# **Annex A. Weight Calculation**

# A1. Design Weight

The Mozambique survey sample was drawn with two-stage, stratified cluster sampling following the DHS sample design. Clusters were equally allocated among districts. At the first stage, a sample cluster was selected independently with probability proportional to the cluster's population in each stratum. The strata were the rural areas of the 23 districts in the ZOI. The unequal probabilities of selection across strata caused by the equal number of clusters in each stratum were adjusted relative to the population of each stratum. Design weights were calculated based on the separate sampling probabilities for each sampling stage and for each cluster. We have:

 $P_{1hi}$  = first-stage sampling probability of the *i*-th cluster in district *h* (all rural districts).

 $P_{2hi}$  = 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 household in cluster *i* is:

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

where:

 $m_h$  = number of sample clusters selected in district h

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

 $N_h$  = total population in the frame in district h

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

L<sub>hi</sub> = number of households listed in the household listing for the *i*-th sample cluster in

district h

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

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

<sup>&</sup>lt;sup>1</sup> ICF International. 2012.

The design weight for each household in cluster i of district b is the inverse of its overall selection probability:

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

During weight calculation, there were eight clusters from two districts whose identification cards could not be linked between sampling frame and survey data files. For these clusters, design weight was further adjusted as the inverse of average selection probability among the unlinked clusters within each of the two districts.

# **A2. Sampling Weight**

The sampling weight was calculated with the design weight corrected for nonresponse for each of the selected clusters. Response rates were calculated at 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, or male decision-maker or female decision-maker).

# A3. References

Demographic and Health Survey Sampling and Household Listing Manual. 2012. ICF International. Calverton MD. September.

Megill, David J. 2004. Recommendations on Sample Design for Post-Harvest Surveys in Zambia Based on the 2000 Census. Working Paper No. 11. Food Security Research Project. Lusaka, Zambia. February.

# **Annex B. Indicator Descriptions and Calculations**

# INDICATOR TITLE: Prevalence of Poverty: Percent of people living on less than \$1.25/day\* (R)

\*The Millennium Development Goals (MDGs) define this level as those living in—extreme poverty. Although we do not use the word—extreme in this title, we are referring to the same measure used by the United Nations for the MDGs.

# DEFINITION:

This indicator measures MDG Target 1a. Halving extreme poverty refers to the period 1990 to 2015. The applicable poverty line has been updated to \$1.25 per person per day, converted into local currency at 2005 Purchasing Power Parity (PPP) exchange rates. The use of PPP exchange rates ensures that the poverty line applied in each country has the same real value. Measurement is based on the value of average daily consumption expenditure per person, where food and other items that a household consumes out of its own production are counted as if the household purchased those items at market prices. For example, all members of a household of four people are counted as poor if its average daily consumption expenditures are less than \$5 per day at 2005 PPP after adjusting for local inflation since 2005. The poverty rate is estimated by dividing the measured number of poor people in a sample of households by the total population in the households in the sample.

Data for this indicator must be collected using the Consumption Expenditure methodology of the Living Standards Measurement Survey (LSMS). Missions are encouraged to use the LSMS Integrated Survey in Agriculture Consumption Expenditure module, which has been incorporated in the Feed the Future M&E Guidance Series Volume 8: Population-Based Survey Instrument for Feed the Future zone of influence indicators. FEEDBACK will collect consumption-expenditure data in order to calculate prevalence of poverty for this indicator, as well as per capita expenditures to be used as a proxy for income. Expenditures are used instead of income because of the difficulty in accurately measuring income and because expenditure data are less prone to error, are easier to recall, and are more stable over time than income data.

# RATIONALE:

This measures the first goal of the Feed the Future Initiative as well as an MDG. It is the purpose of the Feed the Future Initiative. All objectives, program elements, and projects are designed to reduce poverty.

