



Feed the Future Malawi 2015

Zone of Influence Interim Assessment Report

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# List of Acronyms

| 5DE  | Five Domains of Empowerment  |
|--|--|
| BFS  | Bureau for Food Security   |
| BMI  | Body Mass Index  |
| Cl   | 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  |
| FY<br>GDP  | Fiscal Year<br>Gross Domestic Product  |
|  |  |
| GDP  | Gross Domestic Product   |
| GDP<br>GPI   | Gross Domestic Product<br>Gender Parity Index  |
| gdp<br>gpi<br>hhs  | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale  |
| gdp<br>gpi<br>HHS<br>IFPRI   | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute  |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS   | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013  |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS<br>IHSI   | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013<br>First Integrated Household Survey 1997-1998   |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS<br>IHSI<br>IHS2                                     | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013<br>First Integrated Household Survey 1997-1998<br>Second Integrated Household Survey 2004-2005   |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS<br>IHSI<br>IHS2<br>IHS3                             | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013<br>First Integrated Household Survey 1997-1998<br>Second Integrated Household Survey 2004-2005<br>Third Integrated Household Survey 2010-2011  |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS<br>IHS1<br>IHS2<br>IHS3<br>IR                       | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013<br>First Integrated Household Survey 1997-1998<br>Second Integrated Household Survey 2004-2005<br>Third Integrated Household Survey 2010-2011<br>Intermediate Results  |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS<br>IHS1<br>IHS2<br>IHS3<br>IR<br>LCU                | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013<br>First Integrated Household Survey 1997-1998<br>Second Integrated Household Survey 2004-2005<br>Third Integrated Household Survey 2010-2011<br>Intermediate Results<br>Local Currency Unit   |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS<br>IHS1<br>IHS2<br>IHS3<br>IR<br>LCU<br>LSMS        | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013<br>First Integrated Household Survey 1997-1998<br>Second Integrated Household Survey 2004-2005<br>Third Integrated Household Survey 2010-2011<br>Intermediate Results<br>Local Currency Unit<br>Living Standards Measurement Survey                            |
| GDP<br>GPI<br>HHS<br>IFPRI<br>IHPS<br>IHS1<br>IHS2<br>IHS3<br>IR<br>LCU<br>LSMS<br>MAD | Gross Domestic Product<br>Gender Parity Index<br>Household Hunger Scale<br>International Food Policy Research Institute<br>Integrated Household Panel Survey 2013<br>First Integrated Household Survey 1997-1998<br>Second Integrated Household Survey 2004-2005<br>Third Integrated Household Survey 2010-2011<br>Intermediate Results<br>Local Currency Unit<br>Living Standards Measurement Survey<br>Minimum Acceptable Diet |

| MES   | MDG Endline Survey                                 |
|-------|--|
| МК    | 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                                 |
| ТА    | 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

<sup>&</sup>lt;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).

<sup>&</sup>lt;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 indicator   |               | aseline (2012  | )          |                   | terim (2015) | )                      |
|---|---------------|----------------|------------|-------------------|--------------|------------------------|
|   | Estimate      | 95% CI'        | n          | Estimate          | 95% CI       | n                      |
| Daily per capita expenditures (as a (2010-2011, 2015) <sup>2</sup>                            | a proxy for i | income) in U   | SG-assist  | ted areas (2      | 010 USD)     |                        |
| 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                     |
| Prevalence of Poverty: Percent of   | people livin  | g on less tha  | n \$1.25/d | ay (2005 PF       | P) (2010-20  | 11, 2015) <sup>2</sup> |
| 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                     |
| Depth of Poverty: Mean percent sl<br>2011, 2015) <sup>2</sup>                                 | hortfall rela | tive to the \$ | 1.25/day ( | (2005 PPP)        | poverty line | (2010-                 |
| 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                     |
| Percent of women achieving adequent of women achieving adequent (2012, 2015) <sup>2,3,4</sup> | uacy on Wo    | omen's Empo    | wermen     | t in Agricult     | ure Index    |                        |
| 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.I    | 2,967      | 76.I              | 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. l   | 2,967      | 76.6              | 73.2 – 79.8  | 891                    |
| Leisure   | 86.8          | 83.8 - 89.3    | 2,967      | 88. I             | 85.3 - 90.5  | 891                    |
| Autonomy in production  | 83.5          | 81.0 - 85.8    | 2,967      | n/a               | n/a          | n/a                    |
| Prevalence of households with mo  | derate or s   | evere hungei   | r (2012, 2 | 015) <sup>2</sup> |              |                        |
| 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. I | 237                    |
| Male adult(s) only  | 41.5          | 32.7 – 50.2    | 216        | 22.1              | 2.4 – 76.5   | 46                     |
| Women's Dietary Diversity: Mean (2012, 2015) <sup>2</sup>                                     | number of     | food groups    | consume    | ed by wome        | n of reprodu | ctive age              |
| 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

|   | - D-         | seline (2012              | \                  | . In         | toring (20LE)          |         |
|---|--------------|---------------------------|--------------------|--------------|------------------------|---------|
| Feed the Future indicator   | Estimate     | <b>95% CI<sup>1</sup></b> | )<br>              | Estimate     | terim (2015)<br>95% Cl | n       |
| Prevalence of exclusive breastfeed  |              |                           |                    |              |                        |         |
| 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      |
| Prevalence of children 6-23 month   |              |                           |                    |              |                        |         |
| 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     |
| Prevalence of women of reproduc   |              |                           |                    |              |                        |         |
| commodities (n/a, 2015) <sup>2,5</sup>  | J            |                           | 0                  |              |                        |         |
| 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<br>products: All women age 15-49                         | n/a          | n/a                       | n/a                | 21.5         | 18.3 – 25.1            | 932     |
| Orange-fleshed sweet potatoes<br>(OFSP) and OFSP products: All<br>women age 15-49 | n/a          | n/a                       | n/a                | 12.7         | 10.1 – 15.7            | 932     |
| Prevalence of women of reproduc   | tive age wh  | o consume a               | t least one        | e targeted r | nutrient-rich          | value   |
| chain commodity (n/a, 2015) <sup>2,5</sup>  |              |                           |                    |              |                        |         |
| All women age 15-49   | n/a          | n/a                       | n/a                | 35.7         | 32.7 – 38.9            | 932     |
| Prevalence of children 6-23 month<br>(n/a, 2015) <sup>2,5</sup>                   | hs who cons  | ume targete               | d nutrient         | -rich value  | chain comm             | odities |
| Soy and soy products: All children  | n/a          | n/a                       | n/a                | 9.4          | 6.2 – 13.9             | 245     |
| Groundnuts and groundnut<br>products: All children                                | n/a          | n/a                       | n/a                | 15.0         | 11.0 – 20.0            | 245     |
| Orange-fleshed sweet potatoes<br>(OFSP) and OFSP products: All<br>children        | n/a          | n/a                       | n/a                | 14.7         | 10.6 – 20.1            | 245     |
| Prevalence of children 6-23 month   | hs who cons  | ume at least              | one targe          | ted nutrien  | t-rich value           | chain   |
| commodity (n/a, 2015) <sup>2,5</sup>  |              |                           |                    |              |                        |         |
| 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     |
| Prevalence of underweight wome  | n (2010, 201 | <b>5)</b> <sup>2</sup>    |                    |              |                        |         |
| All non-pregnant women<br>age 15-49   | 10.1         | 8.4 – 11.9                | I,478              | 8.9          | 7.0 – 11.2             | 848     |
| Prevalence of stunted children un   | -            | • •                       | 2015) <sup>2</sup> |              |                        |         |
| All children <sup>*</sup>   | 49.2         | 45.3 – 53.I               | 1,153              | 42.3         | 38.1 – 46.6            | 812     |
| Male children <sup>*</sup>  | 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)          |             |     |
|----------------------------------|-----------------|----------------|--------------------|-------------------------|-------------|-----|
| reeu the Future indicator        | Estimate        | 95% CI'        | n                  | Estimate                | 95% CI      | n   |
| Prevalence of wasted children un | der 5 years o   | of age (2010,  | 2015) <sup>2</sup> |                         |             |     |
| 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                     | l.8 – 5.5   | 388 |
| Prevalence of underweight childr | en under 5 y    | ears of age (2 | 2010, 20           | <b>15)</b> <sup>2</sup> |             |     |
| All children                     | 14.8            | 12.2 – 17.3    | 1,153              | 16.0                    | 13.7 – 18.7 | 812 |
| Male children                    | 16.4            | 3.2 –  9.7     | 544                | 15.5                    | 12.3 – 19.5 | 424 |
| Female children                  | 13.3            | 9.9 – 16.7     | 609                | 16.6                    | 13.3 – 20.4 | 388 |

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

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 (Cls) demonstrate the reliability of estimated values. While interim surveys were not designed to capture change over time, non-overlapping Cls do indicate significant differences between the two estimates. However, if Cls 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 WEAI 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 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 WEAI 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 WEAI.

- <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 NRVCC 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.I 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

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

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;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>

## I.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.)

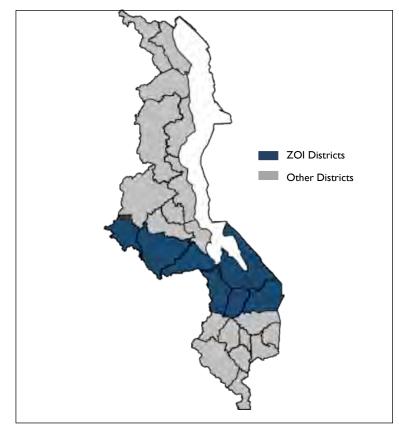


Figure 1.1. Map of Malawi: Feed the Future 2015 Interim Assessment coverage area

<sup>&</sup>lt;sup>6</sup> Ibid. p. 19-20.

### I.2.I 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.

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

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

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

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

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

<sup>&</sup>lt;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>

## I.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

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

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

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

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

<sup>&</sup>lt;sup>18</sup> NSO. (2010a).

<sup>&</sup>lt;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>

| Total populationTotal population, by subpopulationWomen of reproductive age (15-49 years)Children 0-59 monthsChildren 0-5 monthsChildren 6-23 monthsChildren 6-29 monthsChildren 6-59 monthsYouth 15-29 years | 5,168,082<br>1,170,747<br>979,259<br>96,570<br>283,907<br>882,689<br>1,368,423 |
|---|--|
| Women of reproductive age (15-49 years)         Children 0-59 months         Children 0-5 months         Children 6-23 months         Children 6-59 months  | 979,259<br>96,570<br>283,907<br>882,689  |
| Children 0-59 months<br>Children 0-5 months<br>Children 6-23 months<br>Children 6-59 months   | 979,259<br>96,570<br>283,907<br>882,689  |
| Children 0-5 months<br>Children 6-23 months<br>Children 6-59 months   | 96,570<br>283,907<br>882,689   |
| Children 6-23 months<br>Children 6-59 months  | 283,907<br>882,689   |
| Children 6-59 months  | 882,689  |
|   |  |
| Youth JE 29 years   | 1,368,423  |
| TOULT TO-27 years   |  |
| Total population, by area type  |  |
| Urban   | 0  |
| Rural   | 5,168,082  |
| Total population, by gendered household type  |  |
| 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>  | -  |
| Women of reproductive age, by pregnancy status  |  |
| Pregnant  | 181,322  |
| Non-pregnant  | 989,425  |
| Children 0-59 months, by child sex  |  |
| Male  | 495,994  |
| Female  | 483,265  |
| Children 0-5 months, by child sex   |  |
| Male  | 48,853   |
| Female  | 47,717   |
| Children 6-23 months, by child sex  |  |
| Male  | 143,808  |
| Female  | 140,099  |
| Children 6-59 months, by child sex  |  |
| Male  | 447,141  |
| Female  | 435,548  |
| Youth 15-29 years, by sex   |  |
| Male  | 667,855  |
| Female  | 700,568  |

| Table I.I. | Population of individuals, by category, in the ZOI, Malawi 2015 |
|------------|---|
|------------|---|

<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>&</sup>lt;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                | I,076,684            |
| Number of households, by gendered household type |                      |
| 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).

## I.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>&</sup>lt;sup>21</sup> NSO. (2015b). p. 19.

<sup>&</sup>lt;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>

| Crop        | Р         | roduction (M | t)        |           | Yield (Kg/Ha) | )         |
|-------------|-----------|--------------|-----------|-----------|---------------|-----------|
| Сгор        | 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         | I,465     |
| Soybeans    | 75,665    | 109,372      | 117,867   | 998       | 1,023         | 868       |

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

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

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

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

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

<sup>&</sup>lt;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>

## I.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.

<sup>&</sup>lt;sup>28</sup> Ibid. p. 131, p. 219.

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

<sup>&</sup>lt;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 interimFeed the Future indicators.

# Table 2.1.Data sources and dates of the baseline and interim Feed the Future<br/>indicators

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

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

| Indicator   | Ba          | seline                 | Interim                                 |                   |  |
|---|-------------|------------------------|---|-------------------|--|
| mulcator  | Data source | Date collected         | Data source                             | Date collected    |  |
| Prevalence of underweight women                             | DHS         | June/September<br>2010 | FFP/ICF + FTF<br>FEEDBACK<br>ZOI Survey | July/October 2015 |  |
| Prevalence of stunted children DHS<br>under 5 years of age  |             | June/September<br>2010 | FFP/ICF + FTF<br>FEEDBACK<br>ZOI Survey | July/October 2015 |  |
| Prevalence of wasted children DHS<br>under 5 years of age   |             | June/September<br>2010 | FFP/ICF + FTF<br>FEEDBACK<br>ZOI Survey | July/October 2015 |  |
| Prevalence of underweight children DHS under 5 years of age |             | June/September<br>2010 | FFP/ICF + FTF<br>FEEDBACK<br>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>&</sup>lt;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 populationbased 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.

<sup>&</sup>lt;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>

| Indicator   | Baseline<br>value | DEFF | Std.<br>dev. | Estimated<br>interim<br>value | Sample<br>size | Number of<br>households<br>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<br>(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<br>breastfeeding of children<br><6 months | 67.77             | 3.04 |              | 78.43                         | 70             | 889                               |

# Table 2.2.Sample size estimate for the four key indicators and exclusive<br/>breastfeeding

### 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>&</sup>lt;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 populationbased 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<br/>assessment' in Malawi 2015

| Response rates and components                         | Total |
|---|-------|
| Households  |       |
| Households selected                                   | 1,071 |
| Households occupied                                   | 1,029 |
| Households interviewed                                | 1,021 |
| Household response rate <sup>2</sup>                  | 99.2% |
| Women of reproductive age (15-49 years)               |       |
| Number of eligible women                              | 988   |
| Number of eligible women interviewed                  | 937   |
| Eligible women response rate <sup>3</sup>             | 94.8% |
| Primary adult female decisionmakers (age 18+ years)   |       |
| Number of eligible women                              | 967   |
| Number of eligible women interviewed                  | 948   |
| Primary adult female response rate <sup>3</sup>       | 98.0% |
| Children under 5 years of age                         |       |
| 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 | n for key indicators in the interim report |
|------------|----------------------------|--|
|------------|----------------------------|--|

| Indicator  | Season of data collection for interim    |
|--|--|
| Daily par capita avpanditures                              | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Daily per capita expenditures                              | ZOI Surveys – July/October 2015          |
| Providence of Powerty                                      | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Prevalence of Poverty                                      | ZOI Surveys – July/October 2015          |
| Death of Devents   | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Depth of Poverty   | ZOI Surveys – July/October 2015          |
| ) Manuar's Free success and in A sciently we had as        | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Women's Empowerment in Agriculture Index                   | ZOI Surveys – July/October 2015          |
| Development (here helder ich med eine eine heren           | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Prevalence of households with moderate or severe hunger    | ZOI Surveys – July/October 2015          |
| Waman's Distant Diversity                                  | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Women's Dietary Diversity                                  | ZOI Surveys – July/October 2015          |
| Prevalence of exclusive breastfeeding among children under | Non-lean season – FFP/ICF + FTF FEEDBACK |
| 6 months of age  | ZOI Surveys – July/October 2015          |
| Prevalence of children 6-23 months receiving a minimum     | Non-lean season – FFP/ICF + FTF FEEDBACK |
| acceptable diet  | ZOI Surveys – July/October 2015          |
| Drevelance of underweight children under Europe of one     | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Prevalence of underweight children under 5 years of age    | ZOI Surveys – July/October 2015          |
| Describer of structured skildness and see E areas of see   | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Prevalence of stunted children under 5 years of age        | ZOI Surveys – July/October 2015          |
| Describer of supervised skilderer under Fusions of and     | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Prevalence of wasted children under 5 years of age         | ZOI Surveys – July/October 2015          |
| Describer of underweight wares                             | Non-lean season – FFP/ICF + FTF FEEDBACK |
| Prevalence of underweight women                            | 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, 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 who has 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

<sup>&</sup>lt;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.

<sup>&</sup>lt;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.

|  |                           | By g                        | By gendered household type <sup>a</sup> |                          |               |  |  |
|--|---------------------------|-----------------------------|---|--------------------------|---------------|--|--|
| Characteristic   | Total<br>(All households) | Male and<br>female<br>adult | Female<br>adult(s)<br>only              | Male<br>adult(s)<br>only | Child<br>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                      | -             |  |  |
| Highest education level attained <sup>a</sup>                  |                           |                             |   |                          |               |  |  |
| 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                     | -             |  |  |
| n <sup>3</sup>   | 1,021                     | 737                         | 238                                     | 46                       | 0             |  |  |

### Table 3.1. Household demographic characteristics

<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.

|                       | Total (All      | primary   | By prii | mary adult | decisionmaker | sex <sup>a</sup> |
|-----------------------|-----------------|-----------|---------|------------|---------------|------------------|
| Characteristic        | adult decision  | onmakers) | Mal     | le         | Fem           | ale              |
|                       | Percent         | n         | Percent | n          | Percent       | n                |
| Age <sup>a</sup>      |                 |           |         |            |               |                  |
| 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              |
| Educational attainmer | nt <sup>a</sup> |           |         |            |               |                  |
| No education          | 23.6            | I,687     | 14.2    | 722        | 29.8          | 965              |
| Less than primary     | 56.5            | I,687     | 55.9    | 722        | 56.9          | 965              |
| Primary               | 16.1            | I,687     | 24.1    | 722        | 10.9          | 965              |
| Secondary or more     | 3.8             | 1,687     | 5.9     | 722        | 2.4           | 965              |

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

<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>&</sup>lt;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.

| <b>C</b> hausatauistia                             | Total (All ho | ouseholds) |
|--|---------------|------------|
| Characteristic –                                   | Estimate      | n          |
| Percent with improved water source                 | 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      |
| Household roof materials (%) <sup>5</sup>          |               |            |
| Natural  | 70.6          | 1,021      |
| Rudimentary  | 0.0           | 1,021      |
| Finished   | 29.4          | 1,021      |
| Household exterior wall materials (%) <sup>6</sup> |               |            |
| Natural  | 8.1           | 1,020      |
| Rudimentary  | 7.2           | 1,020      |
| Finished   | 84.7          | 1,020      |
| Household floor materials (%) <sup>7</sup>         |               |            |
| Natural  | 84.1          | 1,020      |
| Rudimentary  | 0.0           | 1,020      |
| Finished   | 15.9          | 1,020      |

#### Table 3.3. Household dwelling characteristics

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.

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

<sup>&</sup>lt;sup>39</sup> Ibid., p. 304.

<sup>&</sup>lt;sup>40</sup> Ibid., p. 19.

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

<sup>&</sup>lt;sup>42</sup> Ibid., p. 19.

|                          | P                                  | ercent  | Female t                         | o male ratio   |     |
|--------------------------|------------------------------------|---|----------------------------------|--|-----|
| Characteristic           | Attending<br>school <sup>1,a</sup> | Attained a<br>primary level<br>of education <sup>2, b</sup> | Attending<br>school <sup>1</sup> | Attained a<br>primary level<br>of education <sup>2</sup> | n   |
| Age group <sup>a,b</sup> |                                    |   |                                  |  |     |
| 5-9                      | 72.9                               | n/a <sup>1</sup>  | 1.2                              | n/a'   | 838 |
| 10-14                    | 96.8                               | 2.8   | 0.9                              | 4.0  | 780 |
| 15-19                    | 76.I                               | 40.7  | 0.6                              | 1.5  | 453 |
| 20-24                    | 15.1                               | 35.9  | 0.2                              | 0.7  | 406 |
| 25-29                    | n/a²                               | 35.4  | n/a²                             | 0.6  | 289 |
| 30-34                    | n/a²                               | 23.5  | n/a²                             | 0.1  | 288 |
| 35-54                    | n/a²                               | 19.5  | n/a²                             | 0.3  | 593 |
| 55+                      | n/a²                               | 7.7   | n/a²                             | 0.1  | 377 |
| Sex <sup>a,b</sup>       |                                    |   |                                  |  |     |
| Female                   |                                    |   |                                  |  |     |
| Age group                |                                    |   |                                  |  |     |
| 5-9                      | 79.9                               | n/a <sup>1</sup>  | n/a³                             | n/a³   | 425 |
| 10-14                    | 94.0                               | 4.3   | n/a³                             | n/a³   | 419 |
| 15-19                    | 52.5                               | 53.5  | n/a³                             | n/a³   | 207 |
| 20-24                    | 6.8                                | 32.0  | n/a³                             | n/a³   | 234 |
| 25-29                    | n/a²                               | 26.7  | n/a³                             | n/a³   | 147 |
| 30-34                    | n/a²                               | 5.0   | n/a³                             | n/a³   | 159 |
| 35-54                    | n/a²                               | 10.5  | n/a³                             | n/a³   | 305 |
| 55+                      | n/a²                               | 2.5   | n/a³                             | n/a³   | 218 |
| Male                     |                                    |   |                                  |  |     |
| Age group                |                                    |   |                                  |  |     |
| 5-9                      | 66.2                               | n/a <sup>1</sup>  | n/a³                             | 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 |

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

 $n/a^{1}$  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.</p>

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 1 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.

<sup>&</sup>lt;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

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

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

<sup>&</sup>lt;sup>46</sup> CIA. (2016).

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

<sup>48</sup> Ibid.

<sup>&</sup>lt;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.

<sup>&</sup>lt;sup>50</sup> Deaton. (2008).

|                              | Estimate (weighted)          |      |      |      |      |      |       |  |
|------------------------------|------------------------------|------|------|------|------|------|-------|--|
| Characteristic               | Mean <sup>a</sup> Percentile |      |      |      |      |      |       |  |
|                              | riedii                       | l0th | 25th | 50th | 75th | 90th | n²    |  |
| 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)          | ٨                            | ۸    | ٨    | ۸    | ۸    | ٨    | 15    |  |
| Household educational attain | iment <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    |  |

#### Table 4.1. Daily per capita expenditures by household characteristic (in 2010 USD)<sup>1</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 CPI MK/2015 CPI MK)\*1/(PPP 2005)\* (2010 USD CPI/2005 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.

