



Months of Adequate Household Food Provisioning (MAHFP) for Measurement of Household Food Access: Indicator Guide

**VERSION 4** 

June 2010

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This guide is made possible by the generous support of the American people through the support of the U.S. Agency for International Development (USAID) Bureau for Global Health, Office of Health, Infectious Diseases, and Nutrition, under terms of Cooperative Agreement No. GHN-A-00-08-00001-00, through the Food and Nutrition Technical Assistance II Project (FANTA), managed by FHI 360.

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June 2010

#### **Recommended Citation:**

Bilinsky, Paula; and Swindale, Anne. 2010. Months of Adequate Household Food Provisioning (MAHFP) for Measurement of Household Food Access: Indicator Guide (v.4). Washington, D.C.: FHI 360/FANTA.

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### I. Introduction

All Title II programs have improvements in food security as their core objective. As defined by USAID, food security has three components - availability, access and utilization. Title II programs focus on the access and utilization components. Utilization, in the context of food security, refers to the individual's biological capacity to make use of food for a productive life. Consensus on the measurement of the utilization component has centered on various measures of nutritional status (anthropometric measurement) of children. Household food access is defined as the ability to acquire sufficient quality and quantity of food to meet all household members' nutritional requirements for productive lives. Given the variety of activities implemented by implementing partners (IPs) to improve household food access and the significant challenges most IPs face in measuring household food access for reporting purposes, there is a need to build consensus on appropriate household food access impact indicators. This guide provides an approach to measuring household food provisioning as a proxy measure of household food access.

In light of the need to build consensus on household food access impact indicators, two strategic objective level indicators of household food access – household dietary diversity score (HDDS) and months of adequate household food provisioning (MAHFP) - were identified during the development of USAID Office of Food for Peace (FFP)'s FY05-08 strategy, through a process of consultation and discussion with IPs, researchers, and other technical groups. Inputs from the FAM M&E Working Group and the FFP Performance Management Plan (PMP) Working Group were particularly critical.

These two indicators focus on the desired outcome of improved food access - - improved household food consumption. FFP requires all Title II Multi-Year Assistance Programs (MYAP) with improved household food access as an objective to include these indicators in their Indicator Performance Tracking Table (IPTT) and collect them during the baseline and final evaluation surveys. In addition, the Household Hunger Scale (HHS), a tool to measure the prevalence of household hunger in food insecure areas may be a required indicator in the future.<sup>2</sup>

Food access depends on the ability of households to obtain food from their own production, stocks, purchases, gathering, or through food transfers from relatives, members of the community, the government or donors. A household's access to food also depends on the resources available to individual household members and the steps they must take to obtain those resources, particularly exchange of other goods and services.

As a household manages its resources over the course of a year, the ability to meet its food needs may vary due to any number of factors such as inadequate crop production by the household due to poor soils or lack of labor, loss or decrease in income sources such as employment, social obligations or natural

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<sup>&</sup>lt;sup>1</sup> USAID defines food security as, "when all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life." Three distinct variables are essential to the attainment of food security: 1) Food Availability: sufficient quantities of appropriate, necessary types of food from domestic production, commercial imports or donors other than USAID are consistently available to the individuals or are within reasonable proximity to them or are within their reach; 2) Food Access: individuals have adequate incomes or other resources to purchase or barter to obtain levels of appropriate food needed to maintain consumption of an adequate diet/nutrition level; 3) Food Utilization: food is properly used, proper food processing and storage techniques are employed, adequate knowledge of nutrition and child care techniques exist and is applied, and adequate health and sanitation services exist. (USAID Policy Determination, Definition of Food Security, April 13, 1992).

<sup>&</sup>lt;sup>2</sup> See FANTA-2's technical report Validation of a measure of household hunger for cross-cultural use (forthcoming in 2010) for information on the scale, and efforts to develop a generic, universally applicable measurement instrument that can be used to measure the access component of household food insecurity in a range of country and cultural contexts.

disaster. The overall goal of food security programs is to reduce the degree to which a household is vulnerable to any factor that results in insufficient food or to enhance community resilience and livelihood capacities in the face of shocks. Title II program activities may reduce this vulnerability in any number of ways. Over time, the MAHFP indicator can capture changes in the household's ability to address vulnerability in such a way as to ensure that food is available above a minimum level the year round. Measuring the MAHFP has the advantage of capturing the combined effects of a range of interventions and strategies, such as improved agricultural production, storage and interventions that increase the household's purchasing power.

## II. Collecting the Data

This guide provides guidance on the specific data collection needs for the MAHFP indicator. It assumes that these questions will be part of a population-based survey instrument and will be applied to all the households in the sample.

When to collect the data: To most accurately capture improvements in household food access over time, an IP should collect data for MAHFP during the period of greatest food shortages (such as immediately prior to the harvest). This will increase the accuracy of recall of the months when the household did not have sufficient food. Subsequent data collection (final evaluations, for example) should be undertaken at the same time of year.

**Recall Period:** Although the response options start with the month of January, the respondent is asked to think back over the previous 12 months, starting with the current month. Adjust the months according to when you conduct the survey so that the current month appears first.

