



Data to Action: Strengthening data practices to improve WASH services

A briefing note from the Safe Water Partnership 'Data to Action' E-Learning event on March 6, 2022

The [Safe Water Partnership](#) (SWP) held an E-Learning session on 6 March 2022, titled 'Data to Action: Strengthening data practices to improve WASH services.'

The goal of this interactive session was to harness lessons learned by project partners over the course of their Conrad N. Hilton Foundation supported projects to identify ways to 1) enhance the use of data for planning and implementing responsive, sustainable programs, and 2) ensure that all stakeholders have access to usable and useful data systems. The session included plenary presentations from partners across the SWP as well as small-group discussions that allowed all participants to discuss their experience using data within the partnership.

This briefing note outlines highlights of best practices and key challenges shared during these plenary presentations and small group discussions.

Plenary Presentations: Case Studies

Uganda: Improving Revenue Collection, *Aquaya*

Partners shared their experiences using qualitative focus group discussions to understand water users' preferences for funding operation and maintenance of rural water systems. They found that most users preferred paying a flat fee over pay-as-you-fetch models. After sharing results with the District Water Department, Aquaya worked with the District to pilot a program with 10 Village Saving and Loan Associations (VSLA) to pool their resources into a water point operations and maintenance fund. Within the first year, VSLA members pooled 16 times more funding compared to members not in the VSLA, showing the benefit of soliciting user preferences in program design.

“Well analyzed data that is availed and discussed leads to improved services to communities.”

Ghana: Using Local Water Quality Data to Promote Chlorination, *Aquaya*



One of the technologies used as part of chlorination pilot

Partners presented their experience sharing water quality data with community members and local government to generate support for water treatment. Aquaya partnered with local labs to test the quality of water sources serving half the district population and found that 70% of sources were contaminated with *E. coli*. Aquaya shared these results with the District Water and Sanitation Management Teams and the District Assembly, who in turn shared the results with community members through multiple forums. Once aware of the situation, the local government and community advocated for water treatment throughout the district. This has led to the adoption of a pilot water chlorination system with strong government and community support.

“Because of existing relationships with local government and partners, we were able to have these conversations.”

Ghana: Data for implementation and tracking District Master Plan, *Asutifi North District Assembly*

A representative from Asutifi North District Assembly shared how service monitoring data, collected in partnership with SWP partners, has been integrated into an online dashboard that the District Assembly, SWP partners, and other WASH actors in the district have been using to track progress on implementation of the District Master Plan and inform decision making around implementation activities. The dashboard, hosted on mWater, has helped stakeholders identify priority communities most in need of improved water services and has helped the District Assembly mobilize and allocate resources effectively.

Factors that enabled data use: 1) Data was relevant, credible and presented in accessible ways, 2) local staff were involved in data collection and had the capacity to collect and analyze data for decision-making, and 3) financial capacity to act on data.

Burkina Faso: Using Qualitative Data to Design Responsive Programs, *Espace Culturel Gambidi*

Partners shared how they have used various qualitative data collection approaches to understand healthcare worker and community member's needs to inform design of programs intended to improve WASH in Healthcare Facilities (HCFs). Methods included "mystery users" (anonymous comments from healthcare workers), analyzing discussions from interactive radio shows, and participatory site visits. These qualitative methods helped project partners identify where the current WASH systems were not meeting the needs of healthcare workers and patients and informed both behavioral interventions and infrastructure improvements.

Built on a foundation of trust between stakeholders, these collaborative and participatory methods led to improvement of WASH infrastructure and behaviors within HCFs and the wider community.



Locally produced kabakuru soap

Small group discussion: Ensuring all stakeholders have access to useable and useful data systems

The group shared examples of how they have used or created collaborative data platforms, highlighting elements that worked well and helped ensure that all stakeholders have access to useable and useful data systems. They also discussed challenges in using these collaborative systems as well as key principles for strengthening data systems to make sure that they are available to and usable by all.

Characteristics of effective data systems

In an effective system, data is all in **one place** and contains a variety of relevant indicators, enabling users to easily **measure progress towards goals**.

Useful data systems include **simple and easily understood visualizations**, taking into consideration the data literacy level of the target audience.

Challenges

It can be **cumbersome to clean and validate data** before it can be used, creating a tension between the desire to have data quickly and the desire to have clean and accurate data. The process can further be complicated if the right people do not have access to the system to make these changes.

If data systems are not designed to be shared externally from the start, it can **be hard to repurpose** them once data has already been collected and uploaded.

Indicators are not always consistent across geographies or thematic areas, making comparisons at the county or national level challenging. Harmonized indicators that do exist, such as the Joint Monitoring Programme service levels, are not always well aligned with the needs of local or national initiatives.

