FOOD FOR PEACE DATA QUALITY ASSESSMENT

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March 2nd, 2016

Food and Nutrition Technical Assistance III Project (FANTA)
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Session Objectives

Participants will:

1. Identify four key data quality assessment (DQA) requirements from the FFP Monitoring and Evaluation Policy document

2. Assess an indicator using five data quality standards

3. Review an illustrative DQA process and potential pitfalls to avoid
FFP Data Quality Assessment (DQA) Definition

A systematic and periodic review of the data quality of indicators that FFP development projects report annually.
Purpose

To improve data quality with the ultimate goal of improving accountability and decision making.
Purpose

A DQA is designed to:

1. Verify the quality of data
2. Assess the system that produces that data
3. Develop action plans to improve both
DQA Requirements for FFP Development Projects
Requirement Number 1

DQA on annual monitoring indicator data

*Preferably on project-specific indicators from non-survey data collection methods*
Requirement Number 1 (cont.)

Universe of annual monitoring indicator data

- FFP annual monitoring indicators
- Project-specific annual monitoring indicator data collected through beneficiary-based surveys
- Project-specific annual monitoring indicators collected through routine monitoring

Focus of DQA
Requirement Number 2

Provide description of plans for DQA on an annual basis
What must the description of the plan for DQA include?
Requirement Number 3

Description of plan for DQA should include:

- Indicators to be assessed and justification for selection
- Timeframe: timing and duration
- Methodology
- DQA staff roles and qualifications
 Requirement Number 4

Select a sample of indicators for DQA annually

Purposive sample based on:

- Importance of indicator to ToC
- Identified and perceived data quality risks associated with indicator
- Timing and availability of staff
- Frequency and timing of data collection
- Other factors
Selecting Indicators for DQA

Categorize indicators:

• Similar data flows
• Output vs. Outcome
Data Flows

- **M&E Unit**
- **Intermediate aggregation levels (e.g., districts, regions)**
- **Service delivery points**

Source: Adapted from Measure Evaluation

Photo: Jessica Scranton, FANTA/FHI 360

**FOOD FOR PEACE DATA QUALITY ASSESSMENTS**
A DQA is designed to:

1. Verify the **quality** of data
2. Assess the **system** that produces that data
3. Develop action plans to improve both
Data Quality
Data Quality Standards

- Validity
- Reliability
- Precision
- Integrity
- Timeliness
A DQA is designed to:

1. Verify the quality of data
2. Assess the system that produces that data
3. Develop action plans to improve both
Data-Management and Reporting System
Quality Data

Data-management and reporting system

Source: Adapted from Measure Evaluation
## Functional Components of Data-Management System Needed to Ensure Data Quality

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>I.</td>
<td>M&amp;E structures, functions, and capabilities</td>
</tr>
<tr>
<td>II.</td>
<td>Indicator definitions and reporting guidelines</td>
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<td>III.</td>
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<td>IV.</td>
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<td>V.</td>
<td>Data use and dissemination</td>
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<tr>
<td>VI.</td>
<td>Links with national reporting systems (where relevant)</td>
</tr>
</tbody>
</table>

Source: Adapted from Measure Evaluation
**Quality Standards**

Validity, Reliability, Precision, Integrity, Timeliness

**Functional Components of Data-Management System Needed to Ensure Data Quality**

I. M&E structures, functions, and capabilities

II. Indicator definitions and reporting guidelines

III. Data collection tools and reporting forms

IV. Processes of data verification, aggregation, processing, management, storage, and safeguarding

V. Data use and dissemination

VI. Links with national reporting systems (where relevant)

Source: Adapted from Measure Evaluation
DQA Requirements for FFP Development Projects
Data Quality Standards

- Validity
- Reliability
- Precision
- Integrity
- Timeliness
Case Example

You are the DQA team leader for a FFP development food assistance project. You are verifying the quality of the data for the following indicator:

Number of kilograms (kg) produced as a result of participation in project’s technology transfer

- Tilapia
- Maize

Photos: Jessica Scranton, FANTA
Number of kg of tilapia/maize produced as a result of participation in project’s technology transfer

Validity

Are we measuring what we believe we are measuring?
Validity

Key Functional Components of a Data-Management System that Impact Validity

I. M&E structures, functions, and capabilities
II. Indicator definitions and reporting guidelines
III. Data collection tools and reporting forms
IV. Processes of data verification, aggregation, processing, management, storage, and safeguarding
V. Data use and dissemination
VI. Links with national reporting systems (where relevant)
Number of kg of tilapia/maize produced as a result of participation in project’s technology transfer

Do data reflect stable and consistent definitions and data collection processes and analysis methods over time?
Reliability

Key Functional Components of a Data-Management System that Impact Reliability

I. M&E structures, functions, and capabilities

II. Indicator definitions and reporting guidelines

III. Data collection tools and reporting forms

IV. Processes of data verification, aggregation, processing, management, storage, and safeguarding

V. Data use and dissemination

VI. Links with national reporting systems (where relevant)
Number of kg of tilapia/maize produced as a result of participation in project’s technology transfer

**Precision**

*Do data have a sufficient level of detail to permit management decision making and/or comply with reporting requirements? E.g. level of disaggregation, avoid over or underreporting.*
Select Key Functional Components of a Data-Management System that Impact Precision