**How to collect the data:** Data for this indicator are collected by first screening out those households that were able to provide for their household food needs throughout the entire year. Those households that were unable to adequately provide for the household (question number one) then go on to question number two where they are asked to identify in which months (during the past 12 months) they did not have access to sufficient food to meet their household needs. The purpose of these questions is to identify the months in which there is limited access to food regardless of the source of the food (i.e., production, purchase, barter or food aid).

These questions should be asked of the person (adult) who is responsible for food preparation in the household. If the food was prepared by a child/youth, the question should not be asked of the child/youth who actually prepared food but rather of the adult (usually a woman) who makes the daily decisions about what will be prepared and eaten. The questions refer to the food needs of the household as a whole, not any single member of the household.

Those households that respond to question one by saying they did have adequate food supply throughout the past year should still be included in the tabulation of the denominator of the indicator ("total number of households") or the level of food insecurity will be overestimated.

# **III.** Questionnaire Format

In order to collect data on months of adequate household food provisioning, the following questions should be added to the baseline and final evaluation surveys.

	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1.	Now I would like to ask you about your household's food supply during different months of the year. When responding to these questions, please think back over the last 12 months, from now to the same time last year.		IF NO,
	Were there months, in the past 12 months, in which you did not have enough food to meet your family's needs?	1 1	END HERE
	PLACE A $\it 1$ IN THE BOX IF THE RESPONDENT ANSWERS YES. PLACE A $\it 0$ IN THE BOX IF THE RESPONSE IS NO.	''	
2.	If yes, which were the months in the past 12 months during which you did not have enough food to meet your family's needs?		
	THIS INCLUDES ANY KIND OF FOOD FROM ANY SOURCE, SUCH AS OWN PRODUCTION, PURCHASE OR EXCHANGE, FOOD AID, OR BORROWING.		
	DO NOT READ THE LIST OF MONTHS ALOUD. PLACE A $1$ IN THE BOX IF THE RESPONDENT IDENTIFIES THAT MONTH AS ONE IN WHICH THE HOUSHOLD DID NOT HAVE ENOUGH FOOD TO MEET THEIR NEEDS. IF THE RESPONDENT DOES NOT IDENTIFY THAT MONTH, PLACE A $0$ IN THE BOX.		
	USE A SEASONAL CALENDAR IF NEEDED TO HELP RESPONDENT REMEMBER THE DIFFERENT MONTHS.		
	PROBE TO MAKE SURE THE RESPONDENT HAS THOUGHT ABOUT THE ENTIRE PAST 12 MONTHS.		
Α	January	A	
В	December	В	
С	November	c	
D	October	D	
E	September	E	
F	August	F	
G	July	G	
Н	June	н	
ı	May	·	
J	April	1	
К	March	к	
L	February	니	

## IV. MAHFP Indicator Tabulation Plan

The tabulation of the responses is a simple tally of total months that can be done by hand or with the aid of computer software such as a database or spreadsheet. First, the MAHFP for each household in the sample is calculated:

Calculate the MAHFP (0-12) for each household	Twelve months <i>minus</i> the total number of months out of the previous 12 months that the household was unable to meet their food needs. Values for A through L will be either "0" or "1." Note that if the answer to Question 1 was No, then responses A-L of question two should be coded as zero (0).  (12) - Sum (A + B + C + D + E + F + G + H + I + J + K + L)
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Second, an average for all the households in the sample is calculated. The denominator should include all households interviewed, even those who did not experience any months of inadequate household food provisioning.

Average MAHFP	Sum of the MAHFPs for all households in the sample
Average WATTE	Total Number of Households

It may be helpful to use the results of this question for on-going discussions with community members about household food security, for example, in developing a detailed household food security calendar that describes labor needs and weather patterns, which influence access to food.

### V. Setting Targets

While this indicator is used widely among Title II programs, there has been no research done to assist in setting targets. The degree of change that can realistically be expected in the context of a 5-year program Title II is not known.

Two options are proposed to determine appropriate targets.

- The first option is to use the months of adequate food provisioning of the top tercile (one-third) of the households as a target. The MAHFP indicator is an average of all the households in the sample, as explained above. To set the target we want to take the average, not of the entire sample, but only of one-third of the sample, those households that scored highest on the MAHFP. To do this, first array (list) the MAHFP scores of all the households in order from lowest to highest, then cut the sample into equal thirds. Calculate the average MAHFP score of the top tercile and use this as the target for the entire population.
- Because projects using the MAHFP indicator often include interventions aimed at increasing household income, surveys sometimes collect income or economic status information. If income data are available, the sample could be divided into three income groups (terciles of income), and the average months of adequate food provisioning could be calculated for the richest income tercile. The average MAHFP in the richest 33 percent of households can then serve as a target number of months of adequate food provisioning. Where income data are not available, income groups can be defined using proxies, such as possession of assets or other items found to be highly correlated with income in the project population.

# VI. References

Bonnard, Patricia et al. 2002. Report of the Food Aid and Food Security Assessment: A Review of the Title II Development Food Aid Program. Washington, D.C.: FHI 360/FANTA.

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