STANDARD SECTOR INDICATOR CODE: HE-047	**Constructed or Improved Water and Sanitation Systems:** Number of community water and sanitation systems constructed, improved, or rehabilitated.	
HEALTH SECTOR	**Sector Schematic Alignment** **Health Sector** • **Project Area:** Environmental Health • **Project Activity Area/Training Package:** WASH: Water, Sanitation, and Hygiene **Agriculture Sector** • **Project Area:** Resilience and Stability • **Project Activity Area/Training Package:** WASH: Water, Sanitation, and Hygiene	
Type: Short-term Outcome	**Unit of Measure**: Community WAT/SAN systems	**Disaggregation:** **Type of Water Sanitation System:** Constructed, Improved, Rehabilitated

To be counted for this indicator the following criteria must be met:
* The community members must have a plan for constructing, improving, or rehabilitating the community water and sanitation system
* The community members must be working with the Volunteer or their partners to plan, mobilize, build, improve or rehabilitate the system.
* The community members must be able to document and quantify what was constructed, improved, or rehabilitated

Definitions:
Constructed - to build all or parts of a water and sanitation system according to a systematic plan and a definite process.

Rehabilitated – is defined as to bring to a condition of useful and functional activity.

Improved water and sanitation – is defined as to make the system more useful or enhance its quality. Improving a water system may include upgrading: transmission pipes and connections or equipment such as pumps; source of water (rainwater collection, boreholes, and protected wells); storage tanks; distribution system or reliability of the system. Improvement in the sanitation system includes connections to sewers and septic systems, and pour-flush and improved pit latrines. A system may be improved but it does not mean there is access to clean water and sanitation services. See details below:

"Improved" sources of drinking water include:
* Piped water into dwelling, also called a household connection, is defined as a water service pipe connected with in-house plumbing to one or more taps (e.g. in the kitchen and bathroom).
* Piped water to yard/plot, also called a yard connection, is defined as a piped water connection to a tap placed in the yard or plot outside the house.
* Public tap or standpipe is a public water point from which people can collect water. A standpipe is also known as a public fountain or public tap. Public standpipes can have one or more taps and are typically made of brickwork, masonry or concrete.
* Tubewell or borehole is a deep hole that has been driven, bored or drilled, with the purpose of reaching groundwater supplies. Boreholes/tubewells are constructed with casing, or pipes, which prevent the small diameter

hole from caving in and protects the water source from infiltration by run-off water. Water is delivered from a tubewell or borehole through a pump, which may be powered by human, animal, wind, electric, diesel or solar means. Boreholes/tubewells are usually protected by a platform around the well, which leads spilled water away from the borehole and prevents infiltration of run-off water at the well head.

- Protected dug well is a dug well that is protected from runoff water by a well lining or casing that is raised above ground level and a platform that diverts spilled water away from the well. A protected dug well is also covered, so that bird droppings and animals cannot fall into the well.
- Protected spring. The spring is typically protected from runoff, bird droppings and animals by a "spring box", which is constructed of brick, masonry, or concrete and is built around the spring so that water flows directly out of the box into a pipe or cistern, without being exposed to outside pollution.
- Rainwater refers to rain that is collected or harvested from surfaces (by roof or ground catchment) and stored in a container, tank or cistern until used.

"Unimproved" sources of drinking-water include:

- Unprotected spring. This is a spring that is subject to runoff, bird droppings, or the entry of animals. Unprotected springs typically do not have a "spring box".
- Unprotected dug well. This is a dug well for which one of the following conditions is true: 1) the well is not protected from runoff water; or 2) the well is not protected from bird droppings and animals. If at least one of these conditions is true, the well is unprotected.
- Cart with small tank/drum. This refers to water sold by a provider who transports water into a community. The types of transportation used include donkey carts, motorized vehicles and other means.
- Tanker-truck. The water is trucked into a community and sold from the water truck.
- Surface water. This is water located above ground and includes rivers, dams, lakes, ponds, streams, canals, and irrigation channels.
- Bottled water. This is considered to be improved only when the household uses drinking-water from an improved source for cooking and personal hygiene; where this information is not available, bottled water is classified on a case-by-case basis.

