



## Feed the Future Malawi 2015

### Zone of Influence Interim Assessment Report

April 2016



**USAID**  
FROM THE AMERICAN PEOPLE

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## List of Acronyms

5DE	Five Domains of Empowerment
BFS	Bureau for Food Security
BMI	Body Mass Index
CI	Confidence Interval
CPI	Consumer Price Index
CRS	Catholic Relief Services
DA	Development Assistance
DEFF	Design Effect
DHS	Demographic and Health Survey
EA	Enumeration Area
FANTA	Food and Nutrition Technical Assistance
FEWS NET	Famine Early Warning Systems Network
FFP	Food for Peace
FTF FEEDBACK	Feed the Future FEEDBACK
FTFMS	Feed the Future Monitoring System
FY	Fiscal Year
GDP	Gross Domestic Product
GPI	Gender Parity Index
HHS	Household Hunger Scale
IFPRI	International Food Policy Research Institute
IHPS	Integrated Household Panel Survey 2013
IHS1	First Integrated Household Survey 1997-1998
IHS2	Second Integrated Household Survey 2004-2005
IHS3	Third Integrated Household Survey 2010-2011
IR	Intermediate Results
LCU	Local Currency Unit
LSMS	Living Standards Measurement Survey
MAD	Minimum Acceptable Diet
MDD-W	Women's Minimum Dietary Diversity
MDG	Millennium Development Goals

MES	MDG Endline Survey
MK	Malawi Kwacha
M&E	Monitoring and Evaluation
NRVCC	Nutrient-Rich Value Chain Commodity
NSO	National Statistical Office of Malawi
OFSP	Orange-Fleshed Sweet Potatoes
PCI	Project Concern International
PPP	Purchasing Power Parity
PSLCE	Primary School Leaving Certificate Examination
SD	Standard Deviation
TA	Traditional Authority
USAID	United States Agency for International Development
USD	United States Dollar
USG	United States Government
WDDS	Women's Dietary Diversity Score
WEAI	Women's Empowerment in Agriculture Index
WHO	World Health Organization
ZOI	Zone of Influence



# Executive Summary

## Background

Feed the Future, led by the United States Agency for International Development (USAID), seeks to reduce poverty and undernutrition in 19 developing countries through its focus on accelerating growth of the agriculture sector, addressing root causes of undernutrition, and reducing gender inequality.

Feed the Future monitors its performance in part by periodic assessments of a number of standardized indicators. These indicators reflect data collected through population-based surveys in the geographic areas targeted by Feed the Future interventions, known as the Feed the Future Zones of Influence (ZOI). This document reports the results of the first interim assessment of Feed the Future's population-based indicators for the ZOI in Malawi.

The Feed the Future ZOI in Malawi covered at baseline and in the first interim assessment includes the rural areas of seven ZOI districts in the Central and Southern regions of Malawi: Balaka, Dedza, Lilongwe, Machinga, Mangochi, Mchinji, and Ntcheu. During 2015, USAID/Malawi expanded the Feed the Future ZOI to include Blantyre/rural, and created a secondary ZOI comprising the southern districts of Chikawa and Nsanje. However, this document reports on interim indicator results only for the seven districts covered during baseline to allow for comparisons between baseline and interim data.

This first interim assessment will provide the U.S. Government (USG) interagency partners, USAID Bureau for Food Security (BFS), USAID Missions, host country governments, and development partners with information about short-term progress of the ZOI indicators. The assessment is designed for use as a monitoring tool, and as such provides point estimates of the indicators with an acceptable level of statistical precision. However, Feed the Future ZOI sample calculations are not designed to support conclusions of causality or program attribution, nor is the interim assessment designed to measure change from the baseline.

## Interim Assessment Indicators

Thirteen Feed the Future indicators are included in this assessment: (1) Daily per capita expenditures (as a proxy for income) in USG-assisted areas; (2) Prevalence of Poverty; (3) Depth of Poverty; (4) Prevalence of households with moderate or severe hunger; (5) Women's Dietary Diversity; (6) Prevalence of children 6-23 months receiving a minimum acceptable diet (MAD); (7) Prevalence of exclusive breastfeeding among children under 6 months of age; (8) Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities (NRVCCs); (9) Prevalence of children 6-23 months who consume targeted NRVCC; (10) Prevalence of underweight women; (11) Prevalence of stunted children

under 5 years of age; (12) Prevalence of wasted children under 5 years of age; and (13) Prevalence of underweight children under 5 years of age.

The first interim assessment does not report on the Feed the Future indicator Women's Empowerment in Agriculture Index (WEAI) score, but does report on nine of the ten indicators that comprise the WEAI. These are presented in the WEAI section of this report (Section 5). Because adjustments were being made to the WEAI tool at the time of the first interim ZOI survey, a streamlined version of the WEAI module was used that only collected data for nine of the 10 indicators. The full WEAI will be collected during the next interim survey in 2017.

The interim assessment also does not report on the two Feed the Future anemia indicators because changes plausibly associated with Feed the Future's efforts are unlikely given coverage and focus of nutrition programs at this time, and because they require more intrusive data collection, increase the cost of the survey, and increase the time and complexity of data collection and obtaining in-country institutional review board approval.

## Interim Assessment Data Sources

Data for the Feed the Future ZOI indicators presented in this assessment are drawn from two sources: (1) The Malawi ZOI interim assessment of 2015 and, (2) the Baseline Study of FY 2014 Office of Food for Peace (FFP Development) Food Assistance Projects in Malawi (2015).

The Malawi ZOI interim assessment was conducted by FTF FEEDBACK in conjunction with its data collection partner, the National Statistical Office of Malawi (NSO), in the rural areas of the ZOI districts of Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu. The Baseline Study of FY 2014 FFP Development Food Assistance Projects in Malawi (2015) was conducted by ICF International in conjunction with its data collection subcontractor, the Lilongwe University of Agriculture and Natural Resources (LUANAR)'s Centre for Agricultural Research and Development (CARD), in the rural areas of Balaka and Machinga, the two ZOI districts where one of the FFP programs is also implemented. Fieldwork for the ZOI interim assessment took place between July 27 and September 11, 2015, for ICF International, and from September 21 to October 17, 2015, for FTF FEEDBACK.

FTF FEEDBACK coordinated with ICF International to ensure that the survey design, sampling methodology, and survey instrument were harmonized across the seven districts.

FTF FEEDBACK and NSO interviewed 813 households and ICF International and CARD interviewed 208 households. A total of 1,021 households were interviewed, which provided data for the target sample size of 1,007 households and ensured the sample is representative of the seven districts covered in the interim assessment.

## Summary of Key Findings

### *Household Economic Status*

Average daily per capita expenditures in the Malawi ZOI is \$1.58 (2010 USD). The prevalence of poverty (defined as the percentage of people living below \$1.25 per day (2005 Purchasing Power Parity [PPP]) is 54.5 percent. The depth of poverty (the mean percent shortfall relative to the \$1.25 per day poverty line) is 21.0 percent.

### *Women's Empowerment in Agriculture Index Indicators*

The Feed the Future interim assessments present uncensored headcounts for nine of the 10 WEAI indicators. Uncensored headcounts are the percent of women (regardless of their overall empowerment status) who achieve adequacy on each of the WEAI indicators. The WEAI uncensored headcounts with the highest levels of surveyed women's achievement include control over the use of income (98.7 percent), input in productive decisions (90.7 percent), and satisfaction with leisure time (88.1 percent). The WEAI uncensored headcount with the lowest levels of achievement among primary adult female decisionmakers is access to and decisions on credit (35.7 percent).

### *Hunger and Dietary Intake*

The prevalence of households in the ZOI with moderate or severe hunger is 55.7 percent, which means more than half of Malawi ZOI households experience hunger. Women's dietary diversity, or the mean number of food groups (of nine possible groups) consumed by women of reproductive age (15-49 years), is 3.38 food groups. The prevalence of exclusive breastfeeding among children under 6 months is 60.0 percent. Among children 6-23 months, 13.4 percent received a MAD.

The targeted NRVCCs in Malawi are soy, groundnuts, and orange-fleshed sweet potatoes (OFSP). Among women of reproductive age in the Malawi ZOI, over one-third (35.7 percent) consume at least one of the three NRVCC foods, with groundnuts or foods made from groundnuts most commonly consumed (21.5 percent of women). This is followed by OFSP or foods made from OFSP (12.7 percent), and finally, soy or foods made from soy (10.3 percent). The NRVCC pattern is similar for children age 6-23 months. Among young children, groundnuts are the most prevalent NRVCC (consumed on the prior day by 15.0 percent of children), followed by OFSP (14.7 percent), and soy (9.4 percent). Similar to women of reproductive age, nearly one-third (32.1 percent) of ZOI children age 6-23 months consume at least one of the NRVCC foods.

## *Nutritional Status of Women and Children*

The prevalence of underweight non-pregnant women in the Malawi ZOI (defined as a Body Mass Index [BMI]) below 18.5) is 8.9 percent. Among children less than 5 years, 42.3 percent are stunted. This means more than two of every five children in the ZOI have low height-for-age, indicating long-term, chronic undernutrition. About 3.6 percent of children under age 5 are wasted, or have low weight-for-height, which is an indicator of acute malnutrition. Finally, 16.0 percent of children are underweight, or have low weight-for-age. Underweight is an indicator of either acute or chronic undernutrition in children.

Although the sample for the Malawi ZOI interim assessment was not designed to measure change from baseline indicator values, for a few indicators, non-overlapping confidence intervals (CIs) between the 2010-2012 baseline indicator value and comparable 2015 interim indicator value point to a statistically significant change over time. When CIs do overlap, however, which is the case for most indicators, conclusions cannot be made regarding statistically significant change from baseline to interim without conducting a statistical test of the difference.

Statistical tests of differences were conducted for the children's stunting, wasting, and underweight indicators. There has been a statistically significant reduction in the prevalence of children's stunting in the Malawi ZOI from the baseline prevalence of 49.2 percent in 2010 to 42.3 percent in 2015. Among male children, stunting declined from 52.3 percent to 44.3 percent over this period. Children's wasting had a statistically significant reduction from 6.4 percent to 3.6 percent. No statistically significant difference was found from 2010 to 2015 for children's underweight.

For the remaining indicators, and as shown by the non-overlapping CIs in the Feed the Future indicator estimates table below, significant differences were found over time between the 2010/11 baseline and 2015 interim estimates for the prevalence of poverty (\$1.25/day 2005 PPP); and between the 2012 baseline and 2015 interim estimates for the three WEAI indicators of ownership of assets, control over use of income, and workload; and the prevalence of households with moderate or severe hunger.

The prevalence of poverty in the ZOI declined significantly from 66.7 percent at baseline to 54.5 percent at interim.<sup>1</sup> When interpreting this finding, it is important to keep in mind the two different surveys used for the poverty estimates in Malawi: baseline poverty values were calculated with secondary data from the Integrated Household Survey 3 (IHS3), collected from March 2010 through March 2011. Interim values were calculated with data from the Malawi ZOI interim survey collected from late July to October 2015. This means that baseline consumption expenditure data, on which poverty prevalence is based, capture consumption

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<sup>1</sup> The depth of poverty indicator also has non-overlapping confidence intervals between baseline and interim estimates (indicating a statistically significant decline in this measure over time), but only for the female adult(s) only households.

patterns across seasons, while interim data largely capture consumption expenditure over one season.<sup>2</sup>

Three of the nine WEAI uncensored headcounts also exhibit a significant change between baseline and interim. Two of these indicators—control over the use of income and workload—increase from baseline to interim. At baseline, 92.7 percent of primary adult female decisionmakers achieved adequacy on the control over the use of income indicator; this estimate is 98.7 percent at interim. Similarly, at baseline, 43.4 percent of women achieved adequacy on the workload indicator; at interim, 76.6 percent achieved adequacy. The ownership of assets indicator reveals the opposite pattern; at baseline, this indicator was 91.5 percent whereas the interim estimate is 87.4 percent.

Finally, in addition to poverty (among all households and female adult[s] only household) and three of the WEAI indicators, the prevalence of households reporting moderate or severe hunger also shows a statistically significant change in the Malawi ZOI between baseline and interim. However, the prevalence of household hunger has increased between the two surveys, from 40.2 percent of households at baseline (2012) to 55.7 percent at interim (2015). It is noteworthy that the Malawi baseline survey was collected between November to December 2012 (during the lean season in Malawi), whereas the interim assessment data were collected from late July to October 2015 (outside the typical lean season in Malawi, and via two separate surveys, the FFP and the Feed the Future surveys). While the increase in the household hunger indicator between baseline and interim is somewhat counter-intuitive in relation to the poverty indicator (which shows a significant decline), as well as to seasonality, agricultural production during the 2011/12 season was relatively good while the 2014/25 production season suffered from unprecedented floods and extended dry periods. Seasonality of data collection is discussed in more detail in the body of this report.

The Malawi ZOI Interim Indicator Assessment Report is a product of the FTF FEEDBACK project, which is responsible for specific elements of performance monitoring and impact evaluation supporting the Feed the Future initiative. FTF FEEDBACK is implemented by Westat in partnership with TANGO International and the University of North Carolina's Carolina Population Center.

Baseline and interim estimates of indicator values in the ZOI are shown in the Feed the Future Zone of Influence Indicator Estimates table on the following page. Dates of the data source used for each indicator are noted in this table as well (and these dates vary by indicator, as well as by baseline and interim).

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<sup>2</sup> Different recall periods are used for different types of items. Recall periods for the items that typically account for the bulk of consumption expenditure, such as food and small consumables like fuel, transport, and clothing, range from 7 days to 3 months. Consumption expenditure over any recall period of less than 12 months is annualized to compute total households consumption expenditures. In other words, consumption during the recall period is assumed to represent consumption over the year.

## Feed the Future Zone of Influence indicator estimates: Malawi

Feed the Future indicator	Baseline (2012)			Interim (2015)		
	Estimate	95% CI <sup>1</sup>	n	Estimate	95% CI	n
<b>Daily per capita expenditures (as a proxy for income) in USG-assisted areas (2010 USD) (2010-2011, 2015)<sup>2</sup></b>						
All households	1.38	1.30 – 1.46	2,764	1.58	1.39 – 1.76	1,021
Male and female adults	1.37	1.29 – 1.45	2,091	1.55	1.33 – 1.78	737
Female adult(s) only	1.24	1.14 – 1.35	542	1.61	1.30 – 1.91	238
Male adult(s) only	3.06	2.45 – 3.67	129	3.17	0.89 – 5.44	46
<b>Prevalence of Poverty: Percent of people living on less than \$1.25/day (2005 PPP) (2010-2011, 2015)<sup>2</sup></b>						
All households	66.7	63.4 – 69.9	2,764	54.5	46.2 – 62.5	1,021
Male and female adults	66.0	62.4 – 69.6	2,091	58.1	46.5 – 68.9	737
Female adult(s) only	74.7	70.9 – 78.5	542	43.9	29.8 – 59.0	238
Male adult(s) only	34.8	23.6 – 45.9	129	26.9	3.2 – 80.7	46
<b>Depth of Poverty: Mean percent shortfall relative to the \$1.25/day (2005 PPP) poverty line (2010-2011, 2015)<sup>2</sup></b>						
All households	27.5	25.6 – 29.4	2,764	21.0	16.3 – 25.7	1,021
Male and female adults	27.3	25.2 – 29.4	2,091	21.4	15.4 – 27.3	737
Female adult(s) only	31.1	28.9 – 33.4	542	20.2	12.1 – 28.3	238
Male adult(s) only	8.6	4.8 – 12.4	129	4.1	0.0 – 11.5	46
<b>Percent of women achieving adequacy on Women's Empowerment in Agriculture Index Indicators (2012, 2015)<sup>2,3,4</sup></b>						
Input in productive decisions	91.7	90.3 – 92.9	2,967	90.7	87.9 – 92.9	891
Ownership of assets	91.5	90.1 – 92.7	2,967	87.4	84.3 – 90.0	891
Purchase, sale, or transfer of assets	79.6	77.6 – 81.4	2,967	75.2	71.2 – 78.9	891
Access to and decisions on credit	32.0	29.2 – 34.9	2,967	35.7	31.9 – 39.8	891
Control over use of income	92.7	91.6 – 93.7	2,967	98.7	97.6 – 99.3	891
Group member	70.9	67.4 – 74.1	2,967	76.1	72.4 – 79.5	891
Speaking in public	68.2	64.5 – 71.6	2,967	68.0	64.6 – 71.2	891
Workload	43.4	40.7 – 46.1	2,967	76.6	73.2 – 79.8	891
Leisure	86.8	83.8 – 89.3	2,967	88.1	85.3 – 90.5	891
Autonomy in production	83.5	81.0 – 85.8	2,967	n/a	n/a	n/a
<b>Prevalence of households with moderate or severe hunger (2012, 2015)<sup>2</sup></b>						
All households	40.2	36.7 – 43.8	3,353	55.7	45.8 – 65.2	1,019
Male and female adults	38.1	34.0 – 42.2	2,187	55.3	44.5 – 65.6	736
Female adult(s) only	45.5	40.8 – 50.2	929	59.3	44.0 – 73.1	237
Male adult(s) only	41.5	32.7 – 50.2	216	22.1	2.4 – 76.5	46
<b>Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age (2012, 2015)<sup>2</sup></b>						
All women age 15-49	3.37	3.26 – 3.47	2,837	3.38	3.15 – 3.61	932

### Feed the Future Zone of Influence indicator estimates: Malawi (continued)

Feed the Future indicator	Baseline (2012)			Interim (2015)		
	Estimate	95% CI <sup>1</sup>	n	Estimate	95% CI	n
<b>Prevalence of exclusive breastfeeding among children under 6 months of age (2010, 2015)<sup>2</sup></b>						
All children	67.8	60.9 – 74.6	397	60.0	48.5 – 70.6	80
Male children	66.8	58.5 – 75.1	177	53.2	38.0 – 67.8	41
Female children	68.5	59.4 – 77.6	220	67.4	51.8 – 79.9	39
<b>Prevalence of children 6-23 months receiving a minimum acceptable diet (2010, 2015)<sup>2</sup></b>						
All children	16.6	14.5 – 18.7	1,453	13.4	9.3 – 18.8	245
Male children	17.7	14.7 – 20.7	753	11.4	6.6 – 18.8	128
Female children	15.4	12.2 – 18.6	700	15.6	10.1 – 23.4	117
<b>Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities (n/a, 2015)<sup>2,5</sup></b>						
Soy and soy products: All women age 15-49	n/a	n/a	n/a	10.3	8.1 – 13.0	932
Groundnuts and groundnut products: All women age 15-49	n/a	n/a	n/a	21.5	18.3 – 25.1	932
Orange-fleshed sweet potatoes (OFSP) and OFSP products: All women age 15-49	n/a	n/a	n/a	12.7	10.1 – 15.7	932
<b>Prevalence of women of reproductive age who consume at least one targeted nutrient-rich value chain commodity (n/a, 2015)<sup>2,5</sup></b>						
All women age 15-49	n/a	n/a	n/a	35.7	32.7 – 38.9	932
<b>Prevalence of children 6-23 months who consume targeted nutrient-rich value chain commodities (n/a, 2015)<sup>2,5</sup></b>						
Soy and soy products: All children	n/a	n/a	n/a	9.4	6.2 – 13.9	245
Groundnuts and groundnut products: All children	n/a	n/a	n/a	15.0	11.0 – 20.0	245
Orange-fleshed sweet potatoes (OFSP) and OFSP products: All children	n/a	n/a	n/a	14.7	10.6 – 20.1	245
<b>Prevalence of children 6-23 months who consume at least one targeted nutrient-rich value chain commodity (n/a, 2015)<sup>2,5</sup></b>						
All children	n/a	n/a	n/a	32.1	26.9 – 37.8	245
Male children	n/a	n/a	n/a	34.5	27.8 – 41.8	128
Female children	n/a	n/a	n/a	29.5	21.0 – 39.6	117
<b>Prevalence of underweight women (2010, 2015)<sup>2</sup></b>						
All non-pregnant women age 15-49	10.1	8.4 – 11.9	1,478	8.9	7.0 – 11.2	848
<b>Prevalence of stunted children under 5 years of age (2010, 2015)<sup>2</sup></b>						
All children*	49.2	45.3 – 53.1	1,153	42.3	38.1 – 46.6	812
Male children*	52.3	47.5 – 57.2	544	44.3	39.2 – 49.5	424
Female children	46.5	41.4 – 51.6	609	40.0	34.9 – 45.3	388



## Feed the Future Zone of Influence indicator estimates: Malawi (continued)

Feed the Future indicator	Baseline (2012)			Interim (2015)		
	Estimate	95% CI <sup>1</sup>	n	Estimate	95% CI	n
<b>Prevalence of wasted children under 5 years of age (2010, 2015)<sup>2</sup></b>						
All children <sup>*</sup>	6.4	4.6 – 8.2	1,153	3.6	2.5 – 5.3	812
Male children	7.0	4.6 – 9.4	544	4.1	2.5 – 6.5	424
Female children	5.9	3.7 – 8.2	609	3.2	1.8 – 5.5	388
<b>Prevalence of underweight children under 5 years of age (2010, 2015)<sup>2</sup></b>						
All children	14.8	12.2 – 17.3	1,153	16.0	13.7 – 18.7	812
Male children	16.4	13.2 – 19.7	544	15.5	12.3 – 19.5	424
Female children	13.3	9.9 – 16.7	609	16.6	13.3 – 20.4	388

n/a Not available.

\* Significance tests were performed to evaluate statistical differences between baseline and interim values for these child stunting, wasting, and underweight indicators. The p-value and level of significance are noted to the right of each indicator. \* p<.05, \*\* p<.01, \*\*\* p<.001

<sup>1</sup> Confidence intervals (CIs) demonstrate the reliability of estimated values. While interim surveys were not designed to capture change over time, non-overlapping CIs do indicate significant differences between the two estimates. However, if CIs do overlap, the reader cannot conclude whether there is or is not a significant difference between baseline and interim estimates unless a statistical test of differences is conducted. For the following indicators, it cannot be concluded that there are significant differences in estimates over time: daily per capita expenditures; Depth of Poverty; the six WVEAI indicators of *Input in productive decisions, Purchase, sale or transfer of assets, Access to and decisions on credit, Group member, Speaking in public, and Leisure*; Women's dietary diversity; Prevalence of exclusive breastfeeding among children under 6 months of age; Prevalence of children 6-23 months receiving a minimum acceptable diet; Prevalence of underweight women; and Prevalence of underweight children under 5 years of age.

<sup>2</sup> Dates in parentheses indicate when baseline and interim data were collected for each indicator. Because different data sources were used for different indicators, these dates vary.

<sup>3</sup> The full WVEAI score cannot be calculated because interim data were collected from women only and the autonomy indicator was dropped. The second interim survey (2017) will collect the full set of data from women and men and will report on the full WVEAI.

<sup>4</sup> The baseline report presented censored headcounts of inadequate achievement for these empowerment indicators, while this interim report presents uncensored headcounts of adequate achievement for both baseline and interim reporting periods. Censored headcounts present the percent of women who are disempowered and achieve adequacy (or inadequacy) in each indicator, while uncensored headcounts present the percent of women who achieve adequacy (or inadequacy) in each indicator regardless of empowerment status.

<sup>5</sup> The indicators for women's and children's consumption of targeted NRVC were not collected during the baseline round of data collection.

**Source(s):** Baseline: FTF FEEDBACK ZOI Baseline Survey, Malawi 2012; Malawi Demographic and Health Survey (DHS) 2010; Malawi Integrated Household Survey 3 (IHS3) 2010-2011. Interim: FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

# I. Background

This section provides background information on Feed the Future in Malawi, including a description of the program and the Zone of Influence (ZOI), demographic information on the ZOI population, and a summary of the agriculture situation in the ZOI.

## I.1 Feed the Future Overview

The Feed the Future Malawi strategy fits within the United States Agency for International Development (USAID)/Malawi Country Development Cooperation Strategy that aims to support the democratic and good governance of the state as it responds to the needs of its people. The Malawi Feed the Future Strategy objectives are to sustainably reduce poverty and hunger, and improve the nutrition of women and children. To meet these objectives, Feed the Future Malawi has worked to align and promote coordination between agriculture and nutrition programming.<sup>3</sup>

Agricultural and nutritional outcomes are highly interdependent. Malnutrition in Malawi is a major contributor to economic losses, primarily due to low productivity of agricultural labor. Conversely, poorly functioning input and output markets reduce incentives for farmers to undertake the crop diversification that might lead to better dietary diversity and nutritional outcomes. Value-chain investments would involve facilitating private sector provision of higher quality, more reliable input and output markets and services, while also providing farmers with the tools to improve productivity and diversification.<sup>4</sup> By providing support to non-state actors, the policy-enabling environment will be strengthened. This potentially leads to better and more stable agricultural policies. Better nutritional outcomes will be a result of higher engagement of small farmers, and women in particular, in new crop production leading to better dietary diversity. In addition, the USAID/Malawi flagship activity integrates nutrition-specific interventions with value chain interventions in up to five of the seven districts, which also contributes to nutritional outcomes. With such considerations, USAID/Malawi has outlined the following Intermediate Results (IRs): (1) improved nutrition-related behaviors; (2) transformational agriculture value-chain development; and (3) improvement of the enabling policy environment.<sup>5</sup>

USAID/Malawi has selected legumes, specifically soy and groundnuts, and orange-fleshed sweet potatoes (OFSP) as targeted value chain commodities. These value-chain commodities are traditionally cultivated by women and offer a significant opportunity to support women's economic advancement. In addition, these value-chain products are highly nutritious foods that offer opportunities for dietary diversification and are more climate-resilient. Legumes are

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<sup>3</sup> USAID. (2011a). p. 11.

<sup>4</sup> Ibid.

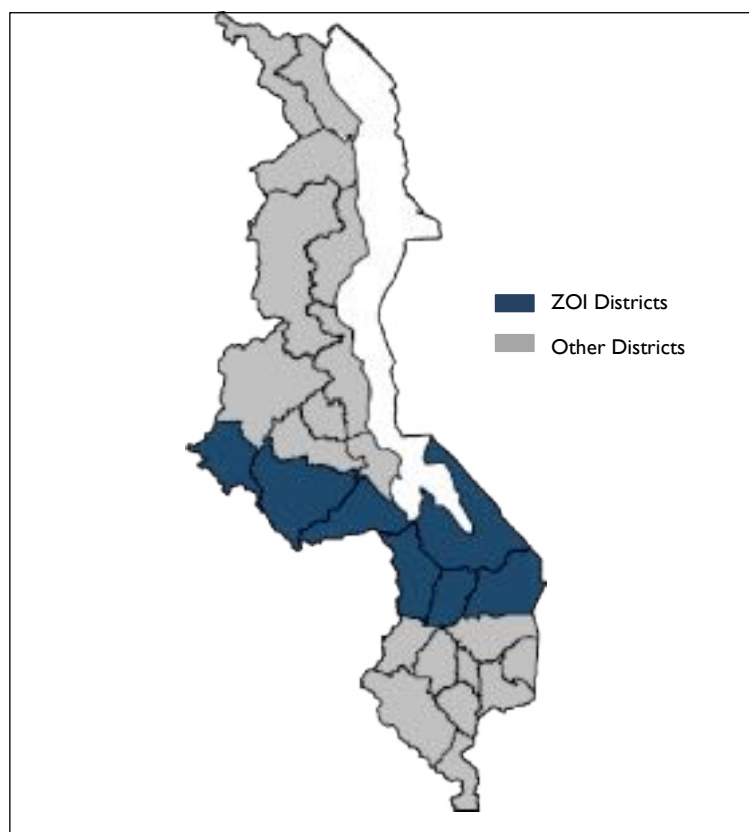
<sup>5</sup> Ibid. p. 12.

produced by 16 percent of smallholder farmers and consumed by 18 percent of households of smallholder farmers in Malawi. Evidence also demonstrates that investments in legumes can support productivity by increasing household income available for inputs and from the nitrogen-fixing properties of legumes. These products similarly offer farmers opportunities to diversify from maize into higher value per hectare crops that can be sold in local and export markets.<sup>6</sup>

## 1.2 Feed the Future ZOI Profile

The geographic focus of the interim data collection is the rural areas of seven districts situated across the boundary of the Central and Southern regions of Malawi that were the ZOI at baseline (Balaka, Dedza, Lilongwe, Machinga, Mangochi, Mchinji, and Ntcheu). Feed the Future expanded the ZOI in 2014 to include three districts (Blantyre/rural, Chikwawa, and Nsanje) where Food for Peace (FFP) programs are being implemented. The expanded Feed the Future ZOI consists of 10 districts. See **Figure 1.1**. The green areas of the country map indicate the original seven districts in the Feed the Future ZOI. The three new districts are shown in blue. (For the interim survey, data collection in Blantyre, Chikwawa, and Nsanje was conducted by an FFP contractor.)

**Figure 1.1. Map of Malawi: Feed the Future 2015 Interim Assessment coverage area**



<sup>6</sup> Ibid. p. 19-20.

### 1.2.1 Rationale for ZOI Selection

Malawi is a landlocked country and is overwhelmingly agricultural. With a population of about 15 million, it is the smallest but most densely populated country in the region (139 people/km<sup>2</sup>). Malawi is one of the least irrigated countries in southern Africa, and as a result, agriculture relies heavily on rainfall. Rural smallholder farmers comprise approximately 80 percent of Malawi's population, yet only 10-15 percent of them bring grain to market in a given year.<sup>7</sup>

Many households experience an annual hungry season between November and March, which occurs during the planting and sole rainy season in the months prior to the main harvest.<sup>8</sup> Rural smallholder farmers are typically dependent on markets during this time to meet their food needs, which increases their vulnerability to food insecurity. Economic and food security improvements are hindered by high levels of undernutrition, HIV/AIDS, malaria, and annual outbreaks of cholera during the rainy season, as well as low agricultural productivity and underdeveloped markets.<sup>9</sup> Additionally, Malawi is subject to drought and has experienced three major droughts in the last two decades, including the most recent drought and subsequent humanitarian response of 2004-2005.<sup>10</sup> More recently, the year 2015 in Malawi started with heavy floods in the central and southern parts of Malawi, which affected or displaced approximately 700,000 to one million people. This event was followed by periods of drought, which negatively impacted food supplies as erratic rainfall decreased food crop supplies by 30 percent and cash crop supplies by 30-40 percent nationally.<sup>11</sup>

Malawi has been described as “a nation of poor farmers,” as poverty is highly concentrated in rural areas.<sup>12</sup> In 2010/11, rural areas held approximately 95 percent of the poor and 97 percent of the extremely poor population while urban areas held approximately 5 percent of the poor and 3 percent of the extreme poor. Approximately 51 percent of the population lived below the national poverty line (37,002 Kwacha/year) and approximately 25 percent of the population was categorized as extremely poor, below the extreme national poverty line of 22,956 Kwacha/per year.<sup>13</sup>

The Malawian economy has benefited from decades of peace and high levels of security. The gross domestic product (GDP) growth rate reached 9.6 percent in 2008, with more recent GDP figures showing lower growth rates of 5.2 percent in 2013 and 5.7 percent in 2014.

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<sup>7</sup> Feed the Future. (2016).

<sup>8</sup> There is a winter harvest that occurs prior to the rainy season, but this is not sufficient to prevent the lean season from occurring.

<sup>9</sup> USAID. (2013b). p. 1.

<sup>10</sup> USAID. (2011b). p. 2.

<sup>11</sup> FEWS NET. (2015a).

<sup>12</sup> USAID. (2011a). p. 2

<sup>13</sup> NSO. (2012). p. 203-210.

However, international trade is hampered by high freight costs, poor infrastructure, regional insecurity, and unpredictable economic policies.<sup>14,15</sup>

According to the 2010 national report on the Millennium Development Goals (MDGs), Malawi is on track to achieve five out of eight MDGs. The MDGs that are not likely to be met by 2015 are Goal 2 (achieve universal primary education), Goal 3 (promote gender equality and empower women), and Goal 5 (improve maternal mortality).<sup>16</sup>

The Feed the Future ZOI straddles the Central and Southern regions, an area characterized by both tremendous need and the potential for improved value chains. This ZOI was selected because its inhabitants suffer from some of the highest poverty and undernutrition rates in the country, with higher prevalence of stunting and underweight, and double the prevalence of wasting compared to the national level. The Central region hosts almost half of all children under 5 years with stunting in Malawi. Another contributing factor to the selection of this area was the regional production of legumes, specifically groundnuts and soy. The selected districts already produce the most groundnuts and soy in the country. OFSP were also included in the interim survey. In both value chains, legumes and OFSP, the greatest potential for expansion and impact exists in seven districts, which are Balaka, Dedza, Lilongwe, Machinga, Mangochi, Mchinji, and Ntcheu. Finally, the USAID/Malawi Mission had successful experience with farming and livelihoods programming in this region through the completed I-Life Title II development food aid program, which provided a foundation upon which to build and expand.<sup>17</sup>

## **1.2.2 Demography of the ZOI**

The seven districts in the Malawi ZOI had an estimated total population of 5.4 million people in 2015, based on projections from the 2008 Malawi national census.<sup>18</sup> The Feed the Future Malawi ZOI, however, is defined as rural residents only; urban residents are not included. To estimate the rural population in the seven districts of the ZOI, district populations by residence type (rural/urban) were obtained from the NSO; each of the seven ZOI districts has a very low proportion of urban residents, ranging from about 1 percent in Lilongwe to 7 percent in Balaka, and urban and rural populations had similar growth rates.<sup>19</sup> The proportions of urban at the district level were applied to the total and subpopulation estimates to obtain rural population estimates for the ZOI.

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<sup>14</sup> Feed the Future. (2016).

<sup>15</sup> The World Bank. (2016).

<sup>16</sup> Government of Malawi. (2010a). p. ix.

<sup>17</sup> USAID. (2011a). p. 8.

<sup>18</sup> NSO. (2010a).

<sup>19</sup> NSO. (2010b).

**Tables 1.1 and 1.2** present individual and household population estimates, respectively, for the ZOI for 2015. Estimates of the total rural population as well as subpopulations of the ZOI are presented. The subpopulation categories correspond to the various subpopulations for the Feed the Future indicators and disaggregates (e.g., children age 6-23 months, number of households). The ZOI estimates for the total population of individuals as well as households are also disaggregated by gendered household type.<sup>20</sup>

**Table 1.1. Population of individuals, by category, in the ZOI, Malawi 2015**

Category of individuals	Estimated population
Total population	5,168,082
<b>Total population, by subpopulation</b>	
Women of reproductive age (15-49 years)	1,170,747
Children 0-59 months	979,259
Children 0-5 months	96,570
Children 6-23 months	283,907
Children 6-59 months	882,689
Youth 15-29 years	1,368,423
<b>Total population, by area type</b>	
Urban	0
Rural	5,168,082
<b>Total population, by gendered household type</b>	
Male and female adult(s)	3,892,298
Female adult(s) only	1,245,861
Male adult(s) only	29,923
Child(ren) only (no adults) <sup>1</sup>	-
<b>Women of reproductive age, by pregnancy status</b>	
Pregnant	181,322
Non-pregnant	989,425
<b>Children 0-59 months, by child sex</b>	
Male	495,994
Female	483,265
<b>Children 0-5 months, by child sex</b>	
Male	48,853
Female	47,717
<b>Children 6-23 months, by child sex</b>	
Male	143,808
Female	140,099
<b>Children 6-59 months, by child sex</b>	
Male	447,141
Female	435,548
<b>Youth 15-29 years, by sex</b>	
Male	667,855
Female	700,568

<sup>1</sup> The population values for the categories within gendered household type were based on the distribution of these categories in the FTF FEEDBACK ZOI survey. Because this survey did not find any child only households and because it is expected that such households exist in the ZOI, a population value is not reported here for this category.

**Sources:** NSO data – The total ZOI population and its age and sex distribution were obtained from the NSO of Malawi *Population and Housing Census 2008; Population Projection*. The numbers of pregnant and non-pregnant women were estimated using the Age-Specific Fertility Rates in the *Malawi MGD End Line Survey (MES) 2014*. The proportions of children 0-5 months, 6-23 months, and 6-59 months were estimated using the age distribution from the MES 2014. All estimates were adjusted such that the estimates would reflect only those living in rural areas by using urban rates reported in the *Population and Housing Census 2008 Thematic Report: Spatial Distribution and Urbanisation Report* (NSO 2010a).

<sup>20</sup> See Section 2.2.1 Standard Disaggregates for the definition of gendered household type.

Table 1.1 shows that the Malawi ZOI has an estimated 2015 population of 5,168,082 people. Women of reproductive age, children age 0-59 months, and youth age 15-29 years account for 22.7 percent, 18.9 percent, and 26.5 percent of the total ZOI population, respectively. The subpopulation estimates of the 979,259 children age 0-59 months divided into 0-5 month, 6-23 month, and 6-59 month age groups were based on the corresponding proportions of the children by months from the MES 2014.<sup>21</sup>

The distributions of the total ZOI populations of individuals and households by gendered household type were estimated from the ZOI interim survey. As indicated by Table 1.1, the estimated percentages of the population residing in male and female adult(s), female adult(s) only, and male adult(s) only household types are 75.3 percent, 24.1 percent, and 0.6 percent, respectively.

Table 1.2 indicates that the Malawi ZOI has an estimated total number of 1,076,684 households, which is based on the average household size of 4.8 persons from the ZOI interim survey. The estimated percentages of households in male and female adult(s), female adult(s) only, and male adult(s) only household types are 67.9 percent, 29.9 percent, and 2.3 percent, respectively.

**Table 1.2. Number of households, by category, in the ZOI, Malawi 2015**

Category of households	Estimated population
Total number of households in ZOI	1,076,684
<b>Number of households, by gendered household type</b>	
Male and female adult(s)	730,548
Female adult(s) only	321,887
Male adult(s) only	24,249
Child(ren) only, (no adults) <sup>1</sup>	-

<sup>1</sup> The number of households for the categories within gendered household type were based on the distribution of these categories in the FTF FEEDBACK ZOI survey. Because this survey did not find any child only households and because it is expected that such households exist in the ZOI, the number of households is not reported here for this category.

**Source:** The number of households was estimated based on the average household size recorded by the FTF FEEDBACK ZOI Interim Survey in Malawi (2015).

### 1.2.3 Agriculture in the ZOI

Malawi is a Sub-Saharan, landlocked country located below the equator. It has a total land area of approximately 94,276 square kilometers. A significant area of the country contains Lake Malawi, which has a length of 475 kilometers and demarcates Malawi's eastern boundary. The Rift Valley also runs the length of the country. To the west and south of these important geographic features lie fertile plains.<sup>22</sup>

Malawi is primarily an agricultural economy. **Table 1.3** presents national level production and agricultural yields for select crops in recent years. Approximately 30 percent of Malawi's GDP

<sup>21</sup> NSO. (2015b). p. 19.

<sup>22</sup> NSO and ICF Macro. (2011). p. 1.



is based on agriculture, and the main domestic exports are tobacco, sugar, and tea. The rate of growth in the agricultural sector grew modestly from 6.2 percent in 2013 to 6.3 percent in 2014, mostly due to favorable agriculture and tobacco production during 2014, but the growth rate was expected to decline to only 5.4 percent during 2015 due to lower crop and animal production caused by adverse weather conditions such as floods, late, or irregular rain falls.<sup>23</sup> In recent years, the Government of Malawi has prioritized agricultural development and research. Through a consultative process, the government formulated the plan called Agriculture Sector-Wide Approach and has made targeted commitments under the Comprehensive Africa Agriculture Development Programme.<sup>24</sup>

**Table 1.3. Agricultural yields and marketed volumes at national levels**

Crop	Production (Mt)			Yield (Kg/Ha)		
	2010/2011	2012/2013	2014/2015	2010/2011	2012/2013	2014/2015
Maize	3,895,181	2,919,720	2,159,807	2,248	2,171	1,639
Rice	117,733	109,525	93,901	1,913	1,917	1,695
Groundnuts	325,215	361,332	359,975	1,056	1,050	795
Pigeon peas	220,017	287,910	335,091	1,119	1,327	1,465
Soybeans	75,665	109,372	117,867	998	1,023	868

**Source:** Government of Malawi 2015 – Ministry of Agriculture, Irrigation and Water Development – APES

This commitment and progress by the Government of Malawi is important for addressing food insecurity and the needs of the predominantly rural population. Sixty percent of the population relies on subsistence agriculture and four out of five Malawians (80 percent) are smallholder farmers.<sup>25</sup> The average landholding is just more than one acre, and landholders can be differentiated into three groups based on the land cultivated in the 2009-2010 rainy season. Just under a third (30 percent) of the population holds less than one acre of land. Within this group, most land is dedicated to maize and a portion to pulses, with no production of tobacco or export-oriented crops. The combined effects from poor soil fertility, erosion, and continuous cropping result in low crop yields for these farmers. A larger group of farmers (38 percent) holds between one and two acres of land. This group is characterized by slightly more diverse cropping patterns and allocation of some land to export-oriented crops, primarily tobacco. The third group of farmers has two to four acres of land (24 percent) or four to six acres (5 percent). These farms primarily dedicate land to export-oriented crops, and this group of farmers experiences a low incidence of poverty.<sup>26</sup>

Poor Malawians are concentrated in the Southern region. Nearly 47 percent of the poor live in the rural areas of the Southern region, and about one in three poor persons reside in the rural areas of the Central region.<sup>27</sup> Members of female-headed households in rural areas are more

<sup>23</sup> Ministry of Finance, Malawi. (2015). p. 9.

<sup>24</sup> USAID. (2011b). p. 4.

<sup>25</sup> Feed the Future. (2016).

<sup>26</sup> NSO. (2012). p. 131.

<sup>27</sup> NSO. (2012). p. 131, p. 207.

likely to be poor than those in male-headed rural households (63 and 55 percent, respectively).<sup>28</sup>

Smallholder farmers face multiple productivity challenges arising from the weak market for staple crops and variable weather. Maize output and prices are extremely volatile and swing between periods of high yields and low prices, which are insufficient to cover input costs, and periods of low yields and high prices that constrain household consumption. In general, 60 percent of households are net buyers of maize. The price variations hinder farmers from investing in fertilizer or irrigation schemes that could boost productivity, along with other factors related to policy constraints and inefficient marketing systems. Low productivity is also due to an agricultural system that largely depends on a single 5-month-long rainy season. It is estimated that just 5 percent of the average rainfall is utilized. With one main rain-fed growing season each year,<sup>29</sup> the effects of climate change, recurrent drought, and environmental degradation significantly destabilize food production.<sup>30</sup> Finally, the high population density of the country and the expected population growth (projected to reach 40 million by 2040) are additional factors that highlight the importance of increased agricultural productivity.<sup>31</sup>

### 1.3 Purpose of This Report

The purpose of this interim assessment is to provide the U.S. Government interagency partners, USAID BFS, USAID Missions, host country governments, and development partners with information about the current status of the ZOI indicators. The assessment is designed for use as a monitoring tool, and as such provides point estimates of the indicators with an acceptable level of statistical precision. However, Feed the Future ZOI sample calculations are not designed to support conclusions of causality or program attribution, nor is the interim assessment designed to measure change from the baseline with statistical precision.