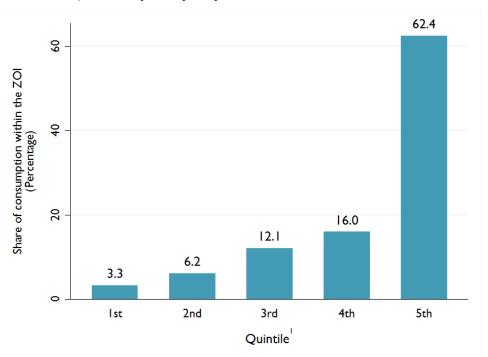
Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

<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>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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.

|                                      | Prevalen<br>pover           |                | Depth of poverty <sup>3</sup>                 |                | Average consumption<br>shortfall of the poor <sup>4</sup> |   |                |
|--------------------------------------|-----------------------------|----------------|---|----------------|---|---|----------------|
| Characteristic                       | Percent<br>popula-<br>tionª | n <sup>5</sup> | Percent<br>of<br>poverty<br>line <sup>b</sup> | n <sup>5</sup> | In USD<br>2005 PPP  | Percent<br>of<br>poverty<br>line <sup>c</sup> | n <sup>5</sup> |
| Total (All households)               | 54.5                        | 1,021          | 21.0  | 1,021          | 0.48  | 38.5  | 443            |
| Gendered household type <sup>b</sup> |                             |                |   |                |   |   |                |
| Male and female adults               | 58. I                       | 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             | ٨   | ٨   | 3              |
| Child(ren) only (no adults)          | -                           | -              | -   | -              | -   | -   | 0              |
| Household size                       |                             |                |   |                |   |   |                |
| 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)                  | ۸                           | 15             | ۸   | 15             | ٨   | ۸   | 7              |
| Household educational atta           | inment <sup>a,b</sup>       |                |   |                |   |   |                |
| No education                         | 70.6                        | 36             | 10.7  | 36             | ۸   | ۸   | 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             | ٨   | ۸   | 16             |

### Table 4.2. Poverty at the \$1.25 (2005 PPP)' per person per day threshold

^ 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.

|                             | Prevaler<br>pover                       |       | Depth of                                      |       | Average consumption<br>shortfall of the poor <sup>4</sup> |   |     |
|-----------------------------|---|-------|---|-------|---|---|-----|
| Characteristic              | Percent<br>popula-<br>tion <sup>a</sup> | n⁵    | Percent<br>of<br>poverty<br>line <sup>b</sup> | n⁵    | In USD<br>2005 PPP <sup>c</sup>                           | Percent<br>of<br>poverty<br>line <sup>c</sup> | n⁵  |
| Total (All households)      | 70.5                                    | 1,021 | 30.1  | 1,021 | 0.68  | 42.7  | 592 |
| Gendered household type     |   |       |   |       |   |   |     |
| 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   |
| Household size              |   |       |   |       |   |   |     |
| 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)         | ۸                                       | 15    | ^   | 15    | ^   | ^   | 11  |
| Household educational attai | nment <sup>b,c</sup>                    |       |   |       |   |   |     |
| 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  |

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

^ 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.</p>
- 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.

<sup>&</sup>lt;sup>54</sup> NSO. (2005).

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

|                                      | Prevalen<br>pover           |       | Depth of<br>poverty <sup>3</sup>              |       | Average consumption<br>shortfall of the poor <sup>4</sup> |   |                |
|--------------------------------------|-----------------------------|-------|---|-------|---|---|----------------|
| Characteristic                       | Percent<br>popula-<br>tionª | n⁵    | Percent<br>of<br>poverty<br>line <sup>b</sup> | n⁵    | In USD<br>2005 PPP <sup>c</sup>                           | Percent<br>of<br>poverty<br>line <sup>c</sup> | n <sup>5</sup> |
| Total (All households)               | 43.1                        | 1,021 | 14.1  | 1,021 | 0.32  | 32.6  | 313            |
| Gendered household type <sup>b</sup> |                             |       |   |       |   |   |                |
| Male and female adults               | 45.I                        | 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    | ٨   | ۸   | I              |
| Child(ren) only (no adults)          | -                           | -     | -   | -     | -   | -   | 0              |
| Household size                       |                             |       |   |       |   |   |                |
| Small (1-5 members)                  | 42.I                        | 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)                  | ۸                           | 15    | ^   | 15    | ۸   | ۸   | 6              |
| Household educational attain         | iment <sup>a,b</sup>        |       |   |       |   |   |                |
| No education                         | 0.0                         | 36    | 0.0   | 36    | ۸   | ۸   | 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    | ٨   | ٨   | 9              |

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

^ 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.</p>

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

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

<sup>&</sup>lt;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.

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

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

# Table 5.1.Achievement of adequacy on Women's Empowerment in Agriculture Index<br/>indicators'

<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<br/>surveyed women

| Activity                     | Participates | in activity | Has input <sup>1</sup> into decisions<br>about activity |                  |  |
|------------------------------|--------------|-------------|---|------------------|--|
|                              | Percent      | n²          | Percent   | n <sup>1,3</sup> |  |
| Total (All surveyed women)   | 97.3         | 891         | 98.5  | 867              |  |
| Type of activity             |              |             |   |                  |  |
| 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         | ٨   | 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.

| Activity                     | Has input <sup>1</sup> into use of income from activity |                  |  |  |  |
|------------------------------|---|------------------|--|--|--|
| Activity                     | Percent   | n <sup>2,3</sup> |  |  |  |
| Total (All surveyed women)   | 98.1  | 866              |  |  |  |
| Type of activity             |   |                  |  |  |  |
| Food crop farming            | 93.8  | 772              |  |  |  |
| Cash crop farming            | 93.0  | 426              |  |  |  |
| Livestock raising            | 94.9  | 288              |  |  |  |
| Fishing or fishpond culture  | ۸   | 13               |  |  |  |
| Non-farm economic activities | 95.4  | 297              |  |  |  |
| Wage or salaried employment  | 95.6  | 496              |  |  |  |

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

^ 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.

| Activity   |            | vhich respon<br>eir own deci | Not              | n              |                         |     |
|--|------------|------------------------------|------------------|----------------|-------------------------|-----|
| Activity   | Not at all | Small<br>extent              | Medium<br>extent | High<br>extent | applicable <sup>3</sup> |     |
| Getting inputs for<br>agricultural<br>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<br>employment             | 1.7        | 13.8                         | 15.5             | 59.2           | 9.8                     | 890 |
| Major household<br>expenditures                  | 3.8        | 19.6                         | 16.9             | 37.5           | 22.2                    | 887 |
| Minor household<br>expenditures                  | 1.4        | 15.6                         | 19.4             | 63.3           | 0.3                     | 890 |

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

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.

|  | Someone in the household owns item |     | Woman can decide to<br>purchase items |         | Woman can decide to<br>sell/give/rent owned items |     |
|--|------------------------------------|-----|---------------------------------------|---------|---|-----|
| Type of resource                         | 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,<br>turkeys, and pigeons | 40.I                               | 891 | 73.0                                  | 357     | 80.6  | 360 |
| Fish pond or fishing equipment           | 0.7                                | 891 | ۸                                     | 7       | ۸   | 7   |
| Non-mechanized farm equipment            | 88.4                               | 891 | 65.6                                  | 784     | 71.7  | 782 |
| Mechanized farm<br>equipment             | 0.4                                | 890 | ۸                                     | 3       | ٨   | 3   |
| Non-farm business<br>equipment           | 4.1                                | 890 | n/a                                   |         | n/a   |     |
| House or other<br>structures             | 41.9                               | 891 | n/a                                   | n/a n/a |   |     |
| Large consumer<br>durables               | 24.2                               | 889 | n/a                                   |         | n/a   |     |
| Small consumer<br>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   |     |

# Table 5.5.Household ownership and surveyed women's control over productive<br/>resources

^ 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).

|  |                            | Credit source (percent) <sup>1</sup> |                    |                  |                            |                                      |
|--|----------------------------|--------------------------------------|--------------------|------------------|----------------------------|--------------------------------------|
| Estimate   | Any<br>source<br>(percent) | Non-governmental organization        | Informal<br>lender | Formal<br>lender | Friends<br>or<br>relatives | Group-<br>based<br>micro-<br>finance |
| Total receiving a loan<br>(All surveyed women)                     | 47.4                       | 4.6                                  | 4.6                | 6.1              | 23.3                       | 24.1                                 |
| Type of loan   |                            |                                      |                    |                  |                            |                                      |
| Any Ioan   | 47.4                       | 4.6                                  | 4.6                | 6.1              | 23.3                       | 24.1                                 |
| In-kind Ioan   | 2.7                        | 0.9                                  | 0.0                | 0.6              | 1.3                        | 0.0                                  |
| Cash Ioan  | 45.4                       | 3.7                                  | 4.6                | 5.8              | 22.1                       | 24.1                                 |
| n <sup>2</sup>   | 891                        | 891                                  | 890                | 890              | 889                        | 890                                  |
| Total contributing to a<br>credit decision (all<br>surveyed women) | 75.3                       | 63.0                                 | 66.2               | 63.6             | 73.0                       | 77.9                                 |
| Type of decisions  |                            |                                      |                    |                  |                            |                                      |
| 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                                 |
| n <sup>2</sup>   | 417                        | 42                                   | 43                 | 51               | 202                        | 213                                  |

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

<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 WEAI 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).

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

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

<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).

| Group type                     | Percent <sup>I</sup><br>Is an active group member | n²  |  |
|--------------------------------|---|-----|--|
| Total (All surveyed women)     | 76.1  | 891 |  |
| Group type                     |   |     |  |
| 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 |  |

## Table 5.8. Group membership among surveyed women

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).

|  | Primary          | v activity            | Secondary activity <sup>1</sup> |                       |  |
|--|------------------|-----------------------|---------------------------------|-----------------------|--|
| Activity                                   | Percent of women | Mean hours<br>devoted | Percent of<br>women             | Mean hours<br>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<br>(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                   |  |
| n  | 891              | 891                   | 891                             | 891                   |  |

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.

**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.

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

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

<sup>&</sup>lt;sup>63</sup> FEWS NET. (2013).

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

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

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

|                                  |                                     | Percent            |                  |       |
|----------------------------------|-------------------------------------|--------------------|------------------|-------|
| Characteristic                   | Little to no<br>hunger <sup>a</sup> | Moderate<br>hunger | Severe<br>hunger | n'    |
| Total (All households)           | 44.3                                | 50.5               | 5.2              | 1,019 |
| Gendered household type          |                                     |                    |                  |       |
| 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     |
| Household size                   |                                     |                    |                  |       |
| 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)              | ٨                                   | ۸                  | ٨                | 15    |
| Household educational attainment | t <sup>a</sup>                      |                    |                  |       |
| 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    |

^ Results not statistically reliable, n<30.

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.

# 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.

| Characteristic                       | Mean <sup>a</sup> | Median | n'  |
|--------------------------------------|-------------------|--------|-----|
| Total (All women 15-49)              | 3.38              | 3      | 932 |
| Age <sup>a</sup>                     |                   |        |     |
| 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  |
| Educational attainment <sup>a</sup>  |                   |        |     |
| 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  |
| Gendered household type <sup>a</sup> |                   |        |     |
| Male and female adults               | 3.51              | 3      | 717 |
| Female adult(s) only                 | 2.93              | 3      | 213 |
| Male adult(s) only                   | ٨                 | ٨      | 2   |
| Child(ren) only (no adults)          | -                 | -      | 0   |
| Household size                       |                   |        |     |
| Small (1-5 members)                  | 3.31              | 3      | 504 |
| Medium (6-10 members)                | 3.43              | 3      | 402 |
| Large (11+ members)                  | ٨                 | ٨      | 26  |
| Household hunger <sup>a</sup>        |                   |        |     |
| Little to no hunger                  | 3.76              | 4      | 471 |
| Moderate or severe hunger            | 2.95              | 3      | 459 |
|                                      |                   |        |     |

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

^ 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.</p>

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

<sup>&</sup>lt;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>&</sup>lt;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 <u>http://www.feedthefuture.gov/sites/default/files/resource/files/ftf\_guidanceseries\_voll1\_interimassessment\_oct2014.pdf</u>.

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

| Characteristic                       | Percent <sup>a</sup> | n'  |
|--------------------------------------|----------------------|-----|
| Total (All women 15-49)              | 25.8                 | 932 |
| Age <sup>a</sup>                     |                      |     |
| 15-19                                | 29.0                 | 174 |
| 20-24                                | 28.6                 | 229 |
| 25-29                                | 25.1                 | 142 |
| 30-34                                | 29.1                 | 154 |
| 35-39                                | 12.2                 | 3   |
| 40-44                                | 28.5                 | 75  |
| 45-49                                | 18.6                 | 45  |
| Educational attainment <sup>a</sup>  |                      |     |
| No education                         | 14.5                 | 165 |
| Less than primary                    | 23.7                 | 594 |
| Primary                              | 36.8                 | 129 |
| Secondary or more                    | 60.5                 | 44  |
| Gendered household type <sup>a</sup> |                      |     |
| Male and female adults               | 28.8                 | 717 |
| Female adult(s) only                 | 5.7                  | 213 |
| Male adult(s) only                   | ٨                    | 2   |
| Child(ren) only (no adults)          | -                    | 0   |
| Household size                       |                      |     |
| Small (1-5 members)                  | 23.9                 | 504 |
| Medium (6-10 members)                | 26.9                 | 402 |
| Large (11+ members)                  | ۸                    | 26  |
| Household hunger <sup>a</sup>        |                      |     |
| Little to no hunger                  | 34.0                 | 471 |
| Moderate or severe hunger            | 16.8                 | 459 |
|                                      |                      |     |

Table 6.3. Women's minimum dietary diversity

^ 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.

| Category  | Percent of women according to achievement<br>of a minimum dietary diversity <sup>a</sup> |               |  |  |  |
|---|--|---------------|--|--|--|
|   | Achieving  | Not achieving |  |  |  |
| Women consuming a specific food group                   |  |               |  |  |  |
| 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          |  |  |  |
| n   | 230  | 702           |  |  |  |

| Table 6.4. | Consumption of foods b | y women's minimum dietaı | y diversity status |
|------------|------------------------|--------------------------|--------------------|
|------------|------------------------|--------------------------|--------------------|

<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).

| Characteristic                                  | Percent <sup>a</sup> | n' |
|---|----------------------|----|
| Total (All children under 6 months)             | 60.0                 | 80 |
| Child sex                                       |                      |    |
| Male  | 53.2                 | 41 |
| Female  | 67.4                 | 39 |
| Caregiver's educational attainment <sup>2</sup> |                      |    |
| No education                                    | ۸                    | 8  |
| Less than primary                               | 51.6                 | 52 |
| Primary   | ۸                    | 15 |
| Secondary or more                               | ۸                    | 5  |

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

^ 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.</p>

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>&</sup>lt;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.

<sup>&</sup>lt;sup>70</sup> Ibid., p. 44.

| Characteristic                                  | Percent <sup>a</sup> | n'  |
|---|----------------------|-----|
| Total (All children 6-23 months)                | 13.4                 | 245 |
| Child sex                                       |                      |     |
| Male  | 11.4                 | 128 |
| Female  | 15.6                 | 7   |
| Child age <sup>a</sup>                          |                      |     |
| 6-11 months                                     | 5.9                  | 76  |
| 12-17 months                                    | 20.3                 | 82  |
| 18-23 months                                    | 12.9                 | 87  |
| Caregiver's educational attainment <sup>2</sup> |                      |     |
| No education                                    | 12.7                 | 42  |
| Less than primary                               | 11.6                 | 169 |
| Primary   | ۸                    | 27  |
| Secondary or more                               | ۸                    | 7   |
| Gendered household type                         |                      |     |
| Male and female adults                          | 14.0                 | 194 |
| Female adult(s) only                            | 11.1                 | 50  |
| Male adult(s) only                              | ۸                    | I   |
| Child(ren) only (no adults)                     | -                    | 0   |
| Household size                                  |                      |     |
| Small (1-5 members)                             | 13.0                 | 139 |
| Medium (6-10 members)                           | 13.1                 | 96  |
| Large (11+ members)                             | ۸                    | 10  |
| Household hunger <sup>a</sup>                   |                      |     |
| Little to no hunger                             | 18.6                 | 106 |
| Moderate or severe hunger                       | 9.2                  | 138 |

# Table 6.6.Percentage of children age 6-23 months who receive a minimum<br/>acceptable diet

^ 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.

|  |                             | Percent                  |                       |          |  |
|--|-----------------------------|--------------------------|-----------------------|----------|--|
| MAD components and food groups           | A 11 1 1 1 A                | By child age (in months) |                       |          |  |
|  | All children <sup>a</sup> - | 6 to 11                  | 12 to 17              | 18 to 23 |  |
| Breastfed children                       |                             |                          | By child age (in mont |          |  |
| 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         | ٨                           | ۸                        | ٨                     | ٨        |  |
| Achieving minimum milk feeding frequency | ٨                           | ۸                        | ٨                     | ٨        |  |
| Achieving minimum dietary diversity      | ٨                           | ۸                        | ٨                     | ٨        |  |
| Consuming                                |                             |                          |                       |          |  |
| Grains, roots, and tubers                | ٨                           | ۸                        | ٨                     | ٨        |  |
| Legumes and nuts                         | ٨                           | ۸                        | ۸                     | ٨        |  |
| Dairy products                           | ٨                           | ۸                        | ۸                     | ٨        |  |
| Flesh foods                              | ٨                           | ۸                        | ۸                     | ٨        |  |
| Eggs                                     | ٨                           | ۸                        | ۸                     | ٨        |  |
| Vitamin A-rich fruits and vegetables     | ٨                           | ۸                        | ٨                     | ٨        |  |
| Other fruits and vegetables              | ٨                           | ۸                        | ٨                     | ٨        |  |
| n  | 23                          | 2                        | 6                     | 15       |  |

# Table 6.7.Components of a minimum acceptable diet among children age<br/>6-23 months

^ 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):

- I. 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.

<sup>&</sup>lt;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)."

|                                   |   |                                  | Percent                                       |   |     |
|-----------------------------------|---|----------------------------------|---|---|-----|
| Characteristic                    | Any<br>targeted<br>commodity <sup>a</sup> | Soy/soy<br>products <sup>b</sup> | Groundnuts/groundnut<br>products <sup>c</sup> | Orange-<br>fleshed sweet<br>potatoes<br>(OFSP)/OFS<br>products <sup>d</sup> | n'  |
| Total (All women 15-49)           | 35.7                                      | 10.3                             | 21.5  | 12.7  | 932 |
| Age <sup>d</sup>                  |   |                                  |   |   |     |
| 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  |
| Educational attainmen             | t <sup>a,c,d</sup>                        |                                  |   |   |     |
| 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  |
| Gendered household ty             | /ре                                       |                                  |   |   |     |
| 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                | ۸   | ۸                                | ۸   | ٨   | 2   |
| Child(ren) only<br>(no adults)    | -   | -                                | -   | -   | 0   |
| Household size                    |   |                                  |   |   |     |
| Small (1-5 members)               | 34.4                                      | 10.2                             | 20.2  | 12.4  | 504 |
| Medium<br>(6-10 members)          | 37.0                                      | 10.3                             | 23.3  | 12.5  | 402 |
| Large (11+ members)               | ٨   | ۸                                | ٨   | ٨   | 26  |
| Household hunger <sup>a,c,d</sup> |   |                                  |   |   |     |
| Little to no hunger               | 41.3                                      | 11.6                             | 24.7  | 15.1  | 471 |
| Moderate or severe<br>hunger      | 29.7                                      | 8.9                              | 18.1  | 10.0  | 459 |

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

^ 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.</p>

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.

|                                   | <u> </u>                                  |                                  |   |  |     |
|-----------------------------------|---|----------------------------------|---|--|-----|
|                                   |   | P                                | ercent  |  |     |
| Characteristic                    | Any<br>targeted<br>commodity <sup>a</sup> | Soy/soy<br>products <sup>ь</sup> | Groundnuts/<br>groundnut<br>products <sup>c</sup> | Orange-<br>fleshed sweet<br>potatoes<br>(OFSP)/OFSP<br>products <sup>d</sup> | n'  |
| Total (All children               | 32.1                                      | 9.4                              | 15.0  | 14.7   | 245 |
| 6-23 months)                      | 52.1                                      | 7.4                              | 15.0  | 14.7   | 245 |
| Child sex                         |   |                                  |   |  |     |
| Male                              | 34.5                                      | 10.2                             | 13.4  | 17.1   | 128 |
| Female                            | 29.5                                      | 8.4                              | 16.8  | 12.1   | 117 |
| Child age <sup>a,d</sup>          |   |                                  |   |  |     |
| 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                              | .   | 14.9   | 87  |
| Caregiver's educational at        | ttainment <sup>2</sup>                    |                                  |   |  |     |
| No education                      | 41.7                                      | 6.5                              | 22.7  | 20.0   | 42  |
| Less than primary                 | 28.8                                      | 9.1                              | 13.0  | 13.0   | 169 |
| Primary                           | ۸   | ^                                | ٨   | ٨  | 27  |
| Secondary or more                 | ۸   | ^                                | ٨   | ٨  | 7   |
| Gendered household type           |   |                                  |   |  |     |
| 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                | ۸   | ^                                | ٨   | ٨  | I   |
| Child(ren) only (no adults)       | -   | -                                | -   | -  | 0   |
| Household size                    |   |                                  |   |  |     |
| 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)               | ۸   | ۸                                | ٨   | ٨  | 10  |
| Household hunger <sup>a,b,d</sup> |   |                                  |   |  |     |
| Little to no hunger               | 42.0                                      | 15.1                             | 20.0  | 20.0   | 106 |
| Moderate or severe<br>hunger      | 24.3                                      | 4.7                              | 11.0  | 10.6   | 138 |

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

^ 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.</p>

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 (BMI < 18.5), normal weight (18.5  $\leq$  BMI < 25.0), overweight (25.0  $\leq$  BMI < 30.0), and obese (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 (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).

|                                     | Maan         | Body Ma                       | Body Mass Index (BMI) category (percent) <sup>b</sup> |                 |       |     |  |
|-------------------------------------|--------------|-------------------------------|---|-----------------|-------|-----|--|
| Characteristic                      | Mean<br>BMIª | Under-<br>weight <sup>c</sup> | Normal<br>weight                                      | Över-<br>weight | Obese | n'  |  |
| Total (All women age 15-49)         | 22.1         | 8.9                           | 77.8  | 10.8            | 2.6   | 848 |  |
| Age <sup>a,b,c</sup>                |              |                               |   |                 |       |     |  |
| 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  |  |
| Educational attainment <sup>b</sup> |              |                               |   |                 |       |     |  |
| 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  |  |
| Gendered household type             |              |                               |   |                 |       |     |  |
| 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                  | ۸            | ۸                             | ۸   | ۸               | ۸     | 2   |  |
| Child(ren) only (no adults)         | -            | -                             | -   | -               | -     | 0   |  |
| Household size                      |              |                               |   |                 |       |     |  |
| 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)                 | ۸            | ۸                             | ۸   | ۸               | ۸     | 23  |  |
| Household hunger <sup>a,b</sup>     |              |                               |   |                 |       |     |  |
| 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 |  |

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

^ Results not statistically reliable, n<30.