"Improved" sanitation includes:

- Flush toilet uses a cistern or holding tank for flushing water, and a water seal (which is a U-shaped pipe below the seat or squatting pan) that prevents the passage of flies and odors. A pour flush toilet uses a water seal, but unlike a flush toilet, a pour flush toilet uses water poured by hand for flushing (no cistern is used).
- Piped sewer system is a system of sewer pipes, also called sewerage, that is designed to collect human excreta (feces and urine) and wastewater and remove them from the household environment. Sewerage systems consist of facilities for collection, pumping, treating and disposing of human excreta and wastewater.
- Septic tank is an excreta collection device consisting of a water-tight settling tank, which is normally located underground, away from the house or toilet. The treated effluent of a septic tank usually seeps into the ground through a leaching pit. It can also be discharged into a sewerage system.
- Flush/pour flush to pit latrine refers to a system that flushes excreta to a hole in the ground or leaching pit (protected, covered).
- Ventilated improved pit latrine (VIP) is a dry pit latrine ventilated by a pipe that extends above the latrine roof. The open end of the vent pipe is covered with gauze mesh or fly-proof netting and the inside of the superstructure is kept dark.
- Pit latrine with slab is a dry pit latrine that uses a hole in the ground to collect the excreta and a squatting slab or platform that is firmly supported on all sides, easy to clean and raised above the surrounding ground level to prevent surface water from entering the pit. The platform has a squatting hole, or is fitted with a seat.
- Composting toilet is a dry toilet into which carbon-rich material (vegetable wastes, straw, grass, sawdust, ash) are

added to the excreta and special conditions maintained to produce inoffensive compost. A composting latrine may or may not have a urine separation device.

"Unimproved" sanitation includes:
- Flush/pour flush refers to excreta being deposited in or nearby the household environment (not into a pit, septic tank, or sewer). Excreta may be flushed to the street, yard/plot, open sewer, a ditch, a drainage way or other location.
- Pit latrine without slab uses a hole in the ground for excreta collection and does not have a squatting slab, platform or seat. An open pit is a rudimentary hole.
- Bucket refers to the use of a bucket or other container for the retention of feces (and sometimes urine and anal cleaning material), which are periodically removed for treatment, disposal, or use as fertilizer.
- Hanging toilet or hanging latrine is a toilet built over the sea, a river, or other body of water, into which excreta drops directly.
- No facilities include defecation in the bush, field or ditch; excreta deposited on the ground and covered with a layer of earth (cat method); excreta wrapped and thrown into garbage; and defecation into surface water (drainage channel, beach, river, stream or sea).

Rationale: Community-level management of water and sanitation systems is needed to ensure the provision of a safe and reliable water supply and accessibility to appropriate sanitation facilities. Unsafe drinking water along with poor sanitation and hygiene are the main contributors to an estimated 4 billion cases of diarrheal disease each year and cause more than 1.5 million deaths annually, mostly among children under 5 years of age. Proper management of water systems will help make sure that people have water available to them that meets the minimum standards established for drinking water. Improving sanitation systems will help bolster the health of people as well as ensure a clean environment.

Measurement Notes:

1. **Sample Tools and/or Possible Methods (for Peace Corps staff use):** Volunteers should use data collection tools to measure progress against project indicators. A data collection tool to measure this indicator could be based on one of the following methods—a survey and through observation —though there may be other data collection methods that are appropriate. Please check PCLive for data collection tools. Once a tool has been developed, post staff should have a few Volunteers and their partners pilot it, and then distribute and train Volunteers on its use.

2. **General Data Collection for Volunteer Activities:** All Volunteer activities should be conducted with the intention of achieving outcomes – knowledge change (short-term), skills demonstration (intermediate-term), and behavioral changes (intermediate to long term) as defined by the progression of indicators within the objectives of a project framework. The progression of measurement for all Volunteer activities should begin with baseline data being conducted prior to the implementation of an activity (or set of activities), followed by documenting any outputs of the activities and then later at the appropriate time, measurements of specific outcomes (see the bullet on "frequency of measurement").

