WATER AND DEVELOPMENT

Indicator Handbook

October 2020
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Purpose

The Water and Development Indicator Handbook presents the set of performance monitoring indicators used to measure progress against the United States (U.S.) Government Global Water Strategy and United States Agency for International Development’s (USAID) Water and Development Plan. These indicators are designed to measure progress against each development result (DR) in the Water and Development Plan results framework. USAID’s standard indicators are aligned with global monitoring efforts surrounding the Sustainable Development Goals (SDGs). As the sector moves towards achieving higher levels of water and sanitation services, additional indicators are used to track progress towards safely managed services.

This handbook is intended to be used by USAID staff and implementing partners involved in water, sanitation and hygiene (WASH) programming in order to ensure correct use of USAID’s standard indicators. This handbook includes all current standard performance indicators, including those added in Fiscal Year (FY) 2016 to align with global sector monitoring as well as those added in FY 2018 to align with the new USAID Water and Development Plan. The handbook also provides guidance on how to measure specific indicators for a variety of programming types, including when results can be plausibly attributed to USAID activities. The indicators and monitoring guidance in this handbook provide a basis for demonstrating how activities can be linked to the achievement of water and sanitation objectives.
Introduction

Monitoring is the ongoing and systematic tracking of data or information relevant to USAID strategies, projects, and activities. Relevant data and informational needs are identified during the planning and design phase. This may include output and outcome measures that are directly attributable to or affected by USAID interventions as well as measures of the operating context and programmatic assumptions. Monitoring USAID’s water and sanitation development activities is key to accountability and learning. USAID is committed to ongoing efforts to improve monitoring.

Monitoring is integrated throughout the Program Cycle. Information from partners helps Missions learn from and adaptively manage programs. Monitoring data also enables USAID, as an Agency, to understand its achievements and tell its story to Congress and the American people. Monitoring is not limited to an activity’s interventions; it also includes tracking programmatic assumptions within the operational context of the activity to recognize trends and shifts in external factors that might affect the activity’s performance.

Performance monitoring is designed to measure expected outputs and outcomes of strategies, projects, or activities based on a Mission’s Results Framework or project or activity theory of change. Performance indicators are the basis for observing progress and measuring results compared to expected outcomes.

Indicators provide a quantifiable measure of characteristics or conditions of people, institutions, systems, or processes that may change over time. Indicators can be categorized as either output or outcome indicators. Output indicators measure what is produced as a direct result of inputs. Outputs are the tangible, immediate, and intended products or consequences of an activity within USAID’s control or influence. Outcome indicators measure the condition of people, systems, or institutions that are expected to be affected by USAID interventions. Outcomes are any result higher than an output to which a given output contributes, but for which it is not solely responsible.

COMPLEXITY- AWARE MONITORING

Performance indicators are not the only tool for measuring the progress of an activity or project. Complexity-aware monitoring is distinct from performance monitoring as practiced in USAID and is intended to complement performance monitoring. Tools such as: sentinel indicators, stakeholder feedback, process monitoring of impacts, most significant change, and outcome harvesting can provide valuable insight into performance. Complexity-aware monitoring is appropriate for aspects of strategies or projects where cause and effect relationships are poorly understood, thereby making it difficult to identify solutions and detailed performance indicators in advance.

1 ADS Chapter 201, Program Cycle Operational Policy
2 For more information on theories of change see What is this thing called a theory of change? and Theories of Change.
3 More information on complexity-aware monitoring can be found on USAID’s Learning Lab platform.
Standard Indicators

Standard indicators are measures that USAID and the Department of State use worldwide to collect performance data that can be aggregated globally, enabling USAID to consistently collect and report comparable indicator data from multiple operating units (OUs). Standard indicator results for water and sanitation are aggregated across the U.S. Government and help justify requests for funding, understand operational challenges, assess progress, and support external reporting. USAID uses subsets of these indicators to report separately on first time access to water and sanitation services, as required under the Water for the World Act of 2014.\(^4\) Therefore, accuracy of reporting against these indicators by implementing partners is critical.

Aggregation of results is accomplished by using the established definitions and measurement instructions—which do not differ across OUs—in USAID’s standard performance indicator reference sheets (PIRS), a tool used to define indicators, ensure data quality, and maintain consistency in reporting. The PIRS outline acceptable data sources and methods for tracking each standard indicator and can be found in Annex III of this handbook.\(^5\) Because every activity is unique, a PIRS will need to be adapted for all indicators, detailing what data sources the activity plans to use, how these data will be collected, and any data collation that will be needed.

All standard performance indicators are required-as-applicable (RAA) to ensure consistency of reporting and meaningful aggregation of results. Indicators that are RAA must be reported on by any activity that is making progress towards those outcomes. Timing of reporting is established within the agreements of each activity. Standard Indicators are vital for USAID to tell its story.

All of the standard indicators related to water, sanitation and hygiene are found under HL.8 in the Department of State Office of Foreign Assistance’s Standardized Program Structure and Definitions (SPSD).\(^6\) The standard indicators for reporting on water and sanitation map to USAID’s Water and Development Plan\(^7\) results framework, shown below in Figure 1. There is at least one standard indicator related to each development result.

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\(^4\) H.R. 2901
\(^5\) Standard PIRS are available in alternative formats
\(^6\) WASH Indicator Reference Sheets
\(^7\) 2017 U.S. Government Global Water Strategy
USAID GOAL

To increase the availability and sustainable management of safe water and sanitation for the underserved and most vulnerable, in alignment with U.S. national security and foreign policy objectives.

DEVELOPMENT RESULTS

DEVELOPMENT RESULT 1

STRENGTHENING SECTOR GOVERNANCE & FINANCING

**HL.8.3-3** Number of water and sanitation sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance.

**HL.8.4-1** Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance.

DEVELOPMENT RESULT 2

INCREASE SUSTAINABLE ACCESS & USE OF SANITATION & THE PRACTICE OF KEY HYGIENE BEHAVIORS

**HL.8.2-1** Number of communities certified as open defecation free (ODF) as a result of USG assistance.

**HL.8.2-2** Number of people gaining access to a basic sanitation service as a result of USG assistance.

**HL.8.2-3** Number of people gaining access to safely managed sanitation services as a result of USG assistance.

**HL.8.2-4** Number of basic sanitation facilities provided in health facilities and schools as a result of USG assistance.

**HL.8.2-5** Percentage of households with soap and water at a handwashing station on premises.

**HL.8.2-6** Percentage of households in target areas practicing correct use of recommended household water treatment technologies.

**HL.8.2-7** Number of people receiving improved sanitation service quality from an existing “limited” or “basic” service as a result of USG assistance.

DEVELOPMENT RESULT 3

INCREASE SUSTAINABLE ACCESS TO SAFE DRINKING WATER

**HL.8.1-1** Number of people gaining access to a basic drinking water service.

**HL.8.1-2** Number of people gaining access to a safely managed drinking water service.

**HL.8.1-3** Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance (i.e., existing access).

**HL.8.1-4** Number of health facilities and schools gaining access to basic drinking water services as a result of USG assistance.

DEVELOPMENT RESULT 4

IMPROVE MANAGEMENT OF WATER RESOURCES

**HL.8.5-1** Number of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance.

**FIGURE 1:** USAID’S WATER AND DEVELOPMENT PLAN RESULTS FRAMEWORK AND STANDARD PERFORMANCE INDICATORS
Drinking Water Indicators (HL.8.1)

USAID has four standard indicators for measuring an “Increase in sustainable access to safe drinking water” (DR 3):

**TABLE 1: STANDARD INDICATORS FOR DRINKING WATER**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL.8.1-1</td>
<td>Number of people gaining access to a <strong>basic</strong> drinking water service</td>
</tr>
<tr>
<td>HL.8.1-2</td>
<td>Number of people gaining access to a <strong>safely managed</strong> drinking water service</td>
</tr>
<tr>
<td>HL.8.1-3</td>
<td>Number of people receiving improved service quality from an existing <strong>basic</strong> or <strong>safely managed</strong> drinking water service as a result of USG assistance (i.e., existing access)</td>
</tr>
<tr>
<td>HL.8.1-4</td>
<td>Number of health facilities and schools gaining access to <strong>basic</strong> drinking water services as a result of USG assistance</td>
</tr>
</tbody>
</table>

The indicators above align with definitions used by the Joint Monitoring Programme (JMP), and are designed to capture progress along the JMP service ladder, adapted below in figure 2 to illustrate where USAID’s standard drinking water indicators fall along the service ladder.

**FIGURE 2: ADAPTED JMP SERVICE LADDER AND DEFINITIONS, SHOWING USAID’S STANDARD DRINKING WATER INDICATORS ALIGNMENT WITH THE APPROPRIATE SERVICE LEVELS**

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8 Improved source is defined as a water delivery point that by nature of construction or through active intervention is protected from outside contamination, in particular from outside contamination with fecal matter. While water quality is not a part of this definition, USAID environmental compliance procedures must be followed in all activities.
New access is counted starting at the basic service level. There are no standard indicators for access at lower service levels. Basic water services include a water source that is protected from contamination by the nature of construction (e.g. borehole, protected spring, protected dug well) – known as an “improved” water source. A household must be able to collect water from this source and return home within 30 minutes. This service must be available year-round, with no seasonal outages. However, water may not be available all day or every day.

Safely managed services also must include an improved water source, but must also be available on the premises of the household, be available all the time (24 hours per day, 7 days a week, year-round), and be free from biological and chemical contaminants.

Indicators HL.8.1-1 and HL.8.1-2 are designed to capture new access only at the household level. This means that beneficiaries can only be counted if they did not have access to that level of service prior to USAID’s activity. Baseline data is generally required to verify this.

However, many USAID water programs are designed to support those who already have a basic service. These programs might focus on improving the accessibility, reliability, affordability or quality of drinking water. Indicator HL.8.1-3 is the standard indicator for reporting on beneficiaries who see a service quality improvement as a result of USAID’s activities. These three indicators are used for reporting on household access to water services.

Indicator HL.8.1-4 is used for reporting on new access to water services at health facilities and schools as a result of USG assistance

DATA SOURCES AND METHODS

Due to the nature of these indicators, in some cases more than one data source will be used to quantify the indicator. Acceptable data collection methods for drinking water include:

DIRECT OBSERVATION AND MEASUREMENT

In some situations, it is possible to directly count the beneficiaries of a particular intervention. For example, if an activity is supporting the construction of a new rural water point designed to serve an entire community that does not currently have a water scheme, then direct observation of the water service is possible. In this case, the entire community can be counted as people gaining access, so long as the water point produces an adequate volume of water to meet the standard of 20 liters of water per person per day.

Before any activity intervention, the partner should confirm that the benefitting households have no current access to a water service that meets the basic service definition. This can be done using distance as a proxy for time to collect. For example, if target households have no improved water source within 1 kilometer, then they do not have access to a basic service. An activity can verify this through direct visits to households, a sample survey, interviews with leaders and community members, or with a mixture of these methods.
A basic service must meet all of the standards set in the PIRS. Once construction is complete, the partner should verify that the new service meets the basic standard before counting the full population as beneficiaries. The number of beneficiaries is commonly calculated using a standard household size and multiplying by the total number of households.

Water quality improvements (which could be part of improved service quality under indicator HL.8.1-3 or result in a service achieving safely managed status for the first time under indicator HL.8.1-2) are also typically measured directly via water quality testing. Upon confirmation of quality, all people using the water service can be counted as beneficiaries. Note that household water treatment cannot contribute to this indicator because the improvements must be made at the service-delivery level (through activities such as construction of water treatment systems, support to service providers to chlorinate water, source water protection, or the implementation of a water safety plan).

SAMPLE SURVEY

When an activity will result in a new water scheme, which may not be the only basic water service available to a target population, sample surveys can be used to account for the population gaining access to new or improved services. Questions for this survey should build off the JMP’s Core Questions for Households9 and must include:

• What is the water source?
• What is the time required to access the water point?
• What quantity of water can be accessed in one day?
• What is the reliability of the water service?

These questions should be asked both before and after any activity interventions. The baseline survey data should be analyzed to determine what percentage of the population has an existing basic service and what portion does not. The endline survey should also calculate this proportion to determine how many people gained access to basic service as a result of the intervention. These percentages will need to be multiplied by the overall population benefitting to obtain a final number of people gaining access. Comparison between the two measures, and relevant sub-parameters pertaining to other measures of service quality (e.g. reliability measured from service records, water quality from tests), can also be used to determine if there were service quality improvements that should be counted for those people who already had basic service.

SERVICE PROVIDER RECORDS

When an activity is working directly with a service provider (e.g. utility, private operator, community management committee), customer or service records may be used as a source of data. Where service providers extend services to new customers as a result of an activity, those customers can be counted as people gaining access. This method of tracking beneficiaries would need to be combined with either direct observation or a sample survey to understand if the beneficiaries previously had access to a basic or safely managed water service. Where a provider’s service quality (e.g. reliability, water quality) improves as a result of an activity, its customers can be counted as receiving improved service quality (indicator HL.8.1-3) once during the life of an activity when the benefits are measured and documented by the implementing partner. The implementing partner should determine when benefits are reasonably expected to have occurred to inform the selection of timing for measurement.

ATTRIBUTION OF RESULTS

Many of the standard indicators note that the result must be achieved “as a result of USG assistance.” Whether and how results can be attributed to specific USAID-funded interventions is often a question. USAID interventions are always implemented as part of a wider system, with many other actors contributing to ultimate outcomes. A facilitative approach, centered on working with service providers and other sector institutions to expand access to services, is critical to achieving sustainability and self-reliance. It can, however, present challenges for monitoring, therefore data must be collected along the theory of change to ensure plausible attribution of results.

For indicators related to expanding access to household water services (HL.8.1-1, HL.8.1-2 and HL.8.1-3), interventions may range from direct construction, providing assistance to service providers, or working with the government to develop policies and plans that result in expanded service, depending on the context. In general, results can be attributed to USAID activities in cases where implementing partners are doing direct construction activities or working directly with the service provider. Service providers are defined as those who are directly responsible for the operations of a water source. Depending on the context, these may be communities, private sector providers, utilities or local governments.

