

STANDARD SECTOR INDICATOR CODE: ENV-037	Energy Consumption-Cookstoves: Number of individuals, out of the total number of individuals the Volunteer/partner worked with, who lowered their consumption of fuel wood or charcoal through the use of a new or improved cookstove. (ENV-037)	
ENVIRONMENT SECTOR	Sector Schematic Alignment <ul style="list-style-type: none"> • Project Area: Natural Resource Planning and Management • Project Activity Area/Training Package: Improved Cookstoves 	
Type: Outcome	Unit of Measure: Individuals	Disaggregation: Sex: Male, Female

Definitions:

Improved cookstoves include but are not limited to: devices used by families within the kitchen or cooking area with the goal of improving health, environmental, and financial outcomes for the families and cooks, which are typically women and children. Some examples of improved cookstoves include rocket stoves, gasifier stoves (eg., Top-Lit UpDraft or TLUD), charcoal stoves, institutional stoves, traditional mud or clay stoves, and brick-and-mortar stoves.

Improved cookstoves should 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 90 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.

Fuel wood and charcoal can include: all biomass-based fuel, such as dung crop residues, etc.

Volunteers should not count multiple individuals within a household when recording "lowered their consumption of fuelwood or charcoal through the use of a new or improved cookstove." The Volunteer should only count the primary individual (eg., main cook, female head of household) responsible for the collection of fuelwood and the preparation of household meals.

Partner/s—refers to the local counterpart who is co-facilitating implementation of new or improved cookstove use with the Volunteer.

Rationale: An increase in the number of individuals using new or improved cookstoves to lower their consumption of biomass fuels, (mainly wood, charcoal, dung, and crop residues) should lead to improved natural resource management and less time/work/money dedicated to obtaining biomass fuel sources.

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—survey, observation, or interview—though there may be other data collection methods that are appropriate as well. For more information on the suggested methods, please see [Appendix I in the MRE Toolkit](#). Also be sure to check the intranet page as sample tools are regularly uploaded for post use. 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 “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 indicator (i.e. determine whether or not an individual in question has lowered their consumption of fuel wood or charcoal through the use of a cookstove(s) before working with the Volunteer) early in their work focused on lowering the consumption of fuelwood or charcoal through the use of cookstoves. 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 “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 individuals 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:

- a. 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);

- b. 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;
- c. 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 an individual reducing consumption of fuelwood or charcoal through the use of a cookstove, as compared to what was measured initially at baseline. In the case of this indicator, if the individual the Volunteer/partner works with already used a cookstove that uses a similar amount of fuel wood as other stoves in the community 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 desired change. However, if as a result of working with the Volunteer/partner, the individual decided to use an improved cookstove that reduced the consumption of fuelwood or charcoal, that would count because the Volunteer's work influenced the new use of a cookstove.
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 individuals who used cookstoves to reduce fuel wood or charcoal consumption 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". When reporting in the VRF, a Volunteer should disaggregate the individuals who achieved the outcome based on male and female.

Data Quality Assessments (DQA): DQAs 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: ENV. ADOPT NEW/IMPROVED NAT. RES. MGMT PRACTICES (INDIVIDUALS)