FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Feed the Future Nepal 2015

Zone of Influence Interim Assessment Report

July 2016

USAID
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Prepared for the United States Agency for International Development, USAID Contract Number GS-23F-8144H/AID-OAA-M-12-00006, Feed the Future FEEDBACK

Recommended Citation:
Feed the Future FEEDBACK. 2016. Feed the Future Nepal 2015 Zone of Influence Interim Assessment Report. Rockville, MD: Westat.

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List of Acronyms

5DE	Five Domains of Empowerment
ADS	Agricultural Development Strategy
AFSP	Agriculture and Food Security Project
AHS	Annual Household Survey
ADB	Asian Development Bank
BFS	Bureau for Food Security
BMI	Body Mass Index
CBS	Central Bureau of Statistics
CI	Confidence Interval
CIP	Country Investment Plan
CPI	Consumer Price Index
DEFF	Design Effect
DHS	Demographic and Health Survey
EA	Enumeration Area
FANTA	Food and Nutrition Technical Assistance Project
FSIP	Food Security Interim Plan
FTF FEEDBACK	Feed the Future FEEDBACK
GAFSP	Global Agriculture and Food Security Program
GDP	Gross Domestic Product
GPI	Gender Parity Index
HH	Household
HHS	Household Hunger Scale
IFPRI	International Food Policy Research Institute
LSMS	Living Standards Measurement Survey
MAD	Minimum Acceptable Diet
MDD-W	Women's Minimum Dietary Diversity
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MSNP	Multi-Sector Nutrition Plan
NLSS III	Nepal Living Standards Survey
NPR	Nepalese Rupees

NRVCC	Nutrient-Rich Value Chain Commodity
PBS	Population-Based Survey
PPP	Purchasing Power Parity
PPS	Probability Proportional to Size
SD	Standard Deviation
QCI	Quality Control Interviewer
QCS	Quality Control Supervisor
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 (PBSs) 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 Nepal.

The Feed the Future ZOI in Nepal has been expanded from 20 to 24 districts since the Feed the Future FEEDBACK (FTF FEEDBACK) baseline data collection. A second ZOI was added after the devastating April 2015 earthquake to include an additional four highly affected districts in the Central Region: Kavre, Makwanpur, Nuwakot, and Sindhupalchowk.

In addition, other districts have Food for Peace (FFP) programming without Feed the Future programming. These additional districts are located in the Far-Western (Bajura, Bajhang, and Darchula); Central (Makwanpur, Ramechhap, and Sindhuli); and Eastern (Khotang, Okhaldhunga, and Udayapur) regions of the country. Community Resilience Program activities were also expanded to include five earthquake-affected districts in the Central Region: Dolakha, Kavre, Nuwakot, Rasuwa, and Sindhupalchowk.

The Bureau for Food Security (BFS) determined that FTF FEEDBACK will collect data at interim in the same 20 districts as baseline,[1] where Feed the Future activities were implemented. These include 20 districts in three regions as listed below:

- Far-Western Region (6 districts)—Achham, Baitadi, Dadeldhura, Doti, Kailali, and Kanchanpur;
- Mid-Western Region (10 districts)—Banke, Bardiya, Dailekh, Dang, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan, and Surkhet; and
- Western Region (4 districts)—Arghakhanchi, Gulmi, Kapilvastu, and Palpa.

[1] Throughout this report, results for the baseline and interim in the ZOI refer to these 20 districts.

Of these 20 districts, 11 have FFP programming in addition to Feed the Future programming. Four of these are located in the Far-Western Region (Achham, Baitadi, Dadeldhura, and Doti) and seven in the Mid-Western Region (Dailekh, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan, and Surkhet).

For the interim survey, the FTF FEEDBACK team interviewed a total of 880 households in the ZOI. These households were spread across 44 clusters in the targeted districts, with a sample consisting of 20 households per cluster. The baseline assessment comprised data from the 2013 FTF FEEDBACK Nepal ZOI Baseline Survey, the 2011 Nepal Demographic and Health Survey (DHS) and the 2010-2011 Nepal Living Standards Survey (NLSS III).

This first interim assessment will provide the United States Government (USG) interagency partners, USAID 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. It is also important to note that at the time of interim data collection for the nutrition indicators (from the 2014 Multiple Indicator Cluster Survey [MICS]), Feed the Future nutrition programming had not begun in the 20 districts.

Interim Assessment Indicators

Thirteen Feed the Future indicators are included in this assessment: (1) Daily per capita expenditures (as a proxy for income) in U.S. Government-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 (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.

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 9 of the 10 indicators that comprise the WEAI. These are presented in the Chapter 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 9 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 of 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 three sources: (1) The FTF FEEDBACK ZOI interim assessment; (2) the 2014 MICS; and (3) the 2013/2014 Annual Household Survey (AHS).

The Nepal ZOI Interim Survey was conducted by FTF FEEDBACK in conjunction with its data collection partner, New ERA. Fieldwork for the ZOI interim survey took place between August 8 and September 28, 2015.

Summary of Key Findings

Household Economic Status

The Nepal interim assessment shows that average daily per capita expenditures in the ZOI is $2.29 (2010 U.S. Dollars [USD]). The prevalence of poverty, defined as the percentage of people living below $1.25 per day (2005 purchasing power parity [PPP]), is 20.9 percent. The depth of poverty (the mean percent shortfall relative to the $1.25 per day poverty line) is 2.8 percent.

Women's Empowerment in Agriculture Index Indicators

The Feed the Future interim assessments present uncensored headcounts for 9 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 Feed the Future indicator estimates table on pages xvi-xviii shows that the WEAI uncensored headcounts with the highest levels of surveyed women's achievement in the Nepal ZOI include control over the use of income (98.8 percent), input in productive decisions (97.5 percent), and ownership of assets (96.4 percent). The WEAI uncensored headcounts with the lowest levels of achievement among primary adult female decisionmakers are group membership and workload (both at 51.2 percent).

Hunger and Dietary Intake

The Feed the Future indicator estimates table shows that the prevalence of households in the Nepal ZOI with moderate or severe hunger is 9.0 percent; fewer than 1 in every 10 ZOI households experiences hunger. Women's dietary diversity, or the mean number of food

groups (of nine possible groups) consumed in the prior 24 hours by women of reproductive age (15-49 years), is 3.28 food groups. The prevalence of exclusive breastfeeding among children under 6 months is 59.1 percent; over half of all infants in the Nepal ZOI were exclusively breastfed in the prior day. Among children 6-23 months, over one-quarter (28.1 percent) received a MAD in the prior day.

The targeted NRVCC in Nepal are six commodities identified by USAID/Nepal, which meet NRVCC criteria (see Chapter 6): cauliflower; cabbage; pumpkin; dark green leafy vegetables (e.g., saag/spinach, mustard leaves, etc.); okra; and bitter gourd.

Among women of reproductive age in the Nepal ZOI, more than two-thirds (67.4 percent) consumed at least one of the six NRVCC foods in the prior day, with dark green leafy vegetables most commonly consumed (41.8 percent of women), followed by okra (24.8 percent), and bitter gourd (15.8 percent). The remaining three NRVCC foods in Nepal were consumed by approximately 10 percent or fewer women of reproductive age: pumpkin (10.7 percent), cabbage (6.0 percent), and cauliflower (4.6 percent).

As shown in the indicator estimates table, among children age 6-23 months in the Nepal ZOI, over one-third (36.1 percent) consumed any (at least one) of the six NRVCC in the prior day. Similar to women, among young children, the most commonly consumed NRVCC is dark green leafy vegetables (26.6 percent of children age 6-23 months). The next most commonly consumed NRVCC among young children in the Nepal ZOI is okra (13.4 percent). The remaining four NRVCC in Nepal were consumed by approximately 5 percent or fewer children age 6-23 months in the ZOI: pumpkin (5.2 percent), cauliflower (2.7 percent), bitter gourd (also 2.7 percent), and cabbage (1.5 percent).

Nutritional Status of Women and Children

The prevalence of women's underweight in the ZOI (defined as a body mass index [BMI] below 18.5) is 23.2 percent; nearly one-quarter of non-pregnant women of reproductive age in the Nepal ZOI are underweight. Among children less than 5 years, 47.0 percent are stunted; slightly fewer than half of all children under age 5 in the ZOI have low height-for-age, indicating long-term, chronic undernutrition in young children. Approximately 8.4 percent of children under age 5 are wasted, or have low weight-for-height. Wasting is an indicator of acute malnutrition. Finally, 32.0 percent of children are underweight, or have low weight-for-age. Underweight is an indicator of either acute or chronic undernutrition in children.

Country-Specific Findings: Key Indicators by Geographic Area and Ethnic Group

In addition to the standard Feed the Future tables presented in this Nepal interim assessment report, Chapter 8 also presents additional USAID Mission-requested analysis on the prevalence

of key Feed the Future indicators by both geographic area and ethnic group. WEAI raw headcounts (i.e., the percent of women who achieve adequacy on each of the nine WEAI indicators collected at interim); household hunger; and several measures of women's dietary diversity are presented separately for women residing in the Hill and Terai geographic areas, as well as by three ethnic group categories (Brahman/Chhetri, Dalit, and Indigenous/Janajati). A few key findings from this country-specific chapter are presented below.

As presented in Table 8.1 in Chapter 8, a few of the nine WEAI indicators vary significantly by geographic area or by ethnic group; the workload indicator varies by both, with higher achievement of adequacy among women in Terai areas (61.7 percent) and among women in the indigenous or Janajati ethnic group category (59.2 percent). Table 8.2 reveals that the prevalence of household hunger varies significantly by ethnic group, but not by geographic area. Moderate or severe household hunger (the Feed the Future standard indicator) was reported by 20.1 percent of the Dalit households, as compared to 6.1 percent of Brahman/Chhetri households and only 3.4 percent of the Indigenous/Janajati households.

The mean Women's Dietary Diversity Score (WDDS) varies significantly by geographic area (with women in Hill areas exhibiting significantly higher WDDS than women in Terai areas, 3.51 food groups versus 3.04, respectively); and varies significantly by ethnic group with Brahman/Chhetri women exhibiting the highest mean WDDS values (3.54 food groups). Similar to the WDDS findings, Table 8.4 reveals that the prevalence of women achieving a minimum dietary diversity (MDD-W, a new indicator for the Feed the Future interim assessments) is significantly higher among Hill women (26.3 percent), than among Terai women (13.9 percent). This indicator also varies by ethnic group, with Brahman/Chhetri women exhibiting the greatest prevalence (28.7 percent) of the three ethnic categories.

Measuring Change Over Time

Although the Nepal ZOI interim assessment was not designed to measure change from baseline indicator values, for a few indicators, non-overlapping confidence intervals (CIs) between 2013 baseline indicators and comparable 2015 interim indicators 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 unless a statistical test of differences is conducted.

For a subset of indicators shown in the indicator estimates table below, significance tests were conducted to compare baseline and interim estimates. The indicators which were tested include both the poverty- and expenditure-related indicators (per capita expenditures, prevalence of poverty, and depth of poverty) as well as the children's anthropometry indicators (stunting, wasting, and underweight). As noted by the asterisks (and table footnote 2) in the indicator estimates table that follows, several indicators exhibited a statistically significant

change between baseline and interim, including: prevalence of poverty, depth of poverty, and children's wasting.

In the Nepal ZOI the prevalence of poverty and depth of poverty declined for all households, as well as for male and female adult households and female adult-only households. At baseline (2010-2011) the prevalence of poverty in the ZOI was 32.5 percent, declining to 20.9 percent at interim (2013-2014).[2] Similarly, the depth of poverty has also declined over time from 6.8 percent at baseline to 2.8 percent at interim. Note that there is no statistically significant difference between the baseline ($2.12/day 2010 USD) and interim ($2.29/day 2010 USD) per capita expenditure estimates.

The statistically significant drop in poverty and depth of poverty appears inconsistent when there is no statistically significant change in expenditures. There is, however, a possible explanation for this apparent inconsistency. The statistically significant change in poverty is related to the low value for depth of poverty. When depth of poverty is low, many people are near the poverty line and it does not take much change in expenditures for them to move out of poverty. Depth of poverty was already low (only 6.8 percent) at baseline. A drop to 2.8 percent is a large relative drop in depth of poverty. When percentages are low, the standard deviation (SD) is also low, which can be why there is a statistically significant difference in depth of poverty. For expenditures, the relative change is small compared to the indicator values, which makes it less surprising that there is not a statistically significant difference over time.

In addition, the prevalence of children's wasting has declined from the baseline (2011) estimate of 12.0 percent to the interim (2014) estimate of 8.4 percent.[3] This significant decline in children's wasting in the ZOI is apparent for all children, as well as for male children (but not for female children). Moreover, there is no statistically significant difference in children's stunting between baseline and interim. Nor is there a significant different in children's underweight between baseline and interim.

Notwithstanding, the six indicators discussed above for which a significance test was conducted, non-overlapping baseline and interim CIs in the Feed the Future indicator estimates table below indicate significant differences. Significant differences were found over time between the baseline and interim estimates for WDDS and the five WEAI indicators of *Ownership of assets; Purchase, sale or transfer of assets; Control over the use of income; Group membership;* and *Leisure.*

As shown in the table that follows, five of the nine WEAI uncensored headcounts demonstrate a significant increase between baseline and interim. Women's adequacy on ownership of assets

[2] Note that for the expenditures and poverty indicators, the baseline data source was the 2010-2011 NLSS, whereas the interim data source was the 2013-2014 AHS.

[3] Note that for the children's anthropometry indicators, the baseline data source was the 2011 DHS, whereas the interim data source was the 2014 MICS.

has increased from 89.9 percent at baseline to 96.4 percent at interim. Similarly, women's adequacy on the purchase, sale, or transfer of assets indicator has increased from 90.5 percent to 95.9 percent; adequacy on the control over the use of income indicator has increased from 95.4 percent to 98.8 percent; adequacy on the group membership indicator has increased from 16.2 percent to 51.2 percent; and adequacy on the satisfaction with leisure time indicator has increased from 84.1 percent to 92.4 percent.

Among women of reproductive age in the ZOI, the WDDS indicator also demonstrates a statistically significant change over time, although it exhibits a decline between the baseline estimate (3.89 food groups [of nine possible groups]) and the interim estimate (3.28 food groups).

The Nepal ZOI interim 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 following Feed the Future ZOI Indicator Estimates table.

Feed the Future Zone of Influence indicator estimates: Nepal

Feed the Future indicator	Baseline			Interim		
	Estimate	95% CI[1,2]	n	Estimate	95% CI	n
Daily per capita expenditures (as a proxy for income) in USG-assisted areas (2010 USD) (2010-2011, 2013-2014)[3]						
All households	2.12	2.04-2.21	1,404	2.29	2.07-2.50	600
Male and female adults	2.10	2.00-2.20	1,044	2.24	2.03-2.45	462
Female adult(s) only	2.17	2.02-2.32	329	2.48	2.09-2.86	124
Male adult(s) only	^	^	25	^	^	12
Prevalence of Poverty: Percent of people living on less than $1.25/day (2005 PPP) (2010-2011, 2013-2014)[3]						
All households**	32.5	28.0-37.0	1,404	20.9	15.2-28.2	600
Male and female adults*	32.7	27.8-37.6	1,044	22.2	16.1-29.8	462
Female adult(s) only*	32.8	26.4-39.2	329	13.9	6.2-28.3	124
Male adult(s) only	^	^	25	^	^	12
Depth of Poverty: Mean percent shortfall relative to the $1.25/day (2005 PPP) poverty line (2010-2011, 2013-2014)[3]						
All households***	6.8	5.5-8.1	1,404	2.8	1.8-3.8	600
Male and female adults***	6.7	5.3-8.1	1,044	2.9	1.7-4.0	462
Female adult(s) only***	7.7	5.5-9.9	329	2.3	0.3-4.2	124
Male adult(s) only	^	^	25	^	^	12

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

Feed the Future indicator	Baseline			Interim		
	Estimate	95% CI[1,2]	n	Estimate	95% CI	n
Percent of women achieving adequacy on Women's Empowerment in Agriculture Index Indicators (2013, 2015)[3,4,5]						
Input in productive decisions	97.2	96.0-98.0	1,682	97.5	95.2-98.7	760
Ownership of assets	89.9	87.2-92.0	1,682	96.4	93.4-98.0	760
Purchase, sale or transfer of assets	90.5	87.6-92.7	1,682	95.9	94.7-96.9	760
Access to and decisions on credit	50.8	46.9-54.7	1,682	57.3	53.0-61.5	760
Control over use of income	95.4	93.3-96.8	1,682	98.8	97.7-99.4	760
Group member	16.2	13.3-19.7	1,682	51.2	42.8-59.5	760
Speaking in public	72.2	67.8-76.2	1,682	79.6	75.5-83.2	760
Workload	45.0	40.3-49.9	1,682	51.2	45.7-56.8	760
Leisure	84.1	80.1- 87.4	1,682	92.4	89.4-94.6	760
Autonomy in production	63.2	57.7-68.4	1,682	n/a	n/a	n/a
Prevalence of households with moderate or severe hunger (2013, 2015)[3]						
All households	10.6	7.6-13.6	1,946	9.0	6.3-12.8	836
Male and female adults	9.9	7.2-12.5	1,500	8.9	6.0-13.0	694
Female adult(s) only	13.0	6.8-19.3	404	10.6	6.0-18.1	118
Male adult(s) only	12.4	1.1-23.8	35	^	^	19
Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age (2013, 2015)[3]						
All women ages 15-49	3.89	3.76-4.02	2,580	3.28	3.12-3.44	994
Prevalence of exclusive breastfeeding among children under 6 months of age (2011, 2014)[3]						
All children	71.1	62.3-80.0	162	59.1	49.8-67.8	145
Male children	68.4	57.2-79.6	86	60.2	48.4-71.0	86
Female children	74.4	62.4-86.4	76	57.6	42.3-71.6	59
Prevalence of children 6-23 months receiving a minimum acceptable diet (2011, 2014)[3]						
All children	22.7	17.8-27.6	494	28.1	23.3-33.5	500
Male children	23.6	16.8-30.5	274	31.0	24.7-38.0	273
Female children	21.5	14.9-28.2	220	24.6	19.1-31.0	227
Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities (n/a, 2015)[3,6]						
Cauliflower	n/a	n/a	n/a	4.6	2.4-8.6	994
Cabbage	n/a	n/a	n/a	6.0	4.1-8.6	994
Pumpkin	n/a	n/a	n/a	10.7	6.5-17.2	994
Green leafy vegetables (saag/spinach)	n/a	n/a	n/a	41.8	34.6-49.5	994
Okra	n/a	n/a	n/a	24.8	19.5-31.0	994
Bitter gourd	n/a	n/a	n/a	15.8	11.9-20.5	994
Prevalence of women of reproductive age who consume at least one targeted nutrient-rich value chain commodity (n/a, 2015)[3,6]						
All women ages 15-49	n/a	n/a	n/a	67.4	60.9-73.3	994

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

Feed the Future indicator	Baseline			Interim		
	Estimate	95% CI[1,2]	n	Estimate	95% CI	n
Prevalence of children 6-23 months who consume targeted nutrient-rich value chain commodities (n/a, 2015)[3,6]						
Cauliflower	n/a	n/a	n/a	2.7	0.9-7.9	121
Cabbage	n/a	n/a	n/a	1.5	0.4-6.4	121
Pumpkin	n/a	n/a	n/a	5.2	2.1-12.3	121
Green leafy vegetables (saag/spinach)	n/a	n/a	n/a	26.6	18.6-36.6	121
Okra	n/a	n/a	n/a	13.4	7.9-22.0	121
Bitter gourd	n/a	n/a	n/a	2.7	0.5-12.6	121
Prevalence of children 6-23 months who consume at least one targeted nutrient-rich value chain commodity (n/a, 2015)[3,6]						
All children	n/a	n/a	n/a	36.1	27.6-45.6	121
Male children	n/a	n/a	n/a	37.0	26.9-48.4	69
Female children	n/a	n/a	n/a	34.5	23.2-47.9	52
Prevalence of underweight women (2011, 2015)[3]						
All non-pregnant women ages 15-49	21.5	18.2-24.8	1,879	23.2	19.5-27.3	945
Prevalence of stunted children under 5 years of age (2011, 2014)[3]						
All children	45.2	39.8-50.5	877	47.0	42.8-51.2	1,573
Male children	46.6	40.3-52.9	485	44.4	39.7-49.2	831
Female children	43.4	37.4-49.3	392	49.7	44.4-55.1	742
Prevalence of wasted children under 5 years of age (2011, 2014)[3]						
All children*	12.0	9.6-14.4	877	8.4	6.8-10.4	1,573
Male children**	13.2	10.0-16.5	485	7.6	5.8-9.7	831
Female children	10.5	7.3-13.6	392	9.3	7.1-12.2	742
Prevalence of underweight children under 5 years of age (2011, 2014)[3]						
All children	34.9	30.0-39.7	877	32.0	28.1-36.2	1,573
Male children	35.8	29.5-42.1	485	30.3	25.9-35.0	831
Female children	33.7	28.3-39.2	392	33.8	29.2-38.7	742

^ Results not statistically reliable, n<30.

n/a – Not available.

[1] Confidence intervals (CIs) demonstrate the reliability of estimated values. While interim surveys were not designed to capture change over time, non-overlapping CIs do indicate significant differences between the two estimates. However, if CIs do overlap, the reader cannot conclude whether there is or is not a significant difference between baseline and interim estimates unless a statistical tests of differences is conducted. For the following indicators, it cannot be concluded that there are significant differences in estimates over time: the four WEAI indicators of *Input in productive decisions*, *Access to and decisions on credit*, *Speaking in public*, and *Workload*; *Prevalence of households with moderate or severe hunger*; *Prevalence of exclusive breastfeeding among children under 6 months of age*; *Prevalence of children 6-23 months receiving a minimum acceptable diet*; and *Prevalence of underweight women.* Based on non-overlapping CIs, the following indicators have significant differences between baseline and interim estimates: the WEAI indicators *of Ownership of assets*, *Purchase, sale or transfer of assets*, *Control over use of income*, *Group member*, and *Leisure*; and *Women's Dietary Diversity Score*.

[2] Significance tests were run to compare the baseline and interim estimates for *Daily per capita expenditures*, *Prevalence of poverty*, *Depth of poverty*, *Prevalence of stunted children under 5 years of age, Prevalence of wasted children under 5 years of age, and Prevalence of underweight children under 5 years of age*. The level of significance is noted to the right of each indicator: * p<.05, ** p<.01, *** p<.001.

[3] 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.

[4] 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.

[5] 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.

[6] 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, Nepal 2013; Nepal DHS 2011; Nepal NLSS III 2010-2011. *Interim:* FTF FEEDBACK ZOI Interim Survey, Nepal 2015; Nepal MICS 2014; Nepal AHS 2013-2014.

1. Background

This chapter provides background information on Feed the Future in Nepal, 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.

1.1 Feed the Future Overview

Feed the Future Intervention Areas and Objectives in Nepal

Nepal is a landlocked country divided into three primary ecological zones mainly running east-west: the Terai in the south, the Hill area in the middle, and the Mountain area in the north. Crop production and poverty rates vary significantly by region and district. The Mid- and Far-Western Regions typically have the highest rates of food insecurity and hunger. And, although the Terai is the ecological zone with the greatest agricultural production,[4] eight districts in the Terai faced food deficits in 2010. Furthermore, despite their greater agricultural production rates, some Terai districts have high rates of malnutrition due to behavioral and cultural practices.[5]

The Terai, together with the Hills, contains the most arable land and fertile soils. Irrigation potential is greater and transportation networks are present in the Terai and lower Hills. Of the total population, 47 percent lives in the Terai and 45 percent are located in the Hills.[6]

The Far-Western, Mid-Western, and Western Regions have higher subregional hunger indexes, incidences of asset sales as a coping strategy, levels of outmigration, and numbers of female-headed households.[7] In addition, the Far- and Mid-Western Regions were prioritized by the Government of Nepal in its Country Investment Plan (CIP). The United States Agency for International Development (USAID)/Nepal has aligned its economic growth program with the

[4] Joshi, Conroy, and Witcomb. (2012).
[5] USAID. (2011). p. 9.
[6] Ibid.
[7] As mentioned in USAID (2011), "Feed the Future household (HH) level indicators are disaggregated by "gendered household types" – that is: (1) HH with male and female adults (18+ years), (2) HH with at least one male adult and no female adult, (3) HH with at least one female adult and no male adults, and (4) HH with children and no adults. This categorization is somewhat different that the standard "male-headed vs. female-headed" households, and the distinction and change is very meaningful. The concept of "head of household" is highly loaded, presumes certain characteristics that may or may not be present in household gender dynamics, and often reflects the bias of the researcher or respondent. In addition, the head of household concept may perpetuate existing social inequalities and prioritization of household responsibilities that may be detrimental to women."
Note: Some of the background data presented in this report were analyzed by household head rather than gendered HH type in the cited reports, and in these cases, the household headship disaggregation is used.

Government of Nepal's priorities, and Feed the Future will build on USAID/Nepal's economic growth programs in the ZOI.[8]

Thus based on need, prioritization by the Government of Nepal, and potential synergies with other USAID-funded programs in the same geographic areas, 20 districts in 3 regions were selected as the ZOI in Nepal in 2011. A second ZOI was added after the devastating April 2015 earthquake to include an additional four highly affected districts in the Central Region: Kavre, Makwanpur, Nuwakot, and Sindhupalchowk.

Feed the Future's overall objectives in Nepal are to maximize the number of Nepalis lifted out of poverty and to increase the number of children and women with improved nutritional status. Also, Nepal is undergoing changes in precipitation patterns, temperature regimes, and hydrology (due to glacier melt) linked to climate change. Feed the Future activities are part of a larger U.S. Government (USG) commitment to build the resilience of vulnerable populations to the changing climate in Nepal.

Feed the Future seeks to achieve the following key objectives in Nepal by 2015:

- An estimated 100,000 households including Nepali women, children, and family members – mostly smallholder farmers – will receive targeted assistance to escape hunger and poverty. The interventions will focus on establishing profitable businesses that are able to provide inputs, extension services, and market linkages to targeted farmers on a sustainable basis. The interventions will increase production (availability) of vegetables while also enhancing incomes (access).

- In conjunction with the Global Health Initiative, more than 625,000 children will be reached with services to improve their nutrition and prevent stunting and child mortality. Nutrition and hygiene interventions will promote behavior change regarding diet composition, feeding practices, and spending patterns (utilization). Targeted programs also will increase resiliency (stability) in vulnerable communities and groups.

- Significant numbers[9] of people residing in households in rural areas will achieve improved income and nutritional status from strategic policy and institutional reforms.

[8] USAID. (2011). p. 12.

[9] According to the Feed the Future Multi-Year Strategy 2011-2015 for Nepal, these preliminary targets were estimated based on analysis at the time of strategy development using estimated budget levels and *ex-ante* cost-benefit ratios from previous agriculture and nutrition investments. Therefore, targets are subject to significant change based on availability of funds and the scope of specific activities designed. More precise targets will be developed through project design for specific Feed the Future activities.

The agriculture and nutrition components will be strongly connected throughout the program, with the same households targeted by these interventions. A subset of the most vulnerable beneficiaries will be targeted by a literacy and entrepreneurship training component.

Government of Nepal Strategies and Investments

The Feed the Future program in Nepal aligns closely with the Government of Nepal's agriculture and nutrition strategies and investments. The strategic framework for agriculture and food security in Nepal has been provided in the longer-term Agriculture Perspective Plan (1995-2015). The objectives for the agriculture sector were established in the National Agriculture Policy (2004), National Agriculture Sector Development Priority Framework (2010), and the associated CIP. The overall goal of the CIP is to reduce poverty and household food insecurity on a sustainable basis and to strengthen the national economy.

The Government of Nepal has updated its strategy, as embodied in the Agricultural Development Strategy (ADS) for 2015 to 2035.[10] This was prepared under the leadership of the Asian Development Bank. The ADS is intended to guide the agriculture sector of Nepal for the next 20 years. The ADS vision is that Nepal will have a "self-reliant, sustainable, competitive, and inclusive agriculture sector that drives economic growth and contributes to improved livelihoods and food and nutrition security."[11] The ADS aims to accelerate growth in the agriculture sector through four strategic components: governance, productivity, profitable commercialization, and competitiveness. It will achieve these aims while promoting: social and geographic inclusiveness; natural resources and economic sustainability; development of the private sector and the cooperative sectors; improved markets (roads, collection centers, packing houses, market centers); information; and power infrastructure (rural electrification). The strategy aims to accelerate agricultural growth, increase food and nutrition security, reduce poverty, increase the agricultural trade surplus, lead to higher and more equitable income of rural households, and strengthen farmers' rights.[12]

Since the ADS represents an important opportunity for the Government of Nepal to move agricultural development forward, USAID/Nepal commissioned an overall assessment of the Nepali policymaking process in 2013 to examine the strengths and current barriers for successful food security policy change focusing on the ADS. The results are reported in the Institutional Architecture for Food Security Policy Change Cross-country Study (March 2015), outlining comparative lessons and next steps.[13]

[10] Government of Nepal, Ministry of Agricultural Development. (2014).
[11] Ibid.
[12] Ibid.
[13] USAID. (2015).

The Interim Plan of Nepal (2007-2010), renewed for 2011-2014, contains a food security component. The food security objectives, policies, programs, and monitoring mechanisms in the Food Security Interim Plan (FSIP) were prepared with technical assistance from the Food and Agriculture Organization of the United Nations. The principal objective of the FSIP is to make the lives of the targeted people healthy and productive by improving national food sovereignty and the food and nutrition situation. The basic FSIP objectives are as follows: (1) increased national self-reliance in basic food products (increased food production, transportation, cold storage, irrigation); (2) improved nutrition situation (reduced undernutrition); (3) enhanced quality, standard and hygiene of available food products; (4) enhanced capacities to manage food insecurity during crisis situations like famines, droughts, floods, landslides, fires, etc.; and (5) Improved access to food for people/groups most at risk of food insecurity (through rural infrastructure, employment, and income generation opportunities).

The Government of Nepal was awarded $46.5 million for 5 years (through fiscal year 2013/2014) for the Nepal Agriculture and Food Security Project (AFSP) through the Global Agriculture and Food Security Program (GAFSP).[14] Nepal AFSP seeks to improve household food security through increased agricultural productivity, household incomes, and awareness about health and nutrition, focused in the Mid-Western and Far-Western Regions. Agricultural productivity activities will support small infrastructure development, access to locally appropriate technologies, control of diseases and pests, and identification of new and improved technologies. Improved productivity will increase food availability and household incomes, which will be complemented by efforts to change financial management behaviors that threaten to reduce income such as consumption of seed stock and sale of productive assets. Health and nutrition subprojects will provide dietary support, increase the supply of nutritious foods, and promote improved nutrition, health, and hygiene behaviors through community-based programs.[15]

This aligns with the Ministry of Health and Population's 5-year National Health Sector Plan, Phase II for 2010-2015. The National Health Sector Plan, Phase II contains components addressing food security and nutrition. The Government of Nepal's nutrition priority areas outlined in this plan are: (1) wider coverage of micronutrient initiatives (vitamin A and zinc supplementation, iron and folic acid supplementation to pregnant and lactating women, and salt iodization); (2) increased dissemination of information on breastfeeding and complementary feeding practices; (3) improved focus on maternal, infant and young child nutrition; (4) improved hygiene and sanitation, food safety and preparation; (5) strengthened nutrition education in training curriculums for health care workers; and (6) education on nutrition, dietary diversification, and locally available nutritious foods.

[14] Government of Nepal, Ministry of Agricultural Development. (2015).
[15] GAFSP. (2013).

Looking forward, the nutrition sector will be guided by the Multi-Sector Nutrition Plan (MSNP) for 2013-2017, which was developed by the National Planning Commission jointly with sectoral ministries and finalized in September 2012.[16] The MSNP has three major outcomes: (1) policies, plans, and multi-sector coordination improved at national and local levels; (2) improved use of nutrition specific and nutrition sensitive services; and (3) strengthened capacity of central and local governments to provide basic nutrition services in an inclusive and equitable manner. The five-year goal is to improve maternal and child nutrition, which will result in the reduction of maternal, infant and young child undernutrition, in terms of maternal body mass index (BMI) and child stunting, by one-third. The goal is to significantly reduce chronic malnutrition so that it no longer becomes an impediment to improving human capital and for overall socioeconomic development.[17]

1.2 Feed the Future ZOI Profile

The Feed the Future ZOI in Nepal has been expanded from 20 to 24 districts. A second ZOI was added after the devastating April 2015 earthquake to include an additional four highly-affected districts in the Central Region: Kavre, Makwanpur, Nuwakot, and Sindhupalchowk.