Different information is required to demonstrate attribution, depending on the type of intervention.

DIRECT CONSTRUCTION

When the implementing partner performs a construction activity that results in new or improved access to a water service, the partner must document: (1) the number of people relying on that service as their primary drinking water source, (2) the water service for that population prior to the intervention, and (3) the service level being provided after intervention.

TECHNICAL ASSISTANCE TO SERVICE PROVIDER

When working to improve services by supporting a service provider, demonstrating attribution can be more complex. Again, the partner must document: (1) the number of people relying on that service as their primary drinking water source, (2) the water service level for that population prior to the intervention, (3) the service level being provided after intervention, as well as (4) what changed within the service provider as a result of interventions, and (5) broader trends around access to account for the fact that access rates may be improving as a result of factors beyond USAID’s activities.

Note that direct construction is often not an appropriate intervention, despite the fact that it may drive short-term access numbers and be easily attributable. Direct construction is best-suited for low capacity and commitment environments that require initial infrastructure investments. These types of interventions must be coupled with other interventions aimed at building the capacity of the system to operate and manage water services.
HL.8.1-1 ATTRIBUTION EXAMPLE

NUMBER OF PEOPLE GAINING ACCESS TO A BASIC DRINKING WATER SOURCE

For an activity aiming to report against a standard indicator, it’s important to understand where the interventions fall on the spectrum of how directly the activity is engaged (see Figure 4). When an activity is not working directly (either through construction or technical assistance activities) with a water service provider, results cannot be reported under HL.8.1 indicators. The type of intervention implemented will dictate what information is needed to demonstrate attribution.

For activities that are not working with a service provider, but are working on underlying governance and finance, consider using HL.8.3-3 or HL.8.4-1 if applicable.

WHAT ARE WE DOING?

Direct construction or rehabilitation of water points providing a basic level of access

Example: Providing a new borehole, pump and standpipe to a community that previously relied on a water source 5k away.

Technical assistance to a water service resulting in expanded access

Example: Supporting a utility that only covers 25% of a city to develop project plans, improve financial management, and take a loan resulting in service to 40% of the city.

Results from indirect activities are not reported under HL.8-1 indicators

Technical assistance to government resulting in expanded access

Example: Supporting a county to pass a law on tariff levels that results in increased revenue generation which is used by a WSP to expand service area.

WHAT DO WE NEED TO KNOW?

- Previous type of access
- Service level provided
- Number of people served
- Previous status of water service provider (WSP)
- Interventions and outcomes along theory of change
- Secular trends*

* Secular trend refers to the long-term, external trend for the indicator

FIGURE 4: EXAMPLE OF DIRECT AND INDIRECT DRINKING WATER INTERVENTIONS
DRINKING WATER SCENARIOS

SCENARIO 1: REHABILITATING A RURAL WATER SCHEME

An activity is working in a rural village of 250 people, with the goal of improving drinking water services. There is a hand-dug well with a handpump at the center of the village, but it has been non-functional for the past 3 years. The implementing partner decides to rehabilitate the handpump.

The following steps can help the partner determine the correct indicator to use:

What is the baseline status for access to drinking water?

The partner must perform an initial assessment of current drinking water access. Through discussions with the community and direct observation, the partner learns that the nearest water point meeting the standard for an improved source, a borehole with motorized pump, is 2.5 kilometers away from the village.

Using distance as a proxy for time, it is clear that the population of this village must take longer than 30 minutes to collect their drinking water. Therefore, the 250 people in this village do not currently have access to a basic drinking water service.

What indicator should the activity use?

Because the activity intends to provide a drinking water service to people who currently do not have one, the appropriate indicator is HL.8.1-1 (the number of people gaining access to basic drinking water services).

What data are needed to confirm this result?

The partner must document the completion of the new drinking water service and demonstrate that it meets the definition of a basic service. This would likely include a certificate of completion, signed by a local government official or a firm providing quality assurance, of the infrastructure that was rehabilitated. The partner should also verify that water can be collected in 30 minutes by all members of the village. This could include direct observation of household locations and wait time at the water point.

Can these results be attributed to USG assistance?

Yes! This example falls into the category of direct rehabilitation of a water service, so the results are fully attributable to USG assistance.
SCENARIO 2: STRENGTHENING A WATER UTILITY

An activity is providing technical assistance to improve the operations of a water utility serving 20,000 households in an urban area. The goal of this activity is to set the utility on a more commercially viable path, while also improving and expanding services to people in the service area. The interventions will not include direct construction but will provide technical assistance to the utility on human resources, financial management and the preparation of proposals for commercial finance. The desired outcome of this activity is to improve the performance of the utility which will enable it to invest in improvements to services and potentially access new sources of finance to further expand services.

The following steps can help the partner determine the correct indicator to use:

What is the baseline status for access to drinking water?

In this scenario, it is clear there is already a water service in the intervention area. A baseline assessment is needed to understand the service level. A sample survey in the service area (stratified by neighborhood to ensure various types of beneficiaries are included) is undertaken. This survey showed that all 2,000 households in the service area receive drinking water from the utility via public access points (i.e., standposts) where the time to collect water is under 30 minutes. However, water is only available for 3-5 hours per day and 3-4 days each week, year-round. Therefore, these customers have access to a basic water service, but the reliability of the service is a challenge.

The preparations for the survey also uncovered a new informal settlement, just outside the utility’s service area. This area has 1,000 households. These households were then included in the survey, which established that households in this area are purchasing bottled water for drinking from a private vendor. Their only other water source is an unprotected well, which they use for other domestic (e.g., non-drinking and cooking) needs. Therefore, this group of 1,000 households lacks even basic access to drinking water.

Based on the household survey, the activity was able to establish that the average household size in this area is five people. This number is then used to convert from the number of households to a number of people.

What indicator should the activity use?

Two indicators are recommended based on the scenario above:

1. Because the utility is currently serving 100,000 people, but reliability is an issue for all of these customers, the activity can report on indicator HL.8.1-3 to capture improvements in service quality.

2. In addition, if the activity results in the utility expanding to serve the new informal settlement of 5,000 people, they would be able to report on indicator HL.8.1-1.
What data are needed to confirm this result?

To measure service quality improvements for the existing customers, the activity uses utility records. Operations records show the volume of water delivered to the standposts throughout the systems. These demonstrate that that system reliability has increased from providing water 3-4 days per week to providing water daily to all customers, therefore all 100,000 customers (20,000 households x 5 people per household) can be counted as having received improved service quality (indicator HL.8.1-3).

The activity also documents that the utility received a concessional loan for a system expansion as a result of a proposal the activity helped them to develop, and that funds were disbursed to the utility. The activity then documents that construction works were completed and the informal settlement of 5,000 people (1,000 households) now have 10 standposts providing water. A small household sample survey is completed to check the time to collect water, where the activity finds that all households can collect water within 30 minutes. Therefore, the activity can report that 5,000 people gained access to a basic water service (indicator HL.8.1-1).

Can these results be attributed to USG assistance?

Yes! In this example, the partner is working with the water service provider, so benefits to customers can be attributed to USG assistance. However, since this activity is taking a facilitative approach, it is important to track custom indicators along the activity’s theory of change to ensure that results can be attributed to the interventions, and not external factors.

In this scenario, the activity is documenting the proximate results of their technical assistance by measuring improvements in utility performance through an annual utility capacity assessment. Based on this assessment, the activity can document that the utility has a lower rate of non-revenue water, improved financial management capacity, fewer staff vacancies, and is following standard operating procedures for system maintenance.
Sanitation and Hygiene Indicators (HL8.2)

USAID’s has seven standard indicators for measuring an “Increase sustainable access and use of sanitation and the practice of key hygiene behaviors” (DR 2).

**TABLE 2: STANDARD INDICATORS FOR SANITATION**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HL.8.2-1</strong></td>
<td>Number of communities certified as open defecation free (ODF) as a result of USG assistance.</td>
</tr>
<tr>
<td><strong>HL.8.2-2</strong></td>
<td>Number of people gaining access to a basic sanitation service as a result of USG assistance.</td>
</tr>
<tr>
<td><strong>HL.8.2-3</strong></td>
<td>Number of people gaining access to safely managed sanitation services as a result of USG assistance.</td>
</tr>
<tr>
<td><strong>HL.8.2-4</strong></td>
<td>Number of basic sanitation facilities provided in health facilities and schools as a result of USG assistance.</td>
</tr>
<tr>
<td><strong>HL.8.2-7</strong></td>
<td>Number of people receiving improved sanitation service quality from an existing “limited” or “basic” service as a result of USG assistance.</td>
</tr>
</tbody>
</table>

**New Indicator in FY 2018**: Identifies community-based sanitation indicators

Identifies household access sanitation indicators

Identifies sanitation indicators designed to monitor health facilities and schools

**TABLE 3: STANDARD INDICATORS FOR HYGIENE**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>HL.8.2-5</strong></td>
<td>Percentage of households with soap and water at a handwashing station on premises.</td>
</tr>
<tr>
<td><strong>HL.8.2-6</strong></td>
<td>Percentage of households in target areas practicing correct use of recommended household water treatment technologies.</td>
</tr>
</tbody>
</table>

Identifies household access indicators for hygiene

**CAPTURING PROGRESS ALONG THE SANITATION SERVICE LADDER**

The sanitation indicators are aligned with definitions used by the JMP and are designed to capture progress along the sanitation service ladder. ODF status is counted when an entire community progresses beyond open defecation (indicator HL8.2-1), regardless of the quality of sanitation facilities households are using. When beneficiaries gain new access to basic sanitation (improved facility that is not shared), the number of people can be reported under indicator HL.8.2-2. When beneficiaries gain new access to a safely managed...
sanitation service, the number of people can be attributed to indicator HL.8.2-3. There are activities that address specific components of the sanitation service chain\(^{11}\) that seek to move households up the sanitation ladder from basic but cannot satisfy all aspects of safely managed sanitation services. These activities can attribute measured improvements (such as improved containment, safe emptying/transporting, or fecal sludge treatment improvements) to indicator HL.8.2-7.

**FIGURE 5:** ADAPTED JMP SANITATION SERVICE LADDER AND DEFINITIONS TO SHOW WHERE USAID’S STANDARD INDICATORS CORRESPOND WITH THE APPROPRIATE SERVICE LEVELS

**BEST PRACTICES IN REPORTING HYGIENE BEHAVIORS**

Hygiene indicators are aligned with international best practices in reporting hygiene behaviors such as handwashing with soap and household water treatment. Households with soap\(^{12}\) and water at a handwashing station on premises (indicator HL.8.2-5) are only counted if the handwashing station is available on the premises of the household. The percentage of households practicing correct use of recommended household water treatment technologies (indicator HL.8.2-6), also referred to as point-of-use (POU) water treatment, must follow one of the peer-reviewed water treatment methods with an evidence base shown to meet World Health Organization (WHO) water treatment standards.

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\(^{11}\) The sanitation service chain is the management of fecal waste from capture to transport to safe treatment and disposal.

\(^{12}\) Soap may be in bar, powder, or liquid form. Alternatives like sand or ash do not qualify as soap for purposes of reporting on this indicator.
DATA SOURCES AND METHODS

The PIRS for each standard sanitation and hygiene indicator outlines acceptable data sources and tracking methods. Just as with the drinking water indicators, each activity will need to develop its own adapted PIRS, detailing specific data sources, collection methods, and any data collation needed. Acceptable data collection methods for sanitation and hygiene include:

DIRECT OBSERVATION

In some situations, it is possible to directly count all of the beneficiaries of a particular intervention. This would be equivalent to a census of all households or communities, rather than relying on a sample. For example, when communities achieve ODF status, each community is generally verified through a site visit by an implementing partner or local certification authority. Direct observation to verify the presence of latrines or perform transect walks of common open defecation sites may be part of this observation. For basic sanitation, an implementer may also choose to directly observe the presence of all new latrines following an intervention. If the latrines are observed to meet basic sanitation standards, a direct count of beneficiaries can be completed.

HOUSEHOLD SURVEY

Indicators HL.8.2-5 and HL.8.2-6 must be measured via a household survey. Soap and water must be readily observed by an enumerator to qualify for the handwashing indicator and presence of the materials required (e.g., chlorine tablets, flocculant sachets, water filters, fuel for boiling) as well as a safe water storage container must be observed by the enumerator for the household water treatment indicator. Full details of monitoring methods for the various technologies are available in the PIRS.

Sanitation access may also be measured with household surveys, either a complete census or a sample survey. For example, activities where partners are implementing behavior change, demand generation, or market facilitation in target communities, baseline and endline surveys may be used to determine how many members of a community gained access to basic sanitation. Surveys must be designed to assess whether facilities meet the criteria for basic sanitation (an improved facility that is not shared with other households). It is important to assess the baseline status of sanitation access to determine if the activity resulted in new access to sanitation.

SERVICE PROVIDER RECORDS

In some cases, service provider records may be used to report on access to sanitation services. For households achieving safely managed sanitation, an activity may be working with a utility, private pit-emptying business, or other service provider. In cases like this, records of new customers who adopt these services may be used to determine the number of beneficiaries who have gained access to safely managed sanitation services or are receiving improved service quality. These records would need to provide information on the prior level of service or be combined with other sources of information.
ATTRIBUTION OF RESULTS

Many of the standard indicators note that the result must be achieved “as a result of USG assistance.” Whether and how results can be attributed to specific USAID-funded interventions is often a question. USAID interventions are always implemented as part of a wider system, with many other actors contributing to ultimate outcomes. A facilitative approach, centered on creating behavior change and working with service providers to expand access to services, is critical to achieving sustainability and self-reliance. It can, however, present challenges for monitoring, therefore data must be collected along the theory of change to ensure accurate attribution of results.

