CASE STUDY

EquityTool helps identify those most in need

Routine monitoring of equity in a sanitation delivery project in Benin and Côte d’Ivoire demonstrates the EquityTool’s versatility and adaptability, including seamless integration with DHIS2.
Delivery of sanitation services is a challenge in many parts of the world, yet successful sanitation service delivery is critical in reducing illness and death from diarrheal disease. Recognizing this as a public health issue, from 2014-2021, Population Services International (PSI) collaborated with international and local partners and communities in Benin and Côte d’Ivoire to implement and evaluate the Sanitation Service Delivery (SSD) project, a regional urban sanitation project funded by USAID. The focus of the project was to achieve better sanitation outcomes in project communities by implementing and testing different scalable business models involving private sector latrine and fecal sludge management service providers, to support the creation of an enabling environment for sanitation among the urban poor.

Initially implemented in three communes in Benin, and seven in Côte d’Ivoire, SSD supported market-based approaches for increasing the use of improved sanitation and working to link public and private sectors to provide better sanitation services, influencing the region’s sanitation sector to create a more effective, efficient, and inclusive sanitation market for the urban poor. Project activities and deliverables varied according to the needs of specific project populations, but all were designed to contribute to increasing the safe disposal and/or reuse of fecal waste, at scale, and sharing learning on market-based approaches to provide sanitation services in West Africa.

This case study describes how the use of ongoing wealth assessment by PSI allowed the project to determine what proportion of their clients came from each wealth quintile and provided valuable information on the importance of wealth assessment throughout the life of a project.

**BACKGROUND**

Seeking a widely accessible and applicable wealth assessment solution that provided the needed level of reliability, limited the time investment, and provided clear, simple, fast analysis, without increasing the project budget, the SSD team turned to the EquityTool, developed by Metrics for Management.

In 2018, the SSD project team began using the EquityTool to monitor the distribution of SSD clients relative to published country wealth quintiles. This enabled the team to track uptake among the poorest urban residents (the lowest two wealth quintiles as defined in the project logframe), and report on the proportion of people gaining access to basic/improved sanitation by wealth quintile.

Because SSD teams were using DHIS2, an open source, cloud-based information system, to collect and report data on product sales, sanitation service provision, client satisfaction, and supervision data for the project, the EquityTool’s seamless integration with DHIS2 was appealing. PSI spearheaded EquityTool development and this was the first use of the DHIS2 version of the EquityTool.

The EquityTool, as a web-based product, is easily accessible through any connected computer, tablet, or smartphone. It provides files for each country for import into other software, which in this example, made activation as simple as importing the DHIS2-compatible metadata package from the EquityTool website into PSI’s DHIS2 instance and using the EquityTool’s questionnaires, deployed in French, for Benin and Côte d’Ivoire. Given that SSD’s focus was exclusively on urban areas, the project’s equity measures were based on the urban populations reference group. SSD staff collected wealth data and other data points directly on smartphones or tablets through the DHIS2 mobile app for Android. Aside from running into occasional connectivity challenges in the early days of implementation in field locations, which were effectively resolved, they found implementation to be simple and straightforward.

In Benin, standard EquityTool questionnaires addressed factors such as building materials in the home, type of drinking water, type of toilet (prior to the SSD intervention), cooking fuel use, and primary material used in the construction of the exterior walls. Standard Côte d’Ivoire EquityTool questionnaire questions encompassed these items, too, and also focused on measures such as access to electricity and possession of certain types of functioning hardware and equipment (e.g., subscription to satellite TV).

**CHALLENGE: REACHING THOSE WITH THE GREATEST NEED**

As an organization that prioritizes serving vulnerable populations, PSI wanted to assess if they were reaching the most vulnerable in the communities receiving SSD services. Traditionally, methods for identifying poor clients are expensive or imprecise, and therefore, used infrequently. Sustainable sanitation was as important to PSI as sanitation delivery. The work was driven by this indicator: Proportion of people gaining access to sanitation (basic/limited/improved) as a result of project activities who are from the lowest 40% wealth group.

Experience had taught PSI that relying on household questionnaires and exit interviews using standard Demographic and Health Survey (DHS) questions to assign respondents in wealth quintiles was a difficult, time consuming process and the analysis was typically complex.

RESULT: A FLEXIBLE WAY TO ASSESS WEALTH IN REAL TIME

With the need to assess wealth profiles across multiple communities and communes, in two different countries, SSD required easily adaptable wealth data collection questionnaires to ensure correct understanding of the unique wealth criteria of project communities.

The ability to easily customize EquityTool survey questionnaires with additional questions and variables, while maintaining the integrity of the tool’s core wealth calculations, is a key advantage to using the EquityTool.

In addition to customizing the survey, PSI also fixed small bugs and tested updated versions to remain compatible with DHIS2 upgrades.