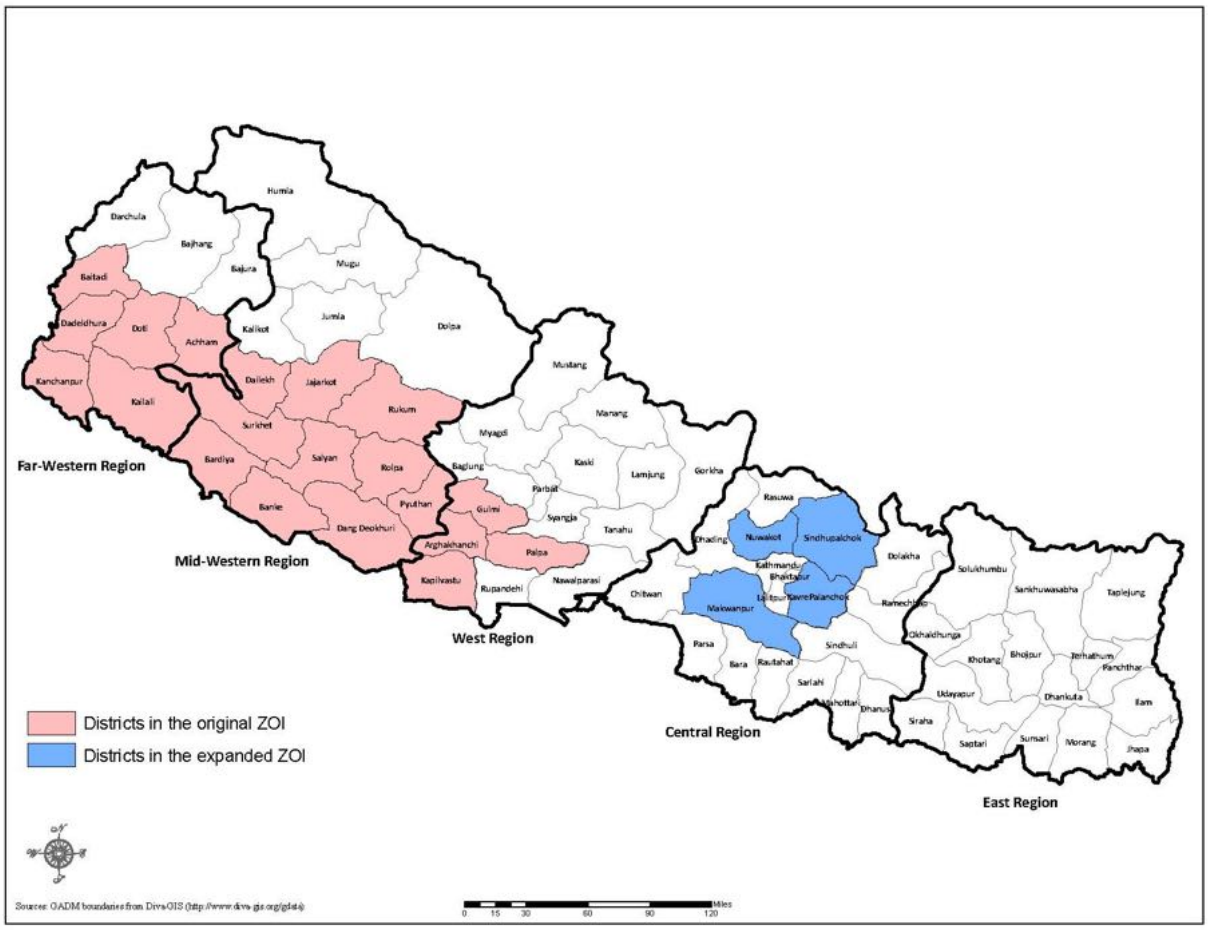
Interim data collection occurred in the same 20 districts of the ZOI where the baseline data collection took place. Eleven of these 20 districts include Food for Peace (FFP) activities, in addition to non-FFP Feed the Future activities. These 20 districts are in four regions: Far-Western Region (6 districts)—Achham, Baitadi, Dadeldhura, Doti, Kailali, and Kanchanpur; Mid-Western Region I (5 districts)—Bardiya, Dailekh, Jajarkot, Salyan, and Surkhet; Mid-Western Region II (5 districts)—Banke, Dang, Pyuthan, Rolpa, and Rukum; and Western Region (4 districts)—Arghakhanchi, Gulmi, Kapilvastu, and Palpa.

Both urban and rural areas are included in the ZOI (and in the sample frame), with a larger rural population in the ZOI. As can be seen in Table 1.1, the ZOI population in both urban and rural areas are presented by both the "old" and the "new" definitions. The Ministry of Local Development and Federal Affairs was responsible for creating new and extending existing municipalities between May 2014 and September 2015. Based on the new classification, the numbers categorized as "urban" is higher than based on the old definition. Nonetheless, the rural population of 4,307,666 compared to an urban population of 2,631,348 remains substantially higher based the new definitions. Urban/rural disaggregates are not presented in this report.

A map of the Feed the Future ZOI in Nepal is provided in **Figure 1.1.** This map presents 20 of districts of the ZOI where Feed the Future FEEDBACK (FTF FEEDBACK) data was collected.

[16] Government of Nepal, National Planning Commission. (2012).
[17] Ibid. p. 13.

Figure 1.1. Map of Nepal: Feed the Future ZOI



1.2.1 Rationale for ZOI Selection

With a population of 28 million, Nepal is a severely food-deficient country recovering from a 10-year civil war. With a per capita gross domestic product (GDP) of $701.7 (2011-2015),[18] Nepal is the poorest country in South Asia and the 21st poorest country in the world.[19] Approximately 25 percent of Nepalese live below the international poverty line of $1.25/day.[20]

Agriculture provides 70 percent of the livelihood in Nepal and accounts for about one-third of the GDP.[21] Recent declining agricultural production has depressed rural economies and

[18] The World Bank. (2016).
[19] The World Bank. (2013a).
[20] The World Bank. (2013b).
[21] CIA. (2016).

increased widespread hunger and urban migration in Nepal. This situation is compounded by a population growth rate of 1.8 percent per year[22] and a high ratio of population to arable land.[23]

The main underlying causes of hunger, poverty, and undernutrition in Nepal include low agricultural productivity, limited livelihood opportunities, weak market linkages, and inadequate production and consumption of nutritious, locally-available foods. Other major issues include decreasing land resources and biodiversity; climate change risks; low and declining investment in agricultural research and extension; poor access to quality inputs and services; limited basic infrastructure; rising food prices; and market volatility. These result in youth outmigration, declining labor availability, and more fallow land.

The national rate of stunting among children under 5 years old in 2014 was 37.4 percent, wasting was 11.3 percent, and underweight was 30.1 percent, reflecting widespread chronic malnutrition.[24]

In Nepal's traditionally patriarchal social hierarchy system, women, Dalits,[25] and other disadvantaged groups typically have less access to social services and little access to property ownership or cash. Dalits in the Terai (the plains) have among the highest poverty rates in Nepal (49.2 percent compared to 42.6 percent national average).[26]

The vast majority of Nepali women (90.5 percent)[27] are engaged in agriculture. Since the current total fertility rate is 2.3[28] nationally, but much higher in some areas (particularly in the Mid-Western and Far-Western regions), most women are involved in multiple roles such as caring for fields and livestock, caring for children, and doing domestic chores. Political uncertainty and declining employment opportunities have resulted in a significant number of male laborers migrating for work abroad, which has added more responsibilities for women.[29] Women and children typically have higher levels of poverty and suffer greater hunger levels.

1.2.2 Demography of the ZOI

Tables 1.1 and **1.2** present individual and household population estimates, respectively, for the ZOI for 2015. Estimates of the total 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

[22] CIA. (2013).
[23] The World Bank. (2013c).
[24] CBS Nepal and UNICEF. (2015a).
[25] Dalits are considered the most disadvantaged caste in Nepal.
[26] UNDP. (2008).
[27] FAO. (2013).
[28] CBS Nepal and UNICEF. (2015a). p. 114.
[29] Adhikari and Podhisita. (2010).

households). The ZOI estimates for the total population of individuals as well as households are also disaggregated by gendered household type.[30]

The population estimates in the ZOI are based on district-level population projections from the 2011 national census in Nepal.[31] The number of individuals in the different subgroups is estimated using the 2014 Nepal Multiple Indicator Cluster Survey (MICS).[32] Specifically, the percentages of individuals in certain groups were calculated from the Nepal MICS and then applied to the projected total or 5-year age groups of the Nepal ZOI in 2015. The rural/urban population disaggregates are adjusted for the new urban-rural conversion since the 2011 population census.

As shown in Table 1.1, there are an estimated 6.9 million individuals living within the Nepal ZOI. There are about 2 million women of reproductive age (15-49), 0.7 million children under age 5, and 2.1 million male and female youth (age 15-29) in the ZOI. An estimated 62 percent of ZOI residents live in rural areas, and the remaining 38 percent reside in urban areas based on the new urban definition.

The distributions of the total ZOI populations by gendered household type were estimated from the 2011 national census and projected 2015 populations. As indicated by Table 1.1, the estimated percentages of the population residing in male and female adult(s), female adult(s) only, male adult(s) only, and children only (no adults) household types are 86.3 percent, 12.0 percent, 1.5 percent, and 0.2 percent respectively.

Table 1.2 shows the estimated total number of households and the distribution of the gendered type households in 2015 in the Nepal ZOI. The number of gendered households in the ZOI was estimated by using the 2001-2011 inter-censual household growth rates. The total number of households was estimated by dividing the total population by estimated average household size average (4.92 members). There are approximately 1.4 million households in the Nepal ZOI. About 78 percent of the households in the ZOI are male and female adult households.

[30] See Section 2.2.1 Standard Disaggregates for the definition of gendered household type.
[31] CBS Nepal. (2015b).
[32] CBS Nepal and UNICEF. (2015b).

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

Category of individuals	Estimated population
Total population	6,939,050
Total population, by sub-population	
Women of reproductive age (15-49 years)	2,014,113
Children 0-59 months	713,622
Children 0-5 months	60,658
Children 6-23 months	204,239
Children 6-59 months	652,964
Youth 15-29 years	2,097,135
Total population, by area type	
Urban (Old Definition)	780,702
Rural (Old Definition)	6,158,348
Urban (New Definition)	2,631,384
Rural (New Definition)	4,307,666
Total population, by gendered household type	
Male and female adult(s)	5,991,657
Female adult(s) only	832,909
Male adult(s) only	104,044
Child(ren) only (no adults)	10,440
Women of reproductive age, by pregnancy status	
Pregnant	83,586
Non-pregnant	1,930,528
Children 0-59 months, by child sex	
Male	359,669
Female	353,953
Children 0-5 months, by child sex	
Male	32,586
Female	28,072
Children 6-23 months, by child sex	
Male	105,383
Female	98,856
Children 6-59 months, by child sex	
Male	327,083
Female	325,881
Youth 15-29 years, by sex	
Male	978,999
Female	1,118,136

Source: Population and Housing Census of Nepal, 2011; Population Projections for Nepal, 2011-2031, retrieved from http://cbs.gov.np/image/data/Population/Population%20projection%202011-2031/PopulationProjection2011-2031.pdf; and Nepal Multiple Indicator Cluster Survey 2014, retrieved from http://cbs.gov.np/sectoral_statistics/social_statistics/findings_tables.

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

Category of households	Estimated population
Total number of households in ZOI	1,409,417
Number of households, by gendered household type	
Male and female adult(s)	1,099,381
Female adult(s) only	261,063
Male adult(s) only	43,924
Child(ren) only, (no adults)	5,049

Source: Population and Housing Census of Nepal, 2011; and Population Projections for Nepal, 2011-2031.

1.2.3 Agriculture in the ZOI

Feed the Future selected the value chains to be supported in Nepal using the following criteria: high unmet demand; high potential to increase production; prioritization in the CIP; significant nutritional content and share of diet; production by a large number of smallholders; and high potential and applicability in focus districts.

The U.S. Government determined that it can best support the Government of Nepal in addressing Nepal's most pressing food security, poverty, and nutrition challenges through balanced interventions in high-value vegetable value chains and complementary support to cereals (rice and maize), pulses (lentils), and livestock. Prior to Feed the Future investments, change in the area, yield, and production of these crops between 2000-01 to 2010-11 is shown in **Table 1.3.**

Table 1.3. Percent change in area, yield and production of crops from 2000-01 to 2010-11

	Percent change from 2000-01 to 2010-11		
Value chain	Area	Yield	Production
Rice	-4.1%	10.3%	5.8%
Maize	9.9%	26.7%	39.3%
Lentils	16.2%	24.5%	44.6%
Vegetables	55.3%	24.8%	93.8%

Source: Statistical Information on Nepalese Agriculture, 2010-2011. Government of Nepal Ministry of Agriculture and Cooperatives Agri-Business Promotion and Statistics Division, December 2011.

A 2016 report, the Food and Nutrition Security in Nepal: A Status Report, prepared jointly by Ministry of Agricultural Development and Nepal's Central Bureau of Statistics (CBS) for the FAO, presents trends in cereals production in Nepal on a per capita basis between 2000 and 2013. The results show that the total cereal production (paddy, maize, and wheat, with paddy in rice equivalent) increased by 33 percent from 1999-2001(5.2 million MT) to 2011-2013 (6.9 million MT), and that the annual growth rate seen in the 1990s (2.3 percent) was largely sustained during the 2000s (with 2 percent between 2000-13).[33]

[33] Ministry of Agricultural Development and CBS Nepal. (2016). p. 3.

Feed the Future is not proposing to replace cereals with vegetables, but rather is promoting crop diversification and intercropping. Previous projects have shown that households growing vegetables for sale in markets consume 20 percent of the produce grown, thereby contributing to improved household nutrition. Increased income has proven to contribute to increased food security. Cultivation of vegetables using improved production techniques results in a significantly higher gross margin than cereals. Under the USAID-funded Nepal Flood Recovery Program, when farmers switched from producing cereals to vegetables, their incomes increased by 200 percent. High value vegetable production can have an especially large impact on incomes and food security for producers in marginal areas and/or with small landholdings. Input and labor costs are higher for vegetables, but this is more than compensated for by increased income per unit of land.[34] The increased input and labor startup costs for vegetables reflect the need for improved techniques to address labor shortages and enhance labor productivity (e.g., mechanization, conservation agriculture, and water management), as well as to tackle the issues of input costs (for example, improving access to credit and financial services).

Feed the Future is investing in high value vegetables, cereals, pulses, and livestock under an integrated farming systems approach. The integrated farming systems approach includes promotion of intercropping or relay cropping during the fallow season, crop rotation to improve nutrient retention; locally-adapted improved varieties (i.e., high yielding, early harvest, and flood tolerant varieties); minimal tillage systems with residue management; timely provision of quality inputs, improved water management; and mechanization adapted to the scale of farms in supported regions.

The focus subsectors of high value vegetables, cereals, pulses, and livestock present many opportunities to integrate women and youth in employment-generating activities. Livestock (e.g., poultry and goats) will also be included as part of the farming system, in order to reach the landless and most marginalized. Enhanced cereal productivity and marketing systems alongside high value vegetable investments increase the likelihood of success by ensuring sufficient local-level production of diverse foods and by increasing resilience in the system.

Conservation agriculture approaches for staple crops can save labor when machinery is used, while also conserving water and fuel and improving soil quality. The labor benefit is of particular value in Nepal, where increasing labor shortages are affecting farming, particularly in female-headed households. Conservation agriculture is also important for climate change adaptation.

Gender is an important cross-cutting issue addressed by the Feed the Future initiative, along with assisting youth and disadvantaged groups. With the high rate of male seasonal migration, in which men leave their households to migrate to India and return for festivals and harvests,

[34] USAID. (2011). p. 12.

women head a large percentage of rural households. By focusing on agricultural value chains, Feed the Future can have a major impact on women and children.

Investments in agriculture will be linked to household nutrition. On the supply side, nutrition will be improved by the production of nutritious foods for the household, sale of agricultural products that generate income for the purchase of nutritious foods, and distribution of these same smallholder farmer-produced nutritious foods to target smallholders as beneficiaries. This will be paired with demand-side activities, including nutrition and hygiene education.

1.3 Purpose of This Report

The purpose of this interim assessment is to provide the USG interagency partners, USAID Bureau for Food Security (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.

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

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

2.1 Data Sources

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

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

Indicator	Baseline		Interim	
	Data source	Date collected	Data source	Date collected
Daily per capita expenditures (as a proxy for income) in USG-assisted areas	NLSS III 2010-2011	February 2010-January 2011	Nepal AHS 2013-2014	December 2013-June 2014
Prevalence of Poverty: Percent of people living on less than $1.25/day	NLSS III 2010-2011	February 2010-January 2011	Nepal AHS 2013-2014	December 2013-June 2014
Depth of Poverty: Mean percent shortfall relative to the $1.25/day poverty line	NLSS III 2010-2011	February 2010-January 2011	Nepal AHS 2013-2014	December 2013-June 2014
Women's Empowerment in Agriculture Index indicators	FTF FEEDBACK ZOI Survey	April-May 2013	FTF FEEDBACK ZOI Survey	August-September 2015
Prevalence of households with moderate or severe hunger	FTF FEEDBACK ZOI Survey	April-May 2013	FTF FEEDBACK ZOI Survey	August-September 2015
Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age	FTF FEEDBACK ZOI Survey	April-May 2013	FTF FEEDBACK ZOI Survey	August-September 2015
Prevalence of exclusive breastfeeding among children under 6 months of age	Nepal DHS 2011	February-June 2011	Nepal MICS 2014	February-June 2014
Prevalence of children 6-23 months receiving a minimum acceptable diet	Nepal DHS 2011	February-June 2011	Nepal MICS 2014	February-June 2014
Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities	n/a	n/a	FTF FEEDBACK ZOI Survey	August-September 2015
Prevalence of children 6-23 months who consume targeted nutrient-rich value chain commodities	n/a	n/a	FTF FEEDBACK ZOI Survey	August-September 2015
Prevalence of underweight women	Nepal DHS 2011	February-June 2011	FTF FEEDBACK ZOI Survey	August-September 2015

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

Indicator	Baseline		Interim	
	Data source	Date collected	Data source	Date collected
Prevalence of stunted children under 5 years of age	Nepal DHS 2011	February-June 2011	Nepal MICS 2014	February-June 2014
Prevalence of wasted children under 5 years of age	Nepal DHS 2011	February-June 2011	Nepal MICS 2014	February-June 2014
Prevalence of underweight children under 5 years of age	Nepal DHS 2011	February-June 2011	Nepal MICS 2014	February-June 2014

2.1.1 Primary Data: The ZOI Interim Survey in Nepal

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.

Survey Sample Design

The survey sample for the Nepal ZOI interim assessment comprises 20 districts in three regions: Far-Western Region (6 districts)—Achham, Baitadi, Dadeldhura, Doti, Kailali, and Kanchanpur; Mid-Western Region I (5 districts)—Bardiya, Dailekh, Jajarkot, Salyan, and Surkhet; Mid-Western Region II (5 districts)—Banke, Dang, Pyuthan, Rolpa, Rukum; and Western Region (4 districts)—Arghakhanchi, Gulmi, Kapilvastu, and Palpa.

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

Sample Size Calculation

The purpose of the interim indicator assessment is to provide estimates of the population-based indicators with an acceptable level of statistical accuracy. The interim survey sample sizes were calculated to provide point estimates of indicator values rather than calculating sample sizes to detect change in indicator values over time. Point estimates measure indicators for a point in time with a given amount of precision, whereas measuring change over time would compare differences in indicator values between baseline and interim. A sample size based on point estimates is preferable to a sample designed to measure change over time, because point estimates will require a smaller sample size. The baseline sample size is larger than the 2015 interim survey sample size because the baseline sample was powered to measure change from baseline to a second interim survey in 2017. See the *Limitations of the Survey* subsection below for additional discussion about the differences in sample sizes between the Feed the Future FEEDBACK (FTF FEEDBACK) ZOI surveys.

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 based on 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 United States Agency for International Development (USAID) Mission's 2015 targets in the Feed the Future Monitoring System. In cases where indicators have no targets, 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 former either 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 and women of reproductive age for underweight women) in the total population and the average number of household members were estimated based on baseline survey data, and used to calculate the number of households needed for an indicator.[35]

Sample sizes were calculated for each of the key Feed the Future indicators (poverty, daily per capita expenditures, stunting, and underweight). For exclusive breastfeeding, we calculated the sample size required to obtain at least 70 children age 0-5 months. Collecting data on at least 70 children was chosen in order to be large enough to provide some precision in measurement, but not so large as to require a large number of households. Exclusive breastfeeding in general requires a large sample size because there are few children of breastfeeding age.

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 in the table. The minimum number of households required to capture 70 infants aged 0-5 months is 1,308 households. The exclusive breastfeeding data is obtained from the Nepal Multiple Indicator Cluster Survey (MICS). The minimum sample size of 1,308 households is met in the MICS sample. The sample size requirements for stunted and underweight children are also met in the MICS sample.

The interim population-based survey (PBS) collected information on six indicators as indicated in Table 2.1. The number of households needed for these indicators at the ZOI level is 160. However, USAID/Nepal was also interested in disaggregating the Women's Empowerment in Agriculture Index (WEAI) findings by Terai and Hill, and by caste/ethnic group (Brahmin/Chhetri, Dalit, and indigenous/Janajati). These additional disaggregations require a larger sample size. The number of households needed for the WEAI indicator for the interim PBS is 93. Because Dalits account for 17.3 percent of total population, in order to provide estimates of the WEAI for Dalit people with an acceptable level of statistical accuracy and

[35] Stukel and Deitchler. (2012).

adjust for nonresponse, 597 households were needed. To ensure sufficient sample distribution in all 20 districts in the ZOI, 880 households were allocated in 44 clusters, with a sample take of 20 households per cluster.

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

Indicator	Interim data source	Baseline value	DEFF	Std. dev.	Estimated interim value	Sample size	Number of households needed
Prevalence of poverty	AHS 2013/14	32.5	3.42	-	25.00	246	255
Prevalence of underweight children	MICS 2014	34.9	1.8	-	30.5	147	332
Prevalence of stunted children	MICS 2014	45.2	2	-	39.20	183	414
Per capita expenditures (as a proxy for incomes)	AHS 2013/14	2.12	2.73	1.6	2.33	495	509
Household hunger	FTF FEEDBACK Interim PBS	10.6	4.6	-	9.54	153	160
Women's dietary diversity	FTF FEEDBACK Interim PBS	3.9	6.4	1.3	4.29	226	<100
Prevalence of exclusive breastfeeding (minimum sample size)	MICS 2014	71.1	1.1	-	78.21	70	1,308

Sample Selection

Sampling was based on a two-stage design, with stratification by region and urban/rural. In the first stage, 44 enumeration areas (EAs) were selected from the 2011 Nepal Population Census in 20 districts. EA selection in each stratum was performed by probability proportional to size (PPS) sampling. Also, each stratum was allocated a minimum of two EAs.

In the second stage, 20 households within each selected EA were selected randomly from a list of eligible households.

Sample Weights

Data required for the statistical weighting of survey data were collected throughout the sampling process. These data included, but were not limited to: (1) number of households from the sampling frame used for selection of EAs; (2) population of strata (i.e., region, urban/rural) from which EAs are drawn; (3) number of households in 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.

Questionnaire Design

The survey instrument used for the ZOI interim survey in Nepal was based on the baseline ZOI survey instrument and an update to the standard Feed the Future questionnaire.[36] It was customized in the following ways: Module D was customized to reflect common housing materials; Module E was excluded because secondary data sources (2013/2014 Annual Household Survey (AHS) was used for these indicators; food groups listed in Modules H and I were revised to reflect the common foods and infant formulas consumed in Nepal, and the specific food items needed to produce nutrition-sensitive agriculture indicators, which are cauliflower, cabbage, pumpkin, green leafy vegetables (saag/spinach), okra, and bitter gourd. Also, questions relating to anemia in Modules H and I were removed because FTF FEEDBACK did not collect anemia data in the ZOI interim survey. Finally, child anthropometry was excluded because secondary data (2014 MICS) were used.

FTF FEEDBACK provided training in customization, pretesting, and translation of the questionnaire to New ERA, the in-country data collection partner. FTF FEEDBACK modified the questionnaire based on customizations New ERA recommended and pretest findings, with Bureau for Food Security (BFS) review and approval of the revisions.

The questionnaire was translated into three native languages spoken by 10 percent or more of the population in the ZOI: Nepalese, Tharu, and Abadi. 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.

Fieldwork

Preparation for fieldwork began with thorough training of the New ERA specialists to conduct and supervise fieldwork. A senior FTF FEEDBACK trainer trained 14 New ERA trainers.

The New ERA trainers then trained the field staff from July 9 to July 22, 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

[36] USAID. (2014b).

use of the tablets for data collection. Trainees' comprehension of the material taught 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, New ERA 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 New ERA senior management reviewed findings from the pilot test and made final modifications to procedures, the questionnaires, and the data entry programs.

A final field team of 48 individuals conducted fieldwork from August 8 to September 28, 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. Each of the eight field teams consisted of three interviewers and a field team supervisor, who managed the logistics of the team, work assignments, and general quality of the interviewing process. In addition, each team had one quality control supervisor (QCS) and a quality control interviewer (QCI). The QCS was a senior New ERA staff member responsible for maintaining the overall quality of the interviewing process. The QCI was responsible for reviewing completed questionnaires for completeness and consistency.

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 doing this, data were submitted prior to starting work in the next assigned cluster.

A data manager at FTF FEEDBACK worked with a data manager in New ERA headquarters to review data quality and case completion regularly. These reviews informed the QCS, QCI, and field team supervisor of specific teams of areas that needed improvement to maintain data quality.

Limitations of the Survey

Due to the April 2015 earthquake in Nepal, data collection was postponed to August 2015. The earthquake did not affect roads and specific infrastructure in the survey areas since most of the earthquake damage occurred north-east and west of Kathmandu, primarily in the Central and Eastern Regions. The survey areas were mostly to the south/central areas west of Kathmandu. The survey teams did not report any issues related to the aftermath of the earthquake. The data collection took place in the peak rainy reason, and to compensate for this, the data collection schedule included extra days to allow for any delays related to the monsoon season. In addition, the New ERA team is well-experienced in conducting surveys during the monsoon season and plans were made accordingly for the staff. The survey was programmed to run from August 8 to October 5, 2015; however, the team finished earlier on September 28, 2015.

During the period of data collection, the survey areas particularly in the districts in Mid-Western and Far-Western Regions, faced obstacles in transportation due to political violence and an ongoing fuel crisis. A field monitor was hired to oversee the training of trainers, the pilot test, and the first 2 weeks of data collection (as an extra layer of supervision on behalf of FTF FEEDBACK) to ensure a smooth startup in the field. He was not able to complete his work in the field after the first week of data collection as planned due to violence in the streets and imposed curfews. However, this did not affect the field quality control supervision mechanism, which included one QCS, one QCI, and one field team supervisor for each of the eight field teams. The QCSs, QCIs and field team supervisors continued their respective supervisory roles throughout the period of fieldwork. To compensate for not being able to visit all of the teams in the first 2 weeks of data collection, the field monitor maintained close contact via telephone with all the QCSs and the New ERA field manger to ensure that the eight teams continued data collection as per protocol. The field manager completed supervisory visits to oversee all of the data collection teams. As an added measure, the FTF FEEDBACK data manager completed regular quality control procedures for data collected by all teams and reviewed reports with the New ERA data manager. The New ERA data manager relayed any issues found to the field teams. The teams did not have major delays or issues, were able to successfully navigate those areas facing political turmoil and completed data collection a little earlier than expected.

Seasonality differences in the data sources may have led to some biases in the indicator values between baseline and interim. This issue is discussed in detail in Section 2.1.3. Primary data collection for this interim assessment (FTF FEEDBACK ZOI survey) was mainly conducted during the lean season. At baseline, FTF FEEDBACK collected data during the non-lean season. The seasonality difference in these two surveys may result in household hunger having an upwards bias and dietary diversity having a downward bias at interim. The baseline data source for prevalence of women underweight was the 2011 Demographic and Health Survey (DHS), which was collected during the non-lean season. At interim, the FTF FEEDBACK ZOI survey is the data source for this indicator. This may lead to an upward bias in prevalence of women's underweight at interim, because the FTF FEEDBACK ZOI survey data were mainly collected during the lean season. Child anthropometry indicators do not have a seasonality issue, given that both baseline (2011 DHS) and interim data (2014 MICS) were collected during the same period of the non-lean season. Expenditure and poverty indicators may be affected by seasonality. The baseline data source (2010-2011 Nepal Living Standards Survey (NLSS III) was collected over an entire year and as a result covered both the lean and non-lean seasons, whereas the interim data source (2013-2014 AHS) was collected over half a year during the non-lean season. The difference in coverage of seasons in these two data sources could lead to an upward bias expenditures and a downward bias poverty at the interim compared to baseline.

Differences in methods of data collection between data sources could also limit the comparability between baseline and interim indicator values. Some of the data sources were very similar, and where the data sources were less similar, efforts were made to ensure the

calculation of indicators across data sources was as close as possible. Methods for data collection, survey instruments and calculation of indicators were virtually the same across the baseline and interim FTF FEEDBACK ZOI surveys. DHS and MICS are generally very similar in data collection methods and survey instruments. The methods for calculation of the child anthropometry indicators were the same for these two data sources. Methods of data collection were very similar, but the survey instruments were different for the 2010-2011 NLSS III and 2013-2014 AHS. Differences in the instruments were handled in the calculation of the indicators. The AHS collected data on some items not found in the NLSS III. In order to make the AHS indicator values compatible with those for the NLSS, when consumption aggregates were calculated for the AHS, only those items available in the NLSS III were included in the AHS consumption aggregates.

Given the difference in seasons and instruments compared to the baseline 2010-2011 NLSS III, readers may question why the 2013-2014 AHS was chosen as the interim data source for expenditure and poverty indicators. The other option was to collect consumption/expenditure data during the interim FTF FEEDBACK ZOI survey. If consumption data were collected by the interim FTF FEEDBACK ZOI survey, those data would have only been for a 2-month period mainly during the lean season. The AHS, on the other hand, covers a much longer time period and was therefore viewed as a more appropriate choice than collecting consumption data during the interim FTF FEEDBACK ZOI survey. In addition to the time period of data collection, the differences in the instruments could be an issue. The differences in instruments can be handled during analysis, as described above.

The small sample size for the interim FTF FEEDBACK ZOI survey has also been noted as a potential limitation. The sample size for the interim FTF FEEDBACK ZOI survey was designed for point estimates of indicators and not powered to measure change in the indicators over time. The interim survey sample size is therefore sufficient for point estimates. To power the interim sample for change would have required a much larger sample than feasible given the short time period between the baseline and interim survey in 2015. The indicators are not expected to change much between baseline and 2015, which implies the sample size required to measure change would be large. The second interim survey (planned for 2017) will be powered to measure change from the baseline to that survey. That is feasible because the sample size required is reasonable. Given the longer time period from baseline to the second interim survey in 2017, indicators will have enough time to change in order that the required sample size be smaller than would have been required to measure change from baseline to the first interim survey in 2015.

It should also be noted that the use of 2011 DHS data for the Nepal baseline assessment and 2014 MICS data for the Nepal interim assessment does not pose a limitation. Both the DHS and MICS datasets are nationally representative and thus can be subset to the ZOI areas only, as was done for both the baseline and interim assessments. Both datasets were collected during

the same time of year (February to June). The anthropometry indicator calculation method used for both baseline and interim is identical, relying on World Health Organization (WHO) methods and statistical programs. The age groups used for the indicators calculated from DHS and MICS are also identical between the two assessments, and adhere to the Feed the Future Indicator Handbook (i.e., 0-59 months for children's anthropometry, 6-23 months for minimum acceptable diet (MAD), and 0-5 months for exclusive breastfeeding).

ZOI Interim Survey Response Rates

Table 2.3 presents the response rates for the ZOI interim survey for Nepal. The components and the response rates for the sampled households, women of reproductive age (15-49), primary adult female decisionmakers (for the WEAI module), as well as children under 5 years are presented. Response rates are presented by rural/urban residence as well as for the total sample.

Table 2.3. Results of the household and individual interviews for the ZOI interim survey in Nepal 2015

Response rates and components	Residence		Total
	Urban	Rural	
Households			
Households selected	161	730	891
Households occupied	152	690	842
Households interviewed	151	687	838
Household response rate[1]	99.3	99.6	99.5
Women of reproductive age (15-49 years)			
Number of eligible women	205	873	1,078
Number of eligible women interviewed	185	809	994
Eligible women response rate[2]	90.2	92.7	92.2
Primary adult female decisionmakers (age 18+ years)			
Number of eligible women	142	670	812
Number of eligible women interviewed	139	661	800
Primary adult female response rate[2]	97.9	98.7	98.5
Children under 3 years of age[3]			
Number of eligible children	35	219	254
Number of caregivers of eligible children interviewed	31	198	229
Eligible children response rate[2]	88.6	90.4	90.2

[1] 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.

[2] 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 3 years of age [Module I], the primary caregivers of the children served as the respondents, not the children directly.)

[3] In contrast to other FTF FEEDBACK ZOI interim surveys, which generally collected data on children under 5 years of age, the Nepal ZOI interim survey collected data for children under 3 years of age. Data from the children's module (Module I) were used to calculate the percent of children 6-23 months consuming targeted NRVCC. All other children's indicators in the Nepal ZOI were calculated with secondary MICS data.

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

2.1.2 Secondary Data

The Nepal interim assessment, similar to the Nepal baseline assessment, utilizes secondary data. Two secondary data sources were used for the Nepal interim assessment: (1) the 2013-2014 Nepal AHS, and (2) the 2014 Nepal MICS. The AHS was used for the calculation of three indicators in the ZOI: Daily per capita expenditures, Prevalence of poverty, and Depth of poverty. MICS data were used for the calculation of five indicators in the ZOI: Prevalence of exclusive breastfeeding among children under 6 months, Prevalence of a MAD among children 6-23 months, Prevalence of stunted children under 5 years of age, Prevalence of wasted children under 5 years of age, and Prevalence of underweight children under 5 years of age.

As shown in **Table 2.4**, the Nepal AHS was conducted from December 2013 to June 2014, and the ZOI sample for the three poverty-related indicators was 600 households in 40 EAs. The MICS data collection occurred between February and June 2014, and the sample of children in the ZOI varied by indicator, ranging from 145 infants under 6 months to 1,573 children under 5 years of age. The MICS sample included 144 EAs across the ZOI.

Table 2.4. Secondary data sources used for the ZOI interim assessment in Nepal 2015

Name of data source	Indicators	Fieldwork dates	Sample size in the ZOI
Nepal Annual Household Survey (AHS) 2013-2014	Daily per capita expenditures	December 2013-June 2014	600
Nepal Annual Household Survey (AHS) 2013-2014	Prevalence of Poverty	December 2013-June 2014	600
Nepal Annual Household Survey (AHS) 2013-2014	Depth of Poverty	December 2013-June 2014	600
Nepal Multiple Indicator Cluster Survey (MICS) 2014	Prevalence of exclusive breastfeeding among children under 6 months	February-June 2014	145
Nepal Multiple Indicator Cluster Survey (MICS) 2014	Prevalence of a minimum acceptable diet among children 6-23 months	February-June 2014	500
Nepal Multiple Indicator Cluster Survey (MICS) 2014	Prevalence of stunted children under 5 years of age	February-June 2014	1,573
Nepal Multiple Indicator Cluster Survey (MICS) 2014	Prevalence of wasted children under 5 years of age	February-June 2014	1,573
Nepal Multiple Indicator Cluster Survey (MICS) 2014	Prevalence of underweight children under 5 years of age	February-June 2014	1,573

2.1.3 Comparability of Data Sources Used for the ZOI Interim Assessment

This section discusses the comparability across data sources for the interim assessment.

