



Box 1: General Definitions

An indicator refers to “a quantitative or qualitative variable that provides reliable means to measure a particular phenomenon or attribute.” (USAID 2009).

A measurement tool is a “systematic collection of information from a defined population through interviews or questionnaires.” (USAID 2009).

Source: Adapted from Mofya-Mukuka and Kabisa (2016)

A ‘best practice’ refers to a technique or method that reliably gives a desired result through lessons learnt and research (WHO 2008).

I. INTRODUCTION

I.1. Background

An important first step in strengthening gender equity and nutrition outcomes involves having reliable methods of measurement of current conditions (Ballard *et al.* 2011). Measurement tools and indicators have been developed and validated for measuring nutrition outcomes (FANTA 2008; FAO and FHI 360 2016) and gender equity (Malapit *et al.* 2014; Alkire *et al.* 2013) at international level. Measurement helps to hold implementers accountable for the actions they take towards improving the status of gender equity and/or nutrition outcomes in their target areas.

Although many measurement tools and indicators are already validated and accepted internationally, literature on best practice of their use in the Zambian context¹ remains scant. These guidelines fill this gap by providing best practice tips to help agricultural projects appropriately use gender equity indicators and nutrition measurement tools in assessing their impacts in the Zambian context.

The guidelines support decision making and address the challenges that may be faced during data collection. They are meant to supplement already existing knowledge in an ‘easy to understand format’ on the use of the tools and indicators, with the lens of agricultural and livelihood interventions in the Zambian context.

¹ The Zambian context in this guideline refers to the socio-cultural (customs, lifestyle and values) environment that may affect the data being collected in one or many ways.



2. METHODS

The guidelines are based on lessons learnt from a study that was conducted in the Western province of Zambia in September 2016. IAPRI collaborated with Programme Against Malnutrition (PAM) to field test measurement tools and indicators among 148 respondents participating in a food security and livelihoods project called Empowering Women through Agricultural Support (EWAS). For child nutrition impact analysis, data was collected for 45 children. Observations of the data and the interviews provided useful insights on how best to overcome challenges that may be faced during data collection.

The measurement tools that were tested assessed nutrition and food security (Household Dietary Diversity Score (HDDS), Minimum Dietary Diversity for Women (MDD-W), Minimum Dietary Diversity Score for Children (MDDS-C) and Household Hunger Scale (HHS)) and gender equity indicators (Women's Empowerment in Agriculture Index (WEAI)). The questionnaire that was used to collect the data was divided into three parts: The first part collected information on demographic characteristics of the respondent and the household; the second part collected data on the nutrition indicators; and the third section focused on gender equity (see Box 2).

3. ACTIVITIES TO UNDERTAKE BEFORE CONDUCTING DATA COLLECTION

Budgeting and allocation of adequate finances: Ensure that the resources are available to conduct quality data collection. A data collection budget should include anticipated expenses for training, field testing of the questionnaire, logistics (transportation, per diems), and stationary.

Enumerators will require quality training on the use of the specific indicators and measurement tools that will be used. In instances where projects do not have adequate expertise, it is imperative that an expert be hired to conduct the training. This is critical in ensuring the data collected is of good quality and captures the correct information.

4. MEASUREMENT TOOLS AND LESSONS LEARNT: DEFINITIONS, OBSERVATIONS, AND RECOMMENDATIONS

4.1 Nutrition and Food Access Measurement Tools

Several nutrition and food access measurement tools were field tested (see Box 2). The findings are as follows:



IAPRI vehicle stuck in sand during data collection ©M. Kabisa 2016

For the questions covered in the survey, whether an enumerator was a man or a woman did not have any effect on the responses from the respondents.



An enumerator interviews a respondent © M. Kabisa 2016

Box 2: Measurement Tool Definitions

Household Dietary Diversity Score: This tool shows the number of food groups consumed within a household during a specified recall period (typically 24 hours) (Swindale and Bilinsky 2006).

Minimum Dietary Diversity for Women: The MDD-W indicator is a population level indicator that measures the number of women of reproductive age (15 to 49 years old) who consumed five out of ten food items consumed the previous 24 hours (FAO and FHI 360 2016).

Minimum Dietary Diversity for Children: This indicator measures the number of children between the ages of 6 months to 23 months that consumed four or more out of seven food groups listed the previous 24 hours (FTF 2014).