EquityTool: A COLLABORATIVE EFFORT

A collaborating panel of experts in the field of wealth measurement and relative wealth indices – including USAID, UNICEF, PSI, MSI Reproductive Choices, Results for Development, BroadBranch, and Metrics for Management – worked together to develop a validated method to simplify equity assessment. PSI led the analysis for the simplification, while Metrics for Management has led the development into a multi-platform tool and continues to support and update the underlying analysis.

The EquityTool is a simple and easy-to-use tool to measure relative wealth. Using a short survey, the EquityTool allows users to compare the wealth of respondents to the national or urban population. It is short, web-based, and free to use. Each country-specific EquityTool questionnaire identifies what percentage of respondents are in each national wealth quintile, automatically calculates results, and formats them into a simple downloadable report.

The EquityTool is compatible with virtually any data collection platform – even paper-based systems – and requires only six to 18 questions from the DHS Wealth Index for a respondent’s country. This facilitates easier and faster – and, potentially less expensive – data collection and analysis of wealth distribution, resulting in fast, accurate, and more frequent (i.e., quarterly) comparisons across programs and populations. Survey questions are pre-translated into local languages and can be completed in a few minutes. The EquityTool is available for over 60 countries and across development sectors to make real-time adjustments in program delivery that increase organizational effectiveness and strengthen program outcomes.

FINDINGS: EQUITABLE SERVICE REQUIRES TIMELY MEASUREMENT

In Benin, SSD equity data collection was initially combined with that for the monitoring of client satisfaction. After the pilot phase, however, the teams decided to routinely collect equity data following the construction of the septic tank or latrine.

Between March 2018 and January 2021, more than 15,000 valid EquityTool responses were collected in Benin, including both landlords and tenants, with the proportion of households by type of client and by wealth quintile, automatically calculated and rendered on dashboards for the program team to monitor and act on. The results show that initially, around 40% (38%-42%) of clients fell in the two lowest wealth quintiles, but subsequently, after new business models were implemented in expanded project areas, the majority of households were in the third and fourth quintiles.

Relative Wealth of SSD Beneficiaries in Benin

<table>
<thead>
<tr>
<th>Month</th>
<th>Urban quintile 1: poorest</th>
<th>Urban quintile 2: poor</th>
<th>Urban quintile 3: middle</th>
<th>Urban quintile 4: wealthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr to Jun 2018</td>
<td>41</td>
<td>28</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Jul to Sep 2018</td>
<td>43</td>
<td>28</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Oct to Dec 2018</td>
<td>45</td>
<td>22</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Jan to Mar 2019</td>
<td>49</td>
<td>20</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Apr to Jun 2019</td>
<td>38</td>
<td>28</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Jul to Sep 2019</td>
<td>38</td>
<td>28</td>
<td>14</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: Benin DHS 2011

No surveyed respondents were in urban quintile 5.
In Côte d’Ivoire, equity data was collected as part of routine feedback gathering from clients, with household representatives asked questions related to their wealth during phone-based interviews conducted by a hotline operator. The data indicated that respondents mostly fell in the 4th and 5th quintiles, suggesting that the fecal sludge management services and septic tank construction which were the focus of SSD in Côte d’Ivoire, were more attractive for wealthier urban households than for the very poor.

Some SSD project leaders in Côte d’Ivoire had concerns that the EquityTool might overestimate wealth levels, or be inappropriate for urban populations. Ensuring that all stakeholders are familiar with the development and benchmarking data available for the EquityTool, as well as the required minimum comparability of the EquityTool with the relevant DHS wealth index, is important to avoid concern and ensure effective use of the EquityTool.

Understanding the wealth profiles of existing project clients provided the SSD project team with an opportunity to evaluate project goals, and provided valuable input on how the timing of wealth assessment could be altered for future projects, to effectively target populations in specific wealth quintiles. Using the EquityTool provides a fast, inexpensive means of assessing wealth in near-real time, which increases the practicality of using wealth data throughout planning, design, targeting, and ongoing decision-making.

**NEXT STEPS: EXPANDING EQUITY ASSESSMENT IN PUBLIC HEALTH PROGRAMS**

PSI’s experience using the EquityTool to assess relative wealth of clients in the SSD project demonstrated the ease of integrating the EquityTool into existing DHIS2 instances. The SSD project team found the EquityTool to be useful, versatile, and a simple way to effectively target sanitation services by population and wealth quintile, and to track progress on deliverables throughout the project life. The practical application was successful, and the SSD project team recommended that the DHIS2/EquityTool combination be expanded for use across other public health programs that have a strong focus on equitable access to products and services.

**Lessons Learned**
- Ensure that wealth questions are specific and appropriately tailored to the context (e.g. both formally registered and informally shared electrical and cable TV connections are easily used in Abidjan.)
- Employ wealth assessment early in a project focused on a specific population defined by wealth.
- Educate users on thoughtful simplification.

M4M can help you use the EquityTool in your project. For more information contact communications@m4mgmt.org.

PSI uses the EquityTool to help identify those most in need. For more information on the SSD project and/or PSI’s application of the EquityTool contact dhm@psi.org.