Data systems often require **significant training** before they can be used, posing a **barrier to access** and limiting their usefulness.

Principles for strengthening systems

Future data systems should work off what is already there and **strengthen existing systems** instead of building new ones.

Promote better understanding and use of systems by **simplifying data collection** processes and providing **capacity building** through ongoing training.

Stakeholders need to be **engaged throughout the entire data lifecycle** including early stages of the visualization process.

Sufficient budget should be allocated to fund ongoing maintenance of data systems to support their long-term use.

Small group discussion: Using data for planning responsive, sustainable WASH Systems

Participants reflected on examples of successful use of data to inform programmatic decision-making and ensuring that projects/activities meet community needs, highlighting examples of what has worked well and the challenges they face.

Successful uses of data

Baseline data is essential to ensure there is an accurate understanding of problems/gaps. This information should then guide choices on where and how to intervene, including appropriate mobilization of resources.

Beyond baseline data, data collected throughout the lifecycle of a project can help **monitor program performance** to identify approaches that aren't working or areas that need additional support, as well as **advocacy** for adapting approaches or initiating new interventions.

Best practices

Involving stakeholders in data collection can help them better understand the situation and encourages ownership of the intervention process. It can also reduce costs and help **integrate data into government systems**, such as involving water engineers in collecting daily information.

It is beneficial to align **tools with government policies and guidelines**, especially if the goal is transferring ownership to the government which may be restricted to using Ministry-approved tools.

We do not always have to collect our own data – when available, it is possible to **use existing data** from MIS systems or other sources (although these often do not have the data needed).

The right data can help **anticipate future needs** throughout the program such as identifying which water points are most at risk of failing.

Successful use of data requires a **good relationship and ongoing dialogue** between the people engaged in monitoring and evaluation (M&E) and decision makers / stakeholders, including community members.

Challenges

Technology: Issues with stability of internet connection and access to sufficient computer facilities.

Coordination: Hard to coordinate and harmonize collection efforts to avoid duplication – different stakeholders have different data needs; hard to share data across platforms, i.e., Akvo, mWater.

Trust and confidence in data: Concerns about social desirability bias in data (e.g., people telling you what they think you want to hear rather than reporting the real situation).

Data availability: Although partners would prefer to utilize existing data and not to duplicate efforts, relevant district- or facility-level data is often not available in government data systems.

Small group discussion: Ensuring that project data is relevant for government and community partners

Participants provided examples of how project data has been used to influence decisions and actions of community partners, highlighting characteristics that make data useful to partners and reflecting on outstanding challenges that need to be addressed to ensure future data is used by partners.

Successful uses of data

Data has been used to **help partners understand** the nature of WASH-related problems and allows them to **systematically work towards improvement goals**.

Data has been used to **target interventions** to where resources are truly needed; enabling the local government to **plan** and **budget** for WASH service delivery.

Characteristics of useful data

For data to be useful, it needs to be **available, accessible, and relevant** to partners; **aligning with priorities** and required information.

Good data is **flexible** and can be leveraged for different purposes.

Data that has these characteristics is more likely to be **discussed**, which is an important step in the effective use of data.

Outstanding challenges

Integration into government systems and processes; once data has been collected it can be challenging to promote its use by government partners.

Partners **may not always have the capacity** to collect and use data, including challenges with **data literacy**. This can lead to a **lack of trust** in data validity and prevent uptake of data.

Key takeaways: Overall best practices for strengthening data practices to improve WASH services

Data systems and their associated collection, analysis, and dissemination processes should be designed with government and community partner needs in mind from the start.

Continued training and capacity building is essential to ensure that all partners can collect, understand, and successfully use data for advocacy and decision-making.

Resources for further reading

1. [Hilton Safe Water Strategy](#)
2. [WATER QUALITY TESTING ASSURANCE FUND: LESSONS LEARNED.](#) A Research Brief by Jessie Press-Williams, Caroline Delaire, Bashiru Yachori, AJ Karon, Rachel Peletz, and Ranjiv Khush
3. [WILLINGNESS-TO-PAY FOR WATER MANAGEMENT IN KABAROLE DISTRICT, UGANDA.](#) A Research Brief by Katherine Marshall, Vanessa Guenther, Caroline Delaire
4. [D2D Data in Water and Sanitation: Bridging the Gap Between 'Technically Brilliant' and Real-World Decision-Making.](#) Phase 2: Case Study Phase and Testing of Framework Ghana, Asutifi North District Assembly. Case-Study Brief [Draft]
5. [Asutifi North District WASH Console](#)

Thanks to all presenters and participants who shared their experiences using data for decision-making within Hilton SWP Projects.