

triple-s

Service Delivery Indicators: a tool for improving rural water services

MAIN MESSAGES

→ Findings

- The more detailed and disaggregated information provided by the SDIs can support better budgeting and planning at district level.
- Application of the SDIs costs around UGX 26 million per district per round of data collection. National application with district level scores would cost around UGX 165 million.

→ Recommended next steps to improve sector monitoring

- Adopt a limited number of the SDIs that focus on additional aspects of service delivery, to supplement the Golden Indicators.
- Conduct a comparative evaluation with other monitoring systems in use in Uganda – covering factors such as cost, reliability, and usability by actors at national and subnational levels.
- Organise training in SDIs for sector professionals representing the range of potential users, including donors and NGOs as well as government users, and encourage trial use to demonstrate value.

The Uganda WASH sector has been using a set of 11 'Golden Indicators' to measure its performance for more than ten years. While the information provided by the Golden Indicators is useful for national-level planning and identifying general problems around rural water supply, it is not detailed enough to guide district-level planning or to enable District Water Offices to take corrective action.

As a supplement to the Golden Indicators, the Service Delivery Indicators (SDIs) developed under the Triple-S initiative enable the user to make a more in-depth analysis of the factors that underlie performance in rural water services delivery at minimum cost and with minimum technical support.



Water quality is one of the sub-indicators used to measure the level of service delivered. (Photo: Martin Watsisi/ IRC Uganda)

To jump start rural water supply coverage and functionality, which has stagnated over the past several years at around 65% and 80% respectively, more fine-grained information is needed than what is currently provided through Uganda's national monitoring system. The SDIs fill a gap by providing more detailed information on service levels and the performance of service providers at the district and sub-county level, enabling District Water Offices (DWOs) and the Technical Support Units (TSUs) to better direct resources and take remedial actions. They also measure the performance of the DWOs and TSUs – signalling to national-level decision makers where more training or resources may be needed. The SDIs can be used both as a monitoring and a research tool.

SERVICE DELIVERY INDICATORS AND APPLICATION

The SDIs, which can be applied on both point sources and piped schemes with tap stands, describe the way in which water supply services are delivered and supported across the different levels of service delivery:

- Service delivered: assessing compliance of the water service received by users with national norms for quantity, quality, accessibility, and reliability.
- Users' level: measuring users' satisfaction with the service, as well as their participation in the management and maintenance of the facility.
- Service provider level: looking at Water Source Committees' composition, governance and performance of duties.
- Service authority level: investigating how districts and sub-counties fulfil functions such as planning,

coordination, over-sight of water services, and post-construction support to service providers.

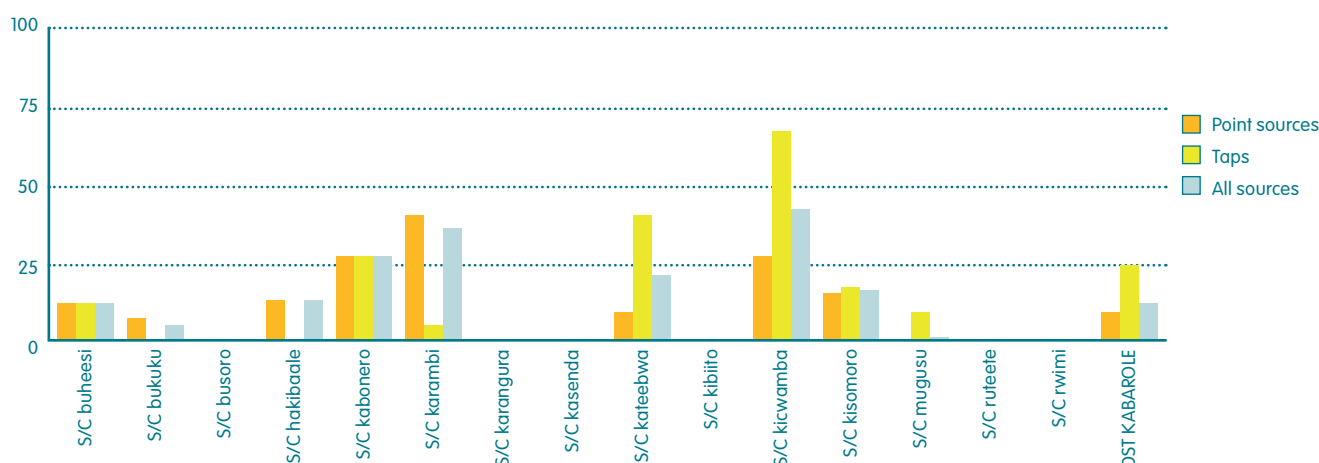
The SDIs are composite indicators that provide overall performance 'scores' of between 1 and 100 for the different levels based on 48 sub-indicators. The composite nature of the indicators makes it easy to evaluate performance and also to analyse in detail the factors that influence it. For example, the user can see the headline scores for service providers of different sub-counties, and looking into the sub-indicators, see that the score is high in one particular sub-county because of good user ratings or that is low in another because of poor user fee collection.

The SDIs also provide information on the actual service delivered. So, for example, while the coverage figure of 87% may lead to the conclusion that constructing new water sources should not be a high priority in Kabarole district, the more detailed information provided by the SDI reveals that more water points would be needed to meet accessibility standards (see Figure 1).

