STANDARD SECTOR INDICATOR CODE: AG-003 FTF (FTF Code: 4.5.2-5)	**All New Technologies and Practices – Application of New Technologies:** Number of farmers and others who have applied new technologies or management practices as a result of USG assistance (AG-003 FTF)	
AGRICULTURE SECTOR	**Sector Schematic Alignment** *Note: This indicator belongs to the "Ag Production and Improved Cultivation Practices" Project Area and "Extension Methodology: Farmer Field Schools" Project Activities/Training Package (PA/TP) within the AG Sector but is borrowed by the following Project Activities/Training Packages within the AG and ENV Sectors.* **AG Sector ("Home" of the SSI)** **PA/TP:** Extension Methodology: Farmer Field Schools **AG Sector** **PA/TP:** Soil and Water Conservation and Management, Staple Crops, Agroforestry, Gardens, & Small Animal Husbandry: Chickens/Beekeeping **ENV Sector** **PA/TP:** Soil and Water Conservation and Management, Agroforestry & Gardens **CED Sector** **PA/TP:** Income Generation Activities	
Type: Outcome	**Unit of Measure**: Individual	**Disaggregation:** **Sex:** Male, Female **Duration:** New, Continuing

Definitions:

This indicator measures the total number of direct beneficiary farmers, ranchers and other primary sector producers (food and non-food crops, livestock products, wild fisheries, aquaculture, agro-forestry, and natural resource-based products are included), individual processors (not firms), rural entrepreneurs, managers and traders, natural resource managers, etc. that applied improved technologies anywhere within the food and fiber system as a result of USG (including Peace Corps) assistance during the fiscal year.

Fiscal Year – October 1 to September 30

USG (including Peace Corps) assistance/training may include but is not limited to: financial aid, workshops, demonstrations, lessons, service delivery, or activities conducted by any agency or organization of the U.S. government or any contractor working at the direction of the U.S. government. These activities typically are conducted to provide participants with knowledge and/or skills, technical assistance, learning opportunities, services or expand coverage for services, etc.

Technologies to be counted here are agriculture-related technologies and innovations including those that address climate change adaptation and mitigation (including, but not limited to, carbon sequestration, clean energy, and energy

efficiency as related to agriculture). Significant improvements to existing technologies should be counted.

Improved technologies: In the Feed the Future context, any "newly" introduced technology is assumed to be an "improved" technology. This includes innovations in efficiency, value-addition, post-harvest management, marketing, sustainable land management, forest and water management, managerial practices, input supply delivery

Examples of relevant improved technologies include but are not limited to:

- Mechanical/Physical: New land preparation, harvesting, processing, product handling and packaging, and sustainable environmental management practices, etc.
- Biological: New crops/livestock species or varieties that could be higher yielding, higher nutrition content, or more resilient to climate impacts; biofortified commodities, such as vitamin-A rich sweet potatoes or rice, high-protein maize or improved livestock breeds; improved soil management practices that increase organic matter or biotic activity; improved livestock health services or products, etc.
- Chemical: Fertilizers, insecticides and pesticides (chemical or natural-based) used in accordance with best management practices, soil amendments that increase fertilizer use efficiency, such as bio-char, lime, etc.
- Management & Cultural Practices: sustainable water management practices; sustainable land management practices; sustainable fishing practices; information technology, improved/sustainable agricultural production and marketing practices, increased use of climate information for planning disaster risk strategies in place, climate change mitigation and energy efficiency, and natural resource management practices that increase productivity and/or resiliency to climate change. Integrated Pest Management (IPM), Integrated Soil Fertility Management (ISFM), and Post-Harvest Handling (PHH) as related to agriculture should all be included as improved technologies or management practices.

Beneficiary – an individual who is engaged with a project activity or comes into direct contact with a set of interventions (goods or services) provided by the project or Peace Corps Volunteer. Individuals merely contacted or involved in an activity through brief attendance (non-recurring participation) do not count as a beneficiary.