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<sup>28</sup> Ibid. p. 131, p. 219.

<sup>29</sup> As mentioned above, there is a winter harvest that occurs prior to the rainy season, but this is not sufficient to prevent the lean season from occurring during the rainy season and prior to the main harvest.

<sup>30</sup> USAID. (2011a). p. 6.

<sup>31</sup> Government of Malawi. (2010b). p. 7.

## 2. Methodologies for Obtaining Interim Values for Feed the Future Indicators

This section describes the methodology used to obtain the population-based Feed the Future indicators. It provides information on the data sources and describes measures and reporting conventions used throughout the report.

### 2.1 Data Sources

**Table 2.1** presents the data sources and dates of data collection for the baseline and interim Feed the Future indicators.

**Table 2.1. Data sources and dates of the baseline and interim Feed the Future indicators**

Indicator	Baseline		Interim	
	Data source	Date collected	Data source	Date collected
Daily per capita expenditures (as a proxy for income) in USG-assisted areas	IHS3	March 2010/ March 2011	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of Poverty: Percent of people living on less than \$1.25/day	IHS3	March 2010/ March 2011	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Depth of Poverty: Mean percent shortfall relative to the \$1.25/day poverty line	IHS3	March 2010/ March 2011	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Women's Empowerment in Agriculture Index indicators	FTF FEEDBACK ZOI Survey	November/ December 2012	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of households with moderate or severe hunger	FTF FEEDBACK ZOI Survey	November/ December 2012	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age	FTF FEEDBACK ZOI Survey	November/ December 2012	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of exclusive breastfeeding among children under 6 months of age	DHS	June/September 2010	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of children 6-23 months receiving a minimum acceptable diet	DHS	June/September 2010	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities*	n/a	n/a	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of children 6-23 months who consume targeted nutrient-rich value chain commodities*	n/a	n/a	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015

**Table 2.1. Data sources and dates of the baseline and interim Feed the Future indicators (continued)**

Indicator	Baseline		Interim	
	Data source	Date collected	Data source	Date collected
Prevalence of underweight women	DHS	June/September 2010	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of stunted children under 5 years of age	DHS	June/September 2010	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of wasted children under 5 years of age	DHS	June/September 2010	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015
Prevalence of underweight children under 5 years of age	DHS	June/September 2010	FFP/ICF + FTF FEEDBACK ZOI Survey	July/October 2015

\* New indicator at interim. Indicator was not available in the ZOI baseline assessment.

n/a Not available.

Based on the information above, the survey instrument used by FTF FEEDBACK for the interim ZOI survey instrument contained the following modules:<sup>32</sup>

- **Module A.** Household Identification Cover Sheet;
- **Module B.** Informed Consent;
- **Module C.** Household Roster and Demographics;
- **Module D.** Dwelling Characteristics;
- **Module E.** Household Consumption Expenditure;
- **Module F.** Household Hunger Scale;
- **Module G.** Women's Empowerment in Agriculture Index;
- **Module H.** Women's Anthropometry and Dietary Diversity (legumes disaggregated by soy and soy products, groundnut and groundnut products, and other foods made from beans, peas, lentils, nuts, seeds; and sweet potatoes that are dark yellow or orange inside disaggregated from any other dark yellow/orange foods such as pumpkin, carrots, squash, or other local dark yellow/orange foods); and
- **Module I.** Child Anthropometry and Infant and Young Child Feeding (legumes disaggregated by soy and soy products, groundnut and groundnut products, and other foods made from beans, peas, lentils, nuts, seeds; and sweet potatoes that are dark yellow or orange inside disaggregated from any other dark yellow/orange foods such as pumpkin, carrots, squash, or other local dark yellow/orange foods).

<sup>32</sup> Note that anemia has been excluded from Modules H and I because Feed the Future did not require anemia testing for the interim indicator assessment.

### 2.1.1 Primary Data: The ZOI Interim Survey in Malawi

This section describes the Zone of Influence (ZOI) interim survey, including discussion of the sample design (including targeted sample size), questionnaire customization, fieldwork, response rates, and limitations of the survey.

It is important to note that while no secondary data were used for the Malawi interim ZOI assessment, data collection was completed by two separate contractors.

The first data collection effort took place between July 27 and September 11, 2015, in the rural areas of the two ZOI districts where a Food for Peace (FFP) program is being implemented (Balaka and Machinga), and was conducted by FFP's monitoring and evaluation (M&E) contractor, ICF International. The second data collection effort took place between September 21 and October 17, 2015, covering the remaining areas of the ZOI—the rural areas of Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu—and was conducted by FTF FEEDBACK. The timing of the surveys was determined through a coordination process between FTF FEEDBACK, ICF International, United States Agency for International Development (USAID) Bureau for Food Security (BFS), and USAID Bureau of Democracy, Conflict, and Humanitarian Assistance/FFP. The timing of baseline surveys and when it would be feasible to field the surveys were considered when determining the timing of the surveys.

This coordination is part of a commitment made by BFS and the Bureau of Democracy, Conflict, and Humanitarian Assistance/FFP to integrate Title II development food assistance programs into Feed the Future, align FFP M&E with Feed the Future M&E, and reduce costs and survey burden on the population in these two districts in Malawi.

#### *Survey Sample Design*

The sample for the Malawi ZOI interim assessment comprises rural areas of seven districts distributed across Central and Southern regions: Balaka, Dedza, Lilongwe, Machinga, Mangochi, Mchinji, and Ntcheu. A total of 861 households in 43 clusters were interviewed by the National Statistical Office of Malawi (NSO) in the rural areas of Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu. A total of 210 households were interviewed by ICF International in the rural areas of Balaka and Machinga.

Below, we describe the sample size calculation, sample weights, and sample design.

#### *Sample Size Calculation*

The purpose of the interim indicator assessment is to provide estimates of the population-based indicators with an acceptable level of statistical accuracy. The interim survey sample sizes were calculated to provide point estimates of indicator values rather than calculating sample sizes to detect change in indicator values over time.

In sample size calculations, the margin of error determines the amount of precision the indicator estimates will have. For continuous variables such as expenditures, the margin of error was equal to the mean indicator value times 0.10; the margin of error for proportions (poverty, stunting, and wasting) was equal to 0.10.

Standard deviations (SDs) and design effects (DEFFs) for sample size calculation were estimated using baseline survey data. We calculated sample sizes using projected interim indicator values based on the Mission's 2015 targets in the Feed the Future Monitoring System (FTFMS). For indicators where the Mission's 2015 targets were not available, projected interim values were calculated based on a 10 percent change from baseline.

All sample sizes were further adjusted for nonresponse using the nonresponse rate from the baseline survey or a 10 percent nonresponse rate if the baseline rate was not provided or was greater than 10 percent. For all indicators, the sample sizes are for the populations associated with the indicator. The proportion of the population of interest (e.g., children under 5 years of age for underweight children) in the total population and the average number of household members was estimated based on baseline survey data, and used to calculate the number of households that needed to be visited to achieve the required sample size for that indicator.<sup>33</sup>

Sample sizes were calculated for each of the key Feed the Future indicators (poverty, daily per capita expenditures, stunting and underweight). Using estimates from the baseline survey of the average number of children 0-5 months per household, we also calculated sample size needed for capturing 70 children in this age range.

**Table 2.2** shows the estimated sample sizes for the relevant population-based indicators. The minimum sample size required to calculate the exclusive breastfeeding indicator also is included. The number of households selected for the sample was determined by the per capita expenditures indicator since it required the largest sample size among the key indicators. Based on per capita expenditures indicator sample size of 1007 and the population distribution among the districts, 827 households were allocated to five of the seven districts (i.e., Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu) and 180 households were allocated to the remaining two districts of Balaka and Machinga.

### *Sample Design*

Sampling was based on a two-stage design, with stratification by district. In the first stage, 43 enumeration areas (EAs) were selected from the 2008 national census frame in five districts (Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu) by probability proportional to size sampling. In the second stage, 20 households were selected for interview at random from a comprehensive list of households generated during a listing operation.

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<sup>33</sup> Stukel and Deitchler. (2012).

In the two districts of Balaka and Machinga, six enumeration areas (EAs) were selected in the areas outside of FFP activities by probability proportional to size sampling, and 20 households per EA were selected for interview by ICF (for a total of 120 households). After ICF completed data collection in the non-FFP areas of Balaka and Machinga, an additional 90 households were randomly selected from the ICF baseline survey dataset of the FFP activity areas.<sup>34</sup>

**Table 2.2. Sample size estimate for the four key indicators and exclusive breastfeeding**

Indicator	Baseline value	DEFF	Std. dev.	Estimated interim value	Sample size	Number of households needed
Prevalence of Poverty	66.65	4.83		58.65	450	500
Prevalence of underweight children	14.75	1.97		12.98	<100	170
Prevalence of stunted children	49.20	2.42		43.30	228	456
Per capita expenditures (as a proxy for incomes)	1.38	4.62	1.0	1.40	906	1007
Household hunger	40.22	2.50		35.58	220	223
Women's Dietary Diversity	3.37	5.14	1.24	4.21	171	<100
Prevalence of exclusive breastfeeding of children <6 months	67.77	3.04		78.43	70	889

### Sample Weights

Data required for statistical weighting of survey data were collected throughout the sampling process. These data included, but were not limited to: (1) EA population sizes used for selection of EAs, (2) population of strata (i.e., district) from which EAs are drawn (note that only rural EAs were selected for the sample), (3) population of selected EAs at the time of listing, and (4) response rates at the household and individual (women, men, and children) levels.

Computations based on the survey sample were weighted so that the results accurately reflected the proportions of the sampled elements within the overall sample frame of the population in the ZOI. Details of how weights were computed are provided in Appendix 2.

<sup>34</sup> According to the sample size calculation above, 180 households were required in Balaka and Machinga: 90 in the FFP activity areas and 90 in the areas without FFP activities. In the FFP areas 90 households were randomly selected from the data set of the larger FFP sample collected by ICF. In the non-FFP areas, based on the proportioning of the sample by population, ICF needed to collect data from 23 additional households in non-FFP areas in Balaka and 67 in Machinga, which corresponds to two EAs in Balaka and four in Machinga. These six EAs correspond to 120 households (six EA times 20 households per EA). The total households, therefore, was 210 for Balaka and Machinga (90 FFP plus 120 non-FFP).



## **Questionnaire Design**

The questionnaire used for the ZOI interim survey in Malawi was based on the population-based survey instrument for Feed the Future ZOI indicators for the interim assessments. Questions relating to targeted nutrient-rich value change commodities (NRVCCs) (soy, groundnuts, and orange-fleshed sweet potatoes [OSFP]) were added to address Feed the Future programming for those commodities in Malawi.

FTF FEEDBACK provided training in customization, pretesting, and translation of the questionnaire to the NSO, the in-country data collection partner. FTF FEEDBACK modified the questionnaire based on customizations recommended by the NSO and pretest findings, with BFS review and approval of the revisions.

The questionnaire was translated into two native languages spoken by 10 percent or more of the population in the ZOI. In Malawi, the questionnaire was translated into Chichewa and Yao. The quality of the translations was assured by using a team translation approach with back translation from the main translation. Translations were incorporated into the data entry program on the tablet computers that were used for data collection in the households.

Questionnaires were further refined based on observations during training, the pilot, and initial days of fieldwork.

ICF International aligned their survey instrument with that of FTF FEEDBACK, where needed, to collect all the data required for the interim indicators and to meet or exceed the sample sizes required by FTF FEEDBACK for the two districts of Balaka and Machinga. See Appendix 3 for details on the harmonization efforts conducted by FTF FEEDBACK and ICF International.

## **Fieldwork**

Preparation for FTF FEEDBACK's fieldwork began with thorough training of the NSO survey specialists to conduct and supervise fieldwork. A senior FTF FEEDBACK trainer trained nine NSO trainers.

The NSO trainers then trained the field staff from August 26 to September 8, 2015. Training of field staff reflected the procedures detailed in the FTF FEEDBACK interviewing and field supervision manuals. An FTF FEEDBACK trainer supported the field training, including providing training on use of the tablets for data collection. Trainees' comprehension of the material imparted was assessed periodically throughout the training. Trainees also participated in role plays to practice important skills and responses to common fieldwork challenges.

At the conclusion of training, NSO senior management and trainees, joined by the FTF FEEDBACK trainer, conducted a pilot test of all procedures. At the conclusion of the pilot test,

FTF FEEDBACK and NSO senior management considered findings from the pilot test and made final modifications to procedures, the questionnaires, and the data entry programs.

A final field team of 50 individuals conducted fieldwork from September 21 to October 17, 2015. The field teams visited each selected cluster and household. Up to three visits were made to each household so that all eligible members of the household could be interviewed. Senior quality assurance staff from the NSO visited each field team on a regular basis to assure that procedures were being followed and to provide any needed supplies.

Data for completed household interviews that had been reviewed and approved were uploaded to FTF FEEDBACK servers on a daily basis, where possible. When lack of internet access precluded this, data were submitted prior to starting work in the next assigned cluster.

A data management team at FTF FEEDBACK worked remotely with a Data Manager at NSO headquarters to review data and case completion regularly. These reviews informed fieldwork where necessary to improve data quality.

ICF International conducted training of its data collection staff prior to their data collection dates of July to September 2015 and followed a similar approach to the FTF FEEDBACK training.

### *Limitations of the Survey*

The interim survey was not powered to show change in indicators from the baseline. This interim survey is intended to provide point estimates with an acceptable level of precision.

The sampling frame used had a measure of size (number of households) from the 2008 census frame. In many selected clusters, the numbers of households listed were very different from the number in the frame. This caused increased variation in sampling weights. In addition, several EAs with less than 300 households in the sampling frame were found to have more than 300 listed, and thus had to be segmented after household listing was completed.

### *ZOI Interim Survey Response Rates*

**Table 2.3** presents the response rates for the ZOI interim survey for Malawi. The components and the response rates for the sampled households, women of reproductive age (15-49), primary adult female decisionmakers (for the Women's Empowerment in Agriculture module), as well as children under 5 years are presented.

**Table 2.3. Results of the household and individual interviews for the ZOI interim assessment<sup>1</sup> in Malawi 2015**

Response rates and components	Total
<b>Households</b>	
Households selected	1,071
Households occupied	1,029
Households interviewed	1,021
Household response rate <sup>2</sup>	99.2%
<b>Women of reproductive age (15-49 years)</b>	
Number of eligible women	988
Number of eligible women interviewed	937
Eligible women response rate <sup>3</sup>	94.8%
<b>Primary adult female decisionmakers (age 18+ years)</b>	
Number of eligible women	967
Number of eligible women interviewed	948
Primary adult female response rate <sup>3</sup>	98.0%
<b>Children under 5 years of age</b>	
Number of eligible children	855
Number of caregivers of eligible children interviewed	843
Eligible children response rate <sup>3</sup>	98.6%

<sup>1</sup> The ZOI Interim Assessment was conducted with two coordinated surveys: the FTF FEEDBACK ZOI Interim Survey, Malawi 2015 and the Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015). This table represents the interviews collected from both surveys that were used for the 2015 ZOI Interim Assessment in the 7-district Feed the Future ZOI.

<sup>2</sup> Household response rates are calculated based on the result codes of Module C, the household roster, and are defined as the number of households interviewed divided by the number of households occupied. Unoccupied households were excluded from the response rate calculations. The unoccupied households were those that were found to be vacant, not a dwelling unit, dwelling unit destroyed, or with an extended absence, or other result code.

<sup>3</sup> Individual response rates are calculated based on the result codes in the relevant individual modules, i.e., Modules G, H, and I. These rates are defined as the number of eligible individuals interviewed divided by the number of eligible individuals. Eligibility is determined in modules G, H, and I, respectively. (Note that for children under 5 years of age [Module I], the primary caregivers of the children served as the respondents, not the children directly.)

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 2.1.2 Comparability of Data Sources Used for the ZOI Interim Assessment

This section discusses the comparability across data sources for the interim assessment. Values for most of the indicators are sensitive to the timing of data collection, specifically whether data were collected in the lean, harvest, wet, or dry seasons or in a major holiday period (e.g., Ramadan, Christmas/New Year's). If the time periods in which data collection for these indicators vary between the baseline and the interim, comparisons may need to be interpreted with caution.

### Seasonality

The lean season in Malawi is from November to March. This overlaps with the rainy season in Malawi, which runs from the middle of October to April. The main harvest season is from April through July and the winter harvest runs from September through November.

Accordingly, comparisons of values between the baseline and interim for indicators will need to be interpreted with caution, particularly as it relates to the following indicators:

- Prevalence of Poverty;
- Per capita expenditures (as a proxy for incomes);
- Depth of Poverty;
- Women's Empowerment in Agriculture Index (WEAI);
- Prevalence of households with moderate or severe hunger; and
- Women's Dietary Diversity.

**Table 2.4** presents the seasons in which data were collected for key indicators in the interim report. Baseline data on prevalence of poverty, per capita expenditures, and depth of poverty was derived from a year-long survey whereas the interim survey was collected over a 4-month period during and after the harvest (non-lean) season. In addition, data for the WEAI, household hunger score, and women's dietary diversity was collected during the lean/rainy season at baseline but was collected during the harvest season for the interim. Women's and children's anthropometry was collected during the harvest season at baseline and interim.

**Table 2.4. Seasons of data collection for key indicators in the interim report**

Indicator	Season of data collection for interim
Daily per capita expenditures	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of Poverty	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Depth of Poverty	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Women's Empowerment in Agriculture Index	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of households with moderate or severe hunger	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Women's Dietary Diversity	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of exclusive breastfeeding among children under 6 months of age	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of children 6-23 months receiving a minimum acceptable diet	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of underweight children under 5 years of age	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of stunted children under 5 years of age	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of wasted children under 5 years of age	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015
Prevalence of underweight women	Non-lean season – FFP/ICF + FTF FEEDBACK ZOI Surveys – July/October 2015

Although the interim assessment was conducted during what is usually the “non-lean” season, it is worthwhile to note that Malawi suffered from floods and extended dry spells during the 2014/15 agricultural season, which severely affected agricultural production and resulted in an early start to the lean season in 2015. Additional economic factors such as high food and agricultural input prices also affected the economic environment in Malawi during much of 2015 and had a negative impact on food availability, especially in the Central and Southern regions of Malawi, affecting many rural households in those areas. These shocks may have had an impact in the interim indicator results, more specifically those measuring household hunger.

## **2.2 Measures and Reporting Conventions Used Throughout This Report**

### **2.2.1 Standard Disaggregates**

A standard set of disaggregate variables are used in tables throughout this report. This section lists each of the standard disaggregate variables and defines how the variable is calculated. Harmonized and pooled data from both FTF FEEDBACK (five districts) and ICF International (two districts) were used for the seven-district ZOI interim assessment in Malawi.

#### ***Age in Months***

The age of children in months is collected in the child nutrition-focused module of the questionnaire, rather than in the household roster, so that the child’s parent or primary caregiver can be prompted to provide the most accurate age possible. Children’s age in months is presented by monthly age groups as appropriate for the children’s dietary intake and anthropometry tables. For example, for the minimum acceptable diet (MAD) table (Table 6.6), which presents the MAD indicator for children age 6-23 months, children’s age in months is disaggregated into 6-month age groups as follows: 6-11 months, 12-17 months, and 18-23 months. For the children’s anthropometry tables (Tables 7.2, 7.3, and 7.4), which present the prevalence of stunting, wasting, and underweight for all children under 5 years of age, children’s age in months is disaggregated into 12-month age groups as follows: 0-11 months, 12-23 months, 24-35 months, 36-47 months, and 48-59 months.

#### ***Age in Years***

Data on respondent’s age in years is collected in the household roster. For women age 15-49 and children under age 6, more detailed age data are collected in subsequent questionnaire modules to confirm eligibility to respond to the module questions; these more detailed age data are used where available. Age is generally presented in the tables in 5- or 10-year age groups.

## **Child Sex**

The sex of the child—male or female—is a standard disaggregate for the tables presenting children’s indicators, e.g., children’s anthropometry (Tables 7.2, 7.3, and 7.4).

## **Educational Attainment (Household)**

Household educational attainment reflects the highest level of education attained by any member of the household, as reported in the household roster of the corresponding questionnaire (for both the FFP and FTF FEEDBACK surveys). This variable is used in tables that present household-level data, and is comprised of four categories: no education (households where no member has received any formal education); less than primary (households with at least one member who has entered the formal schooling system, but with no member who has completed primary); primary (households with at least one member whose highest educational attainment is completed primary, but with no member who has completed secondary); and secondary or more (households with at least one member whose highest educational attainment is completed secondary education or more). Households are categorized in only one of the four categories.

## **Educational Attainment (Individual)**

Educational attainment at the individual level reflects the highest level of education attained by individual household members, as reported in the household roster of the corresponding questionnaire. This variable is comprised of four categories: no education (those who have not received any formal education); less than primary (those who have entered the formal schooling system but whose educational attainment is less than completed primary); primary (those who have completed primary but have not completed secondary); and secondary or more (those who have completed secondary education or more).

## **Gendered Household Type**

Feed the Future Monitoring and Evaluation Guidance Series *Volume 6: Feed the Future Measuring Gender Impact Guidance* notes that household-level indicators should be disaggregated by *gendered household types*—that is: (1) households where members include both male and female adults;<sup>35</sup> (2) households where members include male adult(s), but no female adults; (3) households where members include female adult(s), but no male adults; and (4) households with only members under age 18 (children), i.e., households with children only and no adult members. This approach to conceptualizing household type is distinct from the standard *head of household* approach, which is embedded with presumptions about household gender dynamics

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<sup>35</sup> Adult is defined as age 18 or older.

and may perpetuate existing social inequalities and prioritization of household responsibilities that may be detrimental to women (USAID, 2014a).<sup>36</sup>

This variable is calculated using data on age and sex collected in the household roster of the survey questionnaire.

### ***Household Hunger***

As described in greater detail in Section 6.1 of this report, the Household Hunger Scale (HHS) characterizes households according to three categories of hunger severity: little to no household hunger, moderate household hunger, and severe household hunger. For the purposes of serving as a disaggregate in selected tables, the HHS is converted to a dichotomous measure reflecting households that report little to no household hunger, and households that report moderate or severe household hunger.

### ***Household Size***

For the ZOI surveys, household size is defined as the total number of people who: (1) are reported to be usual members of the household; and (2) have spent the night in the household within the past 6 months. This ordinal household size variable is recoded into a categorical variable as follows: small households (1-5 members), medium households (6-10 members), and large households (11 or more members). Note that other household survey programs may use a slightly different definition of household member from that used in the ZOI surveys.

## **2.2.2 Reporting Conventions**

The Feed the Future ZOI interim assessment reports are primarily descriptive in nature. This section provides an overview of the conventions used in reporting these descriptive results.

- In the tables throughout this report, weighted point estimates and unweighted sample sizes (denoted by *n*) are presented.
- Most estimates are shown to one decimal place, with the specific exceptions of per capita expenditures and the women's dietary diversity indicators, which are shown to two decimal places. Unweighted sample sizes in all tables and the population estimates in Tables 1.1 and 1.2 are shown as whole numbers.
- Values in the tables are suppressed when the unweighted sample size is insufficient to calculate a reliable point estimate ( $n < 30$ ); this is denoted by the use of the symbol ^ in the designated row and an explanatory footnote.

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<sup>36</sup> USAID. (2014a).



Bivariate relationships are described using cross tabulation, and the strength and direction of the relationships are assessed through the use of statistical tests. Analyses are performed in Stata using `svy` commands to handle features of data collected through the use of complex survey designs, including sampling weights, cluster sampling, and stratification.

Statistical significance ( $p < 0.05$ ) is denoted with matched superscripted letters attached to the row (usually the disaggregate variable) and column (usually the outcome variable) headings. Explanatory footnotes following each table clarify the meaning of the significance test annotation, and statistically significant relationships are highlighted in the narrative throughout the report.

### 3. ZOI Interim Survey Population

This section describes the background characteristics of the Zone of Influence (ZOI) population using data from the ZOI interim survey.

#### 3.1 Demographics

**Table 3.1** presents demographic characteristics of the households in the ZOI. Values are shown for all households, as well as by categories of gendered household type. This table presents the average household size, as well as the average number of female adults and children within the household. Household education, defined as the highest level of education of any member of the household, is also presented in this table.

Among all households in the Malawi ZOI, the average household size is 4.8 people. Male and female adult households have an average of 5.3 members, whereas female adult-only and male adult-only households have an average of 3.8 and 1.2 people, respectively. As shown in the superscripts in Table 3.1, household size varies significantly by gendered household type.

The average number of adult (age 18 or over) females in ZOI households is 1.2. Regarding children, the average number of children under 2 years is 0.3; the average number of children under 5 years is 0.8; and the average number of school-age children, those 5-17 years, is 1.9. All four of these household demographic characteristics—mean number of adult females, children under 2, children 0-4 years, and children 5-17 years—vary significantly by gendered household type.

Nearly two-thirds (63.0 percent) of adults in ZOI households are female. Very few households (only 2.1 percent), have no members with any education at all, but in more than half of all households (54.9 percent), the highest level of education is less than primary. One-third (33.1 percent) of households in the ZOI have primary education—meaning, they have at least one member whose highest level of education is completed primary, but have no members with completed secondary or greater. Only 10 percent of households in the Malawi ZOI have secondary or more education. Gendered household type is significantly associated with household educational attainment.

**Table 3.1. Household demographic characteristics**

Characteristic	Total (All households)	By gendered household type <sup>a</sup>			
		Male and female adult	Female adult(s) only	Male adult(s) only	Child only
Mean household size <sup>a</sup>	4.8	5.3	3.8	1.2	-
Mean number of adult female household members <sup>1,2,a</sup>	1.2	1.1	1.3	0.0	-
Mean number of children (<2 years) <sup>1,a</sup>	0.3	0.4	0.2	0.0	-
Mean number of children (0-4 years) <sup>1,a</sup>	0.8	1.0	0.7	0.0	-
Mean number of children (5-17 years) <sup>1,a</sup>	1.9	2.0	1.9	0.2	-
Mean percentage of adults who are female <sup>1,2</sup>	63.0	48.7	100.0	0.0	-
<b>Highest education level attained<sup>a</sup></b>					
No education	2.1	1.4	1.3	32.9	-
Less than primary	54.9	50.5	67.9	15.0	-
Primary	33.1	38.6	21.4	22.1	-
Secondary or more	10.0	9.6	9.5	30.0	-
<b>n<sup>3</sup></b>	<b>1,021</b>	<b>737</b>	<b>238</b>	<b>46</b>	<b>0</b>

<sup>1</sup> The count is based on household members with known age.

<sup>2</sup> Feed the Future defines adult as an individual age 18 or older. Females age 15-17 are of reproductive age, but are not considered adults by this definition.

<sup>3</sup> Sample n is the unweighted count of all households that responded to the survey.

<sup>a</sup> Significance tests were performed for associations between household characteristics and gendered household type. For example, a test was done between mean household size and gendered household type. When an association is found to be significant ( $p < 0.05$ ), a superscript is noted next to the household characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

**Table 3.2** shows characteristics of the primary adult male and female decisionmakers in the sampled households in the ZOI. The primary male and primary female adult decisionmakers are household members age 18 or over who self-identify as the primary adult male and/or primary adult female responsible for both social and economic decisionmaking within the household. When they exist within a single household, primary male and female adult decisionmakers are typically, but not necessarily, husband and wife. Table 3.2 shows the age group, literacy status, and educational attainment for these household members. These characteristics are shown for all primary adult decisionmakers and primary adult decisionmakers according to sex.

Among all primary adult decisionmakers, the modal age group is 30-39; nearly one-quarter (23.0 percent) are within that age group. The age of household decisionmakers varies significantly by sex, with a greater proportion of female than male decisionmakers in the youngest age group (18-24). Nearly one-quarter (23.4 percent) of female primary decisionmakers are in the 18-24 year age group, while only 6.1 percent of male primary decisionmakers are between the ages of 18 and 24.

**Table 3.2. Characteristics of the primary male and female adult decisionmakers**

Characteristic	Total (All primary adult decisionmakers)		By primary adult decisionmaker sex <sup>a</sup>			
	Percent	n	Male		Female	
			Percent	n	Percent	n
<b>Age<sup>a</sup></b>						
18-24	16.6	1,694	6.1	727	23.4	967
25-29	17.1	1,694	23.6	727	12.8	967
30-39	23.0	1,694	26.0	727	21.1	967
40-49	14.8	1,694	17.4	727	13.0	967
50-59	11.5	1,694	10.1	727	12.4	967
60+	17.0	1,694	16.9	727	17.2	967
<b>Educational attainment<sup>a</sup></b>						
No education	23.6	1,687	14.2	722	29.8	965
Less than primary	56.5	1,687	55.9	722	56.9	965
Primary	16.1	1,687	24.1	722	10.9	965
Secondary or more	3.8	1,687	5.9	722	2.4	965

<sup>a</sup> Significance tests were performed for associations between the sex and background characteristics of the decisionmaker. For example, a test was done between sex and age of the decisionmaker. When an association is found to be significant ( $p < 0.05$ ), a superscript is noted next to the characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

With respect to educational attainment among primary adult decisionmakers in the Malawi ZOI, the modal category is less than primary education. Over half of all primary adult decisionmakers (56.5 percent) have less than primary education, and an additional 23.6 percent have no education.

Educational attainment among households' primary adult decisionmakers is also significantly associated with sex, with female decisionmakers exhibiting lower levels of education than their male counterparts. Nearly one-third (29.8 percent) of female decisionmakers have no education. Among male decisionmakers however, only 14.2 percent have no education. Similarly, a greater percentage of male decisionmakers than female decisionmakers have secondary or more schooling (5.9 and 2.4 percent, respectively).<sup>37</sup>

<sup>37</sup> Note that primary decisionmakers' literacy status could not be presented in this table due to incomplete data; household members' literacy status was collected in the Feed the Future interim survey in Malawi, but not in the FFP baseline survey.

## 3.2 Living Conditions

**Table 3.3** shows dwelling characteristics of the households in the ZOI. Many of these measures align with the 2015 Millennium Development Goals (MDG) definitions (UNDG, 2003). The table presents the percentage of households that have access to an improved water source, improved sanitation, electricity, and solid cooking fuel. The average number of people per sleeping room, as well as roof, exterior wall, and floor materials are also presented. Values are shown for all households.

**Table 3.3. Household dwelling characteristics**

Characteristic	Total (All households)	
	Estimate	n
Percent with improved water source <sup>1</sup>	88.6	1,019
Percent with improved sanitation <sup>2</sup>	50.5	1,020
Mean persons per sleeping room <sup>3</sup>	2.7	1,020
Percent using solid fuel for cooking <sup>4</sup>	100.0	1,017
Percent with access to electricity	6.5	1,012
<b>Household roof materials (%)<sup>5</sup></b>		
Natural	70.6	1,021
Rudimentary	0.0	1,021
Finished	29.4	1,021
<b>Household exterior wall materials (%)<sup>6</sup></b>		
Natural	8.1	1,020
Rudimentary	7.2	1,020
Finished	84.7	1,020
<b>Household floor materials (%)<sup>7</sup></b>		
Natural	84.1	1,020
Rudimentary	0.0	1,020
Finished	15.9	1,020

<sup>1</sup> Improved water sources include piped water into the dwelling, piped water into the yard, a public tap/standpipe, a tube well/borehole, a protected dug well, a protected spring, and rainwater (WHO and UNICEF, 2006). The proportion of the population with sustainable access to an improved water source is the 2015 MDG indicator #30 (UNDG, 2003). However, as in most major international survey programs, the measure reported here reflects only access to an improved water source, and not the sustainability of that access.

<sup>2</sup> Improved sanitation facilities are those that separate human excreta from human contact and include the following categories: flush to piped sewer system, flush to septic tank, flush/pour flush to pit, composting toilet, ventilated improved pit latrine, and a pit latrine with a slab (natural or manufactured). Because shared and public facilities are often less hygienic than private facilities, shared or public sanitation facilities are not counted as improved (WHO and UNICEF, 2006). The proportion of the population with access to improved sanitation is the 2015 MDG indicator #31 (UNDG, 2003).

<sup>3</sup> The average number of persons per sleeping room is a common indicator of crowding (UNDG, 2003).

<sup>4</sup> Solid fuel is defined as, charcoal, wood, animal dung, and agriculture crop residue. The proportion of the population using solid fuels is MDG indicator #29 (UNDG, 2003). The other and no food cooked in household categories are removed from percentages.

<sup>5</sup> Natural roofs include no roof, thatch/palm leaf, and sod. Rudimentary roofs include rustic mat, palm/bamboo, wood planks, and cardboard. Finished roofs include metal, wood, calamine/cement fiber, ceramic tiles, cement, and roofing shingles. The other category is removed from percentages.

<sup>6</sup> Natural walls include no walls, cane/palm/trunks, and dirt. Rudimentary walls include bamboo with mud, stone with mud, uncovered adobe, plywood, cardboard, reused wood, and metal sheeting. Finished walls include cement, stone with lime/cement, bricks, cement blocks, covered adobe, and wood planks/shingles. The other category is removed from percentages.

<sup>7</sup> Natural floors include earth/sand and dung. Rudimentary floors include wood planks and palm/bamboo. Finished floors include parquet/polished wood, vinyl or asphalt strips, ceramic tiles, cement, and carpet. The other category is removed from percentages.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

Table 3.3 reveals that most households (88.6 percent) in the Malawi ZOI, which consists of only rural residents, have access to improved water. This is consistent with findings from other representative data sources. The 2014 Malawi MDG Endline Survey (MES) reports that 86.2 percent of Malawi's rural household population (nationally) has access to improved drinking water.<sup>38</sup>

Households in the Malawi ZOI have an average of 2.7 people per sleeping room. All households in the ZOI (100.0 percent) report using solid cooking fuel, an MDG indicator, and only 6.5 percent of ZOI households have access to electricity. Nationally, the 2014 MES reports that 98.3 percent of household members rely on solid cooking fuel,<sup>39</sup> and only 2.9 percent of rural Malawian households have electricity.<sup>40,41</sup>

The majority of households in the Malawi ZOI (70.6 percent) have natural roofs, defined as no roof, or roofs made of thatch/palm leaf or sod. The remaining households in the ZOI (29.4 percent) have finished roofs, or roofs made of metal, wood, calamine/cement fiber, ceramic tiles, cement, and roofing shingles.

In contrast to roofs, the majority of ZOI households (84.7 percent) have finished walls (i.e., walls constructed of cement, stone with lime/cement, bricks, cement blocks, covered adobe, or wood planks/shingles), followed by much smaller percentages of households with natural walls (i.e., no walls, or walls made of cane/palm/trunks, or dirt, 8.1 percent), and rudimentary walls (i.e., walls constructed of bamboo with mud, stone with mud, uncovered adobe, plywood, cardboard, reused wood, or metal sheeting, 7.2 percent). Most ZOI households (84.1 percent) have natural floors (i.e., floors of earth/sand or dung), although 15.9 percent of ZOI households have finished floors, or floors made of parquet/polished wood, vinyl or asphalt strips, ceramic tiles, cement, or carpet. For context, comparable rural estimates for finished roofs, walls, and floors from the 2014 Malawi MDG Endline Survey are 33.4 percent, 63.9 percent, and 16.4 percent, respectively.<sup>42</sup>

### 3.3 Education

**Table 3.4** presents school attendance and educational attainment in the ZOI. The table presents the percent of male, female, and all household members under age 25 who are currently attending school, as well as the percent of household members over age 9 who have attained a primary level of education. Sex ratios in school attendance and attainment of primary education are also presented. These measures align with MDG education indicators.

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<sup>38</sup> NSO. (2015b). p. 94.

<sup>39</sup> Ibid., p. 304.

<sup>40</sup> Ibid., p. 19.

<sup>41</sup> Estimates for the prevalence of solid cooking fuel by residence (rural/urban) are not presented in the 2014 MES report.

<sup>42</sup> Ibid., p. 19.

**Table 3.4. School attendance and educational attainment**

Characteristic	Percent		Female to male ratio		n
	Attending school <sup>1,a</sup>	Attained a primary level of education <sup>2, b</sup>	Attending school <sup>1</sup>	Attained a primary level of education <sup>2</sup>	
Age group <sup>a,b</sup>					
5-9	72.9	n/a <sup>1</sup>	1.2	n/a <sup>1</sup>	838
10-14	96.8	2.8	0.9	4.0	780
15-19	76.1	40.7	0.6	1.5	453
20-24	15.1	35.9	0.2	0.7	406
25-29	n/a <sup>2</sup>	35.4	n/a <sup>2</sup>	0.6	289
30-34	n/a <sup>2</sup>	23.5	n/a <sup>2</sup>	0.1	288
35-54	n/a <sup>2</sup>	19.5	n/a <sup>2</sup>	0.3	593
55+	n/a <sup>2</sup>	7.7	n/a <sup>2</sup>	0.1	377
Sex <sup>a,b</sup>					
Female					
Age group					
5-9	79.9	n/a <sup>1</sup>	n/a <sup>3</sup>	n/a <sup>3</sup>	425
10-14	94.0	4.3	n/a <sup>3</sup>	n/a <sup>3</sup>	419
15-19	52.5	53.5	n/a <sup>3</sup>	n/a <sup>3</sup>	207
20-24	6.8	32.0	n/a <sup>3</sup>	n/a <sup>3</sup>	234
25-29	n/a <sup>2</sup>	26.7	n/a <sup>3</sup>	n/a <sup>3</sup>	147
30-34	n/a <sup>2</sup>	5.0	n/a <sup>3</sup>	n/a <sup>3</sup>	159
35-54	n/a <sup>2</sup>	10.5	n/a <sup>3</sup>	n/a <sup>3</sup>	305
55+	n/a <sup>2</sup>	2.5	n/a <sup>3</sup>	n/a <sup>3</sup>	218
Male					
Age group					
5-9	66.2	n/a <sup>1</sup>	n/a <sup>3</sup>	n/a <sup>3</sup>	413
10-14	100.0	1.1	n/a <sup>3</sup>	n/a <sup>3</sup>	361
15-19	85.1	35.6	n/a <sup>3</sup>	n/a <sup>3</sup>	246
20-24	35.0	46.0	n/a <sup>3</sup>	n/a <sup>3</sup>	172
25-29	n/a <sup>2</sup>	42.6	n/a <sup>3</sup>	n/a <sup>3</sup>	142
30-34	n/a <sup>2</sup>	45.8	n/a <sup>3</sup>	n/a <sup>3</sup>	129
35-54	n/a <sup>2</sup>	30.8	n/a <sup>3</sup>	n/a <sup>3</sup>	288
55+	n/a <sup>2</sup>	16.5	n/a <sup>3</sup>	n/a <sup>3</sup>	159

n/a<sup>1</sup> Not applicable – Children in the age group 5-9 years are not yet old enough to have attained a primary level of education.

n/a<sup>2</sup> Not applicable – Current school attendance applies to school-age children and youth only, ages 5-24.

n/a<sup>3</sup> Not applicable – Female to male ratios cannot be calculated for male-only and female-only disaggregates.

<sup>1</sup> Data collection for both the FFP and FTF FEEDBACK surveys, which took place in late July through mid-September (FFP) and late September through mid-October respectively, overlapped with the school year in Malawi. In Malawi, the academic year spans from early September to late July, with a break during the month of August.

<sup>2</sup> The goals of achieving universal primary education and gender equity with respect to education are assessed by multiple MDG indicators, typically using administrative school data. This table presents respondent-reported school attendance, and primary educational attainment, as well as the ratio of females to males on these measures (UNDG 2003). (For Malawi, literacy is not included in this table because it was not collected in the FFP baseline survey.)

<sup>a-b</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading, and age and sex. For example, a test was done for school attendance by sex, and a test was done for school attendance by age. When an association is found to be significant ( $p < 0.05$ ), the superscript of the column heading will appear next to the sex row heading and/or next to the age group row heading.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).



In Malawi, primary education is defined as 8 years of schooling, Standard I through Standard 8, at the end of which students take the Primary School Leaving Certificate Examination (PSLCE).<sup>43</sup> Free primary education was introduced in Malawi in 1994.

Table 3.4 reveals that the majority of school-age children and teens in the ZOI are currently attending school, although school attendance varies significantly by age. The modal age category for currently attending school is age 10-14; 96.8 percent of youth age 10-14 in the ZOI are currently attending school. However, only 15.1 percent of youth age 20-24 in the ZOI are currently attending school.

School attendance in the ZOI also varies significantly by sex, with males exhibiting greater levels of school attendance than females at most age groups shown in Table 3.4. Particularly among 20–24-year-olds, more males in the ZOI (35.0 percent) than females (6.8 percent) are currently attending school. At the youngest age group, 5–9-year-olds in contrast, the opposite pattern is shown; 79.9 percent of girls age 5-9 are currently attending school compared to 66.2 percent of boys.

Table 3.4 reveals that attainment of a primary level of education in the ZOI varies by both age group and sex. While just over 40 percent (40.7 percent) of 15–19-year-olds in the ZOI have attained a primary level of education, this percentage declines with each subsequent age group; only 7.7 percent of ZOI residents age 55 or more have attained a primary level of education.

The recent expansion of primary education in Malawi in 1994 appears to have particularly benefited females. Over half of females (53.5 percent) age 15-19 have attained primary education, relative to about one-third (35.6 percent) of similarly aged males. At the older ages, however, far more males than females have attained primary education. Among those age 55 and over, 16.5 percent of males have attained a primary level of education, compared to only 2.5 percent of females.

Table 3.4 also presents female to male sex ratios of the two indicators of current school attendance among household members age 5-24 and achievement of primary education among household members age 10 and above. (As noted in the footnote in Table 3.4, literacy measures could not be included because data on household members' literacy status were not collected in the FFP baseline survey in Malawi.) Values less than 1.0 in this portion of the table illustrate disparities for females, and values greater than 1.0 illustrate disparities for males. In this table, the greatest disparities between males and females appear to be with primary educational attainment at the oldest age groups (e.g., 30-34, 35-54, and 55+), with females exhibiting a disadvantage on this measure relative to males. However, this pattern may be shifting as the youngest age groups, i.e., those less than 20, exhibit a higher ratio of females obtaining a primary education than males.

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<sup>43</sup> The World Bank. (2010). p. 13.