Seasonality

The FTF FEEDBACK interim data collection occurred between August 8 and September 28, 2015, which is considered the peak rainy season as seen in **Table 2.5** below. This time period falls mostly in the lean/hunger season.

Table 2.5. Seasonal issues affecting comparison of indicators across data sources

Indicator	Season of data collection for interim
Daily per capita expenditures	Half of year—AHS, non-lean season
Prevalence of Poverty	Half of year—AHS, non-lean season
Depth of Poverty	Half of year—AHS, non-lean season
Women's Empowerment in Agriculture Index	Parts of lean and non-lean seasons
Prevalence of households with moderate or severe hunger	Parts of lean and non-lean seasons
Women's Dietary Diversity	Parts of lean and non-lean seasons
Prevalence of exclusive breastfeeding among children under 6 months of age	Non-lean season
Prevalence of children 6-23 months receiving a minimum acceptable diet	Non-lean season
Prevalence of underweight women	Parts of lean and non-lean seasons
Prevalence of stunted children under 5 years of age	Non-lean season
Prevalence of wasted children under 5 years of age	Non-lean season
Prevalence of underweight children under 5 years of age	Non-lean season

As presented in the table above, the primary data collection occurred mostly during the peak of the rainy season (August 8 to September 15, 2015). During this season, there is food scarcity in the community. From September 16 onwards, the monsoons begin to decline, and people begin early paddy harvesting. Hence, the entire period of data collection from August 8 to September 28, 2015 is considered to be mostly lean/hunger and partly non-lean seasons. FTF FEEDBACK collected data at baseline from April 15 to May 28, 2013, which is outside of the rainy season and is in the non-lean season. This seasonality difference could lead to an upward bias in household hunger and a downward bias in dietary diversity at interim compared to baseline.

In terms of the other data sources used, seasonality is not an issue for the child anthropometry data sources (DHS and MICS), but could be an issue for women's underweight data sources (DHS and FTF FEEDBACK ZOI survey), and the expenditure and poverty data sources (NLSS III and AHS). The 2014 MICS survey data (February to June 2014) collection time period matches that of the 2011 Nepal DHS (February to June 2011). Therefore, there are no issues of seasonality between these two surveys. The women's underweight data source for baseline (2011 DHS) was collected during the non-lean season, but the data source at interim

(FTF FEEDBACK ZOI survey) was mainly collected during the lean season. This difference in seasonality could result in an upward bias in prevalence of underweight women at interim compared to baseline. The 2010-2011 NLSS III was collected year-round (February 2010 to February 2011) and 2013-2014 AHS was collected over half a year (December 2013 to June 2014). Analysis based on the 2013-2014 AHS could lead to an upward bias in expenditures and a downward bias in poverty compared to the 2010-2011 NLSS III, because all data for the AHS were collected during the non-lean season, whereas only part of the NLSS III data were collected during the non-lean season and part were collected during the lean season.

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.

These variables are coded consistently; however, because data have been drawn from the ZOI interim survey, the MICS, and the AHS, there may be minor cross-source variations in the data used to derive the standard disaggregates. These are noted in the variable descriptions below. The data source used for each Feed the Future indicator is also the data source used to produce the disaggregate variables presented in the associated descriptive tables.

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 MAD table (Table 6.6), which presents the MAD indicator for children age 6-23 months, children's age in months is disaggregated into 6-month age groups as follows: 6-11 months, 12-17 months, and 18-23 months. For the children's anthropometry tables (Tables 7.2, 7.3, and 7.4), which present the prevalence of stunting, wasting, and underweight for all children under 5 years of age, children's age in months is disaggregated into 12-month age groups as follows: 0-11 months, 12-23 months, 24-35 months, 36-47 months, and 48-59 months.

Age in Years

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

Child Sex

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

Educational Attainment (Household)

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

Educational Attainment (Individual)

Educational attainment at the individual level reflects the highest level of education attained by individual household members, as reported in the household roster of the corresponding questionnaire. This variable comprises 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 the Gender Impact of FTF* notes that household-level indicators should be disaggregated by *gendered household types* – that is: (1) households where members include both male and female adults;[37]

[37] Adult is defined as age 18 or older.

(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 and may perpetuate existing social inequalities and prioritization of household responsibilities that may be detrimental to women.[38]

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.

[38] USAID. (2014a). p. 1.

- 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.

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 chapter 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 Nepal ZOI, the average household size is 4.9 people. Male and female adult households have an average of 5.3 members, whereas female adult-only households have an average of 3.0 people. (The estimate for male adult-only and child-only households are suppressed due to small sample sizes, n<30.) 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 1.5. Regarding children, the average number of children under 2 years is 0.2; the average number of children 0-4 years is 0.5; and the average number of school-age children, those 5-17 years, is 1.6. With the exception of mean number of children 0-4, all of these household demographic characteristics – mean number of adult females, children under 2, and children 5-17 – vary significantly by gendered household type.

Over half (56.8 percent) of adults in ZOI households are female. About 8.4 percent of households have no education at all, and 13.5 percent have less than primary education. Nearly half (47.4 percent) of ZOI households have primary education (i.e., they have at least one member whose highest level of education is completed primary, but no members with completed secondary or greater). Finally, nearly one-third (30.8 percent) of households in the Nepal ZOI have secondary or more education.

Gendered household type is significantly associated with household educational attainment. Notably, among female adult-only households (those households with no adult males) 18.7 percent have no education at all, while only 10.5 percent (1 in 10 female adult-only households) have secondary or more schooling. In comparison, only 6.5 percent of male and female adult households have no education at all, while over one-third (34.1 percent) have secondary or more schooling.

Table 3.1. Household demographic characteristics

Characteristic	Total (All households)	By gendered household type[a]			
		Male and female adults	Female adult(s) only	Male adult(s) only	Child only
Mean household size[a]	4.9	5.3	3.0	^	^
Mean number of adult female household members[1,2,a]	1.5	1.6	1.3	^	^
Mean number of children (<2 years)[1,a]	0.2	0.2	0.1	^	^
Mean number of children (0-4 years)[1]	0.5	0.6	0.4	^	^
Mean number of children (5-17 years)[1,a]	1.6	1.7	1.3	^	^
Mean percentage of adults who are female[1,2,a]	56.8	50.9	100.0	^	^
Highest education level attained[a]					
No education	8.4	6.5	18.7	^	^
Less than primary	13.5	11.9	22.7	^	^
Primary	47.4	47.4	48.1	^	^
Secondary or more	30.8	34.1	10.5	^	^
n[3]	**838**	**696**	**118**	**19**	**5**

^ Results not statistically reliable, n<30.

[1] The count is based on household members with known age.

[2] 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.

[3] Sample n is the unweighted count of all households that responded to the survey.

[a] 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, Nepal 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 for primary adult decisionmakers according to sex.

Among all primary adult decisionmakers, the modal age group is 30-39; one-quarter (25.0 percent) of decisionmakers 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). About 10.0 percent of female primary decisionmakers are in the 18-24 year age group, while only 5.5 percent of male primary decisionmakers are between the ages of 18 and 24 years.

With respect to literacy and educational attainment among primary adult decisionmakers in the Nepal ZOI, nearly half (49.3 percent) are literate (i.e., report they can read and write). Literacy among primary adult decisionmakers is also significantly associated with sex; over twice as many male decisionmakers (69.2 percent) as female decisionmakers (32.5 percent) are literate.

The modal educational category among primary decisionmakers is no education. Over half (52.6 percent) of primary decisionmakers have no schooling at all, and an additional 16.9 percent have less than primary. As with literacy, 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. Over two-thirds (68.7 percent) of female decisionmakers have no education at all; among male decisionmakers, however, 33.4 percent have no education. Moreover, a greater percentage of male decisionmakers than female decisionmakers have secondary or more schooling (16.5 percent and 6.8 percent, respectively).

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

Characteristic	Total (all primary adult decisionmakers)		By primary adult decisionmaker sex[a]			
			Male		Female	
	Percent	n	Percent	n	Percent	n
Age[a]						
18-24	7.9	1,493	5.5	681	10.0	812
25-29	10.8	1,493	9.0	681	12.3	812
30-39	25.0	1,493	23.7	681	26.1	812
40-49	23.7	1,493	23.8	681	23.6	812
50-59	17.6	1,493	18.8	681	16.5	812
60+	15.0	1,493	19.1	681	11.5	812
Literacy[a]						
Percent literate[1]	49.3	1,493	69.2	681	32.5	812
Educational attainment[a]						
No education	52.6	1,493	33.4	681	68.7	812
Less than primary	16.9	1,493	23.3	681	11.6	812
Primary	19.3	1,493	26.9	681	13.0	812
Secondary or more	11.2	1,493	16.5	681	6.8	812

[1] The percent who are literate comprises those who report that they can both read and write.

[a] 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, Nepal 2015.

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 who have access to an improved water source, improved sanitation, electricity, and solid cooking fuel. The average number of people per sleeping room, as well as roof, exterior wall, and floor materials are also presented. Values are shown for all households.

Table 3.3 reveals that the great majority of households (92.8 percent) in the Nepal ZOI have access to improved water. This is very similar to the national value from the 2014 Nepal Multiple Indicator Cluster Survey (MICS); nationally, 93.3 percent of Nepali household members have improved sources of drinking water.[39]

Relative to improved water, a smaller share of Nepali ZOI households has access to improved sanitation. As shown in Table 3.3, about 61.9 percent has access to improved sanitation facilities. The 2014 Nepal MICS improved sanitation estimate for all household members (nationally) is very similar, at 60.1 percent.[40]

Households in the Nepal ZOI have an average of 2.5 people per sleeping room, slightly higher than the national value from the 2014 Nepal MICS, at 2.4 people per sleeping room.[41] Most households in the ZOI (86.4 percent) report using solid cooking fuel, an MDG indicator, and 80.4 percent of ZOI households have access to electricity. In the 2014 Nepal MICS, for comparison, 74.7 percent of household members nationally relied on solid cooking fuels, and 84.9 percent of households nationally have access to electricity.[42]

As shown in Table 3.3, most households (86.5 percent) in the Nepal ZOI have finished roofs, defined as roofs made of galvanized or corrugated sheets, wood, calamine or cement fiber, tile or slates, cement or concrete, and roofing shingles. About 13.1 percent have natural roofs, or roofs made from thatch, palm leaves, or sticks (or no roof at all). Less than 1percent (0.3 percent) have rudimentary roofs.

Table 3.3 also shows that most ZOI households (56.9 percent) have rudimentary walls, or walls made with bamboo with mud, stone with mud, uncovered adobe, plywood, cardboard, reused wood, or metal sheeting. A smaller percentage (30.8 percent) have finished walls, or walls made of cement, stone with lime/cement, bricks, cement blocks, covered adobe, or wood planks/shingles. About 12.3 percent have natural walls, defined as no walls or walls made of cane/palm/trunks, or mud/sand.

[39] CBS Nepal and UNICEF. (2015a). p. 8.
[40] Ibid.
[41] Ibid., p. 48.
[42] Ibid., pp. 49 and 108.

Most ZOI households (84.0 percent) have natural floors (floors of earth/sand or dung), and 16.0 percent have finished floors (floors of parquet/polished wood, vinyl or asphalt strips, ceramic/slate tiles, cement, or carpet).

For comparison with the ZOI estimates for roofs, walls and floors shown in Table 3.3, the 2014 Nepal MICS reveals that 85.3 percent of Nepali households (nationally) have finished roofs, 41.2 percent have finished walls, and 34.9 percent have finished floors.[43]

Table 3.3. Household dwelling characteristics

Characteristic	Total (All households)	
	Estimate	n
Percent with improved water source[1]	92.8	838
Percent with improved sanitation[2]	61.9	838
Mean persons per sleeping room[3]	2.5	838
Percent using solid fuel for cooking[4]	86.4	836
Percent with access to electricity	80.4	838
Household roof materials (%)[5]		
Natural	13.1	835
Rudimentary	0.3	835
Finished	86.5	835
Household exterior wall materials (%)[6]		
Natural	12.3	838
Rudimentary	56.9	838
Finished	30.8	838
Household floor materials (%)[7]		
Natural	84.0	838
Rudimentary	0.0	838
Finished	16.0	838

[1] 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.

[2] Improved sanitation facilities are those that separate human excreta from human contact and include the 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. 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).

[3] The average number of persons per sleeping room is a common indicator of crowding (UNDG, 2003).

[4] 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.

[5] Natural roofs include no roof and thatch/palm leaf/sticks. Rudimentary roofs include rustic mat, palm/bamboo, wood planks, cardboard, and mud with wooden poles. Finished roofs include galvanized/corrugated sheet, wood, calamine/cement fiber, tiles/slates, cement/concrete, and roofing shingles. The other category is removed from percentages.

[6] Natural walls include no walls, cane/palm/trunks, and mud/sand. 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.

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

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

[43] Ibid., p. 49.

3.3 Education

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

In Nepal, primary school consists of 5 years of schooling (grades 1-5), beginning at age 6. This is followed by three additional middle school years (grades 6-8). Secondary school consists of lower secondary (grades 9-10), which is followed by a national School Leaving Certificate examination after grade 10, and higher secondary (grades 11-12).[44]

Table 3.4 reveals that the age group where school attendance is most prevalent is age 5-9; nearly all (96.0 percent) 5-9 year-old children in the Nepal ZOI are currently attending school. This is followed closely by age 10-14; 94.4 percent of ZOI children age 10-14 are currently attending school. By the ages of 15-19, however, current school attendance has declined to 58.5 percent, and by 20-24, the majority of youth in this age group are no longer attending school. Only 17.7 percent of ZOI youth aged 20-24 are currently attending school. As denoted by the superscripts in Table 3.4, current school attendance varies significantly by age, but not by sex.

Attainment of a primary level of education in the Nepal ZOI, as shown in the third column in Table 3.4, varies significantly by both age group and sex. Attainment of primary school peaks in the 15-19 year-old age group; 87.3 percent of ZOI residents age 15-19 have attained primary education. However, the prevalence of primary school attainment declines with increasing age; among the oldest age group, those age 55 or more, only 8.1 percent (fewer than 1 in every 10 ZOI residents aged 55 or more) have attained a primary level of education.

Sex disparities in attainment of primary education are particularly noticeable for specific age groups. While there is no apparent male advantage among the youngest applicable age group (age 10-14), with 51.1 percent of males and 53.3 percent of females age 10-14 having attained a primary level of education, by the older age groups, the male advantage in educational attainment is strongly apparent. As shown in Table 3.4, by the 30-34 year-old age group, more than two-thirds (69.0 percent) of males but fewer than one-quarter (23.8 percent) of females have a primary education, and these disparities continue through the older age groups.

[44] Retrieved from http://www.classbase.com/countries/Nepal/Education-System.

Table 3.4. School attendance, educational attainment, and literacy

Characteristic	Percent			Female to male ratio			n
	Attending school[1,a]	Attained a primary level of education[2,b]	Literate[3,c]	Attending school[1]	Attained a primary level of education[2]	Literate[3]	
Age group[a,b,c]							
5-9	96.0	n/a[1]	61.8	1.0	n/a[1]	1.0	507
10-14	94.4	52.2	95.6	1.0	1.0	1.0	519
15-19	58.5	87.3	95.1	1.1	1.0	1.0	470
20-24	17.7	76.1	90.6	0.7	0.9	0.9	364
25-29	n/a[2]	61.1	81.4	n/a[2]	0.7	0.8	307
30-34	n/a[2]	44.7	61.7	n/a[2]	0.3	0.5	263
35-54	n/a[2]	24.1	40.3	n/a[2]	0.2	0.3	739
55+	n/a[2]	8.1	23.7	n/a[2]	0.2	0.1	490
Sex[b,c]							
Female							
Age group							
5-9	96.9	n/a[1]	62.6	n/a[3]	n/a[3]	n/a[3]	267
10-14	95.3	53.3	95.6	n/a[3]	n/a[3]	n/a[3]	257
15-19	60.1	87.6	93.4	n/a[3]	n/a[3]	n/a[3]	255
20-24	15.0	71.8	86.4	n/a[3]	n/a[3]	n/a[3]	201
25-29	n/a[2]	51.9	71.7	n/a[3]	n/a[3]	n/a[3]	164
30-34	n/a[2]	23.8	42.9	n/a[3]	n/a[3]	n/a[3]	144
35-54	n/a[2]	7.9	18.7	n/a[3]	n/a[3]	n/a[3]	402
55+	n/a[2]	2.9	4.1	n/a[3]	n/a[3]	n/a[3]	247
Male							
Age group							
5-9	95.1	n/a[1]	61.0	n/a[3]	n/a[3]	n/a[3]	240
10-14	93.6	51.1	95.7	n/a[3]	n/a[3]	n/a[3]	262
15-19	56.5	86.8	97.3	n/a[3]	n/a[3]	n/a[3]	215
20-24	21.0	81.3	95.7	n/a[3]	n/a[3]	n/a[3]	163
25-29	n/a[2]	72.4	93.2	n/a[3]	n/a[3]	n/a[3]	143
30-34	n/a[2]	69.0	83.7	n/a[3]	n/a[3]	n/a[3]	119
35-54	n/a[2]	43.4	66.1	n/a[3]	n/a[3]	n/a[3]	337
55+	n/a[2]	13.3	43.5	n/a[3]	n/a[3]	n/a[3]	243

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[2] Not applicable – Current school attendance applies to school-age children and youth only, ages 5-24.

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

[1] The ZOI Interim Survey was conducted in August and September 2015. This overlapped with the school year in Nepal.

[2] The goals of achieving universal primary education and achieving gender equity with respect to education are assessed by multiple MDG indicators, typically using administrative school data. This table presents respondent-reported school attendance, primary educational attainment, and literacy, as well as the ratio of females to males on these measures (UNDG, 2003).

[3] The MDG indicators for universal primary education and gender equity within education are assessed through the literacy rate (MDG indicator #8) and the ratio of literate women to men (MDG indicator #10) among young adults, age 15-24 years (UNDG, 2003).

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

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

In addition to current school attendance and achievement of primary education, Table 3.4 also shows the percent literate in the Nepal ZOI by age group and sex. Both of these variables are significantly associated with literacy. Literacy is highest among the younger age groups (10-14 years [95.6 percent], 15-19 years [95.1 percent], and 20-24 years [90.6 percent]); the great majority of ZOI residents between the ages of 10 and 24 are literate. Literacy then declines appreciably with increasing age groups, and the female disadvantage is very apparent in the older ages. Among ZOI residents age 55 and above, fewer than one-quarter (23.7 percent) are literate. More than 10 times as many males in the age 55 and above age group are literate compared to females (43.5 percent versus 4.1 percent).

Table 3.4 also presents female to male sex ratios of the indicators of current school attendance among household members age 5-24, achievement of primary education among household members age 10 and above, and literacy among household members age 5 and above. 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 the Nepal ZOI, the greatest disparities between males and females appear to be with primary school attainment and literacy at the oldest age groups (e.g., age 55 and above), with ZOI females exhibiting disadvantage on these measures relative to similarly-aged males (sex ratios of 0.2 and 0.1, for primary education and literacy, respectively among those age 55 or above).

4. Household Economic Status

This chapter includes a background discussion of monetary poverty in Nepal, including the logic of the Living Standards Measurement Survey (LSMS)[45] and consumption expenditure methodology.

The *Household Roster* and *Household Consumption Expenditure* modules of the questionnaire are used to calculate the per capita expenditures and prevalence of poverty indicators. The household consumption expenditure module is similar to the LSMS, where households' consumption of various food and non-food items is measured 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 accurately measuring income. According to Deaton, expenditure data are less prone to error, easier to recall, and more stable over time than income data.[46]

Nationally in Nepal, there has been a large decline in the incidence of poverty (based on the national poverty line) from about 42 percent in 1996 to 25.2 percent in 2011.[47] Poverty in rural Nepal remains higher than in urban areas (27 percent in rural areas and 15 percent in urban areas).[48] Per capita income grew during the period between 1995/96 to 2010/11 by 442 percent.[49] During the same time period, there were some notable changes in the sources of income: with a decline from 61 percent to 28 percent in farm income, an increase of non-farm income (from 22 to 37 percent), and an increase in other sources of income including remittances (from 16 to 35 percent). [50]

Despite the decline in overall poverty, there is some variation by development regions, with the highest incidence in poverty in the Far-Western Region (down from 63.9 percent in 1996 to 41 percent in 2004, but with a rise to 45.6 percent in 2011). The Eastern Region has fared better, and has the lowest in poverty, and has been steadily declining (from about 39 percent in 1996 to 21.4 percent in 2011). In FY 2011, consumption-based inequality was lower than income-based inequality. The poorest quintile group had 7.6 percent of its share in total consumption compared to 45.1 percent of the richest quintile group's share in total

[45] Grosh and Glewwe. (1995).
[46] Deaton. (1997).
[47] ADB. (2013). p. 1.
[48] Ibid.
[49] CBS Nepal. (2011a). p. 39.
[50] Ibid.

consumption.[51] Additionally, according to the recent Annual Household Survey (AHS) 2013/2014 findings, per capita expenditures among households in the first decile were less than a quarter of expenditures of households in the tenth decile.[52]

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 zone of influence (ZOI) per person in 2010 U.S. Dollars (USDs) 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 table shows that 50 percent of individuals consume less than $1.90 (2010 USD). 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 expenditures of $1.90 (2010 USD) is much lower than the average per capita expenditure of $2.29 (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 size as well as household educational attainment. In general, it appears that per capita expenditures increase among households with the highest levels of education, but decrease with the household size.

[51] ADB. (2013). p. 3.
[52] CBS Nepal. (2015b). p. vi.

Table 4.1. Daily per capita expenditures by household characteristic (in 2010 USD)[1]

Characteristic	Estimate (weighted)						
	Mean[a]	Percentile					n[2]
		10th	25th	50th	75th	90th	
Total (All households)	2.29	1.25	1.47	1.90	2.71	3.78	600
Gendered household type							
Male and female adults	2.24	1.24	1.45	1.87	2.63	3.68	462
Female adult(s) only	2.48	1.28	1.57	2.08	3.01	4.08	124
Male adult(s) only	^	^	^	^	^	^	12
Child(ren) only (no adults)	^	^	^	^	^	^	2
Household size[a]							
Small (1-5 members)	2.56	1.29	1.61	2.14	3.21	4.49	441
Medium (6-10 members)	1.93	1.21	1.36	1.72	2.17	2.89	147
Large (11+ members)	^	^	^	^	^	^	12
Household educational attainment[a]							
No education	1.86	1.17	1.28	1.57	2.01	3.22	36
Less than primary	1.70	1.03	1.25	1.45	1.87	2.83	64
Primary	1.95	1.18	1.42	1.77	2.17	2.96	217
Secondary or more	2.80	1.43	1.80	2.36	3.36	4.94	283

^ Results not statistically reliable, n<30.

[1] Per capita expenditures measured in Nepalese rupee (NPR) were converted to 2010 USD using the Consumer Price Index (CPI) and the PPP Index. We used the formula (2005 CPI NPR/2013/14 CPI NPR)*1/(PPP 2005)* (2010 USD CPI/2005 USD CPI) where NPR PPP 2005 = 26.4671, 2013/14 CPI NPR = 198.175, 2005 CPI NPR = 100, 2010 USD CPI =111.65, and 2005 USD CPI = 100. The conversion factor was 0.021286.

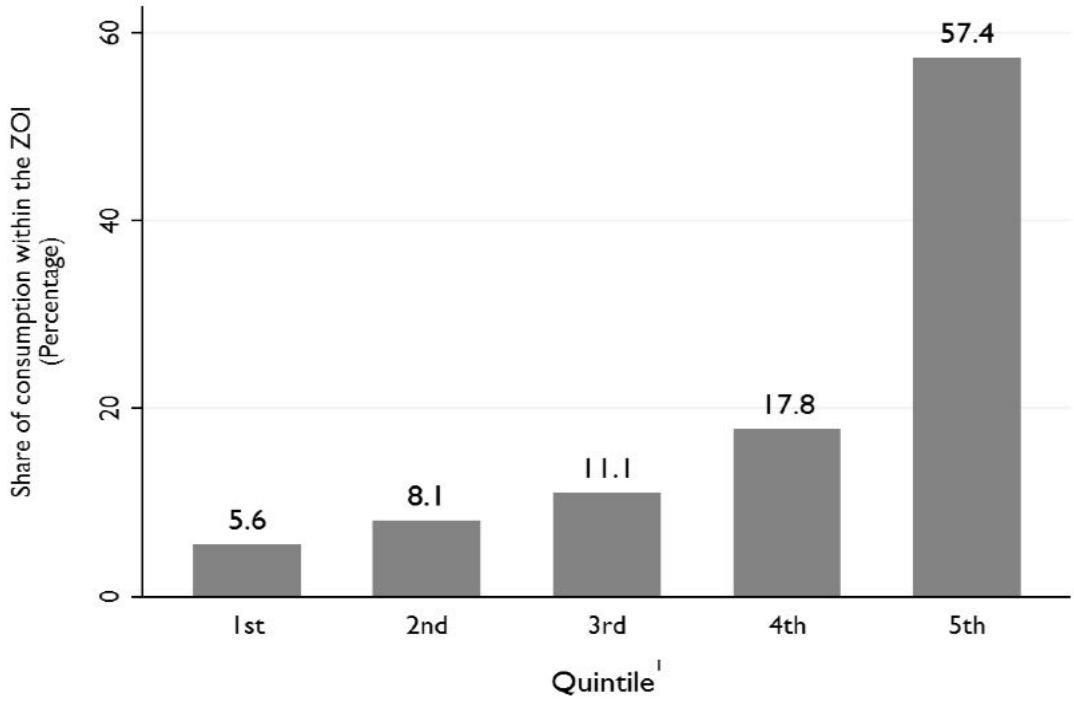
[2] Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore disaggregates' sample sizes may not total to the aggregated sample size.

[a] 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: Nepal AHS 2013-2014.

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 a Millennium Development Goal (MDG). This figure shows that the poorest 20 percent within the ZOI consume only 5.6 percent of the total consumption within the ZOI. Conversely, the wealthiest 20 percent within the ZOI consume nearly 57.4 percent of the total consumption within the ZOI.

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



[1] 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: Nepal AHS 2013-2014.

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.[53] 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[54] 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

[53] 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.

[54] 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.

poverty line typical of the world's poorest countries.[55] Poverty estimates may also be presented for an individual country's own poverty and extreme poverty thresholds.

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

About 21 percent (20.9) of individuals in the ZOI live below the $1.25 poverty threshold. Medium size households with 6-10 members are associated with significantly higher poverty as compared to smaller households with 1-5 members. The prevalence of poverty also declines with the increasing levels of educational attainment of the households except for the no education households. The no education households have lower poverty than some of the better-educated households. Caution should be exercised in interpreting this finding due to the relatively small sample of the no education households.

Depth of Poverty

The depth of poverty in the ZOI is 2.8 percent, which indicates that the average gap between consumption levels of the population and the poverty line is $0.035 (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 6.9 million, a poverty threshold of $1.25 per day, and a poverty gap of 2.8 percent, approximately $243,000 (2005 PPP) per day would need to be transferred to the poor to bring their income or expenditures up to the poverty threshold.

[55] The World Bank. (2011).

Similar to poverty prevalence, households with higher levels of education have a significantly lower depth of poverty than households with lower education except for the "No education" households.

Table 4.2. Poverty at the $1.25 (2005 PPP)[1] per person per day threshold

Characteristic	Prevalence of poverty[2]		Depth of poverty[3]		Average consumption shortfall of the poor[4]		
	Percent popula-tion[a]	n[5]	Percent of poverty line[b]	n[5]	In USD 2005 PPP[c]	Percent of poverty line[c]	n[5]
Total (All households)	20.9	600	2.8	600	0.17	13.2	87
Gendered household type							
Male and female adults	22.2	462	2.9	462	0.16	12.8	73
Female adult(s) only	13.9	124	2.3	124	^	^	13
Male adult(s) only	^	12	^	12	^	^	1
Child(ren) only (no adults)	^	2	^	2	-	-	0
Household size[a]							
Small (1-5 members)	15.6	441	2.4	441	0.19	15.4	48
Medium (6-10 members)	26.8	147	3.2	147	0.15	11.8	35
Large (11+ members)	^	12	^	12	^	^	4
Household educational attainment[a,b]							
No education	38.2	36	3.9	36	^	^	10
Less than primary	44.3	64	6.6	64	^	^	23
Primary	24.7	217	3.7	217	0.19	15.0	41
Secondary or more	9.1	283	0.7	283	^	^	13

^ Results not statistically reliable, n<30.

[1] The Feed the Future poverty indicators are based on the poverty threshold of $1.25 (2005 PPP) per person per day.

[2] 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.

[3] The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

[4] 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.

[5] 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.

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

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015 and Nepal AHS 2013-2014.

Average Consumption Shortfall of the Poor

The average poor person within the ZOI lives at 86.8 percent of the poverty line, or 13.2 percent below the poverty line. The average value of consumption of a poor person is $1.08 (2005 PPP), which is $0.17 (2005 PPP) less than the $1.25 poverty threshold.

There are no significant differences in average consumption shortfall of the poor by household characteristics, a finding that might be partially due to the small sample of the poor population.

4.2.2 The National Poverty Threshold

Table 4.3 presents poverty estimates at the national poverty threshold for Nepal. 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.

The national poverty lines in Nepal for 2013-2014 were identified using data from the Nepal Living Standards Survey (NLSS III) of 2010-2011[56] and were adjusted for price indices. The national poverty line used in this analysis is Rs. 26,028 per person per year for 2013-14 real Nepal price.

Poverty Prevalence

As seen in Table 4.3, 27.4 percent of individuals in the ZOI live below the national poverty threshold. The national poverty threshold identifies more individuals as poor than does the $1.25 poverty threshold. This is because the national poverty line is higher than the $1.25 threshold.

Table 4.3 also shows similar association between poverty and household characteristics (household gendered type, household size, and household education attainment) that are presented in Table 4.2. The prevalence of poverty declines with the increasing levels of educational attainment of the households except for the no education households. Medium households with 6-10 members are associated with significantly higher poverty as compared to smaller households with 1-5 members.

Table 4.3 also shows that depth of poverty and the consumption shortfall of the poor by national threshold are slightly larger than those shown in Table 4.2. The depth of poverty declines with increasing education, except for the no education households. There is no significant difference in the relationship between the average consumption shortfall and household characteristics.

[56] CBS Nepal. (2011c).

Table 4.3. Poverty at the national threshold of 26,028 rupees per capita per year[1]

Characteristic	Prevalence of poverty[2]		Depth of poverty[3]		Average consumption shortfall of the poor[4]		
	Percent population[a]	n[5]	Percent of poverty line[b]	n[5]	In USD 2005 PPP[c]	Percent of poverty line[c]	n[5]
Total (All households)	27.4	600	4.5	600	0.22	16.4	117
Gendered household type							
Male and female adults	28.2	462	4.7	462	0.22	16.5	95
Female adult(s) only	24.1	124	3.6	124	^	^	21
Male adult(s) only	^	12	^	12	^	^	1
Child(ren) only (no adults)	^	2	^	2	-	-	0
Household size[a]							
Small (1-5 members)	22.1	441	3.7	441	0.23	16.8	68
Medium (6-10 members)	34.0	147	5.4	147	0.22	15.8	44
Large (11+ members)	^	12	^	12	^	^	5
Household educational attainment[a,b]							
No education	45.0	36	7.1	36	^	^	13
Less than primary	58.1	64	10.2	64	0.24	17.5	31
Primary	33.1	217	5.7	217	0.23	17.3	55
Secondary or more	11.7	283	1.5	283	^	^	18

^ Results not statistically reliable, n<30.

[1] The national poverty threshold used in this analysis is the poverty threshold established with the NLSS 2010/11 that has been inflated to 2013/14 prices. Nepal Living Standards Survey 2010/11, Statistical Report – Volume Two, Central Bureau of Statistics.

[2] 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.

[3] The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

[4] 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.

[5] 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.

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

Source: Nepal AHS 2013-2014.

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.[57] For more information, the WEAI questionnaires and manual can be found online.[58]

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 adult male or female decisionmaker during the collection of the household roster.[59] The WEAI score is computed as a weighted sum of the zone of influence (ZOI)-level 5DE and the GPI.

The ZOI interim survey, however, only collects data for 9 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 interim survey allow calculation of 9 of the 10 individual empowerment indicators for primary adult female decisionmakers (referred to

[57] Alkire, Malapit, et al. (2013).
[58] IFPRI. (2013). Retrieved from http://feedthefuture.gov/lp/womens-empowerment-agriculture-index.
[59] 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.

hereafter as *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 to address concerns over the validity of the *Autonomy in Production* submodule used in the baseline surveys. Feed the Future is still working with partners to revise the *Autonomy in Production* submodule. 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 9 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).[60] The criteria for determining adequacy in each domain are provided in Appendix A2.3.

Among surveyed women in the Nepal 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 (98.8 percent), (2) input in productive decisions (97.5 percent), and (3) ownership of assets (96.4 percent). The 5DE indicators with the lowest levels of achievement are (1) group membership (51.2 percent), (2) workload (also 51.2 percent), and (3) access to and decisions on credit (57.3 percent).

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

[60] See Appendix 2.3 for the criteria for achieving adequacy in each WEAI indicator.

Table 5.1. Achievement of adequacy on Women's Empowerment in Agriculture Index indicators[1]

Domain	Definition of domain	Indicators	Percent with adequate achievement	n
Production	Sole or joint decisionmaking over food and cash crop farming, livestock, and fisheries, and autonomy in agricultural production	Input in productive decisions	97.5	760
		Autonomy in production	n/a	n/a
Resources	Ownership, access to, and decisionmaking power over productive resources such as land, livestock, agricultural equipment, consumer durables, and credit	Ownership of assets	96.4	760
		Purchase, sale or transfer of assets	95.9	760
		Access to and decisions on credit	57.3	760
Income	Sole or joint control over income and expenditures	Control over use of income	98.8	760
Leadership	Membership in economic or social groups and comfort in speaking in public	Group member	51.2	760
		Speaking in public	79.6	760
Time	Allocation of time to productive and domestic tasks and satisfaction with the available time for leisure activities	Workload	51.2	760
		Leisure	92.4	760

[1] 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, Nepal 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.

