

<p><b>STANDARD SECTOR INDICATOR CODE:</b> AG-003 FTF (FTF Code: EG.3.2-17)</p>	<p><b>All New Technologies and Practices – Application:</b> Number of farmers and others who have applied improved technologies or management practices with Peace Corps assistance. (AG-003 FTF)</p>	
<p><b>AGRICULTURE SECTOR</b></p>	<p><b>Sector Schematic Alignment</b> <i>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.</i></p> <p><b><u>AG Sector (“Home” of the SSI)</u></b> PA/TP: Extension Methodology: Farmer Field Schools</p> <p><b><u>AG Sector</u></b> PA/TP: Soil and Water Conservation and Management, Staple Crops, Agroforestry, Gardens, &amp; Small Animal Husbandry: Chickens/Beekeeping</p> <p><b><u>ENV Sector</u></b> PA/TP: Soil and Water Conservation and Management, Agroforestry &amp; Gardens</p> <p><b><u>CED Sector</u></b> PA/TP: Income Generation Activities</p>	
<p><b>Type:</b> Outcome</p>	<p><b>Unit of Measure:</b> Individual</p>	<p><b>Disaggregation:</b> <b>Sex:</b> Male, Female <b>Type of Individual:</b> Producers, People in government, People in private sector, People in civil society <b>Technology Type:</b> Crop genetics, Cultural practices, Livestock management, Wild fishing technique/gear, Aquaculture management, Pest management, Disease management, Soil-related fertility and conservation, Irrigation, Water management (non-irrigation based), Climate mitigation, Climate adaptation, Marketing and distribution, Post-harvest handling &amp; storage, Value-added processing, Other, <i>Total with one or more improved technology/practice*</i></p> <p><small>*This is NOT the sum of the number of people applying an improved technology or practice, but the total number of <i>distinct</i> people applying an improved technology or practice; some people may apply more than 1 improved technology or practice.</small></p>
<p><b>Definitions:</b> This indicator measures the total number of direct beneficiary farmers, ranchers and other primary sector producers (of food and non-food crops, livestock products, wild fisheries, aquaculture, agro-forestry, and natural resource-based products), as well as individual processors (not firms), rural entrepreneurs, traders, natural resource managers, etc. that applied improved technologies anywhere within the food and fiber system with Peace Corps assistance during the fiscal year. This includes innovations in efficiency, value-addition, post-harvest management, marketing, sustainable land management, forest and water management, managerial practices, and input supply delivery.</p>		

**Peace Corps assistance/training may include but is not limited to:** financial aid, workshops, demonstrations, lessons, service delivery, or other activities conducted by the Peace Corps. 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, etc.

**Examples for Type of Individual disaggregation:**

- *Producers* – farmers, fishers, pastoralists, ranchers, etc.
- *People in government* – policy makers, extension workers
- *People in private sector firms* – processors, service providers, manufacturers
- *People in civil society* – NGOs, CBOs, CSOs, research and academic organizations

**PLEASE NOTE:** While *producers* are included in Micro, Small, Medium Enterprises (MSMEs) under indicators AG-030 FTF and AG-029 FTF, *only* count them under the “Producers” and NOT the “Private sector firms” disaggregation for this indicator. This avoids double counting of individuals.

**PLEASE NOTE:** While private sector firms are considered part of civil society more broadly, *only* count them under the “private sector firms” and NOT the “Civil Society” disaggregation for this indicator. This prevents double counting.

**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. If a beneficiary applied more than one improved technology during the reporting year, **count the beneficiary under each technology type (i.e. double-count)**. However, **count the beneficiary only once in the Total w/one or more improved technology category under the Technology Type disaggregate and in the Sex disaggregate**. In other words, a beneficiary should be counted once in the totals, regardless of the number of technologies applied during the fiscal year. See **Counting for Technology Type Disaggregation** below for an example.
2. If a beneficiary cultivates a plot of land more than once during the reporting year, **count the beneficiary once under each type of technology that was applied during any of the production cycles, but not more than once even if a technology is applied in multiple production cycles during the fiscal year**. For example, if a farmer applies much to a plot of land during both the dry season and rainy season, s/he would only be counted once in the Cultural Practices category under the Technology Type disaggregation. Note however that the area that is mulched should be counted each time it is cultivated under the indicator **AG-012 FTF** “Number of square meters of land under improved technologies.”
3. If more than one beneficiary in a household is applying improved technologies, count each beneficiary in the household who does so.
4. **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-036 FTF** “Number of for-profit private enterprises, producers organizations, water users associations and community-based organizations (CBOs) that applied improved organization-level technologies or management practices.” The area of the communal plot should be counted under **AG-012 FTF** “Number of square meters of land under improved technologies.”