Gendered Household Type: Adult Female no Adult Male (FNM), Adult Male no Adult Female

Adult (MNF), Male and Female Adults (M&F),

Child no Adults (CNA)

UNIT: DISAGGREGATE BY:

Percent

1. Percentage of people from sample living on <\$1.25/day

2. Total population of people in zone of influence (ZOI)

TYPE: DIRECTION OF CHANGE:

Impact Lower is better

DATA SOURCE:

MDG database for national level; PBSs conducted by the M&E contractor in the Feed the Future ZOI.

# INDICATOR TITLE: Per capita expenditures (as a proxy for income) of USG-assisted areas (R)

# DEFINITION:

This indicator will measure the expenditures of rural households as a proxy for income, based on the assumption that increased expenditures are strongly correlated to increased income. Data for this indicator must be collected using the Consumption Expenditure methodology of the Living Standards Measurement Survey (LSMS). Missions are encouraged to use the LSMS Integrated Survey in Agriculture Consumption Expenditure module, which has been incorporated in the Feed the Future M&E Guidance Series Volume 8: Population-Based Survey Instrument for Feed the Future zone of influence indicators. FEEDBACK will collect consumption-expenditure data to calculate the prevalence of poverty as well as per capita expenditures to be used as a proxy for income.

This indicator is a proxy instead of measuring income directly because of the difficulty in accurately measuring income. Expenditures are used instead of income because of the difficulty in accurately measuring income and because expenditure data are less prone to error, easier to recall and are more stable over time than income data.

# RATIONALE:

There is a relationship between increased incomes and improved food security, reduced poverty, and improved nutrition. The usefulness of an income proxy methodology derives from the importance of a change in household income and its impact on the overarching Feed the Future goal of reducing poverty and hunger. Thus, measurement of household income (through this proxy) is one logical choice for monitoring the effects of policies and programs oriented towards accomplishing this goal.

UNIT: DISAGGREGATE BY:

United States Dollar Gendered Household type: Adult Female no Adult

Please enter these two data points:

Male (FNM), Adult Male no Adult Female (MNF),

Male and Female Adults (M&F), Child No Adults

1. Average per capita expenditures (in USD) of sample (CNA)

2. Total population in the zone of influence (ZOI)

TYPE: DIRECTION OF CHANGE:

Outcome Higher is better

DATA SOURCE:

PBSs conducted by M&E contractor in the ZOI or UN for national level.

# INDICATOR TITLE: Prevalence of underweight children under 5 years of age (R)

# DEFINITION:

Underweight is a weight-for-age measurement. Underweight 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 < -2. Although different levels of severity of underweight can be measured, this indicator measures the prevalence of all underweight, i.e., both moderate and severe underweight combined.

The numerator for this indicator is the total number of children 0-59 months in the sample with a weight-for-age Z score < -2. The denominator is the total number of children 0-59 months in the sample with weight-for-age Z score data.

## RATIONALE:

Reducing the prevalence of underweight children under 5 is a goal of the Feed the Future initiative. The prevalence of underweight children is also an indicator to monitor the Millennium Development Goal (MDG)1.8—Halving the number of people who are hungry. Monitoring the prevalence of underweight children 0-59 months therefore allows USAID and its partners to show the contribution of Feed the Future programs to the MDG.

UNIT: DISAGGREGATE BY:

1. Percentage of children 0-59 months of age in the sample who are underweight

Sex: Male, Female

2. total population of children 0-59 months of age in the zone of influence (ZOI)

TYPE: DIRECTION OF CHANGE:

Impact Lower is better

DATA SOURCE:

Population-based survey and official DHS data.

# INDICATOR TITLE: Prevalence of stunted children under 5 years of age (R)

# DEFINITION:

Stunting is a height-for-age measurement that is a reflection of chronic undernutrition. This indicator measures the percentage of children 0-59 months who are stunted, as defined by a height-for-age Z score < -2. Although different levels of severity of stunting can be measured, this indicator measures the prevalence of all stunting, i.e., both moderate and severe stunting combined While stunting is difficult to measure in children 0-6 months and most stunting occurs in the -9-23 month range (1,000 days), these indicator data will still be reported for all children under 5 to capture the impact of interventions over time and to align with DHS data.

