STANDARD SECTOR INDICATOR CODE: HE-074	**Showed Improvement in Knowledge of Benefits of Using Improved Cookstoves:** Number of individuals able to identify at least 2 benefits of an improved cookstove	
HEALTH SECTOR	**Sector Schematic Alignment** • **Project Area:** Environmental Health • **Project Activity Area/Training Package:** Improved Cookstoves	
Type: Short-term Outcome	**Unit of Measure**: Individuals	**Disaggregation:** **Sex:** Male, Female **Age:** 0-9 years, 10-17 years, 18-24 years, 25+ years

To be counted for this indicator the following criteria must be met:

- The individual must have attended training on improved cookstoves and health benefits of using them;
- The training must have been provided by the PCV or their partner in an individual or small group setting. Research shows ideal group size is 25 individuals or less, although in some instances group size can be significantly larger. PC/Post staff determines what comprises a small group setting.
- Attendance at educational session/s must have been documented by the Volunteer or their partner;
- On a pre/post-test the individual must have identified at least 2 of the 4 benefits (shown below) of using and improved cookstove.

Definitions:

Benefitting from using an improved cookstove: is defined as the improved cookstove meets three of the following 4 criteria:

- Consumes at least 35 percent less fuel when cooking a typical meal than the traditional stove currently in use
- Achieves a reduction in air contamination by use of a chimney for indoor stoves;
- Achieves at least a 50 percent reduction in emissions or exposure, as confirmed by either a standard controlled cooking test or a kitchen performance test conducted in the country.
- At least 90% of household cooking is done using the improved cookstove or oven

Improved Cookstoves: For this indicator, number of cookstoves counted will only be improved cookstoves that meet the following criteria outlined in the Peace Corps Improved Cookstoves Handbook:

- Desirable: appropriate for cooks' needs and preferences, compatible within the cultural context.
- Accessible: available and enabling choice, affordable outright or otherwise (e.g. credit)
- Effective: actually reduce levels of indoor air pollution and fuel use: (a) consume at least 35 percent less fuel when cooking a typical meal than the traditional stove currently in use; (b) achieve a reduction in air contamination by use of a chimney for indoor stoves; and (c) achieve at least a 50 percent reduction in emissions or exposure, as confirmed by either a standard controlled cooking test or a kitchen performance test conducted in the country.
- Reliable: consistently performs as expected.
- Maintainable: easy to use and clean; spare parts and service available.

Rationale: The U.S. government is a global leader in the effort towards universal adoption of clean and efficient cooking solutions through its support of the Global Alliance for Clean Cookstoves and investment in the research and development of clean cooking solutions. According to the Global Burden of Disease Study published in Lancet, December 2012, exposure to cookstove smoke leads to roughly 4 million premature deaths each year – or one every 8 seconds. Harmful cookstove smoke is estimated to be the fourth worst health risk factor globally, second worst among women

and girls and fifth worst among men and boys. It is the worst of the environmental risk factors affecting health (such as outdoor air pollution and unimproved water sources and sanitation), both globally and in poor regions. It is also the worst health risk factor in South Asia and second worst in most parts of Sub-Saharan Africa. Each year the effects of smoke from residential burning of wood and other basic fuels kill more people than HIV/AIDS, tuberculosis or malaria. Cookstove smoke contributes to a range of chronic illnesses and acute health impacts such as acute pneumonia in children under the age of five, cardiovascular disease, lung cancer, and chronic obstructive pulmonary disorders (COPD). A growing body of evidence suggests links to other conditions including tuberculosis and low birth weight. Studies have shown that infants whose smoke exposures were reduced by 90% had 50% less pneumonia.

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 the following methods—pre/post-test—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 individuals (youth, teachers, health workers, etc.), and may use their judgment to determine timing because the information will be more accurate if the Volunteer has built some trust with the target population 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 individual has achieved the indicator, 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 an individual was able to identify at least two benefits of using an improved cookstove as compared to a baseline measurement of being able to identify less than two benefits of using an improved cookstove. In the case of this indicator, if the person the Volunteer/partner works with has already been able to identify the benefits of using an improved cookstove before beginning to work with the Volunteer/partner, then the Volunteer would not be able to count him/her for this activity because the Volunteer's work did not actually lead to the improved knowledge. However, if as a result of working with the Volunteer/partner, the individual improved their knowledge of the health benefits of improved cookstoves that would count because the Volunteer's work influenced the individual.

6. **General Reporting in the VRF**: The "number achieved" (or numerator) that Volunteers will report against for this indicator in their VRFs number of individuals able to identify at least two benefits of using an improved cookstove, 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 individuals who participated in the activities designed to meet this indicator.

7. **Reporting on Disaggregated Data in the VRF:** This indicator is disaggregated by "Sex" and "Age". When reporting in the VRF, a Volunteer should disaggregate the individuals who achieved the outcome based on male and female in the following age groups: 0-9 years, 10-17 years, 18-24 years, and 25+ years.

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