



Vicent Mbabazi, Eastern Umbrella of Water and Sanitation

CASE STUDY

EQUITYTOOL wealth assessment improves targeting and outreach

The USAID Uganda Sanitation for Health Activity uses EQUITYTOOL wealth assessment to understand project beneficiary profiles, and effectively target outreach and build pro low-income earner solutions to increase private water connection uptake



This case study is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents of this case study are the responsibility of Tetra Tech and do not necessarily reflect the views of USAID or the United States Government.

BACKGROUND

Poor sanitation poses significant and ongoing threats to health and nutrition in low- and middle-income countries (LMICs). In Uganda, inadequate access to sanitation results in an annual economic cost, in lost productivity and medical costs, equivalent to US\$ 177 million.¹

To address this situation, in January of 2018, the Government of Uganda (GoU), through the USAID Uganda Sanitation for Health Activity (USHA), began a 5-year² collaboration with a consortium of water, sanitation, and hygiene (WASH) experts to increase the number of people with access to improved and sustainable WASH services in 20 districts in Uganda.

Through a series of integrated workstreams in districts, communities, health centers, schools, and households, USHA focuses on achieving three interdependent goals aligned with the GoU's Integrated Sanitation and Hygiene Pillars:

1. Increasing household access to sanitation and water services;
2. Expanding the adoption of key hygiene behaviors in homes, schools, and health facilities; and
3. Strengthening district water and sanitation governance, for sustainable service provision.¹

USHA's lead implementing partner, Tetra Tech, was tasked with supporting Uganda's Umbrella Authorities (UAs)³ to increase access for low-income households in rural and peri-urban communities to private water connections.

CHALLENGE: ENSURING THAT THE PROGRAM IS TRULY REACHING LOW-INCOME EARNERS

A central objective of USHA is to improve WASH access for low-income earners. To this end, USHA requires that 50% of the water connections subsidized by the project are for households in the lowest 40% (quintiles 1 and 2) of local economic status.

"Initially," says Engineer Diana Keesiga, Director of Engineering and Construction at USAID USHA, "we were using the standard wealth index, based on the Demographic Health Survey questionnaire, to inform the development of the different approaches on the project. This has about 40 questions that need to be answered to construct the wealth indices." Baselineing thousands of households in this way resulted in wealth indices that were time consuming and cumbersome to construct, and which could not be easily replicated. "We needed to find an approach or a tool that was easy to use and could easily be replicated by government and other implementers in other areas," continues Ms. Keesiga. "We looked for other methodologies that we could use to generate wealth indices." The EquityTool was that solution.

¹ <https://www.globalwaters.org/HowWeWork/Activities/uganda-sanitation-health-activity>

² The project received a 6-month extension and is now scheduled to close in July 2023.

³ A Ugandan utility focused on water provision.

⁴ EquityTool questions are largely binary.

EquityTool

- A simple way to assess if programs are reaching low-income earners.
- A collaborating panel of experts* in the field of wealth measurement and relative wealth indices worked together to develop a validated method to simplify equity assessment.

*Partners included UNICEF, USAID, Population Services International (PSI), MSI Reproductive Choices, Results for Development, BroadBranch, and Metrics for Management.

SOLUTION: REAL-TIME WEALTH ASSESSMENT TO UNDERSTAND USHA'S TARGET COMMUNITY

The EquityTool is a simple and easy-to-use tool that allows users to measure relative wealth by the comparison to an index established using the wealth of respondents to the national or urban-only population of the country. It provides a short set of questions that can be incorporated into any survey platform and is free to use. The short set of questions facilitates easier and faster – and, potentially less expensive – data collection and analysis of wealth distribution. This allows for fast and accurate comparisons across programs and populations. EquityTool data lets users make near real-time adjustments in program delivery that increase organizational effectiveness and strengthen program outcomes.

The EquityTool uses a short survey, which can be completed in a few minutes, to measure household wealth based on country-specific questions that can be adjusted to the context. It is available for over 60 countries and survey questions are pre-translated into local languages. Each country-specific EquityTool questionnaire identifies what percentage of respondents are in each national or urban wealth quintile, and supplies the appropriate statistical code and assessment instructions for analysis. Compatible with any data collection platform – even paper-based systems – the EquityTool requires only six to 18 questions from the DHS Wealth Index for a respondent's country, reducing the number of variables needed for accurate wealth assessment.