Nearly all surveyed women (98.8 percent) in the Nepal ZOI report participating in a productive activity, and of these women, nearly all (99.3 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 92.7 percent of surveyed women in the ZOI. In addition to food crop farming, smaller percentages of women report livestock raising (88.7 percent) and wage or salaried employment (54.0 percent). The economic activity with the lowest participation in the Nepal ZOI is fishing or fishpond culture (only 4.2 percent of surveyed women).

Women who participate in the specific economic activities shown in Table 5.2 report very high levels of input into decisions regarding the activities. For each respective economic activity, nearly all women (more than 97 percent across each of the six activities), report having input into decisionmaking. The activity with women's greatest reported input into decisionmaking is fishing or fishpond culture (100.0 percent of women).

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

Activity	Participates in activity		Has input[1] into decisions about activity	
	Percent	n[2]	Percent	n[1,3]
Total (All surveyed women)	98.8	760	99.3	746
Type of activity				
Food crop farming	92.7	760	98.9	694
Cash crop farming	26.3	760	99.4	196
Livestock raising	88.7	760	99.4	667
Fishing or fishpond culture	4.2	760	100.0	31
Non-farm economic activities	13.5	760	97.2	104
Wage or salaried employment	54.0	760	99.2	419

[1] *Having input* means that a woman reported having input into most or all decisions regarding the activity.

[2] Estimates exclude households who have no primary adult female decisionmaker or whose data are missing/incomplete.

[3] 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, Nepal 2015.

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 (99.5 percent) report having input into the use of income generated from the economic activities in which they participate. Similar to the findings shown above in Table 5.2 (which was about input in decisions about specific activities), across all the activities presented in Table 5.3, over 97 percent of women report having input in the use of income from the activity. The activity with the greatest income-related input is wage or salaried employment; 99.2 percent of the subgroup of women participating in this economic activity report having input into the use of income generated from their wage or salaried employment.

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

Activity	Has input[1] into use of income from activity	
	Percent	n[2,3]
Total (All surveyed women)	99.5	746
Type of activity		
Food crop farming	98.6	686
Cash crop farming	98.4	195
Livestock raising	98.3	661
Fishing or fishpond culture	97.5	31
Non-farm economic activities	98.1	104
Wage or salaried employment	99.2	413

[1] *Having input* means that a woman reported having input into most or all decisions regarding the use of income generated from the activity.

[2] Estimates exclude households who have no primary adult female decisionmaker or whose data are missing/incomplete.

[3] 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, Nepal 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 with respect to major household expenditures (such as the purchase of a large household appliance); 16.1 percent of women report having no decisionmaking ability in this area. This is followed at a much lower level by decisionmaking regarding livestock raising (3.3 percent report having no decisionmaking ability at all) and whether to take crops to the market (3.0 percent).

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 (82.4 percent). About four of every five women report that they can make decisions about minor household expenditures (such as food for daily consumption or other household needs) to a high extent. In contrast, only 36.4 percent of women, a little more than one-third, report their ability to make decisions to a high extent for major household expenditures.

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.

Table 5.4. Decisionmaking on production among surveyed women

Activity	Extent to which respondents feel they can make their own decisions (percent)[1,2]				Not applicable[3]	n
	Not at all	Small extent	Medium extent	High extent		
Getting inputs for agricultural production	1.9	13.3	17.7	65.7	1.4	760
The types of crops to grow	2.9	11.6	17.7	66.4	1.4	760
Whether to take crops to the market	3.0	13.6	19.2	62.5	1.8	760
Livestock raising	3.3	12.4	17.8	61.7	4.8	760
Her own wage or salary employment	0.5	2.1	2.8	14.5	80.1	760
Major household expenditures	16.1	22.7	23.5	36.4	1.3	760
Minor household expenditures	1.1	5.8	10.7	82.4	0.0	760

[1] Estimates exclude households who 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.

[2] 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 recoded accordingly.

[3] 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, Nepal 2015.

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 *Resources* 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 decide to purchase or to sell, give away, or rent owned items. Women are counted as having the ability to make a decision if they can solely decide or if they can make these decisions with others with any degree of input.

Of the 14 productive resources included in the WEAI module, those most commonly owned by ZOI households in Nepal (technically only the subsample of ZOI households with a primary adult female decisionmaker) include a house or other structures (owned by 99.5 percent of households); agricultural land (owned by 98.6 percent of households); and non-mechanized farm equipment, such as hand tools, animal-drawn plows, etc. (owned by 97.9 percent of households). These assets were reported to be owned by nearly all of the households in the WEAI sample in the Nepal ZOI. The least commonly owned resource is mechanized farm

equipment (e.g., tractor-drawn plows, power tillers, etc.), owned by 9.5 percent, or fewer than 1 in every 10 households.

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

Type of resource	Someone in the household owns item		Woman can decide to purchase items		Woman can decide to sell/give/rent owned items	
	Percent	n[1]	Percent	n[1]	Percent	n[1]
Agricultural land	98.6	760	81.5	741	74.8	741
Large livestock	76.1	760	84.6	564	87.6	562
Small livestock	67.7	760	87.2	516	88.6	516
Chickens, ducks, turkeys, and pigeons	55.9	760	91.0	427	94.2	428
Fish pond or fishing equipment	12.9	760	81.6	90	81.6	87
Non-mechanized farm equipment	97.9	760	84.9	741	91.5	725
Mechanized farm equipment	9.5	760	93.1	62	87.8	62
Nonfarm business equipment	54.9	760	n/a		n/a	
House or other structures	99.5	760	n/a		n/a	
Large consumer durables	35.3	760	n/a		n/a	
Small consumer durables	68.0	760	n/a		n/a	
Cell phone	88.0	760	n/a		n/a	
Non-agricultural land	57.5	760	n/a		n/a	
Means of transportation	33.0	760	n/a		n/a	

[1] Estimates exclude households that have no primary adult female decisionmaker or in which Module G data are missing/incomplete. Those who 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, Nepal 2015.

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 to sell, give away, or rent the specific owned item. The purchase of mechanized farm equipment was the item with the greatest percentage of women's decisionmaking, at 93.1 percent of women in households who owned this item.[61] This was followed by the purchase of poultry/fowl (e.g., chickens, ducks, turkeys or pigeons), at 91.0 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 were also poultry/fowl (94.2 percent) and non-mechanized farm equipment (91.5 percent)

[61] However, please note that only 9.5 percent of households completing the WEAI own any mechanized farm equipment.

In other words, to use the estimates for poultry/fowl as an example, among the approximately half (55.9 percent) of ZOI households that own poultry/fowl, 91.0 percent (the great majority) of primary adult female decisionmakers report the ability to make purchasing decisions (solely or with any degree of input) about poultry/fowl, and a similar proportion (94.2 percent) report any decisionmaking ability to sell, give away, or rent the poultry/fowl.

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. Furthermore, 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 Nepal ZOI, nearly two-thirds of the households in the WEAI module (65.9 percent) report a household member receiving any type of loan in the prior year. The most common credit source overall (of the five possible sources) is friends or relatives (40.5 percent). When examining type of loans, the most common type by far is cash loans; about two-thirds (64.6 percent) of households received a cash loan, and only 4.2 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=507), the bottom half of Table 5.6 presents the percentages who reported 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(s) loaned). Overall, 87.0 percent of women report contributing to at least one of the credit decisions. Similar percentages of women reported contributing to the decisions on whether to borrow the loan (82.9 percent) and on how to use the loan (85.3 percent).

Table 5.6. Credit access among surveyed women

Estimate	Any source (percent)	Credit source (percent)[1]				
		Non-governmental organization	Informal lender	Formal lender	Friends or relatives	Group-based micro-finance
Total receiving a loan (All surveyed women)	65.9	7.3	25.4	5.6	40.5	26.4
Type of loan						
Any loan	65.9	7.3	25.4	5.6	40.5	26.4
In-kind loan	4.2	0.2	4.0	0.1	0.1	0.0
Cash loan	64.6	7.2	21.5	5.5	40.5	26.4
n[2]	**760**	**759**	**759**	**758**	**759**	**760**
Total contributing to a credit decision (All surveyed women)	87.0	89.5	76.7	87.9	80.8	92.5
Type of decisions						
On whether to borrow	82.9	86.1	72.2	85.0	77.3	88.1
On how to use loan	85.3	85.9	75.1	86.7	79.2	88.9
n[2]	**507**	**59**	**197**	**45**	**304**	**210**

[1] Percentages sum to more than 100 because loans may have been received from more than one source.

[2] Estimates exclude households who have no primary adult female decisionmaker or whose data are missing/incomplete.

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 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 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. For this indicator, 79.6 percent of surveyed women in the ZOI achieve adequacy in voicing their opinions on community matters (**Table 5.7**). This is also the uncensored headcount for this indicator, as shown in Table 5.1.

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 consistent. About 73.8 percent of women report being comfortable speaking up in public to protest the misbehavior of authorities or elected officials. This is followed by speaking up in public to ensure proper payment of wages for public works or other similar programs (70.7 percent of women feel comfortable), and speaking up in public to help decide on infrastructure to be built in the community (70.3 percent of women).

Table 5.7. Comfort with speaking in public among surveyed women

Topics for public discussion	Percent	n[1]
	Comfortable speaking in public about selected topics	
Total (All surveyed women)	79.6	760
Topics		
To help decide on infrastructure to be built in the community	70.3	760
To ensure proper payment of wages for public works or other similar programs	70.7	760
To protest the misbehavior of authorities or elected officials	73.8	759

[1] Estimates exclude households who have no primary adult female decisionmaker or whose data are missing/incomplete.

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 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 Nepal ZOI, about half of surveyed women (51.2 percent) report membership in at least one group. (This is also the uncensored headcount for this indicator; 51.2 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 among primary adult female decisionmakers is credit or microfinance groups, at 24.3 percent (nearly one-quarter) of surveyed women. Other group types in the ZOI with active participation among surveyed women, albeit at lower percentages, include mutual help or insurance groups (19.2 percent of women), and "other" groups (13.0 percent).

Table 5.8. Group membership among surveyed women

Group type	Percent[1]	n[2]
	Is an active group member	
Total (All surveyed women)	51.2	760
Group type		
Agricultural producers' group	11.3	760
Water users' group	7.7	760
Forest users' group	9.1	760
Credit or microfinance group	24.3	760
Mutual help or insurance group	19.2	760
Trade and business association	0.1	760
Civic or charitable group	3.2	760
Local government	0.8	760
Religious group	4.4	760
Other	13.0	760

[1] 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.

[2] Estimates exclude households who have no primary adult female decisionmaker or whose data are missing/incomplete.

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 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, 92.4 percent of women reported being satisfied with their leisure time. (This is the uncensored headcount, see Table 5.1.)

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 (99.8 percent, mean 1.2 hours); and personal care (93.8 percent, mean 0.8 hours). Least common activities include exercising (only reported by 0.8 percent of surveyed women), school and homework (1.2 percent), and "other" (1.3 percent). Beyond activities of daily life such as sleeping and eating, other common work activities include domestic work such as fetching food or water (93.4 percent); cooking (83.5 percent); and farming, caring for livestock, or fishing (78.9 percent).

In the Nepal ZOI, relatively few women reported secondary activities, the second set of columns in Table 5.9. Thus, the average time spent in secondary activities across all the women is less than 1 hour. The most commonly reported secondary activity is social activities and hobbies, reported by 32.3 percent of women.

Table 5.9. Time allocation among surveyed women

Activity	Primary activity		Secondary activity[1]	
	Percent of women	Mean hours devoted	Percent of women	Mean hours devoted
Sleeping and resting	100.0	10.4	8.8	0.2
Eating and drinking	99.8	1.2	3.3	0.0
Personal care	93.8	0.8	0.6	0.0
School and homework	1.2	0.0	0.2	0.0
Work as employed	3.5	0.2	0.0	0.0
Own business work	4.6	0.3	0.7	0.0
Farming/livestock/fishing	78.9	2.7	6.2	0.0
Shopping/getting services	9.5	0.2	0.1	0.0
Weaving, sewing, textile care	4.9	0.1	0.3	0.0
Cooking	83.5	1.8	1.7	0.0
Domestic work (fetching food and water)	93.4	2.8	9.5	0.1
Care for children/adults/elderly	37.7	0.8	18.5	0.4
Travel and commuting	53.0	0.9	0.4	0.0
Watching TV/listening to radio/reading	18.5	0.3	12.1	0.2
Exercising	0.8	0.0	0.2	0.0
Social activities and hobbies	53.2	1.4	32.3	0.8
Religious activities	11.8	0.1	0.7	0.0
Other	1.3	0.0	0.1	0.0
n	**760**	**760**	**760**	**760**

[1] 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, Nepal 2015.

6. Hunger and Dietary Intake

This chapter 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 Nepal ZOI experiencing moderate or severe hunger. The HHS was developed by the United States Agency for International Development (USAID)-funded Food and Nutrition Technical Assistance II Project (FANTA-2/FHI 360) in collaboration with the Food and Agriculture Organization of the United Nations (FAO). 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.).[62,63]

The hungry (or lean) season in Nepal occurs during the peak monsoon or rainy season, generally from July to September. Data for the HHS were collected in the ZOI from August 8 to September 28, 2015. Thus, data collection occurred mostly during the peak rainy season (from August 8 to September 15), which corresponds to the lean season. However, some data collection occurred during the decline in the rainy season (from September 16 to September 28, 2015), which corresponds to the non-lean season in Nepal.

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

The great majority (91.0 percent) of the households in the Nepal ZOI report that they experience no or little hunger. About 8.8 percent experience moderate hunger, and very few (0.2 percent) experience 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), 9.0 percent of ZOI households – just under 1 in every 10 households – experience either moderate or severe hunger, which is the Feed the Future standard indicator.

[62] Deitchler, Ballard, Swindale, and Coates (2011).

[63] USAID. (2013). For further description of the household hunger indicator and its calculation, refer to the *Feed the Future Indicator Handbook*, available at http://feedthefuture.gov/resource/feed-future-handbook-indicator-definitions.

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. As denoted by the superscripts in Table 6.1, experiencing little to no hunger is significantly associated with household educational attainment (i.e., the highest level of schooling attained by any member of the household). The prevalence of experiencing little to no hunger increases with increasing levels of household education, from 81.5 percent among households whose members have no education, to 96.1 percent among households with a member (or more) with secondary or more schooling.

Table 6.1. Household hunger

Characteristic	Percent			n[1]
	Little to no hunger[a]	Moderate hunger	Severe hunger	
Total (All households)	91.0	8.8	0.2	836
Gendered household type				
Male and female adults	91.1	8.8	0.1	694
Female adult(s) only	89.4	10.2	0.4	118
Male adult(s) only	^	^	^	19
Child(ren) only (no adults)	^	^	^	5
Household size				
Small (1-5 members)	90.6	9.3	0.1	557
Medium (6-10 members)	91.6	8.0	0.4	261
Large (11+ members)	^	^	^	18
Household educational attainment[a]				
No education	81.5	18.5	0.0	63
Less than primary	87.2	12.8	0.0	104
Primary	90.4	9.2	0.4	387
Secondary or more	96.1	3.9	0.0	282

^ Results not statistically reliable, n<30.

[1] 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.

[a] 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, Nepal 2015.

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 nutritional 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 Nepal ZOI, the WDDS indicator value is 3.28; in other words, women consume an average of 3.28 food groups of the nine possible groups. The median value is three food groups. Mean WDDS varies significantly by levels of women's educational attainment. As shown in Table 6.2, mean WDDS increases with increasing levels of women's education. Women with no education consume an average of 3.12 food groups, while women with secondary or more schooling consume an average of 3.65 food groups.

No other disaggregate variables presented in Table 6.2 (i.e., age group, gendered household type, household size, and household hunger status) are significantly associated with women' mean WDDS.

Table 6.2. Women's dietary diversity score

Characteristic	Mean[a]	Median	n[1]
Total (All women 15-49)	3.28	3	994
Age			
15-19	3.32	3	233
20-24	3.33	3	172
25-29	3.36	3	150
30-34	3.16	3	133
35-39	3.32	3	106
40-44	3.15	3	113
45-49	3.21	3	87
Educational attainment[a]			
No education	3.12	3	370
Less than primary	3.16	3	124
Primary	3.36	3	340
Secondary or more	3.65	4	160
Gendered household type			
Male and female adults	3.29	3	862
Female adult(s) only	3.22	3	127
Male adult(s) only	^	^	2
Child(ren) only (no adults)	^	^	3
Household size			
Small (1-5 members)	3.31	3	524
Medium (6-10 members)	3.32	3	421
Large (11+ members)	2.67	2	49
Household hunger			
Little to no hunger	3.28	3	932
Moderate or severe hunger	3.25	3	62

^ Results not statistically reliable, n<30.

[1] 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.

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

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

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.[64] Achievement

[64] The differences between the 9 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.

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.[65]

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.

Table 6.3. Women's minimum dietary diversity

Characteristic	Percent[a]	n[l]
Total (All women 15-49)	20.2	994
Age		
15-19	22.7	233
20-24	22.0	172
25-29	20.4	150
30-34	19.9	133
35-39	20.2	106
40-44	19.0	113
45-49	11.6	87
Educational attainment[a]		
No education	14.1	370
Less than primary	14.8	124
Primary	23.8	340
Secondary or more	34.5	160
Gendered household type		
Male and female adults	20.7	862
Female adult(s) only	17.0	127
Male adult(s) only	^	2
Child(ren) only (no adults)	^	3
Household size		
Small (1-5 members)	21.8	524
Medium (6-10 members)	20.1	421
Large (11+ members)	7.7	49
Household hunger		
Little to no hunger	20.1	932
Moderate or severe hunger	21.8	62

^ Results not statistically reliable, n<30.

[l] 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.

[a] 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, Nepal 2015.

[65] USAID. (2014b). For more information, refer to Volume 11: Guidance on the First Interim Assessment of the Feed the Future Zone of Influence Population-Level Indicators (Revised October 2014), Section 4.2, available for download at http://www.feedthefuture.gov/sites/default/files/resource/files/ftf_guidanceseries_vol11_interimassessment_oct2014.pdf.

In the Nepal ZOI, about one in every five women (20.2 percent) meets the MDD-W threshold (five food groups). Of the disaggregates presented in Table 6.3, and similar to the WDDS table presented previously, only women's educational attainment is significantly associated with the MDD-W indicator. Prevalence of MDD-W increases substantially with women's increasing education, from 14.1 percent among women with no education, to 34.5 percent among women with secondary or more schooling.

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 who 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 the subgroup of women who do not achieve a minimum dietary diversity (n=764), only two of the 10 food groups are consumed by at least half of the women: grains, roots, and tubers (consumed by 99.3 percent of women in this "not achieving MDD-W" group) and other vegetables (consumed by 77.5 percent of women in this group). For the other eight food groups, the percentage of women consuming each group falls below 50 percent (ranging from 34.2 percent of women consuming vitamin A-rich dark green leafy vegetables) down to only 0.4 percent of women in this group consuming legumes and beans.

Moreover, as shown in the superscripts in Table 6.4, achievement of a minimum dietary diversity is significantly associated with consumption of nine of the 10 specific food groups. The only exception is the grains, roots and tubers group, which is not significantly associated with MDD-W achievement status.

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

Category	Percent of women according to achievement of a minimum dietary diversity[a]	
	Achieving	Not achieving
Women consuming a specific food group		
Grains, roots and tubers	100.0	99.3
Legumes and beans[a]	8.9	0.4
Nuts and seeds[a]	13.9	2.8
Dairy products[a]	76.6	31.1
Meat and organ meats[a]	45.0	24.3
Eggs[a]	20.8	3.8
Vitamin A-rich dark green leafy vegetables[a]	72.2	34.2
Other vitamin A-rich vegetables and fruits[a]	34.2	9.2
Other fruits[a]	70.5	18.3
Other vegetables[a]	96.8	77.5
n	**230**	**764**

[a] 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, Nepal 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. In contrast to the household hunger, WDDS and MDD-W indicators presented above (as well as the nutrient-rich value chain commodity (NRVCC) indicators presented at the end of this chapter), which were calculated with primary 2015 ZOI interim survey data, the exclusive breastfeeding and MAD indicators presented in Tables 6.5-6.7 are calculated with secondary 2014 Nepal Multiple Indicator Cluster Survey (MICS) data.

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 by 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).

Among all infants less than 6 months of age in the Nepal ZOI, more than half (59.1 percent) are exclusively breastfed. The 2014 Nepal MICS national estimate is very similar to the ZOI estimate; nationally, 56.9 percent of infants less than 6 months were exclusively breastfed.[66]

Neither of the disaggregate variables presented in Table 6.5 (child sex or caregivers' educational attainment) are significantly associated with prevalence of exclusive breastfeeding. It should be noted that exclusive breastfeeding declines as the child gets older. Four-fifths (80.8 percent) of children 0-1 month were exclusively breastfed, 53.9 percent of children 2-3 months were exclusively breastfed, and 43.0 percent of children 4-5 months were exclusively breastfed.

[66] CBS and UNICEF. (2015a). p. 35.

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

Characteristic	Percent[a]	n[1]
Total (All children under 6 months)	59.1	145
Child sex		
Male	60.2	86
Female	57.6	59
Caregiver's educational attainment[2]		
No education	59.9	46
Less than primary	^	15
Primary	62.9	48
Secondary or more	47.0	36

^ Results not statistically reliable, n<30.

[1] 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.

[2] The Nepal MICS survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

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

Source: Nepal MICS 2014.

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 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 educational attainment. Household characteristics include gendered household type and household size.

In the Nepal ZOI, over one-quarter (28.1 percent) of children age 6-23 months receive a MAD. Significance tests were run for differences in the prevalence of MAD by the child's sex, child's age group, caregiver's educational attainment, gendered household type, and household size. Both child's age group and caregivers' educational attainment are significantly associated with prevalence of a MAD. MAD increases with increasing age; the indicator rises from 19.4 percent among children age 6-11 months to 35.1 percent among children age 18-23 months. Similarly, MAD generally appears to increase with increasing levels of caregivers' education. Only

26.4 percent of children whose caregivers have no education receive a MAD, whereas among children whose caregivers have secondary or more schooling, 40.2 percent receive a MAD.

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

Characteristic	Percent[a]	n[1]
Total (All children 6-23 months)	28.1	500
Child sex		
Male	31.0	273
Female	24.6	227
Child age[a]		
6-11 months	19.4	176
12-17 months	31.4	171
18-23 months	35.1	153
Caregiver's educational attainment[2,a]		
No education	26.4	199
Less than primary	15.5	49
Primary	26.9	141
Secondary or more	40.2	107
Gendered household type		
Male and female adults	29.1	427
Female adult(s) only	22.7	70
Male adult(s) only	^	1
Child(ren) only (no adults)	^	2
Household size		
Small (1-5 members)	30.0	218
Medium (6-10 members)	26.0	234
Large (11+ members)	30.2	48

^ Results not statistically reliable, n<30.

[1] 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.

[2] The Nepal MICS survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

[a] 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, Nepal 2015 and Nepal MICS 2014.

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. This table was designed to present estimates for all children, as well as by specific age groups, and separately for breastfed children and non-breastfed children. However, for Nepal, the sample size for non-breastfed children ages 6-23 months is too small (n<30) to calculate reliable estimates, and thus estimates are suppressed in Table 6.7.

Table 6.7 reveals that among the subsample of breastfed children ages 6-23 months in the Nepal ZOI, 71.6 percent receive a minimum meal frequency and 32.1 percent receive a

minimum dietary diversity. The food group with the highest consumption (by breastfed children ages 6-23 months in the ZOI) was grains, roots, and tubers (88.6 percent of children), and the food group with the lowest consumption was eggs (7.9 percent). Only two of the seven food groups (i.e., grains, roots, and tubers, and legumes and nuts) are consumed by more than half of the children (56.4 percent).

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

MAD components and food groups	Percent			
	All children	By child age (in months)		
		6 to 11	12 to 17	18 to 23
Breastfed children				
Achieving minimum meal frequency	71.6	57.7	80.1	79.2
Achieving minimum dietary diversity	32.1	20.6	36.2	41.9
Consuming				
Grains, roots, and tubers	88.6	74.8	97.2	96.0
Legumes and nuts	56.4	48.2	61.9	60.5
Dairy products	48.1	43.1	49.7	52.6
Flesh foods	15.2	10.0	15.2	22.0
Eggs	7.9	3.2	10.1	11.2
Vitamin A-rich fruits and vegetables	48.0	37.5	52.6	56.0
Other fruits and vegetables	20.2	10.5	25.1	26.9
n	**485**	**174**	**166**	**145**
Non-breastfed children				
Achieving minimum meal frequency	^	^	^	^
Achieving minimum milk feeding frequency	^	^	^	^
Achieving minimum dietary diversity	^	^	^	^
Consuming				
Grains, roots, and tubers	^	^	^	^
Legumes and nuts	^	^	^	^
Dairy products	^	^	^	^
Flesh foods	^	^	^	^
Eggs	^	^	^	^
Vitamin A-rich fruits and vegetables	^	^	^	^
Other fruits and vegetables	^	^	^	^
n	**15**	**2**	**5**	**8**

^ Results not statistically reliable, n<30.

Source: Nepal MICS 2014.

6.2.3 Consumption of Targeted Nutrient-Rich Value Chain Commodities

U.S. Government (USG)-funded programming supports nutrition-sensitive agricultural value chain[67] 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 NRVCC:

1. Increased production of the commodity must be promoted through a USG-funded value chain activity.

2. The value chain commodity must have been selected for nutrition objectives, in addition to any poverty-reduction or economic-growth related objectives.

3. The commodity must be considered nutrient rich, defined as meeting any one of the following criteria: It is bio-fortified; a legume, nut or seed; an animal-sourced food, including dairy products (milk, yogurt, cheese), eggs, organ meat, flesh foods, and other miscellaneous small animal protein (e.g., grubs, insects); a dark yellow or orange-fleshed root or tuber; or a fruit or vegetable that meets the threshold for being a "high source" of one or more micronutrients on a per 100 gram basis.

This section presents the ZOI interim assessment's findings on the consumption of targeted NRVCC among women age 15-49 and children age 6-23 months. The targeted commodities in Nepal include six foods: cauliflower; cabbage; pumpkin; dark green leafy vegetables (e.g., saag/spinach, mustard leaves, etc.); okra; and bitter gourd.

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.

[67] From Webber and Labaste (2010), "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 [2002], "A Handbook for Value Chain Research," p. 46–47)."

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

Characteristic	Percent							n[1]
	Any targeted commodity[a]	Cauliflower[b]	Cabbage[c]	Pumpkin[d]	Green leafy vegetables (saag/spinach)[e]	Okra[f]	Bitter gourd[g]	
Total (All women15-49)	67.4	4.6	6.0	10.7	41.8	24.8	15.8	994
Age								
15-19	70.9	4.0	6.9	13.8	46.5	22.8	15.0	233
20-24	67.4	5.2	6.6	9.7	40.8	23.6	18.4	172
25-29	66.7	6.7	5.3	8.4	36.8	30.6	14.9	150
30-34	60.1	2.9	5.3	11.6	38.0	20.7	11.7	133
35-39	70.4	2.9	8.8	12.6	49.0	24.6	17.7	106
40-44	65.6	4.9	5.2	6.4	39.8	23.4	17.1	113
45-49	68.5	4.9	2.1	10.1	39.9	30.6	16.4	87
Educational attainment[c]								
No education	64.3	3.9	4.7	10.7	39.6	24.4	14.1	370
Less than primary	65.9	3.3	4.8	8.7	38.8	22.5	14.0	124
Primary	68.8	3.8	5.5	12.2	43.7	25.4	16.5	340
Secondary or more	74.5	9.3	12.0	8.9	46.7	26.9	20.6	160
Gendered household type								
Male and female adults	68.1	5.0	6.2	10.6	41.4	25.2	15.7	862
Female adult(s) only	62.8	1.1	4.9	11.7	45.6	22.1	16.0	127
Male adult(s) only	^	^	^	^	^	^	^	2
Child(ren) only (no adults)	^	^	^	^	^	^	^	3
Household size[a,e]								
Small (1-5 members)	69.5	5.0	6.9	12.2	43.1	26.0	15.0	524
Medium (6-10 members)	68.7	4.5	5.7	10.5	43.5	23.5	17.5	421
Large (11+ members)	41.5	1.6	0.0	0.0	19.7	24.2	10.7	49
Household hunger[c,f]								
Little to no hunger	67.4	4.7	6.3	10.5	41.0	25.6	15.9	932
Moderate or severe hunger	66.6	2.2	0.7	13.0	53.9	13.4	13.8	62

^ Results not statistically reliable, n<30.

[1] 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.

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

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

As shown in Table 6.8, over two-thirds of women of reproductive age in the Nepal ZOI consumed at least one NRVCC food in the prior day; 67.4 percent of women consumed at least one of the six NRVCC foods.[68] As denoted by the superscripts in Table 6.8, the "at least one" indicator varies significantly by household size; women in smaller households are more likely to consume at least one of the six NRVCC foods. About 69.5 percent of women in small households (1-5 members) consumed any of the NRVCC foods, relative to only 41.5 percent of women in the largest household size category (11 or more members).

Table 6.8 reveals that dark green leafy vegetables are the most commonly consumed NRVCC in the Nepal ZOI (41.8 percent of women of reproductive age), followed by okra (24.8 percent), bitter gourd (15.8 percent), pumpkin (10.7 percent), cabbage (6.0 percent), and finally cauliflower (4.6 percent).

A few of the disaggregates presented in Table 6.8 – which includes women's age group, educational attainment, gendered household type, household size, and household hunger – are significantly associated with women's consumption of individual commodities.

The consumption of cabbage varies by educational attainment, with greater levels of cabbage consumption among more educated women (from 4.7 percent of women with no education consuming cabbage to 12.0 percent of women with secondary or more schooling). Cabbage also varies by household hunger. Women in households with little or no hunger are significantly more likely to consume cabbage than women in households with moderate or severe hunger (6.3 percent versus 0.7 percent, respectively).

In addition to cabbage, women's consumption of dark green leafy vegetables also varies by household size, with women in smaller households more commonly consuming this NRVCC food than women in the largest households; 43.1 percent of women in small households (1-5 members) consumed dark green leafy vegetables, compared to only 19.7 percent of women in the largest household category (11 or more members).

Finally, Table 6.8 shows that women's consumption of okra varies by household hunger status, and in a similar way as the finding for cabbage. Women in households with little or no hunger are nearly twice as likely to consume okra than women in households with moderate or severe hunger (25.6 percent versus 13.4 percent, respectively).

[68] Please note that the "any targeted commodity" indicator shown in Tables 6.8 and 6.9 is sensitive to the total number of commodities identified by the USAID Mission for that country. For example, Nepal has six NRVCC foods although Uganda has only one. The greater the number of NRVCC foods, the more likely women (and children) will have eaten *at least one* of the foods. This should be kept in mind when comparing the "any targeted commodity" indicator across Feed the Future countries.

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.

As shown in Table 6.9, more than one-third (36.1 percent) of children age 6-23 months in the Nepal ZOI consumed at least one NRVCC item (any of the six items) in the prior day. Similar to the pattern among women of reproductive age, dark green leafy vegetables were most commonly consumed, eaten in the prior day by more than one-quarter (26.6 percent) of children age 6-23 months. The next most common NRVCC among children was okra (13.4 percent), followed by pumpkin (5.2 percent). The remaining three commodities were consumed by fewer than 5 percent of children age 6-23 months in the ZOI: cauliflower (2.7 percent), bitter gourd (also 2.7 percent), and cabbage (1.5 percent).

Only one NRVCC food is significantly associated with any of the disaggregates in Table 6.9. Children's consumption of cauliflower varies by levels of caregivers' education. No children (0.0 percent) whose mothers have no education consumed cauliflower, whereas 6.7 percent of children whose mothers have secondary or more schooling consumed cauliflower.[69]

[69] Estimates for the "less than primary" education category are suppressed due to insufficient sample size (n<30) in that category.

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

Characteristic	Percent							n[1]
	Any targeted commodity[a]	Cauliflower[b]	Cabbage[c]	Pumpkin[d]	Green leafy vegetables (saag/spinach)[e]	Okra[f]	Bitter gourd[g]	
Total (All children 6-23 months)	36.1	2.7	1.5	5.2	26.6	13.4	2.7	121
Child sex								
Male	37.0	3.1	2.4	2.5	29.2	11.3	3.2	69
Female	34.5	2.0	0.0	9.9	22.4	16.9	1.8	52
Child age								
6-11 months	37.2	2.3	0.0	3.3	26.9	15.4	5.3	32
12-17 months	36.2	0.9	0.0	4.7	25.8	13.8	1.8	46
18-23 months	35.2	4.7	4.0	7.0	27.2	11.7	1.8	43
Caregiver's educational attainment[2,b]								
No education	29.2	0.0	2.5	8.3	26.3	5.4	2.3	30
Less than primary	^	^	^	^	^	^	^	20
Primary	35.3	0.6	0.0	0.0	19.4	21.4	4.8	37
Secondary or more	46.1	6.7	0.0	8.6	36.8	15.8	0.0	34
Gendered household type								
Male and female adults	35.3	3.0	1.7	5.7	25.9	12.6	2.2	109
Female adult(s) only	^	^	^	^	^	^	^	12
Male adult(s) only	-	-	-	-	-	-	-	0
Child(ren) only (no adults)	-	-	-	-	-	-	-	0
Household size								
Small (1-5 members)	38.8	2.8	3.1	7.8	29.2	17.8	2.7	60
Medium (6-10 members)	37.7	3.2	0.0	3.4	26.0	11.4	3.4	54
Large (11+ members)	^	^	^	^	^	^	^	7
Household hunger								
Little to no hunger	37.4	2.9	1.6	4.6	27.3	14.3	2.8	116
Moderate or severe hunger	^	^	^	^	^	^	^	5

^ Results not statistically reliable, n<30.

[1] 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.

[2] The ZOI interim survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

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

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

7. Nutritional Status of Women and Children

This chapter presents findings related to the Feed the Future indicators of women's underweight and children's anthropometry (stunting, wasting, and underweight). In Nepal, primary data for the women's underweight indicator were collected in the 2015 zone of influence (ZOI) interim survey, whereas for the children's three anthropometric indicators (stunting, wasting, and underweight), secondary 2014 Multiple Indicator Cluster Survey (MICS) data were used (see Table 2.1). (The 2014 Nepal MICS does not have women's anthropometric data.)