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.</p>

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>&</sup>lt;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.

| Characteristic                                  | % Stunted<br>(<-2 SD) <sup>a</sup> | % Severely<br>stunted<br>(<-3 SD) | Mean<br>Z-score⁵ | n'  |
|---|------------------------------------|-----------------------------------|------------------|-----|
| Total (All children under 5 years)              | 42.3                               | 13.8                              | -1.7             | 812 |
| Child sex <sup>b</sup>                          |                                    |                                   |                  |     |
| Male  | 44.3                               | 14.7                              | -1.8             | 424 |
| Female  | 40.0                               | 12.7                              | -1.6             | 388 |
| Child age <sup>a,b</sup>                        |                                    |                                   |                  |     |
| 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 |
| Caregiver's educational attainment <sup>2</sup> |                                    |                                   |                  |     |
| 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  |
| Gendered household type                         |                                    |                                   |                  |     |
| 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                              | ۸                                  | ٨                                 | ٨                | 2   |
| Child(ren) only (no adults)                     | -                                  | -                                 | -                | 0   |
| Household size                                  |                                    |                                   |                  |     |
| 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)                             | ^                                  | ٨                                 | ٨                | 27  |
| Household hunger                                |                                    |                                   |                  |     |
| Little to no hunger                             | 39.7                               | 12.1                              | -1.6             | 381 |
| Moderate or severe hunger                       | 44.6                               | 15.4                              | -1.8             | 429 |

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

^ 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.</p>

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.

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

<sup>74</sup> Ibid.

<sup>75</sup> Ibid.

| Characteristic                     | %<br>Wasted<br>(<-2 SD) <sup>a</sup> | %<br>Severely<br>wasted<br>(<-3 SD) | %<br>Overweight<br>(> +2SD)⁵ | % Obese<br>(> +3SD) | Mean<br>Z-<br>score <sup>c</sup> | n'  |
|------------------------------------|--------------------------------------|-------------------------------------|------------------------------|---------------------|----------------------------------|-----|
| Total (All children under 5 years) | 3.6                                  | 0.6                                 | 3.3                          | 0.6                 | 0.0                              | 812 |
| Child sex                          |                                      |                                     |                              |                     |                                  |     |
| Male                               | 4.I                                  | 0.5                                 | 2.8                          | 0.3                 | 0.0                              | 424 |
| Female                             | 3.2                                  | 0.8                                 | 3.9                          | 1.0                 | 0.0                              | 388 |
| Child age <sup>a,b,c</sup>         |                                      |                                     |                              |                     |                                  |     |
| 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 |
| Caregiver's educational attainn    | nent <sup>2,c</sup>                  |                                     |                              |                     |                                  |     |
| No education                       | 4.5                                  | 0.6                                 | 1.3                          | 0.0                 | -0.1                             | 160 |
| Less than primary                  | 4.I                                  | 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  |
| Gendered household type            |                                      |                                     |                              |                     |                                  |     |
| 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                 | ٨                                    | ۸                                   | ۸                            | ۸                   | ۸                                | 2   |
| Child(ren) only (no adults)        | -                                    | -                                   | -                            | -                   | -                                | 0   |
| Household size                     |                                      |                                     |                              |                     |                                  |     |
| 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)                | ٨                                    | ٨                                   | ٨                            | ۸                   | ٨                                | 27  |
| Household hunger                   |                                      |                                     |                              |                     |                                  |     |
| 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 |

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

^ 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-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.</p>

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 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

<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>

| Characteristic                     | % Underweight<br>(<-2 SD)ª | % Severely<br>underweight<br>(<-3 SD) | Mean<br>Z-score <sup>b</sup> | n'  |
|------------------------------------|----------------------------|---------------------------------------|------------------------------|-----|
| Total (All children under 5 years) | 16.0                       | 2.7                                   | -1.0                         | 812 |
| Child sex                          |                            |                                       |                              |     |
| Male                               | 15.5                       | 2.4                                   | -1.0                         | 424 |
| Female                             | 16.6                       | 2.9                                   | -0.9                         | 388 |
| Child age <sup>b</sup>             |                            |                                       |                              |     |
| 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 |
| Caregiver's educational attainment | 2,a,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  |
| Gendered household type            |                            |                                       |                              |     |
| 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                 | ۸                          | ۸                                     | ٨                            | 2   |
| Child(ren) only (no adults)        | -                          | -                                     | -                            | 0   |
| Household size                     |                            |                                       |                              |     |
| 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)                | ۸                          | ۸                                     | ٨                            | 27  |
| Household hunger                   |                            |                                       |                              |     |
| Little to no hunger                | 13.9                       | 1.9                                   | -0.9                         | 381 |
| Moderate or severe hunger          | 18.1                       | 3.3                                   | -1.0                         | 429 |

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

^ 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 Cls 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.I 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.

|  |                        |            | Estimate          |            |                                       |                    |
|--|------------------------|------------|-------------------|------------|---------------------------------------|--------------------|
| Feed the Future indicator                | Indicator <sup>a</sup> | SD         | 95% CI            | DEFF       | Non-<br>response<br>rate <sup>1</sup> | n                  |
| Daily per capita expenditures (as        | a proxy for inc        | ome) in l  | JSG-assisted ar   | eas (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                  |
| <b>Prevalence of Poverty: Percent of</b> | people living          | on less th | an \$1.25/day (20 | 005 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 s         | hortfall relativ       | e to the   | \$1.25/day (2005  | PPP) pov   | erty 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 adeq          | uacy on Wom            | en's Emp   | owerment in A     | griculture | Index Indic                           | ators <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       | ١.5        | 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.I                   | -          | 85.3 – 90.5       | 1.4        | 7.9                                   | 891                |

| Feed the Future indicator   | Estimate               |            |                   |            |                                       |        |
|---|------------------------|------------|-------------------|------------|---------------------------------------|--------|
|   | Indicator <sup>a</sup> | SD         | 95% CI            | DEFF       | Non-<br>response<br>rate <sup>l</sup> | n      |
| Prevalence of households with mo  | oderate or seve        | ere hunge  | er                |            |                                       |        |
| 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.I       | 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: Mear   | n number of fo         | od group   | s consumed by v   | women of   | f reproductiv                         | ve age |
| All women age 15-49   | 3.38                   | 1.53       | 3.15 – 3.61       | 5.2        | 5.7                                   | 932    |
| Prevalence of exclusive breastfee   | ding among chi         | ildren un  | der 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 mont  | hs receiving a r       | ninimum    | acceptable die    |            |                                       |        |
| All children  | 13.4                   | -          | 9.3 – 18.8        | .          | 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 reproduc   |                        | onsume     | targeted nutrie   |            |                                       |        |
| commodities   |                        |            | <b>.</b>          |            |                                       |        |
| Soy and soy products: All women age 15-49   | 10.3                   | -          | 8.1 – 13.0        | 1.5        | 5.7                                   | 932    |
| Groundnuts and groundnut<br>products: All women age 15-49                         | 21.5                   | -          | 18.3 – 25.1       | 1.6        | 5.7                                   | 932    |
| Orange-fleshed sweet potatoes<br>(OFSP) and OFSP products: All<br>women age 15-49 | 12.7                   | -          | 10.1 – 15.7       | 1.7        | 5.7                                   | 932    |
| Prevalence of women of reproduc   | tive age who c         | onsume     | at least one targ | geted nut  | rient-rich va                         | lue    |
| chain commodity   | U                      |            |                   | •          |                                       |        |
| All women age 15-49   | 35.7                   | -          | 32.7 – 38.9       | 1.0        | 5.7                                   | 932    |
| Prevalence of children 6-23 mont<br>commodities                                   | hs who consum          | ne specifi | c targeted nutri  | ent-rich v | alue chain                            |        |
| Soy and soy products: All children  | 9.4                    | -          | 6.2 – 13.9        | 1.0        | 2.4                                   | 245    |
| Groundnuts and groundnut<br>products: All children                                | 15.0                   | -          | 11.0 – 20.0       | 0.9        | 2.4                                   | 245    |
| Orange-fleshed sweet potatoes<br>(OFSP)/OFSP products: All<br>children            | 14.7                   | -          | 10.6 – 20.1       | 1.1        | 2.4                                   | 245    |
| Prevalence of children 6-23 mont  | hs who consum          | ne at leas | t one targeted r  | nutrient-r | ich value cha                         | ain    |
| 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 wome  | n                      |            |                   |            |                                       |        |
| All non-pregnant women<br>age 15-49   | 8.9                    | -          | 7.0 – 11.2        | 1.1        | 5.7                                   | 848    |

|   | Estimate               |    |             |      |                                       |     |  |  |
|---|------------------------|----|-------------|------|---------------------------------------|-----|--|--|
| Feed the Future indicator                               | Indicator <sup>a</sup> | SD | 95% CI      | DEFF | Non-<br>response<br>rate <sup>1</sup> | n   |  |  |
| 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.I                                   | 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.I                                   | 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 WEAI 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 WEAI.

<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:

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

where:

 $W'_{h_i}$  = 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.

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

<sup>&</sup>lt;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 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 MK CPI/2015 MK CPI) \* (1/PPP 2005) \* (2010 USD CPI/2005 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.

<sup>&</sup>lt;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-ofbasic-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.

| -                                     |                          |          |             |         |  |  |
|---------------------------------------|--------------------------|----------|-------------|---------|--|--|
| Threshold                             | Daily, per capita values |          |             |         |  |  |
| i firestiola                          | 2005 PPP                 | 2011 PPP | 2013 Kwacha | 2015 Kw |  |  |
| International extreme thresholds      |                          |          |             |         |  |  |
| \$1.25 (2005 PPP), per person per day | 1.25                     | n/a      | 184.11      | 272.4   |  |  |
| \$1.90 (2011 PPP), per person per day | n/a                      | 1.90     | 228.81      | 338.5   |  |  |
| National thresholds                   |                          |          |             |         |  |  |
| 85,852 (2013 MK), per person per year | 1.60                     | 1.95     | 235.21      | 348.0   |  |  |
| 53,262 (2013 MK), per person per year | 0.99                     | 1.21     | 145.92      | 215.9   |  |  |
|                                       |                          |          |             |         |  |  |

#### Table A2.1. Poverty thresholds

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.

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

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

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

|                              | Prevalence of<br>poverty <sup>2</sup>   |                | Depth<br>pover                                |       | Average consumption<br>shortfall of the poor <sup>4</sup> |   |                |  |  |
|------------------------------|---|----------------|---|-------|---|---|----------------|--|--|
| Characteristic               | Percent<br>popula-<br>tion <sup>a</sup> | n <sup>5</sup> | Percent<br>of<br>poverty<br>line <sup>b</sup> | n⁵    | In USD<br>2011 PPP <sup>c</sup>                           | Percent<br>of<br>poverty<br>line <sup>c</sup> | n <sup>5</sup> |  |  |
| Total (All households)       | 68.9                                    | 1,021          | 27.5  | 1,021 | 0.76  | 40.0  | 582            |  |  |
| Gendered household type      |   |                |   |       |   |   |                |  |  |
| 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.I  | 144            |  |  |
| Male adult(s) only           | 26.9                                    | 46             | 8.6   | 46    | ۸   | ۸   | 6              |  |  |
| Child(ren) only (no adults)  | -                                       | -              | -   | 0     | -   | -   | 0              |  |  |
| Household size               |   |                |   |       |   |   |                |  |  |
| 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)          | ۸                                       | 15             | ٨   | 15    | ۸   | ۸   |                |  |  |
| Household educational attair | nment <sup>b,c</sup>                    |                |   |       |   |   |                |  |  |
| No education                 | 70.6                                    | 36             | 22.4  | 36    | ۸   | ۸   | 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             |  |  |

#### Table A2.2. Poverty at the \$1.90 (2011 PPP)'per person per day threshold

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

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

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

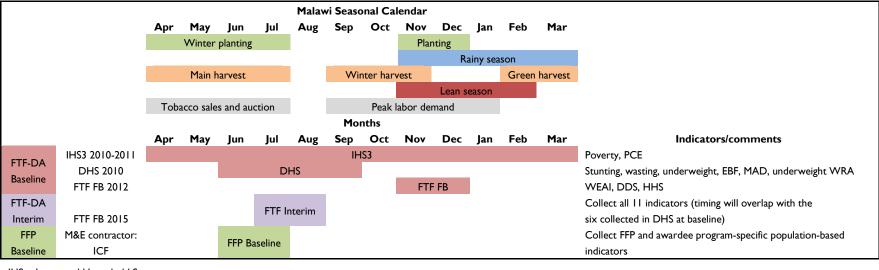
- I. Coordinate with BFS, FFP, and ICF International; and
- 2. Collect data on the 11 Feed the Future indicators in rural areas of five districts: Dedza, Lilongwe, Mangochi, Mchinji, and Ntcheu.

Similarly, FFP directed ICF to:

- I. 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 <u>bfs.mel@usaid.gov.</u>

#### MODULE A. Household Identification Cover Sheet

| HOUSEHOLD IDENTIFICATION  | A09. INTERVIEWER VISITS  |   |               |               |  |                           |  |
|---|--|---|---------------|---------------|--|---------------------------|--|
|   |  |   | 1             | 2             | 3  | FINAL VISIT               |  |
| A01. HOUSEHOLD IDENTIFICATION   |  | DATE  |               |               |  | DAY                       |  |
| A02. CLUSTER NUMBER   |  |   |               |               |  | MONTH<br>YEAR             |  |
| A03. VILLAGE  |  | INTERVIEWER'S NAME  |               |               |  |                           |  |
| A04. TA/TOWN  |  | RESULT*   |               |               |  | RESULT                    |  |
| A05. DISTRICT   |  | NEXT VISIT DATE   |               |               |  | TOTAL NUMBER<br>OF VISITS |  |
| A06. REGION   |  | *RESULT CODES:<br>1 COMPLETED                               |               |               |  | A10. TOTAL PERSONS        |  |
| A07. GPS COORDINATES OF     °     ′       HOUSEHOLD     °     ′   | "  | 2 NOT HOME<br>3 ENTIRE HOUSE<br>4 POSTPONED/UI              |               | FOR EXTEND    | ED PERIOD  | A11. TOTAL NUMBER         |  |
| NOTE:   | 5 REFUSED<br>6 DWELLING VAC<br>7 NOT A DWELLIN<br>8 DWELLING DES<br>9 DWELLING NOT<br>10 TOO ILL TO RES<br>11 OTHER (SPECIF<br>12 PARTIAL COMP | NG<br>STROYED<br>F FOUND<br>SPOND/COGNI <sup>-</sup><br>FY) | fively impair | 2ED           | OF WOMEN 15-49 A12. TOTAL NUMBER OF CHILDREN AGE 0-5 A13. LINE NO. OF RESPONDENT TO MODULE C |                           |  |
| THE <b>PRIMARY MALE AND PRIMARY FEMALE DECISIONMAKE</b><br>18 OR OLDER, AND WHO <u>SELF-IDENTIFY</u> AS THE PRIMARY MA<br>MEMBERS RESPONSIBLE FOR THE DECISION MAKING, BOTH<br>WITHIN THE HOUSEHOLD.<br>IN HOUSEHOLDS WITH BOTH MALE AND FEMALE DECISIONM.<br>AND PRIMARY FEMALE DECISIONMAKERS ARE USUALLY HUS<br>THEY CAN ALSO BE OTHER HOUSEHOLD MEMBERS, AS LONG<br>OVER. | A14. SENIOR SUPERV<br>NAME<br>A17.LANGUAGE OF C<br>A18. LANGUAGE OF<br>** LANGUAGE CODES: 1 C  | QUESTIONNAIR  | ME            | A20. WAS A TR | A16. INTERVIEWER CODE  |                           |  |

#### 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 INTERVIEWED1<br>CONTINUE<br>WITH<br>HOUSEHOLD<br>ROSTER: | RESPONDENT DOES NOT AGREE TO BE INTERVIEWED | 2 		 END. "Thank you very much for your time." |
| "First, I'd like to ask you ab<br>the members of your hous                       | pout<br>sehold."                            |  |

#### 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<br>P.O. Box 333<br>Zomba, Malawi |
| EMAIL ADDRESS:           | tmleme@yahoo.co.uk   |

# MODULE C. Household Roster and Demographics Household identification (*in data file, each module must be matched with the HH ID*)

| _  | C01a. Who would you say is the p   | primary m   | hale (                          | decisi  | ionma   | ker i   | n this hou   | usehold                               | ? This   | s perso   | on should  | l be 18 ye       | ears old (   | or older.   | _   | _   |                                     |
|--|--|---|---------------------------------|---|---|---|--|---------------------------------------|--|---|--|------------------|--|---|---|---|-------------------------------------|
|  | YES, PRIMARY MALE DECISIONMAKER<br>NO PRIMARY MALE DECISIONMAKER II  |   |                                 |   |   |   |  |                                       |  |   |  |                  |  |   |   |   |                                     |
|  | IF THERE IS A PRIMARY MALE DECISIC   | )NMAKER,  | , ENTF                          | ER HIS  | S NAME  | ONI   | LINE 01 OF   | THE RO                                | STER.  | CO2 AN  | ND C03 AR  | e pre-fili       | LED FOR 1  | THIS LINE   | NUME  | ER.   |                                     |
|  | C01b. Who would you say is the p   | 5   |                                 |   |   |   |  | iouseho                               | ld? T  | his per   | rson shou  | uld be 18        | years ol   | d or olde   | r.  |   |                                     |
|  | YES, PRIMARY FEMALE DECISIONMAK<br>NO PRIMARY FEMALE DECISIONMAKE  |   |                                 |   |   |   |  |                                       |  |   |  |                  |  |   |   |   |                                     |
|  | IF THERE IS A PRIMARY FEMALE DECIS<br>RELATIONSHIP (CO3) OF THE FEMALE   |   |                                 |   |   |   |  |                                       |  |   |  |                  |  |   |   |   |                                     |
|  | Now, please tell me the names of all of the other people who usually live here.  |   | [NAN                            | nat is<br>ME's]                                     | Ī   |   |  |                                       |  |   |  |                  |  |   |   |   |                                     |
|  | LIST ALL HOUSEHOLD MEMBERS,<br>THEIR SEX (C02), AND THEIR<br>RELATIONSHIP TO THE PRIMARY<br>DECISIONMAKER NAMED IN LINE 01<br>(C03), OR NAMED IN LINE 02 IF NO<br>HH MEMBER LISTED ON LINE 01. |   | prim<br>ma<br>decis<br>mak      | to the<br>mary<br>ale<br>ision-<br>ker?             |   |   |  |                                       |  |   |  |                  |  |   |   |   |                                     |
|  | IF THERE IS NO PRIMARY MALE OR<br>FEMALE DECISIONMAKER IN THE<br>HOUSEHOLD, START THE<br>HOUSEHOLD LISTING ON LINE 03.   |   | PRIM<br>MA<br>DECI<br>-MAI      | NO<br>MARY<br>ALE<br>ISION<br>KER:                  |   |   |  |                                       |  |   |  |                  |  |   |   |   |                                     |
| L<br>I<br>N  | THEN ASK: Are there any other people<br>who live here, even if they are not at<br>home now? These may include children<br>in school or household members at<br>work.                           |   | [NAN<br>relat<br>ship t<br>prim | nat is<br>ME's]<br>ntion-<br>to the<br>mary<br>nale |   |   |  |                                       |  |   |  |                  |  |   | \\/F  | nat is  |                                     |
| E  | Any other people like small children or infants that we have not listed?   |   |                                 | ision-<br>ker?                                      | Wha   | + ic  |  |                                       |  |   |  |                  |  |   | ti<br>hig   | he<br>hest  |                                     |
| N<br>U<br>B<br>E<br>R                              | Are there any other people who may not<br>be members of your family, such as<br>domestic servants, lodgers, or friends<br>who usually live here?   | What is   | COI<br>BEL<br>IF I              | EE<br>DES<br>LOW                                    | INAM<br>[NAM<br>age<br>IN<br>YEA                    | IE's]<br>??<br>I<br>RS  | Did<br>[NAME]  | How lon                               |  |   | CIRCLE   | CIRCLE           | Has<br>[NAME]<br>ever<br>attended<br>school?   | Is<br>[NAME]<br>currently<br>attending<br>school? | educ<br>comp  | de of<br>cation<br>pleted<br>by<br>ME]?                                   | Can<br>[NAME]<br>read and<br>write? |
|  | IF YES, COMPLETE LISTING FOR<br>QUESTIONS C02-C03. THEN, ASK   | [NAME's]<br>sex?                                  | DECI<br>-MAI                    | ULT<br>ISION<br>KER:                                | IF 95<br>OLDI                                       | OR<br>ER,   | stay here<br>last night?   | since [<br>spent the<br>hou           |  | in this   | NUMBER<br>OF ALL<br>WOMEN  | OF ALL<br>CHILD- | YES=1<br>NO=2  | YES=1<br>NO=2                                     | CO  | EE<br>DES<br>LOW  | SEE<br>CODES<br>BELOW               |
|  | QUESTIONS STARTING WITH CO4<br>FOR EACH PERSON ONE AT A TIME.  | M = 1<br>F = 2                                    |                                 | TER<br>DE 16  | ENT<br>'95  |   | YES=1<br>NO=2  | SEE CO                                | DES B  | ELOW  | AGE<br>15-49   | REN<br>AGE 0-5   | 110-2  | IF AGE 3  |   |   | DLLOW                               |
|  | C01  | C02   | +                               | 03  | C0  |   | C05  | ÷                                     | C06  |   | C07  | C08              | C09  | C10   | C   | 11  | C12                                 |
| 01   |  | 1   | 0                               | 1   |   |   | 1 <b>→</b> C07<br>2  | 123                                   |  |   | 01   | 01               | 1<br>2 <b>→</b> C12  | 12  |   |   |                                     |
| 02   |  | 2   | F                               | $\exists$   |   |   | 1→C07<br>2   | 123                                   |  |   | 02   | 02               | 1<br>2 <b>→</b> C12  | 1 2   |   |   |                                     |
| 03   |  | 12  | F                               |   |   |   | 1 <b>→</b> C07<br>2  | 123                                   |  |   | 03   | 03               | 1<br>2 <b>→</b> C12  | 12  |   |   |                                     |
| 04   |  | 12  |                                 | $\square$   |   |   | 1 <b>→</b> C07<br>2  | 123                                   |  |   | 04   | 04               | 1<br>2 <b>→</b> C12  | 12  |   |   |                                     |
| 05   |  | 12  | F                               | Ħ   |   |   | 1 <b>→</b> C07<br>2  | 123                                   |  |   | 05   | 05               | 1<br>2 <b>→</b> C12  | 1 2   |   |   |                                     |
| 06   |  | 1 2   | F                               | $\exists$   |   | _   | 1 <b>→</b> C07<br>2  | 123                                   |  |   | 06   | 06               | 1<br>2 <b>→</b> C12  | 1 2   |   |   |                                     |
| FEMA<br>SELF<br>SPOU<br>SON/<br>SON/<br>GRAI<br>GR |  | ISTER-IN-I<br>THER-IN-L<br>ATIVE<br>AID<br>NMAKER | LAW<br>LAW                      | 11<br>12<br>13<br>14<br>15                          | SINCE<br>CIRCL<br>OF DA<br>CIRCL<br># OF V<br>CIRCL | E <b>SPE</b><br>Le 1 II<br>Ays In<br>Le 2 II<br>Week<br>Le 3 II | ILT CODES<br>ENT THE NI<br>F DAYS; EN<br>N BOX (1-6)<br>F WEEKS; I<br>KS IN BOX (<br>F MONTHS<br>OF MONTHS | IGHT<br>NTER #<br>)<br>ENTER<br>(1-5) | LESS<br>PRIM<br>PRIM<br>PRIM<br>PRIM<br>PRIM<br>PRIM | THAN P<br>ARY LEV<br>ARY LEV<br>ARY LEV<br>ARY LEV<br>ARY LEV<br>ARY LEV<br>ARY LEV | CODES: E<br>11 (OR NO S<br>/EL 1<br>/EL 2<br>/EL 3<br>/EL 4<br>/EL 5<br>/EL 6<br>/EL 7 | SCHOOL)          | 01<br>02<br>03<br>04<br>05<br>06<br>07<br>08   |   | TY OR A<br>AL/VOCA<br>ERACY<br>AL EDU<br>RELIGIA<br>AL EDU<br>OW/NO | ABOVE .<br>Ational<br>( Only,<br>Jcation<br>Ous on<br>Jcation<br>It Appli | 15<br>L16<br>J17<br>JLY             |
| BRO<br>NEPH<br>NEPH                                | GRANDDAUGHTER05NO DECISIONMAKERDTHER/FATHER06AGE 18 OR OLDER20THER/SISTER07IN HOUSEHOLD20THEW/NIECE08STEPSON/20HEW/NIECE OF SPOUSE 09STEPDAUGHTER20SIN10OTHER RELATIONSHIP                     |   |                                 | 16<br>17  | BOX N   | ENTER # OF MONTHS IN<br>BOX MEMBER HAS BEEN<br>AWAY.            |  |                                       | PRIMARY LEVEL 8                                      |   |  | 10<br>11<br>12   | C12. RESULT CODES:<br>LITERACY<br>CANNOT READ & WRITE1<br>CAN SIGN (WRITE) ONLY2<br>CAN READ ONLY3<br>CAN READ & WRITE |   |   |   |                                     |

