E framework—which aligns closely with the absence of data for monitoring SDG6. The only exception to this is South Sudan (for reasons particular to that country discussed in Box 9.)

Sector financing for monitoring

There were only a small number of countries (five) where we found that WASH monitoring activities in the current year had been costed, budgeted for, and appropriate resources set aside. This may be where there is a particularly robust WASH enabling environment, or where earmarked funding has been allocated for a specific WASH monitoring activity—such as establishing the baseline for the WASH MIS system in Rwanda. In many countries (nine) although there is some element of seeking to cost and budget for WASH monitoring, the resource allocations are insufficient to undertake the planned monitoring activities.

JSR processes

There are seven countries across the ESARO where we found that there is a joined-up JSR process, where recent data on access to WASH forms the basis of the JSR discussions, and the outcomes of the JSR process is used by finance and/or planning ministries as part of the resource allocation process. In some cases, the JSR process is stipulated by law—such as in Rwanda where reviews are held every six months. There are a further six countries—in all but one case those without a WASH monitoring framework—where there were no planned monitoring activities (only ad hoc monitoring if at all) so no requirement to cost or budget for these activities.

Sector reporting

This is the weakest area in our assessment—10 countries across ESAR have no annual reporting process for WASH where all available data is synthesized in a single place. A further two countries have annual reporting for some aspects of WASH, but there are gaps either in the content or frequency of this reporting.

However, we did find that eight countries do have comprehensive annual reporting processes of some form or another—although in some cases the data feeding into these processes may not be fully robust.

Localization of targets and indicators

The majority of countries have established some form of national target for the SDGs, with only two countries having no national targets. This is broadly in line with Global Analysis and Assessment of Sanitation (GLAAS, 2019) data on national WASH targets. The main differences were that we did not find evidence of national SDG targets in South Sudan, as the national WASH policies are no longer current; but we did find that there were national targets in Rwanda (which did not submit a response for the latest GLAAS report.)

However, many of these targets were not closely aligned to JMP indicators (11 countries). For example, in some countries, the target stated for water was in terms of access to safely managed services (the SDG6 target) but the reporting against these targets only provided data on the

number of people with access to an improved facility—in essence reverting to the MDG indicators. This misalignment may give countries a misleading picture of progress against SDG6.

Table 3 below considers the aggregate country situation for alignment between country targets reported in the 2019 GLAAS report, 2017 JMP data and routine monitoring systems identified through this study. The full underlying data table is presented in annex 2. Of the 12 routine monitoring systems identified for water, 11 are not able to report against their national urban target, with eight not able to report against the rural targets. Indicator alignment for routine sanitation monitoring is better, with five of the 11 identified systems not able to report against the national urban target, with three not able to report against the rural target. Urban targets are in nearly always to a higher service level than rural targets, making urban indicator alignment and monitoring more challenging.

Data for monitoring SDG6

As part of our discussions with government officials and UNICEF Country Office staff we sought to understand the data that was available in routine monitoring systems for WASH, and the extent to which this data aligned with the indicators used by the JMP. Later in this report, we discuss some of the characteristics of these systems, but in summary, we were looking for information on the following:

- Management Information Systems (MIS) which included data on access to WASH. This could be focused purely on WASH, or part of a HMIS including data on sanitation and hygiene. The MIS could be managed by government ministries responsible for WASH, or part of the corporate systems of utilities in urban areas. The key requirements were that there was a provision for the data to be regularly updated (even if this did not always happen in practice) and that the data includes estimates of levels of access, rather than focusing purely on the existence and functionality of WASH infrastructure.

- Representative household surveys that included data on access to WASH These were undertaken at a frequency that provided regular updates to estimates of access to WASH services which could be used for annual planning and resource allocation processes.

Focusing on these systems has meant that we have largely excluded data which are already

Table 3: Indicator alignment between national targets as set out in the 2019 GLAAS report, routine monitoring systems identified through this study, and 2017 JMP data.

Number of countries		Water		Sanitation		Hygiene
		Urban	Rural	Urban	Rural	Both
Routine monitoring systems identified	Aligns with targets	**1**	**4**	**6**	**8**	**5**
	Does not align with target	11	8	5	3	0
	No target or data	9	9	10	10	16
JMP 2017	Aligns with targets	**9**	**15**	**15**	**17**	**8**
	Does not align with target	8	3	3	1	1
	No target or data	4	3	3	3	12

used by the JMP in the calculation of estimates for progress against SDG 6.1 and 6.2 from our assessment. There are two justifications for this:

- The data availability for JMP estimates is already well understood, and well documented in the JMP Country Files, which include details of every data set used in the calculation of estimates. The JMP estimates are based on all available national data sources that are representative of rural, urban and total population. These include censuses, household surveys, administrative reports and regulatory data. A summary of the existence of up-to-date JMP estimates for ESAR countries is given in Table 4.[7]

- In ESARO the primary national data sources used for JMP estimates are household surveys and censuses.. Data collection for these sources is only undertaken periodically—with a period of up to 10 years for censuses, and periods of 4–6 years common for large-scale survey programs such as MICS or DHIS. This relatively long gap between data collection rounds is largely due to the scale of the undertaking but does mean the data is updated too infrequently to be useful for understanding short term improvements or deterioration in WASH services, identifying shortcomings, and informing decisions on annual resource allocation.

The discussion in this section focuses on the data included in these routine monitoring systems and how well this aligns with the JMP indicators. This helps to give a picture of how well countries understand progress toward SDG6 at sub-national levels and in between updates to the JMP estimates.

Table 4: Availability of national estimates for JMP service levels for ESAR countries

	Drinking water	Sanitation	Hygiene
Safely managed	2	1	
Basic	18	19	15
No estimates	1	1	6

Source: JMP, 2020

JMP indicators for WASH

Throughout this section we focus on the extent to which the data included in routine monitoring systems aligns with the JMP indicators given in Table 1.

Table 5: JMP service ladders for household WASH services

	Drinking water	Sanitation	Hygiene
Safely managed	Drinking water from an improved water source which is located on premises, available when needed and free from fecal and priority chemical contamination	Use of improved facilities which are not shared with other households and where excreta are safely disposed in situ or transported and treated off-site	n/a
Basic	Drinking water from an improved source, provided collection time is not more than 30 minutes for a roundtrip including queuing	Use of improved facilities which are not shared with other households	Availability of a handwashing facility on premises with soap and water
Limited	Drinking water from an improved source for which collection time exceeds 30 minutes for a roundtrip including queuing	Use of improved facilities shared between two or more households	Availability of a handwashing facility on premises without soap and water
Unimproved	Drinking water from an unprotected dug well or unprotected spring	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines	n/a
Surface water/ open defecation/ no facility	Drinking water directly from a river, dam, lake, pond, stream, canal, or irrigation canal	Disposal of human feces in fields, forests, bushes, open bodies of water, beaches and other open spaces, or with solid waste	No handwashing facility on premises

Source: JMP, 2020

In addition to the JMP service levels, we have also used an additional level defined as 'Basic+' to capture systems which included all the elements of the basic level and also included at least one element of safely managed services. This definition is already used by WHO in GLAAS reports to document the setting of country targets for SDG6.

The following sections provide details of our assessment of the availability of data for water,

[7] There are no up-to date estimates for Eritrea as the latest datapoint was in 2010, and the JMP methodology does not allow estimates to be extended more than 6 years past the last datapoint.

sanitation and hygiene in the routine monitoring systems on which we were able to collect information in our discussions with countries and the extent to which the data is aligned with the JMP service level indicators for SDG 6.1 and 6.2. Our assessment of how while country monitoring systems map to the JMP indicators is based on information from key informants and document review of exactly what elements of each indicator are included in routine data collection. The full details of this data are provided in Annex 2.

We also provide a comparison between the availability of data in routine monitoring systems, and available of da ta used by the JMP to calculate estimates of progress against SDG 6.1 and 6.2. The availability of data for the latest JMP estimates is taken from an analysis provided by the JMP to the assessment team.

Figure 1 shows the availability of routine monitoring data, and how well this aligns with JMP service levels: At present no country in ESAR has monitoring data for access to water services which aligns fully with the JMP indicators for safely managed services. The single biggest limiting factor is the absence of routine monitoring data on water quality.

Across the 21 countries included in this synthesis only five have implemented monitoring which is aligned with at least the JMP indicator for basic services, with the majority also collecting information on some aspects of safely managed services (typically whether water is available on premises.)

The remaining countries that have some monitoring data on access to water services are either aligned with the MDG indicators (six countries where although there are data on

Figure 1: Availability of data in routine monitoring systems, and extent of

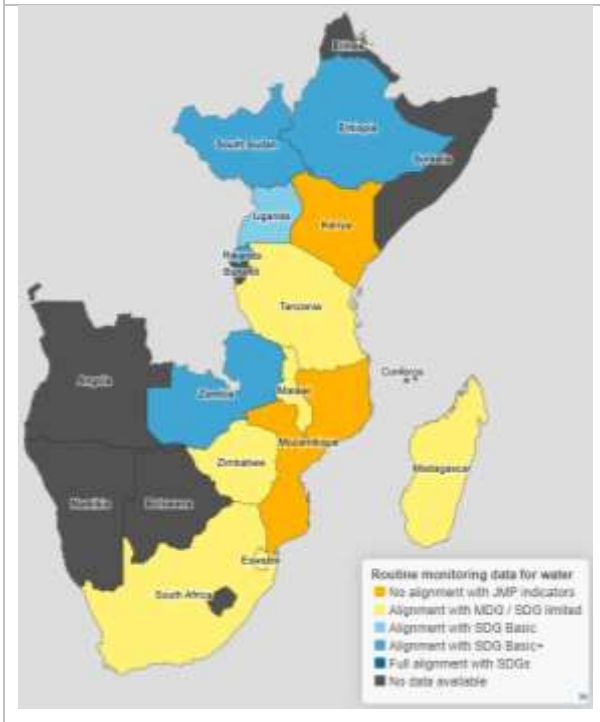
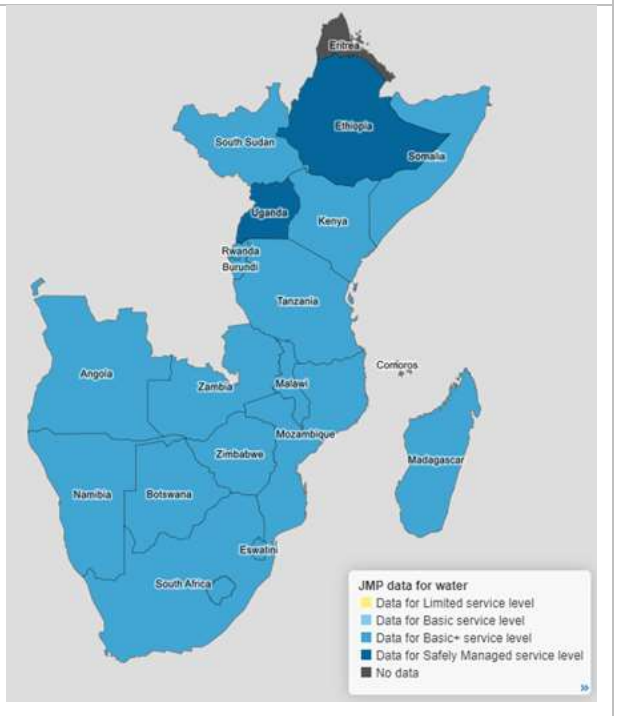


Figure 2: Availability of data for JMP 2017 estimates of access to drinking water services



Water

access to water, there is no information on collection time), or collect data which it is not possible to align with JMP indicators (two countries – Kenya and Mozambique - where the available monitoring data on water are focused exclusively on infrastructure, with no estimates of the number of people served by that infrastructure). A further seven countries do not have any systematic monitoring system for understanding access to water.

In general, the JMP datasets are more complete, and offer data on higher service levels, than the routine monitoring systems we identified (see Figure 2). This disparity will become more marked with the next update to the JMP estimates as three countries have completed MICS6 (which includes water quality testing) since the last JMP update and a further two are in the midst of the survey process.

However, there are a small number of countries where our analysis suggests that country monitoring systems include information on water service levels which is not reflected in JMP data availability. Zambia, South Sudan, and Rwanda all report collecting some information on whether or not water is available on premises, which is not reflected in current JMP data.

Sanitation

Only just over half—12 out of 20—countries have national routine monitoring data on access to sanitation (see Figure 3). In eight countries the only sources of data on access to sanitation (if it exists at all) are the periodic representative surveys which are already used to calculate JMP estimates.

Of the 12 countries with some data on sanitation services, five do not collect information on whether or not sanitation services are shared—meaning that they cannot ascertain basic service status and are only able to report up to the SDG service level for a limited service (equivalent to the MDG service level for a shared sanitation service).

Figure 3: Availability of data in routine monitoring systems, and extent of alignment with JMP indicators for access to sanitation services

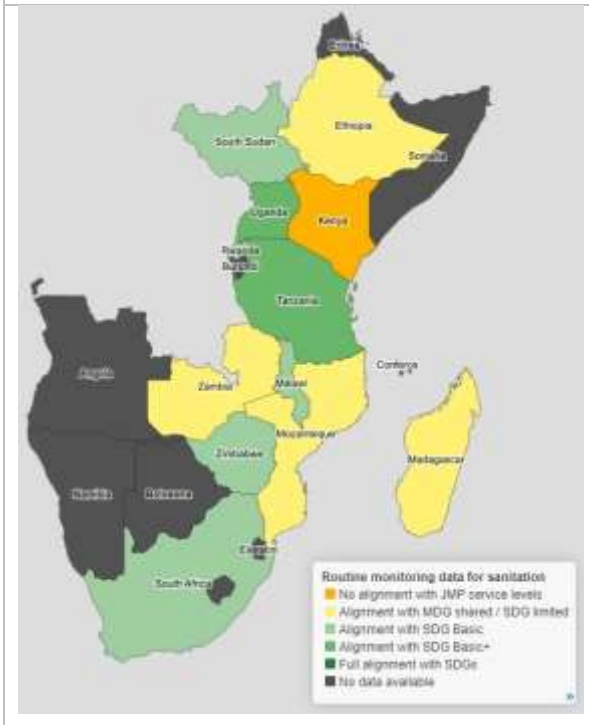
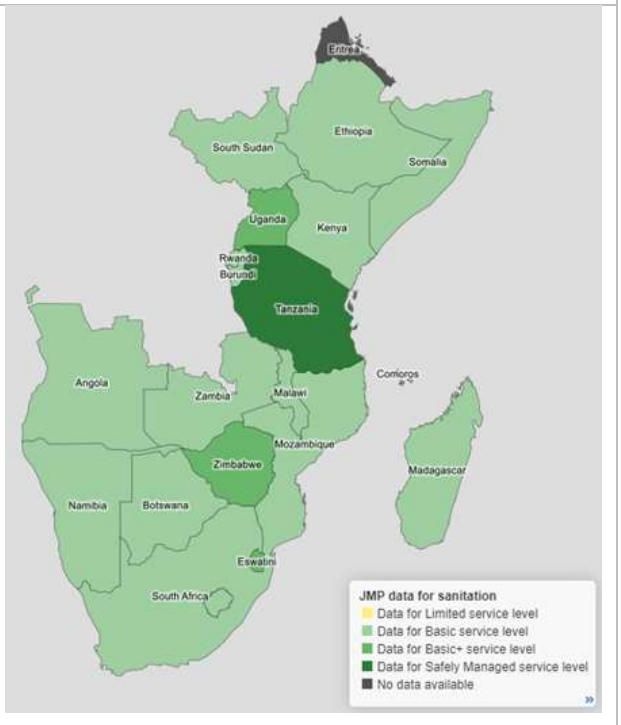


Figure 4: Availability of data for JMP 2017 estimates of access to sanitation services



Collecting information on fecal sludge management (FSM) is a challenge with no country collecting monitoring data on all three aspects of FSM that are included in the JMP indicator. However, two countries have managed to include data on some aspects of FSM in monitoring systems—typically data on the proportion of wastewater which is treated by urban utilities.

Kenya is the only country that collects national routine data on access to sanitation, but cannot use this to report clearly against JMP service levels for sanitation. This is because the main source of data is the Community-Led Total Sanitation (CLTS) Monitoring System, which only collects data on open defecation free status (although work is underway to increase the scope of the system and improve alignment with JMP service ladders.)

In every country, the data available to the JMP are more complete and cover higher levels of service than any data available through routine monitoring systems (Figure 4). This suggests there is limited scope for the routine sanitation monitoring data currently collected by counties to complement and improve JMP estimates for safely managed. This does not mean that there is not scope for routine monitoring systems to be adapted to collect this information in future.