## 4. Household Economic Status

This section includes a background discussion of monetary poverty in Malawi, including the logic of the Living Standards Measurement Survey (LSMS)<sup>44</sup> and consumption expenditure methodology. Malawi's recent real gross domestic product (GDP) figures show 1.9 percent growth in 2012, 5.2 percent in 2013, and approximately 5.7 percent in 2014 but is estimated to fall slightly below 5 percent during 2015.<sup>45</sup> Approximately 86 percent of households in Malawi are engaged in agricultural activities. Agricultural production accounts for one-third of the GDP and represents 90 percent of export revenues. Tobacco production accounts for more than half of Malawi's exports.<sup>46</sup>

According to the National Statistical Office of Malawi (NSO), poverty declined from 52.4 in 2004/05 to 50.7 in 2010/11.<sup>47</sup> Poverty is more heavily concentrated in rural areas; in 2010/11, 56.6 percent of rural areas were poor compared to 17.3 percent of those in urban areas.<sup>48</sup> A big obstacle to overcoming poverty in rural areas of Malawi is the low level of agricultural productivity, as most of the poor rural populations there continue to be engaged in low productivity subsistence farming.<sup>49</sup>

Estimates of per capita expenditures and poverty prevalence are typically derived from surveys similar to the LSMS. For the Feed the Future zones of influence (ZOI) interim assessments, these estimates are derived from the data collected in the household roster and expenditures modules of the ZOI survey or from secondary household expenditures data collected by other organizations. For the Malawi ZOI interim assessment, the measures of household economic status are calculated from the combined Feed the Future ZOI survey and Food for Peace (FFP) survey data, collected from July to October 2015.

Like the LSMS, the expenditures modules of the Feed the Future ZOI and FFP surveys collected data on households' consumption of and expenditures on various food and non-food items in order to infer household income and well-being.

Individuals' per capita expenditures are then derived by dividing total household expenditures by the number of household members. From these data, household expenditure totals are calculated and used as a proxy for household incomes, based on the assumption that a household's consumption is closely related to its income. Household consumption and expenditures are often preferred to income when measuring poverty due to the difficulty in

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<sup>44</sup> Grosh and Glewwe. (1995).

<sup>45</sup> The World Bank. (2016).

<sup>46</sup> CIA. (2016).

<sup>47</sup> NSO. (2012). p. 206.

<sup>48</sup> Ibid.

<sup>49</sup> The World Bank. (2016).

accurately measuring income. According to Deaton, expenditure data are less prone to error, easier to recall, and more stable over time than income data.<sup>50</sup>

## 4.1 Daily Per Capita Expenditures

**Table 4.1** presents daily per capita expenditures, the Feed the Future indicator that measures average daily expenditures within the ZOI per person in 2010 United States Dollar (USD) after adjusting for 2005 purchasing power parity (PPP). Daily per capita expenditures serve as a proxy for income. This table includes the mean per capita expenditures and percentile distribution of per capita expenditures. The percentiles are interpreted as the percentage of the population that consumes less than the listed value. For example, the cut-off point for the 50<sup>th</sup> percentile is 1.33. This means that 50 percent of individuals consume less than \$1.33 (2010 USD) per day. The 50<sup>th</sup> percentile is also the median. The percentiles are shown to provide information on the distribution of expenditures. As is typical of expenditure and income data, these estimates are positively skewed, with the majority of the population consuming/spending very little, and a small portion consuming much more. This is apparent because the median per capita expenditure of \$1.33 (2010 USD) is much lower than the average per capita expenditure of \$1.58 (2010 USD).

Estimates in Table 4.1 are shown for all households as well as disaggregated by household characteristics, including gendered household type, household size, and household educational attainment. The table shows statistically significant differences between the mean per capita expenditures of the different categories of household educational attainment. Per capita expenditures appear to be significantly higher among households with the highest levels of education compared to other households. The few households where no member has obtained any formal education have higher average per capita expenditure than those with some education. This finding should be interpreted with caution due to the relatively small sample of “No education” households.

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<sup>50</sup> Deaton. (2008).

**Table 4.1. Daily per capita expenditures by household characteristic (in 2010 USD)<sup>1</sup>**

Characteristic	Estimate (weighted)						n <sup>2</sup>
	Mean <sup>a</sup>	Percentile					
		10th	25th	50th	75th	90th	
Total (All households)	1.58	0.55	0.83	1.33	2.03	2.94	1,021
Gendered household type							
Male and female adults	1.55	0.55	0.85	1.27	2.03	2.94	737
Female adult(s) only	1.61	0.55	0.78	1.48	1.87	2.85	238
Male adult(s) only	3.17	1.18	1.18	2.07	2.64	9.42	46
Child(ren) only (no adults)	-	-	-	-	-	-	0
Household size							
Small (1-5 members)	1.69	0.55	0.78	1.33	2.09	3.34	669
Medium (6-10 members)	1.48	0.57	0.85	1.28	1.74	2.65	337
Large (11+ members)	^	^	^	^	^	^	15
Household educational attainment <sup>a</sup>							
No education	1.67	1.18	1.19	1.19	1.86	3.36	36
Less than primary	1.36	0.54	0.75	1.10	1.63	2.67	616
Primary	1.69	0.62	0.91	1.33	2.26	2.96	276
Secondary or more	2.24	0.74	1.47	1.58	2.85	3.71	93

<sup>a</sup> Results not statistically reliable, n<30.

<sup>1</sup> Per capita expenditures measured in Malawi kwacha (MK) were converted to 2010 USD using the Consumer Price Index (CPI) and the PPP Index estimated by the World Bank. We used the formula  $(2005 \text{ CPI MK}/2015 \text{ CPI MK}) \times 1/(\text{PPP } 2005) \times (2010 \text{ USD CPI}/2005 \text{ USD CPI})$  where MK PPP 2005 = 56.92; 2015 CPI MK = 382.93; 2005 CPI MK = 100; 2010 USD CPI = 111.65; and 2005 USD CPI = 100. The conversion factor was .0051224.

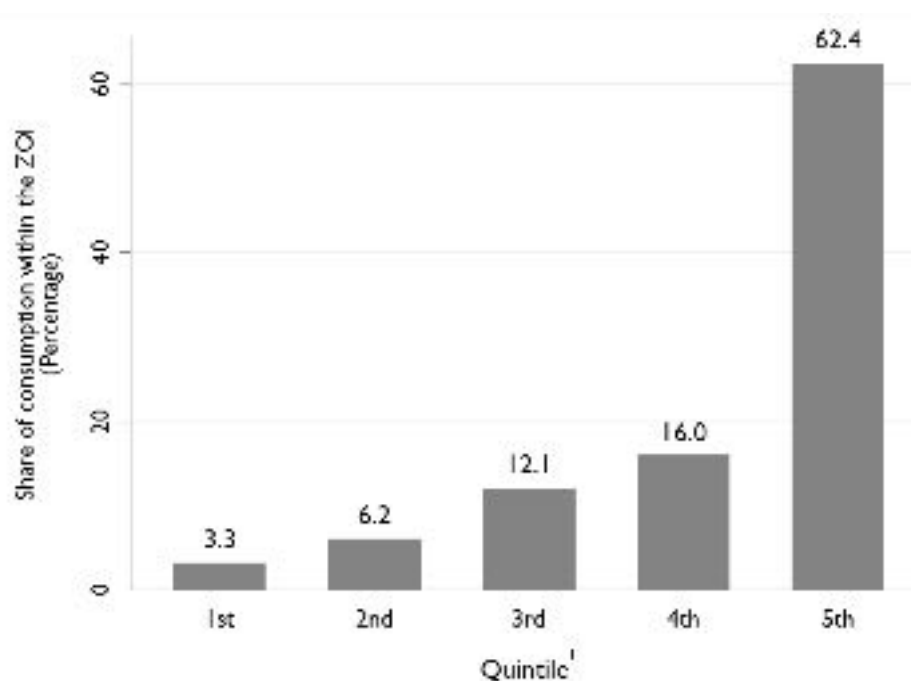
<sup>2</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a</sup> Significance tests were performed for associations between per capita expenditures and household characteristics. For example, a test was done between per capita expenditures and gendered household type. When an association is found to be significant ( $p < 0.05$ ), the superscript is noted next to the household characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

**Figure 4.1** shows the share of total consumption per quintile in the ZOI. The share of consumption attributed to the lowest quintile (the bottom 20 percent) is a measure of inequality, and an Millennium Development Goals (MDG) indicator. This figure shows that the poorest 20 percent within the ZOI consumes only 3.3 percent of the total consumption within the ZOI. Conversely, the wealthiest 20 percent within the ZOI consumes nearly 62.4 percent of the total consumption within the ZOI.

**Figure 4.1. Share of consumption per quintile: Feed the Future ZOI**



<sup>1</sup> Share of the poorest quintile in national consumption is an MDG indicator that provides information on income inequality (UNDG 2003). The poorest quintile is determined as the poorest fifth of the population. The poorest quintile's share of total consumption is calculated by dividing the consumption of the poorest quintile by total consumption within the ZOI.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 4.2 Prevalence and Depth of Poverty in the ZOI

The prevalence of poverty, sometimes called the poverty headcount ratio, is measured by determining the percent of individuals living below a poverty threshold.<sup>51</sup> Estimates of poverty prevalence are sensitive to the poverty thresholds used to identify the poor. A standardized poverty threshold of \$1.25 per person per day in adjusted<sup>52</sup> 2005 USD is used to track global changes in poverty across countries and over time, including for the purpose of monitoring progress toward international goals such as the MDG to eradicate extreme poverty and hunger. The \$1.25 threshold is in effect the extreme poverty threshold and represents the poverty line typical of the world's poorest countries.<sup>53</sup> Poverty estimates may also be presented for an individual country's own poverty and extreme poverty thresholds.

<sup>51</sup> Note that expenditure data are not collected at the individual level but rather at the level of the household; individuals' per capita expenditures are then derived by dividing total household expenditures by the number of household members.

<sup>52</sup> Adjustments are made according to PPP conversions. These conversions are established by The World Bank to allow currencies to be compared across countries in terms of how much an individual can buy in a specific country. The \$1.25 in 2005 PPP means that \$1.25 could buy the same amount of goods in another country as \$1.25 could in the United States in 2005.

<sup>53</sup> The World Bank. (2011).

Where the poverty prevalence indicates how *many* individuals are impacted by poverty, it does not speak to how *much* people are impacted by poverty. The depth of poverty, often called the poverty gap, is a useful poverty estimate because it captures the extremity of poverty. This measure indicates the average gap between consumption levels and the poverty line, with the non-poor counted as having a gap of zero. The measure is expressed as a proportion of the poverty line. The depth of poverty or poverty gap represents the entire ZOI population. The average consumption shortfall of the poor, in contrast, is estimated for only those individuals living below the poverty line.

#### 4.2.1 The \$1.25 Poverty Threshold

**Table 4.2** presents poverty estimates at the \$1.25 per day (2005 PPP) threshold. The prevalence of poverty and depth of poverty at the \$1.25 per day poverty line are Feed the Future indicators. Similar to the per capita expenditures table, this table presents poverty estimates for all households in the ZOI, as well as disaggregated by household characteristics, including gendered household type, household size, and household educational attainment.

##### *Poverty Prevalence*

Over 54 percent (54.5) of individuals in the ZOI live below the \$1.25 poverty threshold. Household educational attainment is significantly associated with poverty. The prevalence of poverty declines with increasing levels of education in the household.

##### *Depth of Poverty*

The depth of poverty in the ZOI is 21.0 percent, which indicates that the average gap between consumption levels of the population and the poverty line is \$0.26 (2005 PPP).

The depth of poverty provides an indication of the amount of resource transfers that, if *perfectly* targeted to poor households, would be needed to bring everyone below the poverty line up to the poverty line. With a ZOI population of 5.17 million, a poverty threshold of \$1.25 per day, and a poverty gap of 21.0 percent, approximately \$1.4 million (2005 PPP) per day would need to be transferred to the poor to bring their expenditures up to the poverty threshold.

Like poverty, depth of poverty is significantly associated with educational attainment in the household. Households with higher levels of education have a lower depth of poverty than households with lower education. The few households where no member has obtained any formal education have a lower depth of poverty than some of the better-educated households, despite a higher prevalence of poverty. This finding should be interpreted with caution due to the relatively small sample of “No education” households.

**Table 4.2. Poverty at the \$1.25 (2005 PPP)<sup>1</sup> per person per day threshold**

Characteristic	Prevalence of poverty <sup>2</sup>		Depth of poverty <sup>3</sup>		Average consumption shortfall of the poor <sup>4</sup>		
	Percent population <sup>a</sup>	n <sup>5</sup>	Percent of poverty line <sup>b</sup>	n <sup>5</sup>	In USD 2005 PPP	Percent of poverty line <sup>c</sup>	n <sup>5</sup>
Total (All households)	54.5	1,021	21.0	1,021	0.48	38.5	443
<b>Gendered household type<sup>b</sup></b>							
Male and female adults	58.1	737	21.4	737	0.46	36.8	339
Female adult(s) only	43.9	238	20.2	238	0.58	46.0	101
Male adult(s) only	26.9	46	4.1	46	^	^	3
Child(ren) only (no adults)	-	-	-	-	-	-	0
<b>Household size</b>							
Small (1-5 members)	52.2	669	21.2	669	0.51	40.5	229
Medium (6-10 members)	57.9	337	20.7	337	0.45	35.7	207
Large (11+ members)	^	15	^	15	^	^	7
<b>Household educational attainment<sup>a,b</sup></b>							
No education	70.6	36	10.7	36	^	^	16
Less than primary	64.4	616	25.4	616	0.49	39.5	315
Primary	51.1	276	18.4	276	0.45	36.0	96
Secondary or more	16.8	93	8.1	93	^	^	16

^ Results not statistically reliable, n<30.

<sup>1</sup> The Feed the Future poverty indicators are based on the poverty threshold of \$1.25 (2005 PPP) per person per day.

<sup>2</sup> The prevalence of poverty is the percentage of individuals living below the \$1.25 (2005 PPP) per person per day threshold. Poverty prevalence is sometimes referred to as the poverty incidence or poverty headcount ratio.

<sup>3</sup> The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

<sup>4</sup> The average consumption shortfall of the poor is the average amount below the poverty threshold of a person in poverty. This value is estimated only among individuals living in households that fall below the poverty threshold.

<sup>5</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a-c</sup> Superscripts in the column heading indicate significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between prevalence of poverty and gendered household type. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

The depth of poverty is also significantly different among the different gendered household types. Male adult(s)-only households have a depth of poverty that is roughly one fifth of the depth of poverty of male and female adults and female adult(s)-only households.

### **Average Consumption Shortfall of the Poor**

The average *poor* person within the ZOI lives at 61.5 percent of the poverty line, or 38.5 percent below the poverty line. The average value of consumption of a *poor* person is \$0.77 (2005 PPP) per day, or stated differently, the average person living in poverty consumes \$0.48 (2005 PPP) less than the \$1.25 poverty threshold.

## 4.2.2 The National Poverty Threshold

**Table 4.3** presents poverty estimates at the national poverty threshold for Malawi. Similar to the \$1.25 per day poverty table, this table presents poverty estimates for all households in the ZOI, as well as disaggregated by household characteristics, including gendered household type, household size, and household educational attainment.

**Table 4.3. Poverty at the national threshold of 85,852 MK/person/year<sup>1</sup>**

Characteristic	Prevalence of poverty <sup>2</sup>		Depth of poverty <sup>3</sup>		Average consumption shortfall of the poor <sup>4</sup>		
	Percent population <sup>a</sup>	n <sup>5</sup>	Percent of poverty line <sup>b</sup>	n <sup>5</sup>	In USD 2005 PPP <sup>c</sup>	Percent of poverty line <sup>c</sup>	n <sup>5</sup>
Total (All households)	70.5	1,021	30.1	1,021	0.68	42.7	592
<b>Gendered household type</b>							
Male and female adults	70.1	737	30.6	737	0.70	43.7	439
Female adult(s) only	72.8	238	28.9	238	0.63	39.6	146
Male adult(s) only	26.9	46	9.1	46	^	^	7
Child(ren) only (no adults)	-	-	-	-	-	-	0
<b>Household size</b>							
Small (1-5 members)	63.8	669	29.3	669	0.73	45.9	333
Medium (6-10 members)	77.4	337	30.9	337	0.64	39.9	248
Large (11+ members)	^	15	^	15	^	^	11
<b>Household educational attainment<sup>b,c</sup></b>							
No education	70.6	36	23.7	36	^	^	22
Less than primary	76.7	616	35.5	616	0.74	46.3	408
Primary	66.0	276	26.6	276	0.64	40.3	129
Secondary or more	54.0	93	14.8	93	0.44	27.5	33

^ Results not statistically reliable, n<30.

<sup>1</sup> The national threshold used in this analysis is the updated total poverty threshold used in the analysis of the Third Integrated Household Panel Survey. The threshold of 85,852 2013 MK per person per year is equivalent to 235.21 per person per day in 2013. Inflated to 2015 MK, the national poverty threshold is 348.07 MK per person per day.

<sup>2</sup> The prevalence of poverty is the percentage of individuals living below the national poverty line. Poverty prevalence is sometimes referred to as the poverty incidence or poverty headcount ratio.

<sup>3</sup> The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

<sup>4</sup> The average consumption shortfall of the poor is the average amount below the poverty threshold of a person in poverty. This value is estimated only among individuals living in households that fall below the poverty threshold.

<sup>5</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a-c</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between prevalence of poverty and gendered household type. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).



The national poverty lines in Malawi were identified using data from the Second Integrated Household Survey in 2004/2005.<sup>54</sup> The poverty lines were estimated using a cost of basic needs approach. The national poverty lines were subsequently adjusted in 2011 as part of the Third Integrated Household Survey, and they underwent an additional update in 2013 as part of the Third Integrated Household Panel Survey (IHPS). The national poverty line used in this analysis is 85,852 per person per year in 2013 Malawi Kwacha (MK) or 235.21 (\$1.60 2005 PPP) per person per day.<sup>55</sup> For further description of the national poverty threshold, please see Appendix 2.2.

As seen in Table 4.3, 70.5 percent of individuals in the ZOI live below the national poverty threshold. The national poverty line identifies more individuals as poor than does the \$1.25 poverty threshold. This is because the national poverty line is 28 percent larger than the \$1.25 2005 PPP threshold.

Despite the higher rates of poverty recorded while using the national threshold, the relationships between poverty and household educational attainment are similar to those observed in Table 4.2. Generally speaking, rising levels of education are associated with greater levels of economic well-being, with the exception of households with no formal education. The estimates for households with no education should be viewed with caution due to small sample sizes. Using the national threshold, there are significant associations between level of educational attainment and the depth of poverty and the average consumption shortfall of the poor.

### 4.2.3 The National Extreme Poverty Threshold

**Table 4.4** presents poverty estimates at the extreme poverty threshold for Malawi. Similar to prior expenditures and poverty tables, this table presents poverty estimates for all households in the ZOI, as well as disaggregated by household characteristics, including gendered household type, household size, and household educational attainment.

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<sup>54</sup> NSO. (2005).

<sup>55</sup> NSO. (2014). p. 99.

**Table 4.4. Poverty at the national extreme threshold of 53,262 MK/person/year<sup>1</sup>**

Characteristic	Prevalence of poverty <sup>2</sup>		Depth of poverty <sup>3</sup>		Average consumption shortfall of the poor <sup>4</sup>		
	Percent population <sup>a</sup>	n <sup>5</sup>	Percent of poverty line <sup>b</sup>	n <sup>5</sup>	In USD 2005 PPP <sup>c</sup>	Percent of poverty line <sup>c</sup>	n <sup>5</sup>
Total (All households)	43.1	1,021	14.1	1,021	0.32	32.6	313
<b>Gendered household type<sup>b</sup></b>							
Male and female adults	45.1	737	13.8	737	0.30	30.6	237
Female adult(s) only	37.9	238	15.2	238	0.40	40.2	75
Male adult(s) only	0.0	46	0.0	46	^	^	1
Child(ren) only (no adults)	-	-	-	-	-	-	0
<b>Household size</b>							
Small (1-5 members)	42.1	669	14.5	669	0.34	34.5	154
Medium (6-10 members)	45.2	337	13.2	337	0.29	29.3	153
Large (11+ members)	^	15	^	15	^	^	6
<b>Household educational attainment<sup>a,b</sup></b>							
No education	0.0	36	0.0	36	^	^	9
Less than primary	51.4	616	17.5	616	0.34	34.1	227
Primary	39.6	276	11.6	276	0.29	29.2	68
Secondary or more	16.8	93	5.8	93	^	^	9

^ Results not statistically reliable, n<30.

<sup>1</sup> The national extreme threshold used in this analysis is the updated ultra-poverty threshold used in the analysis of the Third Integrated Household Panel Survey. The threshold of 53,262 2013 MK per person per year is equivalent to 145.92 per person per day in 2013. Inflated to 2015 MK, the national extreme poverty threshold is 215.93 MK per person per day.

<sup>2</sup> The poverty prevalence is the percentage of individuals living below the national extreme poverty line. Poverty prevalence is sometimes referred to as the poverty incidence or poverty headcount ratio.

<sup>3</sup> The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

<sup>4</sup> The average consumption shortfall of the poor is the average amount below the poverty threshold of a person in poverty. This value is estimated only among individuals living in households that fall below the poverty threshold.

<sup>5</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a-c</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between prevalence of poverty and gendered household type. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

The national extreme poverty line used in this analysis is the food poverty line developed in conjunction with the total poverty line. In reports prepared by the NSO, this poverty line is often called the “ultra” poverty line. The national extreme poverty line used in this analysis is 53,262 per person per year in 2013 MK or 145.92 (\$0.99 2005 PPP) per person per day.<sup>56</sup>

Over 40 percent (43.1 percent) of individuals in the ZOI live below the extreme food poverty threshold. These individuals do not have access to enough resources to meet daily caloric requirements.

<sup>56</sup> Ibid.

The relationship among disaggregates for indicators based on the national extreme threshold are similar to those based on the \$1.25 2005 PPP threshold in Table 4.2. There is a significant association between gendered household type and poverty prevalence, with Male adult only households having the lowest rates of poverty. Given the small sample sizes, these findings should be viewed with caution. There are also significant associations between educational attainment and both the poverty prevalence and the depth of poverty. Households with no formally educated members have the lowest levels of poverty. Like the finding for Male adult only households, these findings should be viewed with caution, given the small sample sizes. For other groups, the rate of poverty decreases and the depth of poverty decreases with rising levels of education.

## 5. Women's Empowerment in Agriculture

While women play a prominent role in agriculture, they face persistent economic and social constraints. Because of this, women's empowerment is a main focus of Feed the Future. Empowering women is particularly important to achieving the Feed the Future objectives of inclusive agriculture sector growth and improved nutritional status. The Women's Empowerment in Agriculture Index (WEAI) was developed to track the change in women's empowerment that occurs as a direct or indirect result of interventions under Feed the Future and as a programming tool to identify and address the constraints that limit women's full engagement in the agriculture sector.<sup>57</sup> For more information, the WEAI questionnaires and manual can be found online.<sup>58</sup>

### 5.1 Overview

The WEAI measures empowerment in five domains. The *Production* domain assesses the ability of individuals to provide input and autonomously make decisions about agricultural production. The *Resources* domain reflects individuals' control over and access to productive resources. The *Income* domain monitors individuals' ability to direct the financial resources derived from agricultural production or other sources. The *Leadership* domain reflects individuals' social capital and comfort speaking in public within their community. The *Time* domain reflects individuals' workload and satisfaction with leisure time. The WEAI aggregates information collected for each of the five domains into a single empowerment indicator.

The index is composed of two subindices: the Five Domains of Empowerment (5DE) subindex, which measures the empowerment of women in the five empowerment domains, and the Gender Parity Index (GPI), which measures the relative empowerment of men and women within the household. The WEAI questionnaire is asked of the primary adult male and female decisionmaker in each household and compares the 5DE profiles of women and men in the same household. The primary adult decisionmakers are individuals age 18 or older who are self-identified as the primary male or female decisionmaker during the collection of the household roster.<sup>59</sup> The WEAI score is computed as a weighted sum of the Zone of Influence (ZOI)-level 5DE and the GPI.

Both the ZOI interim survey and the FFP baseline survey in Malawi, however, collected data for only nine of the 10 indicators and only for the primary adult *female* decisionmakers, not for primary adult *male* decisionmakers, within sampled households. The data collected during the 2015 ZOI interim survey and FFP baseline survey allow calculation of nine of the 10 individual empowerment indicators for primary adult female decisionmakers (referred to hereafter as

<sup>57</sup> Alkire, Malapit, et al. (2013).

<sup>58</sup> Ibid.; IFPRI. (2013), <http://www.ifpri.org/publication/womens-empowerment-agriculture-index>.

<sup>59</sup> The respondents of the WEAI questionnaire are only the primary decisionmakers in the household and, therefore, may not be representative of the entire female and male populations in the surveyed area.

surveyed women), enabling Feed the Future to assess change to the individual indicators or constraints that are affecting women's empowerment in countries' ZOIs. This section presents findings on these nine empowerment indicators.

Since data were not collected from men and the *Autonomy in Production* indicator is excluded, the WEAI score cannot be calculated for the interim assessment. Interim WEAI data collection was streamlined to reduce the overall length of the WEAI module and survey questionnaire, and address concerns over the validity of the *Autonomy in Production* sub-module used in the baseline surveys. Feed the Future is still working with partners to revise the *Autonomy in Production* sub-module. Data to calculate the full WEAI will be collected during the 2017 interim survey.

**Table 5.1** presents the five empowerment domains, their definitions under the WEAI, the corresponding 10 indicators, and the percentage of women who achieve adequacy in the nine indicators assessed in the ZOI interim survey. Because it was not possible to calculate whether a woman is empowered or not based on the complete set of indicators that comprises the 5DE, the percentages presented in Table 5.1 reflect the proportion of all surveyed women with adequacy in individual indicators regardless of their empowerment status (i.e., the uncensored headcount) and not the proportion of surveyed women who are disempowered and achieve adequacy in individual indicators (i.e., the censored headcount).<sup>60</sup> The criteria for determining adequacy in each domain are provided in Appendix A2.3.

Among surveyed women in the Malawi ZOI, the 5DE indicators with the highest uncensored (or “raw”) headcounts (i.e., the greatest achievement of adequacy) are: (1) control over the use of income (98.7 percent); (2) input in productive decisions (90.7 percent); and (3) satisfaction with leisure time (88.1 percent). The 5DE indicators with the lowest levels of achievement are: (1) access to and decisions on credit (35.7 percent); (2) speaking in public (68.0 percent); and (3) purchase, sale, or transfer of assets (75.2 percent).

The tables and text in the remainder of Section 5 present further description of the individual components of these 5DE indicators.

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<sup>60</sup> See Appendix 2.3 for the criteria for achieving adequacy in each WEAI indicator.

**Table 5.1. Achievement of adequacy on Women's Empowerment in Agriculture Index indicators<sup>1</sup>**

Domain	Definition of domain	Indicators	Percent with adequate achievement	n
Production	Sole or joint decisionmaking over food and cash crop farming, livestock, and fisheries, and autonomy in agricultural production	Input in productive decisions	90.7	891
		Autonomy in production	n/a	n/a
Resources	Ownership, access to, and decisionmaking power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit	Ownership of assets	87.4	891
		Purchase, sale or transfer of assets	75.2	891
		Access to and decisions on credit	35.7	891
Income	Sole or joint control over income and expenditures	Control over use of income	98.7	891
Leadership	Membership in economic or social groups and comfort in speaking in public	Group member	76.1	891
		Speaking in public	68.0	891
Time	Allocation of time to productive and domestic tasks and satisfaction with the available time for leisure activities	Workload	76.6	891
		Leisure	88.1	891

<sup>1</sup> The ZOI interim survey includes an abridged version of the empowerment instrument, and the ZOI interim survey did not include information to measure women's autonomy in agricultural production. Due to this omission, censored headcounts and the 5DE cannot be calculated.

n/a Data for this empowerment indicator were not collected for the ZOI interim surveys.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 5.2 Production

**Table 5.2** presents economic activities (including agricultural activities) among surveyed women. This table presents the percentage of surveyed women who are involved in agricultural activities (food crop farming, cash crop farming, livestock raising, or fishing), non-farm economic activities, and wage or salaried employment. This table also presents the percentage of women who have input into the decisions made regarding a specific activity.

**Table 5.2. Economic activities and input in decisionmaking on production among surveyed women**

Activity	Participates in activity		Has input <sup>1</sup> into decisions about activity	
	Percent	n <sup>2</sup>	Percent	n <sup>1,3</sup>
Total (All surveyed women)	97.3	891	98.5	867
<b>Type of activity</b>				
Food crop farming	90.8	891	95.9	805
Cash crop farming	48.4	891	92.2	431
Livestock raising	33.8	891	94.7	294
Fishing or fishpond culture	1.5	891	^	13
Non-farm economic activities	32.5	890	95.3	299
Wage or salaried employment	55.0	891	96.3	498

^ Results not statistically reliable, n<30.

<sup>1</sup> Having input means that a woman reported having input into most or all decisions regarding the activity.

<sup>2</sup> Estimates exclude households that have no primary adult female decisionmaker or whose data are missing/incomplete.

<sup>3</sup> Women who do not participate in an activity or report that no decision was made are excluded from these percentages.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

Nearly all surveyed women (97.3 percent) in the Malawi ZOI report participating in a productive activity, and of these women, nearly all (98.5 percent) report having input into the decisions made about the activities. Food crop farming (defined as crops primarily for household food consumption) is the activity with the highest participation, at 90.8 percent of surveyed women in the ZOI. In addition to food crop farming, smaller percentages of women report wage or salaried employment (i.e., work that is paid for in cash or in kind, 55.0 percent) and cash crop farming (48.4 percent). The economic activity with the lowest participation in the ZOI is fishing or fishpond culture (1.5 percent of surveyed women). About one-third of women participate in non-farm economic activities (e.g., running a small business or self-employment, 32.5 percent) and livestock raising (33.8 percent).

Among women who participate in the specific economic activities shown in Table 5.2, they report high levels of input into decisions regarding the activity. For each respective economic activity (for which there is sufficient sample size), more than 90 percent of women report having input into decisionmaking. The activity with women's greatest reported input into decisionmaking is wage or salaried employment (96.3 percent).

**Table 5.3** shows the percentage of surveyed women who have input into the decisions made regarding the use of income derived from an activity. Nearly all women (98.1 percent) report having input into the use of income generated from the economic activities in which they participate. Of the specific activities for which there is adequate sample size, over 90 percent of women report having input in the use of income from the activity. The activity with the greatest percentage is wage or salaried employment; 95.6 percent of women participating in this activity report having input into the use of income from their paid work.

**Table 5.3. Input in decisionmaking on use of income among surveyed women**

Activity	Has input <sup>1</sup> into use of income from activity	
	Percent	n <sup>2,3</sup>
Total (All surveyed women)	98.1	866
<b>Type of activity</b>		
Food crop farming	93.8	772
Cash crop farming	93.0	426
Livestock raising	94.9	288
Fishing or fishpond culture	^	13
Non-farm economic activities	95.4	297
Wage or salaried employment	95.6	496

^ Results not statistically reliable, n<30.

<sup>1</sup> Having input means that a woman reported having input into most or all decisions regarding the use of income generated from the activity.

<sup>2</sup> Estimates exclude households that have no primary adult female decisionmaker or whose data are missing/incomplete.

<sup>3</sup> Women who do not participate in an activity or report that no decision was made are excluded from these percentages.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

In addition to the decisionmaking of women on broad agricultural and economic activities, the WEAI module collects information on the extent to which women can contribute to specific agricultural and economic activities. **Table 5.4** presents the percent distribution of surveyed women's perceived ability to contribute to decisions regarding various activities. The row percentages total to 100 percent.

Across the various activities shown in Table 5.4, the activity with the highest percentage of women reporting that they have no decisionmaking ability at all is whether to take crops to the market; 4.1 percent of women report having no decisionmaking ability in this area. However, it is noteworthy that across the seven productive activities shown in Table 5.4, less than 5 percent of women in the ZOI report having no decisionmaking ability at all; in other words, across these seven activities for which decisions were made, women rarely report that they have no decisionmaking ability at all.

When examining the areas where women report the most decisionmaking ability, the most common activity about which women report their ability to make decisions to a "high extent" is minor household expenditures (63.3 percent). Nearly two-thirds of women report that they can make decisions to a high extent about minor household expenditures, such as food for daily consumption or other household needs. In contrast, just over one-third (37.5 percent) of women report their ability to make decisions to a high extent for major household expenditures such as purchasing a large household appliance such as a refrigerator. Nearly one-quarter (22.2 percent) of women reported that decisionmaking regarding major household expenditures was not applicable to their specific situation.



**Table 5.4. Decisionmaking on production among surveyed women**

Activity	Extent to which respondents feel they can make their own decisions (percent) <sup>1,2</sup>				Not applicable <sup>3</sup>	n
	Not at all	Small extent	Medium extent	High extent		
Getting inputs for agricultural production	3.5	20.2	21.6	54.2	0.4	889
The types of crops to grow	3.1	19.1	21.2	56.3	0.2	889
Whether to take crops to the market	4.1	19.2	20.7	48.2	7.8	890
Livestock raising	2.0	17.5	17.6	48.2	14.6	890
Her own wage or salary employment	1.7	13.8	15.5	59.2	9.8	890
Major household expenditures	3.8	19.6	16.9	37.5	22.2	887
Minor household expenditures	1.4	15.6	19.4	63.3	0.3	890

<sup>1</sup> Estimates exclude households that have no primary adult female decisionmaker or whose data are missing or incomplete. Women who do not participate in an activity, or who report that no decision was made, are excluded from these percentages.

<sup>2</sup> When a primary adult female decisionmaker reports that she alone makes decisions about the specified activities, she is not asked any further questions, and is categorized during analysis as making her own decisions “to a high extent.” When she reports making decisions about the specified activities in conjunction with other individuals, she is asked an additional question about the extent to which she feels she could make her own personal decisions on the specified matters, with possible response options being “not at all,” “to a small extent,” “to a medium extent,” or “to a high extent.” Responses are re-coded accordingly.

<sup>3</sup> This category includes respondents who report participating in the activity, but say that making the specified decision is not applicable to their situation.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

Tables 5.2, 5.3, and 5.4 present information contributing to two indicators of the WEAI. *Input into productive decisions*, one indicator of the *Production* domain is measured by the extent to which individuals make decisions or feel they can make decisions on the economic activities listed in the three tables. The *Income* domain is comprised entirely of a single indicator measuring the control over use of income. This indicator captures individuals’ ability to make decisions involving the income generated from their productive activity or the extent to which they feel they can make decisions regarding household expenditure and wage income.

## 5.3 Productive Resources

One of the 10 indicators of the WEAI is the ownership of productive resources. The ability of women to make decisions on the use of productive resources is a second indicator of the *Resource* domain. **Table 5.5** presents households’ ownership of productive resources, as reported by surveyed women. Table 5.5 also presents the percentage of women who can make a decision to purchase, sell, give away, or rent owned items. Women are counted as having the ability to make a decision if they can solely make a decision or if they can make these decisions with others with any degree of input.

**Table 5.5. Household ownership and surveyed women's control over productive resources**

Type of resource	Someone in the household owns item		Woman can decide to purchase items		Woman can decide to sell/give/rent owned items	
	Percent	n <sup>1</sup>	Percent	n <sup>1</sup>	Percent	n <sup>1</sup>
Agricultural land	90.5	891	60.9	800	70.5	810
Large livestock	4.1	889	36.4	35	46.8	35
Small livestock	26.5	889	62.3	229	66.5	230
Chickens, ducks, turkeys, and pigeons	40.1	891	73.0	357	80.6	360
Fish pond or fishing equipment	0.7	891	^	7	^	7
Non-mechanized farm equipment	88.4	891	65.6	784	71.7	782
Mechanized farm equipment	0.4	890	^	3	^	3
Non-farm business equipment	4.1	890	n/a		n/a	
House or other structures	41.9	891	n/a		n/a	
Large consumer durables	24.2	889	n/a		n/a	
Small consumer durables	31.8	891	n/a		n/a	
Cell phone	42.7	889	n/a		n/a	
Non-agricultural land	6.1	890	n/a		n/a	
Means of transportation	36.2	890	n/a		n/a	

^ Results not statistically reliable, n<30.

<sup>1</sup> Estimates exclude households that have no primary adult female decisionmaker or in which Module G data are missing/incomplete. Those that indicate "Not applicable" are excluded from estimates.

n/a Questions regarding who can decide to purchase, sell, give, or rent the item were not included in the ZOI interim surveys.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

Of the 14 productive resources included in the WEAI module, those most commonly owned by ZOI households in Malawi (more precisely, the subsample of ZOI households with a primary adult female decisionmaker, which represents 94.7 percent of all households in the ZOI) include agricultural land (90.5 percent of households) and non-mechanized farm equipment (e.g., hoes, sickles, animal-drawn plows, etc., 88.4 percent). The least commonly owned resources include mechanized farm equipment (e.g., tractor-drawn plows, power tillers, etc., 0.4 percent) and fish pond or fishing equipment (0.7 percent). Fewer than one percent of ZOI households own these items.

For the first seven resources shown in Table 5.5, women were asked the extent of their decisionmaking ability to purchase (the middle set of columns), or sell, give away, or rent the specific owned item. Of the resources with sufficient sample size, the purchase of poultry/fowl (chickens, ducks, turkeys, guinea fowl, and pigeons) was the item with the greatest percentage of women's decisionmaking, at 73.0 percent of women in households who owned this item and

were able to decide to purchase. This was followed by the purchase of non-mechanized farm equipment, at 65.6 percent of women. Regarding women's decisionmaking over selling, giving away, or renting the owned resources, the items with the highest percentages on this measure (of those items with a sufficient sample size) are the same: poultry/fowl (80.6 percent) and non-mechanized farm equipment (71.7 percent).

In other words, among the 40.1 percent of households that own poultry/fowl, 73.0 percent of primary adult female decisionmakers report the ability to make purchasing decisions (solely or with any degree of input) about poultry/fowl, and 80.6 percent report decisionmaking ability to sell, give away, or rent the poultry/fowl. As shown in Table 5.5, while most households (90.5 percent) in the Malawi ZOI own agricultural land, only 60.9 percent of women in these households—fewer than two-thirds—have any decisionmaking ability to purchase agricultural land, and only 70.5 percent have any decisionmaking ability to sell, give away, or rent agricultural land. Roughly one-third of primary adult female decisionmakers report having no input into the purchase, rental, or sale of their household's agricultural land.

**Table 5.6** shows the third indicator of the *Resources* domain, access to, and decisionmaking on credit. The table presents the percent of surveyed women who report that a member of the household has in the past 12 months received any loan, either an in-kind loan (such as food items or raw materials), or a cash loan. These categories are not mutually exclusive. Further, for women living in households where a household member has received a loan, the table presents the percentage who report having contributed to the decision to take the loan and the subsequent decisions on how to use the loan. These figures are disaggregated by the source of the loan.

In the Malawi ZOI, fewer than half of the households with a primary female adult decisionmaker in the WEAI module (47.4 percent) report a household member receiving any kind of loan in the prior year, and the most common credit source overall (of the five possible sources) is group-based microfinance (24.1 percent). The most common type of loan is cash; 45.4 percent of households received a cash loan while only 2.7 percent reported receiving an in-kind loan in the prior 12 months.

Among the subsample of women living in households that received a loan in the prior year ( $n=417$ ), the bottom half of Table 5.6 presents the percentages who report having contributed to two different decisions surrounding the loan: (1) the decision on whether to borrow and (2) the decision on how to use the loan (what to do with the money or in kind item loaned). Overall, 75.3 percent of women report contributing to at least one of the credit decisions. Women have similar input into the decision on whether to take the loan (68.2 percent) and the decision on how to use the loan (69.9 percent).

**Table 5.6. Credit access among surveyed women**

Estimate	Any source (percent)	Credit source (percent) <sup>1</sup>				
		Non-governmental organization	Informal lender	Formal lender	Friends or relatives	Group-based micro-finance
Total receiving a loan (All surveyed women)	47.4	4.6	4.6	6.1	23.3	24.1
<b>Type of loan</b>						
Any loan	47.4	4.6	4.6	6.1	23.3	24.1
In-kind loan	2.7	0.9	0.0	0.6	1.3	0.0
Cash loan	45.4	3.7	4.6	5.8	22.1	24.1
<b>n<sup>2</sup></b>	<b>891</b>	<b>891</b>	<b>890</b>	<b>890</b>	<b>889</b>	<b>890</b>
Total contributing to a credit decision (all surveyed women)	75.3	63.0	66.2	63.6	73.0	77.9
<b>Type of decisions</b>						
On whether to borrow	68.2	56.8	65.6	55.8	64.6	73.7
On how to use loan	69.9	63.0	61.1	57.7	68.1	72.1
<b>n<sup>2</sup></b>	<b>417</b>	<b>42</b>	<b>43</b>	<b>51</b>	<b>202</b>	<b>213</b>

<sup>1</sup> Percentages sum to more than 100 because loans may have been received from more than one source.

<sup>2</sup> Estimates exclude households that have no primary adult female decisionmaker or whose data are missing/incomplete.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 5.4 Leadership in the Community

The *Leadership* domain measures an individual's influence and involvement with community organizations and issues impacting her community. The first indicator of the domain is an individual's ease of speaking in public, which is measured by three questions related to the level of difficulty an individual faces when voicing her opinion regarding community decisions. On this indicator, 68.0 percent of surveyed women in the ZOI achieve adequacy in voicing her opinions on community matters (**Table 5.7**).

When looking at the three individual topics for public discussion asked about in the WEAL module, the percentages of surveyed women who are comfortable speaking in public about each of the topics are fairly similar. About 64 percent of women report being comfortable speaking up in public to ensure proper payment of wages for public works or other similar programs. This is followed by speaking up in public to help decide on infrastructure to be built in the community (59.5 percent of women feel comfortable), and speaking up in public to protest the misbehavior of authorities or elected officials (55.1 percent of women feel comfortable).

**Table 5.7. Comfort with speaking in public among surveyed women**

Topics for public discussion	Percent	n <sup>1</sup>
	Comfortable speaking in public about selected topics	
Total (All surveyed women)	68.0	891
<b>Topics</b>		
To help decide on infrastructure to be built in the community	59.5	873
To ensure proper payment of wages for public works or other similar programs	63.7	876
To protest the misbehavior of authorities or elected officials	55.1	881

<sup>1</sup> Estimates exclude households that have no primary adult female decisionmaker or whose data are missing/incomplete.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

The second indicator of the *Leadership* domain is an individual's participation in a community organization. **Table 5.8** shows the percentage of surveyed women who are active members of an organization in their community.

In the Malawi ZOI, just over three-quarters (76.1 percent) of surveyed women report membership in at least one group. (This is also the uncensored headcount for this indicator; 76.1 percent of women are adequate on the group membership indicator, also shown in Table 5.1.) The group type in the ZOI with the highest participation is religious groups, at 59.7 percent of women. Other group types in the ZOI with active participation among surveyed women include credit or microfinance groups (25.9 percent), "other" groups (21.9 percent), and water users' groups (14.3 percent).