3. **Activity-Level Baseline Data Collection:** Activity-level baseline data should be collected by Volunteers/partners before or at the start of their activities with an individual or group of individuals. It provides a basis for planning and/or assessing subsequent progress or impact with these same people. Volunteers should take a baseline measurement regarding the outcome(s) defined in this data sheet. Volunteers should collect baseline information early in their work with community members, and may use their judgment to determine timing because the information will be more accurate if the Volunteer has built some trust with the community first. The information for the baseline measurement will be the same or very similar to the information that will be

collected in the follow-on measurement (see the bullet on "frequency of measurement") after the Volunteer has conducted his/her activities and it is usually collected using the same data collection tool to allow for easy management of the data over time.

Because Volunteers are expected to implement relevant and focused activities that will promote specific changes within a target population (see the "unit of measure" above), taking a baseline measurement helps Volunteers to develop a more realistic snapshot of where individuals within the target population are in their process of change instead of assuming that they are starting at "0." It also sets up Volunteers to be able to see in concrete terms what influence their work is having on the individuals they work with during their service. Please note that data collection is a sensitive process and so Volunteers will not want to take a baseline measurement until they have been able to do some relationship and trust-building with the person/people the Volunteer is working with, and developed an understanding of cultural norms and gender dynamics.

4. **Frequency of Measurement:** For reporting accurately on this outcome indicator, Volunteers must take a minimum of two measurements with members of the target population reached with their activities. After taking the baseline measurement (described above), Volunteers should take at least one follow-on measurement with the same individual(s), typically after completing one or more activities focused on achieving the outcome in this indicator and once they have determined that the timing is appropriate to expect that the outcome has been achieved. Please note that successful documentation of a behavior change or new practice may not be immediately apparent following the completion of activities and may need to be planned for at a later time. Once Volunteers have measured that at least one community water and/or sanitation system has been constructed, improved or rehabilitated, they should report on it in their next VRF.

Volunteers may determine to take more than one baseline and one follow-on measurement with the same individual (or group of individuals) for the following valid reasons:

- Volunteers may want to measure whether or not any additional individuals initially reached with activities have now achieved the outcome in the indicator, particularly for any activities that are on-going in nature (no clear end date);
- Volunteers may want to enhance their own learning and the implementation of their activities by using the data collected as an effective monitoring tool and feedback mechanism for the need to improve or increase their activities;
- A Peace Corps project in a particular country may choose to increase the frequency of measurement of the indicator and Volunteers assigned to that project will be required to follow in-country guidance.

In all cases, any additional data collection above the minimum expectation should be based on the time, resources, accessibility to the target population, and the value to be gained versus the burden of collecting the data. Following any additional measurements taken, Volunteers should report on any new individuals achieving the outcome in their next VRF.

5. **Definition of Change:** The minimum change to report against this indicator is at least one community water and/or sanitation system was constructed, improved, or rehabilitated. In the case of this indicator, if the community the Volunteer/partner works with has already constructed, improved, or rehabilitated a community water and/or sanitation system before beginning to work with the Volunteer/partner, then the Volunteer would not be able to count that system for this activity because the Volunteer's work did not actually lead to the desired change. However, if as a result of working with the Volunteer/partner, the community constructed, improved, or rehabilitated at least one community water and/or sanitation system that would count because the

Volunteer's work directly influenced the completion of that activity by community members.

6. **General Reporting in the VRF**: The "number achieved" (or numerator) that Volunteers will report against for this indicator in their VRFs is the number of community water and/or sanitation system constructed, improved, or rehabilitated , after working with the Volunteer/partner. The "total number" (or denominator) that Volunteers will report on for this indicator in their VRFs is the total number of community water and/or sanitation systems identified as needing to be constructed, rehabilitated or improved in the communities in which a Volunteer/partner works.

7. **Reporting on Disaggregated Data in the VRF:** This indicator is disaggregated by "Type of Water and Sanitation System". When reporting in the VRF, a Volunteer should disaggregate by the number of systems constructed, improved or rehabilitated.

Data Quality Assessments (DQA): DQA are needed for each indicator selected to align with the project objectives. DQAs review the validity, integrity, precision, reliability, and timeliness of each indicator. For more information, consult the Peace Corps MRE Toolkit.

Alignment with Summary Indicator: No link