Figure 5: Availability of data in routine monitoring systems, and extent of alignment with JMP indicators for access to hygiene

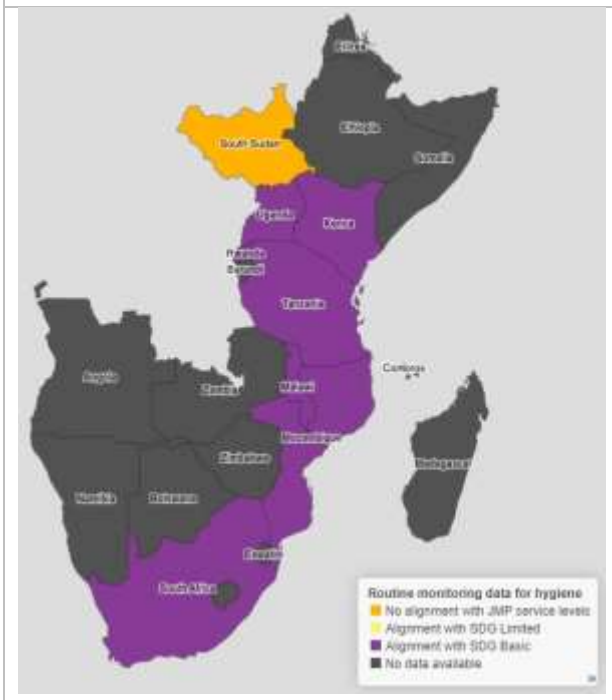
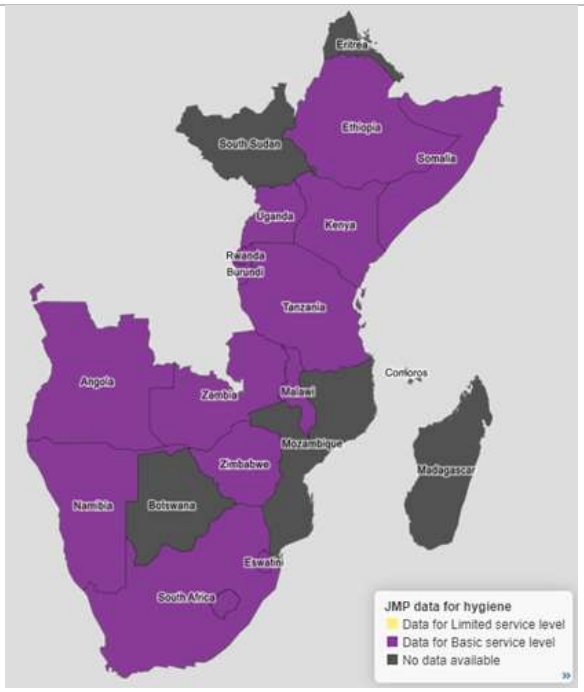


Figure 6: Availability of data for JMP 2017 estimates of access to hygiene



Hygiene

Hygiene is the weakest area of monitoring for SDG6 across the ESAR—there are 12 countries with no monitoring data on hygiene. This mirrors the JMP estimates: While all bar one country have JMP estimates for water and sanitation, only 15 countries have estimates for hygiene.

However, where data is available there is generally strong alignment with the JMP indicators with seven countries collecting monitoring data which aligns with the JMP indicator for basic services.

South Sudan is the only country for which data on hygiene is available but does not align with JMP service levels—this is because the surveys used include data on the availability of soap, but not on the presence of a handwashing facility (the availability of sufficient water for handwashing is used as a proxy, but we did not consider sufficiently close to the JMP definition.)

2018 UNICEF scoping study report on WASH in Schools.[8]

While most countries have some form of routine education management information system (EMIS) in place, for only three countries does it fully align with SDG basic indicators, which includes indicators for water, sanitation, and hygiene. Five further countries collect partial data but lack usage and functionality data.

Recent JMP data (2020) for WASH in schools has significant data gaps. Seven countries can report to JMP basic service level including the indicators

Figure 7: Availability of data EMIS systems, and extent of alignment with JMP indicators for WASH in Schools

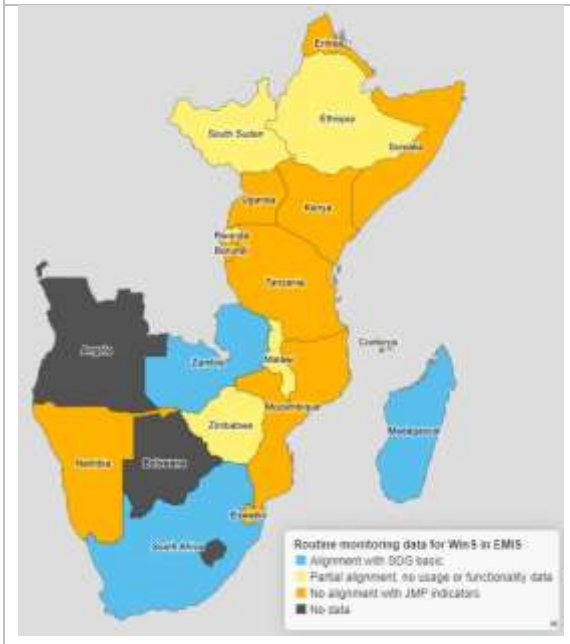
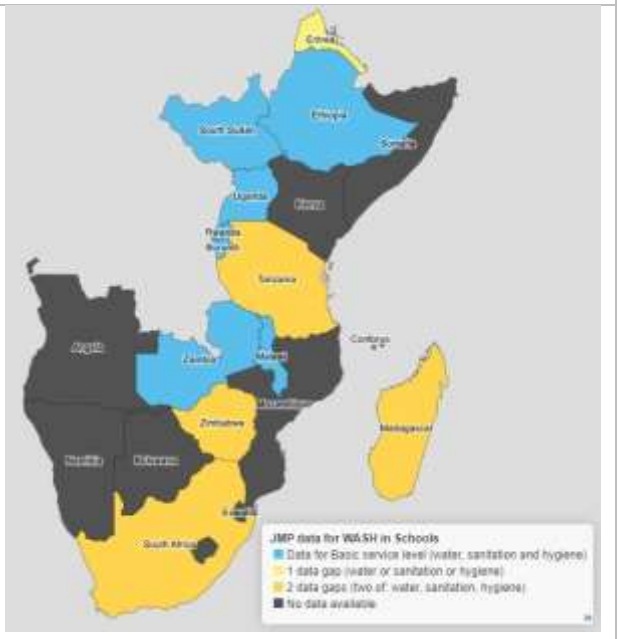


Figure 8: Availability of data for JMP 2020 estimates of WASH in schools



South Sudan and Mozambique were the only countries where there was data on hygiene from routine monitoring systems but no estimates for hygiene in the latest JMP update.

WASH in Schools

Data on WASH in schools monitoring systems and SDG indicator alignment was taken from the

for water, sanitation and hygiene. Five further countries can report to JMP on some indicators (water, sanitation or hygiene), but not all three, while there is no usable data from nine countries.

WASH in Health Care Facilities

Data on monitoring of WASH in health care facilities (HCF) monitoring and SDG alignment is

[8] UNICEF, 2018, Scoping study of WASH in Schools (WinS) programming in Eastern and Southern Africa

taken from the 2019 UNICEF scoping report on WASH in health care facilities.[9] 'WASH in health care facilities UNICEF scoping study in Eastern and Southern Africa'.

Of the 17 countries reporting a health management information systems (HMIS) only Madagascar's system aligns fully with SDG basic indicators, which includes indicators for water, sanitation, hygiene, waste management and environmental cleaning. Nine further countries have partial alignment.

Trends across indicators for household WASH

The extent to which countries can use routine monitoring data to assess progress against the JMP indicators is strongly correlated—where countries have weaknesses in monitoring one area of household WASH it is likely that there are weaknesses across all areas. Twelve countries are unable to report against at least one on the JMP indicators for household WASH. Of these, seven are unable to report against any of the JMP indicators. The remaining five countries with at least one gap in monitoring for SDG6 have significant limitations on the extent to which the data is aligned with the SDG indicators, in many cases continuing to monitor in line with the MDG definitions of access to an improved facility.

Figure 9: Availability of data HMIS systems, and extent of alignment with JMP indicators for WASH in HCFs

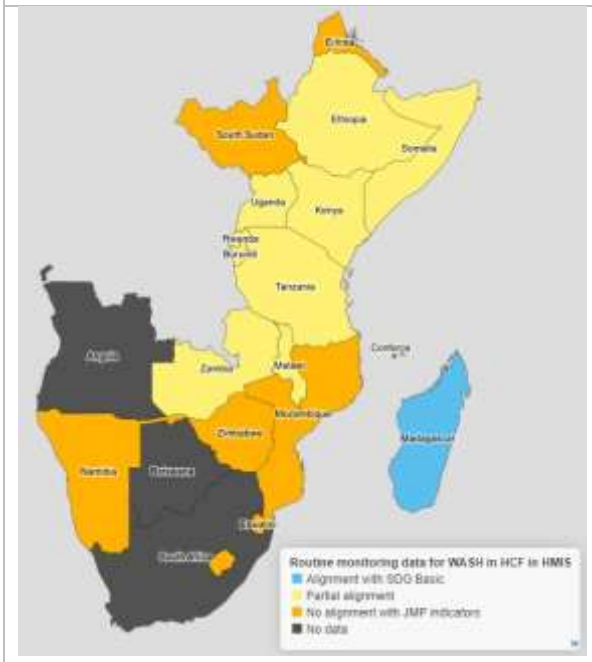


Figure 10: Availability of data for JMP 2020 estimates of WASH in HCFs

Recent JMP data (2020) for WASH in HCFs has significant data gaps. Only Malawi and Rwanda reported against all the JMP basic service level indicators. Zimbabwe is only missing one indicator and Ethiopia two. A further eight countries have three of more indicator data gaps, with no usable data from eight countries.[10]

Across water and sanitation,[11] a significant number of countries have not progressed monitoring beyond the MDG definitions—but this

[9] UNICEF, 2019, WASH in health care facilities UNICEF scoping study in Eastern and Southern Africa

[10] There is no JMP data on WiHCF for Botswana.
[11] There was no MDG indicator for hygiene.

is more pronounced in regard to water (six countries) than sanitation (four). For sanitation, a greater number of countries (seven) align with the JMP indicator for basic services or better, compared to water (five countries).

Monitoring for humanitarian WASH

Of the 21 countries included in this assessment, 15 had some form of a monitoring system for humanitarian WASH. But only in three countries did we find evidence that monitoring systems for humanitarian and development contexts were aligned—this was in South Sudan, Uganda, and South Africa. In the remaining countries with humanitarian contexts, the humanitarian WASH monitoring was managed separately to any national system for monitoring access to WASH—often focusing solely on the progress and completion of activities (captured through a 4Ws matrix or similar) rather than capturing information on changes in levels of access.

Monitoring for integrated water resources management (IWRM)

Ten countries reported some level of monitoring of water stress, but in only one country (South Africa) was it included in the monitoring of access to WASH. Typically, monitoring of water stress was the responsibility of a different ministry or division, and not linked to any data on access to water or (as in the case of Uganda) an indicator was set for water stress, but no data was collected to report against this indicator. This meant that our key informants often had limited knowledge of water stress monitoring.

This result compares favourably with the most recent estimates for SDG 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources where only six countries in ESAR had sufficient data to provide estimates but underlines that monitoring for IWRM is still a considerable challenge for countries across the region.

Monitoring for inequalities

Of the 13 countries that have routine monitoring data on at least one aspect of WASH, nine are able to disaggregate at least some of this data with respect to at least two aspects on inequality—subnational estimate and one other characteristic. Five countries are able to provide more substantial data on equalities, with analysis across multiple characteristics possible.

Monitoring systems for SDG 6

During the KIIs we identified and appraised 22 routine monitoring systems from across 15 countries.[12] The majority of these systems (12, or 57%) are nationwide or cover most of the country (3, or 14%). Two systems (10%) cover the full country with exception for separate administrative areas (e.g. Zanzibar) and four systems (19%) cover only part of country. Just two of the routine systems were survey-based approaches, and the remaining 20 were information management systems.

The scope of the routine monitoring systems varied across countries, with 42% dedicated to water and generally led by water ministries or development partners, 25% focused on sanitation and hygiene, all led by health ministries, and 29% of the systems covering water, sanitation and hygiene, coordinated by various agencies.

In total, six systems cover water, sanitation and hygiene, ten systems are water only, a further five systems are focused on sanitation and hygiene, and a final system is dedicated to water and wastewater quality. A significant number of the routine systems cover both urban and rural areas. There are no systems which cover all WASH

[12] The remaining five countries – Angola, Burundi, Eritrea, Lesotho, and Namibia - had no regular WASH monitoring system in place.

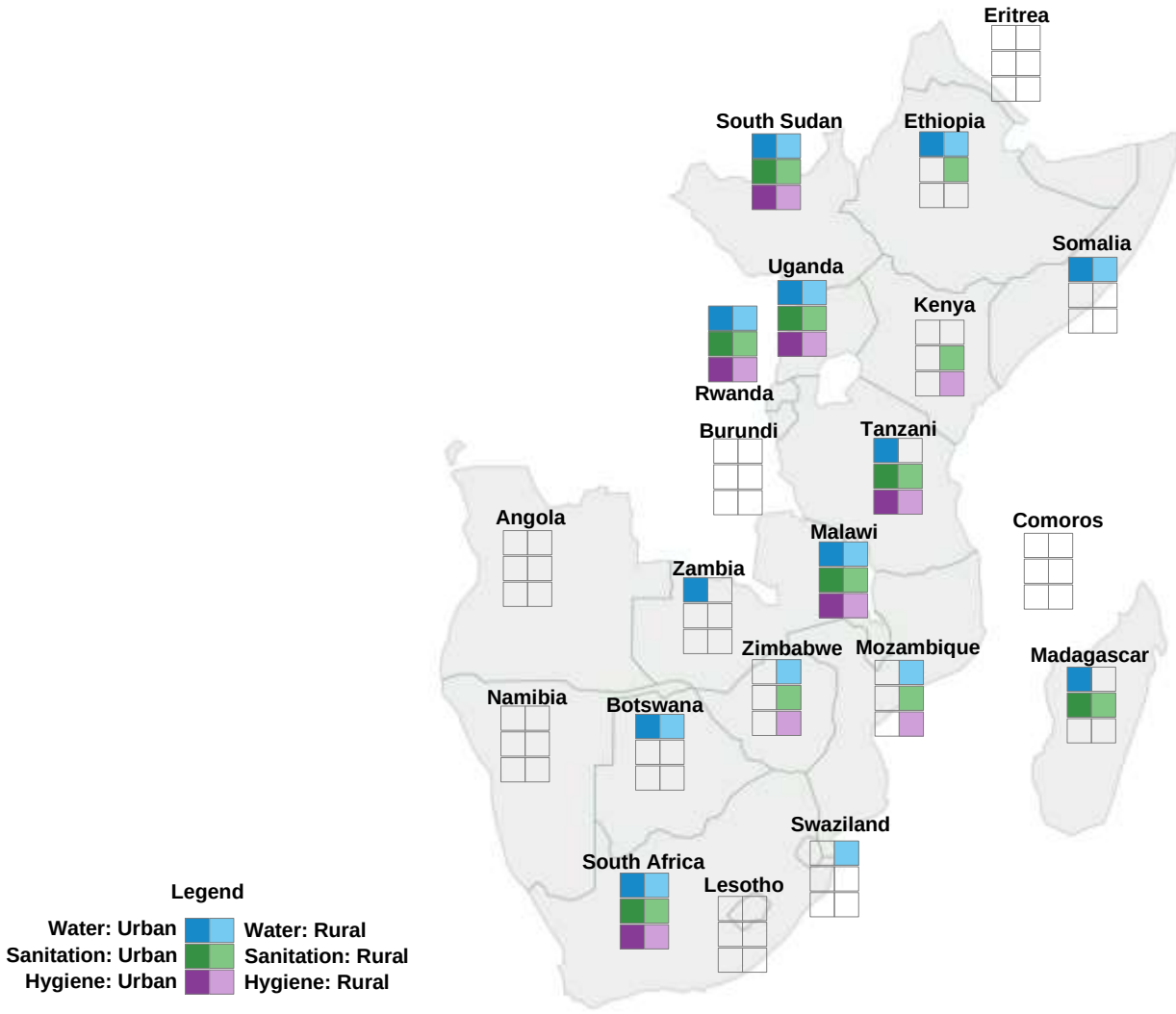
subsector, or sanitation and hygiene systems, that are exclusive to urban areas; only water. Only three of the systems include non-community settings, such as POC/IDP/refugee camps.