**Table 5.8. Group membership among surveyed women**

Group type	Percent <sup>1</sup>	n <sup>2</sup>
	Is an active group member	
Total (All surveyed women)	76.1	891
<b>Group type</b>		
Agricultural producers' group	13.0	890
Water users' group	14.3	891
Forest users' group	8.0	890
Credit or microfinance group	25.9	891
Mutual help or insurance group	4.0	891
Trade and business association	7.1	891
Civic or charitable group	5.9	891
Local government	3.4	889
Religious group	59.7	891
Other	21.9	891

<sup>1</sup> The denominator for this percentage includes all surveyed women, even those who reported that no group exists or that she is unaware of the existence of a group in her community. Women who report that no group exists or who are unaware of a group are counted as having inadequate achievement of this indicator.

<sup>2</sup> Estimates exclude households that have no primary adult female decisionmaker or whose data are missing/incomplete.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 5.5 Time Use

The last domain of the WEAI is time use. This domain assesses women's work load as directly measured through a time allocation log, as well as the satisfaction felt by the surveyed woman with her leisure time. **Table 5.9** shows the percentage distribution and average hours spent participating in various activities and chores that women often perform. The percentage of women performing an activity indicates the percentage of women who reported doing an activity within the past 24 hours, irrespective of the length of time spent performing the activity. The average hours spent performing an activity is the average across all women, assigning zero hours to women who did not perform an activity. Both primary and secondary activities are presented in Table 5.9. In the ZOI, 88.1 percent of women reported being satisfied with their leisure time.

Of all the activities reported in Table 5.9, the most commonly reported primary activities among surveyed women in the ZOI include sleeping and resting (100.0 percent of women, mean 10.4 hours), eating and drinking (98.4 percent, mean 1.3 hours), and cooking (94.2 percent, mean 2.1 hours). Least common activities include exercising (only reported by 0.6 percent of women), school and homework (0.7 percent), and weaving, sewing, and textile care (3.5 percent). Beyond activities of daily life such as sleeping and eating, other common work activities, in addition to cooking, include domestic work such as fetching food or water (87.4 percent), and caregiving for children or other adults or elderly (46.8 percent). In the Malawi ZOI, few women reported any secondary activities, and thus the average time spent in

secondary activities across all the women is less than one hour. The most commonly reported secondary activity is social activities and hobbies (26.6 percent of women).

**Table 5.9. Time allocation among surveyed women**

Activity	Primary activity		Secondary activity <sup>1</sup>	
	Percent of women	Mean hours devoted	Percent of women	Mean hours devoted
Sleeping and resting	100.0	10.4	3.8	0.0
Eating and drinking	98.4	1.3	6.3	0.0
Personal care	85.3	0.6	6.8	0.0
School and homework	0.7	0.0	0.2	0.0
Work as employed	5.0	0.2	0.0	0.0
Own business work	10.3	0.4	1.1	0.0
Farming/livestock/fishing	46.7	1.7	0.9	0.0
Shopping/getting services	12.8	0.2	0.4	0.0
Weaving, sewing, textile care	3.5	0.1	0.4	0.0
Cooking	94.2	2.1	9.3	0.1
Domestic work (fetching food and water)	87.4	2.3	13.0	0.1
Care for children/adults/elderly	46.8	0.5	9.3	0.1
Travel and commuting	54.8	0.9	0.8	0.0
Watching TV/listening to radio/reading	5.9	0.1	5.0	0.1
Exercising	0.6	0.0	0.5	0.0
Social activities and hobbies	82.2	2.7	26.6	0.7
Religious activities	17.1	0.3	1.0	0.0
Other	7.9	0.3	1.2	0.0
<b>n</b>	<b>891</b>	<b>891</b>	<b>891</b>	<b>891</b>

<sup>1</sup> Respondents were allowed to report up to two activities per time use increment (15 minutes) in the prior 24 hours. If two activities were reported, one was designated as a primary and the second as a secondary activity. Some women may not have reported secondary activities for each 15-minute period.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 6. Hunger and Dietary Intake

This section presents findings related to hunger in the Zone of Influence (ZOI) as well as women's and young children's dietary intake.

### 6.1 Household Hunger

The Household Hunger Scale (HHS) is used to calculate the prevalence of households in the Malawi ZOI experiencing moderate or severe hunger. The HHS was developed by the USAID-funded Food and Nutrition Technical Assistance II Project (FANTA-2/FHI 360) in collaboration with the United Nations Food and Agriculture Organization. It has been cross-culturally validated to allow comparison across different food-insecure contexts. The HHS is used to assess, geographically target, monitor, and evaluate settings affected by substantial food insecurity. The HHS is used to estimate the percentage of households affected by three different severities of household hunger: little to no household hunger (HHS score 0-1); moderate household hunger (HHS score 2-3); and severe household hunger (HHS score 4-6). The HHS should be measured at the same time each year, and ideally at the most vulnerable time of year (right before the harvest, during the dry season, etc.).<sup>61,62</sup>

The hungry season in Malawi, also referred to as the “lean” season, generally occurs between November and March, overlapping with the rainy season.<sup>63</sup> As stated previously, data for the Malawi baseline survey were collected during November-December 2012, which is during the typical lean season in Malawi. Data for the Malawi ZOI interim assessment were collected (via the two separate, but coordinated, FFP baseline and Feed the Future ZOI interim surveys) from late July to mid-October 2015, which is not during the typical lean season in Malawi. However, the Famine Early Warning Systems Network (FEWS NET) reports during that time reveal that economic and natural events took place in southern Malawi during 2015 that negatively affected food availability in that area of the country. These events, in turn, potentially impacted the interim household hunger data in the two 2015 surveys. Most notably, increases in food prices, as well as the flooding and drought that occurred during much of 2015, affected households' food availability in rural areas of southern Malawi.<sup>64,65,66</sup>

**Table 6.1** presents estimates of household hunger for all households in the ZOI, as well as by household characteristics, including gendered household type, household size, and household educational attainment.

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<sup>61</sup> Deitchler, Ballard, Swindale, and Coates. (2011).

<sup>62</sup> For further description of the household hunger indicator and its calculation, refer to the Feed the Future Indicator Handbook, available at <http://feedthefuture.gov/resource/feed-future-handbook-indicator-definitions>.

<sup>63</sup> FEWS NET. (2013).

<sup>64</sup> FEWS NET. (2015a).

<sup>65</sup> FEWS NET. (2015b).

<sup>66</sup> FEWS NET. (2015c).



**Table 6.1. Household hunger**

Characteristic	Percent			n <sup>1</sup>
	Little to no hunger <sup>a</sup>	Moderate hunger	Severe hunger	
Total (All households)	44.3	50.5	5.2	1,019
<b>Gendered household type</b>				
Male and female adults	44.7	52.5	2.8	736
Female adult(s) only	40.7	49.8	9.5	237
Male adult(s) only	77.9	0.0	22.1	46
Child(ren) only (no adults)	-	-	-	0
<b>Household size</b>				
Small (1-5 members)	42.5	51.5	6.0	669
Medium (6-10 members)	47.6	48.8	3.7	335
Large (11+ members)	^	^	^	15
<b>Household educational attainment<sup>a</sup></b>				
No education	54.5	45.5	0.0	36
Less than primary	33.2	61.7	5.1	614
Primary	48.6	44.2	7.2	276
Secondary or more	87.8	12.2	0.0	93

<sup>a</sup> Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample size may not total to the aggregated sample size.

<sup>a</sup> Significance tests were performed for associations between little to no hunger and household characteristics, which is equivalent to testing the association between moderate to severe hunger and household characteristics. For example, a test was done between little to no hunger and gendered household type. When differences were found to be significant (p<0.05), the superscript is noted next to the household characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

Roughly two of every five households in the Malawi ZOI (44.3 percent) report that they experienced no or little hunger in the previous 30 days. However, just over half of all households (50.5 percent) experienced moderate hunger, and an additional 5.2 percent experienced severe hunger. As shown in the Feed the Future ZOI indicator estimates table in the Executive Summary (as well as the appendix Table A1.1), 55.7 percent of ZOI households experience either moderate or severe hunger, which is the Feed the Future standard indicator.

Significance tests were performed for relationships between little to no hunger and household characteristics; this is equivalent to a significance test for moderate and severe hunger combined and each respective household characteristic. As denoted by the superscripts in Table 6.1, experiencing little to no hunger is significantly associated with household educational attainment. Generally, with increasing levels of household education, the prevalence of experiencing little to no hunger appears to increase (notwithstanding the estimate for households with no education, at 54.5 percent, however this household education category includes only 36 households so data should be interpreted with caution). Among households whose members have less than primary education, about one-third (33.2 percent) report little to no hunger, whereas among households with secondary or more education, 87.8 percent report little to no hunger.

## 6.2 Dietary Intake

This section presents information on the dietary diversity of women of reproductive age and on infant and young child feeding in the ZOI.

### 6.2.1 Dietary Diversity Among Women Age 15-49 Years

Women of reproductive age (15-49 years) are at risk of multiple micronutrient deficiencies, which can jeopardize their health and their ability to care for their children and participate in income-generating activities (Darnton-Hill et al., 2005). The Feed the Future women's dietary diversity indicator is a proxy for the micronutrient adequacy of women's diets. The dietary diversity indicator reports the mean number of food groups consumed in the previous day by women of reproductive age.

For the ZOI interim survey, two dietary diversity indicators for women are calculated: the Women's Dietary Diversity Score (WDDS) and Women's Minimum Dietary Diversity (MDD-W).

#### *Women's Dietary Diversity Score*

The Feed the Future women's dietary diversity indicator, presented in Table 6.2, is based on nine food groups: (1) grains, roots, and tubers; (2) legumes and nuts; (3) dairy products; (4) organ meat; (5) eggs; (6) flesh food and small animal protein; (7) vitamin A-rich dark green leafy vegetables; (8) other vitamin A-rich vegetables and fruits; and (9) other fruits and vegetables. The number of food groups consumed is averaged across all women of reproductive age in the sample for whom dietary diversity data were collected to produce a WDDS.

**Table 6.2** shows the mean and median WDDS for all women of reproductive age in the ZOI, and by individual-level and household-level characteristics. Mean WDDS is the Feed the Future high-level indicator. Individual-level characteristics include women's age groups and educational attainment. Household-level characteristics include categories of gendered household type, household size, and household hunger.

In the Malawi ZOI, the WDDS indicator value is 3.38, meaning women consume an average of 3.38 food groups of the nine possible groups. The median value is three food groups. Mean WDDS varies significantly by levels of women's age group, educational attainment, gendered household type, and household hunger status.

As shown in Table 6.2, mean WDDS values appear to decrease with increasing age. Women in the youngest age group (15-19 years) consume an average of 3.42 food groups whereas women in the oldest age group (45-49 years) consume 3.16 food groups. Conversely, mean WDDS values increase with increasing education; women with no education consume an average of

2.86 food groups, whereas women with secondary or more education consume, on average, 4.30 food groups.

**Table 6.2. Women's dietary diversity score**

Characteristic	Mean <sup>a</sup>	Median	n <sup>1</sup>
Total (All women 15-49)	3.38	3	932
<b>Age<sup>a</sup></b>			
15-19	3.42	3	174
20-24	3.58	3	229
25-29	3.39	3	142
30-34	3.38	3	154
35-39	3.07	3	113
40-44	3.20	3	75
45-49	3.16	3	45
<b>Educational attainment<sup>a</sup></b>			
No education	2.86	3	165
Less than primary	3.31	3	594
Primary	3.98	4	129
Secondary or more	4.30	5	44
<b>Gendered household type<sup>a</sup></b>			
Male and female adults	3.51	3	717
Female adult(s) only	2.93	3	213
Male adult(s) only	^	^	2
Child(ren) only (no adults)	-	-	0
<b>Household size</b>			
Small (1-5 members)	3.31	3	504
Medium (6-10 members)	3.43	3	402
Large (11+ members)	^	^	26
<b>Household hunger<sup>a</sup></b>			
Little to no hunger	3.76	4	471
Moderate or severe hunger	2.95	3	459

<sup>^</sup> Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a</sup> Significance tests were performed for associations between mean women's dietary diversity score and individual/household characteristics. For example, a test was done between mean women's dietary diversity score and age. When an association is found to be significant (p<0.05), the superscript is noted next to the characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

In addition to the significant association with age and education, WDDS scores vary significantly by gendered household type. Women in male and female adult households consume an average of 3.51 food groups, while women in female adult-only households consume 2.93 food groups. (The other two gendered household type categories have insufficient sample size for a reliable estimate and were excluded from the statistical tests.)

Finally, Table 6.2 also reveals that mean WDDS varies significantly by household hunger status. Women in households experiencing little to no hunger consume an average of 3.76 food

groups, compared to women in households with moderate or severe hunger, at 2.95 food groups.

### ***Women's Minimum Dietary Diversity***

The Feed the Future MDD-W indicator is a new measure introduced in the interim assessments and uses the following 10 food groups: (1) grains, roots, and tubers; (2) legumes and beans; (3) nuts and seeds; (4) dairy products; (5) eggs; (6) flesh foods, including organ meat and miscellaneous small animal protein; (7) vitamin A-rich dark green leafy vegetables; (8) other vitamin A-rich vegetables and fruits; (9) other fruits; and (10) other vegetables.<sup>67</sup> Achievement of MDD-W is defined as having consumed foods from five of the 10 food groups in the past 24 hours. Thus this indicator is a dichotomous variable, and the measure is reported as the percentage of women who achieve a minimum dietary diversity.<sup>68</sup>

**Table 6.3** shows the percentage of all women of reproductive age in the ZOI who have achieved the minimum dietary diversity threshold by individual-level and household-level characteristics. Individual-level characteristics include women's age groups and educational attainment. Household-level characteristics include categories of gendered household type, household size, and household hunger.

Among women in the Malawi ZOI, just over one-quarter (25.8 percent) meet the MDD-W threshold (five food groups). Of the disaggregates presented in Table 6.3, age, educational attainment, gendered household type, and household hunger are significantly associated with the women's MDD-W indicator. Although not as pronounced as the findings for WDDS presented above, Table 6.3 shows that MDD-W prevalence generally appears to decline with increasing age, whereas it increases with increasing education; 14.5 percent of women with no education in the ZOI obtained a minimum dietary diversity, compared to 60.5 percent of women with secondary or more education.

Similarly, as with the findings for WDDS, Table 6.3 shows that MDD-W prevalence differs by gendered household type; 28.8 percent of women in male and female adult households obtained a minimum dietary diversity, compared to only 15.7 percent of women in female adult-only households. Finally, household hunger status is also associated with MDD-W. Only 16.8 percent of women in households experiencing moderate or severe hunger obtain a

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<sup>67</sup> The differences between the nine food groups used for the WDDS (Table 6.2), which is the current standard Feed the Future indicator, and the 10 food groups used for the new MDD-W measure (Table 6.3) include: (1) legumes and beans are separated from nuts and seeds; (2) meat (flesh foods) and organ meat are combined into one group; and (3) other fruits and other vegetables are separated into two groups.

<sup>68</sup> For more information, refer to *Volume 11: Guidance on the First Interim Assessment of the Feed the Future Zone of Influence Population-Level Indicators* (October 2014), Section 4.2, available for download at [http://www.feedthefuture.gov/sites/default/files/resource/files/ftf\\_guidanceseries\\_vol11\\_interimassessment\\_oct2014.pdf](http://www.feedthefuture.gov/sites/default/files/resource/files/ftf_guidanceseries_vol11_interimassessment_oct2014.pdf).

minimum dietary diversity, compared to 34.0 percent (more than one-third) of women in households experiencing little or no hunger.

**Table 6.3. Women's minimum dietary diversity**

Characteristic	Percent <sup>a</sup>	n <sup>1</sup>
Total (All women 15-49)	25.8	932
<b>Age<sup>a</sup></b>		
15-19	29.0	174
20-24	28.6	229
25-29	25.1	142
30-34	29.1	154
35-39	12.2	113
40-44	28.5	75
45-49	18.6	45
<b>Educational attainment<sup>a</sup></b>		
No education	14.5	165
Less than primary	23.7	594
Primary	36.8	129
Secondary or more	60.5	44
<b>Gendered household type<sup>a</sup></b>		
Male and female adults	28.8	717
Female adult(s) only	15.7	213
Male adult(s) only	^	2
Child(ren) only (no adults)	-	0
<b>Household size</b>		
Small (1-5 members)	23.9	504
Medium (6-10 members)	26.9	402
Large (11+ members)	^	26
<b>Household hunger<sup>a</sup></b>		
Little to no hunger	34.0	471
Moderate or severe hunger	16.8	459

<sup>a</sup> Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a</sup> Significance tests were performed for associations between women's minimum dietary diversity and individual/household characteristics. For example, a test was done between women's minimum dietary diversity and age. When an association is found to be significant (p<0.05), the superscript is noted next to the characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

**Table 6.4** shows the percentages of women age 15-49 years who consume each of the 10 food groups by dietary diversity achievement status. The percentages that consume each of the 10 food groups are shown for women who achieve a minimum dietary diversity and for women who do not achieve a minimum dietary diversity.

Among women who do not achieve a minimum dietary diversity, only two food groups—grains, roots, and tubers (78.2 percent), and other vegetables (73.4 percent)—are consumed by at least half of the women. For the other eight food groups, the percentage of women consuming each group falls below 50 percent (ranging from 48.8 percent of women consuming vitamin

A-rich vegetables, down to only 1.5 percent of women consuming nuts and seeds). Moreover, as shown in the superscripts in Table 6.4, achievement of a minimum dietary diversity is significantly associated with consumption of each of the 10 specific food groups.

**Table 6.4. Consumption of foods by women's minimum dietary diversity status**

Category	Percent of women according to achievement of a minimum dietary diversity <sup>a</sup>	
	Achieving	Not achieving
<b>Women consuming a specific food group</b>		
Grains, roots and tubers <sup>a</sup>	96.2	78.2
Legumes and beans <sup>a</sup>	72.0	21.8
Nuts and seeds <sup>a</sup>	14.3	1.5
Dairy products <sup>a</sup>	14.3	1.8
Meat and organ meats <sup>a</sup>	70.7	22.5
Eggs <sup>a</sup>	16.2	3.2
Vitamin A-rich dark green leafy vegetables <sup>a</sup>	83.4	48.8
Other Vitamin A-rich vegetables and fruits <sup>a</sup>	62.6	19.3
Other fruits <sup>a</sup>	40.5	6.4
Other vegetables <sup>a</sup>	96.8	73.4
<b>n</b>	<b>230</b>	<b>702</b>

<sup>a</sup> Significance tests were performed for associations between women's achievement of minimum dietary diversity and consumption of a specific food group. For example, a test was done between women's achievement of minimum dietary diversity and consumption of grains, roots, and tubers. When an association is found to be significant ( $p < 0.05$ ), a superscript is noted next to the food group.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 6.2.2 Infant and Young Child Feeding

This section presents young children's dietary intake measures, including the Feed the Future indicators of exclusive breastfeeding among babies 0-5 months and the minimum acceptable diet (MAD) indicator among children 6-23 months.

### *Exclusive Breastfeeding*

Exclusive breastfeeding provides children with significant health and nutrition benefits, including protection from gastrointestinal infections and reduced risk of mortality due to infectious disease. Exclusive breastfeeding means the infant received breast milk (including expressed breast milk or breast milk from a wet nurse) and may have received oral rehydration salts, vitamins, minerals, and/or medicines, but did not receive any other food or liquid. This indicator measures the percentage of children 0-5 months of age who were exclusively breastfed during the day preceding the survey.

**Table 6.5** shows the prevalence of exclusive breastfeeding among children 0-5 months in the ZOI. Estimates are shown for all children, as well as by children's sex and educational attainment of the child's primary caregiver. The caregiver's educational categories include no

education, less than primary, completed primary, and completed secondary or more. Note that the data are collected for the self-identified *primary caregiver* and not strictly for the biological mother (although it is often the same person).

**Table 6.5. Prevalence of exclusive breastfeeding among children under 6 months**

Characteristic	Percent <sup>a</sup>	n <sup>1</sup>
Total (All children under 6 months)	60.0	80
<b>Child sex</b>		
Male	53.2	41
Female	67.4	39
<b>Caregiver's educational attainment<sup>2</sup></b>		
No education	^	8
Less than primary	51.6	52
Primary	^	15
Secondary or more	^	5

<sup>a</sup> Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>2</sup> The ZOI interim survey and the FFP survey identify the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

<sup>a</sup> Significance tests were performed for associations between exclusive breastfeeding and child/caregiver characteristics. For example, a test was done between exclusive breastfeeding and the child's sex. When an association is found to be significant (p<0.05), the superscript is noted next to the characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

Among all children less than 6 months of age in the Malawi ZOI, 60.0 percent, or three of every five infants, are exclusively breastfed. For context, in the 2014 MES report, 70.1 percent of rural Malawian infants age 0-5 months (nationally) were exclusively breastfed.<sup>69</sup>

As shown in Table 6.5, there is no significant association between exclusive breastfeeding and disaggregate characteristics presented. It is important to note that the sample size of children 0-5 months is quite small in the Malawi ZOI data, at just 80 children. There is insufficient sample size to present exclusive breastfeeding estimates for most of the caregiver's educational attainment categories, with the exception of less than primary.

### **Minimum Acceptable Diet**

The prevalence of children 6-23 months receiving a MAD measures the proportion of young children who receive a MAD apart from breastfeeding. This composite indicator measures both the minimum feeding frequency and minimum dietary diversity based on caregiver reports of the frequency with which the child was fed in the past 24 hours, and what foods were consumed during the past 24 hours. Tabulation of the indicator requires data on children's age

<sup>69</sup> NSO. (2015b). p. 39.

in months, breastfeeding status, dietary diversity, number of semi-solid or solid feeds, and number of milk feeds.

**Table 6.6** presents the Feed the Future MAD indicator for children in the ZOI. Estimates are shown for all children, as well as by characteristics of the children, caregiver, and household. Children's characteristics include children's sex and age group. Caregivers' characteristics include age and sex categories, as well as caregivers' educational attainment. Household characteristics include gendered household type, household size, and household hunger.

In the Malawi ZOI, 13.4 percent of children age 6-23 months receive a MAD. This is nearly identical to the national rural estimate from the 2014 MDG Endline Survey (MES), which is 13.5 percent.<sup>70</sup>

Significance tests were run for differences in prevalence of MAD in the ZOI by child sex, child age, caregiver's educational attainment, gendered household type, household size, and household hunger. MAD was found to be significantly associated with children's age group and household hunger status. The age group with the greatest prevalence of MAD is 12-17 months (20.3 percent of children).

Table 6.6 shows that, among children living in households with little or no hunger, the prevalence of MAD is twice that as among children living in households with moderate or severe hunger, at 18.6 percent and 9.2 percent, respectively.

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<sup>70</sup> Ibid., p. 44.



**Table 6.6. Percentage of children age 6-23 months who receive a minimum acceptable diet**

Characteristic	Percent <sup>a</sup>	n <sup>1</sup>
Total (All children 6-23 months)	13.4	245
<b>Child sex</b>		
Male	11.4	128
Female	15.6	117
<b>Child age<sup>a</sup></b>		
6-11 months	5.9	76
12-17 months	20.3	82
18-23 months	12.9	87
<b>Caregiver's educational attainment<sup>2</sup></b>		
No education	12.7	42
Less than primary	11.6	169
Primary	^	27
Secondary or more	^	7
<b>Gendered household type</b>		
Male and female adults	14.0	194
Female adult(s) only	11.1	50
Male adult(s) only	^	1
Child(ren) only (no adults)	-	0
<b>Household size</b>		
Small (1-5 members)	13.0	139
Medium (6-10 members)	13.1	96
Large (11+ members)	^	10
<b>Household hunger<sup>a</sup></b>		
Little to no hunger	18.6	106
Moderate or severe hunger	9.2	138

^ Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>2</sup> The ZOI interim survey and the FFP survey identify the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

<sup>a</sup> Significance tests were performed for associations between children receiving a minimum acceptable diet and child/caregiver/household characteristics. For example, a test was done between children receiving a minimum acceptable diet and child's sex. When an association is found to be significant (p<0.05), the superscript is noted next to the characteristic.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

**Table 6.7** presents the percentage of children achieving the MAD components (e.g., minimum meal frequency, minimum dietary diversity) and consuming each of the food groups of the minimum dietary diversity indicator. Estimates are shown for all children, as well as by specific age groups, and presented separately for breastfed children and non-breastfed children.

**Table 6.7. Components of a minimum acceptable diet among children age 6-23 months**

MAD components and food groups	Percent			
	All children <sup>a</sup>	By child age (in months)		
		6 to 11	12 to 17	18 to 23
Breastfed children				
Achieving minimum meal frequency	38.3	40.8	38.3	35.9
Achieving minimum dietary diversity	25.3	12.5	39.7	22.2
Consuming				
Grains, roots, and tubers	85.2	81.6	93.6	79.6
Legumes and nuts	28.3	21.0	37.0	26.0
Dairy products	9.0	11.9	12.6	1.9
Flesh foods	21.9	8.4	29.8	26.7
Eggs	2.3	1.3	5.2	0.0
Vitamin A-rich fruits and vegetables	57.7	37.7	63.4	71.7
Other fruits and vegetables	58.4	41.5	70.6	61.8
n	222	74	76	72
Non-breastfed children				
Achieving minimum meal frequency	^	^	^	^
Achieving minimum milk feeding frequency	^	^	^	^
Achieving minimum dietary diversity	^	^	^	^
Consuming				
Grains, roots, and tubers	^	^	^	^
Legumes and nuts	^	^	^	^
Dairy products	^	^	^	^
Flesh foods	^	^	^	^
Eggs	^	^	^	^
Vitamin A-rich fruits and vegetables	^	^	^	^
Other fruits and vegetables	^	^	^	^
n	23	2	6	15

^ Results not statistically reliable, n<30.

<sup>a</sup> Significance tests were performed for associations between MAD components/food groups for breastfed and non-breastfed children. For example, a test was done for achieving minimum meal frequency and breastfeeding status. When an association is found to be significant (p<0.05), a superscript is noted next to the breastfed and non-breastfed row headings corresponding to the MAD component/food group.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

Table 6.7 shows that among breastfed children, 38.3 percent receive a minimum meal frequency, and 25.3 percent receive a minimum dietary diversity. Unfortunately, there is insufficient sample size (n=23) to present these measures for non-breastfed children.

When examining the individual food groups among the subset of breastfed children, Table 6.7 shows that the most common food group is grains, roots, and tubers; 85.2 percent of breastfed children received foods from this group. The least common food for breastfed children is eggs, consumed by only 2.3 percent of children. This most common/least common food group

pattern is consistent across the three age groups of breastfed children (6-11 months, 12-17 months, and 18-23 months) presented in Table 6.7.

### 6.2.3 Consumption of Targeted Nutrient-Rich Value Chain Commodities

U.S. Government (USG)-funded programming supports nutrition-sensitive agricultural value chain<sup>71</sup> interventions to achieve the dual purpose of enhancing both economic and nutritional outcomes. The Feed the Future ZOI interim assessment measures the degree to which respondents in the ZOI are consuming targeted nutrient-rich commodities or products made from targeted nutrient-rich commodities being promoted by these value chain activities.

There are three criteria for a food commodity to be considered a targeted nutrient-rich value chain commodity (NRVCC):

1. Increased production of the commodity must be promoted through a USG-funded value chain activity.
2. The value chain commodity must have been selected for nutrition objectives, in addition to any poverty-reduction or economic-growth related objectives.
3. The commodity must be considered nutrient rich, defined as meeting any one of the following criteria: It is bio-fortified; a legume, nut, or seed; an animal-sourced food, including dairy products (milk, yogurt, cheese), eggs, organ meat, flesh foods, and other miscellaneous small animal protein (e.g., grubs, insects); a dark yellow or orange-fleshed root or tuber; or a fruit or vegetable that meets the threshold for being a “high source” of one or more micronutrients on a per 100 gram basis.

This section presents the ZOI interim assessment’s findings on the consumption of targeted NRVCC among women age 15-49 and children age 6-23 months. The targeted commodities in Malawi include: soy, groundnuts, and orange-fleshed sweet potatoes (OFSP).

#### *Women’s Consumption of Targeted Nutrient-Rich Value Chain Commodities*

**Table 6.8** presents women’s consumption of targeted NRVCC. Estimates are shown for all women age 15-49, as well as by women’s individual and household characteristics. Women’s individual characteristics include age and educational attainment. Household characteristics include gendered household type, household size, and household hunger.

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<sup>71</sup> From Martin Webber and Patrick Labaste, “Building competitiveness in Africa’s agriculture : a guide to value chain concepts and applications,” published by The World Bank: “The term ‘value chain’ describes the full range of value-adding activities required to bring a product or service through the different phases of production, including procurement of raw materials and other inputs, assembly, physical transformation, acquisition of required services such as transport or cooling, and ultimately response to consumer demand (Kaplinsky and Morris (2003), ‘A Handbook for Value Chain Research,’ p. 46–47).”

**Table 6.8. Women's consumption of targeted nutrient-rich value chain commodities**

Characteristic	Percent				n <sup>1</sup>
	Any targeted commodity <sup>a</sup>	Soy/soy products <sup>b</sup>	Groundnuts/groundnut products <sup>c</sup>	Orange-fleshed sweet potatoes (OFSP)/OFS products <sup>d</sup>	
Total (All women 15-49)	35.7	10.3	21.5	12.7	932
<b>Age<sup>d</sup></b>					
15-19	39.3	13.8	23.2	12.3	174
20-24	39.2	9.7	23.6	17.1	229
25-29	36.2	7.6	21.6	14.6	142
30-34	33.7	9.0	21.1	14.3	154
35-39	31.9	11.5	18.0	6.7	113
40-44	30.6	10.3	20.8	7.2	75
45-49	27.1	9.7	14.9	2.5	45
<b>Educational attainment<sup>a,c,d</sup></b>					
No education	27.0	10.9	13.9	8.6	165
Less than primary	35.1	10.2	21.7	11.4	594
Primary	50.4	10.8	31.3	23.8	129
Secondary or more	33.3	8.0	18.8	11.5	44
<b>Gendered household type</b>					
Male and female adults	37.0	11.1	22.4	12.8	717
Female adult(s) only	31.2	7.2	18.2	12.1	213
Male adult(s) only	^	^	^	^	2
Child(ren) only (no adults)	-	-	-	-	0
<b>Household size</b>					
Small (1-5 members)	34.4	10.2	20.2	12.4	504
Medium (6-10 members)	37.0	10.3	23.3	12.5	402
Large (11+ members)	^	^	^	^	26
<b>Household hunger<sup>a,c,d</sup></b>					
Little to no hunger	41.3	11.6	24.7	15.1	471
Moderate or severe hunger	29.7	8.9	18.1	10.0	459

^ Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a-d</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between any targeted commodity and the woman's age. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

As shown in Table 6.8, over one-third of women of reproductive age (WRA) in the Malawi ZOI consumed at least one NRVCC food in the prior day; 35.7 percent of women consumed at least one of the three commodities, with groundnuts as the most commonly consumed NRVCC (21.5 percent of WRA), followed by OFSP (12.7 percent), and soy (10.3 percent).

Among the disaggregates presented in Table 6.8, women's education and household hunger status are significantly associated with consumption of any (at least one) NRVCC. More than half (50.4 percent) of women with primary education reported consuming any NRVCC, the greatest prevalence among the educational categories. Moreover, women residing in households with little to no hunger are significantly more likely to consume any NRVCC compared to women residing in households with moderate or severe hunger, 41.3 percent and 29.7 percent, respectively.

As shown in the superscripts on Table 6.8, none of the disaggregate variables are significantly associated with women's consumption of soy or foods made from soy. With respect to groundnuts, however, the prevalence of groundnut consumption (including foods made from groundnuts) varies significantly by women's educational attainment and household hunger status. For example, nearly one-quarter (24.7 percent) of women residing in households with little to no hunger report consuming groundnuts, compared to 18.1 percent of women residing in households with moderate or severe hunger.

Finally, three disaggregate variables—age group, educational attainment, and household hunger status—are significantly associated with consumption of OFSP and products made from OFSP. Women in the oldest age group (45-49 years) consume the least OFSP; only 2.5 percent of women in this age group reported consuming OFSP. In addition, consumption of OFSP appears to increase with increasing education. Women with primary education (23.8 percent) are about two times as likely as women with less than primary education (11.4 percent) and nearly three times as likely as women with no education (8.6 percent) to consume OFSP; however, only 11.5 percent of women with secondary or more schooling consumed OFSP, although due to small sample size this estimate should be interpreted with caution. Moreover, women in households with little to no hunger are significantly more likely than those in households with moderate or severe hunger to consume OFSP, 15.1 percent and 10.0 percent, respectively.

### *Children's Consumption of Targeted Nutrient-Rich Value Chain Commodities*

**Table 6.9** presents children's consumption of targeted NRVCC. Estimates are shown for all children 6-23 months, as well as by characteristics of the child, caregiver, and household. Children's characteristics include sex and age, and caregivers' characteristics include educational attainment. Household characteristics include gendered household type, household size, and household hunger.

**Table 6.9. Children's consumption of targeted nutrient-rich value chain commodities**

Characteristic	Percent				n <sup>1</sup>
	Any targeted commodity <sup>a</sup>	Soy/soy products <sup>b</sup>	Groundnuts/ groundnut products <sup>c</sup>	Orange-fleshed sweet potatoes (OFSP)/OFSP products <sup>d</sup>	
Total (All children 6-23 months)	32.1	9.4	15.0	14.7	245
<b>Child sex</b>					
Male	34.5	10.2	13.4	17.1	128
Female	29.5	8.4	16.8	12.1	117
<b>Child age<sup>a,d</sup></b>					
6-11 months	21.9	7.4	10.2	6.9	76
12-17 months	42.6	11.8	22.9	21.3	82
18-23 months	30.5	8.6	11.1	14.9	87
<b>Caregiver's educational attainment<sup>2</sup></b>					
No education	41.7	6.5	22.7	20.0	42
Less than primary	28.8	9.1	13.0	13.0	169
Primary	^	^	^	^	27
Secondary or more	^	^	^	^	7
<b>Gendered household type</b>					
Male and female adults	33.3	10.8	16.2	13.9	194
Female adult(s) only	26.3	3.9	10.6	16.1	50
Male adult(s) only	^	^	^	^	1
Child(ren) only (no adults)	-	-	-	-	0
<b>Household size</b>					
Small (1-5 members)	33.0	7.7	15.2	17.4	139
Medium (6-10 members)	29.8	11.5	15.0	10.2	96
Large (11+ members)	^	^	^	^	10
<b>Household hunger<sup>a,b,d</sup></b>					
Little to no hunger	42.0	15.1	20.0	20.0	106
Moderate or severe hunger	24.3	4.7	11.0	10.6	138

^ Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>2</sup> The ZOI interim survey and the FFP survey identify the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

<sup>a-d</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between any targeted commodity and the sex of the child. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

As shown in Table 6.9, nearly one-third of children age 6-23 months in the Malawi ZOI consumed at least one NRVCC item in the prior day; 32.1 percent of children consumed at least one of the three commodities. As was the pattern among women of reproductive age, groundnuts and foods made from groundnuts were most commonly consumed (15.0 percent of children 6-23 months), followed by OFSP (14.7 percent), and then soy (9.4 percent).

Among the disaggregates presented in Table 6.9, child's age group and household hunger status were significantly associated with children's consumption of any (at least one) NRVCC. About 42.6 percent of children age 12-17 months, the age group with the greatest prevalence, consumed any NRVCC foods. Children residing in households with moderate or severe hunger were significantly less likely to consume any NRVCC than children residing in households with no or little hunger, 24.3 percent and 42.0 percent, respectively.

As shown in the superscripts in Table 6.9, the only disaggregate significantly associated with children's consumption of soy and foods made from soy is household hunger status. More than three times as many children in households with little to no hunger consumed soy (15.1 percent) as compared to children in households with moderate or severe hunger (4.7 percent).

With respect to groundnuts and foods made from groundnuts, none of the disaggregates shown in Table 6.9 were significantly associated with children's consumption of groundnuts. However, for OFSP and foods made from OFSP, both children's age group and household hunger status were significantly associated. Children in the 12-17 month age group consumed the most OFSP; 21.3 percent of children in this age group were reported by their caregivers to have consumed OFSP in the prior day. In addition, nearly twice as many children in households with little to no hunger (20.0 percent) compared to children in households with moderate or severe hunger (10.6 percent) consumed OFSP.

## 7. Nutritional Status of Women and Children

This section presents findings related to the Feed the Future indicators of women's underweight and children's anthropometry (stunting, wasting, and underweight).

### 7.1 Body Mass Index of Women Age 15-49 Years

**Table 7.1** presents women's mean Body Mass Index (BMI) as well as the BMI categories of underweight ( $\text{BMI} < 18.5$ ), normal weight ( $18.5 \leq \text{BMI} < 25.0$ ), overweight ( $25.0 \leq \text{BMI} < 30.0$ ), and obese ( $\text{BMI} \geq 30.0$ ). Estimates are shown for all non-pregnant women age 15-49, as well as disaggregated by individual-level and household-level characteristics. Individual characteristics include age and educational attainment. Household characteristics include gendered household type, household size, and household hunger.

Among non-pregnant women age 15-49 in the Malawi Zone of Influence (ZOI), mean BMI is 22.1, or normal weight. As shown in Table 7.1, 8.9 percent of women in the Malawi ZOI are underweight ( $\text{BMI} < 18.5$ ), the Feed the Future standard indicator. Over three-quarters of women in the Malawi ZOI are normal weight (77.8 percent), and 10.8 percent and 2.6 percent are overweight and obese, respectively. As shown in Table 7.1, women's mean BMI varies significantly by levels of age and household hunger. Mean BMI values increase with increasing age, from 20.9 among women age 15-19 to 23.0 among women age 45-49. Mean BMI among women in households with little to no hunger (22.5) is significantly higher than mean BMI among women in households with moderate or severe hunger (21.6).

Table 7.1 also shows that BMI category varies significantly by levels of age, educational attainment, and household hunger. In addition, the prevalence of underweight women (the Feed the Future standard indicator) varies significantly by levels of age, with the youngest age group (15-19 years) exhibiting the highest prevalence of underweight (17.6 percent).

### 7.2 Stunting, Wasting, and Underweight Among Children Under 5 Years

This section reports on three anthropometric measurements of undernutrition among children under 5 years in the ZOI: stunting (height-for-age), wasting (weight-for-height), and underweight (weight-for-age).



**Table 7.1. Prevalence of underweight, normal weight, overweight, and obese women**

Characteristic	Mean BMI <sup>a</sup>	Body Mass Index (BMI) category (percent) <sup>b</sup>				n <sup>i</sup>
		Under-weight <sup>c</sup>	Normal weight	Over-weight	Obese	
Total (All women age 15-49)	22.1	8.9	77.8	10.8	2.6	848
<b>Age<sup>a,b,c</sup></b>						
15-19	20.9	17.6	77.9	3.4	1.2	157
20-24	21.5	9.9	80.7	8.5	0.9	197
25-29	22.7	2.8	79.4	17.2	0.6	127
30-34	22.8	7.4	73.9	13.9	4.8	144
35-39	22.5	5.0	79.3	12.2	3.6	105
40-44	22.3	10.8	68.9	17.7	2.6	73
45-49	23.0	2.0	82.1	3.9	11.9	45
<b>Educational attainment<sup>b</sup></b>						
No education	22.0	6.8	80.9	12.3	0.0	155
Less than primary	22.1	8.7	77.9	10.2	3.1	540
Primary	21.7	9.2	82.3	6.3	2.3	115
Secondary or more	23.4	17.3	52.0	24.3	6.3	38
<b>Gendered household type</b>						
Male and female adults	22.1	9.0	77.6	11.0	2.4	644
Female adult(s) only	22.1	8.4	78.1	10.2	3.3	202
Male adult(s) only	^	^	^	^	^	2
Child(ren) only (no adults)	-	-	-	-	-	0
<b>Household size</b>						
Small (1-5 members)	22.0	7.8	79.9	10.3	2.0	454
Medium (6-10 members)	22.1	10.5	74.9	11.4	3.2	371
Large (11+ members)	^	^	^	^	^	23
<b>Household hunger<sup>a,b</sup></b>						
Little to no hunger	22.5	7.4	76.1	12.3	4.3	424
Moderate or severe hunger	21.6	10.5	79.5	9.2	0.8	422

<sup>a</sup> Results not statistically reliable, n<30.

<sup>i</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a-c</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between BMI and the woman's age. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## 7.2.1 Stunting (Height-for-Age)

*Stunting* is an indicator of linear growth retardation, most often due to a prolonged inadequate diet and poor health. Reducing the prevalence of stunting among children, particularly age 0-23 months, is important because linear growth deficits accrued early in life are associated with cognitive impairments, poor educational performance, and decreased work productivity as adults (Black et al., 2008; Victora et al., 2008). Stunting is a height-for-age measurement that reflects chronic undernutrition. This indicator measures the percentage of children 0-59 months who are stunted, as defined by a height-for-age Z-score more than two SDs below the median of the 2006 WHO Child Growth Standard (<-2SD).<sup>72</sup> The stunting measures presented

<sup>72</sup> WHO. (2006).

below include the Feed the Future stunting indicator of moderate or severe stunting combined (<-2SD) as well as the indicator for severe stunting (<-3SD). Mean Z-scores are also presented.

**Table 7.2** shows the prevalence of stunting, severe stunting, and mean Z-scores for children under 5 years in the ZOI. Estimates are presented for all children and by child, caregiver, and household characteristics. Children's characteristics include sex and age. Caregivers' characteristics include educational attainment. Household characteristics include gendered household type, household size, and household hunger.