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 ≤ BMI < 25.0), overweight (25.0 ≤ BMI < 30.0), and obese (BMI ≥ 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 Nepal ZOI, mean BMI is 20.9, or normal weight. As shown in Table 7.1, nearly one-quarter (23.2 percent) of women in the Nepal ZOI are underweight (BMI <18.5), the Feed the Future standard indicator.

Nearly two-thirds (65.3 percent) of women in the Nepal ZOI are normal weight, and 9.7 percent and 1.7 percent are overweight and obese, respectively.

As shown in Table 7.1, mean BMI varies significantly by women's age group and educational attainment. For example, women's average BMI values increase with increasing age, from 19.3 among women age 15-19 years to 21.4 among women ages 45-49. Similarly, BMI category and prevalence of women's underweight (the Feed the Future standard indicator) also vary significantly by women's age group. Women's underweight generally declines with increasing age (from 36.9 percent among women aged 15-19 to 18.9 percent among women aged 45-49).

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

Characteristic	Mean BMI[a]	Body Mass Index (BMI) category (percent)[b]				n[1]
		Under-weight[c]	Normal weight	Over-weight	Obese	
Total (All women ages 15-49)	20.9	23.2	65.3	9.7	1.7	945
Age[a,b,c]						
15-19	19.3	36.9	62.5	0.6	0.0	222
20-24	20.5	22.1	70.7	7.3	0.0	157
25-29	21.5	20.4	64.6	10.8	4.2	135
30-34	21.7	11.7	67.9	18.7	1.7	128
35-39	21.7	18.5	65.2	12.9	3.4	105
40-44	21.8	20.5	61.5	15.6	2.5	111
45-49	21.4	18.9	65.9	12.7	2.5	87
Educational attainment[a]						
No education	21.1	22.3	64.8	10.8	2.1	357
Less than primary	21.3	21.2	64.2	12.9	1.7	115
Primary	20.3	27.4	65.5	5.7	1.4	318
Secondary or more	21.2	17.5	67.7	13.1	1.6	155
Gendered household type						
Male and female adults	20.8	23.2	65.7	9.2	1.8	813
Female adult(s) only	21.2	21.4	63.6	13.5	1.5	127
Male adult(s) only	^	^	^	^	^	2
Child(ren) only (no adults)	^	^	^	^	^	3
Household size						
Small (1-5 members)	21.0	23.8	64.0	10.5	1.7	493
Medium (6-10 members)	20.8	21.4	67.9	9.3	1.4	408
Large (11+ members)	20.4	30.9	57.5	6.7	5.0	44
Household hunger						
Little to no hunger	20.9	22.1	66.0	10.2	1.7	885
Moderate or severe hunger	19.8	38.0	55.4	3.7	3.0	60

^ Results not statistically reliable, n<30.

[1] 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.

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

Source: FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

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).

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 standard deviations (SDs) below the median of the 2006 World Health Organization (WHO) Child Growth Standard (<-2SD).[70] The stunting measures presented below include the Feed the Future stunting indicator of (<-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 and household size.

In the Nepal ZOI, 47.0 percent of children under age 5 are stunted. This is higher than the national estimate for Nepal from the 2014 MICS survey, which is 37.4 percent.[71] As shown in Table 7.2, 20.6 percent of ZOI children are severely stunted. The national MICS estimate for severe stunting (< -3SD) 15.8 percent.[72] The mean height-for-age Z-score in the ZOI is -1.9, which indicates that the average height-for-age among children in the Nepal ZOI is lower than that of the WHO global reference population. This ZOI estimate is slightly lower than the national mean height-for-age Z-score in the MICS survey, which is -1.6.[73]

As denoted by the superscripts in the column headings of 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. Both the prevalence of children's stunting and mean Z-scores are significantly associated with children's age and caregivers' education, but with no other disaggregate presented in Table 7.2. The prevalence of stunting in the Nepal ZOI generally increases with age (from 22.2 percent among the youngest children, those 0-11 months, to 63.2 percent among children 36-47 months). Stunting then declines slightly among the oldest age group, at 54.0 percent among children 48-59 months.

[70] WHO. (2006).
[71] CBS and UNICEF. (2015b). p. 28.
[72] Ibid.
[73] Ibid.

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

Characteristic	% Stunted (<-2 SD)[a]	% Severely stunted (<-3 SD)	Mean Z-score[b]	n[1]
Total (All children under 5 years)	47.0	20.6	-1.9	1,573
Child sex				
Male	44.4	19.7	-1.8	831
Female	49.7	21.5	-1.9	742
Child age[a,b]				
0-11 months	22.2	9.7	-0.9	304
12-23 months	46.6	17.2	-1.9	310
24-35 months	48.1	20.1	-2.0	273
36-47 months	63.2	30.2	-2.4	328
48-59 months	54.0	25.2	-2.2	358
Caregiver's educational attainment[2,a,b]				
No education	57.3	26.5	-2.2	707
Less than primary	44.8	20.5	-1.9	175
Primary	41.7	15.0	-1.7	407
Secondary or more	31.1	14.5	-1.4	279
Gendered household type				
Male and female adults	47.3	21.8	-1.9	1,344
Female adult(s) only	44.7	14.0	-1.8	225
Male adult(s) only	^	^	^	2
Child(ren) only (no adults)	^	^	^	2
Household size				
Small (1-5 members)	44.9	18.3	-1.9	674
Medium (6-10 members)	48.4	21.5	-1.9	742
Large (11+ members)	49.3	25.8	-2.0	157

^ Results not statistically reliable, n<30.

[1] 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.

[2] The Nepal MICS survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

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

Source: Nepal MICS 2014.

In addition to the significant relationship with children's age, stunting is also significantly associated with caregivers' educational attainment. As shown in Table 7.2, stunting prevalence declines with increasing levels of caregivers' education, from 57.3 percent among children whose caregivers have no education, to 31.1 percent among children whose caregivers have secondary or more schooling. In other words, Table 7.2 illustrates the finding that greater parental education is significantly associated with reduced stunting among children in Nepal.

Finally, as shown in Table 7.2, children's mean height-for-age Z-scores are significantly associated with children's age group and caregivers' education. In parallel to the pattern of the

stunting indicator, mean Z-scores decline (worsen) with increasing age (notwithstanding the slight increase among children age 48-59 months, at -2.2). Similarly, mean Z-scores increase (improve) with rising levels of caregiver education, from -2.2 among children whose caregivers have no education, to -1.4 among children whose caregivers have secondary or more schooling.

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 SD 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 and household size.

In the Nepal ZOI, 8.4 percent of children under age 5 are wasted, and 2.1 percent are severely wasted. National estimates from the MICS survey are slightly higher, at 11.3 percent and 3.2 percent, respectively.[74]

With respect to overweight (> +2SD) and obese (> +3SD), in the Nepal ZOI, 1.8 percent of children under age 5 are overweight, and 0.4 percent are obese. The national estimate for overweight from the 2014 Nepal MICS data is 2.1 percent.[75] (Children's obesity estimates were not presented in the 2014 MICS report.) The mean weight-for-height Z-score for children under age 5 in the Nepal ZOI is -0.6, which indicates that, on average, the weight-for-height of children in the ZOI is slightly lower than that for the WHO global reference population.

[74] Ibid.
[75] Ibid.

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

Characteristic	% Wasted (<-2 SD)[a]	% Severely wasted (<-3 SD)	% Overweight (> +2SD)[b]	% Obese (> +3SD)	Mean Z-score[c]	n[1]
Total (All children under 5 years)	8.4	2.1	1.8	0.4	-0.6	1,573
Child sex						
Male	7.6	1.9	2.1	0.7	-0.6	831
Female	9.3	2.4	1.5	0.1	-0.6	742
Child age[a,b]						
0-11 months	14.1	5.4	4.2	0.4	-0.5	304
12-23 months	10.1	1.7	1.3	1.0	-0.7	310
24-35 months	5.8	0.8	0.7	0.2	-0.6	273
36-47 months	5.8	0.7	2.4	0.4	-0.5	328
48-59 months	6.3	2.0	0.4	0.1	-0.6	358
Caregiver's educational attainment[2,c]						
No education	8.7	3.0	0.9	0.1	-0.7	707
Less than primary	8.2	1.7	2.5	0.2	-0.5	175
Primary	8.6	1.6	2.0	0.3	-0.6	407
Secondary or more	6.6	1.1	3.3	1.5	-0.4	279
Gendered household type						
Male and female adults	8.5	2.2	1.9	0.5	-0.6	1,344
Female adult(s) only	7.8	2.0	1.1	0.0	-0.5	225
Male adult(s) only	^	^	^	^	^	2
Child(ren) only (no adults)	^	^	^	^	^	2
Household size						
Small (1-5 members)	7.9	1.6	1.9	0.7	-0.6	674
Medium (6-10 members)	8.3	2.5	1.5	0.2	-0.6	742
Large (11+ members)	10.7	2.8	2.5	0.0	-0.7	157

^ Results not statistically reliable, n<30.

[1] 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.

[2] The Nepal MICS survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

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

Source: Nepal MICS 2014.

Table 7.3 also includes the results of significance tests for the children's wasting measures (< -2SD, the Feed the Future standard indicator), the overweight measure (> +2SD), and mean weight-for-height Z-scores. Both wasting and overweight are significantly associated with children's age group. In contrast to stunting (which increased with age), wasting generally declines with increasing age, from 14.1 percent among children age 0-11 months, to 6.3 percent among children age 48-59 months. Although the pattern is less linear, overweight also appears to decline with increasing age, from 4.2 percent among children age 0-11 months, to 0.4 percent among children age 48-59 months.

Mean weight-for-height Z-scores are significantly associated with caregivers' education. Z-scores increase (improve) with increasing levels of education, from -0.7 among children whose caregivers have no education, to -0.4 among children whose caregivers have 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 and household size.

In the Nepal ZOI, 32.0 percent of children under age 5 are underweight, and 8.8 percent are severely underweight. National estimates for the prevalence of children's underweight and severe underweight from the 2014 Nepal MICS are 30.1 percent and 8.6 percent, respectively.[76]

The mean weight-for-age Z-score in the ZOI is -1.5, which indicates that on average the weight-for-age for children in the ZOI is below that for the global reference population. The national mean weight-for-age Z-score is -1.4,[77] which is very similar to the ZOI estimate.

As shown in the column headings 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. The prevalence of underweight indicator varies significantly by children's age group and caregivers' educational attainment. Similar to stunting (and in contrast to wasting), prevalence of children's underweight increases with increasing age, from 21.9 percent among children 0-11 months to 37.0 percent among children 48-59 months. Similarly, children's underweight declines with increasing levels of caregivers' education, from 38.6 percent among children whose caregivers have no education, to 21.2 percent among children whose caregivers have secondary or more schooling.

[76] Ibid.
[77] Ibid.

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

Characteristic	% Underweight (<-2 SD)[a]	% Severely underweight (<-3 SD)	Mean Z-score[b]	n[1]
Total (All children under 5 years)	32.0	8.8	-1.5	1,573
Child sex[b]				
Male	30.3	7.1	-1.4	831
Female	33.8	10.6	-1.6	742
Child age[a,b]				
0-11 months	21.9	7.6	-1.0	304
12-23 months	30.3	6.9	-1.5	310
24-35 months	31.0	7.3	-1.5	273
36-47 months	38.9	12.3	-1.8	328
48-59 months	37.0	9.6	-1.7	358
Caregiver's educational attainment[2,a,b]				
No education	38.6	12.9	-1.8	707
Less than primary	33.9	5.0	-1.5	175
Primary	26.7	6.0	-1.4	407
Secondary or more	21.2	5.4	-1.1	279
Gendered household type				
Male and female adults	32.3	8.8	-1.5	1,344
Female adult(s) only	30.5	8.6	-1.4	225
Male adult(s) only	^	^	^	2
Child(ren) only (no adults)	^	^	^	2
Household size				
Small (1-5 members)	30.8	8.2	-1.5	674
Medium (6-10 members)	31.8	8.6	-1.5	742
Large (11+ members)	37.6	11.7	-1.6	157

^ Results not statistically reliable, n<30.

[1] 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.

[2] The Nepal MICS survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child's biological mother.

[a-b] 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: Nepal MICS 2014.

Mean weight-for-age Z-scores are significantly associated with children's sex, children's age group, and caregivers' education. Female children have lower Z-scores than male children (-1.6 versus -1.4). Moreover, Z-scores decrease (worsen) with increasing age, from -1.0 among children age 0-11 months to -1.7 among children age 48-59 months. Finally, Table 7.4 shows that weight-for-age Z-scores increase (improve) with rising levels of caregivers' education. Among children whose caregivers have no education, the mean Z-score is -1.8; this improves to -1.1 among children whose caregivers have secondary or more schooling.

8. Selected Indicators by Geographic Area and Ethnic Group

Nepal is known for its diversity in terms of its ethnic and regional identity, and this includes the geographical areas covered in the zone of influence (ZOI), where the interim survey was conducted in three languages (Nepalese, Tharu, and Abadi). There is evidence of caste/ethnic and regional differentials in welfare levels in terms of wealth and assets, education, maternal and child health and nutrition, fertility and family planning knowledge, and women's empowerment.[78,79]

This chapter presents findings for the additional United States Agency for International Development (USAID) Mission-requested analysis on the prevalence of selected Feed the Future indicators disaggregated by geographic area (Hill versus Terai) and ethnic group (Brahman/Chhetri, Dalit and Indigenous/Janajati). The selected indicators include: adequacy on each of the nine Women's Empowerment in Agriculture Index (WEAI) indicators; household hunger; achievement of minimum dietary diversity among women aged 15-49; and the consumption of foods by Women's Minimum Dietary Diversity (MDD-W) status.

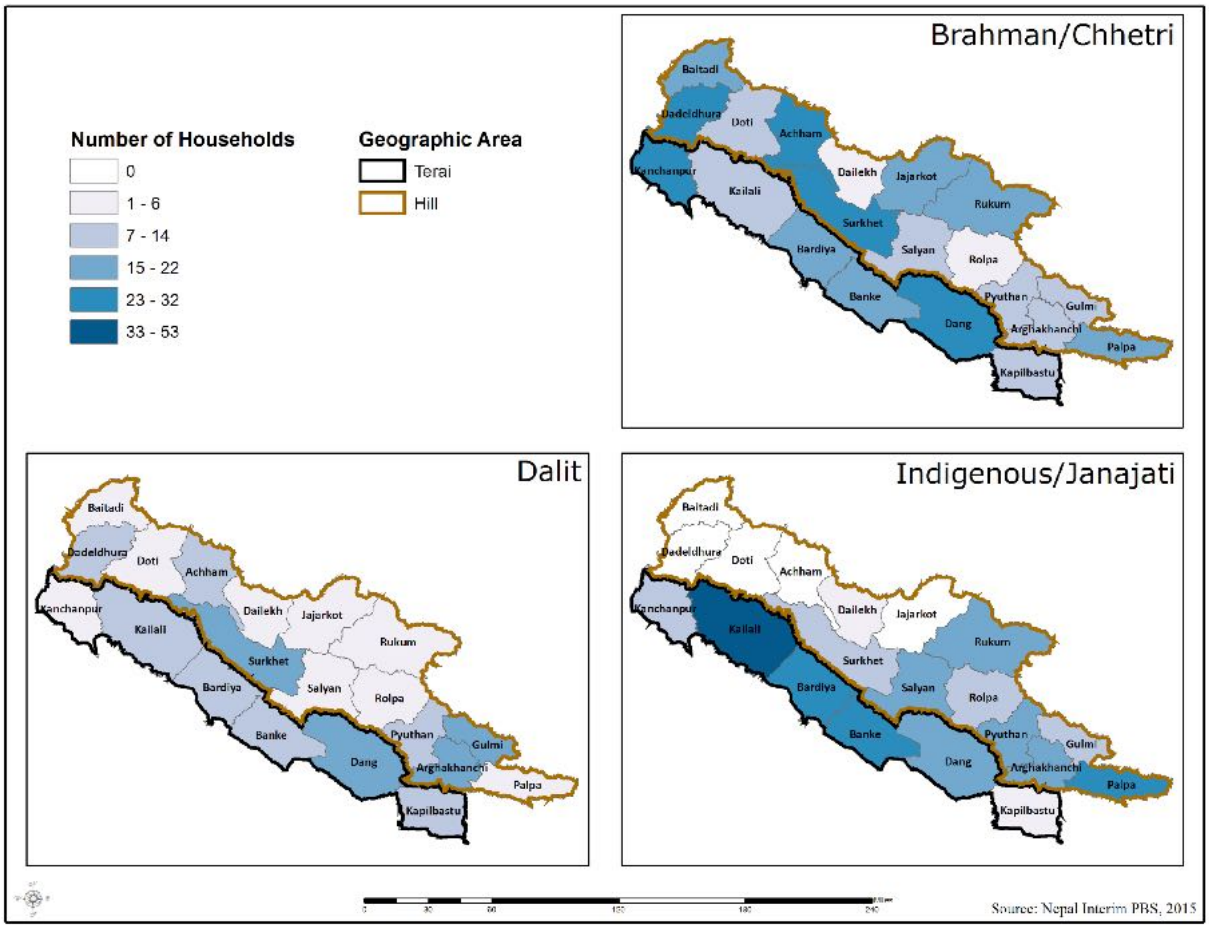
The percentage of households in the ZOI in the Hills and Terai are 47.8 percent and 52.2 percent, respectively.[80] The ethnic groups were collapsed into three major categories including Brahman/Chhetri, Dalit and Indigenous/Janajati, based on the 2011 Census data for the ZOI districts. The percentage of households in the ZOI by ethnic group was as follows: Brahman/Chhetri (44.3 percent), Dalit (17.3 percent), and Indigenous/Janajati (29.7 percent). The Dalits, the ethnic group of particular interest to the USAID Mission, accounts for about 21.5 percent and 13.1 percent of Hill and Terai population respectively.

The figure below (**Figure 8.1**) presents the number of households surveyed (at interim) by the ethnic subgroups (Brahman/Chhetri, Dalit, and Indigenous/Janajati) per district and outlines the geographical areas (Hill and Terai) that make up the ZOI. The Brahman/Chhetri households are distributed all across the ZOI, including both geographical areas. These households are most heavily concentrated in Dang and Kanchanpur in the Terai area, and in Dadeldhura, Achham and Surkhet in the Hills. The Dalit households are distributed in all of the districts in the Terai, but more concentrated in Surkhet, Gulmi, and Arghakhanchi in the Hills, and in Dang in the Terai. The Indigenous/Janajati households are heavily concentrated in the Terai, particularly in Kailali, Bardiya, and Banke. In the Hills, they are most concentrated in the Western Region, followed by the Mid-Western Region.

[78] Bhattachan. (2012).
[79] Bennett, Ram Dahal, and Govindasamy. (2008).
[80] CBS Nepal. (2012).

The household ethnic group was obtained from the primary respondent. Among the 838 households, about 5 percent (45 households) were excluded from the analysis. Of these, 41 were households from a number of "other" ethnic groups (such as Muslim, Kohar, Kurmi, Teli, Yadav, etc.) and four were missing the ethnic group categorization. In terms of geographical areas, 470 households were in the Hills and 368 were in Terai. The number of households in the ethnic groups was 329 Brahman/Chhetri, 186 Dalit, and 278 Indigenous/Janajati.

Figure 8.1. Map of the Feed the Future ZOI: Number of households surveyed by ethnic subgroup per district and geographic area



8.1 WEAI by Geographic Area and Ethnic Group

Table 8.1 presents the percentage of women who achieve adequacy in the nine corresponding indicators of the five empowerment domains assessed in the interim survey by geographic region (Hills and Terai) and by ethnic subgroup (Brahman/Chhetri, Dalit, and Indigenous/Janajati). Please refer to Table 5.1 to view the five corresponding empowerment

domains of the indicators, and their definitions under the WEAI and Table A1.1 to view the overall ZOI-level estimates of these indicators at interim.

Table 8.1. Women achieving adequacy of Women's Empowerment in Agriculture Index Indicators by geographic area and ethnic group

Feed the Future indicator	Geographic area[a]		Ethnic group[b]		
	Hill	Terai	Brahman/ Chhetri	Dalit	Indigenous/ Janajati
Percent of women achieving adequacy on Women's Empowerment in Agriculture Index Indicators[1]					
Input in productive decisions[a]	98.7	95.9	98.4	98.0	96.9
Autonomy in production	n/a	n/a	n/a	n/a	n/a
Ownership of assets	97.6	94.8	98.6	97.1	98.0
Purchase, sale, or transfer of assets[a]	94.0	98.2	96.2	94.4	97.3
Access to and decisions on credit	55.8	59.2	56.0	59.9	60.0
Control over use of income	99.3	98.2	99.7	99.4	98.0
Group member	47.0	56.3	55.6	49.1	55.4
Speaking in public	76.6	83.4	82.9	79.6	76.5
Workload[a,b]	42.7	61.7	47.6	44.7	59.2
Leisure	90.0	95.3	91.1	91.5	94.7
n	**426**	**334**	**304**	**167**	**252**

[1] 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.

[a-b] Significance tests were run for associations between each sub-group and each adequacy indicator. For example, a test was done between input in productive decisions and geographic area. When an association between the adequacy indicator and the subgroup 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, Nepal 2015.

A large proportion of women achieved adequacy (by Hill and Terai, respectively) in the control over use of income (99.3 percent, 98.2 percent); input in productive decisions (98.7 percent, 95.9 percent); ownership of assets (97.6 percent, 94.8 percent); purchase or transfer of assets (94.0 percent, 98.2 percent); and leisure (90.0 percent, 95.3 percent). A lower proportion of women achieved adequacy (by Hill and Terai, respectively) for workload (42.7 percent, 61.7 percent); group membership (47 percent, 56.3 percent); and access to and decisions on credit (55.8 percent, 59.2 percent). Differences in the association between adequacy and subgroup differences between Hill and Terai geographical areas were found to be statistically significant for: input in productive decisions (where a higher percent of women reached adequacy in the Hills compared to the Terai); and purchase, sale, and transfer of assets, and workload (where a higher percent of women reached adequacy in the Terai compared to the Hills).

The proportion of women achieving adequacy by ethnic group (Brahman/Chhetri, Dalit, and Indigenous/Janajati, respectively) was highest for control over use of income (98.0 to 99.7 percent); ownership of assets (97.1 to 98.6 percent); input in productive decisions (96.9 to 98.4 percent); purchase or transfer of assets (94.4 to 97.3 percent); and leisure (91.1 to 94.7). A lower proportion of women achieved adequacy by ethnic group (Brahman/Chhetri, Dalit, and

Indigenous/Janajati, respectively) for workload (44.7 to 59.2 percent); group membership (49.1 to 55.6 percent); and access to and decisions on credit (56 to 60.0 percent). The differences in the association between adequacy and subgroup differences in ethnic group were found to be statistically significant for workload only, where the percent of women achieving adequacy was 44.7 percent among the Dalit, followed by 47.6 percent among the Brahmin/Chhetri, and 59.2 percent among the Indigenous/Janajati.

8.2 Household Hunger

Table 8.2 presents estimates of household hunger for all households, by geographic area and ethnic group, as well as by household characteristics (including gendered household type, household size, and household educational attainment). Please refer to Table 6.1 to view the overall ZOI-level estimates for moderate to severe household hunger at interim.

A larger proportion of households in the Hill areas (11.6 percent) reported experiencing moderate to severe hunger, compared to the Terai areas (5.8 percent) of the ZOI. There was no statistically significant difference in households with moderate to severe hunger by the geographic area. Moderate to severe household hunger in the ZOI at interim was 9.0 percent. Among households from the Hills, there was a statistically significant association between moderate to severe hunger and household educational attainment. Moderate to severe household hunger was reported in 27.7 percent of households with no education, as compared to 12.6 percent of the households with less than primary or primary education. Finally, 5.2 percent of households with the highest level of education (secondary-or-more education) reported moderate to severe hunger.

The findings point to a notable statistically significant association between households with moderate to severe hunger and ethnic group. Moderate to severe hunger was reported by one-fifth (20.1 percent) of the Dalit households, as compared to 6.1 percent of Brahman/Chhetri households and 3.4 percent of the Indigenous/Janajati households. Furthermore, among Indigenous/Janajati households, there was a statistically significant association between moderate to severe hunger and household size; a higher percentage of medium size households (5.5 percent), as compared to the smaller size households (2.3 percent), reported moderate to severe hunger.

Although the team did not conduct tests of significance looking for associations between each household characteristic and moderate to severe hunger between the geographic areas, nor among the ethnic groups, the percent of household reporting moderate to severe hunger, in general, are much higher for Dalit households, as compared to other groups) across the board for all household characteristics. The percent of households reporting moderate to severe hunger, in general, are also higher for Hill area households, as compared to the Terai for the majority of the household characteristics presented.

Table 8.2. Household hunger by geographic and ethnic subgroups

Characteristic	Percent of households with moderate to severe hunger									
	Geographic area[a]				Ethnic group[b]					
	Hill[c]		Terai		Brahman/ Chhetri		Dalit[d]		Indigenous/ Janajati[e]	
	%	n[1]	%	n[1]	%	n[1]	%	n[1]	%	n[1]
Total (All households)[b]	11.6	468	5.8	368	6.1	328	20.1	185	3.4	278
Gendered household type										
Male and female adults	10.9	387	6.5	307	5.6	268	20.0	150	3.6	235
Female adult(s) only	17.4	65	2.1	53	8.3	52	22.8	31	3.2	33
Male adult(s) only	^	12	^	7	^	5	^	2	^	10
Child(ren) only (no adults)	^	4	^	1	^	3	^	2	-	0
Household size[e]										
Small (1-5 members)	12.3	319	5.7	238	6.5	223	20.9	135	2.3	181
Medium (6-10 members)	10.3	145	6.0	116	5.3	103	19.1	46	5.5	94
Large (11+ members)	^	4	^	14	^	2	^	4	^	3
Household educational attainment[c]										
No education	27.7	34	^	29	^	22	^	21	^	17
Less than primary	12.6	67	13.0	37	10.4	31	^	29	5.5	36
Primary	12.6	219	5.7	168	7.0	129	19.7	100	3.7	135
Secondary or more	5.2	148	2.5	134	3.0	146	18.4	35	0.0	90

^ Results not statistically reliable, n<30.

[1] 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.

[a-b] Significance tests were performed for associations between moderate to severe hunger and sub-groups. For example, a test was done between moderate to severe hunger and geographic area. When associations were found to be significant ($p<0.05$), the superscript is noted next to the household characteristic.

[c-e] Significance tests were performed for associations between moderate to severe hunger of selected sub-groups and household characteristics. For example, a test was done between moderate to severe hunger for those living in the hill area and gendered household type. When associations were found to be significant ($p<0.05$), the superscript is noted next to the household characteristic.

Source(s): FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

8.3 Dietary Diversity Among Women Age 15-49 Years

8.3.1 Women's Dietary Diversity Score

Table 8.3 shows the mean Women's Dietary Diversity Score (WDDS) for all women of reproductive age in the ZOI, by geographic area and by ethnic group for individual-level and household-level characteristics. Individual-level disaggregations include women's age groups and educational attainment. Household-level disaggregations include categories of gendered household type, household size, and household hunger.

Women residing in the Hill areas report consuming more food groups than women residing in households in the Terai areas; there was a statistically significant difference in the mean WDDS reported in the Hill areas (3.51) compared to the Terai areas (3.04). Note that the WDDS estimate for the ZOI at the interim is 3.28. Furthermore, among women residing in the Hill areas, there was a statistically significant difference in WDDS by household educational level: women with primary (3.62) and secondary or more (3.89) level of education report consuming more food groups than those with less than primary (3.32) or no education (3.38).

Among the women of Brahman/Chhetri ethnic groups, WDDS was higher (3.54) compared to the other ethnic groups Dalit (3.20) and Janajati (3.24), and this association was statistically significant. Of note, among the Dalit women, there was a statistically significant difference in WDDS by household educational level: women with primary level of education (3.51) report consuming more food groups than those with less than primary (2.67) or no education (3.08).

8.3.2 Women's Minimum Dietary Diversity

Table 8.4 shows the percentage of all women of reproductive age in the core ZOI, by geographic area and by ethnic group, who have achieved the MDD-W 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. Please refer to Table 6.3 to view the overall ZOI-level estimates for MDD-W at interim.

Table 8.3. Women's Dietary Diversity Score by geographic and ethnic subgroups

Characteristic	Mean Women's Dietary Diversity Score									
	Geographic area[a]				Ethnic group[b]					
	Hill[c]		Terai		Brahman/ Chhetri		Dalit[d]		Indigenous/ Janajati[e]	
	Mean	n[1]	Mean	n[1]	Mean	n[1]	Mean	n[1]	Mean	n[1]
Total (All households)[a,b]	3.51	523	3.04	471	3.54	361	3.20	209	3.24	359
Age										
15-19	3.64	129	2.94	104	3.65	77	3.48	53	3.08	91
20-24	3.54	81	3.16	91	3.61	53	3.23	40	3.38	66
25-29	3.63	66	3.16	84	3.60	65	^	21	3.29	50
30-34	3.37	81	2.88	52	3.25	51	2.87	31	3.56	39
35-39	3.47	62	3.12	44	3.65	40	^	22	3.29	40
40-44	3.32	58	2.97	55	3.31	48	^	25	3.08	37
45-49	3.47	46	2.94	41	^	27	^	17	3.15	36
Household educational attainment[c,d]										
No education	3.38	201	2.85	169	3.47	116	3.08	83	3.15	135
Less than primary	3.32	73	2.96	51	3.29	40	2.67	34	3.43	43
Primary	3.62	172	3.11	168	3.56	110	3.51	76	3.22	138
Secondary or more	3.89	77	3.44	83	3.73	95	^	16	3.46	43
Gendered household type										
Male and female adults	3.55	454	3.03	408	3.58	307	3.22	174	3.25	320
Female adult(s) only	3.29	66	3.14	61	3.32	52	3.13	34	3.20	37
Male adult(s) only	^	1	^	1	-	0	-	0	^	2
Child(ren) only (no adults)	^	2	^	1	^	2	^	1	-	0

Table 8.3. Women's Dietary Diversity Score by geographic and ethnic subgroups (continued)

Characteristic	Mean Women's Dietary Diversity Score									
	Geographic area[a]				Ethnic group[b]					
	Hill[c]		Terai		Brahman/ Chhetri		Dalit[d]		Indigenous/Janajati[e]	
	Mean	n[1]	Mean	n[1]	Mean	n[1]	Mean	n[1]	Mean	n[1]
Household size										
Small (1-5 members)	3.49	292	3.09	232	3.51	201	3.15	127	3.27	179
Medium (6-10 members)	3.53	222	3.11	199	3.60	157	3.31	73	3.18	167
Large (11+ members)	^	9	2.56	40	^	3	^	9	^	13
Household hunger										
Little to no hunger	3.53	474	3.04	458	3.54	342	3.21	177	3.23	353
Moderate or severe hunger	3.37	49	^	13	^	19	3.16	32	^	6

^ Results not statistically reliable, n<30.

[1] 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.

[a-b] Significance tests were performed for associations between women's dietary diversity score and sub-groups. For example, a test was done between women's dietary diversity score and geographic area. When differences were found to be significant ($p<0.05$), the superscript is noted next to the household characteristic.

[c-e] Significance tests were performed for associations between women's dietary diversity score of selected sub-groups and individual/household characteristics. For example, a test was done between mean women's dietary diversity score for those living in the hill area and age. When an association is found to be significant ($p<0.05$), the superscript is noted next to the characteristic.

Source(s): FTF FEEDBACK ZOI Interim Survey, Nepal 2015.

Table 8.4. Women's Minimum Dietary Diversity by geographic and ethnic subgroups

Characteristic	Percent of Women Achieving A Minimum Dietary Diversity									
	Geographic area[a]				Ethnic group[b]					
	Hill[c]		Terai		Brahman/ Chhetri		Dalit[d]		Indigenous/Janajati[e]	
	%	n[1]	%	n[1]	%	n[1]	%	n[1]	%	n[1]
Total (All households)[a,b]	26.3	523	13.9	471	28.7	361	17.2	209	18.1	359
Aged										
15-19	31.7	129	12.1	104	30.9	77	34.0	53	14.1	91
20-24	28.4	81	17.0	91	35.5	53	16.6	40	19.4	66
25-29	30.1	66	13.6	84	33.3	65	^	21	15.7	50
30-34	24.1	81	14.2	52	20.8	51	11.3	31	32.4	39
35-39	20.4	62	20.0	44	26.2	40	^	22	25.0	40
40-44	24.6	58	13.2	55	24.5	48	^	25	18.1	37
45-49	16.1	46	7.0	41	^	27	^	17	7.3	36
Household educational attainment[c,d]										
No education	19.6	201	8.6	169	23.3	116	10.7	83	13.6	135
Less than primary	21.0	73	6.4	51	17.6	40	6.0	34	23.4	43
Primary	31.1	172	16.5	168	29.7	110	27.0	76	19.2	138
Secondary or more	41.4	77	28.5	83	40.4	95	^	16	24.6	43
Gendered household type										
Male and female adults	27.3	454	14.1	408	30.9	307	16.2	174	18.4	320
Female adult(s) only	20.8	66	12.9	61	16.1	52	22.7	34	15.9	37
Male adult(s) only	^	1	^	1	-	0	-	0	^	2
Child(ren) only (no adults)	^	2	^	1	^	2	^	1	-	0

Table 8.4. Women's Minimum Dietary Diversity by geographic and ethnic subgroups (continued)

Characteristic	Percent of Women Achieving A Minimum Dietary Diversity									
	Geographic area[a]				Ethnic group[b]					
	Hill[c]		Terai		Brahman/ Chhetri		Dalit[d]		Indigenous/Janajati[e]	
	%	n[1]	%	n[1]	%	n[1]	%	n[1]	%	n[1]
Household size										
Small (1-5 members)	26.1	292	16.5	232	27.4	201	16.7	127	21.4	179
Medium (6-10 members)	26.7	222	13.2	199	30.9	157	19.6	73	14.0	167
Large (11+ members)	^	9	6.6	40	^	3	^	9	^	13
Household hunger										
Little to no hunger	26.4	474	14.1	458	29.3	342	15.9	177	17.5	353
Moderate or severe hunger	26.0	49	^	13	^	19	24.9	32	^	6

^ Results not statistically reliable, n<30.