Household Hunger Scale: This tool is a household level indicator that measures the level of food deprivation a household experiences in a food insecure area over a one month period (Ballard et al. 2011).

4.1.1 Dietary Diversity Scores

Observations and Recommendations

- ❖ Avoid combining household dietary diversity score (HDDS), minimum dietary diversity score for children (MDDS-C) and minimum dietary diversity for women (MDD-W) in one questionnaire as some respondents may find the questions repetitive. Also, these tools measure different dimensions of micronutrient adequacy or food access, so their inclusion should depend on the data needs of the evaluation.
- ❖ Use the time ranges ‘morning, afternoon and evening/night’ instead of asking what the household consumed at breakfast, lunch and supper because the eating pattern in many rural setups does not follow that pattern.
- ❖ On average, the highest level of education attained for rural households in Zambia is 7.8 years (CSO/MoA/IAPRI 2015). Recall of all meals consumed at the household was observed to be problematic for many respondents. We recommend that projects should consider asking the households to pay attention to what every household member consumed even before data collection.
- ❖ As a good practice tip, it is important to decide during the questionnaire design stage which information is most critical to collect in terms of the three dietary diversity measures on the project objectives.

4.1.2 Household Hunger Scale (HHS)

The HHS tool has a set of questions which should be asked in their entirety and not independently (see definition in Box 2).

Observations and Recommendations

- ❖ When conducting household hunger assessments (food deprivation) during the lean season, typically between November to March (FEWS NET 2016), caution must be taken because respondents tend to report higher than actual levels of hunger in anticipation of food aid. However, if the assessment is aimed at measuring baseline prevalence estimates, as opposed to differentiating households that experience food insecurity chronically and those that do so in episodes, the lean season should be avoided (Ballard et al. 2011).
- ❖ When collecting data, it is important to carefully explain the meaning of the terms “hunger” and “insufficient food,” as these could mean different things to different households, influencing the responses given.

The Input and Extent of decision-making indicator collects data on the amount of input women have and their own perceptions of the extent of their input on decisions involving productive assets within their household (Malapit *et al.* 2015).

This *leisure time indicator* refers to the satisfaction a respondent has with the amount of time they have for leisure activities (Stern *et al.* 2016; FTF 2014).

Asset Ownership Indicators: A person is considered adequate in this area if he or she reports having sole or joint ownership, conditional on the household's owning those assets (Alkire *et al.* 2013).

Women's Access to Credit: This indicator examines decision making about credit: whether to obtain credit and how to use the credit obtained from various sources (nongovernmental organizations, formal and informal lenders, friends or relatives, rotating savings and credit associations).

4.2 Gender Equity Indicators

The gender equity indicators that were tested in this study were adapted from the Women's Empowerment in Agriculture Index (WEAI), in a form commonly used by projects based on their interventions. It is important to note that the WEAI has not been validated for use at the project level, and that a project-level WEAI tool is under development.

4.2.1 Input and Extent of Decision-making

To examine women's participation in decision making, the respondent is asked two questions; 1) if the individual participated in the activity, how much input the individual had in making decisions; 2) the extent the individual feels she can make her own personal decisions regarding the following aspects of household decision making:

Observations and Recommendations

- ❖ For most respondents, differentiating between the meaning of "extent of decision making" and "input in decision making" was problematic. This is because the local language does not have a direct translation of these words and the two were understood to mean the same thing. To address this problem, 'input' was explained as whether the respondent was consulted in the decisions made in the household while 'extent' was explained as how much of a say they had in those decisions.
- ❖ In general, socio-cultural norms affect responses on decision making questions, as they may be viewed by the respondent as a way of trying to pry into their household dynamics. It is important to take into consideration the cultural norms that may govern the attitudes towards women giving input and the extent of their input in decision making.
- ❖ The enumerator should exercise tact to assess whether or not this question makes the respondent uncomfortable and possibly change the questioning approach in order to get honest responses to the questions.
- ❖ An important good practice in approaching respondents with sensitive questions about household dynamics is to be open and forthcoming with the respondents about why you are collecting this information. Emphasis on the anonymity of the responses and the fact that it will be reported for the population rather than individual households can be helpful in reassuring the respondent.