The numerator for this indicator is the total number of children 0-59 months in the sample with a height-for-age Z score < -2. The denominator is the total number of children 0-59 months in the sample with height-for-age Z score data.

# RATIONALE:

Stunted, wasted, and underweight children under 5 years of age are the three major nutritional indicators. Stunting is an indicator of linear growth retardation, most often due to prolonged exposure to an 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 among adults. Better nutrition leads to increased cognitive and physical abilities, thus improving individual productivity in general, including agricultural productivity.

Sex: Male, Female

UNIT: DISAGGREGATE BY:

1. Percentage of children 0-59 months of age in the sample

who are stunted

2. Total population of children 0-59 months of age in the zone of influence (ZOI)

TYPE: DIRECTION OF CHANGE:

Impact Lower is better

DATA SOURCE:

# INDICATOR TITLE: Prevalence of wasted children under 5 years of age (R)

# DEFINITION:

This indicator measures the percentage of children 0-59 months who are acutely malnourished, as defined by a weight-for-height Z score < -2. Although different levels of severity of wasting can be measured, this indicator measures the prevalence of all wasting, i.e., both moderate and severe wasting combined.

The numerator for the indicator is the total number of children 0-59 months in the sample with a weight for height Z score < -2. The denominator is the total number of children 0-59 months in the sample with weight-for-height Z score data.

# RATIONALE:

Stunted, wasted, and underweight children under 5 years of age are the three major nutritional indicators. 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.

UNIT: DISAGGREGATE BY:

1. Percentage of children 0-59 months of age in the sample who are wasted

Sex: Male, Female

2. Total population of children 0-59 months of age in the zone of influence (ZOI)

TYPE: DIRECTION OF CHANGE:

Impact Lower is better

DATA SOURCE:

Population-based survey and official DHS data.

# INDICATOR TITLE: Prevalence of underweight women (R)

# DEFINITION:

This indicator measures the percent of nonpregnant women of reproductive age (15-49 years) who are underweight, as defined by a body mass index (BMI) < 18.5. To calculate an individual's BMI, weight and height data are needed: BMI = weight (in kg) height (in meters) squared.

The numerator for this indicator is the number of nonpregnant women 15-49 years in the sample with a BMI < 18.5. The denominator for this indicator is the number of nonpregnant women 15-49 years in the sample with BMI data.

## RATIONALE:

This indicator provides information about the extent to which women's diets meet their caloric requirements. Adequate energy in the diet is necessary to support the continuing growth of adolescent girls and women's ability to provide optimal care for their children and participate fully in income generation activities. Undernutrition among women of reproductive age is associated with increased morbidity and poor food security, and can result in adverse birth outcomes in future pregnancies. Improvements in women's nutritional status are expected to improve women's work productivity, which may also have benefits for agricultural production, linking the two strategic objectives of Feed the Future.

None

UNIT: DISAGGREGATE BY:

1. Percentage of women of reproductive age in the sample who are underweight

2. Total population of women of reproductive age in the zone of influence

TYPE: DIRECTION OF CHANGE:

Impact Lower is better

DATA SOURCE:

# INDICATOR TITLE: Women's Empowerment in Agriculture Index (WEAI) Score (R)

# DEFINITION:

WEAI measures the empowerment, agency, and inclusion of women in the agriculture sector in an effort to identify and address the constraints that hinder women's full engagement in the agriculture sector. The WEAI is composed of two subindexes; the Five Domains of Empowerment subindex (5DE) measures the empowerment of women in five areas; and the Gender Parity subindex (GPI) measures the average level of equality in empowerment of men and women within the household. The WEAI is an aggregate index reported at the Zone of influence (ZOI) level and is based on individual-level data on men and women within the same households and data on women living in households with no adult male.