The USHA team adopted the methodology of the EquityTool to assess the socio-economic profile of households in five towns with water supply services managed by two UAs. Integrating the 11 questions that make up the Uganda EquityTool⁴ questionnaire into the general USHA baseline survey enabled the team to efficiently identify what quintile each applicant household occupies. The ease of use also allowed the team to assess wealth status for applicants who did not participate in the initial baseline.

"The EquityTool," says Ms. Keesiga, "provides a platform where you just input the data by line, and generate a printout, if you don't have abilities to be able to program an Excel sheet and analyze the data on your own. Now, measuring the wealth status of the household you have served is easy. It's not something that you have to dread, getting through those exit interviews, collecting those 40 questions and constructing indices. Now, it's something you can look forward to. It's data that you can collect from the onset to use for decision making, and easily integrate into an existing process. It really makes life easy."

RESULTS: TARGETED OUTREACH TO IDENTIFY AND DEVELOP SOLUTIONS THAT WORK FOR LOW-INCOME EARNERS

Despite the desired USHA focus on bottom two quintiles, initial EquityTool analyses midway through the program showed that more than 70% of the initial households applying in response to the community promotional campaigns were not from the bottom two quintiles. The critical question, then, was, “Why aren’t the UAs reaching the people most in need?”

Fortunately, having real-time wealth assessment data for the target communities showed the USHA team exactly who those people were. The team then developed a strategy of targeted outreach to those in the bottom two quintiles, to learn why they were not applying for water connections, and what adaptations were needed to make household water connections affordable and attractive to low-income earners in the community.

The initial cost of getting a connection was a barrier for the lowest income earners. After identifying cost as a significant barrier for those in the bottom quintiles, the team used EquityTool data to assess ability to pay and willingness to pay, by wealth quintile. Previously, the team had struggled with this categorization of target households because information supplied by community members was often intended to bias results in their favor. The EquityTool questionnaire provided simple, objective measures that UA analysts were able to easily assess while conducting outreach visits, ensuring accurate assessment of a household’s financial condition.

Plotting the wealth quintile against what respondents indicated they were willing to pay, the team found that 80% of people were willing to pay about 50,000 Ugandan shillings (US\$ 13) for a water connection. When the cost doubled, however, from 50,000 to 100,000 shillings, willingness to pay dropped dramatically: less than 20% of respondents were willing to pay the higher rate. The lowest actual cost of a connection, however, was 300,000 shillings (US\$ 82).

This analysis enabled the team to allocate program costs, identifying how much the cost of connections could be, and what level of subsidies were needed to encourage as many households as possible to get connected. In the end, USHA developed a cost scale between 50,000 and 100,000 Ugandan shillings, based on the wealth profiles of households served by different schemes. At schemes serving more rural areas, households, for example, might pay 50,000 shillings, while in more affluent areas, households would be charged 100,000 shillings. The team then conducted community meetings explaining the right-sized connection fee, and received an influx of applicants for new connections.

This influx posed another challenge. Wealthier applicants had the ability to save the required fee more quickly than low-income earning applicants, and with over 800 applications coming in, and limits to available resources, a ‘first come, first served’ approach risked once again upsetting the program balance of higher income and lower income households benefiting. The EquityTool data enabled USHA to ensure that program subsidies were allocated to those in the bottom quintiles. They then worked with the UA to connect higher income applicants with other assistance programs.

Having established a mid-point baseline when they adopted the EquityTool, UA’s scheme staff was also able to recognize that even with the lower advertised fee, they were not getting their required minimum of 50% of applicants from the bottom two wealth quintiles. They conducted another door-to-door outreach to these households, to learn why they still were not participating in the program. In some cases, respondents revealed that they wanted the connections, but struggled to complete the applications. This problem was easily sorted: UA’s scheme staff helped the low-income households through the application, and they were able to get their water connections.