June 24, 2015

Feed the Future ZOI MALAWI Questionnaire

|   |  |  |   | House  | ehold iden   | tification                                       |   | e, each moo<br>natched with  |   |  |   |  |  |
|---|--|--|---|--|--|--|---|--|---|--|---|--|--|
|   | Now, please tell me the names of all of<br>the other people who usually live here.<br>LIST ALL HOUSEHOLD MEMBERS,<br>THEIR SEX (CO2), AND THEIR<br>RELATIONSHIP TO THE PRIMARY<br>DECISIONMAKER NAMED IN LINE 01<br>(CO3), OR NAMED IN LINE 02 IF NO<br>HH MEMBER LISTED ON LINE 01. |  | What is<br>[NAME's]<br>relation-<br>ship to the<br>primary<br>male<br>decision-<br>maker? |  |  |  |   |  |   |  |   |  |  |
|   | IF THERE IS NO PRIMARY MALE OR<br>FEMALE DECISIONMAKER IN THE<br>HOUSEHOLD, START THE<br>HOUSEHOLD LISTING ON LINE 03.   |  | IF NO<br>PRIMARY<br>MALE<br>DECISION-<br>MAKER:   |  |  |  |   |  |   |  |   | What is  |  |
| L   | THEN ASK: Are there any other people<br>who live here, even if they are not at<br>home now? These may include children<br>in school or household members at<br>work.   |  | What is<br>[NAME's]<br>relation-<br>ship to the<br>primary<br>female                      |  |  |  |   |  |   | Has<br>[NAME]<br>ever  | ls<br>[NAME]<br>currently   | the<br>highest<br>grade of<br>education<br>completed<br>by | Can<br>[NAME]<br>read<br>and   |
| I<br>N<br>E   | Any other people like small children or infants that we have not listed?   |  | decision-<br>maker?   | What is  |  |  |   |  |   | attended school?   | attending<br>school?  | [NAME]?<br>SEE   | write?   |
| NU  | Are there any other people who may<br>not be members of your family, such as<br>domestic servants, lodgers, or friends   |  | SEE<br>CODES<br>BELOW   | [NAME's]<br>age?   | Did  |  |   |  |   | YES=1<br>NO=2  | YES=1<br>NO=2   | CODES<br>BELOW   | CODES  |
| M<br>B  | Who usually live here?<br>IF YES, COMPLETE LISTING FOR<br>QUESTIONS C02-C03. THEN, ASK<br>QUESTIONS STARTING WITH C04<br>FOR EACH PERSON, ONE AT A   | What is<br>[NAME's]<br>sex?<br>M = 1   | IF NO<br>ADULT<br>DECISION-<br>MAKER:<br>ENTER  | IN<br>YEARS<br>IF 95 OR<br>OLDER,<br>ENTER                                       | [NAME]<br>stay here<br>last<br>night?<br>YES=1   | been sir<br>has spe<br>in this h                 | ong has it<br>nce [NAME]<br>ent the night<br>nousehold?<br>CODES  | CIRCLE<br>LINE<br>NUMBER<br>OF ALL<br>WOMEN<br>AGE   | CIRCLE<br>LINE<br>NUMBER<br>OF ALL<br>CHILD-<br>REN AGE |  |   |  |  |
|   | TIME.<br>C01   | F = 2  | CODE 16<br>C03  | <sup>'95'</sup>  | NO=2   |  | <u>ELOW</u><br>C <b>06</b>  | 15-49<br><b>C07</b>  | 0-5<br><b>C08</b>                                       | C09  | IF AGE 3<br>C10   | OR OLDER<br>C11  | C12  |
| 07  |  | 12   |   |  | 1 <b>→</b> C07<br>2  | 123  |   | 07   | 07  | 1<br>2 <b>→</b> C12  | 1 2   |  |  |
| 08  |  | 1 2  |   |  | 1 <b>→</b> C07<br>2  | 123  |   | 08   | 08  | 1<br>2 <b>→</b> C12  | 1 2   |  |  |
| 09  |  | 12   |   |  | 1 <b>→</b> C07<br>2  | 123  |   | 09   | 09  | 1<br>2 <b>→</b> C12  | 1 2   |  |  |
| 10  |  | 12   |   |  | 1 <b>→</b> C07<br>2  | 123  |   | 10   | 10  | 1<br>2 <b>→</b> C12  | 1 2   |  |  |
| 11  |  | 12   |   |  | 1 <b>→</b> C07<br>2  | 123  |   | 11   | 11  | 1<br>2 <b>→</b> C12  | 1 2   |  |  |
| 12  |  | 12   |   |  | 1 <b>→</b> C07<br>2  | 123  |   | 12   | 12  | 1<br>2 <b>→</b> C12  | 1 2   |  |  |
| 13  |  | 12   |   |  | 1→C07<br>2   | 123  |   | 13   | 13  | 1<br>2 <b>→</b> C12  | 12  |  |  |
| 14  |  | 12   |   |  | 1→C07<br>2   | 123  |   | 14   | 14  | 1<br>2 <b>→</b> C12  | 12  |  |  |
| 15  |  | 12   |   |  | 1→C07<br>2   | 123  |   | 15   | 15  | 1<br>2 <b>→</b> C12  | 1 2   |  |  |
| FEMA<br>SELF<br>SPOL<br>SON/I<br>GRAN<br>GRAN<br>GR<br>MOTH<br>BROT<br>NEPH<br>NEPH |  | SISTER-IN<br>ATHER-IN<br>LATIVE<br>MAID<br>ONMAKER<br>DR OLDER<br>EHOLD<br>GHTER | I-LAW11<br>-LAW12<br>   | SINCE HC<br>CIRCLE 1<br>OF DAYS<br>CIRCLE 2<br># OF WEE<br>CIRCLE 3<br>ENTER # 0 | JLT CODE:<br>ME<br>IF DAYS; E<br>IN BOX (1-(<br>IF WEEKS;<br>KS IN BOX<br>IF MONTH:<br>DF MONTH<br>BER HAS E | :NTER #<br>6)<br>: ENTER<br>(1-5)<br>S;<br>IS IN | LESS THA<br>PRIMARY<br>PRIMARY<br>PRIMARY<br>PRIMARY<br>PRIMARY<br>PRIMARY<br>PRIMARY<br>SECONDA<br>SECONDA | JLT CODES:<br>N P1 (OR NC)<br>LEVEL 1<br>LEVEL 2<br>LEVEL 3<br>LEVEL 4<br>LEVEL 5<br>LEVEL 5<br>LEVEL 5<br>LEVEL 8<br>RY 1<br>RY 2<br>RY 3<br>RY 4 | SCHOOL)   | 01<br>02<br>03<br>04<br>05<br>06<br>07<br>08<br>09<br>10<br>11<br>12 | UNIVERSI<br>TECHNICA<br>ADULT LIT<br>NO FORM,<br>KORANIC/<br>NO FORM,<br>DON'T KNO<br>NOT APPL<br>C12. RES<br>LITERAC'<br>CANNOT<br>CAN SIGN<br>CAN REA | ICABLE   | E15<br>AL16<br>(,<br>)N17<br>)NLY<br>)N)18<br>91<br>:<br>TE1<br>VLY2<br> |

#### MODULE D. Dwelling Characteristics

Household identification (in data file, each module must be

matched with the HH ID)

#### 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<br>COVERING): | D01:TYPE OF ROOFNATURAL ROOFINGFINISHED ROOFINGNO ROOF11METAL31THATCH/PALM LEAF12WOOD32SOD13CALAMINE/CEMENT FIBER33RUDIMENTARY ROOFINGCERAMIC TILESRUSTIC MAT21CEMENT35PALM/BAMBOO22WOOD PLANKS23CARDBOARD24OTHER96   |
| D02  | OBSERVE (DO NOT ASK) FLOOR MATERIAL:                               | D02:TYPE OF FLOORNATURAL FLOORFINISHED FLOOREARTH/SAND  |
| D03  | OBSERVE (DO NOT ASK) EXTERIOR WALLS:                               | D03:TYPE OF WALLSNATURAL WALLSFINISHED WALLSNO WALLS11CANE/PALM/TRUNKS12DIRT13BRICKS33RUDIMENTARY WALLSCEMENT BLOCKSBAMBOO WITH MUD21COVERED ADOBE35STONE WITH MUD22WOOD PLANKS/SHINGLES36UNCOVERED ADOBE23PLYWOOD24OTHER96CARDBOARD25REUSED WOOD26METAL SHEETING27 |

| QNO. | QUESTIONS  | RESPONSE CODES  |
|------|--|---|
| D04  | How many rooms in this dwelling are used for sleeping? | D04. NUMBER OF ROOMS USED<br>FOR SLEEPING:  |
| D05  | What is the main type of toilet your household uses?   | D05: TYPE OF TOILET         FLUSH OR POUR FLUSH TOILET         FLUSH TO PIPED SEWER SYSTEM         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 (VIP)         21         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         OTHER         96 |
| D06  | Do you share this toilet with other households?        | D06: IF TOILET IS SHARED           YES1           NO2 → SKIP TO D08   |
| D07  | How many households use this toilet?                   | D07: NUMBER OF HOUSEHOLDS WITH WHOM TOILET IS SHARED         NUMBER OF HOUSEHOLDS         (IF LESS THAN 10)         10 OR MORE HOUSEHOLDS   |

| QNO. | QUESTIONS   | RESPONSE CODES   |
|------|---|--|
| D08  | What is the main source of drinking water for your household? | D08: MAIN DRINKING WATER SOURCEPIPED WATERPIPED INTO DWELLINGPIPED INTO DWELLINGPIPED TO YARD/PLOT12TANKER TRUCKPUBLIC TAP/STANDPIPE13CART WITH SMALL TANKTUBE WELL OR BOREHOLE21SURFACE WATER (RIVER/DAM/LAKE/DUG WELLPROTECTED WELL11IRRIGATION CHANNEL)12WATER FROM SPRINGPROTECTED SPRING42  |
| D09  | Does this household have electricity?                         | D09: ELECTRICITY<br>YES1<br>NO2  |
| D10  | What is the main source of cooking fuel for your household?   | D10: COOKING FUEL           ELECTRICITY         01         WOOD         08           LIQUID PROPANE GAS         02         STRAW/SHRUBS/GRASS         09           NATURAL GAS         03         AGRICULTURAL CROP RESIDUE         10           BIOGAS         04         ANIMAL DUNG         11           KEROSENE         05         NO FOOD COOKED IN HOUSEHOLD         95           COAL, LIGNITE         06         OTHER         96           CHARCOAL         07         07         08 |

#### MODULE E. Household Consumption Expenditure

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

H ID)

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<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much o<br>ate cam<br>purcha | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | from your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|--|--------------|---|------------------------------------|----------------|---------------------------------|----------------|--|--|----------------------|--|--------------------|---|--|
| E1.01                                  |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY              | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT       | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Cereals, Grains and Cereal<br>Products | 01-20        |   |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Maize (normal flour)                   | 01           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Maize, refined (fine flour)            | 02           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Maize (bran flour)                     | 03           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Maize grain (not flour)                | 04           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Green maize                            | 05           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Rice                                   | 06           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Finger millet                          | 07           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                      |  |                    |   |  |
| Sorghum                                | 08           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                                 |                |  |  |                      |  |                    |   |  |

| FOOD ITEM                  | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate car<br>purch | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | rom your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>cources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|----------------------------|--------------|---|------------------------------------|----------------|------------------------------|----------------|--|--|---------------------|--|--------------------|--|--|
| E1.01                      |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY           | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT      | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                           | E1.07C<br>ESTIMATE<br>(MK)   |
| Pearl millet               | 09           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                              |                |  |  |                     |  |                    |  |  |
| Wheat flour                | 10           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |  |  |
| Bread                      | 11           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |  |  |
| Buns, scones               | 12           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |  |  |
| Biscuits                   | 13           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |  |  |
| Spaghetti, macaroni, pasta | 14           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |  |  |
| Breakfast cereal           | 15           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |  |  |
| Infant feeding cereals     | 16           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |  |  |

|                           | ITEM  | Over the past 7 days, did<br>you or others in your<br>household eat any | How much<br>your house |                | How much o ate carr |                | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that | How much o<br>ate came f<br>househol | from your      | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market |                    | of what you<br>from gifts or | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market |
|---------------------------|-------|---|------------------------|----------------|---------------------|----------------|---|--------------------------------------|----------------|---|--------------------|------------------------------|---|
| FOOD ITEM                 | CODE  | [FOOD ITEM]?  | the past               |                | purcha              |                | was consumed.   | produc                               |                | today."   |                    | ources?                      | today."   |
| E1.01                     |       | E1.02   | E1.03A<br>QUANTITY     | E1.03B<br>UNIT | E1.04A<br>QUANTITY  | E1.04B<br>UNIT | Е1.05<br>(МК)   | E1.06A<br>QUANTITY                   | E1.06B<br>UNIT | E1.06C<br>ESTIMATE<br>(MK)  | E1.07A<br>QUANTITY | E1.07B<br>UNIT               | E1.07C<br>ESTIMATE<br>(MK)  |
| Roots, Tubers & Plantains | 21-35 |   |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| Cassava tubers            | 21    | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| Cassava flour             | 22    | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| White sweet potato        | 23    | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| Orange sweet potato       | 24    | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| Irish potato              | 25    | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| Potato crisps             | 26    | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| Plantain, cooking banana  | 27    | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                |                        |                |                     |                |   |                                      |                |   |                    |                              |   |
| Cocoyam                   | 28    | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                |                        |                |                     |                |   |                                      |                |   |                    |                              |   |

| FOOD ITEM       | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purcha | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | from your<br>Id's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>;ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|-----------------|--------------|---|------------------------------------|----------------|-------------------------------|----------------|--|--|-----------------------|--|--------------------|--|--|
| E1.01           |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY            | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT        | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                           | E1.07C<br>ESTIMATE<br>(MK)   |
| Nuts and Pulses | 36-50        |   |                                    |                |                               |                |  |  |                       |  |                    |  |  |
| Bean, white     | 36           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |  |  |
| Bean, brown     | 37           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |  |  |
| Pigeonpea       | 38           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |  |  |
| Groundnut       | 39           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |  |  |
| Groundnut flour | 40           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |  |  |
| Soyabean flour  | 41           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |  |  |

| FOOD ITEM                           | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the pasi | hold eat in    | How much<br>ate can<br>purcha | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | from your<br>Id's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|-------------------------------------|--------------|---|------------------------------------|----------------|-------------------------------|----------------|--|--|-----------------------|--|--------------------|---|--|
| E1.01                               |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY            | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT        | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Ground bean                         | 42           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                               | ,              |  |  |                       |  |                    |   |  |
| Cowpea                              | 43           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                               |                |  |  |                       |  |                    |   |  |
| Macademia nuts                      | 44           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                               |                |  |  |                       |  |                    |   |  |
| Vegetables                          | 51-70        |   | •                                  |                |                               |                |  | ·  | •                     |  | ·                  |   |  |
| Onion, fresh or processed           | 51           | YES1<br>NO  |                                    |                |                               |                |  |  |                       |  |                    |   |  |
| Cabbage, fresh or<br>processed      | 52           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |   |  |
| Rape, fresh or processed            | 53           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |   |  |
| Nkhwani, fresh or processed         | 54           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |   |  |
| Chinese cabbage, fresh or processed | 55           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                       |  |                    |   |  |

| FOOD ITEM   | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purch | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | rom your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came f         | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|---|--------------|---|------------------------------------|----------------|------------------------------|----------------|--|--|---------------------|--|--------------------|---|--|
| E1.01   |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY           | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT      | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Other cultivated green leafy<br>vegetables, fresh or<br>processed | 56           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                              |                |  |  |                     |  |                    |   |  |
| Gathered wild green leaves  | 57           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                              |                |  |  |                     |  |                    |   |  |
| Tomato, fresh or processed  | 58           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                              |                |  |  |                     |  |                    |   |  |
| Cucumber, fresh or<br>processed                                   | 59           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |   |  |
| Pumpkin, fresh or processed                                       | 60           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |   |  |
| Okra, fresh or processed  | 61           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |   |  |
| Mushroom, fresh or processed                                      | 62           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |   |  |
| Meat, Fish and Animal<br>products                                 | 71-90        |   | ·                                  |                |                              |                |  |  |                     |  |                    |   |  |
| Eggs  | 71           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                     |  |                    |   |  |

| FOOD ITEM   | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purcha | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | rom your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|---|--------------|---|------------------------------------|----------------|-------------------------------|----------------|--|--|---------------------|--|--------------------|---|--|
| E1.01   |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY            | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT      | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Dried fish  | 72           | YES1<br>NO2→ NEXT ITEM<br>DK  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Fresh fish  | 73           | YES1<br>NO  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Beef  | 74           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Goat  | 75           | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Pork  | 76           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Mutton  | 77           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Chicken   | 78           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Guinea fowl, doves,<br>pigeons, or other birds<br>raised for meat or eggs | 79           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |

| FOOD ITEM  | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purch | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | from your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|--|--------------|---|------------------------------------|----------------|------------------------------|----------------|--|--|----------------------|--|--------------------|---|--|
| E1.01  |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY           | E1.04B<br>UNIT | E1.05<br>(МК)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT       | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Small animal – rabbit, mice,<br>etc.             | 80           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Termites, other insects, for example caterpillar | 81           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Tinned meat or fish                              | 82           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Smoked fish                                      | 83           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Fish Soup/Sauce                                  | 84           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Fruits   | 91-110       |   |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Mango  | 91           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Banana   | 92           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Citrus – naartje, orange, etc.                   | 93           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |

|                        |              | Over the past 7 days, did<br>you or others in your | How much               |                | How much           |                | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only | How much c<br>ate came f | rom your       | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in |                    | of what you              | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in |
|------------------------|--------------|--|------------------------|----------------|--------------------|----------------|---|--------------------------|----------------|---|--------------------|--------------------------|---|
| FOOD ITEM              | ITEM<br>CODE | household eat any<br>[FOOD ITEM]?                  | your house<br>the past |                | ate can<br>purch   |                | on the part that was consumed.  | househol<br>produc       |                | the market<br>today."   |                    | from gifts or<br>ources? | the market today."  |
| E1.01                  | CODE         | E1.02  | E1.03A<br>QUANTITY     | E1.03B<br>UNIT | E1.04A<br>QUANTITY | E1.04B<br>UNIT | E1.05<br>(MK)   | E1.06A<br>QUANTITY       | E1.06B<br>UNIT | E1.06C<br>ESTIMATE<br>(MK)  | E1.07A<br>QUANTITY | E1.07B<br>UNIT           | E1.07C<br>ESTIMATE<br>(MK)  |
| Pineapple              | 94           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Рарауа                 | 95           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Guava                  | 96           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Avocado                | 97           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Wild fruit             | 98           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Apple                  | 99           | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Milk and Milk Products | 111-125      |  |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Fresh milk             | 111          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |
| Powdered milk          | 112          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM           |                        |                |                    |                |   |                          |                |   |                    |                          |   |

| FOOD ITEM                           | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purch | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | from your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|-------------------------------------|--------------|---|------------------------------------|----------------|------------------------------|----------------|--|--|----------------------|--|--------------------|---|--|
| E1.01                               |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY           | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT       | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Margarine – (e.g., Blue<br>band)    | 113          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Butter                              | 114          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Chambiko – soured milk              | 115          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Yogurt                              | 116          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Cheese                              | 117          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Infant feeding formula (for bottle) | 118          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Sugar, Fats, and Oil                | 126-135      |   |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Sugar                               | 126          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |
| Sugar Cane                          | 127          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                      |  |                    |   |  |