Scenarios for counting a beneficiary for this indicator

1**. A beneficiary is counted once regardless of the number of technologies applied during the fiscal year**. If more than one beneficiary in a household is applying improved technologies, count each beneficiary in the household who does so.

2. If a beneficiary cultivates a plot of land more than once in the reporting year, s/he should be counted once if s/he applied an improved technology during any of the production cycles during the reporting year. S/he should not be counted each time an improved technology is applied. For example, because of new access to irrigation as a result of a Feed the Future/Peace Corps activity, a farmer can now cultivate a second crop during the dry season in addition to her/his regular crop during the rainy season. If the farmer applies Feed the Future promoted technologies to her/his plot during one season and not the other, or in both the rainy season and the dry season, s/he would only be counted once under this indicator.

3. Beneficiaries who are part of a group and apply improved technologies on a demonstration or other common plot with other beneficiaries are not counted as having individually applied an improved technology.

The group should be counted as one (1) beneficiary group and reported under AG-036FTF. The area of the communal plot should be counted under AG-012 FTF.

4. If a **lead farmer cultivates a plot used for training**, such as a demonstration plot used for Farmer Field Days or Farmer Field School, the beneficiary farmer should be counted under this indicator.

The area of the demonstration plot would be counted under AG-012 FTF.

5. If a demonstration or training plot is cultivated by extensionists or researchers, such as a demonstration plot in a research institute, neither the area nor the extensionist/researcher SHOULD be counted under this indicator or AG-012 FTF

6. This indicator counts individuals who applied improved technologies, whereas indicator AG-036 FTF (*Number of private enterprises, producers organizations…and community-based organizations (CBOs) that applied new technologies or management practices)* counts the firms, associations, or other group entities applying association- or organization-level improved technologies or practices.

Example scenario: A producer association implements a new land preparation practice during the fiscal year. The association would be counted as having applied an improved technology/practice under AG-036 FTF, but the members of the producer association would not be counted as having individually-applied an improved technology/practice under this indicator. However, if the producer association purchases a dryer and then provides drying services for a fee to its members, the producer association can be counted under AG-036 FTF and any association member that uses the dryer service can be counted as applying improved technology/practices under this indicator.

New – this fiscal year is the first year the individual applied the improved technology/practice

Continuing - this individual first applied the improved technology/practice in the previous fiscal year and continues to apply the technology

Rationale: Technological change and its adoption by different actors in the agricultural supply chain will be critical to increasing agricultural productivity and economic opportunities.

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—secondary data record of organizational records, 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 individuals. 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 adopted improved technologies or management practices before working with the Volunteer) early in their work focused on adoption of improved technologies or management practices by individuals. 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 the individuals within the target population and where they 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 <u>after</u> 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/or more than 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 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 who applied improved technologies or management practices as compared to what was measured initially at baseline. In the case of this indicator, if the individual the Volunteer/partner works with already cultivated improved crop

varieties that increase yields before beginning to work with the Volunteer/partner, then the Volunteer would not be able to count it 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 decides to implement improved land preparation practices, such as contour or minimal tillage that would count because the Volunteer's work influenced the adoption of improved tillage practices.

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 applied a new technology or management practice during the fiscal year, 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 multiple categories; "Sex" and "Duration". Due to the functionality of the VRF, the Volunteer will see a table to enter the disaggregated data for the "Sex" category. Then the Volunteer will see a box to enter disaggregated data for the "Duration"; new and continuing. The totals for each disaggregation category ("Sex" and "Duration") **MUST** be equal. **PLEASE NOTE**: Volunteers should check, before submitting their VRF to see if the totals are equal.

   PLEASE NOTE: After a Volunteer submits their first VRF, the data entered into the "Duration" box will be editable, so a Volunteer should make sure that the sum of the "Duration" (new and continuing) **REMAINS** equal to the "New Achieved Total" column in the "Sex" disaggregation table.

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: AG. NEW TECH/MGMT PRACTICES (INDIVIDUALS), & ENV. ADOPT NEW/IMPROVED NAT. RES. MGMT PRACTICES (INDIVIDUALS)