The 5DE subindex assesses whether women are empowered across the five domains examined in the WEAI. Each domain is weighted equally, as are each of the indicators within a domain. The five domains, their definitions under the WEAI, the corresponding indicators, and their weights for the 5DE are:

Domain (each weighted 1/5 of the 5DE subindex)	Definition of domain	Indicators	Weight of indicator in 5DE subindex
Production	Sole or joint decision- making over food and cash-crop farming,	Input in productive decisions	1/10
livestock, an autonomy in	livestock, and fisheries, and autonomy in agricultural production	Autonomy in production	1/10
	Ownership, access to, and decision-making power	Ownership of assets	1/15
Resources	over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit	Purchase, sale, or transfer of assets	1/15
		Access to and decisions on credit	1/15
Income	Sole or joint control over income and expenditures	Control over use of income	1/5
Leadership	Membership in economic or social groups and	Group member	1/10
Leadership	comfort in speaking in public	Speaking in public	1/10
Time	Allocation of time to productive and domestic tasks and satisfaction with	Workload	1/10
	the available time for leisure activities	Leisure	1/10

The 5DE is a measure of achieving adequate empowerment. A woman is defined as empowered in the 5DE if she reaches the threshold of empowerment in 80 percent or more of the weighted indicators. For not-yet-empowered women, the 5DE shows the percentage of indicators in which those women meet the threshold of empowerment. The 5DE contributes 90 percent of the weight to the WEAI.

The GPI reflects the percentage of women who are as empowered as the men in their households. It is a relative equality measure that demonstrates the equality in 5DE profiles between the primary adult male and female in each household. In most cases, these are husband and wife, but they can be the primary male and female decision-makers regardless of their relationship to each other. For households that have not achieved gender parity, the GPI shows the gap that needs to be closed for women to reach the same level of empowerment as men. By definition, households without a primary adult male are excluded from this measure, and thus the aggregate WEAI uses the mean GPI value of dual-adult households. The GPI contributes 10 percent of the weight to the WEAI.

# INDICATOR TITLE: Women's Empowerment in Agriculture Index (WEAI) Score (R)

The 5DE score ranges from zero to one, where higher values indicate greater empowerment. It is constructed using a robust multidimensional methodology known as the Alkire Foster Method (see <a href="http://www.ophi.org.uk/research/multidimensional-poverty/alkire-foster-method/">http://www.ophi.org.uk/research/multidimensional-poverty/alkire-foster-method/</a> for information on the method). The score has two components. First, it reflects the percentage of women who are empowered (He). Second, it reflects the percentage of domains in which those women who are not yet empowered (Hn) still have adequate achievements (Aa). The 5DE formula is: 5DE = {He + (Hn x Aa)), where He + Hn= 100 percent and 0 < Aa < 100 percent.

The GPI also ranges from zero to one, with higher values indicating greater gender parity, and is constructed with two factors. First, it shows the percentage of women whose empowerment scores are lower than the men's in the household (HwgP). Second, the GPI shows the percentage shortfall in empowerment scores (IGPI) for those women who do not have gender parity. The overall formula is the product of these two numbers, following the Foster Greer Thorbecke — poverty gapl measure:  $GPI = \{1 - (Hwgp \times IGPI)\}$ .

The WEAI score is computed as a weighted sum of the ZOI-level 5DE and the GPI. Thus, improvements in either the 5DE or GPI will increase the WEAI. The total WEAI score = 0.9{ He+ (Hn x Aa)} + 0.1{1 - (HGPI x IGPI)}.

## RATIONALE:

Feed the Future supports the inclusion of poorer and more economically vulnerable populations in economic growth strategies in the agriculture sector to have a transformational effect on regional economies and restructure local production, distribution, and consumption patterns for long-term, sustainable development. Because women play a prominent role in agriculture and due to the persistent economic constraints they face, women's empowerment is a main focus of Feed the Future. Empowering women is particularly important to achieving the Feed the Future objective of inclusive agriculture sector growth. The WEAI was developed to track the change in women's empowerment levels that occurs as a direct or indirect result of interventions under Feed the Future.

UNIT: DISAGGREGATE BY:

1. Score for 5DE subindex None

2. Score for GPI subindex

3. Total population in ZOI

TYPE: DIRECTION OF CHANGE:

Impact Higher is better

DATA SOURCE:

PBSs conducted by an M&E contractor in the ZOI.