| FOOD ITEM                                       | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the pasi | hold eat in    | How much o<br>ate cam<br>purcha | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much c<br>ate came f<br>househol<br>produc | rom your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|---|--------------|---|------------------------------------|----------------|---------------------------------|----------------|--|--|---------------------|--|--------------------|---|--|
| E1.01   |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY              | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT      | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Cooking oil                                     | 128          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Beverages                                       | 136-155      |   |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Теа   | 136          | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Coffee  | 137          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Cocoa, Milo                                     | 138          | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Squash (Sobo drink concentrate)                 | 139          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Fruit juice                                     | 140          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Freezes (flavoured ice)                         | 141          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                     |  |                    |   |  |
| Soft drinks (Coca-cola,<br>Fanta, Sprite, etc.) | 142          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                                 |                |  |  |                     |  |                    |   |  |

| FOOD ITEM                                   | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purch | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | from your<br>Id's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|---|--------------|---|------------------------------------|----------------|------------------------------|----------------|--|--|-----------------------|--|--------------------|---|--|
| E1.01                                       |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY           | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT        | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Chibuku (commercial traditional-style beer) | 143          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Bottled drinking water                      | 144          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Maheu                                       | 145          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Bottled / canned beer<br>(Carlsberg, etc.)  | 146          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Thobwa                                      | 147          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Traditional beer                            | 148          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Wine or commercial liquor                   | 149          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Locally brewed liquor                       | 150          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |

| FOOD ITEM                                 | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purch | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much o<br>ate came f<br>househol<br>produc | from your<br>Id's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came f         | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|---|--------------|---|------------------------------------|----------------|------------------------------|----------------|--|--|-----------------------|--|--------------------|---|--|
| E1.01                                     |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY           | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT        | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Spices & Miscellaneous                    | 156-170      |   |                                    |                |                              |                | •  | •  | <u>.</u>              |  |                    |   |  |
| Salt                                      | 156          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Spices                                    | 157          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Yeast, baking powder, bicarbonate of soda | 158          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Tomato sauce (bottle)                     | 159          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Hot sauce (Nali, etc.)                    | 160          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Jam, jelly                                | 161          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Sweets, candy, chocolates                 | 162          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |
| Honey                                     | 163          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                              |                |  |  |                       |  |                    |   |  |

| FOOD ITEM                             | ITEM<br>CODE | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the past | hold eat in    | How much<br>ate can<br>purcha | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much c<br>ate came f<br>househol<br>produc | rom your<br>d's own | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today." | ate came           | of what you<br>from gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|---------------------------------------|--------------|---|------------------------------------|----------------|-------------------------------|----------------|--|--|---------------------|--|--------------------|---|--|
| E1.01                                 |              | E1.02   | E1.03A<br>QUANTITY                 | E1.03B<br>UNIT | E1.04A<br>QUANTITY            | E1.04B<br>UNIT | E1.05<br>(MK)  | E1.06A<br>QUANTITY                             | e1.06B<br>Unit      | E1.06C<br>ESTIMATE<br>(MK)   | E1.07A<br>QUANTITY | E1.07B<br>UNIT                          | E1.07C<br>ESTIMATE<br>(MK)   |
| Peanut butter                         | 164          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Cooked Foods from<br>Vendors          | 171-190      |   |                                    |                | ,                             |                |  |  |                     |  |                    |   |  |
| Maize – boiled or roasted<br>(vendor) | 171          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Chips (vendor)                        | 172          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Cassava – boiled (vendor)             | 173          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Eggs – boiled (vendor)                | 174          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Chicken (vendor)                      | 175          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Meat (vendor)                         | 176          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |
| Fish (vendor)                         | 177          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |                |                               |                |  |  |                     |  |                    |   |  |

| FOOD ITEM                | ITEM<br>CODE   | Over the past 7 days, did<br>you or others in your<br>household eat any<br>[FOOD ITEM]? | How much<br>your house<br>the pas | hold eat in    | How much<br>ate can<br>purch | ne from        | How much did<br>you spend on<br>what was eaten<br>last week?<br>If your family<br>ate part but not<br>all of something<br>you purchased,<br>estimate what<br>you spent only<br>on the part that<br>was consumed. | How much c<br>ate came f<br>househol<br>produc | rom your<br>d's own  | CHECK<br>E1.06A.<br>IF E1.06A IS<br>> 0, ASK:<br>"Please tell<br>me how much<br>it would have<br>cost to buy<br>that much<br>[FOOD ITEM]<br>if you had to<br>purchase it in<br>the market<br>today."                          | ate came f         | of what you<br>rom gifts or<br>ources? | CHECK<br>E1.07A.<br>IF E1.07A IS<br>> 0, ASK:<br>"Please tell me<br>how much it<br>would have<br>cost to buy that<br>much [FOOD<br>ITEM] if you<br>had to<br>purchase it in<br>the market<br>today." |
|--------------------------|--|---|-----------------------------------|----------------|------------------------------|----------------|--|--|--|---|--------------------|--|--|
| E1.01                    |  | E1.02   | E1.03A<br>QUANTITY                | E1.03B<br>UNIT | E1.04A<br>QUANTITY           | E1.04B<br>UNIT | E1.05<br>(МК)  | E1.06A<br>QUANTITY                             | E1.06B<br>UNIT   | E1.06C<br>ESTIMATE<br>(MK)  | E1.07A<br>QUANTITY | E1.07B<br>UNIT                         | E1.07C<br>ESTIMATE<br>(MK)   |
| Doughnut (vendor)        | 178  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                   |                |                              |                |  |  |  |   |                    |  |  |
| Samosa (vendor)          | 179  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                   |                |                              |                |  |  |  |   |                    |  |  |
| Meal eaten at restaurant | 180  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                   |                |                              |                |  |  |  |   |                    |  |  |
|                          | RESPONSE CATEGORIES FOR<br>E1.03b/1.04b/1.06b/1.07b – UNITS  |   |                                   |                |                              |                |  |  |  |   |                    |  |  |
|                          | 50 KG. BAG         02         NO. 12 PLATE (Heaped).           90 KG. BAG         03         BUNCH (Small)           9AIL (Small)         04         BUNCH (Medium).           PAIL (Medium)         05         BUNCH (Large)           PAIL (Large)         06         PIECE (Small)           NO. 10 PLATE (Flat)         07         PIECE (Medium)           NO. 10 PLATE (Heaped)         08         PIECE (Large) |   |                                   |                |                              |                |  |  | MILLILITRE<br>TEASPOON<br>BASIN<br>SACHET/TUBE<br>TOTAL<br>OTHER (SPECIF | RAM       27         ILLILITRE       28         EASPOON       29         ASIN       30         ACHET/TUBE       31         DTAL       32         THER (SPECIFY)      96         G DATA ANALYSIS; IT SHOULD NOT BE DONE IN THE |                    |  |  |

| 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?                             | YES1<br>NO2→ SKIP TO E1.12<br>DON'T KNOW                     |
| 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                                      |
|       |   | 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  |
|       |   | 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                                       |
|       |   | 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?   | YES1<br>NO2→ GO TO E1.14<br>DON'T KNOW8→ GO TO E1.14         |
| E1.13 | How much did you spend on pet food last week?   | ENTER AMOUNT IN MK:  |
|       |   | <br>DON'T KNOW999998   |
| E1.14 | Over the past 7 days, were there any other expenditures on pets?  | YES1<br>NO2→ GO TO MODULE E2<br>DON'T KNOW8→ 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   |

#### 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."

| ONE WEEK RECALL  |           | Over the past <u>one week (7 days</u> , did your household purchase or |   |
|--|-----------|--|---|
| ITEM   | ITEM CODE | pay for any [ITEM]?  | How much did you pay (how much did they cost) in total? |
| E2.01  | 191-200   | E2.02  | E2.03<br>MK   |
| Charcoal   | 191       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Firewood   | 192       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Paraffin or kerosene   | 193       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Cigarettes or other tobacco  | 194       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Candles  | 195       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Matches  | 196       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Newspapers or magazines  | 197       | YES1<br>NO2→ NEXT ITEM<br>DK8→ 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       | YES1<br>NO2→ NEXT ITEM<br>DK8→ 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       | YES1<br>NO2→ NEXT ITEM<br>DK8→ 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       | YES1<br>NO2→ NEXT ITEM<br>DK8→ 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."

| ONE MONTH RECALL  | ITEM CODE | Over the past <u>one month</u> , did your<br>household purchase or pay for<br>any [ITEM]? | How much did you pay (how much did they cost) in total? |
|---|-----------|---|---|
| E3.01   | 211-236   | E3.02   | E3.03<br>MK   |
| Milling fees for grains (not including cost of grain itself), grain             | 211       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Bar soap (body soap or clothes soap)  | 212       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Clothes soap (powder, paste)  | 213       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Toothpaste, toothbrush  | 214       | NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |
| Toilet paper  | 215       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |
| Glycerine, Vaseline, skin creams  | 216       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Other personal products (shampoo, razor blades, cosmetics, hair products, etc.) | 217       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Light bulbs   | 218       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Postage stamps or other postal fees   | 219       | NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |
| Donation – to church, charity, beggar, etc.                                     | 220       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Petrol or diesel  | 221       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Motor vehicle service, repair, or parts   | 222       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Bicycle service, repair, or parts   | 223       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1  |   |
| Wages paid to servants  | 224       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |

| ONE MONTH RECALL   |                | Over the past <u>one month</u> , did your<br>household purchase or pay for |   |
|--|----------------|--|---|
| ITEM   | ITEM CODE      | any [ITEM]?  | How much did you pay (how much did they cost) in total? |
| E3.01  | 211-236        | E3.02  | E3.03<br>MK   |
| Repairs to household and personal items (radios, watches, etc., excluding battery purchases)   | 225            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                   |   |
| Utilities: Natural gas   | 226            | YES1<br>NO   |   |
| Utilities: Electricity   | 227            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                   |   |
| Utilities: Water   | 228            | YES1<br>NO2→ NEXT ITEM<br>DK   |   |
| Batteries  | 229            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                   |   |
| Recharging of batteries, cell phones, etc.   | 230            | YES1<br>NO2→ NEXT ITEM<br>DK   |   |
| Air time for cell phones   | 231            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                   |   |
| MTL line   | 232            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                   |   |
| HEALTH EXPENDITURES (include estimated value of any in-kind payments, or bo  | rowed amounts) |  |   |
| Anything related to illnesses and injuries, including for medicine, tests, consultation, & in-patient fees   | 233            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                           |   |
| Medical care not related to an illness – preventative health care, pre-natal visits, check-ups, etc.   | 234            | NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |   |
| Non-prescription medicines, for example, Panadol, Fansidar, cough syrup, etc.  | 235            | YES1<br>NO2→ NEXT ITEM<br>DK   |   |
| Transportation used to access health-related services or care that did not require an<br>overnight stay in a health facility or at a traditional healer's dwelling | 236            | YES1<br>NO2→ NEXT ITEM<br>DK8→ 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."

| THREE MONTH RECALL  |           | Over the past three months, did your                                |   |
|---|-----------|---|---|
| ІТЕМ  | ITEM CODE | household purchase or pay for any [ITEM]?                           | How much did you pay (how much did they cost) in total? |
| E4.01   | 241-279   | E4.02   | E4.03<br>MK   |
| Infant clothing   | 241       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |
| Baby nappies/diapers  | 242       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |
| Boy's trousers (FOR ALL CLOTHING, EXCLUDE UNIFORMS/SCHOOL CLOTHING) | 243       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |
| Boy's shirts  | 244       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |
| Boy's jackets   | 245       | YES1<br>NO2→ NEXT ITEM  |   |
| Boy's undergarments   | 246       | DK  |   |
| Boy's other clothing (e.g., hats, gloves, belts, etc.)              | 247       | DK8→ NEXT ITEM           YES1           NO2→ NEXT ITEM           DK |   |
| Men's trousers  | 248       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |
| Men's shirts  | 249       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |
| Men's jackets   | 250       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |
| Men's undergarments   | 251       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                            |   |

| THREE MONTH RECALL   |           | Over the past three months, did your household purchase or pay for any |   |
|--|-----------|--|---|
| ITEM   | ITEM CODE | [ITEM]?  | How much did you pay (how much did they cost) in total? |
| E4.01  | 241-279   | E4.02  | E4.03<br>MK   |
| Men's other clothing (e.g., hats, gloves, belts, etc.)             | 252       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Girl's blouse/shirt  | 253       | YES1<br>NO   |   |
| Girl's dress/skirt   | 254       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                       |   |
| Girl's undergarments   | 255       | NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                       |   |
| Girl's other clothing (e.g., hats, gloves, belts, trousers, etc.)  | 256       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Women's blouse/shirt   | 257       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Chitenje cloth   | 258       | YES1<br>NO   |   |
| Women's dress/skirt  | 259       | NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                       |   |
| Women's undergarments  | 260       | YES1<br>NO2→ NEXT ITEM<br>DK   |   |
| Women's other clothing (e.g., hats, gloves, belts, trousers, etc.) | 261       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Boys shoes (include shoes, sandals, boots, slippers)               | 262       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Men's shoes (include shoes, sandals, boots, slippers)              | 263       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Girl's shoes (include shoes, sandals, boots, slippers)             | 264       | YES1<br>NO   |   |

| THREE MONTH RECALL  |           | Over the past three months, did your household purchase or pay for any |   |
|---|-----------|--|---|
| ITEM  | ITEM CODE | [ITEM]?  | How much did you pay (how much did they cost) in total? |
| E4.01   | 241-279   | E4.02  | E4.03<br>MK   |
| Women's shoes (include shoes, sandals, boots, slippers)       | 265       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Cloth, thread, other sewing material                          | 266       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                       |   |
| Laundry, dry cleaning, tailoring fees                         | 267       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                       |   |
| Bowls, glassware, plates, silverware, etc.                    | 268       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                       |   |
| Cooking utensils (cookpots, stirring spoons and whisks, etc.) | 269       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                       |   |
| Cleaning utensils (brooms, brushes, etc.)                     | 270       | NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                       |   |
| Torch / flashlight  | 271       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Umbrella  | 272       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Paraffin lamp (hurricane or pressure)                         | 273       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Stationery items (excluding school related)                   | 274       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |
| Books (excluding school related)                              | 275       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                       |   |
| Music or video cassette or CD/DVD                             | 276       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1                       |   |
| Tickets for sports / entertainment events                     | 277       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                               |   |

| THREE MONTH RECALL  | ITEM CODE | Over the past three months, did your<br>household purchase or pay for any<br>[ITEM]? | How much did you pay (how much did they cost) in total? |
|---|-----------|--|---|
| E4.01   | 241-279   | E4.02  | E4.03<br>MK   |
| House decorations   | 278       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |   |
| Night's lodging in rest house or hotel (excluding school or health related) | 279       | YES1<br>NO2→ NEXT ITEM<br>DK8→ 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."

| ONE YEAR (12 MONTH) RECALL                          |              | Over the past one year (twelve months),               |  |
|---|--------------|---|--|
| ITEM  | ITEM<br>CODE | did your household purchase or pay for<br>any [ITEM]? | How much did you pay<br>(how much did they cost) in total? |
| E5.01   | 291-322      | E5.02   | E5.03<br>MK  |
| Carpet, rugs, drapes, curtains                      | 291          | YES1<br>NO  |  |
| Linen – towels, sheets, blankets                    | 292          | NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                      |  |
| Mat – sleeping or for drying maize flour            | 293          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Mosquito net  | 294          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Mattress  | 295          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Sports & hobby equipment, musical instruments, toys | 296          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Film, film processing, camera                       | 297          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Cement  | 298          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Bricks  | 299          | NO  |  |
| Iron sheets   | 300          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Construction timber                                 | 301          | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM<br>YES1      |  |
| Council rates                                       | 302          | YES1<br>NO2 → NEXT ITEM<br>DK8 → NEXT ITEM            |  |

| ONE YEAR (12 MONTH) RECALL   | ITEM<br>CODE   | Over the past one year (twelve months),<br>did your household purchase or pay for<br>any [ITEM]? | How much did you pay<br>(how much did they cost) in total? |
|--|----------------|--|--|
| E5.01  | 291-322        | E5.02  | E5.03<br>MK  |
| Insurance – health (MASM, etc.), auto, home, life  | 303            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |  |
| Fines or legal fees  | 304            | YES1<br>NO   |  |
| Lobola (bridewealth) costs   | 305            | YES1<br>NO2→ NEXT ITEM   |  |
| Marriage ceremony costs  | 306            | DK   |  |
| Funeral costs, household members   | 307            | YES1<br>NO2→ NEXT ITEM   |  |
| Funeral costs, non-household members (relatives, neighbors/friends)  | 308            | DK1<br>YES1<br>NO  |  |
| HEALTH EXPENDITURES over last 12 months (include estimated value   | of any in-kind | l payments or borrowed amounts)  |  |
| Hospitalizations or overnight stay in any hospital – total cost for treatment                                  | 309            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |  |
| Travel to and from the medical facility for any overnight stay(s) or hospitalization                           | 310            | YES1<br>NO   |  |
| Food costs during overnight stay(s) at the medical facility or hospitalization (if not already included above) | 311            | YES1<br>NO2 → NEXT ITEM<br>DK8 → NEXT ITEM   |  |
| Over-night(s) stay at a traditional healer's or faith healer's dwelling – total costs for treatment            | 312            | DK8 → NEXT ITEM<br>YES1<br>NO2 → NEXT ITEM<br>DK8 → NEXT ITEM                                    |  |
| Travel costs to the traditional healer's or faith healer's dwelling for overnight stay(s)                      | 313            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM   |  |
| Food costs during overnight stay(s) at the traditional healer's or faith healer's dwelling                     | 314            | YES1<br>NO   |  |

| ONE YEAR (12 MONTH) RECALL                                       | ITEM           | Over the past one year (twelve months), did your household purchase or pay for | How much did you pay               |
|--|----------------|--|------------------------------------|
| ITEM   | CODE           | any [ITEM]?  | (how much did they cost) in total? |
| E5.01  | 291-322        | E5.02  | E5.03<br>MK                        |
| EDUCATION EXPENDITURES over last 12 months (include estimated va | lue of any in- | kind payments or borrowed amounts)   |                                    |
| Tuition, including extra tuition fees                            | 315            | YES1<br>NO   |                                    |
| Expenditures on after school programs and tutoring               | 316            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                       |                                    |
| School books and stationery                                      | 317            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                       |                                    |
| School uniform   | 318            | YES1<br>NO2 → NEXT ITEM<br>DK8 → NEXT ITEM<br>YES1                             |                                    |
| Boarding fees  | 319            | NO2→ NEXT ITEM<br>DK   |                                    |
| Contribution to school building maintenance                      | 320            | YES1<br>NO2 → NEXT ITEM<br>DK8 → NEXT ITEM                                     |                                    |
| Transport to and from school                                     | 321            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                       |                                    |
| Parent/Teacher Association and other related fees                | 322            | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                       |                                    |

| NON-FOOD ITEMS THAT MAY OR MAY NOT HAVE BEEN PURCHASED |           |  |                    |  |   |  |   |
|--|-----------|--|--------------------|--|---|--|---|
| ONE YEAR (12 MONTH) RECALL                             | Item Code | Over the past one year (12 months)<br>did your household gather, purchase<br>or pay for any [ITEM]?<br>(NOTE THAT THE VALUE OF<br>THESE ITEMS SHOULD BE<br>ENTERED <u>ONLY</u> IF THEY WERE<br>PURCHASED OR USED FOR<br>HOUSEHOLD USE, NOT FOR<br>INVESTMENT PURPOSES) | estima<br>quantity | was the<br>ted total<br>of [ITEM]<br>ed? | Did your household gather the<br>[ITEM], or did your household<br>purchase or pay for the [ITEM]? | FOR ITEMS<br>THAT WERE<br>GATHERED:<br>What was<br>the total<br>estimated<br>value of<br>[ITEM] that<br>you used ? | FOR ITEMS<br>THAT WERE<br>BOUGHT:<br>How much<br>did you<br>spend in<br>total on<br>[ITEM]? |
| E5.04  | 323-325   | E5.05  | E5.06a<br>Quantity | E5.06b<br>Unit                           | E5.06c<br>FILTER  | E5.07 (MK)   | E5.08<br>(MK)   |
| Woodpoles, bamboo                                      | 323       | YES1<br>NO 2→ NEXT ITEM  |                    |  | GATHERED1 → E5.07<br>PURCHASED/PAID 2→ E5.08  | → SKIP TO<br>NEXT ITEM   |   |
| Grass for thatching roof or other use                  | 324       | YES1<br>NO2→ NEXT ITEM   |                    |  | GATHERED1 → E5.07<br>PURCHASED/PAID 2→ E5.08  | → SKIP TO<br>NEXT ITEM   |   |

# RESPONSE CATEGORIES FOR E5.06b – UNITS

| POLE |    |  |
|------|----|--|
| BALE | 20 |  |

## MODULE E6. Housing Expenditures

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

| QNO.  | QUESTION  | RESPONSE CATEGORIES   |   |
|-------|---|---|---|
| E6.01 | 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? | OWN1BEING PURCHASED2EMPLOYER PROVIDES $3 \rightarrow$ FREE $4 \rightarrow$ E6.04RENTED $5 \rightarrow$ DON'T KNOW/NON-RESPONSE/NA91 |   |
| E6.02 | If you <u>sold this dwelling</u> today, how much would you receive for it?  | DON'T KNOW/NON-RESPONSE/NA9999991   |   |
| E6.03 | How old is this house, in years?  | DON'T KNOW/<br>NON-RESPONSE/NA991<br>SKIP TO E6.06  |   |
| E6.04 | If you <u>rented this dwelling out</u> today, how much rent would you receive?  | DON'T KNOW/NON-RESPONSE<br>/NA99999991 → SKIP TO E6.09  | E6.04B         UNIT         DAY1         WEEK2         MONTH3         YEAR4         DON'T KNOW/         NON-RESPONSE         /NA99991         SKIP TO E6.09 |

| QNO.  | QUESTION  | RESPONSE CATEGORIES  |
|-------|---|--|
| E6.05 | How much do you pay to rent this dwelling?  | E6.05A     E6.05B       MK     UNIT       DAY     DAY       WEEK     2       MONTH     3       YEAR     4       DON'T KNOW/NON-RESPONSE     DON'T KNOW/       NON-RESPONSE     NON-RESPONSE       NON-RESPONSE     NON-RESPONSE       NON-RESPONSE     SKIP TO E6.09 |
| E6.06 | Do you pay a mortgage on this house, that is, a regular payment towards purchasing the house? | YES1<br>NO2→ SKIP TO E6.09   |
| E6.07 | How often do you make mortgage payments?  | ONCE A MONTH   |
| E6.08 | How much do you pay each time you make a payment on your mortgage?                            | AMOUNT IS VARIABLE   |
| E6.09 | In the past one month, how much did you spend on repairs & maintenance to this house?         | DON'T KNOW/<br>NON-RESPONSE  |