I. M&E structures, functions, and capabilities

II. Indicator definitions and reporting guidelines

III. Data collection tools and reporting forms

IV. Processes of data verification, aggregation, processing, management, storage, and safeguarding

V. Data use and dissemination

VI. Links with national reporting systems (where relevant)
Number of kg of tilapia/maize produced as a result of participation in project’s technology transfer

Do the data collected, analyzed, and reported have established mechanisms in place to reduce manipulation or simple errors in transcription?
Select Key functional Components of a Data-Management System that Impact Integrity

I. M&E structures, functions and capabilities
II. Indicator definitions and reporting guidelines
III. Data collection tools and reporting forms
IV. Processes of data verification, aggregation, processing, management, storage, and safeguarding
V. Data use and dissemination
VI. Links with national reporting systems (where relevant)
Number of kg of tilapia/maize produced as a result of participation in project’s technology transfer

Timeliness

Are data available at a useful frequency? Are data current and timely enough to influence management decision making?
Select Key Functional Components of a Data-Management System that Impact Timeliness

| I.  | M&E structures, functions, and capabilities |
| II. | Indicator definitions and reporting guidelines |
| III. | Data collection tools and reporting forms |
| IV. | Processes of data verification, aggregation, processing, management, storage, and safeguarding |
| V.  | Data use and dissemination |
| VI. | Links with national reporting systems (where relevant) |
Illustrative DQA Process

- **Step 1.** Develop an overall approach and schedule
- **Step 2.** Identify the indicators and sites to be included in the review
- **Step 3.** Identify the DQA team
- **Step 4.** Develop a budget and logistics plan
- **Step 5.** Develop and pilot DQA tools or instruments
- **Step 6.** Train DQA reviewers
Illustrative DQA Process

- **Step 7.** Conduct the DQA
- **Step 8.** Prepare DQA draft report
- **Step 9.** Report review
- **Step 10.** Follow up on Actions
- **Step 11.** Submit DQA report to FFP through FFPMIS as part of the Annual Results Report
Sample DQA Checklist

### Sample of Data Quality Assessment Checklist and Procedures

This is a sample of a Data Quality Assessment (DQA) Checklist. Awardees may adapt this checklist to use to conduct their own DQAs or may decide to use a different checklist. This checklist is intended to assist in assessing each of the five aspects of data quality and provide a convenient manner in which to document the DQA findings.

<table>
<thead>
<tr>
<th>Name of FFP project/Organization:</th>
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</thead>
<tbody>
<tr>
<td><strong>Title of Performance Indicator:</strong></td>
</tr>
<tr>
<td><strong>Indicator should be copied directly from the Performance Indicator Reference Sheet</strong></td>
</tr>
<tr>
<td><strong>Result this Indicator Measures (i.e., Specify the Project Purpose, Sub-purpose, etc.):</strong></td>
</tr>
<tr>
<td><strong>Data Source(s):</strong></td>
</tr>
<tr>
<td><strong>Information can be copied directly from the Performance Indicator Reference Sheet</strong></td>
</tr>
<tr>
<td><strong>Partner or Contractor Who Provided the Data (only applicable for project run by consortium):</strong></td>
</tr>
<tr>
<td><strong>In addition to completing the checklist for its own organization, Awardee should complete this checklist for each sub-awardee that contributes data to an indicator— it is the prime’s responsibility to ensure the data quality of sub-contractors or sub grantees.</strong></td>
</tr>
<tr>
<td><strong>Period for Which the Data Are Being Reported:</strong></td>
</tr>
<tr>
<td><strong>Is this Indicator a project-specific indicator or a FFP/USAID indicator?</strong></td>
</tr>
<tr>
<td><strong>___ FFP/USAID indicator</strong></td>
</tr>
<tr>
<td><strong>___ project-specific indicator (created by the project)</strong></td>
</tr>
<tr>
<td><strong>Data Quality Assessment methodology:</strong></td>
</tr>
<tr>
<td><strong>Describe here or attach to this checklist the methods and procedures for assessing the quality of the indicator data, e.g., reviewing data collection procedures and documentation, interviewing those responsible for data analysis, checking a sample of the data for errors, etc.</strong></td>
</tr>
<tr>
<td><strong>Date[s] of Assessment:</strong></td>
</tr>
<tr>
<td><strong>Assessment Team Members:</strong></td>
</tr>
<tr>
<td><strong>Team Leader approval</strong></td>
</tr>
<tr>
<td><strong>X ___________________________</strong></td>
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</tbody>
</table>
Potential Pitfalls to Avoid

1. Data security issues
2. Lack of assigned budget and personnel for annual DQA
3. Lack of data traceability standards
4. Filing system inconsistencies
5. Incomplete requirements in collection forms
6. Insufficient training and knowledge refreshers
Potential Pitfalls to Avoid

7. Lack of standardized processes/tools/indicators definitions

8. Inconsistent data-collection methodology among prime and sub-awardees (for projects run by consortium)

9. Insufficient standards to verify and cross-check data

10. Insufficient follow up on actions
Resources


This presentation is made possible by the generous support of the American people through the support of the Office of Health, Infectious Diseases and Nutrition, Bureau for Global Health, U.S. Agency for International Development (USAID) and the Office of Food for Peace, Bureau for Democracy, Conflict and Humanitarian Assistance, under terms of Cooperative Agreement No. AID-OAA-A-12-00005, through the Food and Nutrition Technical Assistance III Project (FANTA), managed by FHI 360. The contents are the responsibility of FHI 360 and do not necessarily reflect the views of USAID or the United States Government.