# INDICATOR TITLE: 3.1.9.1-3 and 4.7-4 Prevalence of households with moderate or severe hunger (RiA)

# DEFINITION:

This indicator measures the percentage of households experiencing moderate or severe hunger, as indicated by a score of 2 or more on the household hunger scale (HHS). To collect data for this indicator, respondents are asked about the frequency with which household members experienced three events in the last four weeks:

- 1. No food at all in the house;
- 2. Went to bed hungry, and
- 3. Went all day and night without eating. For each question, four responses are possible (never, rarely, sometimes or often), which are collapsed into the following three responses: never (value=0), rarely or sometimes (value=1), often (value=2). Values for the three questions are summed for each household, producing a HHS score ranging from 0 to 6.

The numerator for this indicator is the total number of households in the sample with a score of 2 or more on the HHS. The denominator is the total number of households in the sample with HHS data.

#### RATIONALE:

Measurement of household hunger provides a tool to monitor global progress of USG- supported food security initiatives. A decrease in household hunger is also a reflection of improved household resilience. The indicator has been validated to be meaningful for cross-cultural use using data sets from seven diverse sites.

Gendered Household type: Adult Female no Adult

Male (FNM), Adult Male no Adult Female (MNF),

Male and Female Adults (M&F), Child No Adults

UNIT: DISAGGREGATE BY:

- 1. Percentage of households in sample with moderate to severe hunger
- 2. Total population of households in the zone of influence (ZOI)

TYPE: DIRECTION OF CHANGE:

Impact Lower is better

# DATA SOURCE:

PBS and official DHS data (see notes below). USAID/W will work to get these HHS questions incorporated into the DHS in applicable countries. Then, the DHS will also be able to show these data at the national level.

(CNA)

# INDICATOR TITLE: Prevalence of children 6-23 months receiving a minimum acceptable diet (MAD) (RiA)

## DEFINITION:

This indicator measures the proportion of children 6-23 months of age who receive a MAD, apart from breast milk. The MAD indicator measures both the minimum feeding frequency and minimum dietary diversity, as appropriate for various age groups. If a child meets the minimum feeding frequency and minimum dietary diversity for his/her age group and breastfeeding status, then the child is considered to receive a MAD.

Tabulation of the indicator requires that data on breastfeeding, dietary diversity, number of semi-solid/solid feeds and number of milk feeds be collected for children 6-23 months the day preceding the survey. The indicator is calculated from the following two fractions:

- 1. Breastfed children 6-23 months of age in the sample who had at least the minimum dietary diversity and the minimum meal frequency during the previous day/Breastfed children 6-23 months of age in the sample with MAD component data; and
- 2. Nonbreastfed children 6-23 months of age who received at least two milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day/nonbreastfed children 6-23 months of age in the sample with MAD component data.

Minimum dietary diversity for breastfed children 6-23 months is defined as four or more food groups out of the following seven food groups (refer to the WHO IYCF operational guidance document cited below):

- 1. Grains, roots, and tubers
- 2. Legumes and nuts
- 3. Dairy products (milk, yogurt, cheese)
- 4. Flesh foods (meat, fish, poultry, and liver/organ meats)
- 5. Eggs
- 6. Vitamin-A rich fruits and vegetables
- 7. Other fruits and vegetables

Minimum meal frequency for breastfed children is defined as two or more feedings of solid, semi-solid, or soft food for children 6-8 months and three or more feedings of solid, semi-solid or soft food for children 9-23 months.

For the MAD indicator, minimum dietary diversity for nonbreastfed children is defined as four or more food groups out of the following six food groups:

- 1. Grains, roots, and tubers
- 2. Legumes and nuts
- 3. Flesh foods (meat, fish, poultry and liver/organ meats)
- 4. Eggs
- 5. Vitamin-A rich fruits and vegetables
- 6. Other fruits and vegetables

Minimum meal frequency for nonbreastfed children is defined as four or more feedings of solid, semisolid, or soft food, or milk feeds for children 6-23 months. For nonbreastfed children to receive a MAD, at least two of these feedings must be milk feeds.