In total, half of the routine systems cover schools (10) and the same for health care facilities (HCF) (10) (see Box 5 for details). Systems which cover all WASH subsectors are more likely to include WASH in schools, and systems dedicated to sanitation and hygiene are more likely to cover HCF.

BOX 5. DATA SYSTEMS FOR WASH IN HEALTH AND EDUCATION

Several Health Management Information Systems (HMIS) and Education Management Information Systems (EMIS) were identified during the initial steps of the appraisal and the key informant interviews. These are typically the responsibility of the respective line ministries for health and education, and the level of engagement with the WASH sector – and WASH data – varies considerably.

Figure 11: Scope of routine monitoring systems for urban and rural household WASH



HMIS typically contain a broad range of data on human health, and often, data collection includes aspects of WASH in health care facilities, but also frequently includes aspects of WASH in household settings (see Box 11). HMIS were identified in Ethiopia, Eritrea, Lesotho, Malawi, Somalia, Tanzania and Uganda. However, not all HMIS include data on household WASH, and in some cases, system insights were not easily accessible. In instances where HMIS systems do include data on household settings, for example, Ethiopia and Uganda, the HMIS has been included in this appraisal.

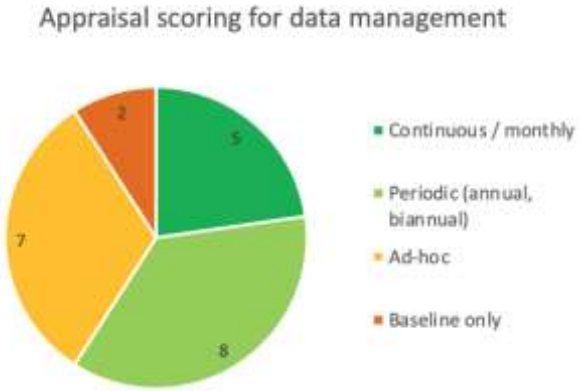
EMIS were identified in several ESA countries including Ethiopia, Kenya, Somalia, Tanzania, Zambia and Zimbabwe. However, since the EMIS cover only schools and in no cases did they include WASH in the household, no EMIS are included in the routine monitoring systems appraisal.

Appraisal of system strength

The state of monitoring systems was evaluated in four categories: Data management, data accessibility and use, financial resources, and human capacity for supporting the system. For data management, systems were evaluated for having updated data and verification and validation processes in place. Data accessibility and use was evaluated by the extent to which data is made available to stakeholders and used in country WASH planning. Financial resources were assessed by the extent to which current M&E activities have been costed, and whether resources are available to meet the requirements. Human capacity was evaluated for the adequacy of staffing and skills to manage the systems and ensure regular and reliable data flows.

Data management

Across the categories, systems scored most highly for data management, where many of the systems are updated continuously or periodically, and only two systems have not progressed beyond baseline data (chart). Although the extent to which the updates cover all communities varies between countries, at least 14 systems across 12 countries have data updated in 2020. In Rwanda, the WASH MIS baseline data is recent (from 2020, although data only covers about half of districts) and the baseline in Eswatini dates back to 2014.



Understanding the mechanisms for data verification and validation, and the extent to which these are practiced, was more challenging. In total we found eight systems had active processes for data verification and/or validation. Most verification processes are established as responsibilities with the system administrators during data entry. Examples of good mechanisms for data verification were found in Zimbabwe, where districts are responsible for validating data, in Tanzania, where data is verified and validated at council, region and national levels, and in Rwanda (Box 6), where the WASH MIS has validation at district and national levels through a mechanism built into the MIS, and a process of returning to each district with final data to discuss and validate.

BOX 6. BUILDING A NEW MIS—THE CASE OF RWANDA

The Ministry of Infrastructure in Rwanda is currently establishing a new MIS which will cover all aspects of WASH in both households and institutions. This will include data that aligns with the JMP indicator for safely managed services across water, sanitation and hygiene, and some aspects of safely managed water. To date, the baseline data collection has taken place in 17 out of

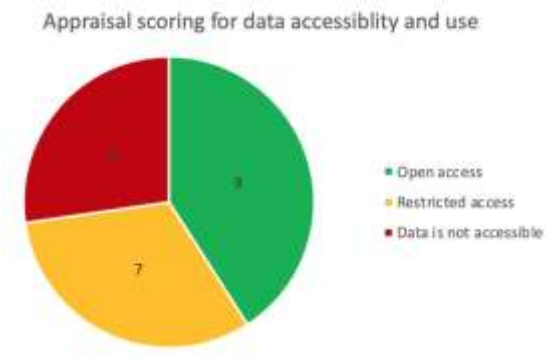
30 districts, with firm plans and funding in place to complete data collection nationwide by the middle of 2021.

However, while this will help establish a comprehensive baseline for SDG 6.1 and 6.2, at present there is not a confirmed schedule for how frequently the data will be updated in future. Without a clear approach to revising data—and the funding to do so—the information in the WASH MIS may quickly become out of date.

Accessibility and use

Data is publicly accessible for nine systems in as many countries, and available to WASH sector stakeholders through permission-based processes in a further six systems across seven countries (chart). In some cases, such as the Food Security and Nutrition Monitoring System (FSNMS) system in South Sudan, monitoring results are made publicly available, but the raw data is only available on request. In a small number of instances, such as with the SINAS system in Mozambique, and the DHIS2 system in Zambia, there are plans to extend restricted access databases and make them public assessable.

However, when routine WASH data is available it is not always made accessible. In the case of six systems across five countries, data sets that exist in the national systems are not available to either the public or WASH sector stakeholders. An example of this is the WASH M&E MIS in Ethiopia (see Box 7), where nationwide data on water supply access was collected in early 2019, but



neither the data nor results have been made accessible to the sector.

The extent to which data is used is difficult to accurately evaluate through a rapid KII process. In only half of the countries where data is made publicly available is there indication the data is used in informing an annual report or into an annual sector review process. The findings suggest the use of data relates more closely to the enabling environment than the accessibility of data.

Data collected shows an interesting trend where the systems which were categorized as not being accessible were almost all water-only systems. The systems with restricted access were largely HMIS with sanitation and hygiene components. And the systems that were open access were often the systems designed for all WASH.

BOX 7. LIMITED PROGRESS IN MONITORING WASH ACCESS IN ETHIOPIA

The only country to score the highest in all of the enabling environment assessment, based on the SWA building blocks, is Ethiopia. The country is well known for the OneWASH National Program, with one plan, one budget and one report, which is led by a National WASH Coordination Office.

However, the strength of the enabling environment is not complemented by an equally strong system for routine monitoring in the WASH sector. Although a robust HMIS is administered by the Ministry of Health, the indicators for sanitation and hygiene are presently limited to community-level use of improved latrines and tracking open defecation free status, and the HMIS data is not widely available to WASH sector stakeholders.

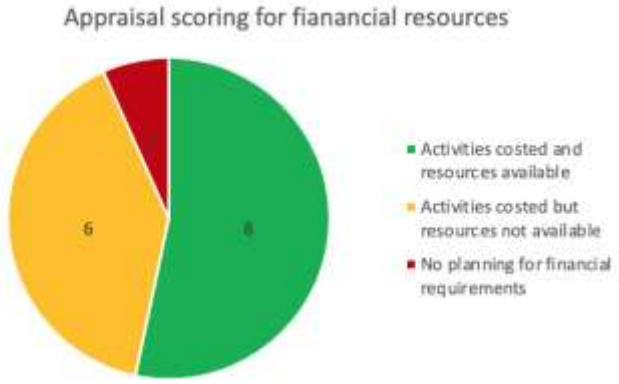
Within the Ministry of Water, Irrigation and Electricity, the Water Development Commission manages the WASH M&E MIS, which is populated by periodic national inventory data collection, happening twice in a decade. Data from the most recent inventory (early 2019) includes

comprehensive data for water supply parameters and has been entered into the WASH M&E MIS. But neither the data nor results have been made available to WASH sector stakeholders and there is limited evidence whether it has been used to any extent within government.

Financial resources

We found that activities in M&E workplans had typically been costed for the current financial year but in only eight cases were sufficient resources available (chart below). Unsurprisingly, we found a strong link between adequate financing for monitoring activities and the regularity of updating. Where activities were costed and resources available, systems were all updated continuously or periodically, and data management practices for verification and validation were usually present. Where monitoring activities were costed but resources not available, many of the systems are updated on an ad hoc basis, or not at all, and lacked processes for ensuring the quality of data.

In Zimbabwe, the responsibility for planning and costing routine monitoring activities is with the districts, and while some fail to adequately plan, adequate resources are made available for those that do submit costed plans (Box 8). Similarly, in Tanzania, under implementation of the National Sanitation Campaign, all councils are required to allocate up to 25% of the annual budget for M&E activities.



In some cases, a large part of the financing for routine monitoring activities come from development partners. One example for this is operational costs for SINAS[13] in Mozambique, and in the case of South Sudan, activities for routine monitoring are planned, costed and available, but are entirely funded by UNICEF, WFP, FAO and others sector stakeholders, not by government.

While it was usually possible to determine the extent to which the resources had been allocated for the current year, it was less clear whether allocated resources would be made available when needed.

BOX 8. ROUTINE WASH MONITORING IN ZIMBABWE

Since 2013, the Department of WASH Coordination, in the Ministry of Lands, Agriculture, Water & Rural Settlement has built and operationalized the Rural WASH Information Management System (IMS) across Zimbabwe. The Rural WASH IMS is operational across the whole country and water supply functionality status updating is based on district reporting on scheme status changes in a continuous process. Reliability of updates depends on the districts, and in 2020 there are 51 (out of 59) districts who have planned and been allocated sufficient budgets for updating. Recently, a SMS-based approach to updating has been operationalized in three of seven provinces. Limited data on water quality is also available in the Rural WASH IMS. Data from the system is used to inform an annual multisectoral WASH report, which in turn is used to inform the recently established process for JSRs. The Zimbabwe WASH sector benefits from the Rural WASH IMS All WASH by having all WASH data centralized and accessible in one place, including data on community and institutional WASH, with village and site-level analysis. System uptake is good, but more is required to institutionalize use of the system within government and increase adoption by development partners. From the rapid

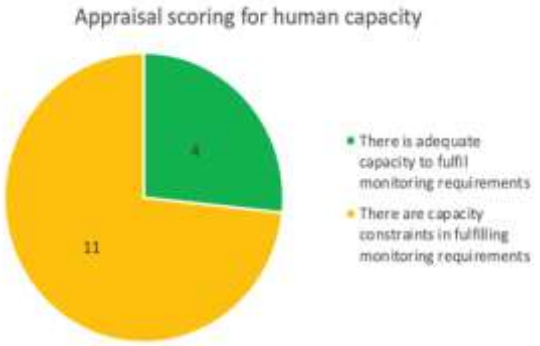
[13] SINAS refers to the WASH national monitoring system

appraisal the routine monitoring in Zimbabwe shows successes in operationalization of a country-led system. This is regularly updated with reliable data, using limited resource requirements and experiments in the use of mobile technologies and is progressing in institutionalization within government.

Human capacity

The level of human capacity available to support monitoring systems, evaluated for the adequacy of staffing and skills to manage the systems and ensure regular and reliable data flows, was low across almost all countries and for all systems (chart below). Interestingly, capacity was seen as a greater challenge than adequate resourcing, and only four systems were reported to not have capacity constraints.

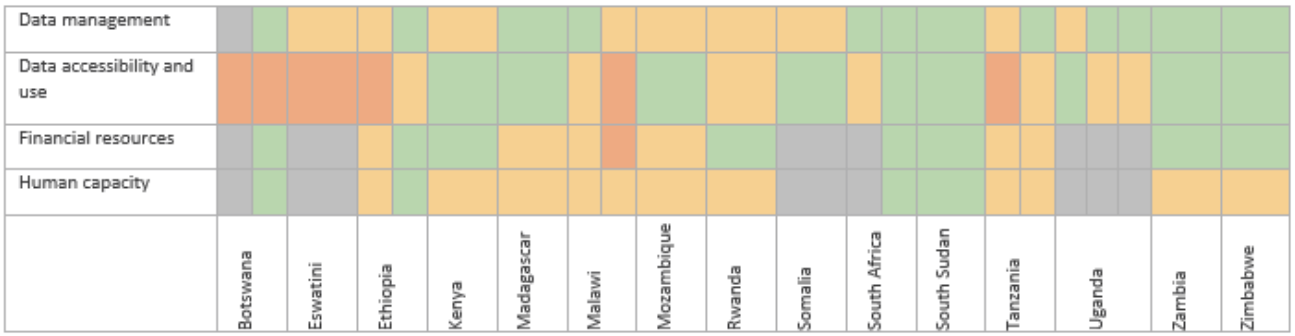
All the systems that had adequate capacity also had sufficient resources available, had been updated in the last year, and typically had good data management practices. Two of these systems were for all WASH, in South Africa and South Sudan, one system dedicated to water in Botswana, which is managed by a water utility corporation but extends beyond urban areas to cover about 70% or the country, and the HMIS in Ethiopia.



Appraisal results compared across the region

Only six systems score highly in more than half of categories, and just two systems score fully in all four categories (data management, accessibility and use, financial resources, and human capacity). One of these is the FSNMS system in South Sudan, which is explained in Box 9. Countries having multiple systems often differ in the relative strength of these systems. An example is Ethiopia, where the WASH M&E MIS, managed by the Water Development

Table 6: Overview regional results for enabling environment



Key

Green	Good
Amber	Satisfactory
Red	Limited
Grey	Could not be scored

Commission, and the HMIS administered by the MoH, have quite different qualities and score differently across all categories of the systems appraisal.

BOX 9. USING SURVEYS FOR ROUTINE MONITORING IN SOUTH SUDAN

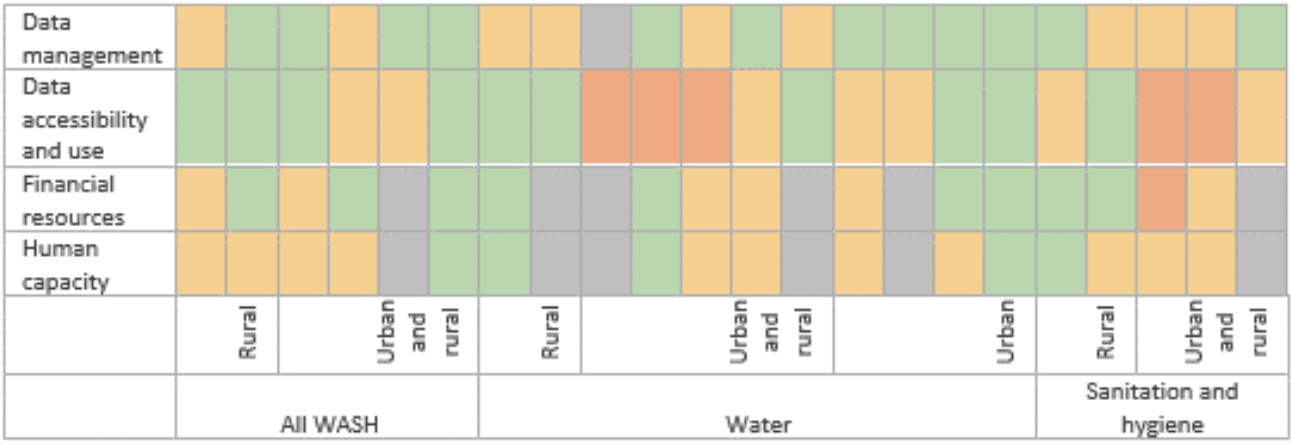
South Sudan stands out as an unusual case in this assessment: The ongoing crisis and resulting low capacity of government institutions means that the enabling environment for WASH monitoring is very weak. As a result, there is no government-led monitoring of access to WASH (there was a database of water systems in use up until 2016).

However, through humanitarian actors nationwide, representative data on access to WASH is collected every six months. This is achieved through the Food Security and Nutrition Monitoring System (FSNMS), which is managed by the WFP and funded by the WFP, UNICEF, and the FAO among other donors. Since 2018 the WASH Cluster and REACH have collaborated with the WFP to include several questions on access to WASH. The result is up-to-date data which aligns with the Joint Monitoring Program (JMP) service levels for access to a basic water and sanitation service. (There are limitations in the hygiene data due to restrictions on the number of questions.) The data initially only covered rural communities, but as of 2020 has been extended to cover urban centers and camps.