Interventions for indicators related to expanding access to sanitation (HL.8.2-1, HL.8.2-2, HL.8.2-3, HL.8.2-7) might include direct construction (e.g., of communal septic systems), demand generation activities, facilitation of supplies and services, and/or working with government on the development of policies and plans which result in behavior changes or increased access. In general, results can be attributed to USAID programs in cases where implementing partners are doing direct construction activities, implementing behavior change activities (either through its own staff or staff who have received training and/or other support from the activity) or working directly with service providers. Service providers are those who deliver sanitation products or services, such as hardware stores that sell sanitation products, masons that construct latrines, or businesses that manage fecal waste transport, treatment and/or disposal. Beneficiaries who receive a service from a provider that a USAID activity is supporting (such as a latrine seller or pit emptier) can be counted as they are directly benefiting from USAID’s intervention. However, if another enterprise decides to enter the same business without support, his or her customers would not be counted.

Spontaneous spillover of improved practices does not count as a deliberate service delivery strategy; neighbors who apply new practices based on observation or interactions with participants who have not been trained to extend knowledge to others as part of a deliberate service delivery strategy are not considered participants and should not be included in reporting. For example, if a community spontaneously adopts sanitation after seeing a neighboring community become ODF, but never received any type of behavior change intervention, they cannot be counted. The sample frame for any survey aiming to measure indicators attributable to USG assistance would only include those areas where the activity implemented social and behavior change or other interventions. Larger scale surveys can be used to track population level changes as custom indicators; USAID’s activities may contribute to these larger changes, but they cannot be directly attributed.
HL8.2-2 EXAMPLE INTERVENTIONS

NUMBER OF PEOPLE GAINING ACCESS TO A BASIC SANITATION SERVICE AS A RESULT OF USG ASSISTANCE

WHAT ARE WE DOING?

- Behavior change campaigns at a community or household level
- Technical assistance to private suppliers of sanitation products
- Results from indirect activities are not reported under HL.8-2 indicators
- Technical assistance to government resulting in expanded access

DIRECT INDIRECT

Example: Implementing a community-led total sanitation initiative resulting in construction of improved latrines for the first time.

Example: Providing business development services and marketing support to sanitation enterprises that build latrines.

Example: Supporting a project management unit to implement a national sanitation behavior change campaign.

WHAT DO WE NEED TO KNOW?

- Previous type of access
- Verification that new latrine meets basic service criteria
- Interventions and outcomes along theory of change
- Secular trend

FIGURE 6: EXAMPLE OF DIRECT AND INDIRECT SANITATION INTERVENTIONS. NOTE THAT DIRECT CONSTRUCTION OF HOUSEHOLD SEWER CONNECTIONS OR LATRINES FOR A COMMUNITY IS NOT REPRESENTED BECAUSE IT IS NOT SOMETHING USAID DOES IN ITS PROGRAMMING.
SANITATION AND HYGIENE SCENARIOS

SCENARIO 1: RURAL BEHAVIOR CHANGE ACTIVITY

An activity is implementing a community-led total sanitation (CLTS) initiative in a rural area. Their plan is to train local health workers who will then trigger 1000 communities to become ODF. The host country has a national process for certifying communities as ODF.

The following steps can help the partner determine the correct indicator to use:

What is the baseline status?

The partner must first ensure that targeted communities are not already ODF. This may be done by checking against a national database, if available, or by direct observation via a community visit to observe whether open defecation is occurring.

What indicator should the activity use?

CLTS is designed to help communities achieve ODF status, therefore the most appropriate indicator to use is HL.8.2-1.

It is not an explicit goal of CLTS to help households achieve access to basic sanitation services, but, in some places, a subset of households may opt for higher-quality latrines that do meet this standard. If there is evidence that the activity may result in new basic sanitation, the activity should also report on indicator HL.8.2-2.

What data are needed to confirm this result?

Because there is a national process in place, the activity will be able to use those records to track this indicator. The activity should track when triggering took place, and when certification is completed by the local government authority, which is when the indicator can be reported. In some cases, local governments may be overloaded and slow to complete these certifications. If that is the case, the partner could perform their own ODF verification process. This would entail an enumerator visiting each community and documenting that they meet host country standards for ODF.

If the activity plans to measure new access to basic sanitation, a baseline measurement of access to sanitation must be established. This will ensure that only those who adopt basic sanitation as a result of the CLTS activity are counted. A sample survey of households across the target communities would provide this information. This survey would need to assess the status of each household latrine to assess whether it meets the standard of an improved facility and ask whether it is shared with any other households. A similar survey upon completion of the CLTS activities can then be used to compare
the rates of access to basic sanitation. With before and after measurements, the activity will be able to report on how many people gained access to basic sanitation.

Can these results be attributed to USG assistance?

Yes! The results could be attributed because the activity would be implementing a behavior change intervention (CLTS), that leads to the community becoming ODF. The activity must maintain a record of triggering being completed to document the activity’s role in achieving this result.

SCENARIO 2: URBAN MARKET-BASED SANITATION ACTIVITY

An activity is aiming to improve sanitation in a city of 50,000 people. To achieve this goal, the activity is implementing multiple interventions including:

• Providing business development services to enterprises that sell latrine products
• Introducing new products to these same enterprises
• Providing technical assistance and new equipment to enterprises that provide pit emptying services
• Supporting sales and marketing city-wide for both sanitation products and services

The following steps can help the partner determine the correct indicator to use:

What is the baseline status?

With a complex set of interventions like this, a baseline status of access should first be established, which will determine the appropriate indicators. The activity conducts a household survey which shows that, of the total population, 70 percent already meets the standard for having a basic sanitation service (a non-shared household latrine that safely prevents human contact with excreta). The 30 percent of the population who do not meet the basic service standard either share a sanitation facility with neighbors, use public sanitation facilities, or openly defecate.

The survey results also show that only 10 percent of the total population have a sanitation facility connected to a piped sewerage network. To better understand the full sanitation service chain, the survey also asks about containment, emptying, and transport for those with on-site sanitation. The results show that half of the population with on-site basic sanitation services report that they have used a service to empty their latrine and transport the waste off-site.

Household surveys can have some data limitations. In general, they are only able to report on the emptying and transportation of fecal waste and lack insight into where the waste ultimately ends up. To understand this, the activity accesses records from the service providers who empty pits as well as the regulator. Both sets of records show that waste emptied from pits is taken to a designated treatment site, where it is treated to national standards.
This provides the activity with the following baseline results:

- 40 percent have access to **safely managed** sanitation (10 percent sewerage, 30 percent on-site)
- 30 percent have **basic** access to sanitation
- 30 percent **lack basic access** to sanitation

**What indicator should the activity use?**

Based on this information, the activity should report on indicators HL.8.2-2 and HL.8.2-3. The 30 percent of the population (15,000 people) who do not have basic access are potential beneficiaries and may get first-time access to basic sanitation as a result of the activity (HL.8.2-2) or could move directly to having a safely managed service (HL.8.2-3). The 30 percent of the population (15,000 people) who have basic, but not safely managed, sanitation may achieve first-time access to safely managed sanitation (HL.8.2-3) once they begin using pit emptying services. If these beneficiaries do not meet the full criteria for safely managed sanitation, but have received an improvement in service quality, then the activity might report on HL.8.2-7.

**What data are needed to confirm this result?**

Because the activity is working with service providers to extend sanitation services, service provider records will be the primary data source for measuring these indicators. The activity needs to set up a monitoring system with the supported service providers to ensure that records will yield all of the necessary information. For the latrine suppliers, records will show how many new latrines have been sold and if these have been sold to customers for whom this is their first private, household latrine. Pit emptying service providers should also track new customers who can then be counted as gaining access to safely managed sanitation.

**Can these results be attributed to USG assistance?**

Yes! Because the activity is working with the sanitation service providers (those who supply pit emptying services or household latrines), results can be attributed to the activity. Given that the approach is aimed at working through the private sector, it is important to track custom indicators across the theory of change to ensure that the technical assistance is achieving results, and outcome indicators can be attributed to the activity. In this scenario, the activity documents that the enterprises have begun offering new products, improved their financial management and customer service, and are taking a more active sales and marketing approach.
Policy and Governance Indicators (HL.8.3)

The standard indicators for measuring “Strengthened sector governance and financing” (DR 1) are categorized under two parts of the Office of U.S. Foreign Assistance’s Standardized Program Structure and Definitions, Policy and Governance (HL.8.3) and Sustainable Financing (HL.8.4). There is one standard indicator for policy and governance, which was introduced in FY 2018.

**New Indicator in FY 2018**

**HL.8.3-3** Number of water and sanitation sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance

Institutions counted under this indicator may include local, regional or national government ministries/ offices, regulators, and civil society organizations. Water and sanitation service providers cannot be counted against this indicator; however, where service provider capacity building results in new or improved access, indicators under HL.8.1 and HL.8.2 may be used.

A single institution may only be counted once in a single reporting year, regardless of the amount of improvement achieved. An institution may be counted again in subsequent years if further improvements are made.

**DATA SOURCES AND METHODS**

This indicator measures institutional improvements based on an activity-specific institutional assessment index. The index must measure outcome-based changes and may be based on the following categories:

- Human resources
- Monitoring systems
- Financial management (budget execution, ability to pass an annual audit)
- Project planning and management of implementation
- Enforcement of policies (watershed protection, allocation systems)
- Equity (tariff setting, poor inclusive policy, gender mainstreaming policy)
- Accountability to stakeholders

This index can be based on standard models such as USAID’s Government to Government (G2G) index, the WASH Building Blocks or a national governance index. Because types of institutions and activities vary widely, managers are encouraged to adopt the approaches most appropriate for their program and adapt the tools best suited for local needs. Managers may also engage with WASH Advisors in Washington when discussing an institutional assessment index.
There are many methods for collecting data related to institutional capacity. Some use scoring systems and others don’t; some use questionnaires, while others employ focus groups; some use external evaluators, and others rely on self-assessments. When developing the method for data collection, activities should consider:

• how to limit subjectivity in ratings
• comparability over time
• appropriateness of quantification of qualitative ratings
• practicality and time burden

A baseline measure is required for this indicator as it monitors changes over time. Activity Monitoring, Evaluation, and Learning (MEL) plans must include information about the institutional assessment index being used, including the indicators, data sources, and measurement methods.

**ATTRIBUTION OF RESULTS**

Results under this indicator can be attributed to USG assistance when a USG-funded activity is directly working with the institution to improve capacity. Activities may achieve results under this indicator using a variety of interventions including, but not limited to, providing training programs, mentoring, twinning, support in planning processes, or development of new institutional systems (e.g., monitoring information systems, financial management systems).

**RELATIONSHIP TO CBLD-9**

USAID is tracking Percent of USG-assisted organizations with improved performance (CBLD-9) Agency-wide, to measure the outcomes of its work to strengthen the capacity and performance of local entities and locally established partners. Because organizations under CBLD-9 includes governmental agencies (national and subnational), most water activities for which this indicator is applicable could be reported on under CBLD-9 as well.

13 https://www.usaid.gov/npi/capacity-building-indicator-resources
An activity is aiming to strengthen the capacity of regional water authorities in two different regions. This authority is mandated to regulate water services within the region. This includes responsibility for monitoring functionality of water services, regulating water quality, issuing permits to water operators, and auditing the finances of these water operators. The activity provides technical assistance to the staff of this regional water authority via training, on-going staff mentoring, and support to develop and use a new monitoring information system.

**The following steps can help the partner determine the correct indicator to use:**

**What indicator should the activity use?**

This activity will be able to report on indicator HL.8.3-3 because it is aiming to strengthen the water service authority. Note that the activity should also report on CBLD-9 as well.

**What data are needed to demonstrate this result?**

The indicator is measured by the activity with an organizational capacity index, developed in consultation with the water authority. This index contains indicators from each of the categories listed in the PIRS, and rates each along an ordinal scale with ratings of Low, Medium, and High. An excerpt of the scorecard used for this index is shown in the table below.

<table>
<thead>
<tr>
<th>Category</th>
<th>LOW</th>
<th>MEDIUM</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td>No staffing plan exists, key job functions are left unfilled and there are many vacancies in the agency.</td>
<td>A staffing plan exists and is mainly aligned with key functions of the agency. There are still some vacancies, but staff in place are well qualified.</td>
<td>A staffing plan exists, is aligned with the key tasks and responsibilities of the agency, and all positions are filled with qualified staff.</td>
</tr>
<tr>
<td>Financial Management</td>
<td>The authority does not have an annual budget, and there are no financial management systems in use.</td>
<td>There is a budget, but it does not account for all expenses, or does not align with available funds. There is a basic financial management system in place.</td>
<td>There is a budget that accounts for operating and capital expenses and is aligned with available sources of funding. There is a financial management system in place to track expenditures.</td>
</tr>
</tbody>
</table>
The activity uses this index to establish a baseline for the authority it is supporting, and measures against the baseline annually via a participatory exercise with the regional water authority staff in each region. The group scores each indicator in the index based on discussion questions and documentation (e.g., budgets, monitoring data). When a change in the organizational capacity is documented, the activity can count that institution under indicator H.L.8.3-3.

Can these results be attributed to USG assistance?

Yes! If the activity is working to build capacity and able to document that change, this can be attributed. The activity should document any interventions which resulted in capacity building, such as the development of monitoring systems, mentoring, or training programs. The activity-specific PIRS must note what documentation (e.g., training rosters, mentoring plans) is being collected and stored in activity monitoring files.
Financing for Water and Sanitation Indicators (HL.8.4)

The standard indicator for water and sanitation financing that was introduced in FY 2018 and that aligns under DR1 (strengthened sector governance and financing) in the results framework is:

**New Indicator in FY 2018**  
**HL.8.4-I** Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance

This indicator measures the total value (in US dollars [USD]) of new funding mobilized during the reporting year to expand or improve water or sanitation services or implement water resource management activities. Types of funding mobilized under this indicator may include:

- Domestic public resources (increased budget allocations)
- Domestic public financing (bond issuance)
- User payments (tariffs)
- Private/commercial financing (such as via a commercial bank or microfinance institution)
- Private financing through public-private partnerships (PPP) or Global Development Alliances (GDA)
- Development partner or donor funds leveraged

This funding must be applied towards the water and sanitation sector for activities such as new construction, replacement, rehabilitation, or improvement of WASH infrastructure. Funding counted towards this indicator must be new funding that would not be available to the sector without USG assistance.