[1] 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.

[a-b] Significance tests were performed for associations between women's minimum dietary diversity and sub-groups. For example, a test was done between women's minimum dietary diversity and geographic area. When differences were found to be significant ($p<0.05$), the superscript is noted next to the household characteristic.

[c-e] Significance tests were performed for associations between women's minimum dietary diversity of selected sub-groups and individual/household characteristics. For example, a test was done between women's minimum dietary diversity for those living in the hill area 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, Nepal 2015.

A higher proportion of women residing in the Hills (26.3 percent) as compared to those women in the Terai areas (13.9 percent), meet the minimum dietary diversity threshold (of five food groups); this two-fold difference is a statistically significant finding. The overall ZOI estimate for MDD-W is 20.2 percent at the interim. Furthermore, in the Hill area, there is a statistically significant association between higher educational attainment level and MDD-W. MDD-W prevalence increases with increasing education; from 19.6 percent in households with no education to 41.4 percent in households with secondary or more education.

The findings point to a statistically significant association between MDD-W and ethnic group; more women of Brahman/Chhetri ethnic groups (28.7 percent) meet the MDD-W threshold compared to the other ethnic groups Dalit (17.2 percent) and Janajati (18.1 percent). Additionally, for the Dalit ethnic group, there is a statistically significant association between household educational attainment and MDD-W; a higher proportion of women in households with primary education attainment achieve the MDD-W (27.0 percent) threshold compared to the proportion of women living in households with lower educational attainment (less than primary (6.0 percent) and no education (10.7 percent).

8.3.3 Consumption of Foods by Women's Minimum Dietary Diversity Status by Geographic Region

Table 8.5 shows the percentages of women age 15-49 years who consume each of the 10 food groups by dietary diversity achievement status and geographic area. As noted above, women who achieve a minimum dietary diversity, consume at least 5 of the 10 food groups, whereas women who do not achieve this, consume less than 5 food groups. Those women who have not achieved a minimum dietary diversity will not have as diverse of a diet. Table 8.5 shows where women who have not achieved a minimum dietary diversity are less likely to consume a given food group. Please refer to Table 6.4 to view the overall ZOI-level estimates for consumption of foods by MDD-W status.

Table 8.5. Consumption of foods by women's minimum dietary diversity status and geographic area

Category	Percent of women according to achievement of a minimum dietary diversity			
	Hill[a]		Terai	
	Achieving	Not achieving	Achieving	Not achieving
Women consuming a specific food group				
Grains, roots, and tubers	100.0	99.5	100.0	99.2
Legumes and beans[a]	3.6	0.2	19.0	0.6
Nuts and seeds[a]	8.7	1.4	23.9	4.0
Dairy products[a]	81.1	41.7	67.8	21.9
Meat and organ meats[a]	36.0	20.0	62.3	28.1
Eggs[a]	18.2	2.9	25.8	4.6
Vitamin A-rich dark green leafy vegetables[a]	81.2	44.2	54.9	25.4
Other vitamin A-rich vegetables and fruits[a]	43.1	15.0	17.1	4.1
Other fruits[a]	66.8	14.9	77.7	21.3
Other vegetables[a]	95.6	73.7	99.2	80.9
n	**145**	**378**	**85**	**386**

[a] Significance tests were performed for associations between women's achievement of minimum dietary diversity of those living in the Hill area and consumption of a specific food group. For example, a test was done between women's achievement of minimum dietary diversity for those living in the Hill area 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, Nepal 2015.

Among women achieving minimum dietary diversity, the percent consuming specific food groups are lower for those living in the Hill areas in comparison to the Terai for most food groups, with the exception of the following food groups where consumption in the Hill areas is higher: dairy products (81.1 percent consumption in Hill areas compared to 67.8 percent in the Terai), vitamin A-rich dark green leafy vegetables (81.2 percent consumption in Hill areas compared to 54.9 percent in the Terai), and other vitamin A-rich vegetables and fruits (43.1 percent consumption in Hill areas compared to 17.1 percent in the Terai).

In the Hill area, among women who do not achieve a minimum dietary diversity, only two food groups – grains, roots, and tubers (99.5 percent), and other vegetables (73.7 percent) – are consumed by well over half of the women. For the other eight food groups, the percentage of women consuming a specific food group falls below 50 percent (ranging from 44.2 percent for vitamin A-rich dark green leafy vegetables and 41.7 percent of dairy products, to 0.2 percent consuming legumes and beans). Similarly in the Terai area, among women who do not achieve a minimum dietary diversity, the same two food groups – grains, roots, and tubers (99.2 percent), and other vegetables (80.9 percent) – are consumed by well over half of the women. For the other eight food groups, the percentage of women consuming a specific food group falls below 30 percent (ranging from 28.1 percent for meat and organ meats down to 6 percent consuming legumes and beans). For those living in the Hill area, with the exception of grains, roots, and tubers, there was a statistically significant association between women's achievement of minimum dietary diversity and consumption of all other specific food groups (legumes and

beans, nuts and seeds, dairy products, meat and organ meats, eggs, vitamin A-rich dark green leafy vegetables, other vitamin A-rich vegetables and fruits, other fruits and other vegetables).

8.3.4 Consumption of Foods by Women's Minimum Dietary Diversity Status by Ethnic Subgroup

Table 8.6 shows the percentages of women age 15-49 years who consume each of the 10 food groups by dietary diversity achievement status and ethnic subgroup. As noted above, women who achieve a minimum dietary diversity, consume at least 5 of the 10 food groups, whereas women who do not achieve this, consume less than 5 food groups. Those women who have not achieved a minimum dietary diversity will not have as diverse of a diet. Table 8.6 shows where women who have not achieved a minimum dietary diversity are less likely to consume a given food group. Please refer to Table 6.4 to view the overall ZOI-level estimates for consumption of foods by MDD-W status.

Table 8.6. Consumption of foods by women's minimum dietary diversity status and ethnic sub-group

Category	Percent of women according to achievement of a minimum dietary diversity					
	Brahman/Chhetri		Dalit[a]		Indigenous/Janajati[b]	
	Achieving	Not achieving	Achieving	Not achieving	Achieving	Not achieving
Women consuming a specific food group						
Grains, roots, and tubers	100.0	99.1	100.0	99.2	100.0	99.6
Legumes and beans[a,b]	9.4	0.2	7.2	1.8	8.1	0.0
Nuts and seeds[a,b]	12.3	5.3	13.3	1.8	17.7	1.7
Dairy products[a,b]	90.3	53.5	75.2	25.7	53.9	14.5
Meat and organ meats[b]	31.1	10.0	34.6	20.2	71.4	42.3
Eggs[a,b]	12.4	2.6	25.6	2.5	31.4	3.7
Vitamin A-rich dark green leafy vegetables[a,b]	80.8	42.3	78.8	37.0	54.9	34.5
Other vitamin A-rich vegetables and fruits[a,b]	39.1	11.2	44.1	7.9	22.4	8.9
Other fruits[a,b]	69.0	18.4	72.3	13.8	74.8	21.6
Other vegetables[a,b]	96.1	76.3	97.7	82.0	98.4	76.8
n	**109**	**252**	**40**	**169**	**75**	**284**

[a-b] Significance tests were performed for associations between women's achievement of minimum dietary diversity among selected ethnic groups and consumption of a specific food group. For example, a test was done between women's achievement of minimum dietary diversity for those in the Dalit ethnic group 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, Nepal 2015.

Among women who achieve a minimum dietary diversity, five to six food groups are consumed by over half of the women in each of the ethnic subgroups. These include grains, roots, and tubers (100 percent); dairy products (53.9 to 90.3 percent); vitamin A-rich dark green leafy vegetables (54.9 to 80.8 percent); other fruits (69.0 to 74.8 percent); and other vegetables (96.1 to 98.4 percent) in all three ethnic subgroups. Meat and organ meats are consumed by over half of the women only in the Indigenous/Janajati subgroup (71.4 percent). Among the Dalit women, there were statistically significant associations between women's achievement of a minimum dietary diversity and consumption of all food groups, with the exception of grains, roots, and tubers, and meat and organ meats. Among the women of the Indigenous/Janajati ethnic group, there were statistically significant associations between women's achievement of a minimum dietary diversity and consumption of all food groups, with the exception of grains, roots, and tubers only.

Among women not achieving a minimum dietary diversity, only two food groups – grains, roots, and tubers (99.2 percent of Dalits and 99.6 percent of Indigenous/Janajati), and other vegetables (82.0 percent of Dalits and 76.8 percent of Indigenous/Janajati), are consumed by over half of the women for the Dalit and the Indigenous/Janajati ethnic subgroups. For the Brahman/Chhetri subgroup, there are three food groups consumed by more than half the women who do not achieve a minimum dietary diversity: grains, roots, and tubers (99.1 percent); other vegetables (76.3 percent); and dairy products (53.5 percent).

9. Summary and Conclusions

This report presents the results of the first interim assessment for the Feed the Future Nepal zone of influence (ZOI). The portion of the Nepal ZOI covered in this assessment consists of both rural and urban areas within 20 districts in Nepal's Far-Western, Mid-Western, and Western Regions—Achham, Baitadi, Dadeldhura, Doti, Kailali, Kanchanpur, Banke, Bardiya, Dailekh, Dang, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan, Surkhet, Arghakhanchi, Gulmi, Kapilvastu, and Palpa. Four additional districts that were added to the ZOI after the 2015 earthquake were not included in this assessment. Both primary 2015 ZOI interim survey and secondary 2014 Nepal Multiple Indicator Cluster Survey (MICS) data and 2013-2014 Annual Household Survey (AHS) data were used for the interim assessment.

Sample sizes from these data are sufficient to provide point estimates in the Nepal ZOI for the standard Feed the Future indicators, but the ZOI interim survey sample was not designed to be large enough to measure change in indicator values from the 2013 baseline assessment. Thirteen Feed the Future indicators are included in this assessment: (1) Daily per capita expenditures (as a proxy for income) in U.S. Government-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 (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.

As shown in Table 2.1 earlier in this report, the three poverty indicators – per capita expenditures, prevalence of poverty, and depth of poverty – were calculated with secondary data in the Nepal ZOI (2013-2014 AHS). Five indicators were calculated with the 2014 Nepal MICS data: exclusive breastfeeding; MAD; and children's stunting, wasting, and underweight. The remaining indicators were calculated from primary data collected in the Nepal ZOI in 2015 by Feed the Future FEEDBACK (FTF FEEDBACK).

9.1 Summary of Key Findings

9.1.1 Household Economic Status

In the 20 districts of the Nepal ZOI, average daily per capita expenditures is $2.29 (2010 United States Dollars [USD]). The prevalence of poverty, the percent of people living below $1.25 per day (2005 purchasing power parity [PPP]), is 20.9 percent. The depth of poverty (the mean percent shortfall relative to the $1.25 per day poverty line) is 2.8 percent.

9.1.2 WEAI Indicators

While neither the full Women's Empowerment in Agriculture Index (WEAI) nor its component subindices can be calculated for the Feed the Future interim assessments, this report presents uncensored headcounts for 9 of the 10 WEAI indicators. Uncensored headcounts are the percentage 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 levels of surveyed women's achievement in the Nepal ZOI include control over the use of income (98.8 percent), input in productive decisions (97.5 percent), and ownership of assets (96.4 percent). The WEAI uncensored headcounts with the lowest levels of achievement among primary adult female decisionmakers is group membership and workload (both at 51.2 percent).

9.1.3 Hunger and Dietary Intake

Fewer than 1 in every 10 ZOI households (9.0 percent) experience moderate or severe hunger, the Feed the Future standard indicator. Women's dietary diversity, or the average number of food groups (of nine possible groups) consumed in the prior day by women age 15-49, is 3.28 food groups. The prevalence of exclusive breastfeeding among ZOI infants age 0-5 months is 59.1 percent; more than half of all infants in the Nepal ZOI were exclusively breastfed in the prior 24 hours. Among ZOI children age 6-23 months, over one-quarter (28.1 percent) received a MAD in the prior day.

The six NRVCC foods in Nepal are cauliflower; cabbage; pumpkin; dark green leafy vegetables (e.g., saag/spinach, mustard leaves, etc.); okra; and bitter gourd. Questions about the consumption of these foods in the prior 24 hours were incorporated into the women's and children's 24-hour dietary intake modules in the ZOI interim survey (Modules H and I).

Among women of reproductive age in the Nepal ZOI, more than two-thirds (67.4 percent) consumed at least one of the six NRVCC foods in the prior day, with dark green leafy vegetables most commonly consumed (41.8 percent of women), followed by okra (24.8 percent), and bitter gourd (15.8 percent). The remaining three NRVCC foods in the Nepal ZOI were consumed by approximately 10 percent or fewer women of reproductive age: pumpkin (10.7 percent), cabbage (6.0 percent), and cauliflower (4.6 percent).

As shown in the indicator estimates table in the Executive Summary, among children age 6-23 months in the Nepal ZOI, over one-third (36.1 percent) consumed at least one of the six NRVCC foods in the prior day. Similar to the finding for women of reproductive age, among young children, the most commonly consumed NRVCC foods in the Nepal ZOI is dark green leafy vegetables; 26.6 percent of children age 6-23 months consumed this food in the prior day. The next most commonly consumed NRVCC foods among young children in the Nepal ZOI is okra (13.4 percent). The remaining four NRVCC foods in Nepal were consumed by

approximately 5 percent or fewer children age 6-23 months in the ZOI: pumpkin (5.2 percent), cauliflower (2.7 percent), bitter gourd (also 2.7 percent), and cabbage (1.5 percent).

9.1.4 Nutritional Status of Women and Children

Nearly one-quarter (23.2 percent) of non-pregnant women of reproductive age in the Nepal ZOI are underweight (body mass index [BMI] below 18.5). About 47.0 percent of children under age 5 in the ZOI are stunted, or have low height-for-age, indicating long-term, chronic undernutrition; and 8.4 percent of children under age 5 are wasted, or have low weight-for-height. Wasting is an indicator of acute malnutrition. Finally, 32.0 percent of children are underweight, or have low weight-for-age. Underweight is an indicator of either acute or chronic undernutrition in children.

9.1.5 Country-Specific Findings: Key Indicators by Geographic Area and Ethnic Group

In addition to the findings for standard Feed the Future indicators and disaggregates, this interim assessment report also presents some country-specific analysis for Nepal. Chapter 8 presents additional analysis on the prevalence of key Feed the Future indicators by both geographic area and ethnic group. In this chapter, WEAI uncensored headcounts, household hunger, and several measures of women's dietary diversity were presented separately for the Hill and Terai geographic areas, as well as by three ethnic group categories (Brahman/Chhetri, Dalit, and Indigenous/Janajati) within the ZOI.

With respect to WEAI (and as shown in Table 8.1), a few of the nine uncensored ("raw") headcounts vary significantly by geographic area or by ethnic group. The workload indicator varies by both, with higher achievement of adequacy among women in Terai areas (61.7 percent) and among women in the Indigenous/Janajati ethnic group category (59.2 percent). In addition, Table 8.2 shows that the prevalence of household hunger varies significantly by ethnic group, but not by geographic area within the ZOI. Moderate or severe household hunger (the Feed the Future standard indicator) was reported by 20.1 percent of the Dalit households, but only by 6.1 percent of Brahman/Chhetri households and 3.4 percent of the Indigenous/Janajati households.

Mean Women's Dietary Diversity Score (WDDS), which is calculated for all women of reproductive age in all sampled households, varies significantly by both geographic area (with women in Hill areas exhibiting significantly higher WDDS than women in Terai areas, 3.51 food groups versus 3.04, respectively) as well as by ethnic group, with Brahman/Chhetri women exhibiting the highest average WDDS values (3.54 food groups) of the three ethnic group categories. Similar to the WDDS findings, Table 8.4 reveals that the ZOI prevalence of MDD-W, a new indicator for the Feed the Future interim assessments is significantly higher among Hill women (26.3 percent), than among Terai women (13.9 percent). This indicator also varies

by ethnic group, with Brahman/Chhetri women exhibiting the greatest prevalence (28.7 percent) of the three ethnic group categories.

9.2 Conclusions

The Nepal 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 standard indicators, however, non-overlapping confidence intervals (CIs) for baseline and interim 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 unless a statistical test of differences is conducted.

Baseline/interim significance tests were conducted for a subset of indicators shown in the indicator estimates table in the Executive Summary of this report. The indicators which were tested include both the poverty- and expenditure-related indicators (per capita expenditures, prevalence of poverty, and depth of poverty) as well as the children's anthropometry indicators (stunting, wasting, and underweight). Of the six indicators tested, three exhibited a statistically significant difference between baseline and interim: prevalence of poverty, depth of poverty, and children's wasting.

In the Nepal ZOI the prevalence of poverty and depth of poverty declined for all household types, including male and female adult households and female adult-only households. At baseline the prevalence of poverty in the ZOI was 32.5 percent, declining to 20.9 percent at interim. Similarly, the depth of poverty has also declined over time from 6.8 percent at baseline to 2.8 percent at interim. Note that there is no statistically significant difference between the baseline and interim per capita expenditure estimates.

In addition, the prevalence of children's wasting has declined from the baseline estimate of 12.0 percent of children under 5 years to the interim estimate of 8.4 percent of children. As noted in the indicator estimates table in the Executive Summary, this significant decline in children's wasting in the Nepal ZOI is apparent for all children, as well as for male children (but not for female children). Moreover, there is no statistically significant difference in children's stunting between baseline and interim. Nor is there a significant difference in children's underweight between baseline and interim.

For the remainder of the indicators presented in the Executive Summary table – indicators for which baseline/interim significance tests were not conducted – non-overlapping CIs demonstrate significant differences between estimates. Significant differences were found over time between the baseline and interim estimates for WDDS and the five WEAI indicators of

Ownership of assets; Purchase, sale or transfer of assets; Control over the use of income; Group membership; and Leisure.

Five of the nine WEAI uncensored headcounts demonstrate a significant increase between baseline and interim. Women's adequacy on ownership of assets has increased from 89.9 percent at baseline to 96.4 percent at interim. Women's adequacy on the purchase, sale or transfer of assets indicator has increased from 90.5 percent to 95.9 percent; adequacy on the control over the use of income indicator has increased from 95.4 percent to 98.8 percent; adequacy on the group membership indicator has increased from 16.2 percent to 51.2 percent; and adequacy on the satisfaction with leisure time indicator has increased from 84.1 percent to 92.4 percent.

Among women of reproductive age in the ZOI, the WDDS indicator also demonstrates a statistically significant change over time, although it exhibits a decline between the baseline estimate (3.89 food groups of nine possible groups) and the interim estimate (3.28 food groups).

Notwithstanding the description above regarding baseline and interim differences in indicator estimates (as detected via a significance test for a subset of six indicators, or via non-overlapping CIs for the remainder of the indicators), this first interim assessment for the Nepal ZOI was designed to present point estimates in the ZOI for the Feed the Future indicators. The second interim assessment for the Nepal ZOI, planned for 2017, will explicitly explore change in indicator estimates over time.

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Appendix 1. Supplementary Data and Figures

A1.1 Interim Feed the Future Indicator Estimates

Unweighted sample sizes, point estimates, SDs, CIs, DEFF, and nonresponse rates for the interim Feed the Future indicators for the ZOI.

Feed the Future indicator	Estimate					n
	Indicator value[a]	SD	95% CI	DEFF	Non-response rate[1]	
Daily per capita expenditures (as a proxy for income) in USG-assisted areas (2010 USD)						
All households	2.29	1.27	2.07-2.50	4.2	n/a	600
Male and female adults	2.24	1.17	2.03-2.45	3.6	n/a	462
Female adult(s) only	2.48	1.64	2.09-2.86	1.7	n/a	124
Male adult(s) only	^	^	^	^	n/a	12
Child(ren) only (no adults)	^	^	^	^	n/a	2
Prevalence of Poverty: Percent of people living on less than $1.25/day (2005 PPP)						
All households	20.9	-	15.2-28.2	3.7	n/a	600
Male and female adults	22.2	-	16.1-29.8	3.4	n/a	462
Female adult(s) only	13.9	-	6.2-28.3	2.0	n/a	124
Male adult(s) only	^	^	^	^	n/a	12
Child(ren) only (no adults)	^	^	^	^	n/a	2
Depth of Poverty: Mean percent shortfall relative to the $1.25/day (2005 PPP) poverty line						
All households	2.8	7.2	1.8-3.8	2.8	n/a	600
Male and female adults	2.9	6.9	1.7-4.0	2.9	n/a	462
Female adult(s) only	2.3	8.2	0.3-4.2	1.7	n/a	124
Male adult(s) only	^	^	^	^	n/a	12
Child(ren) only (no adults)	^	^	^	^	n/a	2
Percent of women achieving adequacy on Women's Empowerment in Agriculture Index Indicators[2]						
Input in productive decisions	97.5	-	95.2-98.7	2.0	6.4	760
Autonomy in production	n/a	n/a	n/a	n/a	n/a	n/a
Ownership of assets	96.4	-	93.4-98.0	2.5	6.4	760
Purchase, sale or transfer of assets	95.9	-	94.7-96.9	0.6	6.4	760
Access to and decisions on credit	57.3	-	53.0-61.5	1.4	6.4	760
Control over use of income	98.8	-	97.7-99.4	1.0	6.4	760
Group member	51.2	-	42.8-59.5	5.4	6.4	760
Speaking in public	79.6	-	75.5-83.2	1.7	6.4	760
Workload	51.2	-	45.7-56.8	2.3	6.4	760
Leisure	92.4	-	89.4-94.6	1.7	6.4	760
Prevalence of households with moderate or severe hunger						
All households	9.0	-	6.3-12.8	2.6	0.7	836
Male and female adults	8.9	-	6.0-13.0	2.4	0.8	694
Female adult(s) only	10.6	-	6.0-18.1	1.0	0.5	118
Male adult(s) only	^	^	^	^	^	19
Child(ren) only (no adults)	^	^	^	^	^	5
Women's Dietary Diversity: Mean number of food groups consumed by women of reproductive age						
All women age 15-49	3.28	1.09	3.12-3.44	5.12	7.8	994

Feed the Future indicator	Estimate					n
	Indicator value[a]	SD	95% CI	DEFF	Non-response rate[l]	
Prevalence of exclusive breastfeeding among children under 6 months of age						
All children	59.1	-	49.8-67.8	1.1	n/a	145
Male children	60.2	-	48.4-71.0	1.0	n/a	86
Female children	57.6	-	42.3-71.6	1.2	n/a	59
Prevalence of children 6-23 months receiving a minimum acceptable diet						
All children	28.1	-	23.3-33.5	1.4	n/a	500
Male children	31.0	-	24.7-38.0	1.3	n/a	273
Female children	24.6	-	19.1-31.0	0.9	n/a	227
Prevalence of women of reproductive age who consume specific targeted nutrient-rich value chain commodities						
Cauliflower	4.6	-	2.4-8.6	4.9	7.8	994
Cabbage	6.0	-	4.1-8.6	2.1	7.8	994
Pumpkin	10.7	-	6.5-17.2	7.0	7.8	994
Green leafy vegetables (saag/spinach)	41.8	-	34.6-49.5	5.6	7.8	994
Okra	24.8	-	19.5-31.0	4.3	7.8	994
Bitter gourd	15.8	-	11.9-20.5	3.3	7.8	994
Prevalence of women of reproductive age who consume at least one targeted nutrient-rich value chain commodity						
All women age 15-49	67.4	-	60.9-73.3	4.3	7.8	994
Prevalence of children 6-23 months who consume specific targeted nutrient-rich value chain commodities						
Cauliflower	2.7	-	0.9-7.9	1.0	5.8	121
Cabbage	1.5	-	0.4-6.4	1.0	5.8	121
Pumpkin	5.2	-	2.1-12.3	1.3	5.8	121
Green leafy vegetables (saag/spinach)	26.6	-	18.6-36.6	1.2	5.8	121
Okra	13.4	-	7.9-22.0	1.2	5.8	121
Bitter gourd	2.7	-	0.5-12.6	2.1	5.8	121
Prevalence of children 6-23 months who consume at least one targeted nutrient-rich value chain commodity						
All children	36.1	-	27.6-45.6	1.0	5.8	121
Male children	37.0	-	26.9-48.4	0.9	5.0	69
Female children	34.5	-	23.2-47.9	0.8	7.0	52
Prevalence of underweight women						
All non-pregnant women age 15-49	23.2	-	19.5-27.3	1.9	7.9	945
Prevalence of stunted children under 5 years of age						
All children	47.0	-	42.8-51.2	2.5	n/a	1,573
Male children	44.4	-	39.7-49.2	1.7	n/a	831
Female children	49.7	-	44.4-55.1	1.9	n/a	742

Feed the Future indicator	Estimate					n
	Indicator value[a]	SD	95% CI	DEFF	Non-response rate[1]	
Prevalence of wasted children under 5 years of age						
All children	8.4	-	6.8-10.4	1.4	n/a	1,573
Male children	7.6	-	5.8-9.7	1.0	n/a	831
Female children	9.3	-	7.1-12.2	1.3	n/a	742
Prevalence of underweight children under 5 years of age						
All children	32.0	-	28.1-36.2	2.6	n/a	1,573
Male children	30.3	-	25.9-35.0	1.8	n/a	831
Female children	33.8	-	29.2-38.7	1.7	n/a	742

^ Results not statistically reliable, n<30.

[1] 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.

[2] 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.

[a] 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, Nepal 2015; Nepal MICS 2014; Nepal AHS 2013-2014.

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, 44 enumeration areas (EAs) were selected from the 2011 Nepal Population Census in 20 districts by probability proportional to size sampling. The stratification was by region and urban/rural. 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 March 5 to March 26, 2015.

For those EAs that have greater than 300 households in the sampling frame, they were subdivided into several smaller segments, each one of which has a size of 150-200 households. Only one of the segments was randomly selected and listed. The segmentation was carried out based on different landmarks such as lanes, roads, canals, river/streams, hills, gullies, farm terraces, temples, ponds etc. The EAs were divided into roughly equal-sized segments.

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 for each cluster. We have:

P_{1hi} = first-stage sampling probability of the *i*-th cluster in stratum *h*; and

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

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

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

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*.

b_i = proportion of households in the *i*-th sample cluster compared to the total number of households in EA *i* in stratum *h* if the EA is segmented, otherwise b_i=1.

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:

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

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

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

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).

A2.2 Poverty Prevalence and Expenditure Methods

General Expenditure and Poverty Estimation Procedures

Both expenditure and poverty indicator estimates are based on consumption aggregates at the household level. The data source and methods for creation of those aggregates, including price adjustments and currency adjustments, are discussed below. The weighting of the expenditure and poverty estimates is also discussed, as well as the calculation of the poverty thresholds. Once a consumption aggregate has been calculated for a household, it is adjusted to be on a per capita basis. It is these per capita consumption estimates that are the foundation of the expenditure and poverty estimates. The per capita consumption estimate in the dataset is on an annual basis and in Nepalese Rupees (NPR) at the time of the survey (2013-2014). Then these

estimates are adjusted to be on a daily basis and in 2010 United States Dollar (USD). These adjusted estimates are the per capita expenditures indicator estimates presented in this report. Poverty is also based on the annual per capita consumption estimates. Like for expenditures these estimates are adjusted to be on a daily basis. They, however, are not adjusted to be in USD, but kept in NPR. To determine if a household is in poverty, the daily per capita consumption estimate in the household is compared to a poverty threshold that is in 2013-2014 NPR. If a household is below the poverty threshold, it is considered to be in poverty. The calculation of the poverty thresholds for $1.25 2005 purchasing power parity (PPP) and the national poverty line are described below.

Data Source

The expenditure and poverty indicators calculated for the zone of influence (ZOI) interim assessment were derived using secondary data that was collected in Annual Household Survey 2013-14 (AHS II).[81] The AHS II was designed to provide reliable estimates mainly by urban and rural categories and covered 3,000 households in Nepal with 1,500 for urban and 1,500 for rural. This analysis was based on AHS data collected from 600 households (210 for urban and 390 for rural) in the Feed the Future ZOI covering 19 districts across three development regions including Western, Mid-Western, and Far-Western. It is noted that 1 of the 20 ZOI districts in the Far-Western Region, Dadeldhura, was not selected into the sample of ZOI districts due to the stratification of the sample by urban and rural, and not district.[82] The sample of 600 households exceeds the minimum number calculated as sample size estimates for the key poverty indicators (Table 2.2) and still provides reliable indicator estimates at the ZOI level, however, they are not representative at the district level.

Data Preparation and Expenditure Estimation by Components

The Nepal AHS Survey collected expenditure data by four components (or sections) in the instrument. These included food, non-food, housing, and durables. Each of the four sections has varying recall periods. These data were aggregated into a single measure of consumption or the "consumption aggregate," that represents the well-being of the household. The expenditure estimates presented in this report are derived following the same methodology used by Nepal Living Standards Survey (NLSS 2011)[83] and Living Standards Measurement Survey (LSMS) to prepare national estimates of poverty in Nepal.[84]

[81] CBS Nepal. (2015a).
[82] Because the sample was not stratified by district, it was possible for some districts to not have EAs in the sample.
[83] CBS Nepal. (2011b).
[84] Deaton and Zaidi. (2002).

Food Consumption

- AHS (II) survey collected data on 110 food items in 13 categories (e.g., grains and cereals, vegetables, fruits, meat and fish, spices and condiments, alcoholic beverage, etc.). The survey asks the total amount of money spent (or equivalent value if the food item was home produced or received as gift or payment) in the food items that were consumed during the past 7 days. This information for all the subcategories of food items were aggregated as food consumption except that consumption of alcohol and tobacco was treated as a separate group and was excluded from the food group. The weekly household food consumption was then converted to annual food consumption.

- The quantity and value of all the food items consumed was collected in the survey. The aggregation was based on reported value or the total amount of money spent on each item. In some cases, where quantity was available but the value was missing, the value was estimated using the median price of the items in this "price group". Extreme observations appearing in the dataset that were deemed in error were corrected with some logical assumptions. No spatial price adjustment was made for the food consumption group.

- To keep the food consumption aggregates comparable with those derived from the NLSS (2011), food items were excluded from AHS aggregation that did not appear in the NLSS instrument. These included: Other meats (Duck, Ostrich), Other milk products, Other oils (Maize), Other fruits, Dried fruits (Walnut, Coconut), Other Green Vegetables, Ice cream, Other chocolates, Other spices (Cloves), Meals eaten out, Bread, and Biscuits.

Non-Food Expenditures

- AHS collected data on a variety of non-food expenditures including goods and services. The non-food expenditures are either frequent or non-frequent, but all measured with a 12-month reference period. Only the total price paid by the household was measured for each type of good or service for the non-food expenditures.

- The non-food items were categorized into: fuels, apparel, personal care, other frequent expenses, other infrequent expenses, and miscellaneous expenses. This section of the instrument also collected information on educational expenditures in the past 12 months for each member of the household. The expenses were recorded for pre-primary and primary, secondary, higher secondary, tertiary (undergraduate, graduate and higher levels) and non-degree and technical/vocational education separately. The expense on education was aggregated as a separate group, and was not included in non-food expenditure.

- Some items listed in the non-food section of the AHS questionnaire were excluded from aggregation. These included expenses on health care (medical, dental, and traditional health) services, maintenance of household items or the house, jewelry, travel, insurance and tax obligations, and large durable items. Some durable items (e.g., car and furniture) were excluded because they were also listed in the inventory of durables and were aggregated into durable expenses. The transfers of money to entities outside of the households (e.g., donations, insurance, taxes, or levies) or expenses on large purchases that occur infrequently, as Deaton and Zaidi have suggested, are excluded because they either do not contribute to the household's well-being or are considered "lumpy expenditures" that should not be included within the aggregate.[85] As all the excluded items were not in NLSS expenditure, the exclusion was also to ensure the expenditure estimates comparable with the NLSS estimates.

Expenditure on Durable Goods

- AHS questionnaire collected information for a list of durable items on: the number of such items owned, the year of purchase, the price of purchase, and the estimate of the current value of the item. Since durable goods are typically expensive and used year after year, the purchase price or the current value is not added directly to the consumption aggregate. Instead, the consumption value of durable goods is estimated as a flow of services accrued to the household.

- The annual value of depreciation of the durable items was estimated considering the values at the time of purchase and the current value with temporal price adjustment using Consumer Price Index (CPI) with the following steps:

  – A rate of depreciation for each of the items is obtained using the purchase value per-item;

  – For each item, the item-specific median depreciation rates is obtained from the sample;

  – The rate of depreciation is applied to the current value (scaled back to last year) of the item to impute the annual flow of services; and

  – The flow of services across all durable goods owned by each household is aggregated to the consumption of durable goods.

- A set of durable items was excluded from expenditure aggregation to ensure the estimates comparable with NLSS. Such items are typically rare or luxury items, or items for production such as big and small cattle, water pump or motor, vacuum cleaner, Inverter, solar panel, jewelry (gold or silver), microwave oven, water heater (gas or electric), and air conditioner/air cooler.

[85] Deaton and Zaidi. (2002). p. 39.

Housing Expenditure

- AHS questionnaire collected data on housing characteristics as well as housing expenses. The rental value of housing for households who rented the housing units was used as the housing expenditure. For owner-occupied households, the expected rental values were used as housing expenditure. In most cases, the respondent reported the expected value of the rent by estimating their housing cost based on the cost of housing for similar dwelling units in the neighborhood.

- For those owner-occupied households where the expected rent was missing and the respondent does not own the housing but lives in some other mode of occupancy (provided by the office, squatters and other categories), the rent was imputed using hedonic regression modeling. As there were not enough households which were rented to provide sufficient sample for the regression, the hedonic regression used data from renters and owner-occupied households to impute the rental values for the non-reported households.

- Annual expenditures by household on electricity, garbage collection and telephone that were reported in the housing section of the questionnaire were excluded from the housing expenditures, but were aggregated into a separate group for utilities.

The total household expenditure is a sum of seven categories of aggregates, including food, non-food, housing, education, tobacco-alcohol, and utilities.

Price Adjustments and Conversions

Outlier Corrections

Consumption poverty analyses are sensitive to the presence of outliers which can cause biased results. Generally, extreme observations appearing in the dataset were the result of mistakes in reporting. Such outliers were corrected with some logical assumptions and were imputed with median values as needed.