Other households were not immediately able to meet the program-required sanitation status. USHA gave these households more time to bring their sanitation status to where it needed to be. Another group of respondents indicated that they were able to pay the fee over time, but as an up-front cost, it was beyond their means. Again, UAs were able to easily resolve this concern, and increase access to safe water, through a simple, data-based solution; in this case creating a payment plan.

During their assessments, the USHA team identified a data challenge in working in peri-urban contexts. Comparing these respondents to the national population in EquityTool resulted in most respondents falling into quintiles four and five, a result that did not seem correct to the analysts. The team considered ways of approximating area-specific wealth quintiles, but after consulting with Metrics for Management, they reanalyzed the data using the EquityTool feature that allows comparison with only the urban population. This resulted in a distribution that more effectively represented the observed conditions. Ms. Keesiga highlights this feature as particularly helpful.

Lessons Learned

- Because the EquityTool is simple to use, it makes wealth assessment more practical and gives it wider applicability throughout the life of a program.
- The value of reliable, replicable real-time wealth assessment goes beyond baseline evaluation, supporting day-to-day decision making.
- Real-time wealth assessment improves client targeting and supports rapid development of pro low-income earner solutions to specific customer challenges.
- The ability to compare a sample to either rural or urban population allows for a more effective wealth assessment.
- EquityTool helps to eliminate the challenge of biased customer reporting by enabling assessors to assess wealth easily and objectively.

NEXT STEPS

- With the 6-month project extension, the team was asked to expand from their two existing UA partners to include a third UA. After success using the EquityTool to resolve challenges in both overall wealth assessment and also specific targeting and solution building, the team decided to use the EquityTool from the start of their work with the new UA.
- Continue introducing implementing partners working with other UAs to the EquityTool.
- Facilitate scale-up of EquityTool use throughout Uganda working closely with the Ministry of Water and Environment.

M4M can help you use the EquityTool in your project. For more information contact communications@m4mgt.org.

For more information on Uganda Sanitation's use of the EquityTool contact Jonathan.Annis@tetrattech.com.



Vicent Mbabazi, Eastern Umbrella of Water and Sanitation

FIGURE 1. KAMENGO: SOCIOECONOMIC DATA RESULTS FROM 1,022 HOUSEHOLDS INDICATED THAT 26% WERE IN QUINTILE 3 AND 25% WERE IN QUINTILE 5 (URBAN POVERTY QUINTILES)

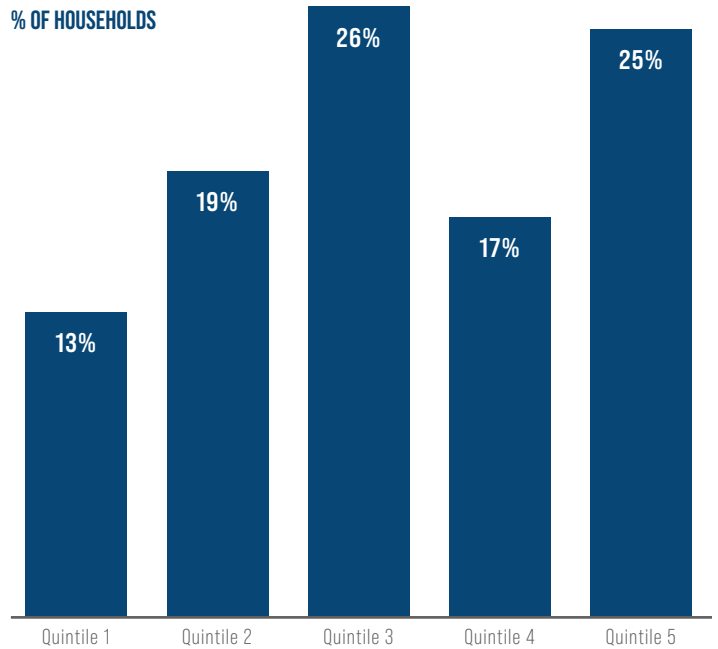


FIGURE 2. KAMENGO: OF 297 EXISTING CUSTOMERS, 59% OF HOUSEHOLDS WERE IN QUINTILE 5 (URBAN POVERTY QUINTILES)