Box 3: WEAI Domains

WEAI

Production (Input in productive decisions and Autonomy), Resources, Income, Leadership (Group membership and Public Speaking) and Time (Workload and Leisure)

Abbreviated WEAI (A-WEAI)

Production (Input in productive decisions), Resources, Income, Leadership (Group membership) and Time (Workload)

Project WEAI (Pro-WEAI)

Production (Input in productive decisions), Resources, Income, Leadership (Group membership), Time (Workload) and additional domains may be included using add-on modules

Ad Hoc WEAI Adaptations

Any combination of domains depending on the survey focus
Source: Adapted from Malapit et al. 2015

4.2.2 Questions on Time Allocation

It should be noted that this indicator is adapted from the WEAI (see Box 3), but absent in the abbreviated WEAI (A-WEAI). Leisure time is no longer collected, it focuses only on primary activities the individual was involved in (Malapit et al. 2015). The lessons learnt using this tool include:

Observation and Recommendations

- ❖ It is important to take into account what the respondents regard as leisure time. This is because of the cultural connotations (e.g., laziness) that may be associated with having enough leisure time. In some instances, respondents may perceive being satisfied with leisure time as a sign of laziness/not doing enough work.
- ❖ During training, emphasis should be made on what will be regarded as 'leisure time' and differentiated from 'resting time'. A good practice in aiding this differentiation is to tie the time to a leisure activity. If a respondent was engaged in an activity that is viewed as a 'leisure activity' e.g. listening to the radio, visiting friends/family etc., then that can be categorized as leisure time. If the respondent was resting/sleeping during the day, then that time should be categorized as resting time.

4.2.3 Questions on Asset Ownership

The asset ownership component of the WEAI assesses whether an individual has sole or joint ownership of land and assets, based on a comprehensive list of assets (see Box 2 for definition).

In many societies in rural Zambia, questions about land access are perceived to be sensitive. There is a general suspicion about why someone would be making enquiries related to land ownership. Therefore, collecting such information requires paying attention to cultural aspects.

- ❖ Questions on asset ownership/access also tend to be problematic for group or extended family ownership of assets, which is quite common in many rural societies. Enumerators should be trained to pay attention to cultural issues when asking about specific assets (e.g. productive assets (ploughs, tractors), livestock such as cattle and goats and land) when collecting data on access.

Box 4: Field Responses Observed

“The respondent was not clear on the question of inadequate food or complete hunger.”- Enumerator

*“The respondent’s recollection of hunger was difficult and her understanding of hunger was having only vegetables with nshima so she found it difficult to reconcile hunger as having no food completely.”
- Enumerator*

“Why would someone be asking such a question (about what we ate)? If you say you did not eat certain food, will they help you?”- Respondent

*“When children eat foods within the household that they are not permitted, they hide e.g. green mangoes.”
- Respondent*

*“Primary decision maker questions were hard for the respondent to answer because she thought she might be disrespecting her husband.”
- Enumerator*

“It makes someone wonder why someone would want to know your household dynamics. What are their intentions?”- Respondent

*“Our fields are inherited so it is shocking to be asked a question about where you acquired the land you use to farm because that is our culture.”
- Respondent*

*“Because we don’t know if you are giving us loans or not it is difficult to answer the question. If we say we borrowed, you may not lend us money.”
- Respondent.*

4.2.4 Women’s Access to Credit

To be empowered on this indicator, a person must belong to a household that has access to credit and if the household used a source of credit, must have participated in at least one decision about it.

Observations and Recommendations

It is common among respondents to anticipate credit when asked questions about credit. Those with unpaid loans think that the enumerator wants to collect the debt. As such, collecting data on credit is one of the most difficult tasks. Training should therefore emphasize on how the enumerators should best approach the credit questions. It is also advisable for the enumerators to know about projects or institutions in the area that may provide credit facilities to aid in the probe for this information from.

5. CONCLUSION

Most challenges faced during data collection stem from a general lack of understanding of the questions on the part of the respondent (even after translating to local language); respondents’ perceptions and expectations from the interview; socio-cultural influences and questionnaire length. The level of education of the respondents should be taken into consideration when drafting a questionnaire to be administered. This is because this may affect their ability to understand the questions being asked and the quality of responses.

Project implementation should adequately inform the beneficiaries of information they are expected to give during impact assessment. An example is advising the respondents to pay attention to what they and their household members consume and activities they carry out on a daily basis.

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