Spatial Price Adjustment

Prices vary markedly across geographical areas. The aggregated consumption data have been adjusted for spatial and cost-of-living differences. The price adjustments in the AHS 2013-2014 are for urban-rural and geographical areas (Hill, Terai and Mountain). Because the ZOI does not include Mountain areas, adjustments were made for urban-rural and, Hill and Terai. The deflation of the consumption was done by dividing nominal consumption expenditures by the price index.

Currency Conversions Using CPI and PPP

The AHS consumption data was collected between December 1, 2013 and July 1, 2014. In order to analyze the data, the consumption values and poverty thresholds had to be adjusted for inflation and converted between NPR and US dollars (USD). The inflation adjustments were done using the CPI and the conversion between NPR and USD was done using the 2005 PPP. The CPI index currency conversions presented in this analysis were prepared as follows:

- The $1.25 2005 PPP poverty threshold was converted to 2013/14 NPR poverty threshold using the formula NPL_125=1.25*PPP*(2013/14 CPI NPR/2005 CPI NPR), where Nepalese 2005 PPP is 26.4671, the CPI 2013/14 index 198.175 with CPI 2005=100. The $1.25 2005 PPP threshold is equivalent to 65.56 NPR, per person, per day in 2013/14 prices.
- Per capita expenditures measured in NPR were converted to 2010 USD using the CPI and the PPP Index. We used the formula (2005 CPI NPR/2013/14 CPI NPR)*1/(PPP 2005)* (2010 USD CPI/2005 USD CPI) where NPR PPP 2005 = 26.4671, 2013/14 CPI NPR = 198.175, 2005 CPI NPR = 100, 2010 USD CPI =111.65, and 2005 USD CPI = 100. The conversion factor was 0.021286.
- The CPI values used for the currency conversions listed here were taken from the World Bank's Databank[86] 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 national poverty threshold used here was first generated by the Nepal Central Bureau of Statistics (CBS) based on National Living Standard Survey 2011. The threshold was then inflated to 2013-14 as national poverty threshold to be used for ZOI expenditure analysis. The national threshold for 2013-14 is 26,028.33 per year, per person, and is converted to daily poverty line at 71.31 per person per day. The national threshold is slightly higher than the 65.56 NPR, per person, per day in 2013-14 prices converted from $1.25 (2005 PPP).

[86] 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.[87] In late 2015, the World Bank updated the $1.25 2005 PPP poverty threshold to a comparable $1.90 2011 PPP.[88] The update reflects changes in market prices and currencies based on the 2011 PPP maintaining while the substantive level of poverty measured by the $1.25 2005 PPP measure. Because future assessments in Nepal are likely to evaluate poverty using the $1.90 2011 PPP thresholds, **Table A2.1** 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 NPR and US dollars. The only use of the 2011 PPP was to create Table A2.1. The $1.90 2011 PPP poverty threshold was converted to 2013/14 NPR by using the Nepalese 2011 PPP value of 25.7593.[89] Using the 2011 CPI of 164.849 (2005=100) and the 2013/14 CPI of 198.175 (2005=100), the $1.90 2013/14 PPP threshold is 58.837 NPR in 2011 prices, which is lower than the 65.56 NPR ($1.25 2005 PPP) threshold. Because the 2011 PPP threshold is lower than the 2005 PPP threshold, poverty rates under the new threshold are lower than the rates reported in Table 4.2. The poverty rates being drastically lower may be attributable to the fact that a large proportion of the population are right below the $1.25 threshold. This fact is evidenced by the low depth of poverty as shown in Table 4.2.

[87] The World Bank. (2014).
[88] The World Bank. (2015b).
[89] The World Bank. (2015c).

Table A2.1. Poverty at the $1.90 (2011 PPP)[1] per person per day threshold

Characteristic	Prevalence of poverty[2]		Depth of poverty[3]		Average consumption shortfall of the poor[4]		
	Percent population[a]	n[5]	Percent of poverty line[b]	n[5]	In USD 2011 PPP[c]	Percent of poverty line[c]	n[5]
Total (All households)	10.6	600	1.3	600	0.23	12.1	47
Gendered household type							
Male and female adults	11.0	462	1.3	462	0.22	11.8	39
Female adult(s) only	8.4	124	1.2	124	^	^	7
Male adult(s) only	^	12	^	12	^	^	1
Child(ren) only (no adults)	^	2	^	2	-	-	0
Household size[a]							
Small (1-5 members)	7.8	441	1.3	441	^	^	26
Medium (6-10 members)	14.8	147	1.2	147	^	^	20
Large (11+ members)	^	12	^	12	^	^	1
Household educational attainment[a,b]							
No education	19.6	36	0.9	36	^	^	5
Less than primary	25.5	64	3.4	64	^	^	14
Primary	14.2	217	1.9	217	^	^	24
Secondary or more	2.3	283	0.2	283	^	^	4

^ Results not statistically reliable, n<30.

[1] The international poverty line was updated in 2015. The line is $1.90 (2011 PPP) per person per day.

[2] 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.

[3] The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty.

[4] 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.

[5] 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.

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

Source: Nepal AHS 2013-2014.

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

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

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

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

Feed the Future Nepal Zone of Influence Interim Survey Questionnaire

Disclaimer: The Feed the Future Nepal 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 of this questionnaire in Nepali language, please contact the United States Agency for International Development, Bureau for Food Security via email at bfs.mel@usaid.gov.

MODULE A. HOUSEHOLD IDENTIFICATION COVER SHEET

HOUSEHOLD IDENTIFICATION	CODE
A01. HOUSEHOLD IDENTIFICATION	
A02. CLUSTER NUMBER	
A03. WARD NUMBER	
A04. NAME OF VILLAGE DEVELOPMENT COMMITTEE (VDC)/MUNICIPALITY	
A05. DISTRICT	
A06. REGION	
A07. GPS COORDINATES OF HOUSEHOLD	° ′ ″

Note:

THE **PRIMARY MALE AND PRIMARY FEMALE DECISIONMAKERS** ARE THOSE WHO ARE AGE 18 OR OLDER, AND WHO SELF-IDENTIFY AS THE PRIMARY MALE AND/OR PRIMARY FEMALE MEMBERS RESPONSIBLE FOR THE DECISIONMAKING, BOTH SOCIAL AND ECONOMIC, WITHIN THE HOUSEHOLD.

IN HOUSEHOLDS WITH BOTH MALE AND FEMALE DECISIONMAKERS, THE PRIMARY MALE AND PRIMARY FEMALE DECISIONMAKERS ARE USUALLY HUSBAND AND WIFE; HOWEVER THEY CAN ALSO BE OTHER HOUSEHOLD MEMBERS, AS LONG AS THEY ARE AGED 18 AND OVER.

A09. INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:
1 COMPLETED
2 NOT HOME
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD
4 POSTPONED/UNAVAILABLE
5 REFUSED
6 DWELLING VACANT
7 NOT A DWELLING
8 DWELLING DESTROYED
9 DWELLING NOT FOUND
10 TOO ILL TO RESPOND/COGNITIVELY IMPAIRED
11 OTHER (SPECIFY) _____
12 PARTIAL COMPLETE

A10. TOTAL PERSONS IN HOUSEHOLD

A11. TOTAL NUMBER OF WOMEN 15-49

A12. TOTAL NUMBER OF CHILDREN AGE 0-2

A13. LINE NO. OF RESPONDENT TO MODULE C

A14. SENIOR SUPERVISOR	**A15.** QC INTERVIEWER	**A16.** INTERVIEWER CODE
NAME _____	NAME _____	

A17. LANGUAGE OF QUESTIONNAIRE**

A18. LANGUAGE OF INTERVIEW**

A19. NATIVE LANGUAGE OF RESPONDENT**

A20. WAS A TRANSLATOR USED? (YES=1, NO=2)

** LANGUAGE CODES: 1 NEPALI 2 THARU 3 ABADI 4 DOTELI 5 MAGAR 6 KHAM MAGAR 7 TAMANG 8 JUMLI (KHAS) 9 GURUNG 10 URDU 11 OTHER (SPECIFY) _____

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 New ERA, Kathmandu. 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 without giving a reason and without fear of any retribution. If you do not want to participate in this study, or if you decide you want to stop the interview after it has begun, the only thing you need to do is tell me you do not want to participate.

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 New ERA office in Kathmandu, by calling 014413603. 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.

We would like to ask you to sign this paper to indicate that you understand what has been explained to you about this study, and that you are willing to participate in the interview.

May I begin the interview now?

SIGNATURE OF RESPONDENT: _____ DATE: _____

SIGNATURE OF WITNESS: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED….1 ..... RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2 ⟶ END. "Thank you very much for your time."

↓

CONTINUE WITH HOUSEHOLD ROSTER:

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

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 New ERA, Kathmandu. 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 without giving a reason and without fear of any retribution. If you do not want to participate in this study, or if you decide you want to stop the interview after it has begun, the only thing you need to do is tell me you do not want to participate.

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 New ERA office in Kathmandu, by calling 014413603. 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:	New ERA
NAME OF SURVEY DIRECTOR:	Jagat Basnet
PHONE NUMBER:	014413603
MAILING ADDRESS:	Rudramati Marg Kalo Pool Kathmandu, Nepal
EMAIL ADDRESS:	jagat@newera.com.np

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 primary male decisionmaker in this household? This person should be 18 years old or older.

YES, PRIMARY MALE DECISIONMAKER EXISTS IN HOUSEHOLD.....1
NO PRIMARY MALE DECISIONMAKER IN HOUSEHOLD.....2

IF THERE IS A PRIMARY MALE DECISIONMAKER, ENTER HIS NAME ON LINE 01 OF THE ROSTER. C02 AND C03 ARE PRE-FILLED FOR THIS LINE NUMBER.

C01b. Who would you say is the primary female decisionmaker in this household? This person should be 18 years old or older.

YES, PRIMARY FEMALE DECISIONMAKER EXISTS IN HOUSEHOLD.....1
NO PRIMARY FEMALE DECISIONMAKER IN HOUSEHOLD.....2

IF THERE IS A PRIMARY FEMALE DECISIONMAKER, ENTER HER NAME ON LINE 02 OF THE ROSTER. SEX (CO2) IS PRE-FILLED FOR THIS LINE NUMBER. ENTER THE RELATIONSHIP (CO3) OF THE FEMALE DECISIONMAKER TO THE PERSON LISTED ON LINE 01; IF NO ONE IS LISTED ON LINE 01, ENTER CODE '01' FOR CO3.

LINE NUMBER	C01: Now, please tell me the names of all of the other people who usually live here. LIST ALL HOUSEHOLD MEMBERS, THEIR SEX (C02), AND THEIR RELATIONSHIP TO THE PRIMARY DECISIONMAKER NAMED IN LINE 01 (C03), OR NAMED IN LINE 02 IF NO HH MEMBER LISTED ON LINE 01. IF THERE IS NO PRIMARY MALE OR FEMALE DECISIONMAKER IN THE HOUSEHOLD, START THE HOUSEHOLD LISTING ON LINE 03. THEN ASK: Are there any other people who live here, even if they are not at home now? These may include children in school or household members at work. Any other people like small children or infants that we have not listed? Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? IF YES, COMPLETE LISTING FOR QUESTIONS C02-C03. THEN, ASK QUESTIONS STARTING WITH C04 FOR EACH PERSON ONE AT A TIME.	C02: What is [NAME's] sex? M = 1 F = 2	C03: What is [NAME's] relationship to the primary male decision-maker? IF NO PRIMARY MALE DECISION-MAKER: What is [NAME's] relationship to the primary female decision-maker? SEE CODES BELOW IF NO ADULT DECISION-MAKER: ENTER CODE 16	C04: What is [NAME's] age? IN YEARS IF 95 OR OLDER, ENTER '95'	C05: Did [NAME] stay here last night? YES=1 NO=2	C06: How long has it been since [NAME] has spent the night in this household? SEE CODES BELOW	C07: CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	C08: CIRCLE LINE NUMBER OF ALL CHILD-REN AGE 0-2	C09: Has [NAME] ever attended school? YES=1 NO=2	C10: Is [NAME] currently attending school? YES=1 NO=2	C11: What is the highest grade of education completed by [NAME]? SEE CODES BELOW	C12: Can [NAME] read and write? SEE CODES BELOW
										IF AGE 3 OR OLDER			
	C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	
01		1	0 1		1→C07 2	1 2 3	01	01	1 2→C12	1 2			
02		2			1→C07 2	1 2 3	02	02	1 2→C12	1 2			
03		1 2			1→C07 2	1 2 3	03	03	1 2→C12	1 2			
04		1 2			1→C07 2	1 2 3	04	04	1 2→C12	1 2			
05		1 2			1→C07 2	1 2 3	05	05	1 2→C12	1 2			
06		1 2			1→C07 2	1 2 3	06	06	1 2→C12	1 2			

C03. RESULT CODES: RELATIONSHIP TO PRIMARY MALE (OR FEMALE, IF NO MALE) DECISIONMAKER:

SELF.....01
SPOUSE/PARTNER.....02
SON/DAUGHTER.....03
SON/DAUGHTER-IN-LAW.....04
GRANDSON/ GRANDDAUGHTER.....05
MOTHER/FATHER.....06
BROTHER/SISTER.....07
NEPHEW/NIECE.....08
NEPHEW/NIECE OF SPOUSE.....09
COUSIN.....10
BROTHER/SISTER-IN-LAW.....11
MOTHER/FATHER-IN-LAW.....12
OTHER RELATIVE.....13
SERVANT/MAID.....14
LABORER.....15
NO DECISIONMAKER AGE 18 OR OLDER IN HOUSEHOLD.....16
OTHER RELATIONSHIP.....96

C06. RESULT CODES: TIME SINCE SPENT THE NIGHT

CIRCLE 1 IF DAYS; ENTER # OF DAYS IN BOX (1-6).

CIRCLE 2 IF WEEKS; ENTER # OF WEEKS IN BOX (1-5).

CIRCLE 3 IF MONTHS; ENTER # OF MONTHS IN BOX MEMBER HAS BEEN AWAY.

C11. RESULT CODES: EDUCATION

LESS THAN CLASS 1.....01
CLASS 1.....02
CLASS 2.....03
CLASS 3.....04
CLASS 4.....05
CLASS 5.....06
CLASS 6.....07
CLASS 7.....08
CLASS 8.....09
CLASS 9.....10
CLASS 10.....11
CLASS 11.....12
CLASS 12.....13
UNIVERSITY OR ABOVE.....14
TECHNICAL/VOCATIONAL.....15
ADULT LITERACY ONLY, NO FORMAL EDUCATION.....16
KORANIC/RELIGIOUS ONLY NO FORMAL EDUCATION).....17
DON'T KNOW/ NOT APPLICABLE.....91

C12. RESULT CODES: LITERACY

CANNOT READ & WRITE.....1
CAN SIGN (WRITE) ONLY.....2
CAN READ ONLY.....3
CAN READ & WRITE.....4

MODULE C. HOUSEHOLD ROSTER AND DEMOGRAPHICS (continued)

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

LINE NUMBER	Now, please tell me the names of all of the other people who usually live here. LIST ALL HOUSEHOLD MEMBERS, THEIR SEX (C02), AND THEIR RELATIONSHIP TO THE PRIMARY DECISIONMAKER NAMED IN LINE 01 (C03), OR NAMED IN LINE 02 IF NO HH MEMBER LISTED ON LINE 01. IF THERE IS NO PRIMARY MALE OR FEMALE DECISIONMAKER IN THE HOUSEHOLD, START THE HOUSEHOLD LISTING ON LINE 03. THEN ASK: Are there any other people who live here, even if they are not at home now? These may include children in school or household members at work. Any other people like small children or infants that we have not listed? Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? IF YES, COMPLETE LISTING FOR QUESTIONS C02-C03. THEN, ASK QUESTIONS STARTING WITH C04 FOR EACH PERSON, ONE AT A TIME.	What is [NAME's] sex? M = 1 F = 2	What is [NAME's] relationship to the primary male decision-maker? IF NO PRIMARY MALE DECISION-MAKER: What is [NAME's] relationship to the primary female decision-maker? SEE CODES BELOW IF NO ADULT DECISION-MAKER: ENTER CODE 16	What is [NAME's] age? IN YEARS IF 95 OR OLDER, ENTER '95'	Did [NAME] stay here last night? YES=1 NO=2	How long has it been since [NAME] has spent the night in this household? SEE CODES BELOW	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILD-REN AGE 0-2	Has [NAME] ever attended school? YES=1 NO=2	Is [NAME] currently attending school? YES=1 NO=2	What is the highest grade of education completed by [NAME]? SEE CODES BELOW	Can [NAME] read and write? SEE CODES BELOW
											IF AGE 3 OR OLDER		
	C01	**C02**	**C03**	**C04**	**C05**	**C06**	**C07**	**C08**	**C09**	**C10**	**C11**	**C12**
07		1 2			1→C07 2	1 2 3	07	07	1 2→C12	1 2		
08		1 2			1→C07 2	1 2 3	08	08	1 2→C12	1 2		
09		1 2			1→C07 2	1 2 3	09	09	1 2→C12	1 2		
10		1 2			1→C07 2	1 2 3	10	10	1 2→C12	1 2		
11		1 2			1→C07 2	1 2 3	11	11	1 2→C12	1 2		
12		1 2			1→C07 2	1 2 3	12	12	1 2→C12	1 2		
13		1 2			1→C07 2	1 2 3	13	13	1 2→C12	1 2		
14		1 2			1→C07 2	1 2 3	14	14	1 2→C12	1 2		
15		1 2			1→C07 2	1 2 3	15	15	1 2→C12	1 2		

C03. RESULT CODES: RELATIONSHIP TO PRIMARY MALE (OR FEMALE, IF NO MALE) DECISIONMAKER:

SELF 01
SPOUSE/PARTNER 02
SON/DAUGHTER 03
SON/DAUGHTER-IN-LAW 04
GRANDSON/ GRANDDAUGHTER 05
MOTHER/FATHER 06
BROTHER/SISTER 07
NEPHEW/NIECE 08
NEPHEW/NIECE OF SPOUSE 09
COUSIN 10
BROTHER/SISTER-IN-LAW 11
MOTHER/FATHER-IN-LAW 12
OTHER RELATIVE 13
SERVANT/MAID 14
LABORER 15
NO DECISIONMAKER AGE 18 OR OLDER IN HOUSEHOLD 16
OTHER RELATIONSHIP 96

C06. RESULT CODES: TIME SINCE HOME

CIRCLE 1 IF DAYS; ENTER # OF DAYS IN BOX (1-6).

CIRCLE 2 IF WEEKS; ENTER # OF WEEKS IN BOX (1-5).

CIRCLE 3 IF MONTHS; ENTER # OF MONTHS IN BOX MEMBER HAS BEEN AWAY.

C11. RESULT CODES: EDUCATION

LESS THAN CLASS 1 01
CLASS 1 02
CLASS 2 03
CLASS 3 04
CLASS 4 05
CLASS 5 06
CLASS 6 07
CLASS 7 08
CLASS 8 09
CLASS 9 10
CLASS 10 11
CLASS 11 12
CLASS 12 13
UNIVERSITY OR ABOVE 14
TECHNICAL/VOCATIONAL 15
ADULT LITERACY ONLY, NO FORMAL EDUCATION 16
KORANIC/RELIGIOUS ONLY NO FORMAL EDUCATION) 17
DON'T KNOW/ NOT APPLICABLE 91

C12. RESULT CODES: LITERACY

CANNOT READ & WRITE 1
CAN SIGN (WRITE) ONLY 2
CAN READ ONLY 3
CAN READ & WRITE 4

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

QNO.	QUESTIONS	RESPONSE CODES
D04	How many rooms in this dwelling are used for sleeping?	**D04. NUMBER OF ROOMS USED 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 ..... 11 FLUSH TO SEPTIC TANK..... 12 FLUSH TO PIT LATRINE..... 13 FLUSH TO SOMEWHERE ELSE ..... 14 FLUSH, DON'T KNOW WHERE..... 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE (VIP)..... 21 PIT LATRINE WITH SLAB..... 22 PIT LATRINE WITHOUT SLAB/OPEN PIT ..... 23 COMPOSTING TOILET..... 31 BUCKET TOILET..... 41 HANGING TOILET/HANGING LATRINE..... 51 NO FACILITY/BUSH/FIELD..... 61 → SKIP TO D08 OTHER..... 96
D06	Do you share this toilet with other households?	**D06. IF TOILET IS SHARED** YES..... 1 NO..... 2 → 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)..... 0☐ 10 OR MORE HOUSEHOLDS..... 95 DON'T KNOW..... 98

QNO.	QUESTIONS	RESPONSE CODES
D08	What is the main source of drinking water for your household?	**D08. MAIN DRINKING WATER SOURCE** PIPED WATER PIPED INTO DWELLING ..... 11 PIPED TO YARD/PLOT ..... 12 PUBLIC TAP/STANDPIPE ..... 13 TUBE WELL OR BOREHOLE ..... 21 DUG WELL PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 WATER FROM SPRING PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42 RAINWATER ..... 51 TANKER TRUCK ..... 61 CART WITH SMALL TANK ..... 71 SURFACE WATER (RIVER/DAM/LAKE/ POND/STREAM/CANAL/ IRRIGATION CHANNEL) ..... 81 STONE TAP/DHARA ..... 82 BOTTLED WATER ..... 91 OTHER 96
D09	Does this household have electricity?	**D09. ELECTRICITY** YES ..... 1 NO 2
D10	What is the main source of cooking fuel for your household?	**D10. COOKING FUEL** ELECTRICITY ..... 01 LIQUID PROPANE GAS (CYLINDER) ..... 02 NATURAL GAS (PIPED) ..... 03 BIOGAS ..... 04 KEROSENE ..... 05 COAL, LIGNITE ..... 06 CHARCOAL ..... 07 WOOD ..... 08 STRAW/SHRUBS/GRASS ..... 09 AGRICULTURAL CROP RESIDUE ..... 10 ANIMAL DUNG ..... 11 NO FOOD COOKED IN HOUSEHOLD ..... 95 OTHER 96
D11	What is your ethnic group? Do you belong to: Brahmin? Chhetri? Dalit? Janajati? Newar? Another ethnic group?	**D11. ETHNICITY** BRAHMIN ..... 01 CHHETRI ..... 02 DALIT ..... 03 JANAJATI ..... 04 → GO TO D12B NEWAR ..... 05 → END MODULE OTHER (SPECIFY)_____ ..... 96 DON'T KNOW ..... 98 → GO TO D12C
D12A	Is that a hill ethnic group, a terai ethnic group, or neither?	**D12A. ETHNICITY – HILL OR TERAI** HILL ..... 01 TERAI ..... 02 NEITHER ..... 03 → END MODULE

QNO.	QUESTIONS	RESPONSE CODES
D12B	Do you belong to hill [ETHNIC GROUP] or terai [ETHNIC GROUP]?	**D12B. ETHNICITY – HILL OR TERAI** HILL.....01 TERAI.....02 → END MODULE OTHER (SPECIFY)_____....96 DON'T KNOW.....98
D12C	What is your ethnic subgroup? (SECOND INTERVIEWER TO CONSULT SHEET WITH ETHNIC SUBGROUP CODES AND REPORT CORRECT CODE TO PRIMARY INTERVIEWER)	**D12C. ETHNICITY – SUBGROUP** SUBGROUP CODE: ☐☐☐....96 → END MODULE DON'T KNOW.....98
D12D	What is your last name?	**D12D. ETHNICITY – LAST NAME** SPECIFY LAST NAME_____ DON'T KNOW.....98

MODULE F. HOUSEHOLD HUNGER SCALE

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

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 3) TO THE RESPONDENT.

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

"Moving on to another topic, I'd like to ask you a few questions about the availability of food in your home."

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

MODULE G. WOMEN'S EMPOWERMENT IN AGRICULTURE INDEX

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

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

PLEASE DOUBLE CHECK TO ENSURE:

- YOU HAVE COMPLETED THE ROSTER SECTION OF THE HOUSEHOLD QUESTIONNAIRE TO IDENTIFY THE CORRECT PRIMARY FEMALE DECISIONMAKER;
- RESPONDENTS TO THIS MODULE ARE AGE 18 OR OLDER;
- YOU HAVE NOTED THE HOUSEHOLD ID AND INDIVIDUAL ID CORRECTLY FOR THE PERSON YOU ARE ABOUT TO INTERVIEW;
- YOU HAVE SOUGHT TO INTERVIEW THE INDIVIDUAL IN PRIVATE OR WHERE OTHER MEMBERS OF THE HOUSEHOLD CANNOT OVERHEAR OR CONTRIBUTE ANSWERS;
- YOU HAVE CHECKED THE INFORMED CONSENT REGISTER AND ENSURED THAT THE RESPONDENT(S) TO MODULE G HAVE PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE MODULE G INFORMED CONSENT PROCEDURE (ANNEX 4) TO THE RESPONDENT(S).

SUB-MODULE G1. INDIVIDUAL IDENTIFICATION

	Code		Code
G1.01. HOUSEHOLD IDENTIFICATION:	☐☐☐☐☐☐	**G1.03.** OUTCOME OF INTERVIEW	COMPLETED ..... 1 HOUSEHOLD MEMBER TOO ILL TO RESPOND/COGNITIVELY IMPAIRED ..... 2 RESPONDENT NOT AT HOME/ TEMPORARILY UNAVAILABLE ..... 3 RESPONDENT NOT AT HOME/ EXTENDED ABSENCE ..... 4 REFUSED ..... 5 COULD NOT LOCATE 6
G1.02. NAME OF RESPONDENT CURRENTLY BEING INTERVIEWED (LINE NUMBER FROM ROSTER IN SECTION C HOUSEHOLD ROSTER): **SURNAME, FIRST NAME:**_____	☐☐	**G1.04.** ABILITY TO BE INTERVIEWED ALONE: (SELECT ALL THAT APPLY)	ALONE ..... A ADULT FEMALES PRESENT ..... B ADULT MALES PRESENT ..... C CHILDREN PRESENT ..... D

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

SUB-MODULE G2. ROLE IN HOUSEHOLD DECISIONMAKING AROUND PRODUCTION AND INCOME GENERATION

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

RESPONDENT ID CODE | |

"Now I'd like to ask you some questions about your participation in certain types of work activities."

ACTIVITY		Did you yourself participate in [ACTIVITY] in the past 12 months?	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:** These are crops that are grown primarily for household food consumption	YES ..... 1 NO ..... 2 →SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99
B	**Cash crop farming:** These are crops that are grown primarily for sale in the market	YES ..... 1 NO ..... 2 →SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99
C	**Livestock raising**	YES ..... 1 NO ..... 2 →SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99
D	**Non-farm economic activities:** This would include things like running a small business, self-employment, buy-and-sell	YES ..... 1 NO ..... 2 →SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99
E	**Wage and salary employment:** This could be work that is paid for in cash or in-kind, including both agriculture and other wage work	YES ..... 1 NO ..... 2 →SKIP TO NEXT ACTIVITY	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99
F	**Fishing or fishpond culture**	YES ..... 1 NO ..... 2 →SKIP TO MODULE G3	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99	NO INPUT OR INPUT INTO VERY FEW DECISIONS ..... 01 INPUT INTO SOME DECISIONS ..... 02 INPUT INTO MOST OR ALL DECISIONS..... 03 NO DECISION MADE ..... 93 REFUSED 99

SUB-MODULE G3(A). ACCESS TO PRODUCTIVE CAPITAL

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

	PRODUCTIVE CAPITAL	Does anyone in your household currently have any [ITEM]?	How many of [ITEM] does your household currently have?	Who would you say owns most of the [ITEM]? **CIRCLE ALL APPLICABLE**	Who would you say can decide whether to sell [ITEM] most of the time? **CIRCLE ALL APPLICABLE**	Who would you say can decide whether to give away [ITEM] most of the time? **CIRCLE ALL APPLICABLE**	Who would you say can decide to mortgage* or rent out [ITEM] most of the time? **CIRCLE ALL APPLICABLE**	Who contributes most to decisions regarding a new purchase of [ITEM]? **CIRCLE ALL APPLICABLE**
PRODUCTIVE CAPITAL		**G3.01a**	**G3.01b**	**G3.02**	**G3.03**	**G3.04**	**G3.05**	**G3.06**
A	Agricultural land (for example, parcels)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9
B	Large livestock (for example, oxen, cattle)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9
C	Small livestock (for example, goats, pigs, sheep)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9
D	Chickens, ducks, turkeys, and pigeons	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9
E	Fish pond or fishing equipment	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9
F	Farm equipment (non-mechanized: for example, hand tools, animal-drawn ploughs)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9
G	Farm equipment (mechanized: for example, tractor-drawn plough, power tiller, treadle pump)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED.....9	SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9

PRODUCTIVE CAPITAL		Does anyone in your household currently have any [ITEM]?	How many of [ITEM] does your household currently have?	Who would you say owns most of the [ITEM]? **CIRCLE ALL APPLICABLE**	Who would you say can decide whether to sell [ITEM] most of the time? **CIRCLE ALL APPLICABLE**	Who would you say can decide whether to give away [ITEM] most of the time? **CIRCLE ALL APPLICABLE**	Who would you say can decide to mortgage* or rent out [ITEM] most of the time? **CIRCLE ALL APPLICABLE**	Who contributes most to decisions regarding a new purchase of [ITEM]? **CIRCLE ALL APPLICABLE**
PRODUCTIVE CAPITAL		**G3.01a**	**G3.01b**	**G3.02**	**G3.03**	**G3.04**	**G3.05**	**G3.06**
H	Nonfarm business equipment (for example, blacksmith, cobbler, tailor, auto-repair shop)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9				
I	House or other structures	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9				
J	Large consumer durables (for example, refrigerator, TV, sofa)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9				
K	Small consumer durables (for example, radio, cookware, pressure cooker, LPG gas stove and gas cylinder, fan)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9				
L	Cell phone	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9				
M	Other land not used for agricultural purposes (for example, parcels of residential or commercial land)	YES.....1 NO.....2 → SKIP TO NEXT ITEM REFUSED .....9 → SKIP TO NEXT ITEM		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9				
N	Means of transportation (for example, bicycle, motorcycle, car, tractor, animal driven cart)	YES.....1 NO.....2 → SKIP TO MODULE G3(B) REFUSED .....9 → SKIP TO MODULE G3(B)		SELF.....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER..D NOT APPLICABLE.....Z REFUSED 9				

** A mortgage is a legal agreement in which a person borrows money to buy property, for example, a house, and pays back the money over a period of years. If the property is not paid for in full, then the lender of the money can legally take the property and sell it to obtain what they are owed.*

SUB-MODULE G3(B). ACCESS TO CREDIT

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

LENDING SOURCES		Has anyone in your household taken any loans or borrowed cash/in-kind from [SOURCE] in the past 12 months?	Who made the decision to borrow from [SOURCE]? **CIRCLE ALL APPLICABLE**	Who makes the decision about what to do with the money/item borrowed from [SOURCE]? **CIRCLE ALL APPLICABLE**
LENDING SOURCE NAMES		**G3.07**	**G3.08**	**G3.09**
A	Non-governmental organization (NGO)	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO NEXT SOURCE DON'T KNOW ..... 8 → GO TO NEXT SOURCE REFUSED ..... 9 → GO TO NEXT SOURCE	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER ....D NOT APPLICABLE.....Z REFUSED 9	SELF ..... A PARTNER/SPOUSE..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED.....9
B	Informal lender (money lender)	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO NEXT SOURCE DON'T KNOW ..... 8 → GO TO NEXT SOURCE REFUSED ..... 9 → GO TO NEXT SOURCE	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER ....D NOT APPLICABLE.....Z REFUSED 9	SELF ..... A PARTNER/SPOUSE..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED.....9
C	Formal lender (bank/financial institution, such as Commercial bank, or a microfinance bank)	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO NEXT SOURCE DON'T KNOW ..... 8 → GO TO NEXT SOURCE REFUSED ..... 9 → GO TO NEXT SOURCE	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER ....D NOT APPLICABLE.....Z REFUSED 9	SELF ..... A PARTNER/SPOUSE..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED.....9
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	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER ....D NOT APPLICABLE.....Z REFUSED 9	SELF ..... A PARTNER/SPOUSE..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED.....9
E	Group based micro-finance or lending including VSLAs, saving and credit group, farmer's group/cooperatives, commodity-based groups, or cooperatives registered under cooperatives act of Nepal.	YES, CASH ..... 1 YES, IN-KIND ..... 2 YES, CASH AND IN-KIND ..... 3 NO ..... 4 → GO TO MODULE G4 DON'T KNOW ..... 8 → GO TO MODULE G4 REFUSED ..... 9 → GO TO MODULE G4	SELF .....A PARTNER/SPOUSE .....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER ....D NOT APPLICABLE.....Z REFUSED 9	SELF ..... A PARTNER/SPOUSE..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER .... D NOT APPLICABLE ..... Z REFUSED.....9

SUB-MODULE G4(A). INDIVIDUAL LEADERSHIP AND INFLUENCE IN THE COMMUNITY

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

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

SUB-MODULE G4(B). GROUP MEMBERSHIP

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

GROUP MEMBERSHIP		Is there a [GROUP] in your community?	Are you an active member of this [GROUP]?
GROUP CATEGORIES		**G4.04**	**G4.05**
A	Agricultural/livestock/fisheries producer's group (including marketing groups)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW 8	YES .....1 NO .....2 REFUSED 9
B	Water users' group	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES .....1 NO .....2 REFUSED 9
C	Forest users' group	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES .....1 NO .....2 REFUSED 9
D	Credit or microfinance group (for example, VSLAs, saving and credit group, farmer's group/cooperatives, commodity-based groups, or cooperatives registered under cooperatives act of Nepal)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES .....1 NO .....2 REFUSED 9
E	Mutual help or insurance group (including traditional associations that help on occasions such as weddings, religious ceremonies, cremations or burials, etc.)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES .....1 NO .....2 REFUSED 9
F	Trade and business association (Chamber of Commerce, FNCCI, Gorahi traders association)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES .....1 NO ..... REFUSED 9
G	Civic groups (improving community) or charitable group (helping others)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES .....1 NO .....2 REFUSED 9
H	Local government (Village Development Committee, District Development Committee)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES .....1 NO .....2 REFUSED 9