The funding and institutional models behind this data collection are unique to South Sudan, but this example does highlight that the use of sample surveys (as opposed to implementing a comprehensive MIS system) can provide up-to-date and actionable data on access to WASH in complex contexts.

Since the appraisal captured data from various systems, it is interesting to view the comparative strengths and identify any trends in the data. One aspect is to see if there are commonalities in the scope of the systems (e.g. urban/rural or

Table 7: Overview regional results for enabling environment disaggregated by rural and urban



Key

Green	Good
Amber	Satisfactory
Red	Limited
Grey	Could not be scored

WASH/water) and their system scores (data management, accessibility and use, financial resources, and human capacity). Data presented in Table 7 show data was collected for a range of system types, including systems covering all WASH and systems covering water, sanitation and hygiene separately, as well as systems dedicated to rural, urban or both rural and urban. When compared against the relative strengths of the routine monitoring systems, the all WASH systems score well in both rural and rural and urban systems. Systems dedicated to water tend to be stronger in urban areas, while systems dedicated to sanitation and hygiene tend to be stronger when only applied in rural areas.

Participants were asked about the perceived strengths of the monitoring systems. Mostly responses related to the ability to have nationwide data for tracking national targets as well as detailed system and asset data for planning and operational uses, the ability to prioritize focus areas based on gaps and help coordinate partner activities.

Common challenges included resources and capacity for administering increasingly complex information management systems, expansion of the system to align with increasing ambitions (e.g. integration of different urban and rural datasets), challenges relating to data quickly becoming outdated and the difficult of ad hoc data collection, or data not being made available. Contextual challenges included internet connectivity for data collectors and persistent turnover and capacity issues at subnational levels.

The systems are often perceived as insufficient due to their indicators relating to MDG era indicators, in line with our findings earlier in this report. HMIS systems were commonly perceived to lack sufficient data for sanitation and hygiene, such as in Ethiopia, usually relating to the scope of indicators included. Several examples were provided of where the sector has advocated for the MoH to extend the scope of sanitation and hygiene indicators in their systems, often with limited success.

BOX 10. COLLECTING DATA THROUGH VILLAGE-BASED HEALTH OUTREACH WORKERS

In Malawi data on sanitation and hygiene is monitored through the health MIS (DHIS2) which is based on reports from a network of 8,874 (at the time of the KII) health outreach workers. This extensive coverage means that data collection can be undertaken at a household level every month. Although the data aggregation process—field-level data collection is still paper-based—means that some of the detail in the data is lost as it is reported up the chain (although this is subsequently captured in Excel reports), with only summary statistics available through DHIS2, the system still provides regularly updated assessment of levels of access to sanitation and hygiene in line with the JMP indicators for basic services.

A similar approach is used in other countries which used the health MIS to monitor sanitation and hygiene—for example in Ethiopia and Uganda (the latter reporting quarterly rather than monthly.)

Strengths and challenges in current monitoring arrangements for SDG6

The state of play for monitoring SDG is Eastern and Southern Africa

Overall our assessment indicates that there are considerable gaps in the ability of the WASH sector in ESAR to monitor progress toward SDG6. No countries have fully included the data needed to report against the JMP indicator for safely managed services in their monitoring systems. Several countries have not yet evolved data systems which were designed for the MDG era. Where monitoring systems exist, there are still substantial challenges in ensuring data collection is frequent and comprehensive—with notable

exceptions for those systems managed by the health sector.

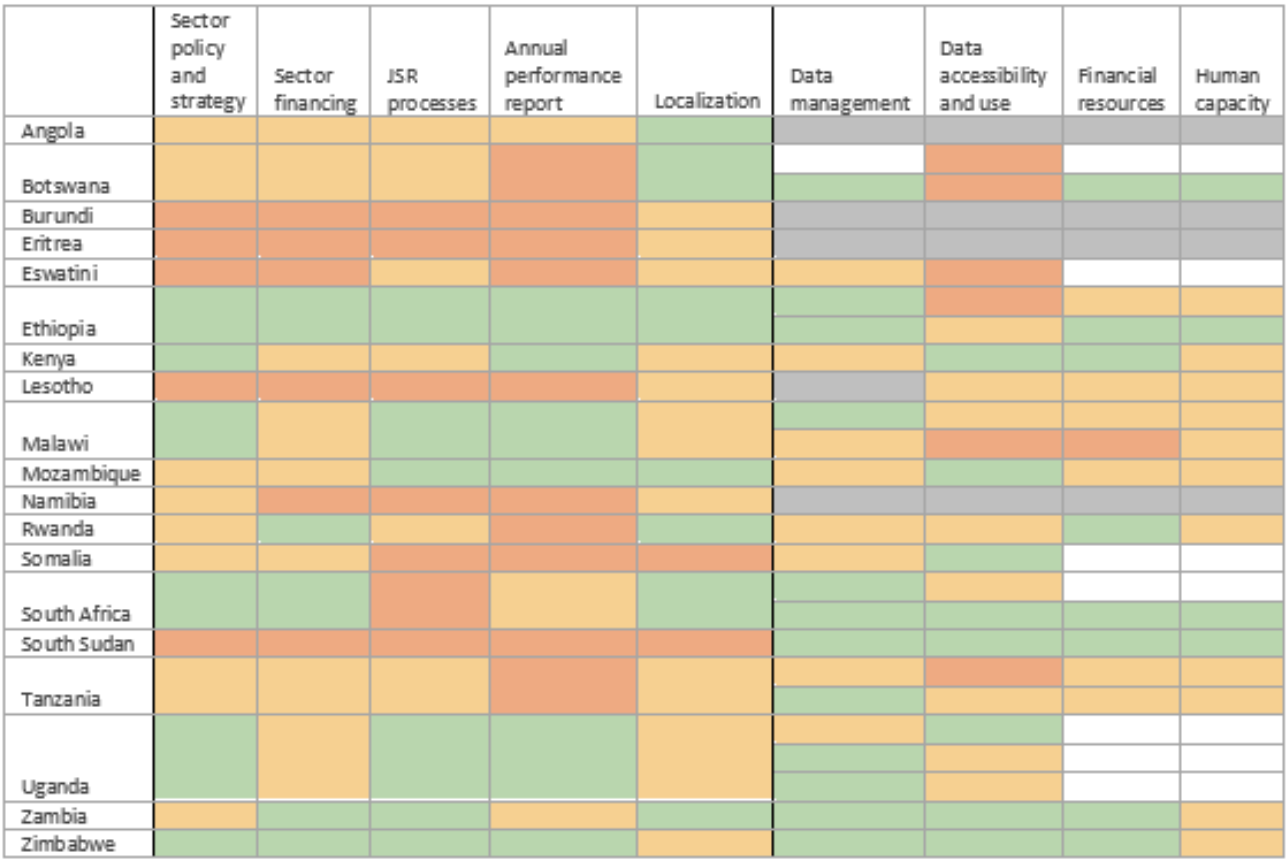
And there is still a group of countries—those with the weakest enabling environments—where there is practically no routine monitoring for WASH, and the only measures of progress are the JMP estimates and the periodic surveys that inform them.

What did we find in our rapid assessment?

Good quality monitoring systems need a strong enabling environment

A clear trend emerges between the scoring for institutional arrangements and the presence and strength of a routine monitoring system. The countries with the strongest institutional arrangements are more likely to have strong monitoring systems. All countries that lack

Table 8: Overview regional results for enabling environment



Key

Green	Good
Amber	Satisfactory
Red	Limited
Grey	Could not be scored

progress on sector policy and strategy, sector financing, JSRs and annual performance reports, also lack routine monitoring systems. The outliers are Somali and South Sudan. In South Sudan, there are very limited institutional arrangements but a routine monitoring system which scores well on all categories (see Box 9 for a discussion of the context behind this.)

It is not clear if any particular aspect of the enabling environment is an essential pre-requisite for strong monitoring systems; rather that broad strength in the enabling environment is a good indicator that monitoring will be strong.

Capacity is a bigger constraint than financing

Based on our assessment, capacity (in terms of skills and adequate staffing) was more commonly cited as a constraint in the management of monitoring systems than financing. The reasons for this are not immediately clear—there is a reasonable expectation that the two should be strongly correlated, and that financing is historically a challenging area for WASH monitoring. This may be a genuine trend or may reflect the way that these elements of the enabling environment were assessed.

Opportunity for strengthening data accessibility

As discussed in the preceding section, we found that when routine monitoring systems are in place, the accessibility of the information was most often restricted or entirely inaccessible. For tracking national targets, the availability of data for the sector stakeholders is not so critical, but not enabling open and easily accessible data restricts the use by sector stakeholders in operational and planning purposes and restricts the potential benefits in improving WASH services. Since in these cases the data already exists, a key opportunity for UNICEF could be to work with countries to open their datasets. Extending access to existing data is relatively low cost compared with other monitoring activities such as new data collection.

MIS and surveys can complement each other

During the MDG era, it was possible to obtain estimates of access to an improved water source through relatively simple water point mapping systems (essentially an infrastructure MIS) provided these were updated and included some information of the number of users for each source. However, the change in indicators for SDG6 has put greater emphasis on the level of service provided by the systems people use substantially increasing the required data points and representing a structural, financial and human resources (HR) step-change. It is difficult (and potentially unrealistic) to collect household data such as the collection time, or point of use water quality within an MIS; something we have not seen evidence of in many of the countries we explored. Such adaptation has been better managed by HMIS systems (see below), but can also be achieved through representative household surveys. The two – MIS and surveys – are not mutually exclusive, but can be used to complement each other (see Box 11).

This is most relevant for rural WASH services: There is a difference in urban areas where utilities are better placed to collect data on household access through existing customer relationship management (CRM) and quality control systems.

BOX 11. STRENGTHS AND WEAKNESSES OF DIFFERENT APPROACHES TO MONITORING

Household surveys *are the best way to get information on the types of water and sanitation facilities people actually use on a day to day basis. e.g. whether they practice open defecation; use improved or unimproved facilities; whether those facilities are accessible and shared with other households, whether households empty on-site sanitation facilities.*

WASH Sector MIS *are a good way to collect more technical information on the level of service provided by the systems people use. e.g. the availability and quality of drinking water; the emptying and treatment of waste via sewerage networks.*

For institutions, EMIS and HMIS *can provide basic self-reported information on whether or not schools and health care facilities have WASH infrastructure in place but facility based surveys (ideally involving a technical team visiting and inspecting a random sample of facilities) are the best way to assess the quality of WASH services in schools and health care facilities.*

Leveraging outreach workers is an inherent strength of HMIS systems that WASH sectors will struggle to replicate.

There are several examples of countries where there are marked differences in perceived quality between a strong health MIS and a weaker water MIS. In the countries which collect sanitation and hygiene data through the HMIS, data collection is often carried out by health extension workers as part of their core tasks, providing a network of thousands (if not tens of thousands) of enumerators. The strength of this system is that a well-established health outreach program with regular engagement with household and communities can provide regular updates to data on sanitation and hygiene. In the countries we looked at there is no similar network of water outreach workers in rural areas, which makes collecting and updating data in water MIS systems much more challenging. There are several examples of countries where there are marked differences in perceived quality between the HMIS and water MIS.

However, one common criticism of HMIS systems is that they do not fully integrate WASH indicators for water and sanitation—a criticism borne out in some examples by our assessment of alignment with SDG6. Further exploration would need to be undertaken to understand if this is widely the case, and what the reasons for this might be. It may be that aligning the WASH indicators used in HMIS systems more consistently with SDG6 is a 'quick-win', with fewer obstacles than trying to create a new WASH MIS.

Increasing the availability of data on basic hygiene is a quick-win

Currently, routine monitoring data on access to basic hygiene is the weakest of all areas of WASH: only eight countries have data on access to basic hygiene services. Despite this, there should be scope for countries to rapidly increase the availability of data for hygiene – monitoring basic hygiene services (the presence of a handwashing facility along with the availability of water and soap) poses significantly fewer challenges – in terms of the volume of data required and the complexity of collecting it – than monitoring safely managed water and sanitation services. By incorporating hygiene indicators into existing monitoring systems (such as HMIS above) the availability of data of hygiene could be improved for relatively little effort.

Incorporating/including utility data

We found that in six countries data from utility MIS/CRM is being used as part of monitoring for SDG6—frequently with good alignment to the SDG indicators.

In 11 of the 21 countries, the majority of the population are served by piped water systems (and this is likely to increase with urbanization and utility expansion.) As such, utilizing utility data is a key opportunity to expand the data available for national water and sanitation MIS.[14]

In Botswana, where 93% of the population have piped water and there is a single utility provider (managed by the government), aligning the utility

[14] IBNET, while no longer active and not fully aligned with the SDGs, has demonstrated that it is possible to collect detailed data from existing utility CRM's (17 countries and 335 utilities within ESAR previously reported to IBNET.)

MIS/CRM to SDG indicators would enable substantial national reporting on SDG6.1 progress; as much of the data including continuity and water quality is already being collected. (With only 2% sewer connections, the same is not true.) Uganda is a clear example of where utility data is fully integrated with sector monitoring and reporting, with data from UPMIS feeding into the SPR.

In other countries—such as Lesotho and Eswatini—there may be good quality data from utilities, but our discussion with countries highlighted that any data collected from utilities was not well integrated into government and ministry monitoring and planning processes.

There is some scope for better alignment with the SDGs for minimal cost

South Africa and South Sudan are unusual in that they utilize annual national surveys to provide data for the national MIS. The data collection systems processes for these surveys are already in place. Relatively minor changes to the survey questions could enable nearly full tracking and reporting against SDG6 indicators for safely managed services (except for water quality, where integrating water quality testing would require extra resources and expertise.) These changes are more difficult to make in MIS systems due to inflexibility of the systems, and less well-managed data collection processes

Systems may stagnate when they are driven by donor priorities rather than sector demand

We found evidence that some systems which have attracted substantial investment from development donors have not been fully adopted by governments. This includes a lack of planning and resourcing for ongoing data collection, not ensuring that capacity to manage the system is maintained, and data not being available to sector stakeholders. In some cases, the data and insights generated by the routine monitoring systems do not appear to be well aligned with existing processes for decision-making in countries. The data can be perceived as 'nice to have', but it does not get used as the system developers intended—in part because it does not meet the needs of data users.

In one striking example, a country in the midst of implementing a donor-funded MIS indicated that the technical platform was insufficiently flexible, and a new solution may need to be implemented. This rapid assessment was not able to identify clear reasons for this, but there are suggestions that the strongest systems may be where the funding for the system and the end-users was aligned—e.g. for utilities investing in MIS systems, or humanitarian actors establishing monitoring systems in fragile contexts.

Opportunity for strengthening data accessibility

We found that when routine monitoring systems are in place, the accessibility of the information was most often restricted or entirely inaccessible—although data accessibility was notably better for systems covering all of WASH or for HMIS covering sanitation and hygiene, than for systems covering only water. For tracking national targets, the availability of data for the sector stakeholders may not be critical, but not enabling open and easily accessible data restricts the use by sector stakeholders in operational and planning purposes and restricts the potential benefits in improving WASH services. Since in these cases the data already exists, a key opportunity for UNICEF could be to work with countries to open their datasets. Extending access to existing data is relatively low-cost compared with other monitoring activities such as new data collection.

Recommendations

What action is needed by the WASH sector in East and Southern Africa

There are clearly significant gaps in the current systems for routine WASH monitoring. A lack of

up-to-date, reliable data aligned with JMP service levels hinders the abilities of countries to understand current progress, identify gaps and investment needs, and advocate convincingly for increased resource allocation.

But significant improvements can be made rapidly – based on this rapid assessment we have identified four points for action which set out steps that can and should be taken immediately to help strengthen monitoring for SDG6 across East and Southern Africa. These actions build on current strengths and provide the foundations for robust WASH monitoring. The recommendations are also reflective of a rapid assessment reflecting a snapshot of the situation found. In this way, the recommendations are not exhaustive nor are they applicable to every country or context found in ESAR.

These recommendations will help to ensure the sector can understand progress towards universal access to safely managed WASH services and undertake course correction now to achieve SDG6 by 2030. As the custodian agency for SDG6 (through its joint leadership of the JMP), UNICEF has a responsibility to strengthen national monitoring and reporting capacity and should be heavily involved in advocating for these actions. But ultimately, they will require the involvement of all stakeholders and a coherent push to enable robust monitoring and tracking of the SDG 6 across the region.