# INDICATOR TITLE: Prevalence of children 6-23 months receiving a minimum acceptable diet (MAD) (RiA)

# RATIONALE:

Appropriate feeding of children 6-23 months is multidimensional. The MAD indicator combines standards of dietary diversity (a proxy for nutrient density) and feeding frequency (a proxy for energy density) by breastfeeding status; and thus provides a useful way to track progress at simultaneously improving the key quality and quantity dimensions of children's diets.

UNIT: DISAGGREGATE BY:

1. Percentage of children 6-23 months in sample receiving

Sex: Male, Female

2. Total population of children 6-23 months in the ZOI

# INDICATOR TITLE: 3.1.9.1-2 Women's Dietary Diversity Score: Mean number of food groups consumed by women of reproductive age (S)

## DEFINITION:

This validated indicator aims to measure the micronutrient adequacy of the diet and reports the mean number of food groups consumed in the previous day by women of reproductive age (15-49 years). To calculate this indicator, nine food groups are used:

- 1. Grains, roots and tubers
- 2. Legumes and nuts
- 3. Dairy products (milk, yogurt, cheese)
- 4. Organ meat
- 5. Eggs
- 6. Flesh foods and other misc. small animal protein
- 7. Vitamin A dark green leafy vegetables
- 8. Other vitamin A-rich vegetables and fruits
- 9. Other fruits and vegetables

The Mean number of food groups consumed by women of reproductive age indicator is tabulated by averaging the number of food groups consumed (out of the nine food groups above) across all women of reproductive age in the sample with data on dietary diversity.

## RATIONALE:

Women of reproductive age are at risk for multiple micronutrient deficiencies, which can jeopardize their health and ability to care for their children and participate in income generating activities. Maternal micronutrient deficiencies during lactation can directly impact child growth and development but the potential consequences of maternal micronutrient deficiencies are especially severe during pregnancy, when there is the greatest opportunity for nutrient deficiencies to cause long term, irreversible developmental consequences for the child in utero. Dietary diversity score (assessed here as the number of food groups consumed) is a key dimension of a high-quality diet with adequate micronutrient content; and thus, important to ensuring the health and nutrition of both women and their children.

UNIT: DISAGGREGATE BY:

Number Location: Urban, Rural

1. Mean number of food groups consumed by women 15-49 years in the sample

2. Total population of women of reproductive age (15-49 years) in the zone of influence (ZOI)

TYPE: DIRECTION OF CHANGE:

Outcome Higher is better

DATA SOURCE:

# INDICATOR TITLE: 3.1.9-4 and 3.1.9.1-4 Prevalence of exclusive breastfeeding of children under 6 months of age (RiA)

## DEFINITION:

This indicator measures the percentage of children 0-5 months of age who were exclusively breastfed during the day preceding the survey. Exclusive breastfeeding means that the infant received breast milk (including milk expressed or 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.

The numerator for this indicator is the total number of children 0-5 months in the sample exclusively breastfed on the day and night preceding the survey. The denominator is the total number of children 0-5 months in the sample with exclusive breastfeeding data.

## RATIONALE:

Exclusive breastfeeding for 6 months provides children with significant health and nutrition benefits, including protection from gastrointestinal infections and reduced risk of mortality, due to infectious disease.

UNIT: DISAGGREGATE BY:

Please enter these two data points: Sex: Male, Female

1. Percentage of children 0-5 months of age in sample who are exclusively breastfed

2. Total population of children 0-5 months of age in the zone of influence (ZOI)

TYPE: OUTPUT/OUTCOME DIRECTION OF CHANGE:

Outcome Higher is better

DATA SOURCE:

# Annex C. The Domains, Indicators, Survey Questions, Aggregation Method, Inadequacy Cut-Offs, and Weights in the WEAI

Dimension	Indicator	Survey Questions	FTF Variables	Aggregation Method	Inadequacy Cut-Off	Weight
Production	Input in productive decisions	How much input did you have in making decisions about: food crop farming, cash crop farming, livestock raising, fish culture  To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to: agriculture production, what inputs to buy, what types of crops to grow for agricultural production, when or who would take crops to market, livestock raising	G2.02-A-C, FG5.02-A-D	Achievement in two	Inadequate if individual participates BUT does not has not at least some input in decisions; or she does not make the decisions nor feels she could	1/10
	Autonomy in production	My actions in [DOMAIN] are partly because I will get in trouble with someone if I act differently. Regarding [DOMAIN] I do what I do so others don't think poorly of me Regarding [DOMAIN] I do what I do because I personally think it is the right thing to do Agricultural production, inputs to buy, crops to grow, take to market, livestock	G5.03-G5.05-A-D	Achievement in any	Inadequate if RAI below 1	1/10

Dimension	Indicator	Survey Questions	FTF Variables	Aggregation Method	Inadequacy Cut-Off	Weight
	Ownership of assets	Who would you say owns most of the [ITEM]? Agricultural land, Large livestock, Small livestock, Chicks etc.; Fish pond/equip; Farm equip (non-mech); arm equip (mechanized) Nonfarm business equipment House; Large durables; Small durables; Cell phone; Non-ag land (any); Transport	G3.02-A-N	Achievement in any if not only one small asset (chickens, non-mechanized equipment and no small consumer durables)	Inadequate if household does not own any asset or if household owns the type of asset BUT she/he does not own most of it alone	1/15
Resources	Purchase, sale, or transfer of assets	Who would you say can decide whether to sell, give away, rent/mortgage [ITEM] most of the time? Who contributes most to decisions regarding a new purchase of [ITEM]? Ag land; Lg livestock, Sm livestock; Chicks etc.; Fish pond; Farm equip (non); Farm equip (mech)	G3.03-G3.05 A- GG3.06 A-G	Achievement in any if not only chickens and farming equipment non-mechanized	Inadequate if household does not own any asset or household owns the type of asset BUT she does not participate in the decisions (exchange or buy) about it	1/15
	Access to and decisions on credit	Who made the decision to borrow/what to do with money/item borrowed from [SOURCE]? Non- governmental organization (NGO); Informal lender; Formal lender (bank); Friends or relatives; ROSCA (savings/credit group)	G3.08-G3.09 A-E	Achievement in any	Inadequate if household has no credit OR used a source of credit BUT she/he did not participate in ANY decisions about it	1/15

Dimension	Indicator	Survey Questions	FTF Variables	Aggregation Method	Inadequacy Cut-Off	Weight
Income	Control over use of income	How much input did you have in decisions on the use of income generated from: Food crop, Cash crop, Livestock, Non-farm activities, Wage& salary, Fish culture; To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to: Your own wage or salary employment? Minor household expenditures?	G2.03 A-FG5.02 E-G	Achievement in any if not only minor household expenditures	Inadequate if participates in activity BUT has no input or little input on indecisions about income generated	1/5
Leadership	Group member	Are you a member of any: Agricultural / livestock/ fisheries producer/mkt group; Water; Forest users'; Credit or microfinance group; Mutual help or insurance group (including burial societies); Trade and business association; Civic/charitable group; Local government; Religious group; Other women's group; Other group	G4.05-A-K	Achievement in any	Inadequate if is not part of AT LEAST ONE group	1/10
	Speaking in public	Do you feel comfortable speaking up in public: To help decide on infrastructure (like sm wells, roads) to be built? To ensure proper payment of wages for public work or other similar programs? To protest the misbehavior of authorities or elected officials? To intervene in case of a family dispute?	G4.01-G4.03	Achievement in any	Inadequate if not comfortable speaking in public	1/10

Dimension	Indicator	Survey Questions	FTF Variables	Aggregation Method	Inadequacy Cut-Off	Weight
	Workload	Worked more than 10.5 hours in previous 24 hours	G6		Inadequate if works more than 10.5 hours a day	1/10
Time	Leisure	How would you rate your satisfaction with your available time for leisure activities like visiting neighbors, watching TV, listening to radio, seeing movies or doing sports?	G6.02		Inadequate if not satisfied (<5)	1/10

Source: Alkire, S. et al. (2013).

# **Annex D. References**

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