Sampling instead of census

To reduce time investment and logistics costs, the SDIs are applied on a sampling basis rather than on a full census covering all water points. To have a reliable survey at sub-county level requires selecting 11 water points randomly in a sub-county that has about 100 water points. For Kabarole with 15 sub-counties and approximately 1000 water points, the sample size is 165, or about 16% of the total number of water points. Information based on sampling can be used for sector analysis and planning. Census information that provides information on all water facilities is important for asset management.

FIGURE 1 SCORE (%) ACCESSIBILITY FOR ALL WATER FACILITIES IN KABAROLE DISTRICT, DISAGGREGATED BY SUB-COUNTY



The score is based on the percentage of water facilities that comply with government standards on maximum number of users and distance (1 km, 30 min round trip).

Data collection and storage

Data collection and storage is done through a digital data system, based on the openXdata platform. Data is collected using mobile phones by data collectors recruited from among hand pump mechanics who know the area and location of the water points. Information is gathered by observations and key informant interviews – for example with the DWO. The duration of the survey of one water point is half a day, which means that data collection for Kabarole takes about 80 person days, which can be carried out in two to three weeks depending on the number of trained data collectors. The data collection process needs to be continually supervised and the data submitted checked online by a researcher daily.

Reporting and sense-making

The SDI reports are automatically generated by the system and can be printed in PDF. These reports are the basis for the most important step of the SDI: the analysis that gives meaning to the reports. Sense-making is best done through a participatory process involving those stakeholders that have an interest in the questions

researched. Depending on the experience of the stakeholders involved, expert guidance and facilitation may be needed.

CHALLENGES ENCOUNTERED

Stakeholders are concerned that there are too many indicators. An evaluation is still needed to determine if a smaller set of indicators would be sufficient to support corrective action or if the complexity of the system indeed necessitates the level of disaggregated data provided by the current set of SDIs.

During the first implementation of the survey, data collectors made numerous mistakes. To ensure good quality data, the survey process must be carried out following strict protocols and with adequate supervision.

COSTS OF IMPLEMENTING AND SCALING

The cost estimates in the table are based on two rounds of data collection in two districts and are only indicative. The costs depend on both the number of survey points and the relative distance between points.

TABLE 1 INDICATIVE COSTS FOR APPLICATION OF SDIS IN US\$ (US\$ 1 = UGX 2533)

	Required sampling size (approximate)	Methodological support	Field supervision	Data collection	Rounded totals
One district with sub-county scores*	120 survey points, 10 randomly selected in each sub-county	3,158	2,369	4,737	10,000
National survey without district scores	120 randomly selected survey points**	3,948	3,948	11,844	20,000
National survey with district scores	1200 survey points with 10 randomly selected in each district	5,922	11,844	47,375	65,000

* Based on a district with 12 sub-counties.

** Entails higher logistical costs due to greater travel distances for survey teams.

Recommendations

In discussions with the Ministry of Water and Environment (MWE) the next step identified is to adopt a limited number of the SDIs that focus on additional aspects of service delivery to supplement the Golden Indicators. A decision should be reached as to what body will take responsibility for overseeing the application of the SDIs, managing and analysing the data collected, and communicating the resulting information to decision makers. Within MWE possible candidates are: the policy analysis unit of the water department; the regulation unit (presently only urban); and the Appropriate Technology Centre, which has a research mandate. Other recommended actions include:

- Conduct a comparative evaluation with existing monitoring systems in Uganda, taking into account factors such as: costs; time between data collection and reporting; reliability and depth of the data; and, use of data for planning, budgeting and action both at national level (sector performance review) and district level (improving service delivery).
- Organise awareness raising and training activities for sector professionals representing the whole range of potential users: MWE, TSUs, DWOs, Donors, NGOs.
- Carry out a national-level survey and use the reports as input for the Joint Technical Review in 2015. This will provide an opportunity for all sector stakeholders to assess the usefulness of the SDIs.

REFERENCES AND ADDITIONAL RESOURCES

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Additional resources on Service Delivery Indicators are available through the Triple-S website. See *Facilitating local monitoring of rural water service delivery*, at: www.waterservicesthatlast.org/experiments/uganda_experiments/facilitating_local_monitoring_of_rural_water_service_delivery.



The SDI tool allows an assessment of user satisfaction
(Photo: Lydia S. Mirembe/ IRC Uganda)

About IRC

IRC is an international think-and-do tank that works with governments, NGOs, businesses and people around the world to find long-term solutions to the global crisis in water, sanitation and hygiene services. At the heart of its mission is the aim to move from short-term interventions to sustainable water, sanitation and hygiene services.

With over 40 years of experience, IRC runs programmes in more than 25 countries and large-scale projects in seven focus countries in Africa, Asia and Latin America. It is supported by a team of over 100 staff across the world.

For more information about IRC, go to www.ircwash.org

About this Brief

This brief is authored by René van Lieshout, Senior Programme Officer in IRC. It is based on research conducted under the Triple-S (Sustainable Services at Scale) initiative, a learning initiative to improve water supply to the rural poor, carried out in Uganda, Ghana, and Burkina Faso.

In Uganda the initiative is spearheaded by a consortium of partners: the Uganda Ministry of Water and Environment (MWE), the Network for Water and Sanitation (NETWAS), the Uganda Water and Sanitation NGO Network (UWASNET), SNV Netherlands Development Organisation Uganda and IRC Uganda.

For more information see: www.waterservicesthatlast.org

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