**DATA SOURCES AND METHODS**

At a minimum, data sources must demonstrate the amount of new funding attributed to the indicator was mobilized and that USG activities resulted in this mobilization. Potential data sources that can be used to demonstrate mobilization of funding include:

- documentation of loans made by commercial banks or microfinance institutions
- documentation of funds leveraged through GDAs or PPPs
- national or sub-national budget information showing an increase in allocations and disbursements for water
- documentation of funding issued by development partners and/or donor partners
ATTRIBUTION OF RESULTS

There are multiple ways through which US Government assistance can lead to mobilization of funds, including:

• advocacy for increased national and county budgets for WASH
• development of financial proposals or financial products
• structuring and implementation of PPPs or GDAs
• development credit guarantees
• capacity improvements that enhance credit worthiness of service providers or small businesses

Activities reporting against this indicator must be working directly with the funder (e.g., government, financial institution, private sector entity, development partner), the organization getting the funding (e.g., utility, local government agency, or both). Activities must also monitor appropriate intermediate outcomes to demonstrate the linkage between USG activities and funding mobilized as a result of these interventions.
FINANCING FOR WATER AND SANITATION SCENARIO

URBAN WATER UTILITY EXPANSION ACTIVITY

An activity is aiming to increase access to commercial finance for ten urban water utilities. The utilities all intend to use these funds in the expansion of a piped water network that will reach new parts of each city, allowing the utilities to expand their customer base and serve more of the population.

The activity will support these efforts by 1) providing technical assistance to improve the creditworthiness of utilities and 2) working with local financial institutions that have existing USAID-supported credit guarantees linking them to credit-worthy utilities.

The following steps can help the partner determine the correct indicator to use:

What indicator should the activity use?

This activity will be able to report on indicator HL.8.4-1 because it is aiming to increase commercial finance to water utilities, which is a mobilization of new funds.

If, during the life of the activity, new funds are mobilized and a utility completes the construction work to serve more of the city’s population, then it may also be possible to report against an indicator under HL.8.1. However, this will require the activity to have baseline data on access to water services in the city.

What data are needed to demonstrate this result?

The activity can report on this result once a loan agreement is signed and funds are disbursed, allowing the utility to begin work. Records from financial institutions and utilities can be used to document that the funds were mobilized.

Can these results be attributed to USG assistance?

Yes, if the loan was enabled by the activity’s work. To attribute the new funds to USG assistance, the activity must document the interventions that led to new finance by monitoring results of this along the activity’s theory of change. In this case, the activity would measure utility creditworthiness before and after interventions since the activity’s hypothesis was that this would result in new finance. In this example, credit ratings from national institutions can be used to document this, where those exist. Where that is not possible, the activity would need to show documentation of the change in creditworthiness, whether that was performed by a financial institution or the activity itself. The activity should also maintain documentation of the technical assistance provided and document any activities related to linking utilities with the financial institutions, such as through meeting notes. The activity MEL plan should note what documentation (e.g., training rosters, mentoring plans) is being collected and stored in activity monitoring files.
Water Resource Productivity Indicators (HL.8.5)

The standard indicator for measuring “Improved management of water resources” (DR 4) is:

**HL.8.5-1** Number of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance

This indicator measures the number of people benefiting from an increase in equitable resource allocation, watershed protection and restoration, as well as improved water quality and availability or through reduced water-related risk. Measures to improve water resources management may include:

- Construction of green infrastructure, buffer zones, or reforestation
- Establishment of payment for water-related ecosystem services
- Implementation and enforcement of water resource management plans
- Data collection to support water resource management decision making with resultant changes in programs

This is an outcome measure which requires population-level data with documented benefits, such as a catchment area used as a source for water points being protected or green infrastructure completed. By themselves, training or work supporting the development of policies and plans cannot be counted under this indicator.

If there are additional actions implemented under the water resource management plan across multiple years, the number of people benefiting should be reported each year additional actions are implemented, even if additional benefits are accruing to the same population.

**DATA SOURCES AND METHODS**

Data sources must demonstrate that measures were implemented as a result of USG assistance. Data sources may include water quality testing results, documentation verifying the implementation of plans, or documentation verifying the implementation of restoration/protection measures. Data sources must also demonstrate that these measures resulted in a concrete benefit. Acceptable methods for this include:

- representative sampling survey pre- and post-intervention to assess benefits, within a catchment area where people can reasonably be assumed to see a benefit from the activity
- number of people covered under an adopted and implemented plan or process for improving water resource management, with the assumption that all people covered by the plan benefit from having such an activity

The number of people may be ascertained via a direct count, determined by multiplying the number of households with benefits by the average number of people per household, or based on public population records with a sample survey used to ascertain what proportion of the population benefitted.
ATTRIBUTION OF RESULTS

Activities working to achieve results under this indicator may be implementing a variety of interventions, including direct implementation of watershed restoration measures, assisting with the development of action plans, building capacity of local institutions, and creating social and behavior change around water resource management. Any of these interventions can result in benefits that are attributable to US Government assistance, as long as the activity is directly working with the institutions and/or people directly involved in actions resulting in improved water resource management. This can include work with basin authorities, community groups, private sector entities, or other institutions as appropriate.

Activities must monitor outcomes along a theory of change, developed to link results between the activity’s interventions and eventual benefits to people, to clearly document attribution.
WATER RESOURCE PRODUCTIVITY SCENARIOS

SCENARIO 1: LOCAL SPRING PROTECTION ACTIVITY

An activity is working with local rural communities to protect spring sources. The activity’s goal is to ensure the watershed, and associated springs sourcing the community’s potable water, is protected and that water quality is improved.

Currently, the spring source is used by the local community for washing clothing, watering livestock, and occasionally for collecting cooking and drinking water. This has led to degradation of the surrounding vegetation and pollution of the water source. The activity works to restore vegetation surrounding the spring, put up fencing, and create a new access point for drinking water, washing clothing, and watering livestock. They also implement a community-wide social and behavior change program to ensure that the community understands and can address any issues related to protecting this spring source.

The following steps can help the partner determine the correct indicator to use:

What indicator should the activity use?

The activity should report on indicator HL.8.5-1 because it is providing a direct benefit to the protection of this watershed and water quality.

If the community is relying on this spring as a drinking water source, it may also be possible for the activity to report on indicator HL.8.1-3 (improved service quality), but only if the source already qualifies as a basic drinking water service and there is a documented improvement to drinking water quality.

What data are needed to demonstrate this result?

The activity should document the completion of the spring protection activities (e.g., certificate of construction of the new access point) and record the implementation of any behavior change activities. The activity may also be able to directly measure changes in water quality at the spring and should document those changes, as appropriate.

The activity will also need to measure the number of people using the spring as a water source. This can be based on a direct count of the number of households, multiplied by an average household size, in the surrounding community that use the spring for either drinking water or other uses.

Can these results be attributed to USG assistance?

Yes! In this case, since the activity directly implemented watershed protection activities that created a benefit to the population using the spring, the population benefitting from the activity is attributable.
An activity is planning to support improved water resources management in a basin characterized by water scarcity, water pollution, and a lack of access to safe and reliable drinking water. The overall goal of the activity is to improve water security for people living in the basin.

To achieve this goal, the activity is implementing multiple indirect interventions, including:

- Building the capacity of water resources management institutions (Ministry of Water, the basin’s water management authority, and local water user groups) to plan and implement measures that will ensure adequate quantity and quality of water for human use and the protection of ecosystem services.
- Providing support to the water management authority to develop stakeholder-driven and evidence-based management plans, including 5-year action plans for all sub-catchments within the basin. The action plans identify priority watershed protection and restoration measures, and associated evidence linking the planned intervention measures with an expected improvement in water quality, quantity, or availability.
- Providing technical assistance to local water users associations responsible for assisting in the development and implementation of sub-catchment management plans.
- Providing technical assistance to the water resources authority and water users groups to improve financing, revenue collection, and budgeting to enhance future implementation of management plans and overall water resources management.

The activity is also implementing multiple direct interventions, such as:

- Installing drainage infrastructure to prevent polluted water from running off into drinking water sources.
- Rehabilitating riparian buffers to reduce flooding, prevent pollution, improve recharge, and control erosion.
- Improving the collection of water withdrawal fees to fund watershed improvements.
- Working with tea growers to change planting practices to improve water retention and reduce pollution.
- Rehabilitating riparian buffers to reduce flooding, prevent pollution, improve recharge, and control erosion.
- Improving the collection of water withdrawal fees to fund watershed improvements.
- Working with tea growers to change planting practices to improve water retention and reduce pollution.

The following steps can help the partner determine the correct indicator to use:

**What indicator should the activity use?**

The activity will result in an action plan that identifies priority watershed protection and restoration measures in the sub-catchments. If those measures are verified as implemented over the life of the activity, the implementing partner should report against indicator HL.8.5-1.
The activity may also be able to report on indicator HL.8.3-3 if there is a documented change in institutional capacity at the Ministry of Water or Basin Water Resources Authority. Additionally, if the technical assistance to improve financing of restoration and watershed protection results in new funding being mobilized, the activity can report on indicator HL.8.4-1.

**What data are needed to demonstrate this result?**

Results can be counted once the on-the-ground watershed protection and restoration activities outlined in sub-catchment action plans are implemented and the implementation has been verified. A certification of the completion of activities, with maps of completed interventions can be used to document results.

A data source documenting the number of people covered in the sub-catchment is also required to report against any indicators. In this case, it can be assumed that all people in the area benefit from having such an activity. The number of people may be a direct count of households multiplied by the average number of people per household or may be based on public records (e.g., census data), if available.

**Can these results be attributed to USG assistance?**

Yes, because the activity is directly implementing protection and restoration measures, results can be attributed to the activity.

Because the activity is also working with the water management authority and local groups to enable the development and continued implementation and enforcement of the sub-catchment plans, it may be possible to count additional beneficiaries beyond those affected by direct protection and restoration work done by the implementing partner. However, when working through the local government and communities, it is important to track custom indicators across the theory of change to ensure that the technical assistance is achieving results, and outcome indicators can be attributed to the activity.

In this case, the activity documents that the sub-catchment management plans are finalized, local institutions have improved capacity and funding to implement the plans, and additional restoration and protection measures identified in the plans are being implemented by stakeholders beyond the implementing partner. Therefore, the additional beneficiaries can be counted.
Custom Indicators

Standard performance indicators are designed to capture key steps in the theory of change, as reflected in the Water and Development Plan results framework, and allow for consolidated external reporting. However, each water and sanitation project or activity should have its own theory of change that clearly articulates how its interventions lead to the desired outputs, outcomes, and impacts. It is unlikely that the set of standard indicators on their own will be sufficient to monitor progress along that theory of change, or support learning and adaptation at an OU or activity level. Therefore, custom indicators should be used.

In addition to reporting on the HL.8 standard indicators outlined in this handbook, activities may be able to report on standard indicators from other sectors, and should consider these. While some standard performance indicators are relevant to regional and global Washington-based investments and should be adopted as appropriate, many are not. Given the unique nature of regional and global investments, these activities should be monitored using primarily custom indicators tailored to each OU’s theory of change. Some sample custom indicators are listed under each DR below. However, this list is not exhaustive, and it is expected that each new activity will develop an appropriate mix of standard and custom indicators.

DR 1  GOVERNANCE AND FINANCE

- Number of districts with monitoring information systems in place and used as a result of USG assistance
- New national policy, standards and guidelines for WASH that exist as a result of USG assistance
- New or improved mechanisms for civil society organizations to advocate for WASH as a result of USG assistance
- Percentage of national or sub-national budget dedicated to WASH as a result of USG assistance
- Percentage increase in government investment in water resources management as a result of USG assistance

DR 2  SANITATION AND HYGIENE

- Change in attitudes and norms around open defecation as a result of USG assistance
- Change (percentage) in sanitation enterprise revenues as a result of USG assistance
- Percentage of women and girls who report having changed their habits due to menstruation as a result of USG assistance

DR 3  DRINKING WATER

- Change (percentage) in non-revenue water as a result of USG assistance
- Percentage improvement in operating ratio of water service providers as a result of USG assistance
- Change in an organizational capacity index for water utilities as a result of USG assistance
- Number of service providers with new water safety plans in place as a result of USG assistance
- Percentage of assets registered and accounted for in service authority monitoring systems as a result of USG assistance
• Number of households adopting water security measures as a result of USG assistance
• Number of hectares under watershed rehabilitation actions as a result of USG assistance
• Number of basins with management plans and stakeholder engagement mechanisms in place as a result of USG assistance
• Number of hectares under improved water resource, watershed, or basin resource management as a result of USG assistance
• Number of women or women’s groups participating in stakeholder consultations on water resource allocation plans and management

**CROSS-CUTTING**

• Number of laws or policies addressing gender equality (e.g., menstrual hygiene management, gender-based violence (GBV), and WASH, female-friendly toilets, workforce equality) enhanced, drafted, approved or implemented at national, district, municipal or utility level as a result of USG support
• Number of people with increased knowledge of WASH approaches/tools through exposure to USG-supported events, communications materials, and products as a result of USG assistance
• Number of women and girls who report improved safety and security from GBV as they go about their daily activities, including when collecting water and during sanitation and hygiene activities
Water Directive Funding and Required Indicators

All OUs receiving water directive funding are required to report on all standard indicators to which a water directive funded project contributes results. In other words, if an OU expects an activity to generate results that are measured by the indicator, the OU must establish a baseline, set targets, and report results for the indicator.