1. Focus on quick-wins and improvements which can be achieved more easily

- Where countries have stronger data systems relatively minor changes to the data collected (such as through revising or adding survey questions could help improve alignment with JMP service level indicators.
- For example, aligning the WASH indicators used in HMIS systems more consistently with JMP service level indicators could lead to additional data availability with minimal additional resources.
- Hygiene presents a clear opportunity for this 'quick-win'. Adapting monitoring to capture information on safely managed services – requiring data on water quality and fecal sludge management – is more challenging.
- There are opportunities to build and strengthen linkages with water and sanitation utilities serving large urban populations to capture existing data.

2. Build the Enabling Environment for Monitoring

- The starting point for good monitoring is a strong enabling environment. Before seeking to implement new monitoring systems – for example, introducing a new technology solution – the building blocks of a strong WASH system – specifically, sector institutions, policy and strategy, financing, and a plan for data use – should be put in place at the national and local level.
- Investment in a strong enabling environment is likely to have broader benefits for the WASH sector beyond monitoring – including improving service delivery.
- There is also opportunities for a stronger role for the regulator in helping support and strengthen WASH system and monitoring of SDG6.

• 3. 'Break down Data Silos and make data Accessible and Available

- Where data already exists, data gatekeepers should collaborate with other sector stakeholders and share data. Breaking down silos and encouraging data use could provide significant benefits for operating and planning WASH services, and help better target investments in WASH.
- Extending access to existing data is a relatively low cost compared with other monitoring

activities such as new data collection. An early focus could be on integrating utility data into country reporting systems.

- This will involve advocacy to bring together stakeholders and technical support to ensure systems are in place to make the data available and interrogability.

- 4. Making the case for improved monitoring for SDG6

- To properly monitor and track the progress towards SDG6, country-led monitoring needs to be scaled up significantly. The case needs to be made for investment in routine monitoring systems – demonstrating how better-quality data can help the planning and implementation of WASH services, and support countries in achieving their national targets for WASH.

- Countries need technical support to understand what information is needed and to design and implement monitoring systems that work for them.

Stakeholder groups and key points of action:

UNICEF COs

Technical leadership/support:

- The analysis focused on government capacity for WASH sector monitoring and their MIS systems only. To ensure sufficient progress is made, UNICEF country offices should ensure they have capacity and resources to provide the technical leadership and relevant support for the sector to ensure stakeholders know what information is needed to accurately report against JMP service level indicators.

Advocacy role:

- UNICEF should continue to prioritize and strengthen evidence-based advocacy (based on findings from this report and country case studies – forthcoming) to influence financing and increased investment in routine monitoring systems, changes in monitoring questions and criteria to address alignment to JMP definitions, and delivery of monitoring using existing systems, including exploring ways to collect data on hygiene facilities through the existing systems, and open and available data.
- UNICEF COs should advocate to the health sector on the value of including data on WASH services that is aligned with the JMP – specifically to explore options for expanding HMIS to include JMP WASH indicators.

Relationship building:

- UNICEF COs' should leverage and build on pre-existing relationships between the health and WASH sectors to bring together stakeholders to design and implement monitoring systems which work for them, break down sector data silos.
- UNICEF COs could use government led JSR's platform and or other forums to bring together all stakeholders to review data

Governments

Enhance Ministerial Coordination:

- Enhanced collaboration through timely and frequent meetings with relevant departments and stakeholders to review and integrate WASH data needed to accurately report against JMP service level indicators.
- **Building strong relationships** between Health and WASH sectors to develop shared aims, and advocate to the health sector on the value of collecting data on WASH services aligned with the JMP.

Ensure sufficient resources are allocated to sector monitoring:

- Governments, together with institutional and financing partners must support the building blocks for WASH. This comprises of sufficient **finance and human capacity** for routine

WASH monitoring, both of which were limited across our regional summary.

Increase data availability, accessibility and interrogability:

- Governments and ministries must make data from MIS systems open and available for all.
- This includes establishing systems to **collect the utilities data** on a routine basis that is aligned to the JMP indicators.

Build on existing systems, both country and regionally:

- Governments should **review existing routine monitoring systems to increase alignment with JMP indicators** and focus on the easy wins for collecting data on hygiene facilities through existing monitoring systems. Specifically, **explore options for expanding HMIS to include JMP WASH indicators**.
- Use regional lessons and build on monitoring systems that are in place to establish other systems. Exploit South-South cooperation and learning to help solve specific problems.

Financing Partners

Continue and expand support to initiatives for WASH that strengthen the enabling environment:

- Financing partners, together with partners, should focus on the starting point of strength across all pillars of the enabling environment and SWA building blocks. Focus on the building blocks are inherent factors of success that will contribute and create conditions for strong monitoring of SDG performance.

Demonstrate to countries that high quality routine monitoring data can help them advocate for and target investment in WASH

- Financing partners are well place to make the case for data and routine monitoring of WASH in supporting WASH sector and programming.

Provide funding or financing for countries that have plans to establish or improve routine monitoring systems

- Routine monitoring systems need adequate investment and prioritization to understand sector gaps and progress

Institutional Partners

Continued and expanded support to initiatives that Strengthen the enabling environment for WASH:

- This crucial support, and must be delivered at the national and sub-national levels

Support initiatives to integrate utility data in WASH sector reporting, data production and use cannot be considered in isolation

- Greater integration between health and WASH: including through HMIS systems (where applicable) should be supported

Annex 1 – Country case study selection

The criteria for the selection of the five countries for the deep-dive case studies was initially driven by the context and settings of countries to include:

- One fragile state[15]
- One Accelerated Sanitation and Water for All (ASWA), Foreign, Commonwealth and Development Office (FCDO)/Directorate-General for International Cooperation (DGIS) country

The choice of the remaining three countries was based on the strength of country-led monitoring systems for SDG6 with two 'high performing' countries and one 'medium performing' country with performance judged against the criteria in Table 9.

It was subsequently decided that priority should be given to case studies that would generate useful learning for the wider sector. We have assessed all countries against the four agreed criteria (Table 9), plus the likelihood of useful learning emerging, which is summarized in Table 10. We then undertook a more detailed assessment for the six countries which scored most strongly against these criteria. This detailed assessment is included for each country in the text below.

Based on this assessment we propose the following countries for inclusion as deep-dive case studies:

- Ethiopia
- South Africa
- Tanzania
- Uganda
- Zimbabwe

Table 9: Selection criteria for in-depth country case studies

Criteria		Indicator	Means of assessing
The alignment of country monitoring systems with SDG6 indicators	How closely the monitoring systems and indicators aligns with the JMP service level indicators, is a key criterion for a countries ability to monitor progress against SDGs.	The proportion of SDG6 indicators included in-country monitoring systems	*For household WASH* Based on questions in the rapid systems assessment on the inclusion of specific sub-indicators (e.g. whether there is data on whether water is available on premises) *For WinS and WinHCF* Based on scoring in the UNICEF ESARO Scoping Reports[16]

[15] Based on World Bank Classifications available at https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations

[16] E.g. Are core SDG questions/indicators integrated into the national HMIS?

Criteria		Indicator	Means of assessing
The localization of SDG6 targets	The extent to which the country has localized the SDGs demonstrates national commitment through inclusion in national policies and having national targets	The proportion of SDGs for which the country has adopted national targets	GLAAS data on national targets Contextual information from rapid systems assessment
The extent to which progress against SDG6 targets is monitored in-country	This looks at how WASH monitoring is implemented, whether this data is up to date and how closely the data aligns with the JMP service level indicators	The proportion of SDG6 indicators for which there is (a) a national baseline and (b) regularly updated data	Based on findings from the rapid systems assessment
The perceived strength of the country-led WASH monitoring systems	The strength of the enabling environment, and elements in place – such as the necessary institutions, policies, financing and capacity, will influence the nature and scope of WASH monitoring systems. We want to understand where the gaps are and links between the enabling environment and the monitoring systems.	The proportion of SWA building block indicators for which country WASH monitoring (institutional arrangements, sector financing) and WASH monitoring systems (planning, monitoring & review, capacity development) score highly	Based on findings from the rapid systems assessment

Table 10: Summary assessment of countries against selection criteria

Criteria	Countries which performed strongly
The alignment of country monitoring systems with SDG6 indicators	*[based on whether WASH data aligned with JMP Basic or better]* Rwanda (3 indicators) Uganda (3) Malawi (2) South Africa (2) South Sudan (2) Tanzania (2)
The localization of SDG6 targets	*[based on the RAG assessment for localization]* Rwanda South Africa Ethiopia Mozambique Zambia Angola Botswana
The extent to which progress against SDG6 targets is monitored in-country	*[based on whether or not there is planned and regular data collection for at least one monitoring system which is at least partly aligned with SDG6]* Ethiopia Kenya Malawi South Africa South Sudan Tanzania Uganda Zambia
The perceived strength of the country-led WASH monitoring systems	*[based on the RAG assessment for all aspects of the enabling environment apart from localization]* Ethiopia (4 green ratings) Zimbabwe (4) Uganda (3) Madagascar (3) Malawi (3) South Africa (2) Mozambique (2) Zambia (2)

Ethiopia

The alignment of country monitoring systems with SDG6 indicators	At the country level, across the systems and surveys, there is some alignment with SDG6 definitions. Indicators are present and data is available for improved drinking water sources, collection time for water and accessible on-premises. Aspects of availability (available when needed) and water quality (free from contamination) are not present. Indicators for open defecation and improved sanitation facilities are included in DHIS and HMIS but further aspects of SDG6 sanitation including shared with households and faecal waste management are not included. Similarly, there is no inclusion of the presence of handwashing facilities or the availability of water and soap. The 2016 DHIS was used to assesses water supply access in the household and the 2019 National WASH Inventory is the primary source for water supply infrastructure. The Living Standard Survey 2018/19 provided further, but limited, insights on water, sanitation and hygiene in households.
The localization of SDG6 targets	In 2017, the Voluntary National Review on SDGs was undertaken by the National Planning Commission. SDG6 targets were integrated into Ethiopia's Second Growth and Transformation Plan and are presently being further refined and integrated with the Third Growth and Transformation Plan.
The extent to which progress against SDG6 targets is monitored in-country	Generally, water sector data has comprehensive indicators, in part established in alignment with SDG6, but lack regular reporting of these, and health sector data is frequent and reliable but lacks sufficiently comprehensive indicators for WASH in the household. Both systems struggle with the availability of data for stakeholders.
The perceived strength of the country-led WASH monitoring systems	The National WASH Coordination Office and the OneWASH National Programme are good examples of sector coordination mechanisms. The monitoring approach based on individual ministries having responsibility for sub-sector data, which is compiled and reported by NWCO, can provide valuable insights into alignment of indicators, financing and coordination of monitoring. Ethiopia boasts several MIS related to WASH. An EMIS is managed by the Ministry of Education and maintains an annually updated database which includes limited data of WASH in schools. A HMIS is managed by the Ministry of Health and is kept updated with regular and reliable reports from a network of health extension workers. The HMIS indicators include community/household sanitation and hygiene but these are not in alignment with SDG6. The Ministry of Water, Irrigation and Energy manages a WASH M&E MIS that contains data on water supply collected through periodic inventories of water supply infrastructure. Beyond the routine monitoring systems, the aforementioned ministries, in addition to the CSA, undertake periodic surveys. The extent to which the data in these various systems and surveys aligns with SDG indicators varies significantly.
Overall Remarks	Ethiopia presents a conundrum—the enabling environment is universally strong, but the monitoring systems and data availability are weak. This is a clear outlier in our assessment. We feel exploring this apparent contradiction would be interesting and could help to provide learning on why the aspects of the enabling environment we have explored to date are necessary pre-requisites for strong monitoring, but not in themselves sufficient

South Africa

The alignment of country monitoring systems with SDG6 indicators	The annual GHS survey includes questions on water, sanitation and hygiene. There is some lack of alignment with SDG6 definitions. The type of water source and if it is accessible on-premises is asked. The collection time was previously asked by whether the source was within 200m and is now not in the latest survey. Availability of water when needed is asked for municipal supplies but the definition used is for more than 15 days of disruption in a year, a higher level than the JMP criteria of available at least 50% of the time. Water quality data for piped supplied is collected through the Blue Drop system that service providers contribute to, however, data has not been publicly available since 2015 and the extend of the data is unknown. Sanitation data includes improved and shared but does not include faecal waste management components to determine safely manages status. The level of sewerage treatment is not currently collected by the central agency (StatsSA). The presence of a handwashing facility is included but the rather than the presence of soap (JMP) handwashing practice with soap after using the toilet is asked, a more challenging indicator and not aligned to JMP.
The localization of SDG6 targets	In the 2017 SDG baseline report, SA commits to the full SDG targets of safely managed for all by 2030. New Sanitation policy refers to meeting SDG targets. The targets are also established in the 2030 national development plan.
The extent to which progress against SDG6 targets is monitored in-country	South Africa is unique in ESARO in that it primarily uses national households surveys (GHS) to track WASH progress and report against SDG6. The system is managed by Statistics South Africa (StatsSA) with the data then being pulled/pushed into the There are however some gaps, first with alignment (see above) and second that data from utilities do not currently feed into StatsSA, meaning that data on piped water quality and sewage treatment is missing. A system to collect this data exists but its completeness is unknown. There is no system to monitor rural water quality.
The perceived strength of the country-led WASH monitoring systems	A strong system. StatsSA has budget and capacity to continue the annual household surveys. Small adjustments to the indicators could create alignment with JMP household questions. A system is needed to incorporate utility water quality and sewerage data. There is no system for non-piped water quality. This data is used by the Department of Water and Sanitation and feeds into this MIS system.

Overall Remarks	South Africa has set out its ambition to fully meet SDG 6.1 and 6.2 within the 2030 sustainable development plan and 2017 SDG baseline report. Reporting on SDG6 progress relies primarily on annual national general household surveys (GHS) that are carried out by Statistics South Africa (StatsSA). The department of water and sanitation (DWS) uses this data to compile their national integrated water information systems (NIWIS), as well as collecting information on service providers. Water and wastewater quality data are self-reported by providers within the IRIS and Blue Drop systems; which while not releasing reports since 2015 does provide data for JMP estimates. While there is a 2017 SDG baseline report there remains a lack of data aligned with the SDG definitions, most notably in regards to water collection time, safely managed sanitation practices and rural water quality. Minor changes to the annual GHS survey, better data collection from utilities and a rural water quality survey could fill in the data gaps and provide a full SDG baseline. **Case Study potential**: South Africa could be an interesting case study primarily because it purposely relies on annual household surveys carried out by a national statistics office. The monitoring system is quite straight forward which could make in-depth analysis and nuances limited. Specific areas which could be investigated include: • How functionality, repairs and O&M are managed and responded to given that the surveys only provide an annual snapshot. What systems are in place? E.g. Utility service lines • Why GHS questions do not align to JMP/SDG6 and plan to remedy this • Challenges faced by the Blue Drop utility water and wastewater quality system, previous attempts and plans to include the data within StatsSA and subsequently the national water MIS (NIWIS). • Any plans to test rural water quality • How StatsSA works together with the Dept of Water and Sanitation, Education and Health • The background as to why an annual survey approach was chosen and whether there were previous Water or Sanitation MIS systems. • How WASH in Schools and WASH in HCF data is collected, as this was a data blank in the previous UNICEF reports.

Tanzania

The alignment of country monitoring systems with SDG6 indicators	The country monitoring systems for sanitation and hygiene are largely aligned with JMP indicators for access to sanitation and hygiene. Two sanitation indicators are not aligned - 'Sanitation facilities with sewer connection where waste reaches treatment plants' is being planned' is being planned and 'On-site facilities where waste is removed and treated safely' is partially aligned. All indicators for access to water are not aligned with JMP indicators.
The localization of SDG6 targets	This is ongoing. Technical Working Group has been developed for this purpose. TWG is taking forward localisation. Mission from JMP did an orientation on JMP indicators. Defined own SDG 6 targets that are not fully based on internal assessment but Water Sector Development Plan target for 2025. These targets are used for planning.
The extent to which progress against SDG6 targets is monitored in-country	There is a strong sanitation and hygiene monitoring system (NSMIS) that includes data on household water treatment and storage. The system is managed by MoH. The indicators on sanitation and hygiene are aligned with SDG monitoring. The system includes household, school and healthcare facilities both urban and rural. Reporting is done on a quarterly basis. There is insufficient information on how access to water is monitored (especially for rural water). MAJIS water system monitors urban water infrastructure and is not aligned with JMP indicators on access to water.
The perceived strength of the country-led WASH monitoring systems	All sectoral plans informed by national plans and manifesto and WASH M&E policies and strategies are aligned with these plans. Water is monitored under the Ministry of Water and sanitation and hygiene are monitored under MoH. WASH M&E activities are planned and budgeted within the framework of the Water Sector Development Plan- although100% of the budget is not always available to sufficiently cover the plans. There is an annual JSR for water annual WASH multi-sectoral report is not consistently produced due to funding.
Overall Remarks	Tanzania was the only ASWA country (except South Sudan) where we found evidence of regularly updated monitoring systems which were well aligned with some SDG6 indicators. It also provides an interesting case as there are several different monitoring systems, and a significant amount of money has been invested in attempting to improve monitoring for rural water (e.g. through Foreign, Commonwealth and Development Office (FCDO) payment by results (PbR) and World Bank programs).