## 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<br>a [ITEM]?      | How many<br>[ITEM]s do you<br>own? | What is the age of<br>these [ITEM]s?<br>IF MORE THAN ONE<br>ITEM, AVERAGE<br>AGE. | If you wanted to sell one<br>of these [ITEM]s today,<br>how much would you<br>receive?<br>IF MORE THAN ONE,<br>AVERAGE VALUE. | Did you purchase or pay<br>for any of these [ITEM]s in<br>the last 12 months? | How much did you<br>pay for all these<br>[ITEM]s all together<br>(total) in the last 12<br>months? |
|---------------------------|-----------|---|------------------------------------|---|---|---|--|
| E7.01                     | 341-371   | E7.02                                     | E7.03<br>NUMBER                    | E7.04<br>YEAR   | <b>Е7.05</b><br>МК  | E7.06   | <b>Е7.07</b><br>МК   |
| Bed//table/chair          | 341       | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Fan                       | 342       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Air conditioner           | 343       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Radio                     | 344       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Tape or CD/DVD player/VCR | 345       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Television                | 346       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Sewing machine            | 347       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Kerosene/paraffin stove   | 348       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Electric stove; hot plate | 349       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Gas stove                 | 350       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Refrigerator              | 351       | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |

| ITEM                            | Item Code | Does your household own<br>a [ITEM]?      | How many<br>[ITEM]s do you<br>own? | What is the age of<br>these [ITEM]s?<br>IF MORE THAN ONE<br>ITEM, AVERAGE<br>AGE. | If you wanted to sell one<br>of these [ITEM]s today,<br>how much would you<br>receive?<br>IF MORE THAN ONE,<br>AVERAGE VALUE. | Did you purchase or pay<br>for any of these [ITEM]s in<br>the last 12 months? | How much did you<br>pay for all these<br>[ITEM]s all together<br>(total) in the last 12<br>months? |
|---------------------------------|-----------|---|------------------------------------|---|---|---|--|
| E7.01                           | 341-371   | E7.02                                     | E7.03<br>NUMBER                    | E7.04<br>YEAR   | <b>Е7.05</b><br>МК  | E7.06   | <b>Е7.07</b><br>МК   |
| Washing machine                 | 352       | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Bicycle                         | 353       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Boat                            | 354       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Motorcycle/scooter              | 355       | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Car                             | 356       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK  |  |
| Mini-bus                        | 357       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Lorry                           | 358       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Beer-brewing drum               | 359       | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Upholstered chair, sofa set     | 360       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Coffee table (for sitting room) | 361       | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Cupboard, drawers, bureau       | 362       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |
| Lantern (paraffin)              | 363       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |                                    |   |   | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |  |

| ITEM                             | Item Code | Does your household own<br>a [ITEM]?      | How many<br>[ITEM]s do you<br>own?<br>E7.03 | What is the age of<br>these [ITEM]s?<br>IF MORE THAN ONE<br>ITEM, AVERAGE<br>AGE.<br>E7.04 | If you wanted to sell one<br>of these [ITEM]s today,<br>how much would you<br>receive?<br>IF MORE THAN ONE,<br>AVERAGE VALUE.<br>E7.05 | Did you purchase or pay<br>for any of these [ITEM]s in<br>the last 12 months? | How much did you<br>pay for all these<br>[ITEM]s all together<br>(total) in the last 12<br>months?<br>E7.07 |
|----------------------------------|-----------|---|---|--|--|---|---|
| E7.01                            | 341-371   | E7.02                                     | NUMBER                                      | YEAR   | MK   | E7.06   | MK  |
| Desk                             | 364       | YES 1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM |   |  |  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |   |
| Clock                            | 365       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |  |  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |   |
| Iron (for pressing clothes)      | 366       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |  |  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |   |
| Computer equipment & accessories | 367       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |  |  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |   |
| Satellite dish                   | 368       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |  |  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |   |
| Solar panel                      | 369       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |  |  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |   |
| Generator                        | 370       | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM  |   |  |  | YES1<br>NO2→ NEXT ITEM<br>DK8→ NEXT ITEM                                      |   |
| Phone/cell phone                 | 371       | YES1<br>NO2→ MODULE F<br>DK8→ MODULE F    |   |  |  | YES1<br>NO2→ MODULE F<br>DK8→ MODULE F  |   |

#### MODULE F. Household Hunger Scale

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

De \_\_\_\_\_

# 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 lil | ke to ask vou a few ( | questions about the availabili | ty 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?                          | YES1<br>NO2 → GO TO F03<br>REFUSED   |
| F02  | How often did this happen in the past 30 days?   | RARELY (1-2 TIMES)1<br>SOMETIMES (3-10 TIMES)2<br>OFTEN (MORE THAN 10 TIMES) 3<br>REFUSED9 |
| F03  | In the past 30 days did you or any household member go to sleep at night hungry because there was not enough food?                             | YES1<br>NO2 $\rightarrow$ GO TO F05<br>REFUSED9 $\rightarrow$ GO TO F05                    |
| F04  | How often did this happen in the past 30 days?   | RARELY (1-2 TIMES)1<br>SOMETIMES (3-10 TIMES)2<br>OFTEN (MORE THAN 10 TIMES)3<br>REFUSED9  |
| 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? | YES1<br>NO2 → END MODULE<br>REFUSED  |
| F06  | How often did this happen in the past 30 days?   | RARELY (1-2 TIMES)1<br>SOMETIMES (3-10 TIMES)2<br>OFTEN (MORE THAN 10 TIMES)3<br>REFUSED9  |

#### 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  |
|---|------|-------------------------|---|
| G1.01. HOUSEHOLD IDENTIFICATION:  |      |                         | COMPLETED   |
| G1.02. NAME OF RESPONDENT CURRENTLY BEING INTERVIEWED (LINE<br>NUMBER FROM ROSTER IN SECTION C HOUSEHOLD ROSTER):<br>SURNAME, FIRST NAME: |      | (SELECT ALL THAT APPLY) | ALONE A<br>ADULT FEMALES PRESENT B<br>ADULT MALES PRESENT C<br>CHILDREN PRESENT D |

| NO.   | QUESTION  | RESPONSE   |
|-------|---|--|
| G1.05 | In what month and year were you born?   | MONTH<br>DK MONTH98<br>YEAR<br>DK YEAR9998   |
| G1.06 | Please tell me how old you are. What was your age at your last birthday?<br>RECORD AGE IN COMPLETED YEARS   | YEARS<br>IF RESPONDENT KNOWS HER/HIS AGE, SKIP TO G1.08.<br>IF RESPONDENT CANNOT REMEMBER HOW OLD SHE/HE IS, ENTER '98' AND ASK QUESTION<br>G1.07. |
| G1.07 | Are you 18 years old or older?  | YES1<br>NO2<br>DK  |
| G1.08 | CHECK G1.05, G1.06 AND G1.07 (IF APPLICABLE): IS THE RESPONDENT<br>18 YEARS OLD OR OLDER?<br>IF THE INFORMATION IN G1.05, G1.06 AND G1.07 CONFLICTS,<br>DETERMINE WHICH IS MOST ACCURATE USING THE AGE/YEAR OF<br>BIRTH CONSISTENCY CHART AND GUIDANCE FROM YOUR<br>INTERVIEWER'S MANUAL. | YES1<br>NO   |
| G1.09 | Are you currently married or living together with a man as if married?  | YES, CURRENTLY MARRIED1<br>YES, LIVING WITH A MAN  |
| G1.10 | Have you ever been married or lived together with a man as if married?  | YES, FORMERLY MARRIED1<br>YES, LIVED WITH A MAN2<br>NO   |
| G1.11 | What is your marital status now: are you widowed, divorced, or separated?   | WIDOWED  |

### 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]<br>in the past 12 months (that is, during the<br>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   | G2.03   |
| A             | Food crop farming:<br>These are crops that are grown<br>primarily for household food<br>consumption   | YES 1<br>NO   | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE | NO INPUT OR INPUT INTO VERY FEWDECISIONS01INPUT INTO SOME DECISIONS02INPUT INTO MOST OR ALL DECISIONS03NO DECISION MADE93REFUSED99      |
| В             | Cash crop farming:<br>These are crops that are grown<br>primarily for sale in the market  | YES 1<br>NO   | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE |
| с             | Livestock raising   | YES 1<br>NO   | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE |
| D             | Non-farm economic activities:<br>This would include things like running a<br>small business, self-employment, buy-<br>and-sell              | YES 1<br>NO 2 $\rightarrow$ SKIP TO NEXT ACTIVITY   | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE |
| E             | Wage and salary employment:<br>This could be work that is paid for in<br>cash or in-kind, including both<br>agriculture and other wage work | YES 1<br>NO   | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE |
| F             | Fishing or fishpond culture   | YES   | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE | NO INPUT OR INPUT INTO VERY FEW<br>DECISIONS01<br>INPUT INTO SOME DECISIONS02<br>INPUT INTO MOST OR ALL DECISIONS03<br>NO DECISION MADE |

#### 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."

|       | CTIVE CAPITAL  | Does anyone in your<br>household currently<br>have any [ITEM]?    | How many of<br>[ITEM] does<br>your<br>household<br>currently<br>have? | Who would you say owns<br>most of the [ITEM]?<br>CIRCLE ALL APPLICABLE                                    |   | [ITEM] most of the time?  |   | Who contributes most to<br>decisions regarding a new<br>purchase of [ITEM]?<br>CIRCLE ALL APPLICABLE |
|-------|--|---|---|---|---|---|---|--|
| PRODU | CTIVE CAPITAL  | G3.01a  | G3.01b  | G3.02   | G3.03   | G3.04   | G3.05   | G3.06  |
| А     | Agricultural land<br>(plots)                             | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBER<br>NOT APPLICABLEZ<br>REFUSED9        | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELF A<br>PARTNER/SPOUSE B<br>OTHER HH MEMBER C<br>OTHER NON-HH MEMBER D<br>NOT APPLICABLE          | SELF A<br>PARTNER/SPOUSE B<br>OTHER HH MEMBER C<br>OTHER NON-HH MEMBER D<br>NOT APPLICABLE           |
| В     | Large livestock<br>(oxen, cattle,<br>donkeys)            | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBER<br>NOT APPLICABLEZ<br>REFUSED9        | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELF A<br>PARTNER/SPOUSE B<br>OTHER HH MEMBER C<br>OTHER NON-HH MEMBER D<br>NOT APPLICABLE           |
| с     | Small livestock<br>(goats, pigs, sheep,<br>rabbits)      | YES1<br>NO235KIP<br>REFUSED975O<br>NEXT<br>ITEM                   |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9       | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9  |
| D     | Chickens, ducks,<br>turkeys, guinea<br>fowl, and pigeons | YES1<br>NO2≫KIP<br>REFUSED9->>O<br>NEXT<br>ITEM                   |   | SELF A<br>PARTNER/SPOUSE B<br>OTHER HH MEMBER C<br>OTHER NON-HH MEMBER D<br>NOT APPLICABLE Z<br>REFUSED 9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9  |
| E     | Fish pond or fishing equipment                           | YES1<br>NO2 <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM  |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBER<br>NOT APPLICABLEZ<br>REFUSED9        | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9  |

|        | TIVE CAPITAL  | Does anyone in your<br>household currently<br>have any [ITEM]?    | How many of<br>[ITEM] does<br>your<br>household<br>currently<br>have? | Who would you say owns<br>most of the [ITEM]?<br>CIRCLE ALL APPLICABLE                              | most of the time?<br>CIRCLE ALL APPLICABLE |   |   | Who contributes most to<br>decisions regarding a new<br>purchase of [ITEM]?<br>CIRCLE ALL APPLICABLE |
|--------|---|---|---|---|--|---|---|--|
| PRODUC | TIVE CAPITAL  | G3.01a  | G3.01b  | G3.02   | G3.03                                      | G3.04   | G3.05   | G3.06  |
| F      | Farm equipment<br>(non-mechanized:<br>hoe, sickle, animal-<br>drawn ploughs,<br>wheel barrow,<br>sprayer, manual<br>treadle pump)   | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | OTHER NON-HH MEMBER D<br>NOT APPLICABLEZ   | PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ    | NOT APPLICABLEZ   | SELF A<br>PARTNER/SPOUSE B<br>OTHER HH MEMBER C<br>OTHER NON-HH MEMBER D<br>NOT APPLICABLE           |
| G      | Farm equipment<br>(mechanized:<br>tractor-drawn<br>plough, power tiller,<br>motorized treadle<br>pump groundnut<br>sheller)   | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBER<br>NOT APPLICABLEZ<br>REFUSED9  | OTHER HH MEMBER                            | PARTNER/SPOUSE B<br>OTHER HH MEMBER C<br>OTHER NON-HH MEMBER D<br>NOT APPLICABLEZ | OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ | SELF A<br>PARTNER/SPOUSE B<br>OTHER HH MEMBER C<br>OTHER NON-HH MEMBER D<br>NOT APPLICABLE           |
| Н      | Nonfarm business<br>equipment (solar<br>panels used for<br>recharging, solar<br>inverter, solar<br>battery, sewing<br>machine, brewing<br>equipment, fryers,<br>generator, satellite<br>dish, cooler boxes) | YES1<br>NO2-35KIP<br>REFUSED9-37O<br>NEXT<br>ITEM                 |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 |  |   |   |  |
| I      | House or other<br>structures  | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 |  |   |   |  |
|        | Large consumer<br>durables<br>(refrigerator, TV,<br>sofa, dining table<br>sets, beds)   | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9 <b>-3</b> O<br>NEXT<br>ITEM |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBER<br>NOT APPLICABLEZ<br>REFUSED9  |  |   |   |  |

|   | CTIVE CAPITAL   | Does anyone in your<br>household currently<br>have any [ITEM]?<br>G3.01a | How many of<br>[ITEM] does<br>your<br>household<br>currently<br>have?<br>G3.01b | most of the [ITEM]?   | Who would you say can<br>decide whether to sell [ITEM]<br>most of the time?<br>CIRCLE ALL APPLICABLE<br>G3.03 | [ITEM] most of the time? | Who would you say can<br>decide to mortgage or rent<br>out [ITEM] most of the time?<br>CIRCLE ALL APPLICABLE<br>G3.05 | Who contributes most to<br>decisions regarding a new<br>purchase of [ITEM]?<br>CIRCLE ALL APPLICABLE<br>G3.06 |
|---|---|--|---|---|---|--------------------------|---|---|
| К | Small consumer<br>durables (radio,<br>CD/DVD player,<br>VCP player  | YES1<br>NO2-≫KIP<br>REFUSED9->TO<br>NEXT<br>ITEM                         |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | 00.00   | 0.04                     | 65.65   | 63.00   |
| L | Cell phone  | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM        |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 |   |                          |   |   |
| М | Other land not used<br>for agricultural<br>purposes<br>(pieces/plots,<br>residential or<br>commercial land) | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>NEXT<br>ITEM        |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 |   |                          |   |   |
| N | Means of<br>transportation<br>(bicycle,<br>motorcycle, car, ox-<br>cart)                                    | YES1<br>NO2- <b>3</b> KIP<br>REFUSED9- <b>3</b> O<br>MODUL<br>E<br>G3(B) |   | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 |   |                          |   |   |

## 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."

|      | NG SOURCES   | Has anyone in your household taken any loans or borrowed cash/in-<br>kind from [SOURCE] in the past 12 months?<br>G3.07  | Who made the decision to borrow<br>from [SOURCE]?<br>CIRCLE ALL APPLICABLE<br>G3.08                 | Who makes the decision about what<br>to do with the money/ item borrowed<br>from [SOURCE]?<br>CIRCLE ALL APPLICABLE<br>G3.09 |
|------|--|--|---|--|
| LEND | ING SOURCE NAMES   |  |   |  |
| A    | Non-governmental organization<br>(NGO)   | YES, CASH  | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9                          |
| В    | 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 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9                          |
| С    | Formal lender (bank/financial<br>institution e.g., OIBM, FINCA,<br>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 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9                          |
| D    | 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 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9                          |
| E    | Group based micro-finance or<br>lending including merry-go-<br>rounds, VSLAs (Village Savings<br>and Loan Associations),<br>ROSCAs (Rotating, Savings and<br>Credit Associations), SACCOs<br>(Savings and Credit<br>Co-Operatives) | YES, CASH  | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9 | SELFA<br>PARTNER/SPOUSEB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ<br>REFUSED9                          |

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

| 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   |
| 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 COMFORTABLE1YES, BUT WITH DIFFICULTY2YES, COMFORTABLY3NOT APPLICABLE5REFUSED9 |
| G4.03 | Do you feel comfortable speaking up in public to protest the misbehavior of authorities or elected officials?   | NO, NOT AT ALL COMFORTABLE   |

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

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

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

|   | IP MEMBERSHIP<br>IP CATEGORIES  | Is there a [GROUP] in your community?             | Are you an active member of<br>this [GROUP]?<br>G4.05 |
|---|---|---|---|
| A | Agricultural/livestock/fisheries producer's group<br>(including marketing groups)   | YES1<br>NO  | YES1<br>NO2<br>REFUSED9                               |
| В | Water users' group  | YES1<br>NO2 SKIP TO NEXT GROUP<br>DON'T<br>KNOW   | YES1<br>NO2<br>REFUSED9                               |
| с | Forest users' group   | YES1<br>NO2 → SKIP TO NEXT GROUP<br>DON'T<br>KNOW | YES1<br>NO2<br>REFUSED9                               |
| D | Credit or microfinance group (including merry-go-<br>rounds, VSLAs (Village Savings and Loan Associations),<br>ROSCAs (Rotating, Savings and Credit Associations),<br>SACCOs (Savings and Credit Co-Operatives) | YES1<br>NO2→ SKIP TO NEXT GROUP<br>DON'T<br>KNOW8 | YES1<br>NO2<br>REFUSED9                               |
| E | Mutual help or insurance group (including support groups)   | YES1<br>NO2<br>DON'T<br>KNOW8                     | YES1<br>NO2<br>REFUSED9                               |
| F | Trade and business association  | YES1<br>NO2 → SKIP TO NEXT GROUP<br>DON'T<br>KNOW | YES1<br>NO2<br>REFUSED9                               |
| G | Civic groups (improving community) or charitable group (helping others)   | YES1<br>NO2<br>DON'T<br>KNOW                      | YES1<br>NO2<br>REFUSED9                               |
| н | Local government  | YES1<br>NO2 SKIP TO NEXT GROUP<br>DON'T<br>KNOW   | YES1<br>NO2<br>REFUSED9                               |

| GROU | P MEMBERSHIP  | Is there a [GROUP] in your community?              | Are you an active member of this [GROUP]? |
|------|---|--|---|
| GROU | P CATEGORIES  | G4.04  | G4.05                                     |
| I    | Religious group   | YES1<br>NO2 SKIP TO NEXT GROUP<br>DON'T<br>KNOW    | YES1<br>NO2<br>REFUSED9                   |
| J    | Other women's group<br>ONLY INCLUDE A GROUP HERE IF IT DOES NOT<br>FIT INTO ONE OF THE OTHER CATEGORIES | YES1<br>NO2 → SKIP TO NEXT GROUP<br>DON'T<br>KNOW8 | YES1<br>NO2<br>REFUSED9                   |
| К    | Any other group or organization<br>(SPECIFY)  | YES1<br>NO2<br>DON'T<br>KNOW8                      | YES1<br>NO2<br>REFUSED9                   |

## SUB-MODULE G5(A). Decision Making

"Now I have some questions about making decisions about various aspects of household life."

| ACTI |  | When decisions are made regarding [ACTIVITY], who is it that normally takes the decision?<br>CIRCLE ALL APPLICABLE<br>G5.01 | FILTER:<br>CHECK G5.01<br>G5.01A  | To what extent do you feel you can make your own<br>personal decisions regarding [ACTIVITY] if you<br>want(ed) to?<br>G5.02                              |
|------|--|---|---|--|
| A    | Getting inputs for agricultural production | SELF  | GB.01A<br>CHECK G5.01:<br>"SELF" ("A") IS THE ONLY<br>RESPONSE1 → GO TO<br>NEXT<br>ACTIVITY<br>"SELF" ("A") IS NOT THE<br>ONLY RESPONSE2 → GO TO<br>G5.02 | NOT AT ALL         1           SMALL EXTENT         2           MEDIUM EXTENT         3           TO A HIGH EXTENT         4           REFUSED         9 |
| В    | The types of crops to grow                 | SELF  | CHECK G5.01:<br>"SELF" ("A") IS THE ONLY<br>RESPONSE1 → GO TO<br>NEXT<br>ACTIVITY<br>"SELF" ("A") IS NOT THE<br>ONLY RESPONSE2 → GO TO<br>G5.02           | NOT AT ALL   |
| с    | Taking crops to the market (or not)        | SELF  | CHECK G5.01:<br>"SELF" ("A") IS THE ONLY<br>RESPONSE1 → GO TO<br>NEXT<br>ACTIVITY<br>"SELF" ("A") IS NOT THE<br>ONLY RESPONSE2 → GO TO<br>G5.02           | NOT AT ALL   |

| ACTIV |  | When decisions are made regarding [ACTIVITY], who is it that normally takes the decision?<br>CIRCLE ALL APPLICABLE  | FILTER:<br>CHECK G5.01   | To what extent do you feel you can make your own<br>personal decisions regarding [ACTIVITY] if you<br>want(ed) to? |
|-------|--|---|--|--|
|       | ACTIVITY   | G5.01   | G5.01A   | G5.02  |
| D     | Livestock raising  | SELFA<br>SPOUSE/PARTNERB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ $\rightarrow$ SKIP TO NEXT ACTIVITY<br>REFUSED9 $\rightarrow$ SKIP TO NEXT ACTIVITY | CHECK G5.01:<br>"SELF" ("A") IS THE ONLY<br>RESPONSE1 → GO TO<br>NEXT<br>ACTIVITY<br>"SELF" ("A") IS NOT THE<br>ONLY RESPONSE2 → GO TO<br>G5.02        | NOT AT ALL   |
| E     | Your own (singular) wage or salary employment  | SELFA<br>SPOUSE/PARTNERB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ $\rightarrow$ SKIP TO NEXT ACTIVITY<br>REFUSED9 $\rightarrow$ SKIP TO NEXT ACTIVITY | CHECK G5.01:<br>"SELF" ("A") IS THE ONLY<br>RESPONSE1 → GO TO<br>NEXT<br>ACTIVITY<br>"SELF" ("A") IS <b>NOT</b> THE<br>ONLY RESPONSE2 → GO TO<br>G5.02 | NOT AT ALL   |
| F     | Major household expenditures (such as a large appliance for the house like refrigerator)   | SELFA<br>SPOUSE/PARTNERB<br>OTHER HH MEMBERC<br>OTHER NON-HH MEMBERD<br>NOT APPLICABLEZ $\rightarrow$ SKIP TO NEXT ACTIVITY<br>REFUSED9 $\rightarrow$ SKIP TO NEXT ACTIVITY | CHECK G5.01:<br>"SELF" ("A") IS THE ONLY<br>RESPONSE1 → GO TO<br>NEXT<br>ACTIVITY<br>"SELF" ("A") IS NOT THE<br>ONLY RESPONSE2 → GO TO<br>G5.02        | NOT AT ALL   |
| G     | Minor household expenditures (such as food for daily consumption or other household needs) | SELF  | CHECK G5.01:<br>"SELF" ("A") IS THE ONLY<br>RESPONSE1 → GO TO<br>NEXT<br>MODULE<br>"SELF" ("A") IS NOT THE<br>ONLY RESPONSE2 → GO TO<br>G5.02          | NOT AT ALL   |