Missions that receive WASH directive funds are assigned standard indicators to report against in the Foreign Assistance Coordination and Tracking System (FACTS Info). Each Mission with directive funding is assigned at least one drinking water indicator (HL.8.1-1, HL.8.1-2 or HL.8.1-3) and at least one sanitation indicator (HL.8.2-1, HL.8.2-2, HL.8.2-3 or HL.8.2-7). However, Missions should report against all HL.8 indicators they possibly can in FACTS Info.

If an OU cannot report against an assigned indicator, it is required to provide an “opt-out” narrative explaining why. **Acceptable reasons for opting out of reporting would include:**

- The OU is targeting a different service level and has therefore selected other standard indicators to report against. In these cases, a different indicator will be assigned in future years to match programming.
- The OU is in design or at the start of a new activity and does not have results to report. Out year targets should be set in this case.
- The OU is focused solely on water and/or sanitation and cannot report on one of the specific assigned indicators.

A Mathira Water and Sanitation Company (MAWASCO) customer in Kenya shares an SMS notification with marketers to seek clarification on the outstanding balance she believes is incorrect. Photo by Margaret Kihuto.
Annex I: Resources

• Indicator Reference Sheets

• JMP Core and Expanded Questions (for Households, Health facilities, and Schools)

• WHO International Scheme to Evaluate Household Water Treatment Technologies (Round 1 and 2)

• USAID Performance Monitoring and Evaluation, Measuring Institutional Capacity
Annex II: FAQs

Where do I find the Standard Foreign Assistance Indicators (or “F indicators”) and associated PIRS?

The Standard Foreign Assistance Indicators are available for download. For WASH indicators, please see the “Health” indicator reference sheets and for gender indicators, please see the “Cross cutting” indicator reference sheets. Detailed guidance on USAID activity monitoring, including information on selecting indicators, determining baselines and setting targets, are available at USAID’s Learning Lab.

What is “first-time access”? Doesn’t everyone have some kind of water source?

First-time access means that particular beneficiary did not previously have that level of service. For example, someone relying on a water point that takes more than 30 minutes to collect water does not have a basic water service. So, if a USAID intervention results in access that now meets the definition of a basic service, this would be first-time access.

Indicator HL 8.1-2 (safely managed), states that new access may be the result of a water system being “rehabilitated from non-functional state.” Would this definition encompass improving water quality from non-potable to potable quality for households that already have piped water? For example, in a city where households served by a small water utility are unable to use their water supply for drinking due to poor quality, a USAID project resulted in improvements in water quality. Would that count?

If the beneficiary did not previously have access that would meet the standard for safely-managed (which would be the case if it didn’t meet the standard of being free from fecal or priority chemical contaminants), then yes, this could be considered new access to a safely-managed drinking water service. The activity would need to confirm that the water service does now meet the standard for a safely managed service.

Do public toilets (e.g., in markets or bus stations) count for the institutional latrine indicator?

No. Institutional latrine are those associated with schools and health care facilities, but not widely open to the public. However, you can create a custom indicator for any program that results in new public latrines.

Can we report results under indicator HL 8.1-2 (safely managed) if the activity will rehabilitate water supply systems for schools that are currently used as evacuation centers for IDPs? I’m aware that we have new indicators HL 8.1-4 / 8.2-4 (institutional settings gaining access), which would correspond to improve access in schools, but if the intent is to provide access to people who were displaced from their homes, can we use the standard HL 8.1-2, instead?

If the rehabilitated water supplies would not just be serving students at the school, but would be used as the primary domestic drinking water source for the displaced people, who previously didn’t have access to a drinking water source then yes, you could report on HL 8.1-2. The one tricky part is that the “safely-managed” standard is quite high and requires that the water quality meets certain standards and is available on premises. I’m not sure what the living arrangements in this situation are, but you’d want to make sure the access to water is close enough to where people live to be considered “on premise.” If not, you could report on the “basic drinking water” (HL8.1-1) indicator instead.
I used to report on household hygiene indicators under 3.1.6.8. Where did these indicators go?

Don’t worry – those standard indicators still exist! These have been moved into the same category as other WASH indicators in the revised framework (HL.8) because these are highly related and should all be reported for any WASH program. The hygiene indicators specifically are under HL 8.2, along with sanitation.

How do you measure the handwashing indicator (HL8.2-5)?

This is usually measured via a household survey with observation of a handwashing station with soap and water on premises. It is possible that there would be appropriate secondary data sources that could be used, but these would have to be available at the right geographic scale and timeframe. Data at the right scale means that the sampling for the secondary source is valid for the project geographies. Often large-scale surveys produce data that is accurate at the national scale, but this data is not detailed enough to provide reasonable estimates for specific communities that a project is working in. For timeframe, the project needs to be able to report on this indicator at the start and end of the project (at a minimum). Regular surveys, such as the DHS, may not be scheduled at the right time for a project to make use of the data for reporting.

We need your assistance for the clarification on the data source section for the PIRS:
HL.8.1-1 “Number of people gaining access to basic drinking water services as a result of USG assistance.” This section mentions two acceptable method(s) by which data for this indicator should be collected. Should we use both methods?

The two data sources listed in the PIRS for this indicator are: 1) direct observation of new services and count of beneficiaries and 2) household surveys of a representative sample of those gaining access. However, you don’t need to use both of these data sources. Either one would be acceptable. The methods listed in the PIRS are those that we know would be acceptable, but the data sources within each activity-specific PIRS must be customized to clearly explain the data sources that you do intend to use. Depending on the specific interventions being implemented, it may be necessary to augment these data sources with others.

What does “as a result of USG assistance” mean? How do I measure attribution for new access to water or sanitation services if we aren’t doing direct construction?

This will depend a lot on your particular program, as there are many ways to assess whether results were as a result of USAID’s assistance. In general, you will need to create indicators for lower level outputs or intermediate indicators that create a causal trail from the specific intervention to the outcome of access to services.
**Annex III: PIRS**

**Indicator HL.8.1-1**  
**Number of people gaining access to basic drinking water services as a result of USG assistance**

**Definition**  
Basic drinking water services, according to the Joint Monitoring Programme (JMP), are defined as improved sources or delivery points that by nature of their construction or through active intervention are protected from outside contamination, in particular from outside contamination with fecal matter, and where collection time is no more than 30 minutes for a roundtrip including queuing. Access must be measured from the beneficiary's place of residence, and does not include access at a day school, health facility or place of work.

Drinking water sources meeting this criteria include:

- piped drinking water supply on premises;
- public tap/standpost; tube well/borehole;
- protected dug well; protected spring;
- rainwater; and/or
- bottled water (when another basic service is used for hand washing, cooking or other basic personal hygiene purposes).

All other services are considered to be “unimproved”, including: unprotected dug well, unprotected spring, cart with small tank/drum, tanker truck, surface water (river, dam, lake, pond, stream, canal, irrigation channel), and bottled water (unless basic services are being used for hand washing, cooking and other basic personal hygiene purposes).

The following criteria must be met for persons counted as gaining access to basic drinking water services as a result of USG assistance:

1. The total collection time must be 30 minutes or less for a round trip (including wait time). Given this definition, the number of people considered to have “gained access” to a basic service will be limited by the physical distance to the service from beneficiaries’ dwellings, the amount of time typically spent queuing at the service, and the production capacity of the service.
2. The service must be able to consistently (i.e. year-round) produce 20 liters per day for each person counted as “gaining access.” This amount is considered the daily minimum required to effectively meet a person’s drinking, sanitation, and hygiene needs.
3. The service is either newly established or was rehabilitated from a non-functional state within the reporting fiscal year as a result of USG assistance.
4. Persons counting toward the indicator must not have previously had similar “access” to basic drinking water services, prior to the establishment or rehabilitation of the USG-supported basic service.

**Note:**
Although USAID expects that all drinking water services supported by USG assistance be tested for fecal coliform and arsenic during the program cycle, compliance with water quality standards is not required for attribution to this indicator. For guidance on water testing requirements during the program cycle, contact USAID/E3/Water Office.

**Limitations:**
Providing “access” does not necessarily guarantee beneficiary “use” of a basic drinking water service and thus potential health benefits are not certain to be realized from simply providing “access.” This indicator does not capture the full dimensions of a water service’s reliability or affordability — two other important factors that influence the likelihood that those defined as having “access” will actually use the service. For more information on these factors please refer to indicator HL.8.1-3.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of people gaining access to basic drinking water services as a result of USG assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary SPS Linkage</td>
<td>HL.8.1</td>
</tr>
<tr>
<td>Linkage to Long-Term Outcome or Impact</td>
<td>Use of a “basic” drinking water service, as defined, is strongly linked to decreases in the incidence of waterborne disease especially among children under age five. Diarrhea remains the second leading cause of child deaths worldwide. While not guaranteeing “use” of the drinking water service, this indicator measures progress in making basic drinking water available in a manner that typically leads to use of the service.</td>
</tr>
<tr>
<td>Indicator Type</td>
<td>Outcome</td>
</tr>
<tr>
<td>Reporting Type</td>
<td>Number</td>
</tr>
<tr>
<td>Use of Indicator</td>
<td>Useful for program management, funding allocations and tracking, and reporting towards USAID’s Water and Development Strategy objectives.</td>
</tr>
<tr>
<td>Reporting Frequency</td>
<td>Reporting Frequency Annual, depending on the specifications in the contract or grant.</td>
</tr>
<tr>
<td>Data Source</td>
<td>Upon completion of construction or rehabilitation of a basic water service, data must be collected by USAID staff, implementing partners, or a third-party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator. Acceptable method(s) by which data for this indicator should be collected are:</td>
</tr>
<tr>
<td></td>
<td>• Observations of water services and direct count of beneficiaries or households with estimates of the number of people living in those households. This must include an assessment of the “time to collect,” where only people living within that radius of the service currently not using a basic drinking water supply service according to the baseline is the initial estimate of those “gaining access” to the service. This number might be further reduced, however, depending upon the measured production volume of the service in comparison to the 20 liters/capita/day minimum standard.</td>
</tr>
<tr>
<td></td>
<td>• Household surveys of a representative and statistically significant sample of those who gained access to verify that the water services meet the standards in the definition for a basic water service. This data source requires that a baseline must be established among potential beneficiaries before the start of activity implementation to measure current “time to collect” and type of existing “main drinking water services” through an initial household survey, using a representative sample of households, conducted by the implementing partner or a third party. This indicator can be difficult and time consuming to measure accurately and requires robust data quality assurance on the part of USAID.</td>
</tr>
</tbody>
</table>
| Bureau Owner(s) | Agency: USAID  
Bureau and Office: RFS/CW  
POC: waterteam@usaid.gov |
| Disaggregate(s) | Sex (Female, Male)  
Residence (Rural, Urban)  
Wealth Quintile |
### Indicator HL.8.1-2

**Number of people gaining access to safely managed drinking water services as a result of USG assistance**

**Definition**
A safely managed drinking service is defined as one that meets the definition of a basic drinking water service (see indicator HL.8.1-1), and is also:

- Located on premises: water is provided directly to the household or on premises;
- Available when needed: consistently produces 20 liters per day for each person counted as “gaining access.” This amount is considered the daily minimum required to effectively meet a person’s drinking, sanitation, and hygiene needs;
- Compliant with fecal (and priority chemical) standards: meets a fecal coliform standard of 0 CFU/100 mL, arsenic standard of 10 parts per billion, and (at a minimum) host country standards for other chemicals that have been identified to pose a site-specific risk to human health.

Persons are counted as “gaining access” to a safely managed drinking water service if the service is either newly established, rehabilitated from a non-functional state, or upgraded from a basic water service within the reporting fiscal year as a result of USG assistance, and these persons did not previously have similar “access” to a safely managed drinking water service prior to the establishment or rehabilitation of the USG-supported safely managed service.

**Limitations:**
Providing “access” does not necessarily guarantee beneficiary “use” of a safely managed drinking water service and thus potential health benefits are not certain to be realized from simply providing “access.” Although, the chosen definition of “access” does attempt to define standard ease of use/accessibility and minimum volume of water to meet potential user needs, this definition does not capture the water service’s affordability. For more information on this factor please refer to indicator HL.8.1-3.

<table>
<thead>
<tr>
<th>Primary SPS Linkage</th>
<th>HL.8.1</th>
</tr>
</thead>
</table>

#### Linkage to Long-Term Outcome or Impact
Use of a “safely managed” drinking water service, as defined, is strongly linked to decreases in the incidence of waterborne disease especially among children under age five. Diarrhea remains the second leading cause of child deaths worldwide. While not guaranteeing “use” of the drinking water service, this indicator measures progress in making high quality drinking water available/“accessible” in a manner that typically leads to use of the safely managed service.

<table>
<thead>
<tr>
<th>Indicator Type</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Type</td>
<td>Number</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of Indicator</th>
<th>Useful for program management, funding allocations and tracking, and reporting towards USAID’s Water and Development Strategy objectives.</th>
</tr>
</thead>
</table>

| Reporting Frequency | Annual basis, depending on the specifications in the contract or grant agreement. |
Indicator HL.8.1-2  
Number of people gaining access to safely managed drinking water services as a result of USG assistance

Data Source  
Upon completion of construction, rehabilitation, or upgrading of water services that meets the standard for a safely managed service, data must be collected by USAID staff, implementing partners, or a third-party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator. Acceptable method(s) by which data for this indicator should be collected are:

• Observations of water services and direct count of beneficiaries or households with estimates of the number of people living in those households;
• Water quality tests of any USG-constructed water services;
• Household surveys of a representative and statistically significant sample of those who gained access to verify that the water services meet the standards in the definition for “safely managed”;
• Third-party data provided by a water utility or other local entity responsible for provision of water demonstrating new connections. The implementing partner assisting the third party must demonstrate the linkage between USG assistance and new water supplies; and
• Government records for water services managed directly by the government demonstrating new connections and water quality. The contractor or grantee must demonstrate the linkage between USG assistance and new water supplies.