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.

Zimbabwe

The alignment of country monitoring systems with SDG6 indicators	Zimbabwe WASH data alignment with SDG6 is mixed. Data on household access to improved sources are available through the Rural WASH Information Management System, which also includes data on drinking water quality, improved and shared sanitation facilities in alignment with SDG6. Open defecation prevalence is also tracked but the system is yet to incorporate indicators for handwashing. The Ministry of Education manages an EMIS that includes WASH in schools. The routine monitoring systems are complemented by surveys, including DHIS, MICS. The Ministry of Health coordinates surveys that include indicators for waste management and water quality.
The localization of SDG6 targets	The process of localisation of indicators is underway but has not been approved or included in the policy.
The extent to which progress against SDG6 targets is monitored in-country	Current monitoring is comprehensive but does not align fully with SDG6. The 2019 MICS household survey is used as the SDG6 baseline.
The perceived strength of the country-led WASH monitoring systems	The Rural WASH Information Management System has been operational for several years and is increasingly improved through the extension of the system and the introduction of new technologies. Data is continuously updated through a network of health extension workers and is accessible, perceived as reliable and useful. Data verification and validation processes are practised. M&E activities are costed, and resources are adequate and available. At the data entry level capacity is sufficient but the main limitation is the human capacity to operate the system at the national level.
Overall Remarks	In our assessment, Zimbabwe had one of the strongest assessments of the enabling environment, but also scored strongly in terms of the WASH monitoring systems - being rated green for data management, accessibility and financing for implementation. Zimbabwe is also one of the few countries to have fully implemented a single MIS covering all areas of (rural) WASH. The Rural WASH IMS has been established across the entire country for several years, and our assessment indicated that there is funding in place for ongoing data collection and updating across much of the country. There are also recent steps to develop the ability to update the data via SMS. The established nature of the system should provide a more robust foundation for a case study – a similar system in Rwanda is still at the baseline data collection stage.

Alternative countries

Zambia

Extensive consideration was given to including Zambia as a deep-dive case study in place of Tanzania. We assessed Zambia against all four criteria for inclusion but feel, on balance, that Tanzania will present a more interesting case study. This is largely because there is more evidence of relatively strong WASH monitoring systems and additional information (for example

on the FCDO PbR project) which is not yet captured. In addition, including Tanzania (an ASWA-DGIS country) will allow for greater synergies with other workstreams on this assignment.

Malawi

Malawi is a medium performing country—hygiene and sanitation data (from the HMIS) is strong, but water is relatively weaker. However, Uganda generally covers similar issues (e.g. multiple systems including HMIS) with stronger overall performance and also has interesting learning around the use of utility data.

Rwanda

Rwanda is establishing a new MIS which will cover all aspects of WASH and is well aligned to the SDGs. However, the system is not yet fully functional (baseline data collection is only 50%

The alignment of country monitoring systems with SDG6 indicators	There is no single MIS for Zambia, (although one is under development) with HH WASH monitoring collected via national surveys. The ZDHS survey monitors SDG 6.1 – and is aligned to the SDG basic+. It does not capture water quality monitoring nor availability of water 50% of the time. Wq monitoring is partly captured through NAWSCO. For sanitation, HH monitoring captures improved status of sanitation facilities, meaning progress for safely managed (SDG 6) cannot be tracked – although NAWSCO does partly capture some of this information in urban areas. A DHIS electronic WASH surveillance system exists to monitor CLTS – but does not align to SDG 6 indicators. WinS is partly included but lacks indicators for usage and functionality, nor are advanced service levels are not reached. Win HCF is aligned to SDG 6 indicators.
The localization of SDG6 targets	Zambia has localised SDG indicators in its national WASH policy and the policy sets ambitious targets of 100% for Ws and 90% for sanitation. The indicators are reported to be aligned with SDG indicators (*although the policy is not verified*).
The extent to which progress against SDG6 targets is monitored in-country	Regular monitoring through surveys is conducted for HH WASH and WinS and HCF but as explained above, is only partly aligned to SDG 6 and still uses MDG indicators for sanitation at a national level. A baseline for HH WASH – missing for institutions. Urban and peri-urban monitoring is more robust through the regulator, NAWSCO.
The perceived strength of the country-led WASH monitoring systems	The enabling environment for WASH monitoring is satisfactory – with the Ministry for Water Development, Sanitation and Environmental Protection (MWDSEP) offering coordination. The WASH policy has limited M and E framework, although the M and E policy was seen to be partly established. The Sector has a strong regulatory authority for urban / peri-urban water, and conducts regular JSR, supported by regular multi-sectoral wash reports and its finding are implemented by the government and partners.
Overall Remarks	Zambia performs well against the several criteria and has satisfactory WASH monitoring systems, supported through regular surveys and utility data. The localisation of SDGs targets is strong – with targets and policy aligned to SDG 6. However, regular monitoring through surveys fails to fully capture data to track progress against SDG 6 – in particular for sanitation. Zambia's experience with Akros will be interesting to explore for rural sanitation monitoring, which has been recently expanded to cover 50% of the country to capture OD in rural areas The deep dive will explore if Akros can be adapted to supports SDG 6 monitoring, and what are the challenges to it doing so.

complete) and there is uncertainty about the future of the system. There is no funding in place for data-updating, and some comments in the KII suggested the technology platform was not fit for purpose. Despite appearing strongly in our assessment there is some uncertainty as to what has been achieved, and what is more aspirational.

South Sudan

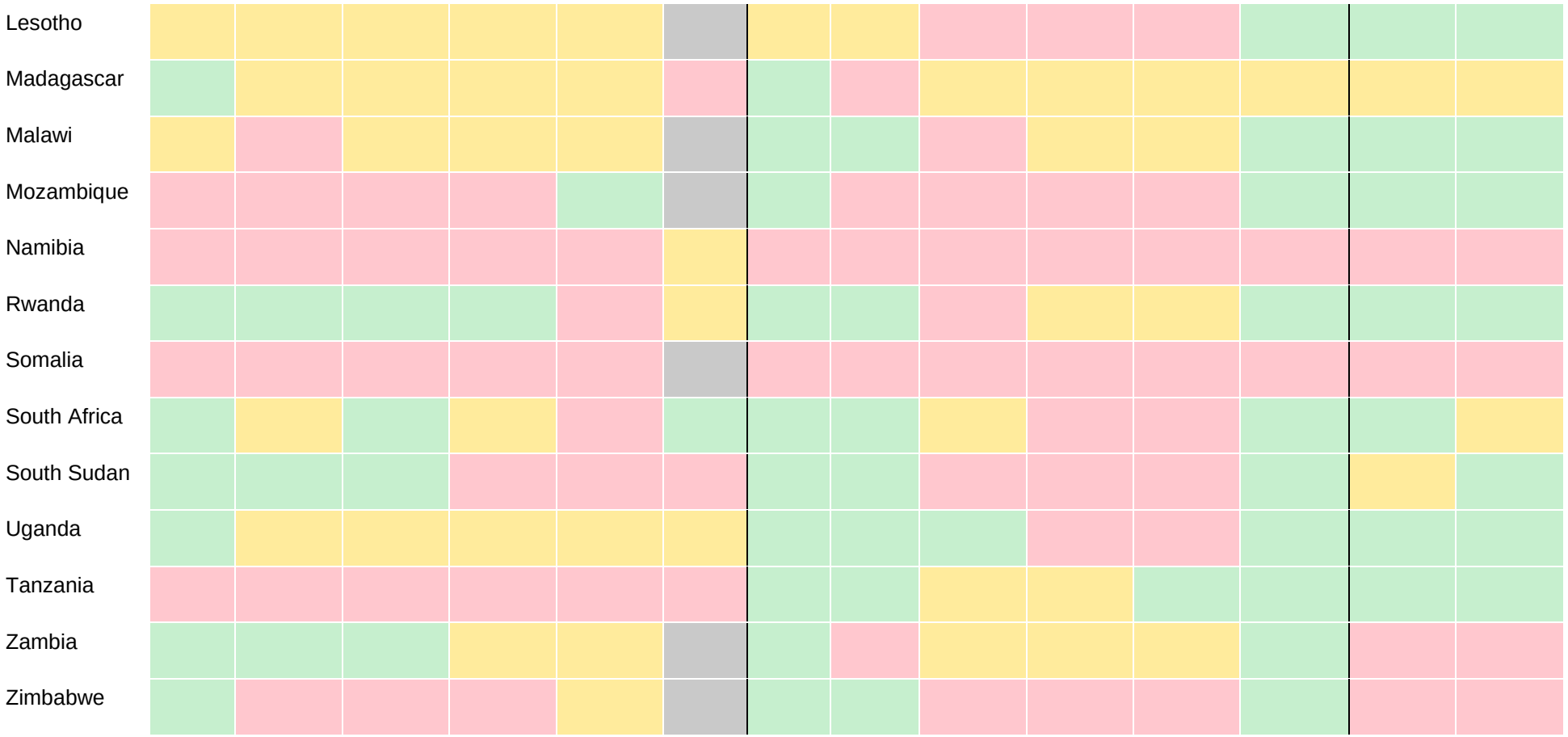
Is one of only two countries (the other being South Africa) that relies on surveys for WASH monitoring. South Sudan also provides an interesting example of high-quality, and high-frequency, WASH monitoring data being collected and used in a fragile state. However, the monitoring system in South Sudan is entirely managed and supported by humanitarian actors – there is little to no government involvement and the enabling environment is very weak. As a result, it is difficult for other countries to replicate the monitoring approach used in South Sudan, and there is likely to be relatively limited learning for the wider sector.

Annex 2 – Ability of routine monitoring systems to report against JMP Indicators

This annex provides the underlying data behind our assessment of the extent to which country-led routine monitoring systems align with the JMP indicators for SDG6. The data was collected primarily through the KII with UNICEF staff and government officials and supplemented by the review of key documents (e.g. monitoring reports or documentation on the design and operation of monitoring systems).

The elements included in this table are aligned with the indicators for each of the JMP service levels (see Table 5 for details). The cells in pink/orange highlight where routine monitoring systems and JMP indicators do align and therefore do not allow reporting against national target indicator

	Access to Water						Access to sanitation						Access to hygiene	
	Improved drinking water	Collection time	Accessible on premises	Available when needed	Free from contamination	Water Quality data collected through a separate system.	Improved sanitation facilities	Shared with other households	Sanitation facilities with sewer connections where waste reaches treatment	On- site facilities where waste is treated in-situ	On- site facilities where waste is removed and treated safely	Open defecation prevalence	Presence of handwashing facilities	Soap and water available
Angola														
Botswana														
Burundi														
Comoros														
Eritrea														
Eswatini														
Ethiopia														
Kenya														


Lesotho
Madagascar
Malawi
Mozambique
Namibia
Rwanda
Somalia
South Africa
South Sudan
Uganda
Tanzania
Zambia
Zimbabwe
No data available
Data partly available
Data fully available

Alignment of monitoring indicators with target indicators

This annex shows the extent of indicator alignment between (i) national targets as set out in the 2019 GLAAS report, (ii) routine monitoring systems identified through this study, and (iii) 2017 JMP data.

	Water				Sanitation				Hygiene		
	Target Urban (GLAAS)	Target Rural (GLAAS)	Routine Monitoring	2017 JMP Data	Target Urban (GLAAS)	Target Rural (GLAAS)	Routine Monitoring	2017 JMP Data	Target (GLAAS)	Routine Monitoring	2017 JMP Data
Angola											
Botswana											
Burundi											
Comoros											
Eritrea											
Eswatini											
Ethiopia											
Kenya											
Lesotho											
Madagascar											
Malawi											
Mozambique											
Namibia											
Rwanda											
Somalia											

	Water				Sanitation				Hygiene		
	Target Urban (GLAAS)	Target Rural (GLAAS)	Routine Monitoring	2017 JMP Data	Target Urban (GLAAS)	Target Rural (GLAAS)	Routine Monitoring	2017 JMP Data	Target (GLAAS)	Routine Monitoring	2017 JMP Data
South Africa	●	●	◔	◕	◔	◔	◑	◑	◂	●	●
South Sudan	◔	◔	◕	◕	◔	◔	◑	◑	○	○	◂
Tanzania	●	◕	◔	◕	●	◔	◕	●	●	●	●
Uganda	◕	◕	◑	●	◑	◑	◕	◕	●	●	●
Zambia	●	◕	◕	◕	◔	◔	◔	◑	●	◂	●
Zimbabwe	●	◔	◔	◕	◔	◔	◑	◕	●	◂	●

●	Full alignment with SDGs	◔	Alignment with MDGs / SDG limited
◕	Alignment with SDG Basic+	○	No alignment
◑	Alignment with SDG Basic	◂	No data
	Monitoring or data does not enable reporting against the national target for urban **or** urban		
	Monitoring or data does not enable reporting against the national target for urban **and** rural		

Annex 3 – Country summary findings

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Country snapshot: Angola

Key features of the monitoring landscape in country				
Angola has no specific WASH coordination office and WASH is split across different lead ministries. At present, WASH monitoring is survey based through national surveys. A central WASH MIS, SISAS, is under development, led by the Ministry of Energy and Water, with technical and financial support from sector partners. SISAS will support periodic data collection conducted by district level government official and sector partners and will be used to inform on JMP indicators. Monitoring for WinS and WinHCF is led by the Ministry of Education and Ministry of Health mandates, both with MIS in place, but not publicly available.				
Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				
Level of alignment with SDG 6 targets and JMP Indicators				
Water	N/A			
Sanitation	N/A			
Hygiene	N/A			
Characteristics of the main monitoring systems				
WASH Monitoring System Description	Single MIS			
System 1:				
System scope				
National coverage (% or description)				
Urban/rural				

Non-community settings (POC, IDP, refugee camps)	
WASH in Schools	✓ ✗
WASH in HCF	✓ ✗
Data management	
Data accessibility and use	
Resources for system implementation: Financial resources	
Resources for system implementation: Human capacity	

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities	N/A			

Country snapshot: Botswana

Key features of the monitoring landscape in country
Botswana does not have systematic monitoring systems in place. An MIS system led by the Department of Water Affairs (DWA) is in place – but few details on its coverage were available at this time. Botswana has domesticated SDG indicators to track progress and monitoring of access to water. This is collected through the 10-year census and the census mid-point Botswana Demographic Surveys (BDS). The SDG 6 baseline data comes primarily from the 2017 BDS survey. Monitoring of access to sanitation and hygiene is intended to be led by the Ministry of Land management, Water and Sanitation services (MLMWSS). The Water Utilities Corporation (WUC) collects and reports ongoing service coverage, water quality and wastewater quality but data is not publicly available or currently reported in the JMP.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	N/A
	Sanitation	N/A
	Hygiene	N/A

Characteristics of the main monitoring systems	
WASH monitoring system description	Extent of monitoring systems unknown
System 1: DWA MIS (Name Unknown)	

System scope	Water
Lead organisation	Department of Water Affairs
National coverage (% or description)	Unknown
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	n/a (little/no camps settings in country)
WASH in schools	
WASH in HCF	
Data management	Unknown
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data
Resources for system implementation: Financial resources	---
Resources for system implementation: Human capacity	---
System 2: WUC Water Utility Corporation	
System scope	Water
Lead organisation	WUC Water Utility Corporation
National coverage (%)	Urban + 70% Rural maybe (UNICEF guess)
Urban/rural	
Non-community	n/a (little/no camps settings in country)
WASH in schools	
WASH in HCF	
Data management	Annually
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data
Resources for system implementation: Financial resources	Activities costed AND resources available

Resources for system implementation: Human capacity	There is adequate capacity to fulfil monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH	N/A			
IWRM				
Inequalities				

Country snapshot: Burundi

Key features of the monitoring landscape in country				
Burundi does not have a national WASH monitoring system. The Ministry of Hydraulics is responsible for data management on water (and to a limited extent sanitation) although there is no monitoring system currently in place. The Ministry of Health has some provincial-level sanitation data – but there is no systematic monitoring. Current service estimates are informed by national DHS and MICS survey data, collected by the National Institute of Statistics. The Ministry of Hydraulics and UNICEF are discussing the implementation of WASH monitoring system for asset monitoring and service level monitoring. UNICEF CO plans to estimate the levels of access – using the estimated households served by the infrastructure. A public sector company REGIDESO is responsible for water and electricity service provision, and associated monitoring, primarily in urban areas.				
Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				
Level of alignment with SDG 6 targets and JMP Indicators				
Water	N/A			
Sanitation	N/A			
Hygiene	N/A			
Characteristics of the main monitoring systems				
WASH Monitoring System Description	No monitoring system in place			
Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				

Inequalities	

Country snapshot: Comoros

Key features of the monitoring landscape in country
Comoros does not have a strong WASH Strategy/ policy or an M and E framework or policy. There is no coordinated body for WASH monitoring and the country suffers from weak institutional support for WASH M and E. The responsibility for WASH is split amongst different ministries and WASH is not prioritised in department strategies. There is limited to no annual WASH reporting or coordinated sector reporting to inform annual planning. There are no routine monitoring systems, data is collected by infrequent demographic surveys - the latest data in 2021, and data collected is not aligned to SDG 6 indicators. There is very limited resourcing (financial or human capacity) to implement nationwide surveys. On sanitation - civil society provide data on sanitation indicators. For WASH in institutions, UNICEF CO have the most robust monitoring and recent data with a WinS and WASH in HCF national survey completed in 2018.