#### 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 <u>ONE TO TWO ACTIVITIES CAN BE MARKED FOR EACH TIME PERIOD</u> 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."

| ACTIVITY | Ν  | IGHT |   |  | MOR | NINC | 3 | DAY |   | - |   |    |  |    |  |    |    |  |    | <br> |   |  |
|----------|--|------|---|--|-----|------|---|-----|---|---|---|----|--|----|--|----|----|--|----|------|---|--|
| CODE     | ACTIVITY 4   |      | 5 |  | 6   |      | 7 |     | 8 |   | 9 | 10 |  | 11 |  | 12 | 13 |  | 14 | 15   | 5 |  |
| А        | SLEEPING AND RESTING                                 |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| В        | EATING AND DRINKING                                  |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| С        | PERSONAL CARE  |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| D        | SCHOOL (INCLUDING HOMEWORK)                          |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| E        | WORK AS EMPLOYED                                     |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| F        | OWN BUSINESS WORK                                    |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| G        | FARMING/LIVESTOCK/FISHING                            |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| Н        | SHOPPING/GETTING SERVICE (INCLUDING HEALTH SERVICES) |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| I        | WEAVING, SEWING, TEXTILE CARE                        |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| J        | COOKING  |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| К        | DOMESTIC WORK (INCLUDING FETCHING WOOD AND WATER)    |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| L        | CARE FOR CHILDREN/ADULTS/ELDERLY                     |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| М        | TRAVEL AND COMMUTING                                 |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| Ν        | WATCHING TV/LISTENING TO RADIO/READING               |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| 0        | EXERCISING   |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| Р        | SOCIAL ACTIVITIES AND HOBBIES                        |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| Q        | RELIGIOUS ACTIVITIES                                 |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |
| Х        | OTHER (SPECIFY)                                      |      |   |  |     |      |   |     |   |   |   |    |  |    |  |    |    |  |    |      |   |  |

## SUB-MODULE G6(A). Time Allocation (continued)

| ACTIVITY |  | DAY |    | EVE | NING | 6 N | IGHT |    |    |   |    |    |    |   |    |   |   |  |   |  |
|----------|--|-----|----|-----|------|-----|------|----|----|---|----|----|----|---|----|---|---|--|---|--|
| CODE     | ACTIVITY   | 16  | 17 |     | 18   |     | -    | 19 | 20 | 0 | 21 | 22 | 23 | } | 24 | 1 | 2 |  | 3 |  |
| А        | SLEEPING AND RESTING                                 |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| В        | EATING AND DRINKING                                  |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| С        | PERSONAL CARE  |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| D        | SCHOOL (INCLUDING HOMEWORK)                          |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| E        | WORK AS EMPLOYED                                     |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| F        | OWN BUSINESS WORK                                    |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| G        | FARMING/LIVESTOCK/FISHING                            |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| Н        | SHOPPING/GETTING SERVICE (INCLUDING HEALTH SERVICES) |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| I        | WEAVING, SEWING, TEXTILE CARE                        |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| J        | COOKING  |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| К        | DOMESTIC WORK (INCLUDING FETCHING WOOD AND WATER)    |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| L        | CARE FOR CHILDREN/ADULTS/ELDERLY                     |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| М        | TRAVEL AND COMMUTING                                 |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| Ν        | WATCHING TV/LISTENING TO RADIO/READING               |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| 0        | EXERCISING   |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| Р        | SOCIAL ACTIVITIES AND HOBBIES                        |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| Q        | RELIGIOUS ACTIVITIES                                 |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |
| Х        | OTHER (SPECIFY)                                      |     |    |     |      |     |      |    |    |   |    |    |    |   |    |   |   |  |   |  |

## SUB-MODULE G6(B). Satisfaction with Time Allocation

| QNO.   | QUESTION   | RESPONSE OPTIONS/INSTRUCTIONS                                   |
|--------|--|---|
| G6.01B | 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 USUAL1<br>ABOUT THE SAME AS USUAL2<br>LESS THAN USUAL |
| G6.02  | 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. | SATISFACTION RATING:  |
|        | 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?   |   |

#### MODULE H. Women's Anthropometry and Dietary Diversity

HOUSEHOLD IDENTIFICATION (IN DATA FILE, EACH RESPOND MUST BE MATCHED WITH THE H

| CH RESPONDENT   |  |  |  |
|-----------------|--|--|--|
| WITH THE HH ID) |  |  |  |

#### 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  |
|-----|---|--|--|--|--|--|
| H01 | WOMAN'S ID CODE AND NAME<br>FROM THE HOUSEHOLD ROSTER   |  |  |  |  |  |
|     |   | NAME:  | NAME:  | NAME:  | NAME:  | NAME:  |
| H02 | In what month and year were you born?   | MONTH<br>DK MONTH98  |
|     |   | YEAR<br>DK YEAR9998  |
| H03 | Please tell me how old you are. What<br>was your age at your last birthday?<br>RECORD AGE IN COMPLETED<br>YEARS | YEARS<br>IF RESPONDENT KNOWS<br>HER AGE, SKIP TO H05.<br>IF RESPONDENT CANNOT<br>REMEMBER HOW OLD SHE<br>IS, ENTER '98' AND ASK<br>QUESTION H04. | YEARS<br>IF RESPONDENT KNOWS<br>HER AGE, SKIP TO H05.<br>IF RESPONDENT CANNOT<br>REMEMBER HOW OLD SHE<br>IS, ENTER '98' AND ASK<br>QUESTION H04. | YEARS<br>IF RESPONDENT KNOWS<br>HER AGE, SKIP TO H05.<br>IF RESPONDENT CANNOT<br>REMEMBER HOW OLD SHE<br>IS, ENTER '98' AND ASK<br>QUESTION H04. | YEARS<br>IF RESPONDENT KNOWS<br>HER AGE, SKIP TO H05.<br>IF RESPONDENT CANNOT<br>REMEMBER HOW OLD SHE<br>IS, ENTER '98' AND ASK<br>QUESTION H04. | YEARS<br>IF RESPONDENT KNOWS HER<br>AGE, SKIP TO H05.<br>IF RESPONDENT CANNOT<br>REMEMBER HOW OLD SHE IS,<br>ENTER '98' AND ASK QUESTION<br>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?   | YES1<br>NO2<br>DK8   | YES1<br>NO2<br>DK8  | YES1<br>NO2<br>DK8                                  | YES1<br>NO2<br>DK8   | YES1<br>NO2<br>DK8   |  |
| H05 | CHECK H02, H03, AND H04 (IF<br>APPLICABLE): IS THE RESPONDENT<br>BETWEEN THE AGES OF 15 AND 49<br>YEARS?<br>IF THE INFORMATION IN H02, H03,<br>AND H04 CONFLICTS, DETERMINE<br>WHICH IS MOST ACCURATE USING<br>THE AGE/YEAR OF BIRTH<br>CONSISTENCY CHART AND<br>GUIDANCE FROM YOUR<br>INTERVIEWER'S MANUAL. | YES1<br>NO2 CHECK<br>DK8 → FOR<br>OTHER<br>WOMEN AGE 15-49<br>IN THE HOUSEHOLD;<br>IF NONE, SKIP TO MODULE I | YES1<br>NO2 CHECK<br>DK8 → FOR<br>OTHER<br>WOMEN AGE 15-49<br>IN THE HOUSEHOLD;<br>IF NONE, SKIP TO<br>MODULE I | YES1<br>NO2 CHECK<br>DK                             |  | YES 1<br>NO 2 CHECK<br>DK  |  |
|     | WOMEN'S NUTRITIONAL STATUS   |  |   |   |  |  |  |
| H06 | Are you currently pregnant?  | YES1 → SKIP TO<br>DIETARY<br>DIVERSITY<br>NO2<br>DK8<br>REFUSED9   | YES1 → SKIP TO<br>DIETARY<br>DIVERSITY<br>NO2<br>DK8<br>REFUSED9  | YES1 → SKIP TO<br>DIETARY<br>DIVERSITY<br>NO2<br>DK | YES1 → SKIP TO<br>DIETARY<br>DIVERSITY<br>NO2<br>DK8<br>REFUSED9 | YES1 → SKIP TO<br>DIETARY<br>DIVERSITY<br>NO2<br>DK8<br>REFUSED9 |  |
| H07 | WEIGHT IN KILOGRAMS:<br>WEIGH THE WOMAN  | KG 9994<br>NOT PRESENT 9994<br>OTHER   | KG9994<br>NOT PRESENT9994<br>OTHER9996<br>REFUSED   | KG  | KG   | KG   |  |
| H08 | HEIGHT IN CENTIMETERS:<br>MEASURE THE WOMAN  | CM 9994<br>NOT PRESENT 9994<br>OTHER   | CM9994<br>NOT PRESENT9994<br>OTHER  | CM  | CM9994<br>NOT PRESENT  | CM   |  |

|      | WOMEN'S DIETARY DIVERSITY  |                            |                            |                            |                            |                            |  |
|------|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--|
|      | 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.<br>Yesterday during the day or night did you drink or eat any [ASK QUESTIONS H14 to H30]? |                            |                            |                            |                            |                            |  |
| NO.  | QUESTION   | WOMAN 1                    | WOMAN 2                    | WOMAN 3                    | WOMAN 4                    | WOMAN 5                    |  |
| H14  | Bread, savory biscuits, porridge, crackers, pasta, noodles, rice, or<br>other foods made from grains such as corn, wheat, millet,<br>sorghum, bulgar, wheat, barley?   |                            | -                          | NO2                        | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |  |
| H15A | Orange-fleshed sweet potatoes or foods made from orange-<br>fleshed sweet potatoes such as porridge, flitters, or stew, for<br>example?  | YES1<br>NO2<br>DON'T KNOW8 |  |

| 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?                               | YES1<br>NO2<br>DON'T KNOW8 |
| H16  | White potatoes, white yams, cassava, plantains or any other foods made from roots?   | YES1<br>NO2<br>DON'T KNOW8 |
| H17A | Any dark green leafy vegetables such as spinach, kale, okra, pumpkin leaves, amaranth leaves or moringa leaves?  | YES1<br>NO2<br>DON'T KNOW8 |
| H17B | Any other vegetables such as green beans, tomatoes, mushrooms, cabbage, cauliflower, broccoli etc.?  | YES1<br>NO2<br>DON'T KNOW8 |
| H18A | Ripe mangoes, ripe papayas, apricots, cantaloupe melons, pulp<br>from African locust bean, or other fruits that are dark yellow or<br>orange inside?                   | YES1<br>NO2<br>DON'T KNOW8 |
| H18B | Any other fruits like bananas, apples, avocados, pineapples, berries, baobab fruit, etc.?  | YES1<br>NO2<br>DON'T KNOW8 |
| H19A | Any liver, kidney, heart, or other organ meats from domesticated<br>animals such as beef, pork, lamb, goat, chicken, duck, or<br>pigeon?                               | YES1<br>NO2<br>DON'T KNOW8 |
| H19B | Any meat from domesticated animals, such as beef, pork, lamb, goat, chicken, duck, or pigeon?  | YES1<br>NO2<br>DON'T KNOW8 |
| H20A | Any liver, kidney, heart, or other organ meats from wild animals<br>such as warthogs, buck, kudu, impala, antelopes, crocodile,<br>cats, monkeys, alligators, or mice? | YES1<br>NO2<br>DON'T KNOW8 |
| H20B | Any flesh from wild animals, such as warthogs, buck, kudu,<br>impala, antelopes, crocodile, cats, monkeys, alligators, or mice?  | YES1<br>NO2<br>DON'T KNOW8 |
| H21  | Eggs? (chicken, turkey, fowl, duck)  | YES1<br>NO2<br>DON'T KNOW8 |

| NO.  | QUESTION   | WOMAN 1                    | WOMAN 2                    | WOMAN 3                    | WOMAN 4                    | WOMAN 5                    |
|------|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| H22  | Fresh or dried fish, shellfish, crabs, or seafood?   | YES1<br>NO2<br>DON'T KNOW8 |
| H23A | Any food made from groundnut or groundnut products such as groundnut flour, peanut butter, roasted groundnuts, boiled groundnut snack, sauces, groundnut biscuits? | YES1<br>NO2<br>DON'T KNOW8 |
| H23B | Any foods made from soy or soy products such as soya bean flour, soy milk, soy mash relish, soy flitters, or soy soup?   | YES1<br>NO2<br>DON'T KNOW8 |
| H23D | Any other foods made from beans, peas, lentils, or other legumes?  | YES1<br>NO2<br>DON'T KNOW8 |
| H24A | Any foods made from sesame or sesame flour?  | YES                        | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| H24B | Any foods made from other nuts or seeds?<br>EXCLUDE FOODS MADE FROM GROUNDNUTS OR<br>SESAME SEEDS WHICH BELONG IN ABOVE CATEGORIES.                                | YES1<br>NO2<br>DON'T KNOW8 |
| H25  | Milk, soured milk, cheese, yogurt, or other milk products?   | YES1<br>NO2<br>DON'T KNOW8 |
| H26  | Any oil, fats, or butter, or foods made with any of these?<br>INCLUDE GROUNDNUT OIL AND SESAME OIL.  | YES1<br>NO2<br>DON'T KNOW8 |
| H27  | Any sugary foods such as chocolates, sweets, candies, pastries, doughnuts, cakes, sweet biscuits, or sugar cane?   | YES1<br>NO2<br>DON'T KNOW8 |
| H28  | Condiments for flavor, such as chilies, spices, herbs, fish powder, curry, or bicarbonate soda/ash used for cooking?   | YES1<br>NO2<br>DON'T KNOW8 |
| H29  | Edible insects, mopane worms, grasshoppers or flying ants?   | YES1<br>NO2<br>DON'T KNOW8 |
| H30  | Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?  | YES                        | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |

### MODULE I. Child Anthropometry and Infant and Young Child Feeding

HOUSEHOLD IDENTIFICATION (IN DATA FILE, EACH RESPONDENT MUST BE MATCHED WITH THE HH ID)

| ) |  |  |  |
|---|--|--|--|
|   |  |  |  |

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 y | our 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   |
|------|---|---|---|---|---|---|
| l01  | CAREGIVER'S ID CODE FROM THE HOUSEHOLD<br>ROSTER  |   |   |   |   |   |
| 102  | CHILD'S ID CODE AND FIRST NAME FROM THE<br>HOUSEHOLD ROSTER   | CHILD'S NAME  |
| 103  | What is [CHILD'S NAME]'s sex?   | MALE 1<br>FEMALE 2  | MALE1<br>FEMALE2  | MALE1<br>FEMALE2  | MALE1<br>FEMALE2  | MALE1<br>FEMALE2  |
| 104  | I would like to ask you some question about [CHILD'S<br>NAME]. What is [his/her] birthday?<br>In what month and year was [CHILD'S NAME] born? | DAY<br>DK DAY98<br>MONTH<br>DK MONTH98<br>YEAR<br>DK YEAR9998 |
| 104A | CHECK 104: IS THE INFORMATION ON THE CHILD'S DAY, MONTH, AND YEAR OF BIRTH COMPLETE?  |   | YES1 → SKIP TO 105<br>NO2                                     | YES1 → SKIP TO 105<br>NO2                                     | YES 1 → SKIP TO 105<br>NO 2                                   | YES 1 → SKIP TO 105<br>NO2                                    |

| NO.  | QUESTION  | CHILD 1   | CHILD 2   | CHILD 3   | CHILD 4   | CHILD 5   |
|------|---|---|---|---|---|---|
| 104B | Does [CHILD'S NAME] have a health or vaccination card with the birth date recorded?   | YES1<br>NO2<br>DK   | YES   | YES1<br>NO2<br>DK8<br>KIP<br>TO<br>I05                        | YES1<br>NO2<br>DK8<br>KIP<br>TO<br>I05                        | YES1<br>NO2<br>DK   |
| 104C | May I please see the card?  | YES   | YES1<br>NO2<br>CARD NOT<br>AVAILABLE8<br>SKIP<br>IO5          | YES   | YES   | YES   |
|      | CONFIRM WITH THE RESPONDENT THAT THE<br>INFORMATION ON THE CARD IS CORRECT.<br>IF THE HEALTH/VACCINATION CARD IS SHOWN<br>AND THE RESPONDENT CONFIRMS THE<br>INFORMATION IS CORRECT, RECORD THE DATE<br>OF BIRTH AS DOCUMENTED ON THE CARD. | DAY<br>DK DAY98<br>MONTH<br>DK MONTH98<br>YEAR<br>DK YEAR9998 |
| 105  | How old was [CHILD'S NAME] at [his/her] last birthday?<br>RECORD AGE IN COMPLETED YEARS   | YEARS   | YEARS   | YEARS   | YEARS   | YEARS   |
| 106  | How many months old is [CHILD'S NAME]? RECORD<br>AGE IN COMPLETED MONTHS  | MONTHS  | MONTHS  | MONTHS  | MONTHS  | MONTHS  |

| NO.  | QUESTION  | CHILD 1   | CHILD 2   | CHILD 3                           | CHILD 4   | CHILD 5   |
|------|---|---|---|-----------------------------------|---|---|
| 107  | CHECK I04, I04D, I05, AND I06 TO VERIFY<br>CONSISTENCY  |   |   |                                   |   |   |
| 107A | CHECK: IS THE YEAR RECORDED IN 104 OR 104D<br>CONSISTENT WITH THE AGE IN YEARS<br>RECORDED IN 105?  | YES1<br>NO2   | YES 1<br>NO 2                                     | YES 1<br>NO 2                     | YES1<br>NO2   | YES1<br>NO2   |
| 107B | ARE YEAR AND MONTH OF BIRTH RECORDED IN<br>104 OR 104D CONSISTENT WITH AGE IN MONTHS<br>RECORDED IN 106?  | YES1<br>NO2   | YES 1<br>NO 2                                     | YES1<br>NO2                       | YES1<br>NO2   | YES1<br>NO2   |
| 107C | CHECK 107A AND 107B: IF THE ANSWER TO A OR<br>B IS 'NO,' RESOLVE ANY INCONSISTENCIES. IF<br>THE BIRTHDATE WAS RECORDED ON A HEALTH<br>CARD, THIS MAY BE USED AS THE CORRECT<br>DATA SOURCE. |   |   |                                   |   |   |
| 108  | CHECK 106. IS THE CHILD UNDER 60 MONTHS?  | YES1<br>NO2<br>DON'T KNOW8<br>PROCEED TO NEXT<br>CHILD OR, IF THERE ARE<br>NO OTHER CHILDREN,<br>END MODULE | YES 1<br>NO                                       | YES 1<br>NO                       | YES1<br>NO2<br>DON'T KNOW8<br>PROCEED TO NEXT<br>CHILD OR, IF THERE ARE<br>NO OTHER CHILDREN,<br>END MODULE | YES1<br>NO2<br>DON'T KNOW8<br>PROCEED TO NEXT<br>CHILD OR, IF THERE ARE NO<br>OTHER CHILDREN, END<br>MODULE |
|      | "Now I would like to assess your child for a condition calle thumbs on [NAME]'s feet."  | ed "edema," which occurs wh   | hen too much fluid is retained                    | by the body. It can be related    | to nutrition. To perform the  | test, I need to gently press my   |
| 109  | DOES CHILD HAVE EDEMA?  | YES1<br>NO2<br>NOT PRESENT4<br>OTHER6<br>REFUSED9   | YES1<br>NO2<br>NOT PRESENT4<br>OTHER6<br>REFUSED9 | YES                               | YES   | YES1<br>NO2<br>NOT PRESENT4<br>OTHER6<br>REFUSED9   |
| 110  | WEIGHT IN KILOGRAMS:<br>WEIGH THE CHILD   | KG 9994<br>NOT PRESENT 9994<br>OTHER  | KG  | KG •<br>NOT PRESENT 9994<br>OTHER | KG 9994<br>NOT PRESENT  | KG  |

| NO.  | QUESTION  | CHILD 1  | CHILD 2                                      | CHILD 3  | CHILD 4  | CHILD 5  |
|------|---|--|--|--|--|--|
| 111  | CHILDREN UNDER 24 MONTHS SHOULD BE<br>MEASURED LYING DOWN; CHILDREN 24 MONTHS<br>OR OLDER SHOULD BE MEASURED STANDING<br>UP.<br>HEIGHT IN CENTIMETERS:<br>MEASURE THE CHILD | CM   | CM   | CM   | CM   | CM   |
| I11A | WAS THE CHILD MEASURED LYING DOWN OR<br>STANDING UP?  | LYING DOWN1<br>STANDING UP2<br>NOT MEASURED6     | LYING DOWN1<br>STANDING UP2<br>NOT MEASURED6 | LYING DOWN 1<br>STANDING UP 2<br>NOT MEASURED 6  | LYING DOWN1<br>STANDING UP2<br>NOT MEASURED6     | LYING DOWN 1<br>STANDING UP 2<br>NOT MEASURED 6  |
|      | EXCLUSIVE BREASTFEEDING AND MINIMUM ACCE  | PTABLE DIET                                      |  |  |  |  |
|      |   | YES 1  | YES1   | YES 1  | YES 1  | YES1   |
| 115  | CHECK QUESTION 105. IS THE CHILD UNDER 2<br>YEARS OF AGE?   | NO2<br>PROCEED TO NEXT<br>CHILD OR END<br>MODULE | NO2<br>PROCEED TO NEXT                       | NO2<br>PROCEED TO NEXT<br>CHILD OR END<br>MODULE | NO2<br>PROCEED TO NEXT<br>CHILD OR END<br>MODULE | NO2<br>PROCEED TO NEXT<br>CHILD OR END<br>MODULE |