Limitations:
This indicator can be difficult and time consuming to measure accurately and requires robust data quality assurance on the part of USAID. If a sample survey is used to estimate the number of those “gaining access,” then a baseline must be established before the start of activity implementation through an initial household survey conducted by the USAID partners implementing activities or a third party evaluator using a representative sample of households in the zone of influence.

Any use of sample surveys or third-party data (e.g., from utilities or government entities) must also account for baseline service levels and demonstrate the link between USG assistance and new access to safely managed water service.

Agency: USAID  
Bureau and Office: RFS/CW  
POC: waterteam@usaid.gov

Disaggregate(s)  
Sex (Female, Male)  
Residence (Rural, Urban)  
Wealth Quintile
<table>
<thead>
<tr>
<th>Indicator</th>
<th><strong>HL.8.1-3</strong> Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance</th>
</tr>
</thead>
</table>
| **Definition** | A person is counted for this indicator when their current primary drinking water service qualifies as a “basic” or “safely managed” (see indicators HL.8.1-1 and HL.8.1-2) but the quality of “service” they receive is further “improved” as a result of USG assistance in terms of its ease of accessibility, reliability, water quality and/or affordability. Access must be measured from the beneficiary’s place of residence, and does not include access at a day school, health facility, or place of work. Specifically, “improved service quality” is defined as being achieved if:  
  • The accessibility measure, time taken to collect water from a basic or safely managed service, is further reduced to less than the minimum requirements for a basic water service (see indicator HL.8.1-1) or safely managed water service (see indicator HL.8.1-2); and/or  
  • Reliability of supply improves such that the person’s main service is available regularly or more frequently, i.e., there is no regular rationing of supply or regular seasonal failure of their improved service; and/or,  
  • Water quality improvements are made that would be reasonably expected to result in long term improvements to the fecal, biological or chemical contamination of a drinking water sources (e.g., construction of water treatment systems, support to service provider to consistently chlorinate water, implementation of a water safety plan); and/or,  
  • Affordability of their basic or safely managed drinking water services improves such that the average price they pay for water is no higher than two times the average water tariff for piped water into the dwelling in their country (where applicable). |
| **Primary SPS Linkage** | HL.8.1 |
| **Linkage to Long-Term Outcome or Impact** | "Poor quality service" (i.e., difficult to access, unreliable, or expensive) from basic or safely managed drinking water services discourage people from consuming the minimum amount of water required for drinking, sanitation and hygiene and thus contributes to elevated waterborne disease. Poor water quality is linked to diarrheal disease and other poor health outcomes. |
| **Indicator Type** | Outcome |
| **Reporting Type** | Number |
| **Use of Indicator** | Useful for program management; funding allocations; and reporting towards USAID’s Water and Development Strategy objectives |
| **Reporting Frequency** | Annual, depending on the specifications in the contract or grant. |
Indicator HL.8.1-3

**Number of people receiving improved service quality from an existing basic or safely managed drinking water service as a result of USG assistance**

**Data Source**

Upon completion of construction, rehabilitation, or upgrading of water services, data must be collected by USAID staff, implementing partners, or a third-party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator. Acceptable method(s) by which data for this indicator should be collected are:

- Program records and observations of water supply systems constructed/renovated.
- Household surveys of a representative and statistically significant sample of those who received improved drinking water service quality.
- Intercept survey at the point of water distribution. An intercept survey is a short, structured interview carried out by an enumerator at a desired location, which, in this case, would be the water distribution point.
- Water quality testing must be used to confirm results related to improvements in water quality upon completion of the intervention. These data sources require that a baseline must be established among potential beneficiaries before the start of activity implementation to measure current "time to collect," and type of existing "main drinking water services" through an initial household survey, using a representative sample of households, conducted by the implementing partner or a third party. Water quality improvements require baseline testing of water quality.

Service quality improvement information will be defined as:

- **Accessibility**: the total time to collect water from the service.
- **Reliability**: the number of days within each quarter that the service was operational.
- **Affordability**: price per volume of water sold.
- **Quality**: the chemical, physical, and/or biological characteristics of water.

This indicator can be difficult and time consuming to measure accurately and requires robust data quality assurance on the part of USAID.

**Note**: The same beneficiaries cannot be counted against this indicator and indicator HL.8.1-1 or HL.8.1-2 within the same year of reporting.

**Bureau Owner(s)**

Agency: USAID
Bureau and Office: RFS/CW
POC: waterteam@usaid.gov

**Disaggregate(s)**

- Sex (Female, Male)
- Residence (Rural, Urban)
- Wealth Quintile
**Indicator**

| HL.8.1-4 | Number of health facilities and schools gaining access to basic drinking water services as a result of USG assistance |

**Definition**

Schools in the context of this indicator are day schools for children 6 to 18 years of age who return home after school. Schools may be public or private. Health facilities may provide different levels of service, but it is anticipated that water services will be installed in health facilities at the lower echelons of the service hierarchy. Health facilities may be public or private.

An institution is considered to have gained access to a basic drinking water service if:

- The service is either newly established or rehabilitated from a non-functional state within the reporting fiscal year as a result of USG assistance, and this institution did not previously have similar “access.”
- The service is on the premises of the institution.
- The service meets the definition of a basic drinking water service as defined in indicator HL.8.1-1.

**Limitations:**

The definition of this indicator does not consider reliability, seasonality or water quality. It only measures the most basic level of service at an institution.

**Primary SPS Linkage**

HL.8.1

**Linkage to Long-Term Outcome or Impact**

Per WHO guidelines, “Schools with poor water, sanitation, and hygiene conditions and intense levels of person-to-person contact are high-risk environments for children and staff and exacerbate children’s particular susceptibility to environmental health hazards.” Health facilities, like any other public space, must have water service to reduce the possibility of spreading disease.

**Indicator Type**

Output

**Reporting Type**

Number

**Use of Indicator**

Useful for program management, funding allocations and tracking, and reporting towards the Water and Development Strategy.

**Reporting Frequency**

Annual, depending on the specifications in the contract or grant

**Data Source**

Direct observations of all institutional setting sites targeted by USG assistance conducted on an annual basis by the USAID implementing partners or a third-party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator.

**Bureau Owner(s)**

Agency: USAID
Bureau and Office: RFS/CW
POC: waterteam@usaid.gov

**Disaggregate(s)**

Institution Type (School/Health Facility)
## Indicator HL.8.2-1

### Number of communities verified as open defecation free (ODF) as a result of USG assistance

<table>
<thead>
<tr>
<th><strong>Definition</strong></th>
<th>ODF status in a community requires that everyone in the community has a designated location for sanitation (regardless of whether it meets the definition of a “basic sanitation facility” is a shared facility or otherwise unimproved) and that there is no evidence of open defecation in the community. However, where higher national standards exist, ODF status should be defined in accordance with national regulations and/or an established national system. If a national policy does not exist, implementing partners shall agree upon a definition with USAID during development of the project Monitoring and Evaluation Plan. ODF status must be verified through an established certification process, reviewed by a third party, or a review by the implementing partner.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary SPS Linkage</strong></td>
<td>HL.8.2</td>
</tr>
<tr>
<td><strong>Linkage to Long-Term Outcome or Impact</strong></td>
<td>“Poor access to adequate sanitation will result in the practice of open defecation. The harmful impacts that result from open defecation include the spread of diarrheal disease, loss of privacy and human dignity, and environmental pollution. Even if a few households continue to practice open defecation, the overall risk of bacteriological contamination and incidence of disease may continue to be high.”</td>
</tr>
<tr>
<td><strong>Indicator Type</strong></td>
<td>Outcome</td>
</tr>
<tr>
<td><strong>Reporting Type</strong></td>
<td>Number</td>
</tr>
<tr>
<td><strong>Use of Indicator</strong></td>
<td>Useful for program management, funding allocations, tracking, and reporting.</td>
</tr>
<tr>
<td><strong>Reporting Frequency</strong></td>
<td>Defined in accordance with local monitoring and evaluation systems, at least twice during project implementation.</td>
</tr>
</tbody>
</table>
| **Data Source** | Upon declaration of ODF status for a community, the status may be certified by an official entity in accordance with national systems. Where use of a national certification system is not possible, the implementing partner may conduct verification through collection of data or via a third-party review. Methods for verifying ODF status may include:  
  • transect walks of open defecation sites at dawn and dusk,  
  • determining whether open/hanging latrines are being used through observations  
  • observing existing community sanctions for infringements to ODF rules  
  • household surveys to assess latrine ownership/access  
  • community mapping exercises  

To facilitate inspection and safeguard against fraud when rewards to communities are used as incentives, it is suggested that ODF verification involve a committee made up of government officials, NGO staff, other civil society representatives, community residents, and/or residents from neighboring towns that have achieved ODF status. Kamal Kar and Robert Chambers, co-authors of the Handbook on Community-Led Total Sanitation even suggest withholding certification of ODF status for a 6-month period to ensure that sanitation coverage has been sustained. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and its contribution to ODF status in order to attribute results to this indicator. |
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of communities verified as open defecation free (ODF) as a result of USG assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau</td>
<td>Agency: USAID</td>
</tr>
<tr>
<td>Owner(s)</td>
<td>Bureau and Office: RFS/CW</td>
</tr>
<tr>
<td>POC</td>
<td><a href="mailto:waterteam@usaid.gov">waterteam@usaid.gov</a></td>
</tr>
<tr>
<td>Disaggregate(s)</td>
<td>None</td>
</tr>
</tbody>
</table>
**Indicator**

**HL.8.2-2**

**Number of people gaining access to a basic sanitation service as a result of USG assistance**

**Definition**

A basic sanitation service, defined according to the Joint Monitoring Programme (JMP), consists of 1) a sanitation facility that hygienically separates human excreta from human contact (i.e., an improved sanitation facility), that 2) is not shared with other households.

Improved sanitation facilities include the following types:

- flush or pour/flush facility connected to a piped sewer system, septic system, or a pit;
- composting toilets;
- pit or ventilated improved pit latrines (with slab).

All other sanitation facilities do not meet this definition and are considered “unimproved.”

Unimproved sanitation includes flush or pour/flush toilets without a sewer connection; pit latrines without slab/open pit; bucket latrines; or hanging toilets/latrines.

Households that 1) have an unimproved sanitation facility, or 2) have an improved facility that is shared with other households are not counted as having access to a basic sanitation service.

A household is defined as a person or group of persons that usually live and eat together.

Persons are counted as “gaining access” to an improved sanitation facility, either newly established or rehabilitated from a non-functional or unimproved state, as a result of USG assistance if their household did not have similar “access”, i.e., an improved sanitation facility was not available for household use, prior to completion of an improved sanitation facility associated with USG assistance.

This assistance may come in the form of hygiene promotion to generate demand. It may also come as programs to facilitate access to supplies and services needed to install improved facilities or improvements in the supply chain(s).

**Limitations:**

It is important to note that providing “access” does not necessarily guarantee beneficiary “use” of a basic sanitation facility and thus potential health benefits are not certain to be realized from simply providing “access.” Not all household members may regularly use the noted basic sanitation facility. In particular, in many cultures young children are often left to defecate in the open and create health risks for all household members including themselves. The measurement of this indicator does not capture such detrimental, uneven sanitation behavior within a household.

Additional limitations of this indicator are that it does not fully measure the quality of services, i.e. accessibility, quantity, and affordability, or the issue of facilities for adequate menstrual hygiene management.

<table>
<thead>
<tr>
<th>Primary SPS Linkage</th>
<th>HL.8.2</th>
</tr>
</thead>
</table>

| Linkage to Long-Term Outcome or Impact | Use of an improved sanitation facility by households is strongly linked to decreases in the incidence of waterborne disease among household members, especially among those under age five. Diarrhea remains the second leading cause of child deaths worldwide. |

<table>
<thead>
<tr>
<th>Indicator Type</th>
<th>Outcome</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reporting Type</th>
<th>Number</th>
</tr>
</thead>
</table>

| Use of Indicator | Useful for program management, funding allocations and tracking, and reporting towards USAID’s Water and Development Strategy objectives. |

<p>| Reporting Frequency | Annual, depending on the specifications in the contract or grant. |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of people gaining access to a basic sanitation service as a result of USG assistance</th>
</tr>
</thead>
</table>

**Data Source**

Data must be collected by USAID staff, implementing partners, or a third-party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator. Acceptable method(s) by which data for this indicator can be collected are:

- **Direct count of beneficiary households and estimates of the number of people living in those households by the USAID partners implementing activities in the zone of influence or a third-party evaluator and summarized on a quarterly or annual basis.** This method would be most appropriate when the technical approach being pursued involves some direct household engagement by the USAID implementing partner, e.g., when a household is provided a subsidy for the construction of an improved sanitation facility.

- **Household surveys of a representative and statistically significant sample of those who gained access to verify that the sanitation facility meets the standards in the definition for a basic facility.** This data source requires that a baseline must be established before the start of activity implementation through an initial household survey conducted by USAID, the implementing partner, or a third party evaluator using a representative and statistically significant sample of households in the zone of influence.

This indicator can be difficult and time consuming to measure accurately and requires robust data quality assurance on the part of USAID.

**Bureau Owner(s)**

- **Agency:** USAID
- **Bureau and Office:** RFS/CW
- **POC:** waterteam@usaid.gov

**Disaggregate(s)**

- **Sex (Female, Male)**
- **Residence (Rural, Urban)**
- **Wealth Quintile**
**Indicator**  
HL.8.2-3  

**Number of people gaining access to safely managed sanitation services as a result of USG assistance**

| Definition | A safely managed sanitation service is defined as a basic sanitation facility service (see indicator 8.2-2) that is not shared with other households and where excreta is safely disposed in situ or removed to be treated off-site. 

Safely managed sanitation services are those that effectively separate excreta from human contact and ensure that excreta do not re-enter the immediate environment. This means that household excreta are contained, extracted, and transported to designated disposal or treatment site, or, as locally appropriate, are safely re-used at the household or community level. 

Persons are counted as “gaining access” to a safely managed sanitation service if their household did not previously have similar “access.” This may include households who previously had a basic sanitation facility but did not have safe removal or disposal of excreta. 