5. 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 should be counted under **AG-012 FTF** “Number of square meters of land under improved technologies.”

6. If a demonstration or training plot is cultivated by **extensionists or researchers**, e.g. a demonstration plot in a research institute, the area and the extensionist/researcher SHOULD NOT be counted.

7. This indicator counts individuals who applied improved technologies, whereas indicator **AG-036 FTF** (“*Number of for-profit 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.

#### **\*Counting for Technology Type Disaggregation**

If more than one improved technology is being applied by an individual, count the individual under each technology type (i.e. double-count). In addition, count the individual under the “total with one or more improved technology” category. Since it is very common for Feed the Future activities to promote more than one improved technology, not all of which are applied by all beneficiaries at once, this approach allows Feed the Future to accurately track and count the uptake of different technology types, and to accurately count the total number of people applying improved technologies. See the box below for an example.

**If an activity is promoting a technology for multiple benefits, the individual applying the technology may be reported under each relevant Technology Type category. For example, mulching could be reported under Cultural practices (weed control), Soil-related fertility and conservation (organic content) and Water management (moisture control), depending on why (for what purpose(s)/benefit(s)) the technology is being applied by the beneficiary farmer.**

**Example:** One of the farmers you worked with during this past fiscal year applied improved seed (crop genetics), Integrated Pest Management (pest management) and mulching (cultural practices and water management) over the course of the fiscal year. Another farmer you worked with applied drip irrigation (irrigation), System of Rice Intensification (SRI) (cultural practices), and how to properly store her seed (post-harvest handling & storage). Technology Type disaggregation data entry would be as follows:

Technology type	
crop genetics	1
cultural practices	2
livestock management	
wild fishing technique/gear	
aquaculture management	
pest management	1
disease management	
soil-related fertility and conservation	
irrigation	1
water management (non-irrigation-based)	1
climate mitigation	
climate adaptation	
marketing and distribution	
post-harvest handling & storage	1
value-added processing	
other	
total with one or more improved technology	2

**Examples for Technology Type disaggregation:**

- Crop genetics: e.g. improved/certified seed that could be higher-yielding, higher in nutritional content (e.g. through biofortification, such as vitamin A-rich sweet potatoes or rice, or high-protein maize, or drought tolerant maize, or stress tolerant rice) and/or more resilient to climate impacts; improved germ plasm
- Cultural practices: e.g. seedling production and transplantation; cultivation practices such as planting density, moulding; mulching
- Livestock management: e.g. improved livestock breeds; livestock health services and products such as vaccines; improved livestock handling practices
- Wild fishing technique/gear: e.g. sustainable fishing practices; improved nets, hooks, lines, traps, dredges, trawls; improved hand gathering, netting, angling, spearfishing, and trapping practices
- Aquaculture management: e.g. improved fingerlings, improved feed and feeding practices, fish disease control, pond culture, pond preparation, sampling & harvesting, carrying capacity & fingerling management
- Pest management: e.g. Integrated Pest Management (IPM); improved insecticides & pesticides, improved & environmentally sustainable use of insecticides & pesticides
- Disease management: e.g. improved fungicides, appropriate application of fungicides
- Soil-related fertility and conservation: e.g. Integrated Soil Fertility Management (ISFM), soil management practices that increase biotic activity and soil organic matter levels, such as soil amendments that increase fertilizer-use efficiency (e.g. soil organic matter); improved fertilizer; improved fertilizer use practices; erosion control

- Irrigation: e.g. drip, surface, and sprinkler irrigation; irrigation schemes
- Water management (non-irrigation-based): e.g. water harvesting, sustainable water use practices, improved water quality testing practices; mulching
- Climate mitigation: technologies selected because they minimize emission intensities relative to other alternatives; examples include low- or no-till practices, efficient nitrogen fertilizer use
- Climate adaptation: technologies promoted with the explicit objective of adapting to current climate change concerns; examples include drought and flood resistant varieties, conservation agriculture
- Marketing and distribution: e.g. contract farming technologies and practices; improved input purchase technologies and practices; improved commodity sale technologies and practices; improved market information system technologies and practices
- Post-harvest handling & storage: e.g. improved packing house technologies and practices; improved transportation; decay and insect control; temperature and humidity control; improved quality control technologies and practices; sorting and grading
- Value-added processing: e.g. improved packaging practices and materials including biodegradable packaging; food and chemical safety technologies and practices; improved preservation technologies and practices
- Other: e.g. improved mechanical and physical land preparation; non-market-related information technology; improved record keeping; improved budgeting and financial management

**Fiscal Year** – October 1 to September 30

**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 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/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)