**Table 7.2. Stunting (height-for-age) among children under 5 years old**

Characteristic	% Stunted (<-2 SD) <sup>a</sup>	% Severely stunted (<-3 SD)	Mean Z-score <sup>b</sup>	n <sup>1</sup>
Total (All children under 5 years)	42.3	13.8	-1.7	812
<b>Child sex<sup>b</sup></b>				
Male	44.3	14.7	-1.8	424
Female	40.0	12.7	-1.6	388
<b>Child age<sup>a,b</sup></b>				
0-11 months	23.1	4.1	-0.9	148
12-23 months	38.6	14.4	-1.7	166
24-35 months	49.2	19.4	-2.0	156
36-47 months	49.7	18.0	-1.9	166
48-59 months	48.4	12.2	-1.9	176
<b>Caregiver's educational attainment<sup>2</sup></b>				
No education	44.2	15.3	-1.7	160
Less than primary	44.6	14.6	-1.7	524
Primary	31.4	8.6	-1.5	96
Secondary or more	28.4	9.2	-1.5	32
<b>Gendered household type</b>				
Male and female adults	41.7	12.4	-1.7	642
Female adult(s) only	44.8	19.3	-1.9	168
Male adult(s) only	^	^	^	2
Child(ren) only (no adults)	-	-	-	0
<b>Household size</b>				
Small (1-5 members)	41.7	12.9	-1.7	423
Medium (6-10 members)	43.8	15.1	-1.7	362
Large (11+ members)	^	^	^	27
<b>Household hunger</b>				
Little to no hunger	39.7	12.1	-1.6	381
Moderate or severe hunger	44.6	15.4	-1.8	429

<sup>a</sup> Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>2</sup> The ZOI interim survey and the FFP survey identify the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

<sup>a-b</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between percent stunted and the child's sex. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

In the Malawi ZOI, more than two in every five children (42.3 percent) under age 5 are stunted. This is compared to the 2014 MDG Endline Survey (MES) rural value of 43.2 percent.<sup>73</sup> As shown in Table 7.2, 13.8 percent of ZOI children are severely stunted, relative to the 2014 MES rural value of 16.7 percent.<sup>74</sup> The mean height-for-age Z-score in the ZOI is -1.7, which indicates that the average height-for-age among children in the Malawi ZOI is lower than that of the WHO global reference population. This value is similar to the mean height-for-age Z-score in the 2014 MES for rural children, which is -1.8.<sup>75</sup>

As denoted by the superscripts in Table 7.2, significance tests were run for both the Feed the Future children's stunting indicator ( $<-2SD$ ) as well as the mean height-for-age Z-scores. Children's stunting is significantly associated with children's age; the prevalence of stunting increases with increasing age, ranging from 23.1 percent among children 0-11 months to 48.4 percent among children 48-59 months. Similarly, mean height-for-age Z-scores are significantly associated with children's sex and age, with males showing significantly lower mean Z-scores than females (-1.8 and -1.6, respectively).

### 7.2.2 Wasting (Weight-for-Height)

*Wasting* is an indicator of acute malnutrition. Children who are wasted are too thin for their height and have a much greater risk of dying than children who are not wasted. This indicator measures the percentage of children 0-59 months who are acutely malnourished, as defined by a weight-for-height Z-score more than two SDs below the median of the 2006 WHO Child Growth Standard. The wasting measures presented below include the Feed the Future wasting indicator of moderate or severe wasting combined ( $<-2SD$ ) as well as the indicator for severe wasting ( $<-3SD$ ), and the percentage of children who are overweight ( $>+2SD$ ) and obese ( $>+3SD$ ). Mean Z-scores are also presented.

**Table 7.3** shows the prevalence of wasting, severe wasting, overweight, obesity, and mean Z-scores for children under 5 years in the ZOI. Estimates are presented for all children and by child, caregiver, and household characteristics. Children's characteristics include sex and age. Caregivers' characteristics include educational attainment. Household characteristics include gendered household type, household size, and household hunger.

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<sup>73</sup> NSO. (2015b). p. 32.

<sup>74</sup> Ibid.

<sup>75</sup> Ibid.

**Table 7.3. Wasting (weight-for-height) among children under 5 years old**

Characteristic	% Wasted (<-2 SD) <sup>a</sup>	% Severely wasted (<-3 SD)	% Overweight (> +2SD) <sup>b</sup>	% Obese (> +3SD)	Mean Z-score <sup>c</sup>	n <sup>i</sup>
Total (All children under 5 years)	3.6	0.6	3.3	0.6	0.0	812
<b>Child sex</b>						
Male	4.1	0.5	2.8	0.3	0.0	424
Female	3.2	0.8	3.9	1.0	0.0	388
<b>Child age<sup>a,b,c</sup></b>						
0-11 months	7.9	2.1	9.5	3.4	0.1	148
12-23 months	5.1	0.0	0.4	0.0	-0.3	166
24-35 months	2.6	0.6	2.5	0.0	0.1	156
36-47 months	2.7	0.0	2.6	0.0	0.1	166
48-59 months	0.5	0.5	2.4	0.0	0.0	176
<b>Caregiver's educational attainment<sup>2,c</sup></b>						
No education	4.5	0.6	1.3	0.0	-0.1	160
Less than primary	4.1	0.8	3.4	0.4	0.0	524
Primary	0.9	0.0	6.0	3.1	0.3	96
Secondary or more	0.0	0.0	5.4	0.0	0.5	32
<b>Gendered household type</b>						
Male and female adults	3.5	0.6	3.5	0.6	0.0	642
Female adult(s) only	4.1	0.5	2.8	0.6	0.0	168
Male adult(s) only	^	^	^	^	^	2
Child(ren) only (no adults)	-	-	-	-	-	0
<b>Household size</b>						
Small (1-5 members)	2.8	0.2	2.2	0.2	0.0	423
Medium (6-10 members)	3.9	1.1	4.6	1.1	0.0	362
Large (11+ members)	^	^	^	^	^	27
<b>Household hunger</b>						
Little to no hunger	3.1	0.2	3.3	0.3	0.1	381
Moderate or severe hunger	4.2	1.0	3.4	0.9	0.0	429

<sup>a</sup> Results not statistically reliable, n<30.

<sup>i</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>2</sup> The ZOI interim survey and the FFP survey identify the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

<sup>a-c</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between the percent wasted and the child's sex. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

In the Malawi ZOI, 3.6 percent of children under age 5 are wasted, and less than 1 percent (0.6 percent) are severely wasted. The 2014 MES national rural values are 3.9 percent and 1.1 percent, respectively.<sup>76</sup> With respect to overweight (>+2SD) and obesity (>+3SD), in the Malawi ZOI, 3.3 percent of children under age 5 are overweight, and less than 1 percent

<sup>76</sup> Ibid.

(0.6 percent) are obese. In the 2014 MES, 4.7 percent of rural children nationally are overweight.<sup>77</sup> (Children's obesity indicators were not provided in the 2014 MES report.) The mean weight-for-height Z-score in the Malawi ZOI is 0.0, which indicates that, on average, the weight-for-height of children in the ZOI is similar to that for the WHO global reference population. In the 2014 MES, the mean weight-for-height Z-score for rural children is also 0.0.<sup>78</sup>

Table 7.3 also includes the results of significance tests for the children's wasting indicator ( $<-2SD$ , the Feed the Future standard indicator), the overweight indicator ( $>+2SD$ ), and mean weight-for-height Z-scores. There are no significant differences in these indicator values for all disaggregate variables with the exception of children's age and caregiver's education. Children's age group is significantly associated with all three indicators (wasting, overweight, and mean weight-for-height Z-scores). As shown in the table, the prevalence of wasting declines with increasing children's age, from 7.9 percent of children 0-11 months to 0.5 percent of children 48-59 months. Similarly, the prevalence of overweight appears to decline with increasing children's age, from 9.5 percent of children 0-11 months to 2.4 percent of children 48-59 months. Finally, mean weight-for-height Z-scores vary significantly by caregiver's level of education, from -0.1 among children with caregivers with no education, to 0.5 among children with caregivers with secondary or more schooling.

### 7.2.3 Underweight (Weight-for-Age)

*Underweight* is a weight-for-age measurement and is a reflection of acute and/or chronic undernutrition. This indicator measures the percentage of children 0-59 months who are underweight, as defined by a weight-for-age Z-score of more than two SDs below the median of the 2006 WHO Child Growth Standard. The underweight measures presented below include the Feed the Future underweight indicator of moderate or severe underweight combined ( $<-2SD$ ) as well as the indicator for severe underweight ( $<-3SD$ ). Mean Z-scores are also presented.

**Table 7.4** shows the prevalence of underweight, severe underweight, and mean Z-scores for children under 5 years in the ZOI. Estimates are presented for all children and by child, caregiver, and household characteristics. Children's characteristics include sex and age. Caregivers' characteristics include educational attainment. Household characteristics include gendered household type, household size, and household hunger.

In the Malawi ZOI, 16.0 percent of children under age 5 are underweight, and 2.7 percent are severely underweight. This is similar to the 2014 MES national rural values of 17.1 percent and 3.9 percent, respectively.<sup>79</sup> The mean weight-for-age Z-score in the ZOI is -1.0, which indicates

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<sup>77</sup> Ibid.

<sup>78</sup> Ibid.

<sup>79</sup> Ibid.

that on average the weight-for-age for children in the ZOI is below that for the global reference population. In the 2014 MES, the mean weight-for-age Z-score for rural children is also -1.0.<sup>80</sup>

**Table 7.4. Underweight (weight-for-age) among children under 5 years old**

Characteristic	% Underweight (<-2 SD) <sup>a</sup>	% Severely underweight (<-3 SD)	Mean Z-score <sup>b</sup>	n <sup>1</sup>
Total (All children under 5 years)	16.0	2.7	-1.0	812
<b>Child sex</b>				
Male	15.5	2.4	-1.0	424
Female	16.6	2.9	-0.9	388
<b>Child age<sup>b</sup></b>				
0-11 months	10.4	4.1	-0.6	148
12-23 months	21.7	3.2	-1.0	166
24-35 months	17.1	2.8	-1.0	156
36-47 months	15.6	2.3	-1.1	166
48-59 months	14.8	1.1	-1.1	176
<b>Caregiver's educational attainment<sup>2,a,b</sup></b>				
No education	18.4	2.7	-1.1	160
Less than primary	17.2	3.3	-1.0	524
Primary	10.4	0.0	-0.6	96
Secondary or more	2.6	0.0	-0.5	32
<b>Gendered household type</b>				
Male and female adults	14.6	1.8	-0.9	642
Female adult(s) only	21.5	5.8	-1.1	168
Male adult(s) only	^	^	^	2
Child(ren) only (no adults)	-	-	-	0
<b>Household size</b>				
Small (1-5 members)	16.4	2.7	-1.0	423
Medium (6-10 members)	15.8	2.5	-1.0	362
Large (11+ members)	^	^	^	27
<b>Household hunger</b>				
Little to no hunger	13.9	1.9	-0.9	381
Moderate or severe hunger	18.1	3.3	-1.0	429

<sup>a</sup> Results not statistically reliable, n<30.

<sup>1</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>2</sup> The ZOI interim survey and the FFP survey identify the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

<sup>a-b</sup> A superscript in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between the percent underweight and the child's sex. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source:** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

<sup>80</sup> Ibid.

As shown in Table 7.4, significance tests were run for both children's underweight ( $<-2SD$ ), the Feed the Future standard indicator, as well as the mean weight-for-age Z-scores. Prevalence of underweight varies significantly by levels of caregiver's education, and mean weight-for-age Z-scores vary significantly by levels of children's age group and levels of caregiver's education. The age group with the highest prevalence of underweight is 12-23 months, at 21.7 percent, although prevalence of underweight declines thereafter. Similarly, underweight is highest among children with caregivers with no education, at nearly one in five children (18.4 percent), and declines to only 2.6 percent among children with caregivers with secondary or more schooling (although the sample size of that educational category is only 32 cases).

## 8. Summary and Conclusions

This report presents the results of the first interim assessment for the Feed the Future Malawi Zone of Influence (ZOI). The Malawi ZOI consists of rural areas of seven districts: Balaka, Dedza, Lilongwe, Machinga, Mangochi, Mchinji, and Ntcheu. As was described in more detail in Chapter 2, data for two of these districts, Balaka and Machinga, were obtained from the Food for Peace (FFP) baseline survey. Data collection for the two surveys (by FTF FEEDBACK and ICF International) occurred between late July and mid-October 2015. Feed the Future indicator data collected by ICF International in the Balaka and Machinga districts were harmonized and pooled with FTF FEEDBACK data to produce the Malawi ZOI datasets for analysis.

Sample sizes from these data are sufficient to provide point estimates in the Malawi ZOI for standard Feed the Future indicators, but were not designed to be large enough to measure change in indicator values from the 2012 Malawi baseline assessment. Thirteen Feed the Future indicators are included in this assessment: (1) Daily per capita expenditures (as a proxy for income) in United States Government (USG)-assisted areas; (2) Prevalence of Poverty; (3) Depth of Poverty; (4) Prevalence of households with moderate or severe hunger; (5) Women's Dietary Diversity; (6) Prevalence of children 6-23 months receiving a minimum acceptable diet (MAD); (7) Prevalence of exclusive breastfeeding among children under 6 months of age; (8) Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodity (NRVCC); (9) Prevalence of children 6-23 months who consume targeted NRVCC; (10) Prevalence of underweight women; (11) Prevalence of stunted children under 5 years of age; (12) Prevalence of wasted children under 5 years of age; and (13) Prevalence of underweight children under 5 years of age.

All of these indicators (and all other measures presented in this report) are calculated from primary data collected in Malawi; no secondary data sources were used for the Malawi interim assessment.

### 8.1 Summary of Key Findings

#### 8.1.1 Household Economic Status

In the seven districts of the Malawi ZOI (which is rural areas only), average daily per capita expenditures is \$1.58 (2010 United States Dollar [USD]). The percentage of people living below \$1.25 per day (2005 purchasing power parity [PPP]) is 54.5 percent, and the depth of poverty (the mean percent shortfall relative to the \$1.25 per day poverty line) is 21.0 percent.

#### 8.1.2 WEAI Indicators

While neither the Women's Empowerment in Agriculture Index (WEAI) nor its component sub-indices can be calculated for the interim assessments, this report presents uncensored



headcounts for nine of the 10 WEAI indicators. Uncensored headcounts are the percent of primary adult female decisionmakers who achieve adequacy on each of the WEAI indicators, regardless of their overall empowerment status. The WEAI indicators with the highest achievement include control over the use of income (98.7 percent), input in productive decisions (90.7 percent), and satisfaction with leisure time (88.1 percent). The WEAI indicator with the lowest achievement among primary adult female decisionmakers in the Malawi ZOI is access to and decisions on credit (35.7 percent).

### **8.1.3 Hunger and Dietary Intake**

More than half (55.7 percent) of all households in the Malawi ZOI experience moderate or severe hunger. The women's dietary diversity indicator is 3.38 food groups. This is the mean number of food groups (of nine possible groups) consumed by rural women of reproductive age (15-49 years) in the seven districts of the ZOI. The prevalence of exclusive breastfeeding among children under 6 months is 60.0 percent; three of every five infants in the Malawi ZOI are exclusively breastfed. Among children 6-23 months in the ZOI, 13.4 percent receive a MAD.

The NRVCC in Malawi are soy, groundnuts, and orange-fleshed sweet potatoes (OFSP). Questions about the consumption of these foods were incorporated into the women's and children's dietary intake modules in the FFP baseline and the FTF FEEDBACK ZOI interim surveys (Modules H and I).

Among women of reproductive age in the ZOI, over one-third (35.7 percent) consumed at least one of the three NRVCC foods in the prior day, with groundnuts most commonly consumed (21.5 percent of women), followed by OFSP (12.7 percent) and then soy (10.3 percent). Among children 6-23 months, nearly one-third (32.1 percent) consumed at least one of the three NRVCC foods. The pattern for children is similar to that among women, with groundnuts most commonly consumed (15.0 percent of children 6-23 months), followed by OFSP (14.7 percent) and then soy (9.4 percent).

### **8.1.4 Nutritional Status of Women and Children**

About 8.9 percent of non-pregnant women of reproductive age in the ZOI are underweight (defined as a Body Mass Index [BMI] less than 18.5). Among children less than 5 years in the Malawi ZOI, 42.3 percent (more than two of every five children) are stunted; these children have low height-for-age, indicating long term, chronic undernutrition. About 3.6 percent of children are wasted, or have low weight-for-height. Wasting is an indicator of acute malnutrition. Finally, 16.0 percent of children are underweight, or have low weight-for-age. Underweight is an indicator of either acute or chronic undernutrition in children.

## 8.2 Conclusions

The Malawi ZOI interim assessment was not designed to measure change from baseline indicator values, nor was it designed to draw conclusions about attribution or causality. For a few indicators, however, non-overlapping confidence intervals (CIs) for baseline (2012) and interim (2015) estimates point to a statistically significant change over time. (It should be noted that baseline indicator estimates are shown in the Executive Summary table only.) In addition, when CIs do overlap, which is the case for most indicators, conclusions cannot be made regarding statistically significant change from baseline to interim without conducting a statistical test of the difference.

Significance tests were conducted for a subset of indicators shown in the indicator estimate table in the Executive Summary of this report. The indicators that were tested include the children's anthropometry indicators (stunting, wasting, and underweight). Of the three indicators tested, two exhibited a statistically significant difference between baseline and interim: children's stunting and wasting.

The prevalence of children's stunting declined from the baseline prevalence of 49.2 percent in 2010 to 42.3 percent in 2015. Among male children, stunting declined from 52.3 percent to 44.3 percent over this period. Children's wasting had a statistically significant reduction from 6.4 percent to 3.6 percent. No statistically significant difference was found from 2010 to 2015 for children's underweight.

For the remainder of the indicators presented in the Executive Summary table—indicators for which significance tests were not conducted—non-overlapping CIs demonstrate significant differences between estimates. Significant differences were found over time between the baseline and interim estimates for the prevalence of poverty (\$1.25/day 2005 PPP); the prevalence of households with moderate or severe hunger; and the three WEAI indicators of ownership of assets, control over the use of income, and workload.

As shown in the summary table on pages xiv-xvi in the Executive Summary, the prevalence of poverty exhibits a significant decline between baseline (66.7 percent) and interim (54.5 percent). However, the prevalence of households with moderate or severe hunger is showing the opposite pattern; this indicator has increased significantly between baseline (40.2 percent) and interim (55.7 percent).

The decline in poverty and the increase in household hunger between the baseline and interim assessments in the Malawi ZOI is a somewhat puzzling and counterintuitive finding. It is worthwhile to keep in mind that the baseline poverty indicator was calculated from secondary data, the Third Integrated Household Survey (IHS3) (collected in 2010-2011, over a 12-month period), and not the baseline ZOI survey (collected in 2012). Interim expenditure data, in contrast, were collected over a shorter period, from late July to mid-October 2015. Moreover,

data for the interim household hunger indicator were collected after a poor agricultural season in the ZOI, which could explain this indicator's increase in conjunction with the rather counterintuitive decrease in prevalence of poverty.

In addition to prevalence of poverty and household hunger, three of the WEAI uncensored headcounts are significantly different between baseline and interim. The control over the use of income and the workload indicators have increased between baseline and interim. Primary female decisionmakers' adequacy on control over the use of income has increased from 92.7 percent at baseline, to 98.7 percent at interim. Similarly, women's adequacy on the WEAI workload indicator has increased from 43.4 percent at baseline to 76.6 percent at interim. The women's ownership of assets indicator has declined between the two surveys, from 91.5 percent at baseline to 87.4 percent at interim.

Notwithstanding the description above regarding the specific indicators that exhibit statistically significant change over time, this first interim assessment for the Malawi ZOI was designed to present point estimates for the Feed the Future indicators. The second interim assessment for the Malawi ZOI, planned for 2017, will explicitly explore change in indicator estimates over time.

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## Appendix I. Supplementary Data and Figures

### AI.1 Interim Feed the Future Indicator Estimates

Unweighted sample sizes, point estimates, standard deviations, confidence intervals, design effects (DEFF), and nonresponse rates for the interim Feed the Future indicators for the Zone of Influence.

Feed the Future indicator	Estimate				Non-response rate <sup>1</sup>	n
	Indicator <sup>a</sup>	SD	95% CI	DEFF		
Daily per capita expenditures (as a proxy for income) in USG-assisted areas (2010 USD)						
All households	1.58	1.14	1.39 – 1.76	7.1	0.8	1,021
Male and female adults	1.55	1.07	1.33 – 1.78	8.2	0.8	737
Female adult(s) only	1.61	1.19	1.30 – 1.91	4.0	0.8	238
Male adult(s) only	3.17	7.27	0.89 – 5.44	1.1	0.8	46
Child(ren) only (no adults)	-	-	-	-	-	0
Prevalence of Poverty: Percent of people living on less than \$1.25/day (2005 PPP)						
All households	54.5	-	46.2 – 62.5	7.1	0.8	1,021
Male and female adults	58.1	-	46.5 – 68.9	10.4	0.8	737
Female adult(s) only	43.9	-	29.8 – 59.0	5.8	0.8	238
Male adult(s) only	26.9	-	3.2 – 80.7	1.7	0.8	46
Child(ren) only (no adults)	-	-	-	-	-	0
Depth of Poverty: Mean percent shortfall relative to the \$1.25/day (2005 PPP) poverty line <sup>a</sup>						
All households	21.0	25.3	16.3 – 25.7	8.9	0.8	1,021
Male and female adults	21.4	24.0	15.4 – 27.3	11.6	0.8	737
Female adult(s) only	20.2	27.1	12.1 – 28.3	5.4	0.8	238
Male adult(s) only	4.1	19.0	0.0 – 11.5	1.7	0.8	46
Child(ren) only (no adults)	-	-	-	-	-	0
Percent of women achieving adequacy on Women's Empowerment in Agriculture Index Indicators <sup>2</sup>						
Input in productive decisions	90.7	-	87.9 – 92.9	1.6	7.9	891
Autonomy in production	n/a	n/a	n/a	n/a	n/a	n/a
Ownership of assets	87.4	-	84.3 – 90.0	1.7	7.9	891
Purchase, sale or transfer of assets	75.2	-	71.2 – 78.9	1.8	7.9	891
Access to and decisions on credit	35.7	-	31.9 – 39.8	1.5	7.9	891
Control over use of income	98.7	-	97.6 – 99.3	1.2	7.9	891
Group member	76.1	-	72.4 – 79.5	1.6	7.9	891
Speaking in public	68.0	-	64.6 – 71.2	1.2	7.9	891
Workload	76.6	-	73.2 – 79.8	1.4	7.9	891
Leisure	88.1	-	85.3 – 90.5	1.4	7.9	891



Feed the Future indicator	Estimate				Non-response rate <sup>1</sup>	n
	Indicator <sup>a</sup>	SD	95% CI	DEFF		
Prevalence of households with moderate or severe hunger						
All households	55.7	-	45.8 – 65.2	10.0	1.0	1,019
Male and female adults	55.3	-	44.5 – 65.6	8.2	0.9	736
Female adult(s) only	59.3	-	44.0 – 73.1	7.1	1.2	237
Male adult(s) only	22.1	-	2.4 – 76.5	6.0	0.8	46
Child(ren) only (no adults)	-	-	-	-	-	0
Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age						
All women age 15-49	3.38	1.53	3.15 – 3.61	5.2	5.7	932
Prevalence of exclusive breastfeeding among children under 6 months of age						
All children	60.0	-	48.5 – 70.6	1.1	2.8	80
Male children	53.2	-	38.0 – 67.8	1.0	0.7	41
Female children	67.4	-	51.8 – 79.9	0.9	4.9	39
Prevalence of children 6-23 months receiving a minimum acceptable diet						
All children	13.4	-	9.3 – 18.8	1.1	2.4	245
Male children	11.4	-	6.6 – 18.8	1.1	3.0	128
Female children	15.6	-	10.1 – 23.4	0.9	1.7	117
Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities						
Soy and soy products: All women age 15-49	10.3	-	8.1 – 13.0	1.5	5.7	932
Groundnuts and groundnut products: All women age 15-49	21.5	-	18.3 – 25.1	1.6	5.7	932
Orange-fleshed sweet potatoes (OFSP) and OFSP products: All women age 15-49	12.7	-	10.1 – 15.7	1.7	5.7	932
Prevalence of women of reproductive age who consume at least one targeted nutrient-rich value chain commodity						
All women age 15-49	35.7	-	32.7 – 38.9	1.0	5.7	932
Prevalence of children 6-23 months who consume specific targeted nutrient-rich value chain commodities						
Soy and soy products: All children	9.4	-	6.2 – 13.9	1.0	2.4	245
Groundnuts and groundnut products: All children	15.0	-	11.0 – 20.0	0.9	2.4	245
Orange-fleshed sweet potatoes (OFSP)/OFSP products: All children	14.7	-	10.6 – 20.1	1.1	2.4	245
Prevalence of children 6-23 months who consume at least one targeted nutrient-rich value chain commodity						
All children	32.1	-	26.9 – 37.8	0.8	2.4	245
Male children	34.5	-	27.8 – 41.8	0.7	3.0	128
Female children	29.5	-	21.0 – 39.6	1.2	1.7	117
Prevalence of underweight women						
All non-pregnant women age 15-49	8.9	-	7.0 – 11.2	1.1	5.7	848

Feed the Future indicator	Estimate				Non-response rate <sup>1</sup>	n
	Indicator <sup>a</sup>	SD	95% CI	DEFF		
Prevalence of stunted children under 5 years of age						
All children	42.3	-	38.1 – 46.6	1.5	5.0	812
Male children	44.3	-	39.2 – 49.5	1.2	4.1	424
Female children	40.0	-	34.9 – 45.3	1.1	6.1	388
Prevalence of wasted children under 5 years of age						
All children	3.6	-	2.5 – 5.3	1.1	5.0	812
Male children	4.1	-	2.5 – 6.5	1.1	4.1	424
Female children	3.2	-	1.8 – 5.5	1.0	6.1	388
Prevalence of underweight children under 5 years of age						
All children	16.0	-	13.7 – 18.7	1.0	5.0	812
Male children	15.5	-	12.3 – 19.5	1.1	4.1	424
Female children	16.6	-	13.3 – 20.4	0.9	6.1	388

<sup>1</sup> Nonresponse rates for each indicator are derived by the difference between the number of eligible cases and the number of observations available for analysis divided by the number of eligible cases.

<sup>2</sup> The full WEA score cannot be calculated because interim data were collected from women only and the autonomy indicator was dropped. The second interim survey (2017) will collect the full set of data from women and men and will report on the full WEA.

<sup>a</sup> Significance tests were run for associations between each indicator (bold text title in the rows) and the disaggregate variable below the indicator title. For example, a test was done between per capita expenditures and gendered household type. When an association between the indicator and disaggregate variable is found to be significant ( $p < 0.05$ ), the superscript is noted next to the indicator.

n/a Not available.

**Source(s):** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## Appendix 2. Methodology

### A2.1 Sampling and Weighting

#### *Sampling*

The sample of households for the interim survey followed a two-stage stratified cluster sampling design. In the first stage, 43 enumeration areas (EAs) were selected from the 2008 national census frame in five districts (Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu) by probability proportional to size sampling. In the second stage, 20 households were selected for interview at random from a comprehensive list of households generated during a listing operation that was fielded from August 5 to August 12, 2015. EAs with total number of households greater than 300 in the household listing were segmented into two or more clusters, each with total number of households less than 200.

In the two districts of Balaka and Machinga, an additional six EAs were selected for the non-Project Concern International (PCI) award areas with 20 households per EA. Also, 90 households were randomly selected from the ICF baseline survey of the PCI award areas.

#### *Weighting*

Data required for weighting of survey data were collected throughout the sampling process, and included: (1) EA measure of size (where size is in terms of number of population or number of households) used for selection of EAs; (2) measure of size of strata from which EAs are drawn; (3) measure of size of EAs at time of listing; and (4) response rates among households, women, and men. Weights were calculated for households, women, men, and children in the sample.

Design weights were calculated based on the separate sampling probabilities for each sampling stage and cluster. For the five districts (Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu) as well as the non-PCI award areas in Balaka and Machinga, we have:

$P_{1hi}$  = first-stage sampling probability of the  $i$ -th cluster in stratum  $h$ .

$P_{2hi}$  = second-stage sampling probability within the  $i$ -th cluster (household selection).

The probability of selecting cluster  $i$  in the sample is:

$$P_{1hi} = \frac{m_h \times N_{hi}}{N_h}$$

The second-stage probability of selecting a household in cluster  $i$  is:

$$P_{2hi} = \frac{n_{hi}}{L_{hi}}$$

where:

$m_h$  = number of sample clusters selected in stratum  $h$ .

$N_{hi}$  = total population in the frame for the  $i$ -th sample cluster in stratum  $h$ .

$N_h$  = total population in the frame in stratum  $h$ .

$n_{hi}$  = number of sample households selected for the  $i$ -th sample cluster in stratum  $h$ .

$L_{hi}$  = number of households listed in the household listing for the  $i$ -th sample cluster in stratum  $h$ .

The overall selection probability of each household in cluster  $i$  of stratum  $h$  is the product of the selection probabilities of the two stages:

$$P_{hi} = P_{1hi} \times P_{2hi} = \frac{m_h \times N_{hi}}{N_h} \times \frac{n_{hi}}{L_{hi}}$$

The design weight for each household in cluster  $i$  of stratum  $h$  is the inverse of its overall selection probability:

$$W_{hi} = \frac{1}{p_{hi}} = \frac{N_h \times L_{hi}}{m_h \times N_{hi} \times n_{hi}}$$

The sampling weight was calculated with the design weight corrected for nonresponse for each of the selected clusters. Response rates were calculated at the cluster level as ratios of the number of interviewed units over the number of eligible units, where units could be household or individual (woman, child).

For the PCI award area in Balaka and Machinga where ICF collected data, household and individual weights for the overall ICF sample were provided by ICF. The sampling weight for the 90 randomly selected households was calculated to adjust for the selection probability:

$$W_{hi} = \frac{W'_{hi}}{p'_{hi}} = W'_{hi} \times \frac{N}{90}$$

where:

$W'_{hi}$  = sampling weight for the overall ICF sample in district  $h$ .

$N$  = total number of households in the overall ICF sample.

## A2.2 Poverty Prevalence and Expenditure Methods

### *Data Source*

The expenditure and poverty indicators calculated for the zone of influence (ZOI) interim assessment were derived using data collected in Module E of the Malawi interim survey of 2015 and Module H of the Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015). These two surveys were collected between July and October of 2015. The representative surveys included a combined sample of 1,071 selected households within the seven districts of the Feed the Future ZOI. After excluding households with incomplete data, 1,021 households provided complete expenditure data and were used in the analysis.

### *Methodology Overview*

This report assesses poverty based on household consumption and expenditure data. Detailed information is collected on the types and amounts of foods consumed and the non-food expenses incurred by households. These data were aggregated into a single measure of consumption or the “consumption aggregate,” that represents the well-being of the household. The construction of the aggregate was performed by Malawi’s National Statistical Office (NSO), drawing heavily from its own procedure for measuring poverty nationwide using the Integrated Household Surveys. The NSO’s own procedures reflect international best practices established by the poverty measurement literature.<sup>81,82</sup>

### *Components of the Consumption Aggregate*

Broadly, the consumption aggregate comprises four main components: Food, Non-food, Non-consumer durables, Consumer durable goods, and Housing (actual or self-estimated rental cost of housing).

### *Food Component*

The food component can be constructed by simply adding up the consumption of all food items in the household. The Feed the Future ZOI survey collected data on 113 food items that were organized in 11 categories: cereals, grains, and cereal products; roots, tubers, and plantains; nuts and pulses; vegetables; meat, fish, and animal products; fruits; cooked food from vendors; milk and milk products; sugar, fats, and oil; beverages; and spices and miscellaneous. The surveys recorded the quantity and price of purchased food, the quantity of food consumed from own production, and the quantity consumed from gifts based on a 7-day recall period.

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<sup>81</sup> Deaton and Zaidi. (2002).

<sup>82</sup> Haughton and Khandker. (2009).

The quantity of foods consumed was measured with 32 different quantity unit codes ranging from standard units as *kilograms* and *liters* to non-standard units as *heaps*, *pails*, *plates*, *cups*, and *basins*. The conversion of non-standard units into kilograms and liters was necessary because it considerably simplified the estimation of the monetary value of foods that were grown by the household or given to the household. The conversion factors that were developed for the Integrated Household Surveys were used in converting the non-standard food units into common metric values.

Having established metrics for measuring quantities, values were estimated for the non-purchased food. Rather than relying on respondents' own evaluation of the value of this food, the price per unit of a food was estimated from the purchased foods. Price per unit was calculated by dividing the amount paid by the quantity purchased. Ideally, food items would be relatively homogenous in cost and quality across households. However, differences within certain types of food exist. To minimize spatial price and quality differences, the median price per unit values were computed at several levels: cluster, traditional authority (TA), district, and for the whole country. If a household consumed a food item that was not purchased in the last week, the median price per unit value from its cluster would be used to value that consumption. If no other household purchased the item in that cluster or if there were insufficient observations to obtain a reliable price per unit, the median unit value from the next higher geographic level was used to estimate the value of that consumption.

The total value of food consumed was then created as the sum of the purchase price of food consumed within the past week, the imputed price of foods consumed from the household's own production, and the imputed price of foods consumed from food that was gifted to the household.

Expenditures on drinking water were added to the food component.

### ***Non-Food, Non-Consumer Durables***

The survey also collected data on a range of non-food items such as, kerosene, electricity, health, transport, communications, recreation, education, furnishings, personal care, etc. The recall period varied from the past week to the past year, depending on the frequency that the item is typically purchased.

Several non-food items were excluded from the consumption aggregate because they represented very large expenses that do not reflect regular purchases, were not related to a household's well-being, or were associated with a household's business rather than private consumption. The following items were excluded: payments of mortgages or debts, losses to theft, remittances to other households, and expenditures on marriages, lobola, births and funerals, repairs to the dwelling, and construction materials.

## ***Durable Goods***

Ownership of durable goods is an important component of the welfare of the population. Given that these goods last for many years, the contribution to the consumption aggregate is not the purchase price. Instead, a value is estimated for the utility that a household derives from the durable good during the specified time frame. In other words, instead of using the *expenditure* on the asset, a *usage value* of the asset is calculated and added to the consumption aggregate.

This estimation uses information on the number of durable goods owned, age, and their current value. First, purchases of these durable goods are assumed to be uniformly distributed over time. This assumption allows the estimation of the average lifetime of each durable good. The lifespan of a durable good is calculated as twice the average age of the good reported in the survey. Second, the remaining lifetime is calculated as the expected lifetime minus the current age of the item. If the current age of the durable good exceeded the expected lifetime, the remaining lifetime was assumed to be 2 years. Last, the daily use value of each durable good is calculated as the current value divided by the remaining lifetime. A total of 31 durable goods were covered by the survey. In keeping with the NSO procedure, only 27 consumption durables were included in the consumer durables component of the consumption aggregate. The following durables were not included as they are production durables: boat, mini-bus vehicles, lorries, and beer-brewing drums.

## ***Housing***

The housing component includes expenditures on electricity, telephone, cell phone, firewood, and rental expenditures. Self-reported rent for households in rented dwellings was used, and for non-renters self-assessed rental expenditure was used. A hedonic rental regression was estimated with the rent (actual or self-reported) as the dependent variable and a set of independent variables that included the type of walls, roof, and floor; the number of rooms; the main source of drinking water and sanitation; access to electricity; and the geographical location of the household. The predicted rent from this regression was used to impute the value of housing for those households that reported an unreasonable rent or did not report any rent at all.

## **Price Adjustments and Conversions**

### ***Outlier Corrections***

Consumption poverty analyses are sensitive to the presence of outliers, which can bias results. To guard against extreme values, quantity and price data were reviewed using graphical tools (box plots) and tabulations. Generally, extreme values greater than the 99<sup>th</sup> percentile or lower than the first percentile were considered as outliers and replaced with median values. The outliers were identified for specific consumption items by district. Similarly, replacement median

values were also derived for specific consumption items by district. Since the consumption of many household items is associated with household size, the consumption data were first normalized by household size before identifying and rectifying outliers.

### ***Spatial Price Adjustment***

Prices vary markedly across geographical areas. The aggregated consumption data have been adjusted for spatial, cost-of-living differences. Only domain level Consumer Price Index (CPI) data were available i.e., rural south and rural center. Consequently, the surveyed districts were grouped into the two rural sub-regions. The national rural CPI for October 2015 was used as the base. The price index for the survey period shows that relative to the national price level for all rural areas, the rural south had the higher price level than the rural center. The deflation of the consumption was done by dividing nominal consumption expenditure by the price index.

### **Currency Conversions Using CPI and PPP**

The consumption data were collected between July and October of 2015. In order to analyze the data, the consumption values and poverty thresholds had to be adjusted for inflation and converted between Malawi Kwacha (MK) and United States Dollars (USDs). The inflation adjustments were done using the CPI and the conversion between kwacha and dollars was done using the 2005 PPP. The currency conversions presented in this analysis were prepared as follows:

- Consumption data were collected between July and October of 2015. The average monthly CPI during these months was used as the 2015 CPI value. The CPI values available have a base year of 2012, and these values were re-based to 2005. The 2015 CPI used to inflate poverty threshold and consumption aggregates was 382.93.<sup>83</sup>
- The \$1.25 2005 PPP poverty threshold was converted to 2015 MK by using the Malawi 2005 PPP value of 56.92. The \$1.25 2005 PPP threshold is equivalent to 272.45 MK, per person, per day in 2015 prices.
- Consumption values in 2015 were converted to 2010 USD by adjusting for 2005 PPP. It was converted to 2010 USD by using the formula  $(2005 \text{ MK CPI} / 2015 \text{ MK CPI}) * (1 / \text{PPP } 2005) * (2010 \text{ USD CPI} / 2005 \text{ USD CPI})$  where PPP 2005 = 56.92; 2005 MK CPI = 100; 2015 MK CPI = 382.93; 2010 USD CPI = 111.65; and 2005 USD CPI = 100. The conversion factor was .0051224.

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<sup>83</sup> NSO. (2015a).



- When inflating the national poverty thresholds from 2013 to 2015 prices, the 2013 price should be multiplied by the 2015 MK CPI (382.93) divided by the 2013 MK CPI (258.77). This value is 1.48.
- The CPI values used for the currency conversions listed here were taken from the World Bank's Databank<sup>84</sup> unless otherwise noted. All CPI values have been adjusted to a base year of 2005 for presentation in this report.

## Weights

Expenditure estimates are reflective of the consumption and poverty of individuals within the ZOI. The data are collected at the household level, and individual estimates are produced by multiplying the household sampling weight by the number of *usual* household members in the household.

## National Poverty Thresholds

The two national poverty lines (total poverty line and extreme poverty line), which are in MK, were first generated by the Government of Malawi through the NSO in 2004 by using a cost-of-basic-needs approach. The total poverty line is the sum of the food poverty line and the non-food poverty line. The poverty lines were generated as part of the Second Integrated Household Survey 2004-2005. They were subsequently adjusted in 2011 as part of the Third Integrated Household Survey 2010-2011, and underwent an additional update in 2013 as part of the Integrated Household Panel Survey 2013.

The national poverty line used in this analysis is 85,852 per person per year or 235.21 per person per day. The national extreme poverty line used in this analysis is the Ultra poverty threshold used by the Government of Malawi, which includes only the food portion of the total poverty line. The national extreme poverty line is 53,262 per person per year or 145.92 per person per day.

**Table A2.1** presents the daily values of the national poverty lines and the international extreme thresholds adjusted for 2005 PPP and 2011 PPP and inflated to 2015 prices.

**Table A2.1. Poverty thresholds**

Threshold	Daily, per capita values			
	2005 PPP	2011 PPP	2013 Kwacha	2015 Kwacha
<b>International extreme thresholds</b>				
\$1.25 (2005 PPP), per person per day	1.25	n/a	184.11	272.45
\$1.90 (2011 PPP), per person per day	n/a	1.90	228.81	338.59
<b>National thresholds</b>				
85,852 (2013 MK), per person per year	1.60	1.95	235.21	348.07
53,262 (2013 MK), per person per year	0.99	1.21	145.92	215.93

n/a Not available.

<sup>84</sup> The World Bank. (2015a).

## International Poverty Threshold of \$1.90 (2011 PPP)

In 2011 the International Comparison Program collected data to update the PPP indexes that are used to standardize consumption across different economies.<sup>85</sup> In late 2015, The World Bank updated the \$1.25 (2005 PPP) poverty threshold to a comparable \$1.90 (2011 PPP).<sup>86</sup> The update reflects changes in market prices and currencies based on the 2011 PPP maintaining while the substantive level of poverty was measured by the \$1.25 (2005 PPP) measure. Because future assessments in Malawi are likely to evaluate poverty using the \$1.90 (2011 PPP) thresholds, **Table A2.2** has been prepared to provide a comparison for future assessments.

All indicators and analyses presented in this report have utilized the 2005 PPP to convert between MK and USDs. The only use of the 2011 PPP was to create Table A2.2. The \$1.90 (2011 PPP) poverty threshold was converted to 2015 MK by using the Malawi 2011 PPP value of 78.02.<sup>87</sup> The \$1.90 (2011 PPP) threshold is equivalent to 148.24 MK, per person, per day in 2011 prices. Using the 2011 CPI of 167.65 (2005=100) and the 2015 CPI of 382.93 (2005=100), the \$1.90 (2011 PPP) threshold is 338.59 MK in 2015 prices.

The \$1.90 (2011 PPP) poverty line in 2015 MK is 338.59, which is higher than the 272.45 MK (\$1.25 [2005 PPP]) threshold. Because the 2011 PPP threshold is higher than the 2005 PPP threshold, poverty rates under the new threshold are higher than the rates reported in Table 4.2. The poverty prevalence using the 2005 PPP threshold is 54.5 percent whereas the poverty prevalence under the 2011 PPP threshold is 68.9 percent.

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<sup>85</sup> The World Bank. (2014).

<sup>86</sup> The World Bank. (2015b).

<sup>87</sup> The World Bank. (2015c).

**Table A2.2. Poverty at the \$1.90 (2011 PPP)<sup>1</sup> per person per day threshold**

Characteristic	Prevalence of poverty <sup>2</sup>		Depth of poverty <sup>3</sup>		Average consumption shortfall of the poor <sup>4</sup>		
	Percent population <sup>a</sup>	n <sup>5</sup>	Percent of poverty line <sup>b</sup>	n <sup>5</sup>	In USD 2011 PPP <sup>c</sup>	Percent of poverty line <sup>c</sup>	n <sup>5</sup>
Total (All households)	68.9	1,021	27.5	1,021	0.76	40.0	582
<b>Gendered household type</b>							
Male and female adults	67.9	737	28.5	737	0.80	42.0	432
Female adult(s) only	72.8	238	24.8	238	0.65	34.1	144
Male adult(s) only	26.9	46	8.6	46	^	^	6
Child(ren) only (no adults)	-	-	-	0	-	-	0
<b>Household size</b>							
Small (1-5 members)	63.8	669	27.2	669	0.81	42.7	326
Medium (6-10 members)	73.8	337	28.0	337	0.72	37.9	245
Large (11+ members)	^	15	^	15	^	^	11
<b>Household educational attainment<sup>b,c</sup></b>							
No education	70.6	36	22.4	36	^	^	22
Less than primary	76.7	616	33.0	616	0.82	43.0	401
Primary	61.0	276	24.8	276	0.77	40.7	127
Secondary or more	54.0	93	9.8	93	0.34	18.2	32

^ Results not statistically reliable, n<30.