Enabling Environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localization: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	N/A
	Sanitation	N/A
	Hygiene	N/A

Characteristics of the main monitoring systems	
WASH Monitoring System Description	No routine monitoring systems for WASH
System 1: WASH MIS	
System scope	N/A
Lead organisation	N/A
National Coverage (% or description)	N/A

Urban/rural	N/A
Non-community settings (POC, IDP, refugee camps)	N/A
WASH in Schools	N/A
WASH in HCF	N/A
Data management	N/A
Data accessibility and use	N/A
Resources for system implementation: Financial resources	There are financial constraints in fulfilling monitoring requirements
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Eritrea

Key features of the monitoring landscape in country
Eritrea manages the monitoring and coordination of WASH through multiple ministries and departments. Rural water supply is the mandate of Water Resources Department (WRD) under Ministry of Land, Water & Environment (MoLWE). Sanitation and hygiene is the mandate of the Environmental Health Division under the Ministry of Health (MoH). The MoE is responsible for WinS through the General Education Department, where the MoH has a collaborative role. WinS is also included in the School Health Policy and forms part of the Rural Sanitation Policy. However, there is no data for WinS and WinHCFs included in the JMP. A centralised WASH MIS is not established – although being part of sector strategic plan for 2011 to 2015 – an Integrated National Water Resources Database and Information and Network System was not fully implemented. However, a water supply database exists. Water monitoring is partly through limited WASH inventory surveys and annual reports from regional administration. A Health MIS exists and includes indicators for sanitation and hygiene. There is also a complete data set for CLTS available for sanitation and hygiene indicators apart from HMIS. There are no updated JMP estimates and the last national Population and health household survey was 2010. This included water and sanitation indicators but no hygiene indicators.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	N/A
	Sanitation	N/A
	Hygiene	N/A

Characteristics of the main monitoring systems	
WASH monitoring system description	Other (please specify)
System 1: DWA MIS (Name Unknown)	
System scope	Water
Lead organisation	Department of Water Affairs
National coverage (% or description)	Unknown
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	n/a (little/no camps settings in country)
WASH in schools	
WASH in HCF	
Data management	Unknown
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data
Resources for system implementation: Financial resources	---
Resources for system implementation: Human capacity	---

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Eswatini

Key features of the monitoring landscape in country
Eswatini currently relies exclusively on national surveys to understand access to WASH services: this includes a decennial annual census (last in 2017), intercensal surveys and regular MICS (last in 2014 with data collection for 2020 ongoing). All these data are included in the current JMP estimates. A rural water point mapping exercise was undertaken in 2014, which provides a baseline of the number of people living within 1km of an improved source – it does not cover all aspects of the JMP indicators for water, not does it include sanitation and hygiene. The data was previously used as part of JSR processes but has not been updated since 2014. There are ongoing discussions with development partners – led by the World Bank – to implement a rural water and sanitation monitoring system, but there is no firm timetable for this. In urban areas, the Eswatini Water Services Corporation appears to have robust data collection and management processes, but this data is not widely shared or routinely used as part of national WASH planning processes. EWSC data on water quality is included in JMP estimates.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with MDGs / SDG limited
	Sanitation	N/A
	Hygiene	N/A

Characteristics of the main monitoring systems	
WASH monitoring system description	Water point mapping
System 1: Water point mapping	
System scope	Water
Lead organisation	Consultancy-led
National coverage (% or description)	Nationwide
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Baseline (2014)
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data
Resources for system implementation: Financial resources	
Resources for system implementation: Human capacity	

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Ethiopia

Key features of the monitoring landscape in country
Ethiopia's National WASH Coordination Office is responsible for coordination of the OneWASH National Programme, with one plan, one budget and one report. The office uses data from multiple sector systems to inform the annual WASH sector report, which is used to inform an annual Multi-Stakeholder Forum. Within the Ministry of Water, Irrigation and Electricity, the Water Development Commission manages the WASH M&E MIS, which is populated by periodic national inventory data collection, most recently undertaken in early 2019. The WASH M&E MIS includes comprehensive data for water supply parameters and provides a good basis on which to further strengthen water supply monitoring, but the data is not available to WASH sector stakeholders and there is limited data updates or verification processes. The Ministry of Health's HMIS provides regular and reliable insights on a wide range of community health parameters, but indicators for sanitation and hygiene are presently limited to community level use of improved latrines and tracking ODF status. The HMIS is not available to WASH sector stakeholders, but the data is made available only upon specific request to the Ministry of Health. The Ministry of Education administers an EMIS which contains reliable but limited data for WASH in Schools.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with SDG Basic+
	Sanitation	Alignment with MDGs / SDG limited
	Hygiene	N/A

Characteristics of the main monitoring systems	
WASH monitoring system description	Water MIS + HMIS for sanitation and hygiene
System 1: WASH M&E MIS	
System scope	Water
Lead organisation	Water Development Commission
National coverage (% or description)	Nationwide
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Weak. Limited data verification practised, database not kept adequately updated
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data
Resources for system implementation: Financial resources	Activities costed but resources not available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements
System 2: HMIS	
System scope	Sanitation and hygiene
Lead organisation	Ministry of Health
National coverage (%)	Nationwide
Urban/rural	
Non-community	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Excellent data management practices, including verification and regular updating

Data accessibility and use	Restricted access. Data is accessible to approved partners only
Resources for system implementation: Financial resources	Activities costed AND resources available
Resources for system implementation: Human capacity	There is adequate capacity to fulfil monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Kenya

Key features of the monitoring landscape in country
Kenya has two ministries responsible for WASH. Sanitation monitoring is led by the Ministry of Health through the National WASH Hub for monitoring of CLTS. Current alignment of the WASH Hub with the SDG indicators is limited, although this is being addressed by UNICEF. There are two counties using mWater sanitation MIS but there are no plans to expand. The Ministry of Water, Sanitation and Irrigation is responsible for monitoring of access to water. There is no MIS for water, but Kenya uses data from national surveys to monitor access to water. This includes the WASREB IMPACT household surveys and the PMA survey (2017). Kenya also draws on national survey conducted by World Vision. All these data are included in current JMP estimates. Monitoring of WASH in Schools is managed by Ministry of Education, but the EMIS is not frequently updated, nor is it linked to the WASH Hub CLTS MIS. There is no MIS for monitoring of WASH in HCFs. Kenya uses survey data for monitoring of WinS and WinHCFs. This includes the World Vision survey (2017) and PMA (2018).

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localization: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	No alignment
	Sanitation	No alignment
	Hygiene	Alignment with SDG Basic

Characteristics of the main monitoring systems

WASH Monitoring System Description	Single MIS
System 1: CLTS Monitoring System	
System scope	All WASH
Lead organisation	Ministry of Health
National Coverage (% or description)	45/47 counties
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Includes non-community settings (e.g. POC/IDP/refugee camps)
WASH in Schools	
WASH in HCF	
Data management	Data collection is paper based and inputted frequently. This is not real time
Data accessibility and use	Open access. Data (in at least summary form) is available to the public
Resources for system implementation: Financial resources	Activities costed AND resources available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Lesotho

Key features of the monitoring landscape in country
Lesotho coordinates monitoring of WASH through the Water Commission, but it does not currently have a functioning WASH MIS nor available data. The monitoring of rural water is based on ad hoc reporting from district engineers on works completed. Although urban and water and sanitation are monitored by the utility (WASCO) this data is not integrated into Water Commission monitoring and reporting systems. While the Ministry of Health has an established HMIS, this does not include indicators on sanitation and hygiene. The Department of Rural Water Supply has implemented a GIS-based monitoring system for access to water at the district level across the country but there, to date, there is no collation of data at a central level. Additional investment in data collection and the skills needed to use the system is needed if the full benefits of the system are to be realised. At present, the primary sources of data are from representative surveys. Lesotho recently (2018) completed a MICS which has established an SDG6 baseline, including on access to safely managed services. The Lesotho Bureau of Statistics has a programme to undertake continuous surveys which are updated quarterly and provide data on water and sanitation, but this has been paused since 2015.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				
Level of alignment with SDG 6 targets and JMP Indicators				
Water	N/A			
Sanitation	N/A			
Hygiene	N/A			

Characteristics of the main monitoring systems	
WASH Monitoring System Description	No WASH monitoring system functional

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Madagascar

Key features of the monitoring landscape in country
Madagascar has a single MIS system, SESARM, which collects data on all aspects of WASH including WinS and WinHCF. The system also collects data from utilities or private sector providers and is hosted under the Ministry of Water and Sanitation. There are plans to revise the indicators in 2021 to move from the current alignment to MDG (SDG Limited), to full SDG alignment. Ministry responsibility stops at the regional level, after which the SESARM system relies primarily on partners to submit data, typically every trimester. While all WASH organisations do feed into SESARM system, a key challenge is for the local communes to report, and most currently do not. There has been some success where communes have been provided with technical support through UNICEF and this type of support would need to be scaled up if SESARM is to be complete and nationally representative. The main limitation to achieving this is financial.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	Single ministry responsible for all WASH areas and monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localization: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with MDGs / SDG limited
	Sanitation	Alignment with MDGs / SDG limited
	Hygiene	N/A

Characteristics of the main monitoring systems

WASH Monitoring System Description	Single MIS
System 1: SESARM	
System scope	All WASH
Lead organisation	Ministry of Water and Sanitation
National coverage (% or description)	Nationwide, but with gaps at the community level
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	n/a (little/no camps settings in country)
WASH in schools	
WASH in HCF	
Data management	Submitted by partners and WASH actors every trimester
Data accessibility and use	Open access. Data (in at least summary form) is available to the public
Resources for system implementation: Financial resources	Activities costed but resources not available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Malawi

Key features of the monitoring landscape in country
Malawi has two national systems for monitoring WASH. The Ministry of Forestry and Natural Resources leads monitoring of access to water. However, the system relies on ad-hoc data collection with limited capacity for undertaking monitoring at village level. The means that there are considerable gaps in the available data. The Ministry of Health is responsible for monitoring access to sanitation and hygiene. The data is collected using the DHIS-2. Monthly data collection through village-based frontline health workers is collated at district level before being entered into the excel based system. This means that district-level disaggregation is available to DHIS-2 administrators based in headquarters. In addition, Malawi undertakes regular MICS surveys (every three years, with data collection in 2020 disrupted due to COVID-19) which form part of the data used for the JMP estimates.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with MDGs / SDG limited
	Sanitation	Alignment with SDG basic
	Hygiene	Alignment with SDG basic

Characteristics of the main monitoring systems	
WASH monitoring system description	Water MIS + HMIS for sanitation and hygiene

System 1: Water supply monitoring	
System scope	Water
Lead organisation	Ministry of Forestry and Natural Resources
National coverage (% or description)	…
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Ad hoc
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data
Resources for system implementation: Financial resources	No planning for financial requirements (activities not costed)
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements
System 2: DHIS-2	
System scope	Sanitation and hygiene
Lead organisation	Ministry of Health
National coverage (%)	Nationwide
Urban/rural	
Non-community	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Monthly
Data accessibility and use	Restricted access. Data is accessible to approved partners only

Resources for system implementation: Financial resources	Activities costed but resources not available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Mozambique

Key features of the monitoring landscape in country
Mozambique's Planning Department within the DNAAS coordinates a rural WASH MIS, SINASH. SINASH was recently upgraded with Mobile to web and additional indicators. The primary focus of SINASH is water supply, collected by DNAAS district officials. Sanitation monitoring in SINAS is limited to facility type and annual ODF status village tracking, where data is used in certifying ODF communities. Although the dataset is not entirely complete, the SINASH system presently contains data collected in 2020 and data and results are available to WASH sector stakeholders. Data is used to inform an annual sector performance report, and the data is used beyond the WASH sector ministries. Plans are under way to enable sector stakeholders to enter data into SINASH, and to make the data publicly available. System strengths include the ability to access WASH data in a centralised place, soon to be publicly available, and with tracking for ODF status communities as a key feature. The system is largely supported by development partners and financial and capacity are major constraints. Data management and verification is presently a shortcoming and the lack of dedicated staffing is a barrier to institutionalising SINASH within Mozambique.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	Single ministry responsible			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	No alignment
	Sanitation	Alignment with MDGs / SDG limited
	Hygiene	Alignment with SDG Basic

Characteristics of the main monitoring systems

WASH Monitoring System Description	Single MIS
System 1: SINASH	
System scope	All WASH
Lead organisation	DINASH planning unit
National coverage (% or description)	Nationwide
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings.
WASH in schools	
WASH in HCF	
Data management	Ad hoc
Data accessibility and use	Open access. Data (in at least summary form) is available to the public
Resources for system implementation: Financial resources	Activities costed but resources not available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Namibia

Key features of the monitoring landscape in country
Namibia spreads the mandate for WASH (and associated monitoring) across several departments and agencies. There is no national WASH MIS. The data on access to WASH in Namibia come from data collected by the Namibia Statistics Authority (NSA) as part of the 10-yearly National Census and the intercensal survey (undertaken midway between two censuses, with the last one in 2016). These datasets are nationally representative, and also provide the most recent data used in the JMP estimates. Although additional data is collected, without a central coordinating function it is challenging to undertake national WASH monitoring. For example, NamWater collects data on the bulk water which is supplied to local authorities, but whilst local authorities may collect data on access within the administrative boundaries, this data is not coordinated or collated.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	N/A
	Sanitation	N/A
	Hygiene	N/A

Characteristics of the main monitoring systems	
WASH monitoring system description	No monitoring systems established

System 1: Water point mapping	
System scope	
Lead organisation	
National coverage (% or description)	
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	
WASH in schools	
WASH in HCF	
Data management	
Data accessibility and use	
Resources for system implementation: Financial resources	
Resources for system implementation: Human capacity	

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH	N/A			
IWRM				
Inequalities				

Country snapshot: Rwanda

Key features of the monitoring landscape in country
Rwanda is rolling out a nationwide WASH MIS to cover all aspects of access to WASH in households and institutions. Led by the Ministry of Infrastructure and supported by UNICEF, data collection has taken place across 17 out of 30 districts, with plans and funding in place to complete data collection by mid-2021. The data collected will allow monitoring of access to WASH in line with the JMP indicators for basic services. This will replace a system of ad hoc data collection and monitoring for WASH where there was no collation at a national level. Although the system is encouraging – initial data is already being analysed – there is no agreement or funding in place for future data collection and further work needs to be done to develop the capacity to fulfil monitoring requirements within the ministry. Because of the recent changes to the monitoring landscape, Rwanda's M&E framework and policies are no longer up-to-date. In addition to the MIS under development, Rwanda undertakes multiple surveys which cover access to WASH in households. The Integrated Household Living Conditions Survey is undertaken every 3 years and Rwanda also participates in the DHS programme (with data collection complete for the 2019/20 survey).