**Limitations:** 
It is important to note that providing “access” does not necessarily guarantee beneficiary “use” of a basic sanitation facility and thus potential health benefits are not certain to be realized from simply providing “access.” Not all household members may regularly use the noted basic sanitation facility. |

<table>
<thead>
<tr>
<th>Primary SPS Linkage</th>
<th>HL.8.2</th>
</tr>
</thead>
</table>

| Linkage to Long-Term Outcome or Impact | Use of a safely managed sanitation facility by households is strongly linked to decreases in the incidence of waterborne disease among household members, especially among those under age five. Diarrhea remains the second leading cause of child deaths worldwide. |

<table>
<thead>
<tr>
<th>Indicator Type</th>
<th>Outcome</th>
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</table>

<table>
<thead>
<tr>
<th>Reporting Type</th>
<th>Number</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Use of Indicator</th>
<th>Useful for program management, funding allocations and tracking, and reporting towards USAID’s Water and Development Strategy objectives.</th>
</tr>
</thead>
</table>

<p>| Reporting Frequency | Annual basis, depending on the specifications in the contract or grant agreement. |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of people gaining access to safely managed sanitation services as a result of USG assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL.8.2-3</td>
<td>Data must be collected by USAID staff, implementing partners, or a third-party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator. Acceptable method(s) by which data for this indicator can be collected are:</td>
</tr>
<tr>
<td></td>
<td>• Direct count of beneficiary households and estimates of the number of people living in those households by the USAID partners implementing activities in the zone of influence. (This method would be most appropriate when the technical approach being pursued involves some direct household engagement by the USAID implementing partner.)</td>
</tr>
<tr>
<td></td>
<td>• For sanitation facilities where excreta is safely disposed in situ (those rural locations where excreta can be safely abandoned or where the sanitation facility itself provides on-site treatment, e.g., composting toilets), acceptable data sources are:</td>
</tr>
<tr>
<td></td>
<td>• Sales records from USG-supported enterprises demonstrating that a household has purchased a latrine. Number of persons in a household may be estimated based on existing data.</td>
</tr>
<tr>
<td></td>
<td>• Household surveys of a representative and statistically significant sample of the population. This will be most appropriate when the USAID grantee or contractor is working to create demand at a wide scale and not directly engaging with households.</td>
</tr>
<tr>
<td></td>
<td>For sanitation facilities where excreta is removed to be treated off-site (e.g., sewerage systems, desludging services), acceptable data sources are:</td>
</tr>
<tr>
<td></td>
<td>• Records from enterprises (private sector or government) providing waste removal services demonstrating household use of such services. The implementing partner must demonstrate the linkage between USG assistance and new services provided.</td>
</tr>
<tr>
<td></td>
<td>• Records from enterprises (private sector or government) providing waste removal services demonstrating increased capacity to provide waste removal and transport services. This must be combined with data demonstrating that the expanded capacity is a result of USG assistance and there is demand for such services (e.g., by households with new latrines that do not require emptying by the end of the activity).</td>
</tr>
<tr>
<td></td>
<td>• Household surveys of a statistically significant sample of the population. This will be most appropriate when the USAID implementing partner is working to create demand for waste removal services at a wide scale and not directly engaging with households.</td>
</tr>
<tr>
<td></td>
<td>If a sample survey is used to estimate the number of those &quot;gaining access&quot;, then a baseline must be established before the start of activity implementation. Any use of third-party data (e.g., utilities or government entities) must account for baseline service levels and demonstrate the link between USG-assistance and new access to safely managed water service. For any projects expanding the capacity of fecal sludge management providers, the implementing partner will be responsible for demonstrating that the expanded capacity has led to use of services.</td>
</tr>
<tr>
<td></td>
<td>This indicator can be difficult and time consuming to measure accurately and requires robust data quality assurance on the part of USAID.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Bureau Owner(s)</strong></th>
<th>Agency: USAID</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Bureau and Office: RFS/CW</td>
</tr>
<tr>
<td></td>
<td>POC: <a href="mailto:waterteam@usaid.gov">waterteam@usaid.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Disaggregate(s)</strong></th>
<th>Sex (Female, Male)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Residence (Rural, Urban)</td>
</tr>
<tr>
<td></td>
<td>Wealth Quintile</td>
</tr>
</tbody>
</table>
**Indicator**

**HL.8.2-4**

**Number of basic sanitation facilities provided in health facilities and schools as a result of USG assistance**

**Definition**

Schools in the context of this indicator are day schools for children 6 to 18 years of age who return home after school. Schools may be public or private. Health facilities may provide different levels of service, but it is anticipated that sanitation facilities will be installed in health facilities at the lower echelons of the service hierarchy. Health facilities may be public or private.

A basic sanitation facility (see indicator HL.8.2-2) is one that provides privacy and hygienically separates human excreta from human contact and includes:

- flush or pour/flush facility connected to a piped sewer system;
- a septic system or a pit latrine with slab;
- composting toilets;
- or ventilated improved pit latrines (with slab).

All other sanitation facilities do not meet the definition of “basic” and are considered “unimproved.” Unimproved sanitation includes flush or pour/flush toilets without a sewer connection; pit latrines without slab/open pit; bucket latrines; or hanging toilets/latrines.

For latrine blocks with several squat holes, the “sanitation facility” count is the number of squat holes in the block. Sanitation facilities that are repaired in order to meet set local government standards will also be counted. Sanitation facilities counted are only those that have hand washing facilities within or near the toilets and are located on premises of the institution. In school settings, there must be gender-specific sanitation facilities and host country standards regarding the ratio of students per squat hole must be met.

**Limitations:**

Access to sanitation facilities does not guarantee use. Additionally, the cleanliness of the sanitation facility will not be reflected either.

**Primary SPS Linkage**

HL.8.2

**Linkage to Long-Term Outcome or Impact**

Per WHO guidelines, “Schools with poor water, sanitation, and hygiene conditions and intense levels of person-to-person contact are high-risk environments for children and staff and exacerbate children’s particular susceptibility to environmental health hazards.” Health facilities, like any other public space, must have sanitation facilities to reduce the possibility of spreading disease. Per WHO guidelines, “hospitals and health centers have special requirements for sanitation as they may have to deal with patients who are infected with diseases such as cholera, typhoid and hepatitis.”

**Indicator Type**

Output

**Reporting Type**

Number

**Use of Indicator**

Useful for program management, funding allocations and tracking, and reporting toward the Water and Development Strategy.

**Reporting Frequency**

Annual, depending on the specifications in the contract or grant
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of basic sanitation facilities provided in health facilities and schools as a result of USG assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL.8.2-4</td>
<td></td>
</tr>
</tbody>
</table>

**Data Source**

Direct observations of all institutional setting sites targeted by USG assistance conducted on an annual basis by the USAID implementing partners or a third-party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator.

**Bureau Owner(s)**

Agency: USAID  
Bureau and Office: RFS/CW  
POC: waterteam@usaid.gov

**Disaggregate(s)**

Institution Type (School/Health Facility)
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Percent of households with soap and water at a handwashing station on premises</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL.8.2-5</td>
<td>A handwashing station is a location where household members go to wash their hands. In some instances, these are fixed locations where handwashing devices are built in and are permanently placed. But they may also be movable devices that may be placed in a convenient spot for family members to use. The measurement takes place via observation by an enumerator during the household visit. The enumerator must see the soap and water at this station. The soap may be in bar, powder, or liquid form. Shampoo will be considered liquid soap. The cleansing product must be at the handwashing station or reachable by hand when standing in front of it. A “commonly used” handwashing station, including water and soap, is one that can be readily observed by the enumerator during the household visit, and where study participants indicate that family members generally wash their hands. Numerator: Sample-weighted number of households where both water and soap are found at the commonly used handwashing station. Denominator: Sample-weighted total number of households observed. Limitations: The measurement of handwashing is difficult and should preferably be conducted by objective measures that do not rely on self-reports. The presence of a handwashing station does not guarantee use. However, this indicator has been shown to be linked with actual handwashing behavior and, as such, is a useful proxy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary SPS Linkage</th>
<th>HL.8.2</th>
</tr>
</thead>
</table>

| Linkage to Long-Term Outcome or Impact | A clear link can be made between handwashing with soap among child caretakers at critical junctures and the reduction of diarrheal disease among children under five, one of the two major causes of child morbidity and mortality in developing countries. The critical junctures in question include handwashing with soap after the risk of fecal contact (after defecation and after cleaning a child’s bottom) and before handling food (before preparing food, eating, or feeding a child). |

<table>
<thead>
<tr>
<th>Indicator Type</th>
<th>Outcome</th>
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<table>
<thead>
<tr>
<th>Reporting Type</th>
<th>Percent</th>
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</table>

<table>
<thead>
<tr>
<th>Use of Indicator</th>
<th>Useful for program management, funding allocations, and tracking.</th>
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</table>

<p>| Reporting Frequency | Annual basis, depending on the specifications in the contract or grant agreement. |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HL.8.2-5</td>
<td></td>
</tr>
</tbody>
</table>

**Data Source**

Acceptable methods for data collection include:

- Multiple Indicator Cluster Surveys (MICS) (Round 4 and later) conducted by UNICEF ([http://mics.unicef.org/tools](http://mics.unicef.org/tools))
- Household surveys, which may be conducted by USAID, contractors, grantees, or a third party evaluator during USG-funded interventions

A baseline needs to be established for each project reporting on this indicator during the first year for which data is collected for this indicator will vary for each operating unit. Since this is an indicator that both DHS and MICS collect, published data obtained through these surveys may also be used, if applicable, in target areas for USG programs.

**Bureau Owner(s)**

Agency: USAID
Bureau and Office: RFS/CW
POC: waterteam@usaid.gov

**Disaggregate(s)**

None
**Indicator**  
**HL.8.2-6**  
**Percentage of households in target areas practicing correct use of recommended household water treatment technologies**

**Definition**  
Households will be counted for this indicator if they are correctly practicing at least one form of evidence-based household water treatment (HWT). HWT is also known as point of use, or POU, treatment, and comprises all methods with a peer-reviewed evidence base shown to improve the microbiological quality of the water to WHO standards of <1 CFU fecal coliforms/100 ml sample. Specific HWT technologies that are considered for this indicator include (alone or in combination to reach <1 CFU/100 ml):

- Chlorination (chemical disinfection)
- Flocculant/Disinfectant (physio-chemical disinfection)
- Filtration (physical removal)
- Solar disinfection (UV/heat disinfection)
- Boiling (disinfection via heat).

Correct practice of an HWT technology does not count towards indicators 8.1-1 (Number of people gaining access to a basic drinking water source), or 8.1-3 (Number of people receiving improved service quality from an existing basic or safely managed drinking water service). This indicator is focused on improving the quality of existing drinking water.

**Limitations:**
HWT is not universally effectively against all classes of waterborne pathogens (e.g. free chlorination is ineffective against Cryptosporidium), and requires substantial education and behavior change to ensure correct and consistent use.

<table>
<thead>
<tr>
<th>Primary SPS Linkage</th>
<th>HL.8.2</th>
</tr>
</thead>
</table>

**Linkage to Long-Term Outcome or Impact**

The World Health Organization (WHO) argues that HWT “may play an important role in protecting public health where existing water sources… are untreated, are not treated properly or become contaminated during distribution or storage” (UNICEF & WHO, 2009). The organization estimates that “low cost interventions for household-based treatment of drinking water and safe storage can significantly reduce the pathogen load in drinking water and . . . reduce the risk of diarrheal disease.” In 2009, UNICEF and WHO adopted a comprehensive strategy for effective diarrhea control that includes household water treatment and safe storage as proven interventions to reduce child mortality.

WHO advises that HWT technologies be considered ‘interim’ solutions to reduce the disease burden owed to poor water quality. Among all HWT technologies, reductions in diarrheal disease owed to HWT intervention studies are often in the range of 15-50% (Clasen et al., 2007). HWT should serve as a temporary disease prevention measure until more efficacious household or community water treatment technologies can be put in place, along with a sustainable business model.

<table>
<thead>
<tr>
<th>Indicator Type</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reporting Type</td>
<td>Percent</td>
</tr>
<tr>
<td>Use of Indicator</td>
<td>Useful for program management, program performance evaluations, funding allocations and tracking.</td>
</tr>
<tr>
<td>Reporting Frequency</td>
<td>At least twice during USG-funded interventions.</td>
</tr>
</tbody>
</table>
### Indicator

**HL.8.2-6** Percentage of households in target areas practicing correct use of recommended household water treatment technologies

### Data Source

Specific monitoring methods to assess ‘correct use’ of HWT are objective and rely on household-level observations of the reported technology(ies) and water storage container, and are based on WHO’s *Toolkit for Monitoring and Evaluating Household Water Treatment and Safe Storage*. Households are considered to be correctly practicing water treatment technologies if the following conditions are met for at least one of the following treatment options: Chlorination or Flocculant/Disinfectant using chlorine: the enumerator observes the presence of chlorine bottle/tablets or flocculant sachets in the home, as well as the presence of a safe storage container; Alternatively, the enumerator may test for free chlorine residual and must obtain positive results (i.e. free residual chlorine > 0 ppm). The results of free chlorine residual testing should be included in the annual Environmental Mitigation and Monitoring Plan (code correct users as CT+);

Filtration: the enumerator observes an intact filter and is able to verify that either water is in the upper compartment to be filtered, or that water has been through the filter and can be dispensed from the filter’s tap. If water is collected from the filter after treatment, the enumerator must also observe a safe water storage container (code correct users as Filter+);

Solar disinfection: the enumerator observes intact and sealable bottles, either in the home or where they are exposed to the sunlight; study participants must self-report that bottles are exposed to the sun for at least six hours per day on sunny days and up to two days on cloudy days. If treated water is collected separately, the enumerator must also observe a safe water storage container (code correct users as SODIS+);

Boiling: the enumerator observes the presence of boiled water, a fuel source, and a safe water storage container; study participants must also report that boiling occurred until water comes to a rolling boil (code correct users as BOIL+).