<sup>1</sup> The international poverty line was updated in 2015. The line is \$1.90 (2011 PPP) per person per day.

<sup>2</sup> The prevalence of poverty is the percentage of individuals living below the \$1.90 (2011 PPP) per person per day threshold. Poverty prevalence is sometimes referred to as the poverty incidence or poverty headcount ratio.

<sup>3</sup> The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

<sup>4</sup> The average consumption shortfall of the poor is the average amount below the poverty threshold of a person in poverty. This value is estimated only among individuals living in households that fall below the poverty threshold.

<sup>5</sup> Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<sup>a-c</sup> Superscripts in the column heading indicates significance tests were performed for associations between the indicator in the column heading and each of the variables in the rows. For example, a test was done between prevalence of poverty and gendered household type. When an association between the column indicator and row variable is found to be significant (p<0.05), the superscript for the indicator in the column heading is noted next to the row variable.

**Source(s):** FTF FEEDBACK ZOI Interim Survey, Malawi 2015; Baseline Study of FY 2014 Food for Peace (FFP) Development Food Assistance Projects in Malawi (2015).

## A2.3 Criteria for Achieving Adequacy for Women's Empowerment in Agriculture Indicators

The table below presents the Women's Empowerment in Agriculture five dimensions of empowerment, their corresponding empowerment indicators, the survey questions that are used to elicit the data required to establish adequacy or inadequacy for each empowerment indicator, and how adequacy criteria are defined for each empowerment indicator.

Dimension	Indicator name	Survey questions	Aggregation of adequacy criteria	Inadequacy criteria
<b>Production</b>	Input in productive decisions	G2.02 A-C, F How much input did you have in making decisions about: food crop farming, cash crop farming, livestock raising, fish culture; G5.02 A-D To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to: agriculture production, what inputs to buy, what types of crops to grow for agricultural production, when or who would take crops to market, livestock raising.	Must have at least some input into or can make own personal decisions in at least two decisionmaking areas	Inadequate if individual participates BUT does not have at least some input in decisions; or she does not make the decisions nor feels she could
<b>Resources</b>	Ownership of assets	G3.02 A-N Who would you say owns most of the [ITEM]? Agricultural land, large livestock, small livestock, chicks etc.; Fish pond/equipment; Farm equipment (non-mechanized); Farm equipment (mechanized); Non-farm business equipment; House; Large durables; Small durables; Cell phone; Non-agricultural land (any); Transport	Must own at least one asset, but not only one small asset (chickens, non-mechanized equipment, or small consumer durables)	Inadequate if household does not own any asset or only owns one small asset, or if household owns the type of asset BUT she does not own most of it alone

Dimension	Indicator name	Survey questions	Aggregation of adequacy criteria	Inadequacy criteria
<b>Resources</b>	Purchase, sale, or transfer of assets	G3.03-G3.05 A-G Who would you say can decide whether to sell, give away, rent/mortgage [ITEM] most of the time? G3.06 A-G Who contributes most to decisions regarding a new purchase of [ITEM]? Ag land; Large livestock, small livestock; Chickens etc.; Fish pond; Farm equipment (non-mechanized); Farm equipment (mechanized).	Must be able to decide to sell, give away, or rent at least one asset, but not only chickens and non-mechanized farming equipment	Inadequate if household does not own any asset or only owns one small asset, or household owns the type of asset BUT she does not participate in the decisions (exchange or buy) about it
	Access to and decisions on credit	G3.08-G3.09 A-E Who made the decision to borrow/what to do with money/item borrowed from [SOURCE]? Non-governmental organization (NGO); Informal lender; Formal lender (bank); Friends or relatives; ROSCA (savings/credit group).	Must have made the decision to borrow or what to do with credit from at least one source	Inadequate if household has no credit OR used a source of credit BUT she did not participate in ANY decisions about it
<b>Income</b>	Control over use of income	G2.03 A-F How much input did you have in decisions on the use of income generated from: Food crop, Cash crop, Livestock, Non-farm activities, Wage and salary, Fish culture; G5.02 E-G To what extent do you feel you can make personal decisions regarding these aspects of household life if you want(ed) to: Your own wage or salary employment? Minor household expenditures?	Must have some input into decisions on income, but not only minor household expenditures	Inadequate if participates in activity BUT has no input or little input on decisions about income generated

Dimension	Indicator name	Survey questions	Aggregation of adequacy criteria	Inadequacy criteria
Leadership	Group member	G4.05 A-K Are you a member of any: Agricultural/livestock/fisherie producer/market group; Water, forest users', credit or microfinance group; Mutual help or insurance group (including burial societies); Trade and business association; Civic/charitable group; Local government; Religious group; Other women's group; Other group.	Must be an active member of at least one group	Inadequate if not an active member of a group or if unaware of any group in the community or if no group in community
	Speaking in public	G4.01 – G4.03 Do you feel comfortable speaking up in public: To help decide on infrastructure (like small wells, roads) to be built? To ensure proper payment of wages for public work or other similar programs? To protest the misbehavior of authorities or elected officials?	Must feel comfortable speaking in at least one public setting	Inadequate if not at all comfortable speaking in public
Time	Workload	G6 Worked more than 10.5 hours in previous 24 hours.	Total summed hours spent toward labor must be less than 10.5	Inadequate if works more than 10.5 hours a day
	Leisure	G6.02 How would you rate your satisfaction with your available time for leisure activities like visiting neighbors, watching TV, listening to radio, seeing movies or doing sports?	Must rate satisfaction level as at least five out of 10	Inadequate if not satisfied (<5)

## Appendix 3. Feed the Future Alignment with Food for Peace for Data Collection in Malawi

### *Background*

In 2012, the Bureau for Food Security (BFS) and the Bureau of Democracy, Conflict, and Humanitarian Assistance/Food for Peace (FFP) committed to integrate Title II food development assistance programs into Feed the Future, to align FFP monitoring and evaluation (M&E) with Feed the Future M&E. This commitment included expanding the definition of the Feed the Future Zones of Influence (ZOI) to include FFP development programs. To differentiate between the original Feed the Future and the added FFP activities and related program areas, the original Feed the Future activities and program areas are referred to as FTF-Development Assistance (DA), and the FFP-managed activities and program areas are referred to as FTF-FFP.

USAID/Malawi's FTF-DA ZOI is composed of the rural areas of seven districts in central and south central Malawi: Balaka, Dedza, Lilongwe, Mangochi, Machinga, Mchinji, and Ntcheu. The inclusion of FFP adds three districts to this (Blantyre, Chikwawa, and Nsanje) and overlapping areas in Balaka and Machinga. Catholic Relief Services (CRS) manages activities in the three additional districts and Project Concern International (PCI) manages activities in Balaka and Machinga.

In May 2014, staff from BFS and FFP met to discuss how to establish values for the Feed the Future population-based indicators in the expanded ZOI in Malawi, while reducing survey burden on the populations in the districts where the FTF-DA and FTF-FFP program areas overlap. The values are to include the original FTF-DA and FTF-FFP food security program areas. BFS's M&E contractor, FTF FEEDBACK conducted the interim FTF-DA ZOI survey. FFP's M&E contractor, ICF International conducted the FTF-FFP ZOI baseline survey.

### *Proposed Approach*

BFS and FFP agreed to coordinate the two population-based surveys to achieve two primary objectives:

- I. Provide the data needed to quantify:
  - a. Interim FTF-DA ZOI values for the 11 Feed the Future population-based indicators (excluding anemia) in the seven districts of the FTF-DA ZOI;

- b. Baseline FFP program area and award-level values at the district-level in Blantyre (rural), Chikwawa, and Nsanje (the CRS area) and at the sub-district (TA) level in rural areas of Balaka and Machinga (the PCI area); and
  - c. Values for the 2015 interim Feed the Future indicators in the expanded Feed the Future ZOI, which includes rural areas of 10 districts: Balaka, Blantyre (rural), Chikwawa, Dedza, Lilongwe, Mangochi, Machinga, Mchinji, Nsanje, and Ntcheu.
2. Align the timing of data collection;
  3. Align the indicators collected;
  4. Align survey instruments (where those instruments overlap); and
  5. Eliminate duplicate data collection in Balaka and Machinga.

To accomplish these objectives, BFS directed FTF FEEDBACK to:

1. Coordinate with BFS, FFP, and ICF International; and
2. Collect data on the 11 Feed the Future indicators in rural areas of five districts: Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu.

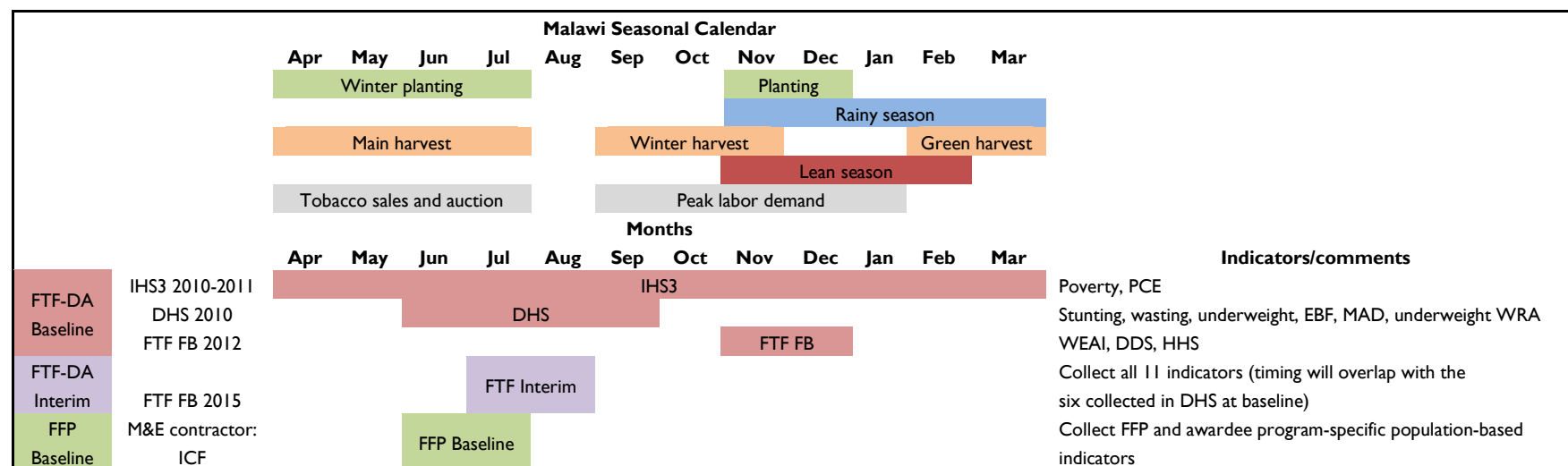
Similarly, FFP directed ICF to:

1. Coordinate with FFP, BFS, and FTF FEEDBACK;
2. Collect data at the district level in Balaka, Blantyre (rural), Chikwawa, Machinga, and Nsanje to provide:
  - a. Baseline data for the CRS award areas in Blantyre (rural), Chikwawa, and Nsanje; and
  - b. District-level data for the PCI award areas of Balaka and Machinga to be combined with the FTF FEEDBACK data to compute FTF-DA ZOI interim values.
3. Oversample in the EAs in the PCI implementation area in Balaka and Machinga to provide baseline data for PCI;
4. Collect data for a streamlined/reduced WEAI; and
5. Provide district-level datasets and related documentation for Balaka and Machinga to FTF FEEDBACK.



Additionally, FTF FEEDBACK established a subcontract with NSO of Malawi to calculate the consumption aggregates for all 10 districts in the expanded Feed the Future ZOI. FTF FEEDBACK was responsible for merging the data collected by FTF FEEDBACK and ICF International and providing one complete dataset to the NSO for analysis. Using the expenditure aggregates produced by the NSO, FTF FEEDBACK and ICF International will each be responsible for calculating the poverty and expenditure indicators for their respective projects.

**Table A2-3** presents a seasonal calendar for Malawi; the three data sources for the FTF-DA baseline, which indicators were derived from each data source, and the year and months during which the data were collected in the FTF-DA ZOI; and the agreed-upon timing for the FTF-DA interim and FTF-FFP baseline data collection.

**Table A2.3. Malawi seasonal calendar, data sources, and timing of data collection**

IHS = Integrated Household Survey.

DHS = Demographic and Health Survey.

FTF FB = FTF FEEDBACK.

PCE = Daily per capita expenditures.

EBF = Exclusive breastfeeding 0-5 months old.

MAD = Minimum adequate diet 6-23 months old.

WEAI = Women's Empowerment in Agriculture Index.

WRA = Women of reproductive age.

DDS = Women's Dietary Diversity.

HHS = Household Hunger Scale (households with moderate or severe hunger).



## **Feed the Future Malawi Zone of Influence Interim Survey Questionnaire**

Disclaimer: The Feed the Future Malawi Zone of Influence Interim Survey Questionnaire is available on the Development Experience Clearinghouse and Development Data Library in the English language only. Should you require the translated version(s) of this questionnaire in Chichewa and/or Yao language, please contact the United States Agency for International Development, Bureau for Food Security via email at [bfs.mel@usaid.gov](mailto:bfs.mel@usaid.gov).

# MODULE A. Household Identification Cover Sheet

HOUSEHOLD IDENTIFICATION		CODE	A09. INTERVIEWER VISITS					
A01. HOUSEHOLD IDENTIFICATION	<input type="text"/>		DATE	1	2	3	FINAL VISIT	
A02. CLUSTER NUMBER	<input type="text"/>						DAY <input type="text"/>	
A03. VILLAGE	<input type="text"/>						MONTH <input type="text"/>	
A04. TA/TOWN	<input type="text"/>						YEAR <input type="text"/>	
A05. DISTRICT	<input type="text"/>		INTERVIEWER'S NAME				INT. NUMBER <input type="text"/>	
A06. REGION	<input type="text"/>		RESULT*				RESULT <input type="text"/>	
A07. GPS COORDINATES OF HOUSEHOLD	<input type="text"/>		NEXT VISIT DATE				TOTAL NUMBER OF VISITS <input type="text"/>	
<p>NOTE:</p> <p>THE <b>PRIMARY MALE AND PRIMARY FEMALE DECISIONMAKERS</b> ARE THOSE WHO ARE AGE 18 OR OLDER, AND WHO <u>SELF-IDENTIFY</u> AS THE PRIMARY MALE AND/OR PRIMARY FEMALE MEMBERS RESPONSIBLE FOR THE DECISION MAKING, BOTH SOCIAL AND ECONOMIC, WITHIN THE HOUSEHOLD.</p> <p>IN HOUSEHOLDS WITH BOTH MALE AND FEMALE DECISIONMAKERS, THE PRIMARY MALE AND PRIMARY FEMALE DECISIONMAKERS ARE USUALLY HUSBAND AND WIFE; HOWEVER THEY CAN ALSO BE OTHER HOUSEHOLD MEMBERS, AS LONG AS THEY ARE AGED 18 AND OVER.</p>			<p>*RESULT CODES:</p> <p>1 COMPLETED</p> <p>2 NOT HOME</p> <p>3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD</p> <p>4 POSTPONED/UNAVAILABLE</p> <p>5 REFUSED</p> <p>6 DWELLING VACANT</p> <p>7 NOT A DWELLING</p> <p>8 DWELLING DESTROYED</p> <p>9 DWELLING NOT FOUND</p> <p>10 TOO ILL TO RESPOND/COGNITIVELY IMPAIRED</p> <p>11 OTHER (SPECIFY) _____</p> <p>12 PARTIAL COMPLETE</p>			<p>A10. TOTAL PERSONS IN HOUSEHOLD <input type="text"/></p> <p>A11. TOTAL NUMBER OF WOMEN 15-49 <input type="text"/></p> <p>A12. TOTAL NUMBER OF CHILDREN AGE 0-5 <input type="text"/></p> <p>A13. LINE NO. OF RESPONDENT TO MODULE C <input type="text"/></p>		
			<p>A14. SENIOR SUPERVISOR</p> <p>NAME <input type="text"/></p>			<p>A15. QC INTERVIEWER</p> <p>NAME <input type="text"/></p>		<p>A16. INTERVIEWER CODE</p> <p><input type="text"/></p>
			<p>A17. LANGUAGE OF QUESTIONNAIRE** <input type="text"/></p>			<p>A19. NATIVE LANGUAGE OF RESPONDENT** <input type="text"/></p>		
			<p>A18. LANGUAGE OF INTERVIEW** <input type="text"/></p>			<p>A20. WAS A TRANSLATOR USED? (YES=1, NO=2) <input type="text"/></p>		
			<p>** LANGUAGE CODES: 1 CHICHEWA 2 YAO 3 TUMBUKA 4 LOMWE 5 NGONI 6 SENA 7 OTHER (SPECIFY)</p>					

## MODULE B(1). Informed Consent

INTRODUCE THE HOUSEHOLD TO THE SURVEY AND OBTAIN THE CONSENT OF A RESPONSIBLE ADULT IN THE HOUSEHOLD TO PARTICIPATE IN MODULES C & D OF THE QUESTIONNAIRE.

AT THE BEGINNING OF EACH SUBSEQUENT MODULE, YOU WILL BE PROMPTED TO OBTAIN INFORMED CONSENT FROM EACH ELIGIBLE RESPONDENT PRIOR TO INTERVIEWING HIM OR HER.

ASK TO SPEAK WITH A RESPONSIBLE ADULT IN THE HOUSEHOLD:

STATEMENT TO BE READ TO THE RESPONDENT:

Thank you for the opportunity to speak with you. We are a research team from the National Statistical Office. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, food consumption and nutrition of women and children. The survey includes questions about the household generally, and questions about individuals within your household, if applicable. The questions about the household and its characteristics will take about 30 minutes to complete. If additional questions are relevant for members of your household, the interview in total will take approximately 2-3 hours to complete. Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone. After entering the questionnaire into a data base, we will destroy all information such as your name that could link these responses to you.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints we welcome you to contact the National Statistical Office, by calling +265884331492. We will leave a copy of this statement and our organization's complete contact information with you so that you may contact us at any time.

**Do you have any questions?  
May I begin the interview now?**

SIGNATURE OF INTERVIEWER: \_\_\_\_\_ DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED....1

↓  
CONTINUE  
WITH  
HOUSEHOLD  
ROSTER:

"First, I'd like to ask you about  
the members of your household."

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 → END. "Thank you very much for your time."

## **MODULE B(2). Informed Consent and Contact Information**

### **To Leave with the Household**

Thank you for the opportunity to speak with you. We are a research team from the National Statistical Office. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, food consumption and nutrition of women and children. The survey includes questions about the household generally, and questions about individuals within your household, if applicable. The questions about the household and its characteristics will take about 30 minutes to complete. If additional questions are relevant for members of your household, the interview in total will take approximately 2-3 hours to complete. Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone. After entering the questionnaire into a data base, we will destroy all information such as your name that could link these responses to you.

If in the future you have any questions regarding the survey or the interview, or concerns or complaints, we welcome you to contact the National Statistical Office, by calling +265884331492. This form is for you so that you will have a record of your participation in the study, and the contact information for the survey organization.

NAME OF SURVEY IMPLEMENTING ORGANIZATION: The National Statistical Office

NAME OF SURVEY DIRECTOR: Tiope Mleme

PHONE NUMBER: +265884331492

MAILING ADDRESS: National Statistical Office  
P.O. Box 333  
Zomba, Malawi

EMAIL ADDRESS: [tmleme@yahoo.co.uk](mailto:tmleme@yahoo.co.uk)

## MODULE C. Household Roster and Demographics

Household identification (in data file, each module must be matched with the HH ID)

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LINE NUMBER	<b>C01a. Who would you say is the primary male decisionmaker in this household? This person should be 18 years old or older.</b> YES, PRIMARY MALE DECISIONMAKER EXISTS IN HOUSEHOLD ..... 1 NO PRIMARY MALE DECISIONMAKER IN HOUSEHOLD ..... 2 IF THERE IS A PRIMARY MALE DECISIONMAKER, ENTER HIS NAME ON LINE 01 OF THE ROSTER. C02 AND C03 ARE PRE-FILLED FOR THIS LINE NUMBER.														
	<b>C01b. Who would you say is the primary female decisionmaker in this household? This person should be 18 years old or older.</b> YES, PRIMARY FEMALE DECISIONMAKER EXISTS IN HOUSEHOLD ..... 1 NO PRIMARY FEMALE DECISIONMAKER IN HOUSEHOLD ..... 2 IF THERE IS A PRIMARY FEMALE DECISIONMAKER, ENTER HER NAME ON LINE 02 OF THE ROSTER. SEX (C02) IS PRE-FILLED FOR THIS LINE NUMBER. ENTER THE RELATIONSHIP (C03) OF THE FEMALE DECISIONMAKER TO THE PERSON LISTED ON LINE 01; IF NO ONE IS LISTED ON LINE 01, ENTER CODE '01' FOR C03.														
	Now, please tell me the names of all of the other people who usually live here.  LIST ALL HOUSEHOLD MEMBERS, THEIR SEX (C02), AND THEIR RELATIONSHIP TO THE PRIMARY DECISIONMAKER NAMED IN LINE 01 (C03), OR NAMED IN LINE 02 IF NO HH MEMBER LISTED ON LINE 01.  IF THERE IS NO PRIMARY MALE OR FEMALE DECISIONMAKER IN THE HOUSEHOLD, START THE HOUSEHOLD LISTING ON LINE 03.  THEN ASK: Are there any other people who live here, even if they are not at home now? These may include children in school or household members at work.  Any other people like small children or infants that we have not listed?  Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?  IF YES, COMPLETE LISTING FOR QUESTIONS C02-C03. THEN, ASK QUESTIONS STARTING WITH C04 FOR EACH PERSON ONE AT A TIME.														
			What is [NAME's] relationship to the primary male decision-maker?												
			IF NO PRIMARY MALE DECISION-MAKER:												
			What is [NAME's] relationship to the primary female decision-maker?												
			SEE CODES BELOW		What is [NAME's] age?										
			IF NO ADULT DECISION-MAKER: ENTER CODE 16		IN YEARS		Did [NAME] stay here last night?		How long has it been since [NAME] has spent the night in this household?		CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49				
			What is [NAME's] sex? M = 1 F = 2		IF 95 OR OLDER, ENTER '95'		YES=1 NO=2		SEE CODES BELOW		CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5				
											Has [NAME] ever attended school? YES=1 NO=2 Is [NAME] currently attending school? YES=1 NO=2 What is the highest grade of education completed by [NAME]? SEE CODES BELOW Can [NAME] read and write? SEE CODES BELOW				
										IF AGE 3 OR OLDER					
	<b>C01</b>	<b>C02</b>	<b>C03</b>	<b>C04</b>	<b>C05</b>	<b>C06</b>	<b>C07</b>	<b>C08</b>	<b>C09</b>	<b>C10</b>	<b>C11</b>	<b>C12</b>			
01		1	0 1		1→C07 2	1 2 3		01	01	1 2→C12	1 2				
02		2			1→C07 2	1 2 3		02	02	1 2→C12	1 2				
03		1 2			1→C07 2	1 2 3		03	03	1 2→C12	1 2				
04		1 2			1→C07 2	1 2 3		04	04	1 2→C12	1 2				
05		1 2			1→C07 2	1 2 3		05	05	1 2→C12	1 2				
06		1 2			1→C07 2	1 2 3		06	06	1 2→C12	1 2				
<b>C03. RESULT CODES: RELATIONSHIP TO PRIMARY MALE (OR FEMALE, IF NO MALE) DECISIONMAKER:</b> SELF ..... 01 BROTHER/SISTER-IN-LAW ..... 11 SPOUSE/PARTNER ..... 02 MOTHER/FATHER-IN-LAW ..... 12 SON/DAUGHTER ..... 03 OTHER RELATIVE ..... 13 SON/DAUGHTER-IN-LAW ..... 04 SERVANT/MAID ..... 14 GRANDSON/ ..... LABORER ..... 15 GRANDDAUGHTER ..... 05 NO DECISIONMAKER MOTHER/FATHER ..... 06 AGE 18 OR OLDER BROTHER/SISTER ..... 07 IN HOUSEHOLD ..... 16 NEPHEW/NIECE ..... 08 STEPSON/ NEPHEW/NIECE OF SPOUSE ..... 09 STEPDAUGHTER ..... 17 COUSIN ..... 10 OTHER RELATIONSHIP ..... 96				<b>C06. RESULT CODES: TIME SINCE SPENT THE NIGHT</b> CIRCLE 1 IF DAYS; ENTER # OF DAYS IN BOX (1-6)  CIRCLE 2 IF WEEKS; ENTER # OF WEEKS IN BOX (1-5)  CIRCLE 3 IF MONTHS; ENTER # OF MONTHS IN BOX MEMBER HAS BEEN AWAY.				<b>C11. RESULT CODES: EDUCATION</b> LESS THAN P1 (OR NO SCHOOL) ..... 01 PRIMARY LEVEL 1 ..... 02 PRIMARY LEVEL 2 ..... 03 PRIMARY LEVEL 3 ..... 04 PRIMARY LEVEL 4 ..... 05 PRIMARY LEVEL 5 ..... 06 PRIMARY LEVEL 6 ..... 07 PRIMARY LEVEL 7 ..... 08 PRIMARY LEVEL 8 ..... 09 SECONDARY 1 ..... 10 SECONDARY 2 ..... 11 SECONDARY 3 ..... 12 SECONDARY 4 ..... 13				A-LEVEL/HIGH SCHOOL ..... 14 UNIVERSITY OR ABOVE ..... 15 TECHNICAL/VOCATIONAL ..... 16 ADULT LITERACY ONLY, NO FORMAL EDUCATION ..... 17 KORANIC/RELIGIOUS ONLY NO FORMAL EDUCATION) ..... 18 DON'T KNOW/NOT APPLICABLE 91  <b>C12. RESULT CODES: LITERACY</b> CANNOT READ & WRITE ..... 1 CAN SIGN (WRITE) ONLY ..... 2 CAN READ ONLY ..... 3 CAN READ & WRITE ..... 4			

[illegible]



## MODULE D. Dwelling Characteristics

Household identification (in data file, each module must be matched with the HH ID)

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CONTINUE INTERVIEWING THE SAME RESPONDENT FROM MODULE C.

"Now I'd like to ask you a few questions about your home."

QNO.	QUESTIONS	RESPONSE CODES
D01	<b>OBSERVE (DO NOT ASK)</b> ROOF TOP MATERIAL (OUTER COVERING):	<b>D01:TYPE OF ROOF</b> NATURAL ROOFING NO ROOF .....11 THATCH/PALM LEAF .....12 SOD .....13 RUDIMENTARY ROOFING RUSTIC MAT .....21 PALM/BAMBOO .....22 WOOD PLANKS .....23 CARDBOARD .....24 FINISHED ROOFING METAL .....31 WOOD .....32 CALAMINE/CEMENT FIBER.....33 CERAMIC TILES .....34 CEMENT .....35 ROOFING SHINGLES .....36 OTHER .....96
D02	<b>OBSERVE (DO NOT ASK)</b> FLOOR MATERIAL:	<b>D02:TYPE OF FLOOR</b> NATURAL FLOOR EARTH/SAND .....11 DUNG.....12 RUDIMENTARY FLOOR WOOD PLANKS .....21 PALM/BAMBOO .....22 FINISHED FLOOR PARQUET/POLISHED WOOD.....31 VINYL OR ASPHALT STRIPS.....32 CERAMIC TILES .....33 CEMENT .....34 CARPET .....35 OTHER .....96
D03	<b>OBSERVE (DO NOT ASK)</b> EXTERIOR WALLS:	<b>D03:TYPE OF WALLS</b> NATURAL WALLS NO WALLS.....11 CANE/PALM/TRUNKS .....12 DIRT .....13 RUDIMENTARY WALLS BAMBOO WITH MUD .....21 STONE WITH MUD .....22 UNCOVERED ADOBE .....23 PLYWOOD .....24 CARDBOARD .....25 REUSED WOOD .....26 METAL SHEETING.....27 FINISHED WALLS CEMENT .....31 STONE WITH LIME/CEMENT .....32 BRICKS.....33 CEMENT BLOCKS .....34 COVERED ADOBE.....35 WOOD PLANKS/SHINGLES .....36 OTHER .....96

QNO.	QUESTIONS	RESPONSE CODES
D04	How many rooms in this dwelling are used for sleeping?	<b>D04. NUMBER OF ROOMS USED FOR SLEEPING:</b> <div style="display: inline-block; width: 30px; height: 20px; border: 1px solid black; margin-right: 5px;"></div> <div style="display: inline-block; width: 30px; height: 20px; border: 1px solid black;"></div>
D05	What is the main type of toilet your household uses?	<b>D05: TYPE OF TOILET</b> FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM ..... 11 FLUSH TO SEPTIC TANK..... 12 FLUSH TO PIT LATRINE..... 13 FLUSH TO SOMEWHERE ELSE ..... 14 FLUSH, DON'T KNOW WHERE..... 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE (VIP) ..... 21 PIT LATRINE WITH NATURALSLAB ..... 22 PIT LATRINE WITH MANUFACTURED SLAB (SANPLAT) ..... 23 PIT LATRINE WITHOUT SLAB/OPEN PIT ..... 24 COMPOSTING TOILET ..... 31 BUCKET TOILET ..... 41 HANGING TOILET/HANGING LATRINE (PILE) ..... 51 NO FACILITY/BUSH/FIELD/LAKE/RIVER ..... 61 → SKIP TO D08 ECOSAN LATRINE..... 81 OTHER..... 96
D06	Do you share this toilet with other households?	<b>D06: IF TOILET IS SHARED</b> YES ..... 1 NO ..... 2 → SKIP TO D08
D07	How many households use this toilet?	<b>D07: NUMBER OF HOUSEHOLDS WITH WHOM TOILET IS SHARED</b> NUMBER OF HOUSEHOLDS (IF LESS THAN 10) ..... <div style="display: inline-block; width: 30px; height: 20px; border: 1px solid black; text-align: center; line-height: 20px;">0</div> 10 OR MORE HOUSEHOLDS..... 95 DON'T KNOW..... 98

QNO.	QUESTIONS	RESPONSE CODES
D08	What is the main source of drinking water for your household?	<b>D08: MAIN DRINKING WATER SOURCE</b> PIPED WATER PIPED INTO DWELLING .....11 PIPED TO YARD/PLOT .....12 PUBLIC TAP/STANDPIPE .....13 TUBE WELL OR BOREHOLE .....21 DUG WELL PROTECTED WELL.....31 UNPROTECTED WELL .....32 WATER FROM SPRING PROTECTED SPRING.....41 UNPROTECTED SPRING .....42 RAINWATER .....51 TANKER TRUCK.....61 CART WITH SMALL TANK .....71 SURFACE WATER (RIVER/DAM/LAKE/ POND/STREAM/CANAL/ IRRIGATION CHANNEL) ..... 81 BOTTLED WATER .....91 OTHER .....96
D09	Does this household have electricity?	<b>D09: ELECTRICITY</b> YES .....1 NO .....2
D10	What is the main source of cooking fuel for your household?	<b>D10: COOKING FUEL</b> ELECTRICITY .....01 LIQUID PROPANE GAS .....02 NATURAL GAS .....03 BIOGAS .....04 KEROSENE .....05 COAL, LIGNITE .....06 CHARCOAL .....07 WOOD ..... 08 STRAW/SHRUBS/GRASS ..... 09 AGRICULTURAL CROP RESIDUE..... 10 ANIMAL DUNG ..... 11 NO FOOD COOKED IN HOUSEHOLD... 95 OTHER ..... 96

## MODULE E. Household Consumption Expenditure

Household identification (*in data file, each module must be  
matched with the HH ID*)

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**ASK THESE QUESTIONS ABOUT ALL HOUSEHOLD MEMBERS.** FOR MODULE E1, ASK WHOEVER IS MOST KNOWLEDGEABLE ABOUT THE FOOD THE HOUSEHOLD MEMBERS HAVE EATEN IN THE PAST WEEK. FOR MODULES E2 THROUGH E7, ASK THE PERSON WHO IS MOST KNOWLEDGEABLE ABOUT OTHER HOUSEHOLD EXPENDITURES, INCLUDING NON-FOOD ITEMS THAT HOUSEHOLD MEMBERS HAVE BOUGHT.

CHECK THE INFORMED CONSENT REGISTER AND ENSURE THAT THE RESPONDENT(S) TO MODULE E HAS PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE MODULE E INFORMED CONSENT PROCEDURE (ANNEX 3) TO THE RESPONDENT.

“Now I would like to ask you about the kinds of foods that you and other members of your household have eaten over the past week. I’d also like to ask you about items that you or members of your household may have bought in the past week. Please include foods in meals that are shared with other members of the household, as well as foods that individual members of the household may have consumed independently of other family members. First we will ask about foods that were eaten at your home, or at the home of friends or other family. Later we will ask about foods that were purchased already prepared from a restaurant or a vendor.”

### MODULE E1. Food Consumption Over Past 7 Days

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
<b>Cereals, Grains and Cereal Products</b>	<b>01-20</b>												
Maize (normal flour)	01	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Maize, refined (fine flour)	02	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Maize (bran flour)	03	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Maize grain (not flour)	04	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Green maize	05	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Rice	06	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Finger millet	07	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Sorghum	08	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Pearl millet	09	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Wheat flour	10	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Bread	11	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Buns, scones	12	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Biscuits	13	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Spaghetti, macaroni, pasta	14	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Breakfast cereal	15	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Infant feeding cereals	16	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
<b>Roots, Tubers &amp; Plantains</b>	21-35												
Cassava tubers	21	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Cassava flour	22	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
White sweet potato	23	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Orange sweet potato	24	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Irish potato	25	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Potato crisps	26	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Plantain, cooking banana	27	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Cocoyam	28	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
<b>Nuts and Pulses</b>	36-50												
Bean, white	36	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Bean, brown	37	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Pigeonpea	38	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Groundnut	39	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Groundnut flour	40	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Soyabean flour	41	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											



FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Ground bean	42	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Cowpea	43	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Macademia nuts	44	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
<b>Vegetables</b>	51-70												
Onion, fresh or processed	51	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Cabbage, fresh or processed	52	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Rape, fresh or processed	53	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Nkhwani, fresh or processed	54	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Chinese cabbage, fresh or processed	55	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Other cultivated green leafy vegetables, fresh or processed	56	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Gathered wild green leaves	57	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Tomato, fresh or processed	58	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Cucumber, fresh or processed	59	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Pumpkin, fresh or processed	60	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Okra, fresh or processed	61	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Mushroom, fresh or processed	62	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
<b>Meat, Fish and Animal products</b>	71-90												
Eggs	71	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Dried fish	72	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Fresh fish	73	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Beef	74	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Goat	75	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Pork	76	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Mutton	77	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Chicken	78	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Guinea fowl, doves, pigeons, or other birds raised for meat or eggs	79	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Small animal – rabbit, mice, etc.	80	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Termites, other insects, for example caterpillar	81	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Tinned meat or fish	82	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Smoked fish	83	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Fish Soup/Sauce	84	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
<b>Fruits</b>	91-110												
Mango	91	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Banana	92	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Citrus – naartje, orange, etc.	93	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Pineapple	94	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Papaya	95	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Guava	96	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Avocado	97	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Wild fruit	98	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Apple	99	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
<b>Milk and Milk Products</b>	111-125												
Fresh milk	111	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Powdered milk	112	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Margarine – (e.g., Blue band)	113	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Butter	114	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Chambiko – soured milk	115	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Yogurt	116	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Cheese	117	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Infant feeding formula (for bottle)	118	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
<b>Sugar, Fats, and Oil</b>	126-135												
Sugar	126	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Sugar Cane	127	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Cooking oil	128	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
<b>Beverages</b>	136-155												
Tea	136	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Coffee	137	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Cocoa, Milo	138	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Squash (Sobo drink concentrate)	139	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Fruit juice	140	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Freezes (flavoured ice)	141	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Soft drinks (Coca-cola, Fanta, Sprite, etc.)	142	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Chibuku (commercial traditional-style beer)	143	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Bottled drinking water	144	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Maheu	145	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Bottled / canned beer (Carlsberg, etc.)	146	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Thobwa	147	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Traditional beer	148	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Wine or commercial liquor	149	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Locally brewed liquor	150	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											



FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
<b>Spices &amp; Miscellaneous</b>	156-170												
Salt	156	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Spices	157	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Yeast, baking powder, bicarbonate of soda	158	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Tomato sauce (bottle)	159	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Hot sauce (Nali, etc.)	160	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Jam, jelly	161	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Sweets, candy, chocolates	162	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Honey	163	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Peanut butter	164	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
<b>Cooked Foods from Vendors</b>	171-190												
Maize – boiled or roasted (vendor)	171	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Chips (vendor)	172	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Cassava – boiled (vendor)	173	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Eggs – boiled (vendor)	174	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Chicken (vendor)	175	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Meat (vendor)	176	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											
Fish (vendor)	177	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM											

FOOD ITEM	ITEM CODE	Over the past 7 days, did you or others in your household eat any [FOOD ITEM]?	How much in total did your household eat in the past week?		How much of what you ate came from purchases?		How much did you spend on what was eaten last week?  If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	How much of what you ate came from your household's own production?		CHECK E1.06A.  IF E1.06A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much of what you ate came from gifts or other sources?		CHECK E1.07A.  IF E1.07A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
E1.01		E1.02	E1.03A QUANTITY	E1.03B UNIT	E1.04A QUANTITY	E1.04B UNIT	E1.05 (MK)	E1.06A QUANTITY	E1.06B UNIT	E1.06C ESTIMATE (MK)	E1.07A QUANTITY	E1.07B UNIT	E1.07C ESTIMATE (MK)
Doughnut (vendor)	178	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Samosa (vendor)	179	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
Meal eaten at restaurant	180	YES ..... 1 NO .....2→ NEXT ITEM DK.....8→ NEXT ITEM											
<b>RESPONSE CATEGORIES FOR E1.03b/1.04b/1.06b/1.07b – UNITS</b>  <div style="display: flex; justify-content: space-between;"> <div> KILOGRAMME ..... 01  50 KG. BAG ..... 02  90 KG. BAG ..... 03  PAIL (Small)..... 04  PAIL (Medium)..... 05  PAIL (Large)..... 06  NO. 10 PLATE (Flat)..... 07  NO. 10 PLATE (Heaped)..... 08 </div> <div> NO. 12 PLATE (Flat) .....09  NO. 12 PLATE (Heaped).....10  BUNCH (Small) .....11  BUNCH (Medium).....12  BUNCH (Large) .....13  PIECE (Small).....14  PIECE (Medium).....15  PIECE (Large) .....16  HEAP (Small) .....17 </div> <div> HEAP (Medium) .....18  HEAP (Large).....19  BALE .....20  BASKET (<i>DENGU</i>) (SHELLED).....21  BASKET (<i>DENGU</i>) (UNSHELLED).....22  OX-CART (UNSHELLED).....23  LITRE .....24  CUP .....25  TIN.....26 </div> <div> GRAM .....27  MILLILITRE .....28  TEASPOON .....29  BASIN .....30  SACHET/TUBE .....31  TOTAL .....32  OTHER (SPECIFY) .....96 </div> </div> <p><b>NOTE:</b> ANY UNIT LISTED <u>MUST</u> BE ABLE TO BE CONVERTED TO A STANDARDIZED UNIT. THIS CONVERSION WILL HAPPEN DURING DATA ANALYSIS; IT SHOULD NOT BE DONE IN THE FIELD BY THE INTERVIEWER.</p>													

QNO.	QUESTION	RESPONSE CATEGORIES
E1.08	Over the past 7 days, did any people who are not members of your household eat any meals in your household?	YES.....1 NO ..... 2→ SKIP TO E1.12 DON'T KNOW ..... 8→ SKIP TO E1.12
E1.09	Over the past 7 days, how many people who are not members of your household ate meals in your household?	E1.09. NUMBER OF PEOPLE <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98
E1.10	Over the past 7 days, what was the total number of days in which any meal was shared with people who are not members of your household?	E1.10. NUMBER OF DAYS <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98
E1.11	Over the past 7 days, what was the total number of meals that were shared with people who are not members of your household?	E1.11. NUMBER OF MEALS <input type="text"/> <input type="text"/>  DON'T KNOW ..... 98
E1.12	Over the past 7 days, did your household purchase pet food for family pets like a cat or a dog?	YES..... 1 NO ..... 2→ GO TO E1.14 DON'T KNOW ..... 8→ GO TO E1.14
E1.13	How much did you spend on pet food last week?	ENTER AMOUNT IN MK:  _____  DON'T KNOW ..... 999998
E1.14	Over the past 7 days, were there any other expenditures on pets?	YES..... 1 NO ..... 2→ GO TO MODULE E2 DON'T KNOW ..... 8→ GO TO MODULE E2
E1.15	How much did you spend on other purchases for pets last week?	ENTER AMOUNT IN MK:  _____  DON'T KNOW ..... 999998

## MODULE E2. Non-Food Expenditures Over Past 7 Days

“Now I would like to ask you about items that you or members of your household may have bought in the past week.”

<b>ONE WEEK RECALL</b>			
ITEM	ITEM CODE	Over the past one week (7 days, did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>E2.01</b>	<b>191-200</b>	<b>E2.02</b>	<b>E2.03 MK</b>
Charcoal	191	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Firewood	192	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Paraffin or kerosene	193	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Cigarettes or other tobacco	194	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Candles	195	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Matches	196	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Newspapers or magazines	197	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Public transport – Bicycle Taxi (include any used for school under education costs; include any used for obtaining health care under health expenditures)	198	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Public transport – Bus/Minibus (include any used for school under education costs; include any used for obtaining health care under health expenditures)	199	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	
Public transport – Other (truck, oxcart, etc.) (include any used for school under education costs; include any used for obtaining health care under health expenditures)	200	YES .....1 NO .....2→ NEXT ITEM DK .....8→ NEXT ITEM	

### MODULE E3. Non-Food Expenditures Over Past One Month

“Next I would like to ask you about items that you or members of your household may have bought over the past month.”