Enabling Environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localization: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with SDG Basic+
	Sanitation	Alignment with SDG Basic
	Hygiene	Alignment with SDG Basic

Characteristics of the main monitoring systems	
WASH Monitoring System Description	Single MIS
System 1: WASH MIS	
System scope	All WASH
Lead organisation	Ministry of Infrastructure
National Coverage (% or description)	50%
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in Schools	
WASH in HCF	
Data management	Baseline (ongoing)
Data accessibility and use	Restricted access. Data is accessible to approved partners only
Resources for system implementation: Financial resources	Activities costed AND resources available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Somalia

Key features of the monitoring landscape in country
Somalia has a WASH steering committee responsible for WASH coordination (and associated monitoring), led by the Ministry of Water Resources. There is no systematic monitoring of access to WASH at household level, which is largely supported by ad hoc household surveys and assessments undertaken by partners. A national MIS (SWALIM) for water infrastructure exists, coordinated by the FAO. It has limited urban coverage and does not provide data on water access at household level. The MoH lead the HMIS which is in process of being upgraded to DHIS-2 and will include the WASH indicators from 2021. Currently it does not have sufficient data on access to WASH. REACH conducted a national WASH survey (2019) in 53 of the 74 districts in Somalia. The survey included a statistically representative sample for displaced and non-displaced households and aligned to SDG indicators. In addition, the World Bank conducted a national household surveys, the Somalia High Frequency Survey (2017) which informs JMP estimates. The WinS JMP data is from the EMIS (2017). WinHCFs data is from 2016.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	No coordinated monitoring for WASH at the government level. But there is a WASH steering committee dealing with coordination issues, led by Ministry of Water Resources. MoE and others are also members.			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				
Level of alignment with SDG 6 targets and JMP Indicators				
Water	N/A			
Sanitation	N/A			
Hygiene	N/A			

Characteristics of the main monitoring systems	
WASH monitoring system description	Water MIS + HMIS for sanitation and hygiene

System 1: SWALIM	
System scope	Water
Lead organisation	FAO
National coverage (% or description)	Nationwide
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Ad hoc
Data accessibility and use	Open access. Data (in at least summary form) is available to the public
Resources for system implementation: Financial resources	…
Resources for system implementation: Human capacity	…
System 2: HMIS	
System scope	Sanitation and hygiene
Lead organisation	Ministry of Health
National coverage (%)	Nationwide (excluding Somaliland)
Urban/rural	
Non-community	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Annually
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data

Resources for system implementation: Financial resources	No planning for financial requirements (activities not costed).
Resources for system implementation: Human capacity	…

Other elements	**RAG ratings:**	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: South Africa

Key features of the monitoring landscape in country
South Africa monitors access to WASH through the Department of Water and Sanitation (DWS) and aims to fully meet SDG 6.1 and 6.2 within the 2030 sustainable development plan. South Africa relies primarily on annual national general household surveys (GHS) that are carried out by Statistics South Africa (StatsSA) for monitoring progress against SDGs. In addition, the DWS is informed through two national MIS; the national integrated water information systems (NIWIS) and National Water Services Knowledge System (NWSKS). In addition, water and wastewater quality data is self-reported by service providers within the IRIS and Blue Drop systems; which while not releasing reports since 2015 does provide data for JMP estimates. Alignment of data to SDG definitions is still limited, most notably in regards water collection time, safely managed sanitation practices and rural water quality. Minor changes to the annual GHS survey and a rural water quality survey could fill in the data gaps and provide a full SDG baseline.

Enabling environment	**RAG ratings:**	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with MDGs / SDG limited
	Sanitation	Alignment with SDG basic
	Hygiene	Alignment with SDG basic

Characteristics of the main monitoring systems	
WASH monitoring system description	Single MIS

System 1: General Household Survey (Statistics SA)	
System scope	All WASH
Lead organisation	Statistics South Africa
National coverage (% or description)	Nationwide
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Annually
Data accessibility and use	Open access. Data (in at least summary form) is available to the public
Resources for system implementation: Financial resources	Activities costed AND resources available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements
System 2: IRIS / Blue Drop	
System scope	Water and Wastewater Quality
Lead organisation	Department of Water and Sanitation
National coverage (%)	Where there are service providers
Urban/rural	
Non-community	n/a (little/no camps settings in country)
WASH in schools	
WASH in HCF	
Data management	Annually
Data accessibility and use	Restricted access. Data is accessible to approved partners only

Resources for system implementation: Financial resources	…
Resources for system implementation: Human capacity	…

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: South Sudan

Key features of the monitoring landscape in country
South Sudan is a unique case for monitoring WASH in ESARO – the ongoing humanitarian crisis means that there is little or no government capacity for monitoring WASH. The humanitarian system takes the lead on all WASH monitoring in-country through regular 5W data collection. In addition, existing household surveys undertaken by the WFP and Food Security Cluster (Food Security and Nutrition Monitoring System–FSNMS) include WASH indicators. The FSNMS surveys are conducted twice every year and as of 2020 this has been extended to cover urban areas and POCs (except some areas with access issues) in addition to rural areas. This allows national and district estimates of household access to WASH. The alignment with JMP indicators for SDG6 is variable – for example, there is no question on the presence of a handwashing facility – and there are challenges in including additional WASH questions to multi-sectoral surveys. As of 2019, this data is not included in JMP estimates. Although the government is involved in some aspects of the FSNMS surveys – for example reviewing questions and indicators – this is very limited, and there is no government involvement in the management of the data, nor is this a system that is likely to be sustained without considerable external financial and technical support. The FSNMS surveys are conducted twice every year and, as of 2020, this has been extended to cover urban areas and POCs (except some areas with access issues) in addition to rural areas. This allows national and district estimates of household access to water, sanitation and hygiene. The alignment with JMP indicators for SDG6 is variable – for example, there is no question on the presence of a handwashing facility – and there are challenges in including additional WASH questions to multi-sectoral surveys. As of 2019, this data is not included in JMP estimates. Although the government is involved in some aspects of the FSNMS surveys – for example reviewing questions and indicators – this is very limited, and there is no government involvement in the management of the data, nor is this a system which it is likely could be sustained without considerable external financial.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	No government monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localization: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP indicators		
	Water	Alignment with SDG Basic+

	Sanitation	Alignment with SDG Basic
	Hygiene	No alignment

Characteristics of the main monitoring systems					
WASH Monitoring System Description	Survey based				
System 1: Food Security and Nutrition Monitoring System (FSNMS)					
System scope	All WASH				
Lead organisation	WFP / FS Cluster				
National coverage (% or description)	Nationwide				
Urban/rural	 				
Non-community settings (POC, IDP, refugee camps)	Includes non-community settings (e.g. POC/IDP/refugee camps)				
WASH in schools					
WASH in HCF					
Data management	Biannually				
Data accessibility and use	Open access. Data (in at least summary form) is available to the public				
Resources for system implementation: Financial resources	Activities costed AND resources available				
Resources for system implementation: Human capacity	There is adequate capacity to fulfil monitoring requirements				
Other elements		RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH					
IWRM					
Inequalities					

Country snapshot: Tanzania

Key features of the monitoring landscape in country
Tanzania manages WASH across different ministries, namely the MoW, MoE, MoH. All these ministries have their own monitoring frameworks. A technical working group was developed for the purpose of localisation of SGD indicators. A national MIS, MAJIS, led by the MoW monitors the water infrastructure and the functionality. Data on water access at household level is estimated but these estimates are not well coordinated and updated in the system. JMP data for access to water relies on surveys (DHS) that are done routinely and the indicators are aligned with SDG indicators. A national sanitation MIS, NSMIS, is led by the MoH and includes WinS and WinHCFs. JMP sanitation estimates are from household surveys. MoE has EMIS which has WASH indicators, but these are not aligned with the SDG 6 indicators.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH monitoring is highly devolved (to ministries or local areas) with no central coordinating function			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with MDGs / SDG limited
	Sanitation	Alignment with SDG basic+
	Hygiene	Alignment with SDG basic

Characteristics of the main monitoring systems	
WASH monitoring system description	Water MIS + HMIS for sanitation and hygiene

System 1: NSMIS	
System scope	Sanitation and hygiene
Lead organisation	Ministry of Health
National coverage (% or description)	Tanzania Mainland (excl. Zanzibar)
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings.
WASH in schools	
WASH in HCF	
Data management	Rolling data collection
Data accessibility and use	Restricted access. Data is accessible to approved partners only.
Resources for system implementation: Financial resources	Activities costed but resources not available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements
System 2: MAJIS	
System scope	Water
Lead organisation	Ministry of Health
National coverage (%)	Nationwide
Urban/rural	
Non-community	Does not include on community settings.
WASH in Schools	
WASH in HCF	
Data management	Ad hoc
Data accessibility and use	Data is not accessible. System is not functional or no access possible beyond or managing the data
Resources for system implementation: (Financial resources)	Activities costed but resources not available

Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements			
Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Uganda

Key features of the monitoring landscape in country
In Uganda, WASH monitoring is split across multiple ministries, with mechanisms established for linking between departments coordinated by the Ministry of Water and Environment which produces the annual Sector Performance Report drawing on data from all WASH monitoring systems. The Ministry of Water and Environment manages the Uganda Water Supply Atlas, a nationwide routine monitoring system dedicated to rural water supply point sources and gravity-fed systems, which includes schools and health care facilities. The database is updated on an ad-hoc basis and the data is open access and available to the public. UPMIS is a routine monitoring system for urban water based on data from utilities. The system benefits from continuous data collection and includes schools and health care facilities if supplied by piped connections. The Ministry of Health administers an HMIS that is operational nationwide, covers urban and rural areas and includes indicators for sanitation and hygiene. The system includes WASH in schools and health care facilities, as well as non-community settings such as IDP camps. Data is updated quarterly but is restricted and only available to sector stakeholders on request. Beyond the HMIS, the Environmental Health Department collects additional data from communities, part of which is focused on CLTS.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)				
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localization: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with SDG basic
	Sanitation	Alignment with SDG basic*
	Hygiene	Alignment with SDG basic

Characteristics of the main monitoring systems	
WASH Monitoring System Description	Water MIS + HMIS for sanitation and hygiene

System 1: Uganda Water Supply Atlas	
System scope	Water
Lead organisation	Ministry of Water
National coverage (% or description)	Nationwide
Urban/Rural	
Non-community settings (POC, IDP, refugee camps)	…
WASH in Schools	
WASH in HCF	
Data management	Ad hoc
Data accessibility and use	Open access. Data (in at least summary form) is available to the public.
Resources for system implementation: Financial resources	…
Resources for system implementation: Human capacity	
System 2: HMIS	
System scope	Sanitation and hygiene
Lead organisation	Ministry of Health
National Coverage (%)	Nationwide
Urban/Rural	
Non-community	Includes non-community settings (e.g. POC/IDP/refugee camps)
WASH in schools	
WASH in HCF	
Data management	Quarterly reports from VHT
Data accessibility and use	Restricted access. Data is accessible to approved partners only
Resources for system implementation: Financial resources	

Resources for system implementation: Human capacity	…
System 3: UPMIS	
System scope	Water
Lead organisation	NWSC / Ministry of Water and Environment
National coverage (%)	Nationwide
Urban/rural	
Non-community	
WASH in schools	
WASH in HCF	
Data management	Continuous data collection
Data accessibility and use	Restricted access. Data is accessible to approved partners only.
Resources for system implementation (Financial resources)	…
Human capacity	…

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Zambia

Key features of the monitoring landscape in country
Zambia has a WASH policy developed by the Ministry of Water Development and Environmental Protection (MWDSEP). An M&E framework for the WASH policy is under development, but there is no single WASH monitoring system. WASH sector monitoring and progress against the SDGs is mainly informed by the surveys – ZDHS, living conditions and census. The coordinated WASH policy and the M&E framework under development is a good opportunity for an integrated monitoring system. A robust national monitoring system is developed by the utilities regulator NAWSCO – and covers urban and peri-urban and feeds in JMP data. The private sector is quite strong and has partnerships with UNICEF in Zambia. There are also two monitoring systems, using real time, for education: the EMIS, which covers the WinS; and also the DHIS, which monitors progress against CLTS. These are not presumed to make up a significant part of the WASH sector monitoring.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localization: Country targets include in policy and aligned with JMP				

Level of alignment with SDG 6 targets and JMP Indicators		
	Water	Alignment with SDG basic+
	Sanitation	Alignment with MDGs / SDG limited
	Hygiene	N/A

Characteristics of the main monitoring systems	
WASH Monitoring System Description	Survey based
System 1: NAWSCO	
System scope	Water
Lead organisation	NAWSCO
National coverage (% or description)	Nationwide
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Annually
Data accessibility and use	Open access. Data (in at least summary form) is available to the public.
Resources for system implementation: Financial resources	Activities costed AND resources available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements
System 2: EMIS	
System scope	All WASH
Lead organisation	Ministry of Education
National coverage (%)	Nationwide
Urban/rural	 
Non-community	n/a (little/no camps settings in country)
WASH in schools	
WASH in HCF	
Data management	Annually

Data accessibility and use	Restricted access. Data is accessible to approved partners only
Resources for system implementation: Financial resources	Activities costed but resources not available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

Country snapshot: Zimbabwe

Key features of the monitoring landscape in country
Zimbabwe benefits from coordination and monitoring of WASH led by the Ministry of Lands, Agriculture, Water & Rural Settlement. There is a national Rural water MIS in operation, that monitors access to WASH, including data on community and institutional WASH, with village and site-level analysis. It also monitors functionality of water sources based on district reporting. Recently, a SMS-based approach to updating has been operationalised in 3/7 provinces. A limitation of the system is data availability for water quality. Some survey led by Ministry of Health the collect water quality and waste management parameters. Additional data on WASH in Schools is captured in a EMIS, which had a revision in 2019 to align with country SDG targets.

Enabling environment	RAG ratings:	Not present, needs to be developed	Needs strengthening	All present, no action needed
Institutional arrangements (sector)	WASH split across multiple ministries, with clearly identified lead ministry which coordinates monitoring			
Sector policy and strategy including an M&E framework				
Sector financing				
JSR processes				
Annual performance report (or sector performance report)				
Localisation: Country targets include in policy and aligned with JMP				
Level of alignment with SDG 6 targets and JMP Indicators				
Water	Alignment with MDGs / SDG limited			
Sanitation	Alignment with SDG basic			
Hygiene	N/A			

Characteristics of the main monitoring systems	
WASH monitoring system description	Single MIS
System 1: Rural WASH IMS	
System scope	All WASH

Lead organisation	Ministry of Water, Dept of WASH Coordination
National coverage (% or description)	Nationwide
Urban/rural	
Non-community settings (POC, IDP, refugee camps)	Does not include on community settings
WASH in schools	
WASH in HCF	
Data management	Annually
Data accessibility and use	Open access. Data (in at least summary form) is available to the public
Resources for system implementation: Financial resources	Activities costed AND resources available
Resources for system implementation: Human capacity	There are capacity constraints in fulfilling monitoring requirements

Other elements	RAG ratings:	No monitoring data	Data available but not integrated	Data available and integrated
Humanitarian WASH				
IWRM				
Inequalities				

List of acronyms

ASWA	Accelerated Sanitation and Water for All program
CRM	Customer relationship management (in reference to utility customer databases)
DGIS	Directorate-General for International Cooperation
ESARO	Eastern and Southern Africa Region
FAO	UN's Food and Agricultural Organization
FCDO	Foreign, Commonwealth and Development Office
FSM	Fecal sludge management
FSNMS	Food Security and Nutrition Monitoring System
GLAAS	Global Analysis and Assessment of Sanitation and Drinking Water
HCF	Health care facilities
HMIS	Health management information system
IWRM	Integrated Water Resources Management
JMP	UNICEF/WHO Joint Monitoring Program
JSR	Joint Sector Review
KII	Key informant interview
M&E	Monitoring and evaluation
MICS	Multiple Indicator Cluster Survey
MDG	Millennium Development Goal(s)
MIS	Management information system
MoH	Ministry of Health
NSO	National Statistics Office(s)
RAG	Red, Amber, Green rating
SDG	Sustainable Development Goal(s)
SWA	Sanitation and Water for All

UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene
WFP	World Food Program
WHO	World Health Organization

References

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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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Readers are encouraged to quote from this publication but UNICEF requests due acknowledgement. You can learn more about UNICEF's work on WASH here: https://www.unicef.org/wash/

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