GROUP MEMBERSHIP		Is there a [GROUP] in your community?	Are you an active member of this [GROUP]?
GROUP CATEGORIES		**G4.04**	**G4.05**
I	Religious group (such as shiva sena, swargadwari guthi)	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES.....1 NO.....2 REFUSED.....9
J	Other women's group ONLY INCLUDE A GROUP HERE IF IT DOES NOT FIT INTO ONE OF THE OTHER CATEGORIES	YES.....1 NO.....2 → SKIP TO NEXT GROUP DON'T KNOW.....8	YES.....1 NO.....2 REFUSED.....9
K	Any other group or organization (SPECIFY)_____	YES.....1 NO.....2 → SKIP TO MODULE G5A DON'T KNOW.....8	YES.....1 NO.....2 REFUSED.....9

SUB-MODULE G5(A). DECISIONMAKING

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

ACTIVITY		When decisions are made regarding [ACTIVITY], who is it that normally makes the decision? **CIRCLE ALL APPLICABLE**	**FILTER: CHECK G5.01**	To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to?
	ACTIVITY	**G5.01**	**G5.01A**	**G5.02**
A	Getting inputs for agricultural production	SELF.....A SPOUSE/PARTNER.....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER.....D NOT APPLICABLE.....Z → SKIP TO NEXT ACTIVITY REFUSED.....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01: "SELF" ("A") IS THE ONLY RESPONSE.....1→GO TO NEXT ACTIVITY "SELF" ("A") IS **NOT** THE ONLY RESPONSE.....2 →GO TO G5.02	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT.....4 REFUSED.....9
B	The types of crops to grow	SELF.....A SPOUSE/PARTNER.....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER.....D NOT APPLICABLE.....Z → SKIP TO NEXT ACTIVITY REFUSED.....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01: "SELF" ("A") IS THE ONLY RESPONSE.....1→GO TO NEXT ACTIVITY "SELF" ("A") IS **NOT** THE ONLY RESPONSE.....2 →GO TO G5.02	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT.....4 REFUSED.....9
C	Taking crops to the market (or not)	SELF.....A SPOUSE/PARTNER.....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER.....D NOT APPLICABLE.....Z → SKIP TO NEXT ACTIVITY REFUSED.....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01: "SELF" ("A") IS THE ONLY RESPONSE.....1→GO TO NEXT ACTIVITY "SELF" ("A") IS **NOT** THE ONLY RESPONSE.....2 →GO TO G5.02	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT.....4 REFUSED.....9
D	Livestock raising	SELF.....A SPOUSE/PARTNER.....B OTHER HH MEMBER.....C OTHER NON-HH MEMBER.....D NOT APPLICABLE.....Z → SKIP TO NEXT ACTIVITY REFUSED.....9 → SKIP TO NEXT ACTIVITY	CHECK G5.01: "SELF" ("A") IS THE ONLY RESPONSE.....1→GO TO NEXT ACTIVITY "SELF" ("A") IS **NOT** THE ONLY RESPONSE.....2 →GO TO G5.02	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT.....4 REFUSED.....9

ACTIVITY		When decisions are made regarding [ACTIVITY], who is it that normally makes the decision? **CIRCLE ALL APPLICABLE**	**FILTER: CHECK G5.01**	To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to?
	ACTIVITY	**G5.01**	**G5.01A**	**G5.02**
E	Your own (singular) wage or salary employment	SELF ..... A SPOUSE/PARTNER ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER ..... D NOT APPLICABLE ..... Z → SKIP TO NEXT ACTIVITY REFUSED ..... 9 → SKIP TO NEXT ACTIVITY	CHECK G5.01: "SELF" ("A") IS THE ONLY RESPONSE ..... 1 → GO TO NEXT ACTIVITY "SELF" ("A") IS **NOT** THE ONLY RESPONSE ..... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT ..... 2 MEDIUM EXTENT ..... 3 TO A HIGH EXTENT ..... 4 REFUSED 9
F	Major household expenditures (such as a large appliance for the house like refrigerator)	SELF ..... A SPOUSE/PARTNER ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER ..... D NOT APPLICABLE ..... Z → SKIP TO NEXT ACTIVITY REFUSED ..... 9 → SKIP TO NEXT ACTIVITY	CHECK G5.01: "SELF" ("A") IS THE ONLY RESPONSE ..... 1 → GO TO NEXT ACTIVITY "SELF" ("A") IS **NOT** THE ONLY RESPONSE ..... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT ..... 2 MEDIUM EXTENT ..... 3 TO A HIGH EXTENT ..... 4 REFUSED 9
G	Minor household expenditures (such as food for daily consumption or other household needs)	SELF ..... A SPOUSE/PARTNER ..... B OTHER HH MEMBER ..... C OTHER NON-HH MEMBER ..... D NOT APPLICABLE ..... Z → SKIP TO NEXT MODULE REFUSED ..... 9 → SKIP TO NEXT MODULE	CHECK G5.01: "SELF" ("A") IS THE ONLY RESPONSE ..... 1 → GO TO NEXT MODULE "SELF" ("A") IS **NOT** THE ONLY RESPONSE ..... 2 → GO TO G5.02	NOT AT ALL ..... 1 SMALL EXTENT ..... 2 MEDIUM EXTENT ..... 3 TO A HIGH EXTENT ..... 4 REFUSED 9

SUB-MODULE G6(A). TIME ALLOCATION

G6.01: PLEASE RECORD A LOG OF THE ACTIVITIES FOR THE INDIVIDUAL IN THE LAST COMPLETE 24 HOURS (STARTING YESTERDAY MORNING AT 4 AM, FINISHING 3:59 AM OF THE CURRENT DAY). THE TIME INTERVALS ARE MARKED IN 15 MIN INTERVALS AND ONE TO TWO ACTIVITIES CAN BE MARKED FOR EACH TIME PERIOD BY DRAWING A LINE THROUGH THAT ACTIVITY. IF TWO ACTIVITIES ARE MARKED, THEY SHOULD BE DISTINGUISHED WITH A 1FOR THE PRIMARY ACTIVITY AND A 2FOR 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 4am, and continue through to 4am of this morning."

ACTIVITY CODE	ACTIVITY	NIGHT								MORNING				DAY																															
		4				5				6				7				8				9				10				11				12				13				14				15			
A	SLEEPING AND RESTING																																														
B	EATING AND DRINKING																																														
C	PERSONAL CARE																																														
D	SCHOOL (INCLUDING HOMEWORK)																																														
E	WORK AS EMPLOYED																																														
F	OWN BUSINESS WORK																																														
G	FARMING/LIVESTOCK/FISHING																																														
H	SHOPPING/GETTING SERVICE (INCLUDING HEALTH SERVICES)																																														
I	WEAVING, SEWING, TEXTILE CARE																																														
J	COOKING																																														
K	DOMESTIC WORK (INCLUDING FETCHING WOOD AND WATER)																																														
L	CARE FOR CHILDREN/ADULTS/ELDERLY																																														
M	TRAVEL AND COMMUTING																																														
N	WATCHING TV/LISTENING TO RADIO/READING																																														
O	EXERCISING																																														
P	SOCIAL ACTIVITIES AND HOBBIES																																														
Q	RELIGIOUS ACTIVITIES																																														
X	_____OTHER (SPECIFY)																																														

SUB-MODULE G6(A). TIME ALLOCATION (continued)

ACTIVITY CODE	ACTIVITY	DAY								EVENING				NIGHT																			
		16				17				18				19				20				21				22				23				24				1				2				3			
A	SLEEPING AND RESTING																																															
B	EATING AND DRINKING																																														
C	PERSONAL CARE																																														
D	SCHOOL (INCLUDING HOMEWORK)																																														
E	WORK AS EMPLOYED																																														
F	OWN BUSINESS WORK																																														
G	FARMING/LIVESTOCK/FISHING																																														
H	SHOPPING/GETTING SERVICE (INCLUDING HEALTH SERVICES)																																														
I	WEAVING, SEWING, TEXTILE CARE																																														
J	COOKING																																														
K	DOMESTIC WORK (INCLUDING FETCHING WOOD AND WATER)																																														
L	CARE FOR CHILDREN/ADULTS/ELDERLY																																														
M	TRAVEL AND COMMUTING																																														
N	WATCHING TV/LISTENING TO RADIO/READING																																														
O	EXERCISING																																														
P	SOCIAL ACTIVITIES AND HOBBIES																																														
Q	RELIGIOUS ACTIVITIES																																														
X	_____OTHER (SPECIFY)																																														

SUB-MODULE G6(B). SATISFACTION WITH TIME ALLOCATION

QNO.	QUESTION	RESPONSE OPTIONS/INSTRUCTIONS
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 USUAL .....1 ABOUT THE SAME AS USUAL .....2 LESS THAN USUAL.....3
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. 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?	SATISFACTION RATING: ☐☐

MODULE H. WOMEN'S ANTHROPOMETRY AND DIETARY DIVERSITY

HOUSEHOLD IDENTIFICATION (IN DATA FILE, EACH RESPONDENT MUST BE MATCHED 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 5) 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 FROM THE HOUSEHOLD ROSTER	NAME:_____________	NAME:_____________	NAME:_____________	NAME:_____________	NAME:_____________
H02	In what month and year were you born? [Nepali month and year]	MONTH DK MONTH….98 YEAR DK YEAR….9998	MONTH DK MONTH….98 YEAR DK YEAR….9998	MONTH DK MONTH….98 YEAR DK YEAR….9998	MONTH DK MONTH….98 YEAR DK YEAR….9998	MONTH DK MONTH….98 YEAR DK YEAR….9998
H03	Please tell me how old you are. What was your age at your last birthday? RECORD AGE IN COMPLETED YEARS	YEARS IF RESPONDENT KNOWS HER AGE, SKIP TO H05. IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	YEARS IF RESPONDENT KNOWS HER AGE, SKIP TO H05. IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	YEARS IF RESPONDENT KNOWS HER AGE, SKIP TO H05. IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	YEARS IF RESPONDENT KNOWS HER AGE, SKIP TO H05. IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.	YEARS IF RESPONDENT KNOWS HER AGE, SKIP TO H05. IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, ENTER '98' AND ASK QUESTION H04.

NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
H04	Are you between the ages of 15 and 49 years old?	YES .....1 NO .....2 DK 8	YES .....1 NO .....2 DK.....8	YES.....1 NO .....2 DK.....8	YES.....1 NO .....2 DK.....8	YES..... 1 NO..... 2 DK..... 8
H05	CHECK H02, H03, AND H04 (IF APPLICABLE): IS THE RESPONDENT BETWEEN THE AGES OF 15 AND 49 YEARS? IF THE INFORMATION IN H02, H03, AND H04 CONFLICTS, DETERMINE WHICH IS MOST ACCURATE USING THE AGE/YEAR OF BIRTH CONSISTENCY CHART AND GUIDANCE FROM YOUR INTERVIEWER'S MANUAL.	YES .....1 NO .....2 ┐ CHECK DK .....8 → FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES .....1 NO .....2 ┐ CHECK DK.....8 → FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES.....1 NO .....2 ┐ CHECK DK.....8 → FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES.....1 NO .....2 ┐ CHECK DK.....8 → FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I	YES..... 1 NO..... 2 ┐ CHECK DK..... 8 → FOR OTHER WOMEN AGE 15-49 IN THE HOUSEHOLD; IF NONE, SKIP TO MODULE I
	WOMEN'S NUTRITIONAL STATUS					
H06	Are you currently pregnant?	YES .....1→SKIP TO DIETARY DIVERSITY NO .....2 DK .....8 REFUSED 9	YES ..... 1→SKIP TO DIETARY DIVERSITY NO .....2 DK.....8 REFUSED 9	YES..... 1→SKIP TO DIETARY DIVERSITY NO .....2 DK.....8 REFUSED.....9	YES..... 1→SKIP TO DIETARY DIVERSITY NO .....2 DK.....8 REFUSED 9	YES.....1→SKIP TO DIETARY DIVERSITY NO..... 2 DK..... 8 REFUSED..... 9
H07	WEIGHT IN KILOGRAMS: WEIGH THE WOMAN	KG ☐☐☐.☐ NOT PRESENT..... 9994 OTHER..... 9996 REFUSED 9999	KG ☐☐☐.☐ NOT PRESENT..... 9994 OTHER..... 9996 REFUSED 9999	KG ☐☐☐.☐ NOT PRESENT ..... 9994 OTHER..... 9996 REFUSED..... 9999	KG ☐☐☐.☐ NOT PRESENT ..... 9994 OTHER..... 9996 REFUSED 9999	KG ☐☐☐.☐ NOT PRESENT ..... 9994 OTHER..... 9996 REFUSED..... 9999
H08	HEIGHT IN CENTIMETERS: MEASURE THE WOMAN	CM ☐☐☐.☐ NOT PRESENT..... 9994 OTHER..... 9996 REFUSED 9999	CM ☐☐☐.☐ NOT PRESENT..... 9994 OTHER..... 9996 REFUSED 9999	CM ☐☐☐.☐ NOT PRESENT ..... 9994 OTHER..... 9996 REFUSED..... 9999	CM ☐☐☐.☐ NOT PRESENT ..... 9994 OTHER..... 9996 REFUSED 9999	CM ☐☐☐.☐ NOT PRESENT ..... 9994 OTHER..... 9996 REFUSED..... 9999

	WOMEN'S DIETARY DIVERSITY
	Now I'd like to ask you to describe everything that you ate yesterday during the day or night, whether you ate it while you were at home, or while you were somewhere else. **(A)** Think about when you first woke up yesterday. Did you eat anything at that time? IF YES: Please tell me everything you ate at that time. PROBE: Anything else? CONTINUE PROBING UNTIL RESPONDENT SAYS "NOTHING ELSE," THEN CONTINUE TO PART B. IF NO: CONTINUE TO PART B. **(B)** What did you do after that? Did you eat anything at that time? IF YES: Please tell me everything you ate at that time. PROBE: Anything else? CONTINUE PROBING UNTIL RESPONDENT SAYS "NOTHING ELSE." REPEAT QUESTION B ABOVE UNTIL RESPONDENT SAYS SHE WENT TO SLEEP UNTIL THE NEXT DAY. IF RESPONDENT MENTIONS MIXED DISHES LIKE A PORRIDGE, SAUCE, OR STEW, PROBE: **(C)** What ingredients were in that [mixed dish]? PROBE: Anything else? CONTINUE PROBING UNTIL RESPONDENT SAYS "NOTHING ELSE." AS THE RESPONDENT RECALLS FOODS, ENTER '1' IN THE COLUMN NEXT TO THE FOOD GROUP. IF THE FOOD IS NOT LISTED IN ANY OF THE FOOD GROUPS BELOW, WRITE THE FOOD IN THE BOX LABELED 'OTHER FOODS.' IF FOODS ARE USED IN SMALL AMOUNTS FOR SEASONING OR AS A CONDIMENT, INCLUDE THEM UNDER THE CONDIMENTS FOOD GROUP. ONCE THE RESPONDENT FINISHES RECALLING FOODS EATEN, READ EACH FOOD GROUP WHERE '1' WAS NOT ENTERED, ASK THE FOLLOWING QUESTION AND ENTER '1' IF RESPONDENT SAYS YES, '2' IF NO, AND '8' IF DON'T KNOW. Yesterday during the day or night, did you drink/eat any [food group items]?

NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
	OTHER FOODS: PLEASE WRITE DOWN OTHER FOODS THAT RESPONDENT MENTIONED, BUT ARE NOT IN THE LIST BELOW, IN THE SPACE TO THE RIGHT OF THIS BOX. THIS WILL ALLOW THE SURVEY SUPERVISOR OR OTHER KNOWLEDGEABLE INDIVIDUAL TO CLASSIFY THE FOOD LATER.	WRITE FOODS EATEN HERE:	WRITE FOODS EATEN HERE:	WRITE FOODS EATEN HERE:	WRITE FOODS EATEN HERE:	WRITE FOODS EATEN HERE:
H14	Food made from grains, such roti, rice, maize, millet, buckwheat, barley, noodles; porridge made from corn, millet or wheat flour; or any other foods made from grains?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H15	Carrots, squash, or sweet potatoes that are yellow or orange inside?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H16	White potatoes, white yams, colocasia bulbs, sweet potatoes, or any other foods made from roots?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8

NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
H17	Any mustard leaves or spinach?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H17A	Any pumpkin leaves, yam leaves, coriander leaves, colocasia leaves, fermented green leafy vegetables, or any other dark leafy green vegetables?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H17B	Any cauliflower?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H17C	Any cabbage?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H17D	Any pumpkin?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H17E	Any okra?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H17F	Any bitter gourd?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H17G	Any other vegetables?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H18	Ripe mangoes, ripe papayas, or apricots?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H18A	Any other fruits such as peaches, apples, or persimmon?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H19	Any liver, kidney, heart, or other organ meats from domesticated animals such as beef, pork, buffalo, lamb, goat, chicken, or duck?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H19A	Any meat from domesticated animals, such as beef, pork, buffalo, lamb, goat, chicken, or duck?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8

NO.	QUESTION	WOMAN 1	WOMAN 2	WOMAN 3	WOMAN 4	WOMAN 5
H20	Any liver, kidney, heart, or other organ meats from wild animals such as deer, spotted deer, wild chicken, wild boar, or tahr?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H20A	Any flesh from wild animals, such as deer, spotted deer, wild chicken, wild boar, or tahr?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H22	Eggs, such as chicken eggs?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H23	Fresh or dried fish, shellfish, or seafood?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H24A	Any foods made from beans, peas, or lentils, including mixed pulse dishes, or any other legumes?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H24B	Any food made from groundnut or groundnut products such as groundnut flour, peanut butter, roasted groundnuts, boiled groundnut snack, sauces, groundnut biscuits?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H24C	Any foods made from nuts or seeds, such as sesame seeds?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H25	Milk, cheese, yogurt, or other milk products?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H26	Any oil, fats, or butter, or foods made with any of these?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H27	Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H28	Condiments for flavor, such as chilies, spices, herbs, fish powder, or garlic?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H29	Grubs, snails, or insects?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8
H30	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8	YES .....1 NO .....2 DON'T KNOW 8

MODULE I. 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 0-35 MONTHS IN THE HOUSEHOLD. ASK THESE QUESTIONS OF THE PRIMARY CAREGIVER OF EACH CHILD AGED 0–35 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 6) TO THE RESPONDENT(S) (THE PRIMARY CAREGIVER OF EACH CHILD AGED 0–35 MONTHS IN THE HOUSEHOLD).

YOU SHOULD CARRY DUPLICATE COPIES OF THIS MODULE IN CASE THERE ARE MORE THAN 5 CHILDREN 0-35 MONTHS OLD IN THE HOUSEHOLD.

"In order to learn more about child nutrition in our country, we would like to learn more about certain foods that your child may eat."

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I01	CAREGIVER'S ID CODE FROM THE HOUSEHOLD ROSTER	|__|__|	|__|__|	|__|__|	|__|__|	|__|__|
I02	CHILD'S ID CODE AND FIRST NAME FROM THE HOUSEHOLD ROSTER	|__|__| ______ CHILD'S NAME	|__|__| ______ CHILD'S NAME	|__|__| ______ CHILD'S NAME	|__|__| ______ CHILD'S NAME	|__|__| ______ CHILD'S NAME
I03	What is [CHILD'S NAME]'s sex?	MALE .... 1 FEMALE 2	MALE.....................1 FEMALE 2	MALE ....1 FEMALE................2	MALE .... 1 FEMALE................ 2	MALE .... 1 FEMALE 2
I04	I would like to ask you some question about [CHILD'S NAME]. What is [his/her] birthday? In what month and year was [CHILD'S NAME] born?	|__|__| DAY DK DAY .... 98 |__|__| MONTH DK MONTH .... 98 |__|__|__|__| YEAR DK YEAR........9998	|__|__| DAY DK DAY .... 98 |__|__| MONTH DK MONTH ....98 |__|__|__|__| YEAR DK YEAR........ 9998	|__|__| DAY DK DAY...............98 |__|__| MONTH DK MONTH.........98 |__|__|__|__| YEAR DK YEAR 9998	|__|__| DAY DK DAY................ 98 |__|__| MONTH DK MONTH.......... 98 |__|__|__|__| YEAR DK YEAR 9998	|__|__| DAY DK DAY .... 98 |__|__| MONTH DK MONTH .... 98 |__|__|__|__| YEAR DK YEAR........ 9998

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I04A	CHECK I04: IS THE INFORMATION ON THE CHILD'S DAY, MONTH, AND YEAR OF BIRTH COMPLETE?	YES.....1 → SKIP TO I05 NO 2	YES .....1 → SKIP TO I05 NO 2	YES .....1 → SKIP TO I05 NO 2	YES.....1 → SKIP TO I05 NO 2	YES.....1 → SKIP TO I05 NO 2
I04B	Does [CHILD'S NAME] have a health or vaccination card with the birth date recorded?	YES.....1 NO .....2 DK.....8 → SKIP TO I05	YES .....1 NO .....2 DK.....8 → SKIP TO I05	YES .....1 NO .....2 DK .....8 → SKIP TO I05	YES.....1 NO.....2 DK.....8 → SKIP TO I05	YES.....1 NO .....2 DK.....8 → SKIP TO I05
I04C	May I please see the card?	YES.....1 NO .....2 CARD NOT..... AVAILABLE ....8 → SKIP TO I05	YES .....1 NO.....2 CARD NOT..... AVAILABLE ....8 → SKIP TO I05	YES .....1 NO.....2 CARD NOT ..... AVAILABLE....8 → SKIP TO I05	YES.....1 NO.....2 CARD NOT ..... AVAILABLE ... 8 → SKIP TO I05	YES.....1 NO .....2 CARD NOT..... AVAILABLE ....8 → SKIP TO I05
I04D	CONFIRM WITH THE RESPONDENT THAT THE INFORMATION ON THE CARD IS CORRECT. IF THE HEALTH/VACCINATION CARD IS SHOWN AND THE RESPONDENT CONFIRMS THE INFORMATION IS CORRECT, RECORD THE DATE OF BIRTH AS DOCUMENTED ON THE CARD.	☐☐ DAY DK DAY .....98 ☐☐ MONTH DK MONTH ..98 ☐☐☐☐ YEAR DK YEAR..9998	☐☐ DAY DK AY.....98 ☐☐ MONTH DK MONTH . .98 ☐☐☐☐ YEAR DK YEAR..9998	☐☐ DAY DK DAY..... 98 ☐☐ MONTH DK MONTH .. 98 ☐☐☐☐ YEAR DK YEAR . 9998	☐☐ DAY DK DAY.....98 ☐☐ MONTH DK MONTH...98 ☐☐☐☐ YEAR DK YEAR . 9998	☐☐ DAY DK DAY .....98 ☐☐ MONTH DK MONTH ..98 ☐☐☐☐ YEAR DK YEAR..9998
I05	How old was [CHILD'S NAME] at [his/her] last birthday? RECORD AGE IN COMPLETED YEARS	☐ YEARS	☐ YEARS	☐ YEARS	☐ YEARS	☐ YEARS
I06	How many months old is [CHILD'S NAME]? RECORD AGE IN COMPLETED MONTHS	☐☐ MONTHS	☐☐ MONTHS	☐☐ MONTHS	☐☐ MONTHS	☐☐ MONTHS

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I07	CHECK I04, I04D, I05, AND I06 TO VERIFY CONSISTENCY					
I07A	CHECK: IS THE YEAR RECORDED IN I04 OR I04D CONSISTENT WITH THE AGE IN YEARS RECORDED IN I05?	YES....................1 NO......................2	YES....................1 NO......................2	YES....................1 NO......................2	YES....................1 NO......................2	YES....................1 NO......................2
I07B	ARE YEAR AND MONTH OF BIRTH RECORDED IN I04 OR I04D CONSISTENT WITH AGE IN MONTHS RECORDED IN I06?	YES....................1 NO......................2	YES....................1 NO......................2	YES....................1 NO......................2	YES....................1 NO......................2	YES....................1 NO......................2
I07C	CHECK I07A AND I07B: IF THE ANSWER TO A OR B IS 'NO,' RESOLVE ANY INCONSISTENCIES. IF THE BIRTHDATE WAS RECORDED ON A HEALTH CARD, THIS MAY BE USED AS THE CORRECT DATA SOURCE.					
I08	CHECK I06. IS THE CHILD UNDER 36 MONTHS?	YES....................1 NO......................2 DON'T KNOW.......8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES....................1 NO......................2 DON'T KNOW.......8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES....................1 NO......................2 DON'T KNOW.......8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES....................1 NO......................2 DON'T KNOW.......8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE	YES....................1 NO......................2 DON'T KNOW.......8 PROCEED TO NEXT CHILD OR, IF THERE ARE NO OTHER CHILDREN, END MODULE
I36	Yesterday, during the day or night, did [CHILD's NAME] have any mustard leaves or spinach?	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8
I36A	Any pumpkin leaves, yam leaves, coriander leaves, colocasia leaves, fermented green leafy vegetables, or any other dark leafy green vegetables?	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8
I36B	Any cauliflower?	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8
I36C	Any cabbage?	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8	YES....................1 NO......................2 DON'T KNOW.......8

NO.	QUESTION	CHILD 1	CHILD 2	CHILD 3	CHILD 4	CHILD 5
I36D	Any pumpkin?	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO .....2 DON'T KNOW.....8
I36E	Any okra?	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO .....2 DON'T KNOW.....8
I36F	Any bitter gourd?	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO .....2 DON'T KNOW.....8
I36G	Any other vegetables?	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO.....2 DON'T KNOW.....8	YES .....1 NO .....2 DON'T KNOW 8	YES.....1 NO .....2 DON'T KNOW.....8

CONCLUDE THE INTERVIEW:

"Thank you very much for your time in responding to this survey. Your contributions are greatly appreciated."

Annex 1. Template for Country-Specific Event Calendar

The purpose of this event calendar template is to assist in ascertaining dates of birth (month and year) for children identified as age 6 or under in the household roster. The local events calendar should be developed in conjunction with local key informants who have a good knowledge of past events in the areas to be surveyed; the events should be specific to the survey area and population at the [province/district] level. The final calendars should be tested by interviewers during the pilot to ensure that the calendar is appropriate for the local population.

LOCAL EVENTS CALENDAR (NEPAL)

Drawn from: World Health Organization. Training Course on Child Growth Assessment. Geneva, WHO, 2008.

Month	Events/Festivals	2002	2003	2004	2005	2006	2007
Margasira	Bhogi	13 Jan	13 Jan	14 Jan	13 Jan	13 Jan	14 Jan
	Sankranti	14 Jan	14 Jan	15 Jan	14 Jan	14 Jan	15 Jan
	Kanuma	15 Jan	15 Jan	16 Jan	15 Jan	15 Jan	16 Jan
Pushya	Republic Day	26 Jan	26 Jan	26 Jan	26 Jan	26 Jan	26 Jan
	Gandhi Vardhanti	30 Jan	30 Jan	30 Jan	30 Jan	30 Jan	30 Jan
Magha	MahaSivaratri	12 Mar	01 Mar	18 Feb	8 Mar	26 Feb	16 Feb
	Holi	29 Mar	19 Mar	6 Mar	25 Mar	14 Mar	3 Mar
Palgun	Ugadi	13 Apr	2 Apr	21 Mar	9 Apr	30 Mar	20 Mar
	Sri Rama Navami	21 Apr	11 Apr	30 Mar	18 Apr	6 Apr	27 Mar
	Good Friday	29 Mar	18 Apr	9 Apr	25 Mar	14 Apr	6 Apr
	AmbedkarJayanti	14 Apr	14 Apr	14 Apr	14 Apr	14 Apr	14 Apr
	May Day	1 May	1 May	1 May	1 May	1 May	1 May
Chaitra	Buddha Purnima	26 May	16 May	4 May	23 May	13 May	2 May
	MrigasiraKarthe	8 June	8 June	7 June	8 June	8 June	9 June
Jeshta	Ramzan	6 Dec	26 Nov	15 Nov	4 Nov	25 Oct	14 Oct
	Bakrid	23 Feb	12 Feb	2 Feb	21 Jan	11 Jan	1 Jan
Ashad	RakshaBandhan	22 Aug	12 Aug	30 Aug	19 Aug	09 Aug	28 Aug
	VaralaxmiVrathm	16 Aug	8 Aug	27 Aug	12 Aug	04 Aug	24 Aug
	Krishnastami	31 Aug	20 Aug	7 Sep	26 Aug	16 Aug	4 Sept
Sravan	VinayakaChavithi	10 Sept	31 Aug	18 Sep	7 Sep	27 Aug	15 Sept
	Moharam	25 Mar	14 Mar	2 Mar	20 Feb	9 Feb	30 Jan
Badra	Gandhi Jayanthi	2 Oct	2 Oct	2 Oct	2 Oct	2 Oct	2 Oct
	Durgastami	13 Oct	3 Oct	21 Oct	11 Oct	30 Sept	19 Oct
	Maharnavami	14 Oct	4 Oct	22 Oct	12 Oct	1 Oct	20 Oct
	Vijayadasami	15 Oct	4 Oct	22 Oct	12 Oct	2 Oct	21 Oct
Ashiyuja	Naraka Chaturdhi	3 Nov	24 Oct	11 Nov	30 Oct	20 Oct	8 Nov
	Deepavali	4 Nov	24 Oct	12 Nov	31 Oct	21 Oct	9 Nov
	Naga Chaviti	8 Nov	28 Oct	16 Nov	5 Nov	26 Oct	14 Nov
Kartika	Nehru Birthday	14 Nov	14 Nov	14 Nov	14 Nov	14 Nov	14 Nov
	Christmas	25 Dec	25 Dec	25 Dec	25 Dec	25 Dec	25 Dec
	Tsunami				26 Dec		

In this sample the months are identified by their local names, feasts and celebrations with fixed dates, as well as those with changing dates, are updated annually while chance events, like the tsunami, typhoons, floods, etc., have to be entered as they occur.

Annex 2. Age/Birthdate Consistency Chart for Survey in 2015

The purpose of this chart is to check the consistency of reported ages and dates, and to help resolve any apparent inconsistencies. Please refer to the Interviewer's Manual for instructions on how to use the chart.

AGE/BIRTHDATE CONSISTENCY CHART FOR SURVEY IN 2015

Current	Year of birth			Current	Year of birth	
Age	Has not had birthday in	Has already had birthday in		Age	Has not had birthday in	Has already had birthday in
	2015	2015			2015	2015
	Don't know				Don't know	
0	2014	--		30	1984	1985
1	2013	2014		31	1983	1984
2	2012	2013		32	1982	1983
3	2011	2012		33	1981	1982
4	2010	2011		34	1980	1981
5	2009	2010		35	1979	1980
6	2008	2009		36	1978	1979
7	2007	2008		37	1977	1978
8	2006	2007		38	1976	1977
9	2005	2006		39	1975	1976
10	2004	2005		40	1974	1975
11	2003	2004		41	1973	1974
12	2002	2003		42	1972	1973
13	2001	2002		43	1971	1972
14	2000	2001		44	1970	1971
15	1999	2000		45	1969	1970
16	1998	1999		46	1968	1969
17	1997	1998		47	1967	1968
18	1996	1997		48	1966	1967
19	1995	1996		49	1965	1966
20	1994	1995		50	1964	1965
21	1993	1994		51	1963	1964
22	1992	1993		52	1962	1963
23	1991	1992		53	1961	1962
24	1990	1986		54	1960	1961
25	1989	1990		55	1959	1960
26	1988	1989		56	1958	1959
27	1987	1988		57	1957	1958
28	1986	1987		58	1956	1957
29	1985	1986		59	1955	1956

Annex 3. Informed Consent Form for Respondents Answering Module 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 New ERA, Kathmandu. 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 without giving a reason and without fear of any retribution. If you do not want to participate in this study, or if you decide you want to stop the interview after it has begun, the only thing you need to do is tell me you do not want to participate.

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 New ERA, Kathmandu, by calling 014413603. 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.

We would like to ask you to sign this paper to indicate that you understand what has been explained to you about this study, and that you are willing to participate in the interview.

May I begin the interview now?

SIGNATURE OF RESPONDENT: _____ DATE: _____

SIGNATURE OF WITNESS: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED.....1 ⟶ CONTINUE WITH MODULE F:

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

Annex 4. 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 New ERA, Kathmandu. 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 without giving a reason and without fear of any retribution. If you do not want to participate in this study, or if you decide you want to stop the interview after it has begun, the only thing you need to do is tell me you do not want to participate.

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 New ERA, Kathmandu, by calling 014413603. 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.

We would like to ask you to sign this paper to indicate that you understand what has been explained to you about this study, and that you are willing to participate in the interview.

May I begin the interview now?

SIGNATURE OF RESPONDENT: _____ DATE: _____

SIGNATURE OF WITNESS: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED.....1 ⟶ CONTINUE WITH MODULE G:

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

Annex 5. 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 New ERA, Kathmandu. 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 without giving a reason and without fear of any retribution. If you do not want to participate in this study, or if you decide you want to stop the interview after it has begun, the only thing you need to do is tell me you do not want to participate.

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 New ERA, Kathmandu, by calling 014413603. 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.

We would like to ask you to sign this paper to indicate that you understand what has been explained to you about this study, and that you are willing to participate in the interview.

May I begin the interview now?

SIGNATURE OF RESPONDENT: _____ DATE: _____

SIGNATURE OF WITNESS: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED.....1 ⟶ CONTINUE WITH MODULE H:

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

Annex 6. Informed Consent Form for Parents or Primary Caregivers of Children Eligible for Module I (Children 0-35 Months)

STATEMENT TO BE READ TO THE RESPONDENT:
Thank you for the opportunity to speak with you. We are a research team from New ERA, Kathmandu. 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 without giving a reason and without fear of any retribution. If you do not want to participate in this study, or if you decide you want to stop the interview after it has begun, the only thing you need to do is tell me you do not want to participate.

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 New ERA, Kathmandu, by calling 014413603. 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.

We would like to ask you to sign this paper to indicate that you understand what has been explained to you about this study, and that you are willing to participate in the interview.

May I begin the interview now?

SIGNATURE OF RESPONDENT: _____ DATE: _____

SIGNATURE OF WITNESS: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED.....1 ⟶ CONTINUE WITH MODULE I:

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

Annex 7. Informed Consent Register – Nepal

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.

INFORMED CONSENT REGISTER – NEPAL				
Line Number	**First and Last Name**	**Age**	**Sex**	**Interviewer Notes**