**Numerator:** Number of households correctly practicing CT+ or SODIS+ or Filter+ or BOIL+

**Denominator:** Total number of households visited

### Bureau Owner(s)

<table>
<thead>
<tr>
<th>Bureau Owner(s)</th>
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</thead>
<tbody>
<tr>
<td><strong>Agency:</strong> USAID</td>
</tr>
<tr>
<td><strong>Bureau and Office:</strong> RFS/CW</td>
</tr>
<tr>
<td><strong>POC:</strong> <a href="mailto:waterteam@usaid.gov">waterteam@usaid.gov</a></td>
</tr>
</tbody>
</table>

### Disaggregate(s)

<table>
<thead>
<tr>
<th>Disaggregate(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology type (CT+, Filter+, SODIS+, BOIL+)</td>
</tr>
<tr>
<td>Residence (Rural, Urban)</td>
</tr>
<tr>
<td>Wealth Quintile</td>
</tr>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>-----------</td>
</tr>
</tbody>
</table>
| HL.8.2-7 | A person is counted for this indicator when their current primary sanitation service qualifies as “basic” (see indicator HL.8.2-2) or “limited” (shared), and they receive an improvement in their sanitation service quality as a result of USG assistance.  
Specifically, “improved sanitation service quality” is defined as being achieved if:  
• Household excreta containment (e.g. septic tank) is improved to be more safely stored, emptied and transported to an officially designated location for disposal/treatment; or  
• Fecal sludge transport service is established and used (e.g. extending FSM service to new HHs); or  
• Delivery to a designated location for treatment is ensure (e.g. establishing truck GPS monitoring); or  
• Improvements are made to the treatment of fecal sludge in-situ at households  
**Note:** People counted against this indicator cannot also be counted against indicator HL.8.2-2 or HL.8.2-3: Number of people gaining access to access to a basic or safely managed sanitation services as a result of USG assistance. |
<p>| Primary SPS | HL.8.2 |
| Linkage | |
| Linkage to Long-Term Outcome or Impact | Use of an improved sanitation facility by households is strongly linked to decreases in the incidence of waterborne disease among household members, especially among those under age five. For sanitation coverage purposes, the WASH sector divides households into five service level categories: open defecation (no service), unimproved sanitation, limited (shared) sanitation, basic sanitation (improved facility not shared), and safely managed. These categories are used to define a sanitation ladder. The WASH sector seeks to have households move up the sanitation ladder and eventually arrive at safely managed sanitation in order to meet sanitation-related Sustainable Development Goals (SDGs). Improvements in sanitation service quality is an indication that there is movement toward reaching the sanitation-related SDGs in the expected direction. |
| Indicator Type | Outcome |
| Reporting Type | Number |
| Use of Indicator | This indicator is required for reporting performance of activities across multiple OUs that support the achievement of Development Result 2 (Increase Sustainable and Use of Sanitation and the Practice of Key Hygiene Behaviors) of the USAID Water and Development Plan. Formerly, indicators captured those beneficiaries reaching a designated level of service (basic or safely managed), but those achieving improvements in service between these categories were not measured. These data will be used to assess progress towards achieving this development result and will be reported in USAID’s annual Water Sector Report to Congress and other key stakeholders. |
| Reporting Frequency | Annual |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of people receiving improved sanitation service quality from an existing “limited” or “basic” service as a result of USG assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL.8.2-7</td>
<td></td>
</tr>
</tbody>
</table>

**Data Source**

Upon completion of promotion, technical assistance, capacity building, construction, rehabilitation, or upgrading of sanitation services that improves sanitation service quality, data must be collected by USAID staff, implementing partners, or a third party evaluator. USAID staff, implementing partners, or a third-party evaluator must reasonably demonstrate the linkage between USG assistance and new services provided in order to attribute results to this indicator. Acceptable method(s) by which data for this indicator should be collected are:

- Program records and observations of sanitation facilities or treatment systems constructed/renovated
- Household surveys of a representative and statistically significant sample of those who received improved sanitation service quality
- Service partner records of service rendered such as truck operators, manufacturers, or sales agents
- Partner government records, policy, by-laws, or regulations

Number of people may be a direct count or may be determined by multiplying number of households with benefits by the average number of people per household. This indicator can be difficult and time consuming to measure accurately and requires robust data quality assurance on the part of USAID.

**Bureau Owner(s)**

Agency: USAID  
Bureau and Office: RFS/CW  
POC: waterteam@usaid.gov

**Disaggregate(s)**

Sex (Female, Male)  
Residence (Rural, Urban)  
Wealth Quintile
**Indicator**
HL.8.3-3

**Number of water and sanitation sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance**

**Definition**
This indicator will measure the number of water sector institutions that demonstrate an improvement in governance based on an activity-specific institutional assessment index. The index can be activity-specific, but must follow guidelines below and must be able to set a baseline against which improvement is measured. Changes must result through USG assistance and meet targets set at the beginning of the activity.

Institutions under this indicator may include:
- Local, regional, or national government ministries;
- Regulators;
- Civil society organizations which conduct activities in support of government policy-making & implementation

A single institution may only be counted once in a single reporting year, regardless of the amount of improvement achieved. An institution may be counted again in subsequent years if further improvements are made.

Improvements will be measured using an activity-specific institutional assessment index. The index will measure outcome based changes, where the following categories can be considered:
- Human resources;
- Monitoring systems
- Financial management (budget execution, ability to pass an annual audit);
- Project planning and management of implementation
- Enforcement of policies (watershed protection, allocation systems)
- Equity (tariff setting, poor inclusive policy, gender mainstreaming policy)
- Accountability to stakeholders

Activity MEL plans must include information about the institutional assessment index being used, including the indicators and measurement methods. This should also be documented in the Indicator Analysis section of the PPR.

**Note:** Service providers (for example utilities or water point committees) cannot be counted towards this indicator.

<table>
<thead>
<tr>
<th>Primary SPS Linkage</th>
<th>HL.8.3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Linkage to Long-Term Outcome or Impact</strong></td>
<td>Improved governance for the water and sanitation sector is critical to achieving USAID’s goal of increasing availability and sustainable management of safe water and sanitation for the underserved and most vulnerable. Progress on this indicator will demonstrate progress towards USAID’s development results and increased self-reliance in target countries.</td>
</tr>
<tr>
<td><strong>Indicator Type</strong></td>
<td>Outcome</td>
</tr>
<tr>
<td><strong>Reporting Type</strong></td>
<td>Number</td>
</tr>
<tr>
<td><strong>Use of Indicator</strong></td>
<td>This indicator is used for reporting performance of activities across multiple OUs that support the achievement of Development Result 1 (Strengthen Sector Governance and Financing) of the USAID Water and Development Plan. These data will be used to assess progress towards achieving this development result and will be reported in USAID’s annual Water Sector Report to Congress and other key stakeholders.</td>
</tr>
<tr>
<td>Indicator</td>
<td>HL.8.3-3</td>
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</tr>
<tr>
<td><strong>Number of water and sanitation sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Reporting Frequency**
- Annual, depending on the specifications in the contract or grant

**Data Source**
- This indicator will be measured using an activity-specific institutional assessment index which is designed and validated at the outset of the activity. A baseline assessment must be done at each institution before the intervention and follow-on annual assessments must be done to measure the change in institutional strength.
- This index can be based on standard models such as USAID’s G2G index, the WASH Building Blocks or a national governance index.

**Bureau Owner(s)**
- Agency: USAID
- Bureau and Office: RFS/CW
- POC: waterteam@usaid.gov

**Disaggregate(s)**
- Institution Scale: national, regional, local (e.g. county, district)
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance</th>
</tr>
</thead>
</table>
| Definition | This indicator will measure the total value (USD) of new funding mobilized to expand or improve water or sanitation services or implement water resource management activities. Funding must be allocated to the relevant ministry in government or disbursed by other organizations in order to count as mobilized. Funding under this indicator may include:  
• Domestic public resources (budget allocations, taxes)  
• Domestic public financing (bond issuance)  
• User payments (tariffs)  
• Private/commercial financing (such as via a commercial bank or microfinance institution)  
• Private financing through public-private partnerships (PPPs) or Global Development Alliances (GDAs)  
• Development partner or donor funds leveraged  
*Note that this may not include USG funding*  
This funding must be applied towards the water and sanitation sector including:  
• capital investment projects for the new construction, replacement, rehabilitation or improvement of WASH infrastructure  
• operation and maintenance of existing WASH infrastructure  
• new WASH product development and marketing  
• expansion capital for small businesses providing water and sanitation products or services  
• government social behavior change campaigns  
• water resource management activities  
Funding counted towards this indicator must be new funding, that would not be available to the sector without USG assistance. USG assistance leading to mobilization of funding may include:  
• development of financial proposals, pipelines and financial products  
• structuring and implementation of PPPs or GDAs  
• creation of development credit guarantees  
• capacity improvements that enhance credit worthiness of service providers or small businesses  
Mobilized finance reported under this indicator should be disaggregated as domestic or international. Domestic finance is investment which originated within the country in which it is implemented (e.g., national government funds to support implementation of a project within that country) and international finance is cross-border finance (e.g., a private company based in one country contributing funds for a project in a different country). |
| Primary SPS Linkage | HL.8.4 |
| Linkage to Long-Term Outcome or Impact | Increased financing for the water and sanitation sector is critical to achieving USAID’s goal of increasing availability and sustainable management of safe water and sanitation for the underserved and most vulnerable. There is a significant funding gap between existing funding and needs to reach universal access. In order to achieve sustainability, it is important to mobilize other funding, including private finance and domestic public expenditure. Progress on this indicator will demonstrate progress towards USAID’s development results and increased self-reliance in target countries. |
| Indicator Type | Outcome |
**Indicator** | **HL.8.4-1**  
**Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance**

<table>
<thead>
<tr>
<th><strong>Reporting Type</strong></th>
<th>Number (Value in USD of all funds mobilized)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use of Indicator</strong></td>
<td>This indicator is used for reporting performance of activities across multiple OUs that support the achievement of Development Result 1 (Strengthen Sector Governance and Financing) of the USAID Water and Development Plan. These data will be used to assess progress towards achieving this development result and will be reported in USAID’s annual Water Sector Report to Congress and other key stakeholders.</td>
</tr>
<tr>
<td><strong>Reporting Frequency</strong></td>
<td>Annual</td>
</tr>
</tbody>
</table>
| **Data Source** | Data will be collected by USAID program managers and from implementing partners. At minimum, data sources must demonstrate that new funding was mobilized and that USG activities resulted in this mobilization. Potential data sources for measurement of this indicator include:  
  • project documentation to demonstrate outcomes of USG-funded activities  
  • documentation of loans made by commercial banks or microfinance institutions  
  • documentation of funds leveraged through GDAs or PPPs  
  • national or sub-national budget information showing an increase in allocations and disbursements for water  
Activities reporting on this indicator must monitor appropriate intermediate outcomes to demonstrate the linkage between USG activities and finance. |
| **Bureau Owner(s)** | Agency: USAID  
Bureau and Office: RFS/CW  
POC: waterteam@usaid.gov |
| **Disaggregate(s)** | Funding Source: Domestic  
Funding Source: International  
Funding Type: Public  
Funding Type: Donor  
Funding Type: Private  
Sector: Water  
Sector: Sanitation  
Sector: Water Resources Management |
**Indicator**

**HL.8.5-1**

**Number of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance**

<table>
<thead>
<tr>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Benefiting” is achieved through increased equitable water resource allocation, watershed protection and restoration, and improved surface and ground water quality and availability or through reduced water-related risk. Illustrative “measures” to improve water resources management may include:</td>
</tr>
<tr>
<td>• Construction of green infrastructure, buffer zones, or reforestation</td>
</tr>
<tr>
<td>• Establishment of payment for water-related ecosystem services</td>
</tr>
<tr>
<td>• Resource management plans implemented and enforced</td>
</tr>
<tr>
<td>• Data collection to support water resource management decision making with resultant changes in programs</td>
</tr>
<tr>
<td>“Adopted and implemented” means that measures must have been taken up and result in a concrete benefit, and not be limited to trainings or development of policies and plans. Measures must be implemented through USG assistance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary SPS Linkage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL.8.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Linkage to Long-Term Outcome or Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved water resource management is critical to achieving USAID’s goal of increasing availability and sustainable management of safe water and sanitation for the underserved and most vulnerable. Progress on this indicator will demonstrate progress towards USAID’s development results and increased self-reliance in target countries.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>This indicator is used for reporting performance of activities across multiple OUs that support the achievement of Development Result 4 (Improve Management of Water Resources) of the USAID Water and Development Plan. These data will be used to assess progress towards achieving this development result and will be reported in USAID’s annual Water Sector Report to Congress and other key stakeholders.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
</tr>
</tbody>
</table>
### Indicator HL.8.5-I
**Number of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance**

<table>
<thead>
<tr>
<th>Data Source</th>
<th>In addition, data sources must demonstrate the benefit of these measures. Acceptable methods for this include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Representative sampling survey pre and post intervention to assess benefits; or</td>
</tr>
<tr>
<td></td>
<td>• Number of people in a given area who have adopted and implemented a plan or process for improving water resource management, with the assumption that all people in the area benefit from having such an activity.</td>
</tr>
<tr>
<td></td>
<td>Number of people may be a direct count or may be determined by multiplying number of households with benefits by the average number of people per household.</td>
</tr>
<tr>
<td></td>
<td>Data sources must demonstrate that measures were implemented as a result of USG assistance. Data sources for this can include testing water quality, verifying implementation of policies and plans or verifying implementation of restoration/protection measures.</td>
</tr>
</tbody>
</table>

| Bureau Owner(s) | Agency: USAID  
| Bureau and Office: RFS/CW  
| POC: waterteam@usaid.gov |

| Disaggregate(s) | Sex: Female, Male  
| Type of Measure: Water Allocation/Watershed Protection/Risk Reduction |