| NO. | QUESTION   | CHILD 1                                | CHILD 2                       | CHILD 3                                    | CHILD 4                                | CHILD 5                                |
|-----|--|--|-------------------------------|--|--|--|
|     |  | YES1                                   | YES1                          | YES 1                                      | YES1                                   | YES1                                   |
| 116 | Has [CHILD'S NAME] ever been breastfed?  |  |                               | DON'T KNOW 8 —<br>REFUSED 9 —              | NO2 —<br>DON'T KNOW8 —<br>REFUSED9 —   | NO2 —<br>DON'T KNOW8 —<br>REFUSED9 —   |
|     |  | SKIP TO I18◀── <sup>I</sup>            | SKIP TO I18                   | SKIP TO I18                                | SKIP TO I18                            | SKIP TO I18                            |
| 117 | Was [CHILD'S NAME] breastfed yesterday during the day or at night?   | YES1 → SKIP<br>TO I19                  | YES 1 → SKIP<br>TO I19        | YES1 → SKIP<br>TO I19                      | YES1 → SKIP<br>TO I19                  | YES1 → SKIP<br>TO I19                  |
|     |  | NO2<br>DON'T KNOW8                     | NO2<br>DON'T KNOW8            | NO 2<br>DON'T KNOW 8                       | NO2<br>DON'T KNOW8                     | NO2<br>DON'T KNOW8                     |
| 118 | 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.<br>Did [CHILD'S NAME] consume breast milk in any of these ways yesterday | YES1<br>NO2<br>DON'T KNOW8             | YES 1<br>NO 2<br>DON'T KNOW 8 | YES 1<br>NO 2<br>DON'T KNOW 8              | YES1<br>NO2<br>DON'T KNOW8             | YES1<br>NO2<br>DON'T KNOW8             |
|     | during the day or at night?  | REFUSED                                | REFUSED                       | REFUSED 9                                  | REFUSED9                               | REFUSED9                               |
| 119 | Now I would like to ask you about some medicines and vitamins that are sometimes given to infants.<br>Was [CHILD'S NAME] given any vitamin drops or other medicines as drops yesterday during the day or at night?   | YES1<br>NO2<br>DON'T KNOW8<br>REFUSED9 | YES                           | YES 1<br>NO 2<br>DON'T KNOW 8<br>REFUSED 9 | YES1<br>NO2<br>DON'T KNOW8<br>REFUSED9 | YES1<br>NO2<br>DON'T KNOW8<br>REFUSED9 |
| 120 | Was [CHILD'S NAME] given oral rehydration solution yesterday during the day or at night?   | YES1                                   | YES                           | YES 1<br>NO                                | YES1<br>NO                             | YES1<br>NO2<br>DON'T KNOW8<br>REFUSED9 |
|     | READ THE QUESTIONS BELOW. READ THE LIST OF LIQUIDS ONE BY ONE AND MARK YES OR NO, ACCORDINGLY.<br>Next I would like to ask you about some liquids that [CHILD'S NAME] may have had yesterday during the day or at night.<br>Did [CHILD'S NAME] have any [ITEM FROM LIST]?:   |  |                               |  |  |  |
| l21 | Plain water?   | YES1<br>NO2<br>DON'T KNOW8             | YES 1<br>NO 2<br>DON'T KNOW 8 | YES 1<br>NO 2<br>DON'T KNOW 8              | YES1<br>NO2<br>DON'T KNOW8             | YES1<br>NO2<br>DON'T KNOW8             |
|     |  | YES1                                   | YES 1                         | YES 1                                      | YES1                                   | YES1                                   |
| 122 | Infant formula such as Nani, SMA, Nestle, Enfamil, Isomil, Lactogen, or S26?   | DON'T KNOW8                            |                               | DON'T KNOW 8 -                             | NO2<br>DON'T KNOW8                     | NO2<br>DON'T KNOW8                     |
|     |  | SKIP TO 124 🚽                          | SKIP TO 124 🚽                 | SKIP TO 124 🚽                              | SKIP TO 124 🚽                          | SKIP TO 124 🚽                          |

| NO. | QUESTION  | CHILD 1                                   | CHILD 2                                      | CHILD 3                                      | CHILD 4                                   | CHILD 5                                   |
|-----|---|---|--|--|---|---|
| 123 | How many times yesterday during the day or at night did [CHILD'S NAME] consume any formula? | TIMES                                     | TIMES  | TIMES  | TIMES                                     | TIMES                                     |
|     |   | DON'T KNOW 98                             | DON'T KNOW 98                                | DON'T KNOW98                                 | DON'T KNOW98                              | DON'T KNOW 98                             |
| 124 | Did [CHILD'S NAME] have any milk such as tinned, powdered, or fresh animal milk?            | YES1<br>NO2<br>DON'T KNOW8<br>SKIP TO 126 | YES 1<br>NO 2<br>DON'T KNOW 8<br>SKIP TO I26 | YES 1<br>NO 2<br>DON'T KNOW 8<br>SKIP TO 126 | YES1<br>NO2<br>DON'T KNOW8<br>SKIP TO I26 | YES1<br>NO2<br>DON'T KNOW8<br>SKIP TO I26 |
| 125 | How many times yesterday during the day or at night did [CHILD'S NAME] consume any milk?    | TIMES                                     | TIMES  | TIMES  | TIMES                                     | TIMES                                     |
| 126 | Did [CHILD'S NAME] have any juice or juice drinks?  | YES1<br>NO2<br>DON'T KNOW8                | YES  | YES 1<br>NO 2<br>DON'T KNOW 8                | YES1<br>NO2<br>DON'T KNOW8                | YES1<br>NO2<br>DON'T KNOW8                |
| 127 | Clear broth?  | YES1<br>NO2<br>DON'T KNOW8                | YES1<br>NO2<br>DON'T KNOW8                   | YES 1<br>NO 2<br>DON'T KNOW 8                | YES1<br>NO2<br>DON'T KNOW8                | YES1<br>NO2<br>DON'T KNOW8                |
| 128 | Yogurt?   | YES1<br>NO2<br>DON'T KNOW8<br>SKIP TO I30 | YES 1<br>NO                                  | YES 1<br>NO                                  | YES1<br>NO2<br>DON'T KNOW8<br>SKIP TO I30 | YES1<br>NO2<br>DON'T KNOW8<br>SKIP TO I30 |
| 129 | How many times yesterday during the day or at night did [CHILD'S NAME] consume any yogurt?  | TIMES<br>DON'T KNOW 98                    | TIMES<br>DON'T KNOW 98                       | TIMES<br>DON'T KNOW98                        | TIMES<br>DON'T KNOW98                     | TIMES                                     |
| 130 | Did [CHILD'S NAME] have any thin porridge?  | YES1<br>NO2<br>DON'T KNOW8                | YES 1<br>NO 2<br>DON'T KNOW 8                | YES 1<br>NO 2<br>DON'T KNOW 8                | YES1<br>NO2<br>DON'T KNOW8                | YES1<br>NO2<br>DON'T KNOW8                |
| 131 | Any other liquids such as gripe water, glucose water, or sugar water?                       | YES1<br>NO2<br>DON'T KNOW8                | YES 1<br>NO 2<br>DON'T KNOW 8                | YES 1<br>NO 2<br>DON'T KNOW 8                | YES1<br>NO2<br>DON'T KNOW8                | YES1<br>NO2<br>DON'T KNOW8                |
| 132 | Any other liquids?  | YES1<br>NO2<br>DON'T KNOW8                | YES 1<br>NO 2<br>DON'T KNOW 8                | YES 1<br>NO 2<br>DON'T KNOW 8                | YES1<br>NO2<br>DON'T KNOW8                | YES1<br>NO2<br>DON'T KNOW8                |

| NO.  | QUESTION   | CHILD 1                    | CHILD 2                       | CHILD 3                       | CHILD 4                    | CHILD 5                    |
|------|--|----------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| 133  | Bread, savory biscuits, porridge, crackers, pasta, noodles, rice, or other foods made from grains such as corn, wheat, millet, sorghum, bulgar, wheat, barley?   | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 134A | Orange-fleshed sweet potatoes or foods made from orange-fleshed sweet potatoes such as porridge, flitters, or stew, for example?                                 | YES                        | YES                           | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 134B | Any other dark yellow or orange fleshed roots, tubers, or vegetables such as yellow-fleshed sweet potatoes, pumpkin, carrots, or squash?                         | YES1<br>NO2<br>DON'T KNOW8 | YES                           | YES1<br>NO2<br>DON'T KNOW8    | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 135  | White potatoes, white yams, cassava, plantains or any other foods made from roots?   | YES1<br>NO2<br>DON'T KNOW8 | YES                           | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 136A | Any dark green leafy vegetables such as spinach, kale, okra, pumpkin leaves, amaranth leaves, or moringa leaves?   | YES1<br>NO2<br>DON'T KNOW8 | YES                           | YES1<br>NO2<br>DON'T KNOW8    | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 136B | Any other vegetables such as green beans, tomatoes, mushrooms, cabbage, cauliflower, broccoli etc.?  | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 137A | Ripe mangoes, ripe papayas, apricots, cantaloupe melons, pulp from African locust bean, or other fruits that are dark yellow or orange inside?                   | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 137B | Any other fruits like bananas, apples, avocados, pineapples, berries, baobab fruit, etc.?  | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 138A | Any liver, kidney, heart, or other organ meats from domesticated animals such as beef, pork, lamb, goat, chicken, duck, or pigeon?                               | YES1<br>NO2<br>DON'T KNOW8 | YES                           | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 138B | Any meat from domesticated animals, such as beef, pork, lamb, goat, chicken, duck, or pigeon?  | YES1<br>NO2<br>DON'T KNOW8 | YES                           | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 139A | Any liver, kidney, heart, or other organ meats from wild animals such as warthogs, buck, kudu, impala, antelopes, crocodile, cats, monkeys, alligators, or mice? | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 139B | Any flesh from wild animals, such as warthogs, buck, kudu, impala, antelopes, crocodile, cats, monkeys, alligators, or mice?                                     | YES1<br>NO2<br>DON'T KNOW8 | YES                           | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |

| NO.  | QUESTION   | CHILD 1                    | CHILD 2                    | CHILD 3                       | CHILD 4                    | CHILD 5                    |
|------|--|----------------------------|----------------------------|-------------------------------|----------------------------|----------------------------|
| 140  | Eggs? (chicken, turkey, fowl, duck)  | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO                   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 141  | Fresh or dried fish, shellfish, crabs, or seafood?   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 142A | Any food made from groundnut or groundnut products such as groundnut flour, peanut butter, roasted groundnuts, boiled groundnut snack, sauces, groundnut biscuits? | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 142B | Any foods made from soy or soy products such as soya bean flour, soy milk, soy mash relish, soy flitters, or soy soup?   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 142D | Any other foods made from beans, peas, lentils or other legumes?   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 143A | Any foods made from sesame or sesame flour?  | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 143B | Any foods made from other nuts or seeds?<br>EXCLUDE FOODS MADE FROM GROUNDNUTS OR SESAME SEEDS<br>WHICH BELONG IN ABOVE CATEGORIES.                                | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 144  | Soured milk, cheese, yogurt, or other milk products?   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 145  | Any oil, fats, or butter, or foods made with any of these?<br>INCLUDE GROUNDNUT OIL AND SESAME OIL.  | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 146  | Any sugary foods such as chocolates, sweets, candies, pastries, doughnuts, cakes, sweet biscuits, or sugar cane?   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 147  | Condiments for flavor, such as chilies, spices, herbs, fish powder, curry, or bicarbonate soda/ash used for cooking?   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 148  | Edible insects, mopane worms, grasshoppers or flying ants?   | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |
| 149  | Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?  | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 | YES 1<br>NO 2<br>DON'T KNOW 8 | YES1<br>NO2<br>DON'T KNOW8 | YES1<br>NO2<br>DON'T KNOW8 |

| NO. | QUESTION   | CHILD 1   | CHILD 2   | CHILD 3  | CHILD 4   | CHILD 5  |
|-----|--|---|---|--|---|--|
|     | CHECK CATEGORIES 33-49<br>IF ALL 'NO,' GO TO I50<br>IF AT LEAST ONE 'YES' OR ALL 'DON'T KNOW,' GO TO I51   |   |   |  |   |  |
| 150 | Did [CHILD'S NAME] eat any solid, semi-solid, or soft foods yesterday during<br>the day or at night?<br>IF 'YES' PROBE: What kind of solid, semi-solid, or soft foods did [CHILD'S<br>NAME] eat? | I33–I49 AND<br>RECORD FOODS<br>EATEN.<br>THEN CONTINUE<br>WITH I51.<br>NO | YES1<br>GO BACK TO<br>I33-I49 AND<br>RECORD FOODS<br>EATEN.<br>THEN CONTINUE<br>WITH I51.<br>NO | YES 1<br>GO BACK TO<br>I33–I49 AND<br>RECORD FOODS<br>EATEN.<br>THEN CONTINUE<br>WITH I51.<br>NO | YES 1<br>GO BACK TO<br>I33-I49 AND<br>RECORD FOODS<br>EATEN.<br>THEN CONTINUE<br>WITH I51.<br>NO 2<br>DON'T KNOW 8<br>PROCEED TO NEXT<br>CHILD OR END<br>MODULE | YES1<br>GO BACK TO<br>I33–I49 AND<br>RECORD FOODS<br>EATEN.<br>THEN CONTINUE WITH<br>I51.<br>NO2<br>DON'T KNOW8<br>PROCEED TO NEXT<br>CHILD OR END<br>MODULE |
| 151 | How many times did [child's name] eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?  | TIMES<br>DON'T KNOW 98  | TIMES<br>DON'T KNOW 98  | TIMES  | TIMES<br>DON'T KNOW98   | 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**

| Age | <u>Year</u> | Event   |
|-----|-------------|---|
| 114 | 1900        | Northeastern Rhodesia separated from Nyasaland.   |
|     |             | Death of Queen Victoria.  |
|     |             | 1st Montfort Marist Mission opened – Limbe.   |
| 111 | 1903        | Kings African Rifles defeated in Somaliland.  |
|     |             | Lake Nyasa and Shire River very low.  |
|     |             | Beginning of Limbe Township.  |
| 110 | 1904        | 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 | 1905        | Dysentery caused death of many people throughout the country.   |
| 107 | 1907        | First Legislative Council; First Governor; Name of protectorate changed from British<br>Central Africa to Nyasaland.      |
|     |             | Completion of railway bridge at Chiromo.  |
| 106 | 1908        | First motor vehicle arrives in Nyasaland.   |
|     |             | 1st Battalion of Kings African Riffles returns from East Africa.  |
|     |             | Railway from Port Herald (Nsanje) to Blantyre opened. First train arrives at Blantyre.                                    |
| 105 | 1909        | Industrial school for the Blind established under the Church of England in Nkhotakota.                                    |
| 104 | 1910        | Post Office Savings Bank introduced.  |
|     |             | Central Angoniland divided into Lilongwe and Dedza districts.   |
| 103 | 1911        | Country divided into 14 districts.  |
|     |             | First population census taken.  |
| 102 |             | Railway built between Port Herald (Nsanje) and the Zambezi river.   |
| 101 | 1913        | 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 | 1914        | Outbreak of the First World War.  |
|     |             | Battle of Karonga.  |
| 00  | 1015        | Disablement of German boat "Herman Von Wissmann".   |
| 99  | 1915        | Chilembwe up-rising in Chiradzulu.  |
| 0.6 | 1010        | Railway extended from Port Herald (Nsanje) to Chindio, Moçambique.  |
| 96  |             | End of the First World War.   |
| 92  |             | Railway opened from Beira to Chindio.   |
| 90  | 1924        | Famine in Mzimba area, relief measures taken.   |
|     |             | Bridges built over Linthipe, Lingadzi, Lumbadzi and Diamphwe rivers in Lilongwe and Dedza districts.                      |
| 88  |             | First flying boat lands on Lake Nyasa.  |
| 87  | 1927        | Blantyre – Salisbury (Harare) Road via Tete commenced.  |

| Age              | Year          | Event   |
|------------------|---------------|---|
| <u>nge</u><br>86 | <u>1928</u>   |   |
| 86               | 1928          | 5 5   |
| 80<br>85         | 1928          |   |
| 00               |               | Jeans Training Centre opened in Domasi with 23 teachers.                              |
| 84               | 1930          |   |
| 83               | 1931          | 5   |
|                  |               | Zomba Mental Hospital opened.   |
|                  |               | New hydroelectric power station commenced on the middle section of the Shire River.   |
| 82               | 1932          | Locusts damaged crops throughout Nyasaland.   |
|                  |               | Mchape (witchcraft cleansing) begins in Mulanje and spreads widely.                   |
|                  |               | Lilongwe to Salima tarmac road constructed.   |
| 81               | 1933          | First silver coins from Southern Rhodesia.  |
|                  |               | Establishment of the Native Authority (Traditional Courts).                           |
|                  |               | Chileka aerodrome opened.   |
| 78               | 1936          | Liwonde pontoon ferry services installed pending bridge construction.                 |
| 77               | 1937          | Midima Hill- Mlomba – Phalombe road completed.  |
| 75               | 1939          | Outbreak of the Second World War.   |
|                  |               | Lakeshore – spread of leprosy.  |
|                  |               | Fort Manning (Mchinji) – opening of sub-boma.   |
| 69               | 1 <b>94</b> 5 | End of Second World War.  |
| 68               | 1946          | 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               | 1949          | 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               | 1952          | African National Congress active in its campaign against Federation                   |
| 61               | 1953          | 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               | 1955          | Transferring of the Northern region headquarters from Mzimba to Mzuzu.                |
| 58               | 1956          | Sir Robert Armitage becomes Governor.   |
|                  |               | Colby School of Agriculture and Veterinary Science opened at Chitedze, near Lilongwe. |
| 57               | 1957          | Queen mother's visit to Nyasaland.  |
| 56               | 1958          | Return of Dr. H. Kamuzu Banda to Nyasaland (Malawi).                                  |
|                  |               | New airport started at Lilongwe.  |
| 55               | 1959          | State of Emergency declared.  |
|                  |               | Release of Dr. Banda from Gweru prison.   |
|                  |               |   |

| Age | Year | Event   |
|-----|------|---|
| 53  |      | First general elections.  |
| 51  | 1963 |   |
| 51  | 1903 | Self-government granted.<br>Federation of Rhodesia and Nyasaland dissolved.             |
| 50  | 1964 |   |
| 00  |      | Britain.  |
| 49  | 1965 | University of Malawi opened.  |
|     |      | Sinking of Liwonde ferry.   |
| 48  | 1966 | Malawi becomes a Republic.  |
|     |      | Malawi population census held.  |
|     |      | Bunda Collage of Agriculture opened.  |
| 44  | 1970 | Rail link to the Mozambique port of Nacala opened by Dr. Banda.                         |
| 43  | 1971 | New currency – Kwacha and Tambala –introduced to replace pounds and shillings.          |
| 42  | 1972 | 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  | 1973 | First outbreak of cholera in Malawi.  |
|     |      | Chilumba Jetty built and opened by Dr. Banda.   |
| 40  | 1974 | Construction of Malawi – Canada rail line from Salima to Mchinji starts<br>from Salima. |
| 39  | 1975 | Capital of Malawi moved from Zomba to Lilongwe.   |
|     |      | Lilongwe town declared a city.  |
| 38  | 1976 | Dr. Banda opened bailey bridge over the Shire river at Mangochi.                        |
| 37  | 1977 | Malawi population census held.  |
|     |      | Construction of Chiweta to Kacheche road, northern lakeshore.                           |
|     |      | Tarmac of Lilongwe to Kasungu road.   |
|     |      | Kamuzu Central Hospital started operating.  |
| 36  | 1978 | Tarmac reached Mchinji boma.  |
|     |      | Lilongwe -Mchinji railway line construction work reaches Mchinji.                       |
| 35  | 1979 | Queen Elizabeth's visit to Malawi.  |
|     |      | Railway line from Salima to Lilongwe officially opened by Dr. Banda.                    |
|     |      | Dwangwa Sugar Corporation opened, Nkhotakota district.                                  |
| 33  | 1981 | ,   |
| 32  | 1982 |   |
|     |      | Road from Dwangwa to Nkhotakota completed.  |
| 31  | 1983 |   |
| • • |      | Sir Glyn and Lady Jones make a private visit to Malawi.                                 |
| 30  |      | President Samora Machel of Moçambique visits Malawi.                                    |
| 29  | 1985 |   |
|     |      | Electricity reached Nkhata Bay.   |
| 26  |      | Mzuzu Municipality declared a city.   |
| 28  | 1986 | Prime Minister of Zimbabwe, Robert Mugabe, visits Malawi.                               |

| Age | <u>Year</u> | Event   |
|-----|-------------|---|
| 27  | 1987        | Visit of Prince Charles.  |
|     |             | Malawi Population and Housing Census held.  |
| 25  | 1989        | Bus-train accident at Chilimba in Blantyre kills 13 people.   |
|     |             | Dr. Banda ordered teachers to teach in their respective regions.  |
| 24  | 1990        | MV Mtendere motorboat capsizes, killing 5 people at Kaporo.   |
|     |             | Iraqi forces invade Kuwait.   |
| 23  | 1991        | Flash floods at Phalombe.   |
| 22  | 1992        | Pastoral letter was released, marking the beginning of multi-party struggle in Malawi.                                      |
| 21  | 1993        | National referendum, which resulted in the adoption of multi-party politics.  |
| 20  | 1994        | Multi-party general election, which ushered the United Democratic<br>Front into government, led by President Bakili Muluzi. |
| 19  | 1995        | Mchape at Liwonde in Machinga.  |
| 17  | 1997        | Death of Dr. Banda, the first president of the Republic of Malawi.  |
| 15  | 1999        | Second election of President Muluzi.  |
| 13  | 2001        | September 11 <sup>th</sup> attacks on the United States of America.   |
| 10  | 2004        | Multi-party general election, which ushered the Democratic Progressive government, led by President Bingu wa Mutharika.     |
| 6   | 2008        | Malawi Population and Housing Census held.  |
| _   |             |   |

5 **2009** 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.

| Current | Year                       | of birth                       | Current | Year of birth              |                                |
|---------|----------------------------|--------------------------------|---------|----------------------------|--------------------------------|
| Age     | Has not had<br>birthday in | Has already<br>had birthday in | Age     | Has not had<br>birthday in | Has already<br>had birthday ir |
|         | 2015                       | 2015                           |         | 2015                       | 2015                           |
|         | Don't know                 |                                |         | Don't know                 |                                |
| 0       | 2014                       | -                              | 30      | 1984                       | 1985                           |
| I       | 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                           |

AGE/BIRTH-DATE CONSISTENCY CHART FOR SURVEY IN 2015

# 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:

# 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:

# 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:

# 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:

# 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:

### 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.

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