<b>ONE MONTH RECALL</b>		Over the past one month, did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>ITEM</b>	<b>ITEM CODE</b>		
<b>E3.01</b>	<b>211-236</b>	<b>E3.02</b>	<b>E3.03 MK</b>
Milling fees for grains (not including cost of grain itself), grain	211	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Bar soap (body soap or clothes soap)	212	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Clothes soap (powder, paste)	213	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Toothpaste, toothbrush	214	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Toilet paper	215	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Glycerine, Vaseline, skin creams	216	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Other personal products (shampoo, razor blades, cosmetics, hair products, etc.)	217	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Light bulbs	218	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Postage stamps or other postal fees	219	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Donation – to church, charity, beggar, etc.	220	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Petrol or diesel	221	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Motor vehicle service, repair, or parts	222	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Bicycle service, repair, or parts	223	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Wages paid to servants	224	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	

<b>ONE MONTH RECALL</b>		Over the past <u>one month</u> , did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
ITEM	ITEM CODE		
<b>E3.01</b>	<b>211-236</b>	<b>E3.02</b>	<b>E3.03 MK</b>
Repairs to household and personal items (radios, watches, etc., excluding battery purchases)	225	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Utilities: Natural gas	226	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Utilities: Electricity	227	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Utilities: Water	228	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Batteries	229	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Recharging of batteries, cell phones, etc.	230	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Air time for cell phones	231	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
MTL line	232	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
<b>HEALTH EXPENDITURES (include estimated value of any in-kind payments, or borrowed amounts)</b>			
Anything related to illnesses and injuries, including for medicine, tests, consultation, & in-patient fees	233	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Medical care not related to an illness – preventative health care, pre-natal visits, check-ups, etc.	234	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Non-prescription medicines, for example, Panadol, Fansidar, cough syrup, etc.	235	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Transportation used to access health-related services or care that did not require an overnight stay in a health facility or at a traditional healer's dwelling	236	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	

## MODULE E4. Non-Food Expenditures Over Past Three Months

“Next I would like to ask you about items that you or members of your household may have bought over the past three months.”

<b>THREE MONTH RECALL</b>		Over the past three months, did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>ITEM</b>	<b>ITEM CODE</b>		
<b>E4.01</b>	241-279	<b>E4.02</b>	<b>E4.03</b> MK
Infant clothing	241	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Baby nappies/diapers	242	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Boy's trousers (FOR ALL CLOTHING, EXCLUDE UNIFORMS/SCHOOL CLOTHING)	243	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Boy's shirts	244	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Boy's jackets	245	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Boy's undergarments	246	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Boy's other clothing (e.g., hats, gloves, belts, etc.)	247	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Men's trousers	248	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Men's shirts	249	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Men's jackets	250	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Men's undergarments	251	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	



<b>THREE MONTH RECALL</b>		Over the past three months, did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>ITEM</b>	<b>ITEM CODE</b>		
<b>E4.01</b>	241-279	<b>E4.02</b>	<b>E4.03 MK</b>
Men's other clothing (e.g., hats, gloves, belts, etc.)	252	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Girl's blouse/shirt	253	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Girl's dress/skirt	254	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Girl's undergarments	255	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Girl's other clothing (e.g., hats, gloves, belts, trousers, etc.)	256	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Women's blouse/shirt	257	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
<i>Chitenje</i> cloth	258	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Women's dress/skirt	259	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Women's undergarments	260	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Women's other clothing (e.g., hats, gloves, belts, trousers, etc.)	261	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Boys shoes (include shoes, sandals, boots, slippers)	262	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Men's shoes (include shoes, sandals, boots, slippers)	263	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Girl's shoes (include shoes, sandals, boots, slippers)	264	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	

<b>THREE MONTH RECALL</b>		Over the past three months, did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>ITEM</b>	<b>ITEM CODE</b>		
<b>E4.01</b>	241-279	<b>E4.02</b>	<b>E4.03 MK</b>
Women's shoes (include shoes, sandals, boots, slippers)	265	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Cloth, thread, other sewing material	266	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Laundry, dry cleaning, tailoring fees	267	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Bowls, glassware, plates, silverware, etc.	268	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Cooking utensils (cookpots, stirring spoons and whisks, etc.)	269	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Cleaning utensils (brooms, brushes, etc.)	270	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Torch / flashlight	271	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Umbrella	272	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Paraffin lamp (hurricane or pressure)	273	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Stationery items (excluding school related)	274	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Books (excluding school related)	275	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Music or video cassette or CD/DVD	276	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	
Tickets for sports / entertainment events	277	YES.....1 NO.....2→ NEXT ITEM DK.....8→ NEXT ITEM	

<u>THREE MONTH RECALL</u>		Over the past three months, did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
ITEM	ITEM CODE		
<b>E4.01</b>	241-279	<b>E4.02</b>	<b>E4.03</b> MK
House decorations	278	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Night's lodging in rest house or hotel (excluding school or health related)	279	YES..... 1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	

## MODULE E5. Non-Food Expenditures Over Past 12 Months

“Now I would like to ask you about items that you or members of your household may have bought over the past one year.”

<b>ONE YEAR (12 MONTH) RECALL</b>		Over the past one year (twelve months), did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>ITEM</b>	<b>ITEM CODE</b>		
<b>E5.01</b>	291-322	<b>E5.02</b>	<b>E5.03 MK</b>
Carpet, rugs, drapes, curtains	291	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Linen – towels, sheets, blankets	292	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Mat – sleeping or for drying maize flour	293	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Mosquito net	294	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Mattress	295	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Sports & hobby equipment, musical instruments, toys	296	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Film, film processing, camera	297	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Cement	298	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Bricks	299	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Iron sheets	300	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Construction timber	301	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Council rates	302	YES.....1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	

<b>ONE YEAR (12 MONTH) RECALL</b>			
<b>ITEM</b>	<b>ITEM CODE</b>	Over the past one year (twelve months), did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>E5.01</b>	291-322	<b>E5.02</b>	<b>E5.03</b> MK
Insurance – health (MASM, etc.), auto, home, life	303	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Fines or legal fees	304	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
<i>Lobola</i> (bridewealth) costs	305	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Marriage ceremony costs	306	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Funeral costs, household members	307	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Funeral costs, non-household members (relatives, neighbors/friends)	308	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
<b>HEALTH EXPENDITURES over last 12 months (include estimated value of any in-kind payments or borrowed amounts)</b>			
Hospitalizations or overnight stay in any hospital – total cost for treatment	309	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Travel to and from the medical facility for any overnight stay(s) or hospitalization	310	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Food costs during overnight stay(s) at the medical facility or hospitalization (if not already included above)	311	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Over-night(s) stay at a traditional healer's or faith healer's dwelling – total costs for treatment	312	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Travel costs to the traditional healer's or faith healer's dwelling for overnight stay(s)	313	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Food costs during overnight stay(s) at the traditional healer's or faith healer's dwelling	314	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	

<b>ONE YEAR (12 MONTH) RECALL</b>			
<b>ITEM</b>	<b>ITEM CODE</b>	Over the past one year (twelve months), did your household purchase or pay for any [ITEM]?	How much did you pay (how much did they cost) in total?
<b>E5.01</b>	291-322	<b>E5.02</b>	<b>E5.03</b> MK
<b>EDUCATION EXPENDITURES over last 12 months (include estimated value of any in-kind payments or borrowed amounts)</b>			
Tuition, including extra tuition fees	315	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Expenditures on after school programs and tutoring	316	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
School books and stationery	317	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
School uniform	318	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Boarding fees	319	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Contribution to school building maintenance	320	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Transport to and from school	321	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Parent/Teacher Association and other related fees	322	YES..... 1 NO ..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	

NON-FOOD ITEMS THAT MAY OR MAY NOT HAVE BEEN PURCHASED							
<u>ONE YEAR (12 MONTH) RECALL</u>		Over the past one year (12 months) did your household gather, purchase or pay for any [ITEM]?				FOR ITEMS THAT WERE GATHERED:	FOR ITEMS THAT WERE BOUGHT:
ITEM	Item Code	(NOTE THAT THE VALUE OF THESE ITEMS SHOULD BE ENTERED <u>ONLY</u> IF THEY WERE PURCHASED OR USED FOR HOUSEHOLD USE, NOT FOR INVESTMENT PURPOSES)	What was the estimated total quantity of [ITEM] used?		Did your household gather the [ITEM], or did your household purchase or pay for the [ITEM]?	What was the total estimated value of [ITEM] that you used ?	How much did you spend in total on [ITEM]?
E5.04	323-325	E5.05	E5.06a Quantity	E5.06b Unit	E5.06c FILTER	E5.07 (MK)	E5.08 (MK)
Woodpoles, bamboo	323	YES..... 1 NO ..... 2→ NEXT ITEM			GATHERED ..... 1 → E5.07 PURCHASED/PAID .. 2→ E5.08	→ SKIP TO NEXT ITEM	
Grass for thatching roof or other use	324	YES..... 1 NO ..... 2→ NEXT ITEM			GATHERED ..... 1 → E5.07 PURCHASED/PAID .. 2→ E5.08	→ SKIP TO NEXT ITEM	

**RESPONSE CATEGORIES FOR E5.06b – UNITS**

POLE ..... 33  
BALE..... 20

## MODULE E6. Housing Expenditures

"Now I'd like to ask you some questions about your home."

QNO.	QUESTION	RESPONSE CATEGORIES				
<b>E6.01</b>	Do you own or are purchasing this house, is it provided to you by an employer, do you use it for free, or do you rent this house?	OWN ..... 1 BEING PURCHASED ..... 2 EMPLOYER PROVIDES ..... 3 FREE ..... 4 → E6.04 RENTED ..... 5 → E6.05 DON'T KNOW/NON-RESPONSE/NA.....91				
<b>E6.02</b>	If you <u>sold this dwelling</u> today, how much would you receive for it?	<div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> DON'T KNOW/NON-RESPONSE/NA.....9999991				
<b>E6.03</b>	How old is this house, in years?	<div style="border: 1px solid black; width: 60px; height: 30px; display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 20px; height: 30px;"></div> <div style="border: 1px solid black; width: 20px; height: 30px;"></div> <div style="border: 1px solid black; width: 20px; height: 30px;"></div> </div> DON'T KNOW/ NON-RESPONSE/NA.....991 → SKIP TO E6.06				
<b>E6.04</b>	If you <u>rented this dwelling out</u> today, how much rent would you receive?	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #d3d3d3;"> <th style="width: 60%;">E6.04A MK</th> <th style="width: 40%;">E6.04B UNIT</th> </tr> </thead> <tbody> <tr> <td> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div>           DON'T KNOW/NON-RESPONSE /NA.....9999991 → SKIP TO E6.09         </td> <td>           DAY .....1            WEEK .....2            MONTH .....3            YEAR.....4              DON'T KNOW/ NON-RESPONSE /NA.....99991 → SKIP TO E6.09         </td> </tr> </tbody> </table>	E6.04A MK	E6.04B UNIT	<div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> DON'T KNOW/NON-RESPONSE /NA.....9999991 → SKIP TO E6.09	DAY .....1 WEEK .....2 MONTH .....3 YEAR.....4  DON'T KNOW/ NON-RESPONSE /NA.....99991 → SKIP TO E6.09
E6.04A MK	E6.04B UNIT					
<div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100px; height: 30px; margin-bottom: 5px;"></div> DON'T KNOW/NON-RESPONSE /NA.....9999991 → SKIP TO E6.09	DAY .....1 WEEK .....2 MONTH .....3 YEAR.....4  DON'T KNOW/ NON-RESPONSE /NA.....99991 → SKIP TO E6.09					



QNO.	QUESTION	RESPONSE CATEGORIES				
E6.05	How much do you pay to rent this dwelling?	<table border="1"> <thead> <tr> <th>E6.05A MK</th> <th>E6.05B UNIT</th> </tr> </thead> <tbody> <tr> <td> <div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> <p>DON'T KNOW/NON-RESPONSE /NA.....9999991 → SKIP TO E6.09</p> </td> <td> <div> DAY .....1  WEEK .....2  MONTH .....3  YEAR.....4 </div> <div> DONT KNOW/  NON-RESPONSE  /NA.....99991 → SKIP TO E6.09 </div> </td> </tr> </tbody> </table>	E6.05A MK	E6.05B UNIT	<div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> <p>DON'T KNOW/NON-RESPONSE /NA.....9999991 → SKIP TO E6.09</p>	<div> DAY .....1  WEEK .....2  MONTH .....3  YEAR.....4 </div> <div> DONT KNOW/  NON-RESPONSE  /NA.....99991 → SKIP TO E6.09 </div>
E6.05A MK	E6.05B UNIT					
<div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> <p>DON'T KNOW/NON-RESPONSE /NA.....9999991 → SKIP TO E6.09</p>	<div> DAY .....1  WEEK .....2  MONTH .....3  YEAR.....4 </div> <div> DONT KNOW/  NON-RESPONSE  /NA.....99991 → SKIP TO E6.09 </div>					
E6.06	Do you pay a mortgage on this house, that is, a regular payment towards purchasing the house?	YES .....1 NO .....2 → SKIP TO E6.09				
E6.07	How often do you make mortgage payments?	ONCE A MONTH .....1 ONCE EVERY 3 MONTHS .....2 ONCE EVERY 6 MONTHS .....3 ONCE A YEAR .....4 OTHER (SPECIFY) .....6				
E6.08	How much do you pay each time you make a payment on your mortgage?	<div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> <p>AMOUNT IS VARIABLE .....999996</p> <p>DON'T KNOW/ NON-RESPONSE .....9999991</p>				
E6.09	In the past one month, how much did you spend on repairs & maintenance to this house?	<div> <div></div><div></div><div></div><div></div><div></div><div></div><div></div> </div> <p>DON'T KNOW/ NON-RESPONSE .....9999991</p>				

## MODULE E7. Durable Goods Expenditures

“Now I’d like to ask you some questions about items that may be owned by your household.”

ITEM	Item Code	Does your household own a [ITEM]?	How many [ITEM]s do you own?	What is the age of these [ITEM]s? IF MORE THAN ONE ITEM, AVERAGE AGE.	If you wanted to sell one of these [ITEM]s today, how much would you receive? IF MORE THAN ONE, AVERAGE VALUE.	Did you purchase or pay for any of these [ITEM]s in the last 12 months?	How much did you pay for all these [ITEM]s all together (total) in the last 12 months?
E7.01	341-371	E7.02	E7.03 NUMBER	E7.04 YEAR	E7.05 MK	E7.06	E7.07 MK
Bed//table/chair	341	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Fan	342	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Air conditioner	343	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Radio	344	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Tape or CD/DVD player/VCR	345	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Television	346	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Sewing machine	347	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Kerosene/paraffin stove	348	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Electric stove; hot plate	349	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Gas stove	350	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	
Refrigerator	351	YES ..... 1 NO ..... 2→ NEXT ITEM DK ..... 8→ NEXT ITEM				YES.....1 NO..... 2→ NEXT ITEM DK..... 8→ NEXT ITEM	

ITEM	Item Code	Does your household own a [ITEM]?	How many [ITEM]s do you own?	What is the age of these [ITEM]s? IF MORE THAN ONE ITEM, AVERAGE AGE.	If you wanted to sell one of these [ITEM]s today, how much would you receive? IF MORE THAN ONE, AVERAGE VALUE.	Did you purchase or pay for any of these [ITEM]s in the last 12 months?	How much did you pay for all these [ITEM]s all together (total) in the last 12 months?
E7.01	341-371	E7.02	E7.03 NUMBER	E7.04 YEAR	E7.05 MK	E7.06	E7.07 MK
Washing machine	352	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Bicycle	353	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Boat	354	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Motorcycle/scooter	355	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Car	356	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Mini-bus	357	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Lorry	358	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Beer-brewing drum	359	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Upholstered chair, sofa set	360	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Coffee table (for sitting room)	361	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Cupboard, drawers, bureau	362	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Lantern (paraffin)	363	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	

ITEM	Item Code	Does your household own a [ITEM]?	How many [ITEM]s do you own?	What is the age of these [ITEM]s? IF MORE THAN ONE ITEM, AVERAGE AGE.	If you wanted to sell one of these [ITEM]s today, how much would you receive? IF MORE THAN ONE, AVERAGE VALUE.	Did you purchase or pay for any of these [ITEM]s in the last 12 months?	How much did you pay for all these [ITEM]s all together (total) in the last 12 months?
E7.01	341-371	E7.02	E7.03 NUMBER	E7.04 YEAR	E7.05 MK	E7.06	E7.07 MK
Desk	364	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Clock	365	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Iron (for pressing clothes)	366	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Computer equipment & accessories	367	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Satellite dish	368	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Solar panel	369	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Generator	370	YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM				YES ..... 1 NO ..... 2 → NEXT ITEM DK ..... 8 → NEXT ITEM	
Phone/cell phone	371	YES ..... 1 NO ..... 2 → MODULE F DK ..... 8 → MODULE F				YES ..... 1 NO ..... 2 → MODULE F DK ..... 8 → MODULE F	

## MODULE F. Household Hunger Scale

Household identification (*in data file, each module must be matched with the HH ID*)

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CHECK THE INFORMED CONSENT REGISTER AND ENSURE THAT THE RESPONDENT TO MODULE F HAS PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE MODULE F INFORMED CONSENT PROCEDURE (ANNEX 4) TO THE RESPONDENT.

ASK THESE QUESTIONS OF THE PERSON RESPONSIBLE FOR HOUSEHOLD FOOD PREPARATION.

**“Moving on to another topic, I’d like to ask you a few questions about the availability of food in your home.”**

QNO.	QUESTION	RESPONSE
F01	In the past 30 days was there ever no food to eat of any kind in your house because of lack of resources to get food?	YES.....1 NO.....2 → GO TO F03 REFUSED.....9 → GO TO F03
F02	How often did this happen in the past 30 days?	RARELY (1-2 TIMES).....1 SOMETIMES (3-10 TIMES).....2 OFTEN (MORE THAN 10 TIMES).....3 REFUSED.....9
F03	In the past 30 days did you or any household member go to sleep at night hungry because there was not enough food?	YES.....1 NO.....2 → GO TO F05 REFUSED.....9 → GO TO F05
F04	How often did this happen in the past 30 days?	RARELY (1-2 TIMES).....1 SOMETIMES (3-10 TIMES).....2 OFTEN (MORE THAN 10 TIMES).....3 REFUSED.....9
F05	In the past 30 days did you or any household member go a whole day and night without eating anything at all because there was not enough food?	YES.....1 NO.....2 → END MODULE REFUSED.....9 → END MODULE
F06	How often did this happen in the past 30 days?	RARELY (1-2 TIMES).....1 SOMETIMES (3-10 TIMES).....2 OFTEN (MORE THAN 10 TIMES).....3 REFUSED.....9

## MODULE G. Women's Empowerment in Agriculture Index

THIS QUESTIONNAIRE SHOULD BE ADMINISTERED TO THE PRIMARY FEMALE DECISIONMAKER (AGE 18 OR OLDER) IDENTIFIED ON LINE 02 OF THE HOUSEHOLD ROSTER (SECTION C) OF THE HOUSEHOLD LEVEL QUESTIONNAIRE.

YOU SHOULD COMPLETE THIS COVERSHEET FOR EACH ELIGIBLE RESPONDENT EVEN IF THE INDIVIDUAL IS NOT AVAILABLE TO BE INTERVIEWED.

PLEASE DOUBLE CHECK TO ENSURE:

- YOU HAVE COMPLETED THE ROSTER SECTION OF THE HOUSEHOLD QUESTIONNAIRE TO IDENTIFY THE CORRECT PRIMARY FEMALE DECISIONMAKER;
- RESPONDENTS TO THIS MODULE ARE AGE 18 OR OLDER;
- YOU HAVE NOTED THE HOUSEHOLD ID AND INDIVIDUAL ID CORRECTLY FOR THE PERSON YOU ARE ABOUT TO INTERVIEW;
- YOU HAVE SOUGHT TO INTERVIEW THE INDIVIDUAL IN PRIVATE OR WHERE OTHER MEMBERS OF THE HOUSEHOLD CANNOT OVERHEAR OR CONTRIBUTE ANSWERS;
- YOU HAVE CHECKED THE INFORMED CONSENT REGISTER AND ENSURED THAT THE RESPONDENT(S) TO MODULE G HAVE PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE MODULE G INFORMED CONSENT PROCEDURE (ANNEX 5) TO THE RESPONDENT(S).

### SUB-MODULE G1. Individual Identification

	Code		Code
<b>G1.01.</b> HOUSEHOLD IDENTIFICATION: .....	<div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div> <div style="border: 1px solid black; display: inline-block; width: 20px; height: 20px;"></div>		

NO.	QUESTION	RESPONSE
G1.05	In what month and year were you born?	<div> <div></div><div></div> </div> MONTH DK MONTH....98 <div> <div></div><div></div><div></div><div></div> </div> YEAR DK YEAR....9998
G1.06	Please tell me how old you are. What was your age at your last birthday?  RECORD AGE IN COMPLETED YEARS	<div> <div></div><div></div> </div> YEARS IF RESPONDENT KNOWS HER/HIS AGE, SKIP TO G1.08. IF RESPONDENT CANNOT REMEMBER HOW OLD SHE/HE IS, ENTER '98' AND ASK QUESTION G1.07.
G1.07	Are you 18 years old or older?	YES.....1 NO.....2 DK.....8 → RESPONDENT NOT ELIGIBLE FOR THIS MODULE; END MODULE G (WEAI) AND PROCEED TO MODULE H IF RESPONDENT IS ELIGIBLE FOR MODULE H.
G1.08	CHECK G1.05, G1.06 AND G1.07 (IF APPLICABLE): IS THE RESPONDENT 18 YEARS OLD OR OLDER?  IF THE INFORMATION IN G1.05, G1.06 AND G1.07 CONFLICTS, DETERMINE WHICH IS MOST ACCURATE USING THE AGE/YEAR OF BIRTH CONSISTENCY CHART AND GUIDANCE FROM YOUR INTERVIEWER'S MANUAL.	YES.....1 NO.....2 DK.....8 → RESPONDENT NOT ELIGIBLE FOR THIS MODULE; END MODULE G (WEAI) AND PROCEED TO MODULE H IF RESPONDENT IS ELIGIBLE FOR MODULE H.
G1.09	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED .....1 YES, LIVING WITH A MAN .....2 → GO TO SUB-MODULE G2 NO, NOT IN UNION.....3 REFUSED.....9
G1.10	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED .....1 YES, LIVED WITH A MAN.....2 NO.....3 → GO TO SUB-MODULE G2 REFUSED.....9
G1.11	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED.....1 DIVORCED.....2 SEPARATED.....3



## SUB-MODULE G2. Role in Household Decision-Making Around Production and Income Generation

HOUSEHOLD IDENTIFICATION (IN DATA FILE, EACH SUB-MODULE (G2-G6) MUST BE LINKED WITH HH AND RESPONDENT ID)

RESPONDENT ID CODE


“Now I’d like to ask you some questions about your participation in certain types of work activities.”

ACTIVITY	Did you yourself participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons)?	How much input did you have in making decisions about [ACTIVITY]?	How much input did you have in decisions on the use of income generated from [ACTIVITY]
ACTIVITY CODE	ACTIVITY DESCRIPTION	G2.01	G2.02
<b>A</b>	<b>Food crop farming:</b> These are crops that are grown primarily for household food consumption	YES ..... 1 NO ..... 2 → SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS.....01 INPUT INTO SOME DECISIONS .....02 INPUT INTO MOST OR ALL DECISIONS..03 NO DECISION MADE .....93 REFUSED .....99
<b>B</b>	<b>Cash crop farming:</b> These are crops that are grown primarily for sale in the market	YES ..... 1 NO ..... 2 → SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS.....01 INPUT INTO SOME DECISIONS .....02 INPUT INTO MOST OR ALL DECISIONS..03 NO DECISION MADE .....93 REFUSED .....99
<b>C</b>	<b>Livestock raising</b>	YES ..... 1 NO ..... 2 → SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS.....01 INPUT INTO SOME DECISIONS .....02 INPUT INTO MOST OR ALL DECISIONS..03 NO DECISION MADE .....93 REFUSED .....99
<b>D</b>	<b>Non-farm economic activities:</b> This would include things like running a small business, self-employment, buy-and-sell	YES ..... 1 NO ..... 2 → SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS.....01 INPUT INTO SOME DECISIONS .....02 INPUT INTO MOST OR ALL DECISIONS..03 NO DECISION MADE .....93 REFUSED .....99
<b>E</b>	<b>Wage and salary employment:</b> This could be work that is paid for in cash or in-kind, including both agriculture and other wage work	YES ..... 1 NO ..... 2 → SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS.....01 INPUT INTO SOME DECISIONS .....02 INPUT INTO MOST OR ALL DECISIONS..03 NO DECISION MADE .....93 REFUSED .....99
<b>F</b>	<b>Fishing or fishpond culture</b>	YES ..... 1 NO ..... 2 → SKIP TO MODULE G3	NO INPUT OR INPUT INTO VERY FEW DECISIONS.....01 INPUT INTO SOME DECISIONS .....02 INPUT INTO MOST OR ALL DECISIONS..03 NO DECISION MADE .....93 REFUSED .....99

## SUB-MODULE G3(A). Access to Productive Capital

“Now I’d like to ask you about your household’s ownership of a number of items that could be used to generate income.”

PRODUCTIVE CAPITAL		Does anyone in your household currently have any [ITEM]?	How many of [ITEM] does your household currently have?	Who would you say owns most of the [ITEM]? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide whether to sell [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide whether to give away [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide to mortgage or rent out [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who contributes most to decisions regarding a new purchase of [ITEM]? <b>CIRCLE ALL APPLICABLE</b>
PRODUCTIVE CAPITAL		G3.01a	G3.01b	G3.02	G3.03	G3.04	G3.05	G3.06
<b>A</b>	Agricultural land (plots)	YES..... 1  NO .....2→SKIP REFUSED ...9→O NEXT ITEM	<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED.....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9
<b>B</b>	Large livestock (oxen, cattle, donkeys)	YES..... 1  NO .....2→SKIP REFUSED ...9→O NEXT ITEM	<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED.....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9
<b>C</b>	Small livestock (goats, pigs, sheep, rabbits)	YES..... 1  NO .....2→SKIP REFUSED ...9→O NEXT ITEM	<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED.....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9
<b>D</b>	Chickens, ducks, turkeys, guinea fowl, and pigeons	YES..... 1  NO .....2→SKIP REFUSED ...9→O NEXT ITEM	<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED.....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9
<b>E</b>	Fish pond or fishing equipment	YES..... 1  NO .....2→SKIP REFUSED ...9→O NEXT ITEM	<div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div> <div style="border: 1px solid black; width: 30px; height: 20px; display: inline-block;"></div>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED.....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9

PRODUCTIVE CAPITAL		Does anyone in your household currently have any [ITEM]?	How many of [ITEM] does your household currently have?	Who would you say owns most of the [ITEM]? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide whether to sell [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide whether to give away [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide to mortgage or rent out [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who contributes most to decisions regarding a new purchase of [ITEM]? <b>CIRCLE ALL APPLICABLE</b>
PRODUCTIVE CAPITAL		G3.01a	G3.01b	G3.02	G3.03	G3.04	G3.05	G3.06
<b>F</b>	Farm equipment (non-mechanized: hoe, sickle, animal-drawn ploughs, wheel barrow, sprayer, manual treadle pump)	YES..... 1  NO .....2→SKIP REFUSED ....9→O NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9
<b>G</b>	Farm equipment (mechanized: tractor-drawn plough, power tiller, motorized treadle pump groundnut sheller)	YES..... 1  NO .....2→SKIP REFUSED ....9→O NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER..D NOT APPLICABLE .....Z REFUSED .....9
<b>H</b>	Nonfarm business equipment (solar panels used for recharging, solar inverter, solar battery, sewing machine, brewing equipment, fryers, generator, satellite dish, cooler boxes)	YES..... 1  NO .....2→SKIP REFUSED ....9→O NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9				
<b>I</b>	House or other structures	YES..... 1  NO .....2→SKIP REFUSED ....9→O NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9				
<b>J</b>	Large consumer durables (refrigerator, TV, sofa, dining table sets, beds)	YES..... 1  NO .....2→SKIP REFUSED ....9→O NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9				

PRODUCTIVE CAPITAL		Does anyone in your household currently have any [ITEM]?	How many of [ITEM] does your household currently have?	Who would you say owns most of the [ITEM]? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide whether to sell [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide whether to give away [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who would you say can decide to mortgage or rent out [ITEM] most of the time? <b>CIRCLE ALL APPLICABLE</b>	Who contributes most to decisions regarding a new purchase of [ITEM]? <b>CIRCLE ALL APPLICABLE</b>
PRODUCTIVE CAPITAL		G3.01a	G3.01b	G3.02	G3.03	G3.04	G3.05	G3.06
<b>K</b>	Small consumer durables (radio, CD/DVD player, VCR player, cookware, iron, paraffin lamp, hot plate)	YES..... 1 NO .....2- <del>3</del> KIP REFUSED ....9- <del>0</del> NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9				
<b>L</b>	Cell phone	YES..... 1 NO .....2- <del>3</del> KIP REFUSED ....9- <del>0</del> NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9				
<b>M</b>	Other land not used for agricultural purposes (pieces/plots, residential or commercial land)	YES..... 1 NO .....2- <del>3</del> KIP REFUSED ....9- <del>0</del> NEXT ITEM	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9				
<b>N</b>	Means of transportation (bicycle, motorcycle, car, ox-cart)	YES..... 1 NO .....2- <del>3</del> KIP REFUSED ....9- <del>0</del> MODULE G3(B)	<input type="text"/> <input type="text"/> <input type="text"/>	SELF .....A PARTNER/SPOUSE.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER ..D NOT APPLICABLE .....Z REFUSED .....9				

### SUB-MODULE G3(B). Access to Credit

“Next I’d like to ask about your household’s experience with borrowing money or other items in the past 12 months.”

LENDING SOURCES		Has anyone in your household taken any loans or borrowed cash/in-kind from [SOURCE] in the past 12 months?	Who made the decision to borrow from [SOURCE]? <b>CIRCLE ALL APPLICABLE</b>	Who makes the decision about what to do with the money/ item borrowed from [SOURCE]? <b>CIRCLE ALL APPLICABLE</b>
LENDING SOURCE NAMES		G3.07	G3.08	G3.09
<b>A</b>	Non-governmental organization (NGO)	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO NEXT SOURCE DON'T KNOW ..... 8 → GO TO NEXT SOURCE REFUSED ..... 9 → GO TO NEXT SOURCE	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9
<b>B</b>	Informal lender	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO NEXT SOURCE DON'T KNOW ..... 8 → GO TO NEXT SOURCE REFUSED ..... 9 → GO TO NEXT SOURCE	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9
<b>C</b>	Formal lender (bank/financial institution e.g., OIBM, FINCA, PRIDE, CUMO)	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO NEXT SOURCE DON'T KNOW ..... 8 → GO TO NEXT SOURCE REFUSED ..... 9 → GO TO NEXT SOURCE	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9
<b>D</b>	Friends or relatives	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO NEXT SOURCE DON'T KNOW ..... 8 → GO TO NEXT SOURCE REFUSED ..... 9 → GO TO NEXT SOURCE	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9
<b>E</b>	Group based micro-finance or lending including merry-go-rounds, VSLAs (Village Savings and Loan Associations), ROSCAs (Rotating, Savings and Credit Associations), SACCOs (Savings and Credit Co-Operatives)	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO MODULE G4 DON'T KNOW ..... 8 → GO TO MODULE G4 REFUSED ..... 9 → GO TO MODULE G4	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9	SELF ..... A PARTNER/SPOUSE ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED ..... 9

### SUB-MODULE G4(A). Individual Leadership and Influence in the Community

“Now I have a few questions about how comfortable you feel speaking up in public when the community needs to make important decisions.”

QNO.	QUESTION	RESPONSE
G4.01	Do you feel comfortable speaking up in public to help decide on infrastructure (like small wells, roads, water supplies) to be built in your community?	NO, NOT AT ALL COMFORTABLE ..... 1 YES, BUT WITH DIFFICULTY ..... 2 YES, COMFORTABLY ..... 3 NOT APPLICABLE ..... 5 REFUSED ..... 9
G4.02	Do you feel comfortable speaking up in public to ensure proper payment of wages for public works or other similar programs?	NO, NOT AT ALL COMFORTABLE ..... 1 YES, BUT WITH DIFFICULTY ..... 2 YES, COMFORTABLY ..... 3 NOT APPLICABLE ..... 5 REFUSED ..... 9
G4.03	Do you feel comfortable speaking up in public to protest the misbehavior of authorities or elected officials?	NO, NOT AT ALL COMFORTABLE ..... 1 YES, BUT WITH DIFFICULTY ..... 2 YES, COMFORTABLY ..... 3 NOT APPLICABLE ..... 5 REFUSED ..... 9

## SUB-MODULE G4(B). Group Membership

“The next few questions are about different groups or organizations that may exist in your community.”

GROUP MEMBERSHIP		Is there a [GROUP] in your community?	Are you an active member of this [GROUP]?
GROUP CATEGORIES		G4.04	G4.05
<b>A</b>	Agricultural/livestock/fisheries producer's group (including marketing groups)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9
<b>B</b>	Water users' group	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9
<b>C</b>	Forest users' group	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9
<b>D</b>	Credit or microfinance group (including merry-go-rounds, VSLAs (Village Savings and Loan Associations), ROSCAs (Rotating, Savings and Credit Associations), SACCOs (Savings and Credit Co-Operatives))	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9
<b>E</b>	Mutual help or insurance group (including support groups)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9
<b>F</b>	Trade and business association	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9
<b>G</b>	Civic groups (improving community) or charitable group (helping others)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9
<b>H</b>	Local government	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T..... KNOW.....8	YES.....1 NO .....2 REFUSED.....9

GROUP MEMBERSHIP		Is there a [GROUP] in your community?	Are you an active member of this [GROUP]?
GROUP CATEGORIES		G4.04	G4.05
I	Religious group	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES.....1 NO .....2 REFUSED.....9
J	Other women's group  ONLY INCLUDE A GROUP HERE IF IT DOES NOT FIT INTO ONE OF THE OTHER CATEGORIES	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES.....1 NO .....2 REFUSED.....9
K	Any other group or organization (SPECIFY)_____	YES.....1 NO.....2 → SKIP TO MODULE G5A DON'T KNOW.....8	YES.....1 NO .....2 REFUSED.....9



## SUB-MODULE G5(A). Decision Making

“Now I have some questions about making decisions about various aspects of household life.”

ACTIVITY		When decisions are made regarding [ACTIVITY], who is it that normally takes the decision? <b>CIRCLE ALL APPLICABLE</b>	<b>FILTER: CHECK G5.01</b>	To what extent do you feel you can make your own personal decisions regarding [ACTIVITY] if you want(ed) to?
	ACTIVITY	G5.01	G5.01A	G5.02
<b>A</b>	Getting inputs for agricultural production	SELF .....A SPOUSE/PARTNER.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER .....D NOT APPLICABLE .....Z → SKIP TO NEXT ACTIVITY REFUSED .....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01:  “SELF” (“A”) IS THE ONLY RESPONSE..... 1 → GO TO NEXT ACTIVITY  “SELF” (“A”) IS <b>NOT</b> THE ONLY RESPONSE.... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT..... 2 MEDIUM EXTENT..... 3 TO A HIGH EXTENT ..... 4 REFUSED ..... 9
<b>B</b>	The types of crops to grow	SELF .....A SPOUSE/PARTNER.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER .....D NOT APPLICABLE .....Z → SKIP TO NEXT ACTIVITY REFUSED .....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01:  “SELF” (“A”) IS THE ONLY RESPONSE..... 1 → GO TO NEXT ACTIVITY  “SELF” (“A”) IS <b>NOT</b> THE ONLY RESPONSE.... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT..... 2 MEDIUM EXTENT..... 3 TO A HIGH EXTENT ..... 4 REFUSED ..... 9
<b>C</b>	Taking crops to the market (or not)	SELF .....A SPOUSE/PARTNER.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER .....D NOT APPLICABLE .....Z → SKIP TO NEXT ACTIVITY REFUSED .....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01:  “SELF” (“A”) IS THE ONLY RESPONSE..... 1 → GO TO NEXT ACTIVITY  “SELF” (“A”) IS <b>NOT</b> THE ONLY RESPONSE.... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT..... 2 MEDIUM EXTENT..... 3 TO A HIGH EXTENT ..... 4 REFUSED ..... 9

ACTIVITY		When decisions are made regarding [ACTIVITY], who is it that normally takes the decision? <b>CIRCLE ALL APPLICABLE</b>	<b>FILTER:</b> <b>CHECK G5.01</b>	To what extent do you feel you can make your own personal decisions regarding [ACTIVITY] if you want(ed) to?
	ACTIVITY	G5.01	G5.01A	G5.02
D	Livestock raising	SELF .....A SPOUSE/PARTNER.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER.....D NOT APPLICABLE .....Z → SKIP TO NEXT ACTIVITY REFUSED.....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01:  “SELF” (“A”) IS THE ONLY RESPONSE..... 1 → GO TO NEXT ACTIVITY  “SELF” (“A”) IS <b>NOT</b> THE ONLY RESPONSE.... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT .....4 REFUSED .....9
E	Your own (singular) wage or salary employment	SELF .....A SPOUSE/PARTNER.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER.....D NOT APPLICABLE .....Z → SKIP TO NEXT ACTIVITY REFUSED.....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01:  “SELF” (“A”) IS THE ONLY RESPONSE..... 1 → GO TO NEXT ACTIVITY  “SELF” (“A”) IS <b>NOT</b> THE ONLY RESPONSE.... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT .....4 REFUSED .....9
F	Major household expenditures (such as a large appliance for the house like refrigerator)	SELF .....A SPOUSE/PARTNER.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER.....D NOT APPLICABLE .....Z → SKIP TO NEXT ACTIVITY REFUSED.....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01:  “SELF” (“A”) IS THE ONLY RESPONSE..... 1 → GO TO NEXT ACTIVITY  “SELF” (“A”) IS <b>NOT</b> THE ONLY RESPONSE.... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT .....4 REFUSED .....9
G	Minor household expenditures (such as food for daily consumption or other household needs)	SELF .....A SPOUSE/PARTNER.....B OTHER HH MEMBER .....C OTHER NON-HH MEMBER.....D NOT APPLICABLE .....Z → SKIP TO NEXT MODULE REFUSED.....9 → SKIP TO NEXT MODULE	CHECK G5.01:  “SELF” (“A”) IS THE ONLY RESPONSE..... 1 → GO TO NEXT MODULE  “SELF” (“A”) IS <b>NOT</b> THE ONLY RESPONSE.... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT .....4 REFUSED .....9

### SUB-MODULE G6(A). Time Allocation

**G6.01.** PLEASE RECORD A LOG OF THE ACTIVITIES FOR THE INDIVIDUAL IN THE LAST COMPLETE 24 HOURS (STARTING YESTERDAY MORNING AT 4 AM, FINISHING 3:59 AM OF THE CURRENT DAY). THE TIME INTERVALS ARE MARKED IN 15 MIN INTERVALS AND ONE TO TWO ACTIVITIES CAN BE MARKED FOR EACH TIME PERIOD BY DRAWING A LINE THROUGH THAT ACTIVITY. IF TWO ACTIVITIES ARE MARKED, THEY SHOULD BE DISTINGUISHED WITH A 1 FOR THE PRIMARY ACTIVITY AND A 2 FOR THE SECONDARY ACTIVITY WRITTEN NEXT TO THE LINES. PLEASE ADMINISTER USING THE PROTOCOL IN THE INTERVIEWER MANUAL.

“Now I’d like to ask you about how you spent your time during the past 24 hours. This will be a detailed accounting. We’ll begin from yesterday morning at 4 am, and continue through to 4 am of this morning.”

[illegible]

**SUB-MODULE G6(A). Time Allocation (continued)**

ACTIVITY CODE	ACTIVITY	DAY			EVENING			NIGHT											
		16	17	18	19	20	21	22	23	24	1	2	3						
A	SLEEPING AND RESTING																		
B	EATING AND DRINKING																		
C	PERSONAL CARE																		
D	SCHOOL (INCLUDING HOMEWORK)																		
E	WORK AS EMPLOYED																		
F	OWN BUSINESS WORK																		
G	FARMING/LIVESTOCK/FISHING																		
H	SHOPPING/GETTING SERVICE (INCLUDING HEALTH SERVICES)																		
I	WEAVING, SEWING, TEXTILE CARE																		
J	COOKING																		
K	DOMESTIC WORK (INCLUDING FETCHING WOOD AND WATER)																		
L	CARE FOR CHILDREN/ADULTS/ELDERLY																		
M	TRAVEL AND COMMUTING																		
N	WATCHING TV/LISTENING TO RADIO/READING																		
O	EXERCISING																		
P	SOCIAL ACTIVITIES AND HOBBIES																		
Q	RELIGIOUS ACTIVITIES																		
X	OTHER (SPECIFY)																		

### SUB-MODULE G6(B). Satisfaction with Time Allocation

QNO.	QUESTION	RESPONSE OPTIONS/INSTRUCTIONS
<b>G6.01B</b>	In the past 24 hours, did you work, either at home or outside the home, more than usual, about the same amount as usual, or less than usual?	MORE THAN USUAL.....1 ABOUT THE SAME AS USUAL.....2 LESS THAN USUAL.....3
<b>G6.02</b>	<p>Next, I am going to ask you a question about how satisfied you are with the time you have to yourself to do things you enjoy. Please give your opinion on a scale of 1 to 10. 1 means you are not satisfied and 10 means you are very satisfied. If you are neither satisfied nor dissatisfied, this would be in the middle, or 5, on the scale.</p> <p>How satisfied are you with your available time for leisure activities like visiting neighbors, watching TV, listening to the radio, seeing movies or doing sports?</p>	<p>SATISFACTION RATING: <input type="text"/> <input type="text"/></p>

## MODULE H. Women's Anthropometry and Dietary Diversity

HOUSEHOLD IDENTIFICATION (IN DATA FILE, EACH RESPONDENT  
MUST BE MATCHED WITH THE HH ID)

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ASK THESE QUESTIONS OF EACH WOMAN AGE 15-49 YEARS IN THE HOUSEHOLD.

CHECK THE INFORMED CONSENT REGISTER AND ENSURE THAT THE RESPONDENT(S) TO MODULE H HAVE PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE MODULE H INFORMED CONSENT PROCEDURE (ANNEX 6) TO THE RESPONDENT(S).

CARRY DUPLICATE COPIES OF THIS MODULE IN CASE THERE ARE MORE THAN 5 WOMEN OF AGE 15-49 IN THE HOUSEHOLD.

ENSURE THAT THE ENTIRETY OF MODULE H, INCLUDING DIETARY DIVERSITY, IS COMPLETED FOR WOMAN 1 BEFORE MOVING ON TO WOMAN 2.

"In order to learn more about peoples' nutrition in our country, we would like to take measures of your growth – your height and your weight – and we'd also like to learn more about what kinds of foods you eat."

NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
<b>H01</b>	WOMAN'S ID CODE AND NAME FROM THE HOUSEHOLD ROSTER	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> NAME: _____	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> NAME: _____	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> NAME: _____	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> NAME: _____	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> NAME: _____
<b>H02</b>	In what month and year were you born?	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> MONTH DK MONTH....98  <div style="border: 1px solid black; width: 80px; height: 25px; margin-bottom: 5px;"></div> YEAR DK YEAR....9998	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> MONTH DK MONTH....98  <div style="border: 1px solid black; width: 80px; height: 25px; margin-bottom: 5px;"></div> YEAR DK YEAR....9998	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> MONTH DK MONTH....98  <div style="border: 1px solid black; width: 80px; height: 25px; margin-bottom: 5px;"></div> YEAR DK YEAR....9998	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> MONTH DK MONTH....98  <div style="border: 1px solid black; width: 80px; height: 25px; margin-bottom: 5px;"></div> YEAR DK YEAR....9998	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> MONTH DK MONTH....98  <div style="border: 1px solid black; width: 80px; height: 25px; margin-bottom: 5px;"></div> YEAR DK YEAR....9998
<b>H03</b>	Please tell me how old you are. What was your age at your last birthday?  RECORD AGE IN COMPLETED YEARS	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> YEARS  IF RESPONDENT KNOWS HER AGE, SKIP TO H05.  IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> YEARS  IF RESPONDENT KNOWS HER AGE, SKIP TO H05.  IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> YEARS  IF RESPONDENT KNOWS HER AGE, SKIP TO H05.  IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> YEARS  IF RESPONDENT KNOWS HER AGE, SKIP TO H05.  IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	<div style="border: 1px solid black; width: 40px; height: 25px; margin-bottom: 5px;"></div> YEARS  IF RESPONDENT KNOWS HER AGE, SKIP TO H05.  IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.

NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
H04	Are you between the ages of 15 and 49 years old?	YES ..... 1 NO ..... 2 DK ..... 8	YES ..... 1 NO ..... 2 DK ..... 8	YES ..... 1 NO ..... 2 DK ..... 8	YES ..... 1 NO ..... 2 DK ..... 8	YES ..... 1 NO ..... 2 DK ..... 8
H05	CHECK H02, H03, AND H04 (IF APPLICABLE): IS THE RESPONDENT BETWEEN THE AGES OF 15 AND 49 YEARS?  IF THE INFORMATION IN H02, H03, AND H04 CONFLICTS, DETERMINE WHICH IS MOST ACCURATE USING THE AGE/YEAR OF BIRTH CONSISTENCY CHART AND GUIDANCE FROM YOUR INTERVIEWER'S MANUAL.	YES ..... 1  NO ..... 2 ] CHECK DK ..... 8 ] FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES ..... 1  NO ..... 2 ] CHECK DK ..... 8 ] FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES ..... 1  NO ..... 2 ] CHECK DK ..... 8 ] FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES ..... 1  NO ..... 2 ] CHECK DK ..... 8 ] FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES ..... 1  NO ..... 2 ] CHECK DK ..... 8 ] FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I
<b>WOMEN'S NUTRITIONAL STATUS</b>						
H06	Are you currently pregnant?	YES ..... 1 → SKIP TO DIETARY DIVERSITY  NO ..... 2 DK ..... 8 REFUSED ..... 9	YES ..... 1 → SKIP TO DIETARY DIVERSITY  NO ..... 2 DK ..... 8 REFUSED ..... 9	YES ..... 1 → SKIP TO DIETARY DIVERSITY  NO ..... 2 DK ..... 8 REFUSED ..... 9	YES ..... 1 → SKIP TO DIETARY DIVERSITY  NO ..... 2 DK ..... 8 REFUSED ..... 9	YES ..... 1 → SKIP TO DIETARY DIVERSITY  NO ..... 2 DK ..... 8 REFUSED ..... 9
H07	WEIGHT IN KILOGRAMS:  WEIGH THE WOMAN	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999
H08	HEIGHT IN CENTIMETERS:  MEASURE THE WOMAN	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999

WOMEN'S DIETARY DIVERSITY						
<p>Now I would like to ask you about liquids or foods that you ate yesterday during the day or at night. I am interested in whether you had the item even if it was combined with other foods. For example, if you ate a millet porridge made with a mixed vegetable sauce, you should reply yes to any food I ask about that was an ingredient in the porridge or sauce. Please do not include any food used in a small amount for seasoning or condiments (like chilies, spices, herbs, or fish powder), I will ask you about those foods separately.</p> <p>Yesterday during the day or night did you drink or eat any [ASK QUESTIONS H14 to H30]?</p>						
NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
H14	Bread, savory biscuits, porridge, crackers, pasta, noodles, rice, or other foods made from grains such as corn, wheat, millet, sorghum, bulgar, wheat, barley?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H15A	Orange-fleshed sweet potatoes or foods made from orange-fleshed sweet potatoes such as porridge, flitters, or stew, for example?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8



NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
H15B	Any other dark yellow or orange fleshed roots, tubers, or vegetables such as yellow-fleshed sweet potatoes, pumpkin, carrots, or squash?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H16	White potatoes, white yams, cassava, plantains or any other foods made from roots?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H17A	Any dark green leafy vegetables such as spinach, kale, okra, pumpkin leaves, amaranth leaves or moringa leaves?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H17B	Any other vegetables such as green beans, tomatoes, mushrooms, cabbage, cauliflower, broccoli etc.?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H18A	Ripe mangoes, ripe papayas, apricots, cantaloupe melons, pulp from African locust bean, or other fruits that are dark yellow or orange inside?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H18B	Any other fruits like bananas, apples, avocados, pineapples, berries, baobab fruit, etc.?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H19A	Any liver, kidney, heart, or other organ meats from domesticated animals such as beef, pork, lamb, goat, chicken, duck, or pigeon?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H19B	Any meat from domesticated animals, such as beef, pork, lamb, goat, chicken, duck, or pigeon?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H20A	Any liver, kidney, heart, or other organ meats from wild animals such as warthogs, buck, kudu, impala, antelopes, crocodile, cats, monkeys, alligators, or mice?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H20B	Any flesh from wild animals, such as warthogs, buck, kudu, impala, antelopes, crocodile, cats, monkeys, alligators, or mice?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H21	Eggs? (chicken, turkey, fowl, duck)	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8

NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
H22	Fresh or dried fish, shellfish, crabs, or seafood?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H23A	Any food made from groundnut or groundnut products such as groundnut flour, peanut butter, roasted groundnuts, boiled groundnut snack, sauces, groundnut biscuits?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H23B	Any foods made from soy or soy products such as soya bean flour, soy milk, soy mash relish, soy flitters, or soy soup?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H23D	Any other foods made from beans, peas, lentils, or other legumes?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H24A	Any foods made from sesame or sesame flour?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H24B	Any foods made from other nuts or seeds? EXCLUDE FOODS MADE FROM GROUNDNUTS OR SESAME SEEDS WHICH BELONG IN ABOVE CATEGORIES.	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H25	Milk, soured milk, cheese, yogurt, or other milk products?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H26	Any oil, fats, or butter, or foods made with any of these? INCLUDE GROUNDNUT OIL AND SESAME OIL.	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H27	Any sugary foods such as chocolates, sweets, candies, pastries, doughnuts, cakes, sweet biscuits, or sugar cane?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H28	Condiments for flavor, such as chilies, spices, herbs, fish powder, curry, or bicarbonate soda/ash used for cooking?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H29	Edible insects, mopane worms, grasshoppers or flying ants?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
H30	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8

## MODULE I. Child Anthropometry and Infant and Young Child Feeding

HOUSEHOLD IDENTIFICATION (IN DATA FILE, EACH RESPONDENT MUST BE MATCHED WITH THE HH ID)

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IDENTIFY THE PRIMARY CAREGIVER OF EACH CHILD AGE 0-59 MONTHS IN THE HOUSEHOLD. ASK THESE QUESTIONS OF THE PRIMARY CAREGIVER OF EACH CHILD AGED 0–59 MONTHS IN THE HOUSEHOLD. CHECK THE INFORMED CONSENT REGISTER AND ENSURE THAT THE RESPONDENT(S) TO MODULE I HAVE PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE MODULE I INFORMED CONSENT PROCEDURE (ANNEX 7) TO THE RESPONDENT(S) (THE PRIMARY CAREGIVER OF EACH CHILD AGED 0–59 MONTHS IN THE HOUSEHOLD).

YOU SHOULD CARRY DUPLICATE COPIES OF THIS MODULE IN CASE THERE ARE MORE THAN 5 CHILDREN 0-59 MONTHS OLD IN THE HOUSEHOLD.

“In order to learn more about child nutrition in our country, we would like to measure your child(ren)’s growth – their height and their weight – and we’d also like to learn more about what kinds of foods they eat.”

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I01	CAREGIVER'S ID CODE FROM THE HOUSEHOLD ROSTER	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
I02	CHILD'S ID CODE AND FIRST NAME FROM THE HOUSEHOLD ROSTER	<input type="text"/> CHILD'S NAME	<input type="text"/> CHILD'S NAME	<input type="text"/> CHILD'S NAME	<input type="text"/> CHILD'S NAME	<input type="text"/> CHILD'S NAME
I03	What is [CHILD'S NAME]'s sex?	MALE ..... 1 FEMALE ..... 2	MALE ..... 1 FEMALE ..... 2	MALE ..... 1 FEMALE ..... 2	MALE ..... 1 FEMALE ..... 2	MALE ..... 1 FEMALE ..... 2
I04	I would like to ask you some question about [CHILD'S NAME]. What is [his/her] birthday? In what month and year was [CHILD'S NAME] born?	<input type="text"/> DAY DK DAY....98 <input type="text"/> MONTH DK MONTH....98 <input type="text"/> YEAR DK YEAR....9998	<input type="text"/> DAY DK DAY....98 <input type="text"/> MONTH DK MONTH....98 <input type="text"/> YEAR DK YEAR....9998	<input type="text"/> DAY DK DAY....98 <input type="text"/> MONTH DK MONTH....98 <input type="text"/> YEAR DK YEAR....9998	<input type="text"/> DAY DK DAY....98 <input type="text"/> MONTH DK MONTH....98 <input type="text"/> YEAR DK YEAR....9998	<input type="text"/> DAY DK DAY....98 <input type="text"/> MONTH DK MONTH....98 <input type="text"/> YEAR DK YEAR....9998
I04A	CHECK I04: IS THE INFORMATION ON THE CHILD'S DAY, MONTH, AND YEAR OF BIRTH COMPLETE?	YES..... 1 → SKIP TO I05 NO ..... 2	YES ..... 1 → SKIP TO I05 NO ..... 2	YES ..... 1 → SKIP TO I05 NO ..... 2	YES ..... 1 → SKIP TO I05 NO ..... 2	YES..... 1 → SKIP TO I05 NO ..... 2

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I04B	Does [CHILD'S NAME] have a health or vaccination card with the birth date recorded?	YES..... 1 NO ..... 2 ] SKIP DK..... 8 ] TO I05	YES ..... 1 NO ..... 2 ] SKIP DK..... 8 ] TO I05	YES ..... 1 NO ..... 2 ] SKIP DK ..... 8 ] TO I05	YES..... 1 NO ..... 2 ] SKIP DK..... 8 ] TO I05	YES..... 1 NO ..... 2 ] SKIP DK..... 8 ] TO I05
I04C	May I please see the card?	YES..... 1 NO ..... 2 ] SKIP CARD NOT AVAILABLE . 8 ] TO I05	YES ..... 1 NO ..... 2 ] SKIP CARD NOT AVAILABLE . 8 ] TO I05	YES ..... 1 NO ..... 2 ] SKIP CARD NOT AVAILABLE . 8 ] TO I05	YES..... 1 NO ..... 2 ] SKIP CARD NOT AVAILABLE . 8 ] TO I05	YES..... 1 NO ..... 2 ] SKIP CARD NOT AVAILABLE . 8 ] TO I05
I04D	CONFIRM WITH THE RESPONDENT THAT THE INFORMATION ON THE CARD IS CORRECT.  IF THE HEALTH/VACCINATION CARD IS SHOWN AND THE RESPONDENT CONFIRMS THE INFORMATION IS CORRECT, RECORD THE DATE OF BIRTH AS DOCUMENTED ON THE CARD.	<div> <div> <div></div> <div></div> </div> <div>DAY</div> <div>DK DAY....98</div> </div> <div> <div> <div></div> <div></div> </div> <div>MONTH</div> <div>DK MONTH....98</div> </div> <div> <div> <div></div> <div></div> <div></div> <div></div> </div> <div>YEAR</div> <div>DK YEAR....9998</div> </div>				

DAY

DK DAY....98

MONTH

DK MONTH....98

YEAR

DK YEAR....9998

DAY

DK DAY....98

MONTH

DK MONTH....98

YEAR

DK YEAR....9998

DAY

DK DAY....98

MONTH

DK MONTH....98

YEAR

DK YEAR....9998

DAY

DK DAY....98

MONTH

DK MONTH....98

YEAR

DK YEAR....9998

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I07	CHECK I04, I04D, I05, AND I06 TO VERIFY CONSISTENCY					
I07A	CHECK: IS THE YEAR RECORDED IN I04 OR I04D CONSISTENT WITH THE AGE IN YEARS RECORDED IN I05?	YES.....1 NO .....2	YES .....1 NO .....2	YES .....1 NO .....2	YES.....1 NO .....2	YES.....1 NO .....2
I07B	ARE YEAR AND MONTH OF BIRTH RECORDED IN I04 OR I04D CONSISTENT WITH AGE IN MONTHS RECORDED IN I06?	YES.....1 NO .....2	YES .....1 NO .....2	YES .....1 NO .....2	YES.....1 NO .....2	YES.....1 NO .....2
I07C	CHECK I07A AND I07B: IF THE ANSWER TO A OR B IS 'NO,' RESOLVE ANY INCONSISTENCIES. IF THE BIRTHDATE WAS RECORDED ON A HEALTH CARD, THIS MAY BE USED AS THE CORRECT DATA SOURCE.					
I08	CHECK I06. IS THE CHILD UNDER 60 MONTHS?	YES.....1  NO .....2 DON'T KNOW .....8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES .....1  NO .....2 DON'T KNOW .....8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES .....1  NO .....2 DON'T KNOW .....8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES.....1  NO .....2 DON'T KNOW .....8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES.....1  NO .....2 DON'T KNOW .....8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE
	"Now I would like to assess your child for a condition called "edema," which occurs when too much fluid is retained by the body. It can be related to nutrition. To perform the test, I need to gently press my thumbs on [NAME]'s feet."					
I09	DOES CHILD HAVE EDEMA?	YES .....1 NO .....2 NOT PRESENT .....4 OTHER .....6 REFUSED .....9	YES.....1 NO .....2 NOT PRESENT .....4 OTHER .....6 REFUSED .....9	YES .....1 NO .....2 NOT PRESENT .....4 OTHER .....6 REFUSED .....9	YES .....1 NO .....2 NOT PRESENT .....4 OTHER .....6 REFUSED .....9	YES.....1 NO .....2 NOT PRESENT .....4 OTHER .....6 REFUSED .....9
I10	WEIGHT IN KILOGRAMS: WEIGH THE CHILD	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .....9994 OTHER .....9996 REFUSED .....9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .....9994 OTHER .....9996 REFUSED .....9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .....9994 OTHER .....9996 REFUSED .....9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .....9994 OTHER .....9996 REFUSED .....9999	KG <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> NOT PRESENT .....9994 OTHER .....9996 REFUSED .....9999

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I11	CHILDREN UNDER 24 MONTHS SHOULD BE MEASURED LYING DOWN; CHILDREN 24 MONTHS OR OLDER SHOULD BE MEASURED STANDING UP.  HEIGHT IN CENTIMETERS: MEASURE THE CHILD	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999	CM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> NOT PRESENT ..... 9994 OTHER ..... 9996 REFUSED ..... 9999
I11A	WAS THE CHILD MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED .... 6	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED .... 6	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED .... 6	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED .... 6	LYING DOWN ..... 1 STANDING UP ..... 2 NOT MEASURED .... 6
<b>EXCLUSIVE BREASTFEEDING AND MINIMUM ACCEPTABLE DIET</b>						
I15	CHECK QUESTION I05. IS THE CHILD UNDER 2 YEARS OF AGE?	YES ..... 1 NO ..... 2 PROCEED TO NEXT CHILD OR END MODULE	YES ..... 1 NO ..... 2 PROCEED TO NEXT CHILD OR END MODULE	YES ..... 1 NO ..... 2 PROCEED TO NEXT CHILD OR END MODULE	YES ..... 1 NO ..... 2 PROCEED TO NEXT CHILD OR END MODULE	YES ..... 1 NO ..... 2 PROCEED TO NEXT CHILD OR END MODULE

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I16	Has [CHILD'S NAME] ever been breastfed?	YES.....1 NO .....2 DON'T KNOW.....8 REFUSED.....9 SKIP TO I18 ←	YES ..... 1 NO .....2 DON'T KNOW .....8 REFUSED .....9 SKIP TO I18 ←	YES ..... 1 NO .....2 DON'T KNOW .....8 REFUSED .....9 SKIP TO I18 ←	YES .....1 NO .....2 DON'T KNOW .....8 REFUSED .....9 SKIP TO I18 ←	YES.....1 NO .....2 DON'T KNOW .....8 REFUSED.....9 SKIP TO I18 ←
I17	Was [CHILD'S NAME] breastfed yesterday during the day or at night?	YES.....1 → SKIP TO I19 NO .....2 DON'T KNOW.....8	YES .... 1 → SKIP TO I19 NO .....2 DON'T KNOW .....8	YES .... 1 → SKIP TO I19 NO .....2 DON'T KNOW .....8	YES.....1 → SKIP TO I19 NO .....2 DON'T KNOW .....8	YES.....1 → SKIP TO I19 NO .....2 DON'T KNOW .....8
I18	Sometimes babies are fed breast milk in different ways, for example by spoon, cup, or bottle. This can happen when the mother cannot always be with her baby. Sometimes babies are breastfed by another woman or given breast milk from another woman by spoon, cup, bottle, or some other way. This can happen if a mother cannot breastfeed her own baby. Did [CHILD'S NAME] consume breast milk in any of these ways yesterday during the day or at night?	YES.....1 NO .....2 DON'T KNOW.....8 REFUSED.....9	YES .....1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES ..... 1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES .....1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES.....1 NO .....2 DON'T KNOW .....8 REFUSED.....9
I19	Now I would like to ask you about some medicines and vitamins that are sometimes given to infants. Was [CHILD'S NAME] given any vitamin drops or other medicines as drops yesterday during the day or at night?	YES.....1 NO .....2 DON'T KNOW.....8 REFUSED.....9	YES ..... 1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES ..... 1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES .....1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES.....1 NO .....2 DON'T KNOW .....8 REFUSED .....9
I20	Was [CHILD'S NAME] given oral rehydration solution yesterday during the day or at night?	YES.....1 NO .....2 DON'T KNOW.....8 REFUSED.....9	YES .....1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES ..... 1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES .....1 NO .....2 DON'T KNOW .....8 REFUSED .....9	YES.....1 NO .....2 DON'T KNOW .....8 REFUSED .....9
<p>READ THE QUESTIONS BELOW. READ THE LIST OF LIQUIDS ONE BY ONE AND MARK YES OR NO, ACCORDINGLY.</p> <p>Next I would like to ask you about some liquids that [CHILD'S NAME] may have had yesterday during the day or at night.</p> <p>Did [CHILD'S NAME] have any [ITEM FROM LIST]?:</p>						
I21	Plain water?	YES.....1 NO .....2 DON'T KNOW.....8	YES ..... 1 NO .....2 DON'T KNOW .....8	YES ..... 1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW .....8
I22	Infant formula such as Nani, SMA, Nestle, Enfamil, Isomil, Lactogen, or S26?	YES.....1 NO .....2 DON'T KNOW.....8 SKIP TO I24 ←	YES .....1 NO .....2 DON'T KNOW .....8 SKIP TO I24 ←	YES ..... 1 NO .....2 DON'T KNOW .....8 SKIP TO I24 ←	YES .....1 NO .....2 DON'T KNOW .....8 SKIP TO I24 ←	YES.....1 NO .....2 DON'T KNOW .....8 SKIP TO I24 ←

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I23	How many times yesterday during the day or at night did [CHILD'S NAME] consume any formula?	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98
I24	Did [CHILD'S NAME] have any milk such as tinned, powdered, or fresh animal milk?	YES.....1 NO .....2 DON'T KNOW.....8 SKIP TO I26 ←	YES .....1 NO .....2 DON'T KNOW .....8 SKIP TO I26 ←	YES .....1 NO .....2 DON'T KNOW .....8 SKIP TO I26 ←	YES.....1 NO.....2 DON'T KNOW.....8 SKIP TO I26 ←	YES.....1 NO.....2 DON'T KNOW.....8 SKIP TO I26 ←
I25	How many times yesterday during the day or at night did [CHILD'S NAME] consume any milk?	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98
I26	Did [CHILD'S NAME] have any juice or juice drinks?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
I27	Clear broth?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
I28	Yogurt?	YES.....1 NO .....2 DON'T KNOW.....8 SKIP TO I30 ←	YES .....1 NO .....2 DON'T KNOW .....8 SKIP TO I30 ←	YES .....1 NO .....2 DON'T KNOW .....8 SKIP TO I30 ←	YES.....1 NO.....2 DON'T KNOW.....8 SKIP TO I30 ←	YES.....1 NO.....2 DON'T KNOW.....8 SKIP TO I30 ←
I29	How many times yesterday during the day or at night did [CHILD'S NAME] consume any yogurt?	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98	<div> <div></div> <div></div> </div> TIMES DON'T KNOW .... 98
I30	Did [CHILD'S NAME] have any thin porridge?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
I31	Any other liquids such as gripe water, glucose water, or sugar water?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
I32	Any other liquids?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8



NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I33	Bread, savory biscuits, porridge, crackers, pasta, noodles, rice, or other foods made from grains such as corn, wheat, millet, sorghum, bulgar, wheat, barley?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I34A	Orange-fleshed sweet potatoes or foods made from orange-fleshed sweet potatoes such as porridge, flitters, or stew, for example?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I34B	Any other dark yellow or orange fleshed roots, tubers, or vegetables such as yellow-fleshed sweet potatoes, pumpkin, carrots, or squash?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I35	White potatoes, white yams, cassava, plantains or any other foods made from roots?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I36A	Any dark green leafy vegetables such as spinach, kale, okra, pumpkin leaves, amaranth leaves, or moringa leaves?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I36B	Any other vegetables such as green beans, tomatoes, mushrooms, cabbage, cauliflower, broccoli etc.?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I37A	Ripe mangoes, ripe papayas, apricots, cantaloupe melons, pulp from African locust bean, or other fruits that are dark yellow or orange inside?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I37B	Any other fruits like bananas, apples, avocados, pineapples, berries, baobab fruit, etc.?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I38A	Any liver, kidney, heart, or other organ meats from domesticated animals such as beef, pork, lamb, goat, chicken, duck, or pigeon?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I38B	Any meat from domesticated animals, such as beef, pork, lamb, goat, chicken, duck, or pigeon?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I39A	Any liver, kidney, heart, or other organ meats from wild animals such as warthogs, buck, kudu, impala, antelopes, crocodile, cats, monkeys, alligators, or mice?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8
I39B	Any flesh from wild animals, such as warthogs, buck, kudu, impala, antelopes, crocodile, cats, monkeys, alligators, or mice?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I40	Eggs? (chicken, turkey, fowl, duck)	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I41	Fresh or dried fish, shellfish, crabs, or seafood?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I42A	Any food made from groundnut or groundnut products such as groundnut flour, peanut butter, roasted groundnuts, boiled groundnut snack, sauces, groundnut biscuits?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I42B	Any foods made from soy or soy products such as soya bean flour, soy milk, soy mash relish, soy flitters, or soy soup?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I42D	Any other foods made from beans, peas, lentils or other legumes?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I43A	Any foods made from sesame or sesame flour?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I43B	Any foods made from other nuts or seeds? EXCLUDE FOODS MADE FROM GROUNDNUTS OR SESAME SEEDS WHICH BELONG IN ABOVE CATEGORIES.	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I44	Soured milk, cheese, yogurt, or other milk products?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I45	Any oil, fats, or butter, or foods made with any of these? INCLUDE GROUNDNUT OIL AND SESAME OIL.	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I46	Any sugary foods such as chocolates, sweets, candies, pastries, doughnuts, cakes, sweet biscuits, or sugar cane?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I47	Condiments for flavor, such as chilies, spices, herbs, fish powder, curry, or bicarbonate soda/ash used for cooking?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I48	Edible insects, mopane worms, grasshoppers or flying ants?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8
I49	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?	YES.....1 NO .....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES.....1 NO .....2 DON'T KNOW.....8	YES.....1 NO .....2 DON'T KNOW.....8

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
	CHECK CATEGORIES 33-49  IF ALL 'NO,' GO TO I50 IF AT LEAST ONE 'YES' OR ALL 'DON'T KNOW,' GO TO I51					
I50	Did [CHILD'S NAME] eat any solid, semi-solid, or soft foods yesterday during the day or at night?  IF 'YES' PROBE: What kind of solid, semi-solid, or soft foods did [CHILD'S NAME] eat?	YES.....1 GO BACK TO I33-I49 AND RECORD FOODS EATEN. THEN CONTINUE WITH I51. NO.....2 DON'T KNOW.....8 PROCEED TO NEXT CHILD OR END MODULE	YES.....1 GO BACK TO I33-I49 AND RECORD FOODS EATEN. THEN CONTINUE WITH I51. NO.....2 DON'T KNOW.....8 PROCEED TO NEXT CHILD OR END MODULE	YES.....1 GO BACK TO I33-I49 AND RECORD FOODS EATEN. THEN CONTINUE WITH I51. NO.....2 DON'T KNOW.....8 PROCEED TO NEXT CHILD OR END MODULE	YES.....1 GO BACK TO I33-I49 AND RECORD FOODS EATEN. THEN CONTINUE WITH I51. NO.....2 DON'T KNOW.....8 PROCEED TO NEXT CHILD OR END MODULE	YES.....1 GO BACK TO I33-I49 AND RECORD FOODS EATEN. THEN CONTINUE WITH I51. NO.....2 DON'T KNOW.....8 PROCEED TO NEXT CHILD OR END MODULE
I51	How many times did [child's name] eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> TIMES  DON'T KNOW ....98	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> TIMES  DON'T KNOW .... 98	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> TIMES  DON'T KNOW .....98	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> TIMES  DON'T KNOW.....98	<div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> DON'T KNOW ....98

CONCLUDE THE INTERVIEW:

"Thank you very much for your time in responding to this survey. Your contributions are greatly appreciated."

## Annex 1. Country-Specific Event Calendar

The purpose of this event calendar template is to assist in ascertaining dates of birth (month and year).

### NATIONAL CALENDAR OF EVENTS – Malawi

<u>Age</u>	<u>Year</u>	<u>Event</u>
114	<b>1900</b>	Northeastern Rhodesia separated from Nyasaland. Death of Queen Victoria. 1st Montfort Marist Mission opened – Limbe.
111	<b>1903</b>	Kings African Rifles defeated in Somaliland. Lake Nyasa and Shire River very low. Beginning of Limbe Township.
110	<b>1904</b>	Start of recruitment of Protectorate people by the Witwatersrand Native Labour Association (Wenela) to work in the mines. Temporary railway built to assist the transportation of goods between Port Herald (Nsanje) and Chiromo. Alomwe immigration from Portuguese East Africa to Malawi increased.
109	<b>1905</b>	Dysentery caused death of many people throughout the country.
107	<b>1907</b>	First Legislative Council; First Governor; Name of protectorate changed from British Central Africa to Nyasaland. Completion of railway bridge at Chiromo.
106	<b>1908</b>	First motor vehicle arrives in Nyasaland. 1st Battalion of Kings African Rifles returns from East Africa. Railway from Port Herald (Nsanje) to Blantyre opened. First train arrives at Blantyre.
105	<b>1909</b>	Industrial school for the Blind established under the Church of England in Nkhotakota.
104	<b>1910</b>	Post Office Savings Bank introduced. Central Angoniland divided into Lilongwe and Dedza districts.
103	<b>1911</b>	Country divided into 14 districts. First population census taken.
102	<b>1912</b>	Railway built between Port Herald (Nsanje) and the Zambezi river.
101	<b>1913</b>	George Smith, K.C.M.G., appointed Governor of Nyasaland. Marimba district was divided into Nkhotakota division and Ngara sub-division. Lilongwe district divided into Dowa, Fort Manning (Mchinji), and Lilongwe districts. Blantyre district divided into: Blantyre division and Chiradzulu sub-division.
100	<b>1914</b>	Outbreak of the First World War. Battle of Karonga. Disablement of German boat “Herman Von Wissmann”.
99	<b>1915</b>	Chilembwe up-rising in Chiradzulu. Railway extended from Port Herald (Nsanje) to Chindio, Moçambique.
96	<b>1918</b>	End of the First World War.
92	<b>1922</b>	Railway opened from Beira to Chindio.
90	<b>1924</b>	Famine in Mzimba area, relief measures taken. Bridges built over Linthipe, Lingadzi, Lumbadzi and Diamphwe rivers in Lilongwe and Dedza districts.
88	<b>1926</b>	First flying boat lands on Lake Nyasa.
87	<b>1927</b>	Blantyre – Salisbury (Harare) Road via Tete commenced.

<b><u>Age</u></b>	<b><u>Year</u></b>	<b><u>Event</u></b>
86	<b>1928</b>	Lilongwe bridge erected.
86	<b>1928</b>	Blantyre – Salisbury (Harare) Road via Tete opened.
85	<b>1929</b>	Labour census taken for the first time in Nyasaland (Malawi). Jeans Training Centre opened in Domasi with 23 teachers.
84	<b>1930</b>	Construction of the Blantyre-Balaka railway.
83	<b>1931</b>	Population census taken in the country. Zomba Mental Hospital opened. New hydroelectric power station commenced on the middle section of the Shire River.
82	<b>1932</b>	Locusts damaged crops throughout Nyasaland. Mchape (witchcraft cleansing) begins in Mulanje and spreads widely. Lilongwe to Salima tarmac road constructed.
81	<b>1933</b>	First silver coins from Southern Rhodesia. Establishment of the Native Authority (Traditional Courts). Chileka aerodrome opened.
78	<b>1936</b>	Liwonde pontoon ferry services installed pending bridge construction.
77	<b>1937</b>	Midima Hill- Mlomba – Phalombe road completed.
75	<b>1939</b>	Outbreak of the Second World War. Lakeshore – spread of leprosy. Fort Manning (Mchinji) – opening of sub-boma.
69	<b>1945</b>	End of Second World War.
68	<b>1946</b>	Sinking of the “Viphya” passenger boat off of Chilumba/Livingstonia. Nyasaland Transport Company (NTC) formed to run buses. Cyclone and floods in Zomba township (Napolo). Chiromo bridge destroyed.
65	<b>1949</b>	Drought and famine at the end of the year, especially in the Southern Region. First African members of the Legislative Council appointed. Launching of “Ilala” at Monkey Bay.
62	<b>1952</b>	African National Congress active in its campaign against Federation
61	<b>1953</b>	Beginning of the Federation of Rhodesia and Nyasaland. Coronation of Queen Elizabeth II. Chief Gomani deposed due to disobeying the Federal Rules. Anti-federation disturbances
59	<b>1955</b>	Transferring of the Northern region headquarters from Mzimba to Mzuzu.
58	<b>1956</b>	Sir Robert Armitage becomes Governor. Colby School of Agriculture and Veterinary Science opened at Chitedze, near Lilongwe.
57	<b>1957</b>	Queen mother’s visit to Nyasaland.
56	<b>1958</b>	Return of Dr. H. Kamuzu Banda to Nyasaland (Malawi). New airport started at Lilongwe.
55	<b>1959</b>	State of Emergency declared. Release of Dr. Banda from Gweru prison.

<b><u>Age</u></b>	<b><u>Year</u></b>	<b><u>Event</u></b>
53	<b>1961</b>	First general elections.
51	<b>1963</b>	Self-government granted. Federation of Rhodesia and Nyasaland dissolved.
50	<b>1964</b>	Malawi becomes a sovereign independent state – Independence from Britain.
49	<b>1965</b>	University of Malawi opened. Sinking of Liwonde ferry.
48	<b>1966</b>	Malawi becomes a Republic. Malawi population census held. Bunda Collage of Agriculture opened.
44	<b>1970</b>	Rail link to the Mozambique port of Nacala opened by Dr. Banda.
43	<b>1971</b>	New currency – Kwacha and Tambala –introduced to replace pounds and shillings.
42	<b>1972</b>	Construction of lakeshore road. Ministry of Works and Supplies headquarters moved from Zomba to Lilongwe. Plane crash in Botswana kills more than 70 Malawian miners.
41	<b>1973</b>	First outbreak of cholera in Malawi. Chilumba Jetty built and opened by Dr. Banda.
40	<b>1974</b>	Construction of Malawi – Canada rail line from Salima to Mchinji starts from Salima.
39	<b>1975</b>	Capital of Malawi moved from Zomba to Lilongwe. Lilongwe town declared a city.
38	<b>1976</b>	Dr. Banda opened bailey bridge over the Shire river at Mangochi.
37	<b>1977</b>	Malawi population census held. Construction of Chiweta to Kacheche road, northern lakeshore. Tarmac of Lilongwe to Kasungu road. Kamuzu Central Hospital started operating.
36	<b>1978</b>	Tarmac reached Mchinji boma. Lilongwe -Mchinji railway line construction work reaches Mchinji.
35	<b>1979</b>	Queen Elizabeth’s visit to Malawi. Railway line from Salima to Lilongwe officially opened by Dr. Banda. Dwangwa Sugar Corporation opened, Nkhotakota district.
33	<b>1981</b>	Kamuzu Academy opened at Mtunthama, Kasungu.
32	<b>1982</b>	Ethanol plant came into operation. Road from Dwangwa to Nkhotakota completed.
31	<b>1983</b>	Dr. Banda opened Kamuzu International Airport in Lilongwe. Sir Glyn and Lady Jones make a private visit to Malawi.
30	<b>1984</b>	President Samora Machel of Moçambique visits Malawi.
29	<b>1985</b>	Silos built at Ipyana in Karonga. Electricity reached Nkhata Bay. Mzuzu Municipality declared a city.
28	<b>1986</b>	Prime Minister of Zimbabwe, Robert Mugabe, visits Malawi.

<b><u>Age</u></b>	<b><u>Year</u></b>	<b><u>Event</u></b>
27	<b>1987</b>	Visit of Prince Charles. Malawi Population and Housing Census held.
25	<b>1989</b>	Bus-train accident at Chilimba in Blantyre kills 13 people. Dr. Banda ordered teachers to teach in their respective regions.
24	<b>1990</b>	MV Mtendere motorboat capsizes, killing 5 people at Kaporo. Iraqi forces invade Kuwait.
23	<b>1991</b>	Flash floods at Phalombe.
22	<b>1992</b>	Pastoral letter was released, marking the beginning of multi-party struggle in Malawi.
21	<b>1993</b>	National referendum, which resulted in the adoption of multi-party politics.
20	<b>1994</b>	Multi-party general election, which ushered the United Democratic Front into government, led by President Bakili Muluzi.
19	<b>1995</b>	Mchape at Liwonde in Machinga.
17	<b>1997</b>	Death of Dr. Banda, the first president of the Republic of Malawi.
15	<b>1999</b>	Second election of President Muluzi.
13	<b>2001</b>	September 11 <sup>th</sup> attacks on the United States of America.
10	<b>2004</b>	Multi-party general election, which ushered the Democratic Progressive government, led by President Bingu wa Mutharika.
6	<b>2008</b>	Malawi Population and Housing Census held.
5	<b>2009</b>	Second election of President Bingu wa Mutharika.

## Annex 2. Age/Birth Date Consistency Chart for Survey in 2015

The purpose of this chart is to check the consistency of reported ages and dates, and to help resolve any apparent inconsistencies. Please refer to the Interviewer's Manual for instructions on how to use the chart.

AGE/BIRTH-DATE CONSISTENCY CHART FOR SURVEY IN 2015

Current	Year of birth			Current	Year of birth	
Age	Has not had birthday in	Has already had birthday in		Age	Has not had birthday in	Has already had birthday in
	2015	2015			2015	2015
	Don't know				Don't know	
0	2014	–		30	1984	1985
1	2013	2014		31	1983	1984
2	2012	2013		32	1982	1983
3	2011	2012		33	1981	1982
4	2010	2011		34	1980	1981
5	2009	2010		35	1979	1980
6	2008	2009		36	1978	1979
7	2007	2008		37	1977	1978
8	2006	2007		38	1976	1977
9	2005	2006		39	1975	1976
10	2004	2005		40	1974	1975
11	2003	2004		41	1973	1974
12	2002	2003		42	1972	1973
13	2001	2002		43	1971	1972
14	2000	2001		44	1970	1971
15	1999	2000		45	1969	1970
16	1998	1999		46	1968	1969
17	1997	1998		47	1967	1968
18	1996	1997		48	1966	1967
19	1995	1996		49	1965	1966
20	1994	1995		50	1964	1965
21	1993	1994		51	1963	1964
22	1992	1993		52	1962	1963
23	1991	1992		53	1961	1962
24	1990	1986		54	1960	1961
25	1989	1990		55	1959	1960
26	1988	1989		56	1958	1959
27	1987	1988		57	1957	1958
28	1986	1987		58	1956	1957
29	1985	1986		59	1955	1956



### **Annex 3. Informed Consent Form for Respondents Answering Module E Who Were Not Consented for the Household Questionnaire**

#### **STATEMENT TO BE READ TO THE RESPONDENT:**

Thank you for the opportunity to speak with you. We are a research team from the National Statistical Office. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, food consumption and nutrition of women and children. This part of the survey includes questions on the purchase of food and other items for the household. The questions for this part of the survey will take about 45 minutes to complete. If additional questions are relevant for you to answer, the interview in total will take approximately 1-2 hours to complete. Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone. After entering the questionnaire into a data base, we will destroy all information such as your name that could link these responses to you.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints we welcome you to contact the National Statistical Office, by calling +265884331492. We will leave a copy of this statement and our organization's complete contact information with you so that you may contact us at any time.

**Do you have any questions?  
May I begin the interview now?**

SIGNATURE OF INTERVIEWER: \_\_\_\_\_

DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED....1 → CONTINUE WITH MODULE E:

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 → END. "Thank you very much for your time."

#### **Annex 4. Informed Consent Form for Respondents Answering Module F Who Were Not Consented for Prior Modules**

##### **STATEMENT TO BE READ TO THE RESPONDENT:**

Thank you for the opportunity to speak with you. We are a research team from the National Statistical Office. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, food consumption and nutrition of women and children. This part of the survey includes questions about availability of food in the household. The questions for this part of the survey will take about 5 minutes to complete. If additional questions are relevant for you to answer, the interview in total will take approximately 1-2 hours to complete. Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone. After entering the questionnaire into a data base, we will destroy all information such as your name that could link these responses to you.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints we welcome you to contact the National Statistical Office, by calling +265884331492. We will leave a copy of this statement and our organization's complete contact information with you so that you may contact us at any time.

**Do you have any questions?  
May I begin the interview now?**

SIGNATURE OF INTERVIEWER: \_\_\_\_\_

DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED....1 → CONTINUE WITH MODULE F:

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 → END. "Thank you very much for your time."

## **Annex 5. Informed Consent Form for Respondents Answering Module G Who Were Not Consented for Prior Modules**

### **STATEMENT TO BE READ TO THE RESPONDENT:**

Thank you for the opportunity to speak with you. We are a research team from the National Statistical Office. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, food consumption and nutrition of women and children. This part of the survey includes questions on how you make decisions about the work you do, and how you spend your time during the day. The questions for this part of the survey will take about 30 minutes to complete. If additional questions are relevant for you to answer, the interview in total will take approximately 1-2 hours to complete. Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone. After entering the questionnaire into a data base, we will destroy all information such as your name that could link these responses to you.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints we welcome you to contact the National Statistical Office, by calling +265884331492. We will leave a copy of this statement and our organization's complete contact information with you so that you may contact us at any time.

**Do you have any questions?  
May I begin the interview now?**

SIGNATURE OF INTERVIEWER: \_\_\_\_\_

DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED....1 → CONTINUE WITH MODULE G:

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 → END. "Thank you very much for your time."

## **Annex 6. Informed Consent Form for Respondents Answering Module H (Women 15-49) Who Were Not Consented for Prior Modules**

### **STATEMENT TO BE READ TO THE RESPONDENT:**

Thank you for the opportunity to speak with you. We are a research team from the National Statistical Office. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, food consumption and nutrition of women and children. This part of the survey includes questions on the kinds of foods you eat, and your nutritional status, including measurement of your weight and height. The questions for this part of the survey will take about 20 minutes to complete. Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone. After entering the questionnaire into a data base, we will destroy all information such as your name that could link these responses to you.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints we welcome you to contact the National Statistical Office, by calling +265884331492. We will leave a copy of this statement and our organization's complete contact information with you so that you may contact us at any time.

**Do you have any questions?  
May I begin the interview now?**

SIGNATURE OF INTERVIEWER: \_\_\_\_\_

DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED....1 → CONTINUE WITH MODULE H:

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 → END. "Thank you very much for your time."

## **Annex 7. Informed Consent Form for Parents or Primary Caregivers of Children Eligible for Module I (Children 0-59 Months)**

### **STATEMENT TO BE READ TO THE RESPONDENT:**

Thank you for the opportunity to speak with you. We are a research team from the National Statistical Office. We are conducting a survey to learn about agriculture, food security, food consumption, nutrition and wellbeing of households in this area. Your household has been selected to participate in an interview that includes questions on topics such as your family background, dwelling characteristics, household expenditures and assets, food consumption and nutrition of women and children. This part of the survey includes questions on the kinds of foods your child eats, and [his/her/their] nutritional status, including measurement of [his/her/their] weight and height. The questions for this part of the survey will take about 20 minutes to complete per child. Your participation is entirely voluntary. If you agree to participate, you can choose to stop at any time or skip any questions you do not want to answer. Your answers will be completely confidential; we will not share information that identifies you with anyone. After entering the questionnaire into a data base, we will destroy all information such as your name that could link these responses to you.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints we welcome you to contact the National Statistical Office, by calling +265884331492. We will leave a copy of this statement and our organization's complete contact information with you so that you may contact us at any time.

**Do you have any questions?  
May I begin the interview now?**

SIGNATURE OF INTERVIEWER: \_\_\_\_\_

DATE: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED....1 → CONTINUE WITH MODULE I:

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED.....2 → END. "Thank you very much for your time."

## Annex 8. Informed Consent Register

INTERVIEWER INSTRUCTIONS: KEEP THIS SHEET IN A SECURE PLACE SO YOU CAN EASILY AND QUICKLY IDENTIFY ELIGIBLE RESPONDENTS FOR DIFFERENT PARTS OF THE SURVEY AND CONFIRM THAT RESPONDENTS HAVE PROVIDED INFORMED CONSENT. USE THE COLUMN FOR INTERVIEWER NOTES TO ADD COMMENTS, REMINDERS, QUESTIONS, OR CONCERNS.

[illegible]