**STANDARD SECTOR INDICATOR CODE:** AG-048

**Improved Dietary Diversity:** Change in mean number of food groups consumed, or dietary diversity score, for beneficiaries of PCV activities or programs. (AG-048)

**AGRICULTURE SECTOR**

**Sector Schematic Alignment**
- **Project Area:** Resilience & Stability
- **Project Activity Area/Training Package:** Nutrition for Healthy Families

**Type:** Outcome

**Unit of Measure:** Change in community/group, as measured by arithmetic mean

**Disaggregation:** None

**Definitions:**

**Dietary diversity score** – a technique used with the aim of measuring the mean number of food groups consumed by an individual in the previous day.

**Nine food groups used in calculating dietary diversity are:**

1. Grains, roots and tubers (Potatoes, taro root, cassava etc.)
2. Legumes (beans, peas, lentils etc.) and tree nuts (almonds, cashews etc.)
3. Dairy products (milk, yogurt, cheese)
4. Organ meat (liver)
5. Eggs
6. Flesh foods and other misc. small animal protein
7. Vitamin A dark leafy greens (kale, collards, spinach, turnip, mustard, broccoli)
8. Other Vitamin A rich vegetables and fruits (sweet potato, carrot, butternut squash)
9. Other fruits and vegetables (cantaloupe, paprika, red pepper, cayenne, chili powder, dried apricot, dried parsley, basil, marjoram & oregano)

**Calculation of individual dietary diversity score:** Each respondent to be measured is asked the question: “From the time you awoke yesterday until you went to sleep for the night, did you consume any foods that were...” completing the question with each of the nine food groups listed above. Do not count the number of individual foods in each food group, but rather, answers should be affirmative or negative. After asking about all nine, a series of responses (yes or no) will remain and the dietary diversity score for that individual is a count of the affirmative answers. Total possible score is 9.

**Calculation of community/group mean dietary diversity score:** Calculation of the arithmetic mean (or average) of all individual dietary diversity scores in a community/group. For example, if there are six individuals in the activity group and their dietary diversity scores are 3, 6, 3, 2, 2, 2; then the group mean would be 3 (3+6+3+2+2+2=18, divided by 6 individuals equals 3).

**Calculation of change in mean of community dietary diversity score:** Calculated using a pre/post test design where the dietary diversity community mean is calculated before a PCV activity or program (pretest) and then again after the implementation of the PCV activity or program (posttest). The change in mean is simply the difference between the pretest and posttest community means. **IMPORTANT NOTE:** To properly calculate the change in mean, volunteer must use the same participants in each sample (i.e. the same individuals assessed in both the pretest and post-test).
Please note the Volunteer should only report one number for this indicator. So, if the Volunteer works in multiple communities, the Volunteer should calculate the mean of all communities worked with.

**Partner/s**—refers to the local counterpart who is co-facilitating improved dietary diversity activities with the Volunteer.

**Rationale:** Dietary diversity is a proxy indicator for nutritional quality of diet. An imperfect indicator, the measure most closely measures maternal and child nutrition if it is female dietary diversity that is measured. Intra-household allocation issues can make male responses for dietary diversity misrepresentative of the nutritional quality of child and maternal diets. Diets that lack diversity often rely on energy dense, starchy staples and provide very low levels of essential micronutrients.

**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, interview, observation, or diary—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 data sheet. Volunteers should collect baseline information early in their work with nutrition and determining dietary diversity, and may use their judgment to determine timing because the information will be more accurate if the Volunteer has built some trust with the individuals/communities the data is gathered from 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 “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:

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 a change in the mean number of food groups consumed by a community/group. A Volunteer should calculate an individual’s dietary diversity score and a community’s dietary diversity score using the techniques presented in “Definitions”.

6. **General Reporting in the VRF**: The only number to be reported in the VRF by the Volunteer is the mean change in community/group dietary diversity, after working with the Volunteer/partner.

7. **Reporting on Disaggregated Data in the VRF**: There is no disaggregation for this indicator; when reporting on this indicator in the VRF, a Volunteer need only include a single number for the change in community-group dietary diversity.

**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**: ADOPTION IMPROVED PRACTICES (ORGS & GROUPS)