

[Photo]

[Year(s) of midline fieldwork] Feed the Future [Country] Phase Two Zone of Influence Midline Indicator Assessment Report

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# List of abbreviations

5DE five domains of empowerment

A-WEAI Abbreviated Women’s Empowerment in Agriculture Index

ARSSI Ability to Recover from Shocks and Stresses Index

BMI body mass index

CAPI computer-assisted personal interviewing

CI confidence interval

CPI Consumer Price Index

CWI comparative wealth index

DEFF design effect

DHS Demographic and Health Survey

EA enumeration area

FAO Food and Agriculture Organization

FIES Food Insecurity Experience Scale

GPI Gender Parity Index

HAZ height-for-age z-score

HWISE Household Water Insecurity Experiences

HWISE-4 Brief Household Water Insecurity Experiences Scale

LCU local currency unit

MAD minimum acceptable diet

MDD minimum dietary diversity

NGO nongovernmental organization

P2 phase two

PPP purchasing power parity

QCS quality control and support

RFS Bureau for Resilience and Food Security

SD standard deviation

SDG Sustainable Development Goals

SEI shock exposure index

USAID United States Agency for International Development

VCC value chain commodity

WASH water, sanitation, and hygiene

WEAI Women’s Empowerment in Agriculture Index

WHO World Health Organization

WHZ weight-for-height z-score

ZOI Zone of Influence

# Executive summary

## Background

Feed the Future seeks to sustainably reduce global poverty, hunger, and malnutrition by helping partner countries boost agriculture-led growth, resilience, and nutrition. Program efforts are designed to impact the population in Zones of Influence (ZOIs) in Feed the Future target countries. The ZOI is the targeted sub-national regions and districts where the program intends to achieve the greatest household- and individual-level impacts on poverty, hunger, and malnutrition. Progress in achieving Feed the Future’s objectives is tracked using population-based indicators collected at baseline and then periodically thereafter.

The purpose of the Feed the Future [Country] Phase Two ZOI (P2-ZOI) [Year(s) of midline fieldwork] Midline Indicator Assessment is to provide the U.S. Government interagency partners, the United States Agency for International Development (USAID) Bureau for Resilience and Food Security (RFS), USAID [Country], the Government of [Country], and development partners with information to monitor long-term progress of the Feed the Future P2-ZOI indicators in [Country]. The assessment presents indicator estimates for the P2-ZOI (heretofore referred to as the “ZOI”) at midline and compares them to baseline, but it is not designed to detect statistically significant changes in indicator estimates. It is possible, however, to detect a statistically significant change if the difference between baseline and midline estimates is large enough. Furthermore, the Midline Indicator Assessment is not designed to support conclusions of causality or program attribution.

The Feed the Future ZOI in [Country] includes [insert brief description of the ZOI].

## Feed the Future [Country] P2-ZOI [Years(s) of midline fieldwork] Midline Indicator Assessment indicators

The Feed the Future ZOI indicators, which correspond to the Global Food Security Strategy Results Framework (**Figure ES1**), calculated for this assessment are as follows:

* Percent of households with access to a basic sanitation service [HL.8.2-a] [[1]](#footnote-0)
* Percent of households with soap and water at a handwashing station on premises [HL.8.2-b]
* Prevalence of household water insecurity, based on the Brief Household Water Insecurity Experiences Scale (HWISE-4)[[2]](#footnote-1)
* Prevalence of poverty: Percent of people living on less than $1.90/day 2011 PPP [EG-c]
* Depth of Poverty of the Poor: Mean percent shortfall of the poor relative to the $1.90/day (2011 PPP) poverty line [EG-h]
* Percent of people who are ‘Near-Poor’, living on 100 percent to less than 125 percent of the $1.90/day (2011 PPP) poverty line [FTF Context-9]
* Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index [EG-g]
* Prevalence of moderate and severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) [EG-e]
* Ability to recover from shocks and stresses index [RESIL-a]
* Index of social capital at the household level [RESIL-b]
* Percent of households that believe local government will respond effectively to future shocks and stresses [RESIL-c]
* Percent of households participating in group-based savings, micro-finance, or lending programs [EG.4.2-a]
* Percent of producers who have applied targeted improved management practices or technologies [EG.3.2-a]
* Percent of women of reproductive age consuming a diet of minimum diversity [HL.9.1-d]
* Prevalence of exclusive breastfeeding of children under 6 months of age [HL.9.1-b]
* Percent of children 6-23 months receiving a minimum acceptable diet [HL.9.1-a]
* Prevalence of underweight (BMI < 18.5) women of reproductive age [HL.9-d]
* Prevalence of stunted (HAZ < -2) children under 5 (0-59 months) [HL.9-a]
* Prevalence of wasted (WHZ < -2) children under 5 (0-59 months) [HL.9-b]
* Prevalence of healthy weight (WHZ ≤ 2 and ≥ -2) among children under 5 (0-59 months) [HL.9-i]

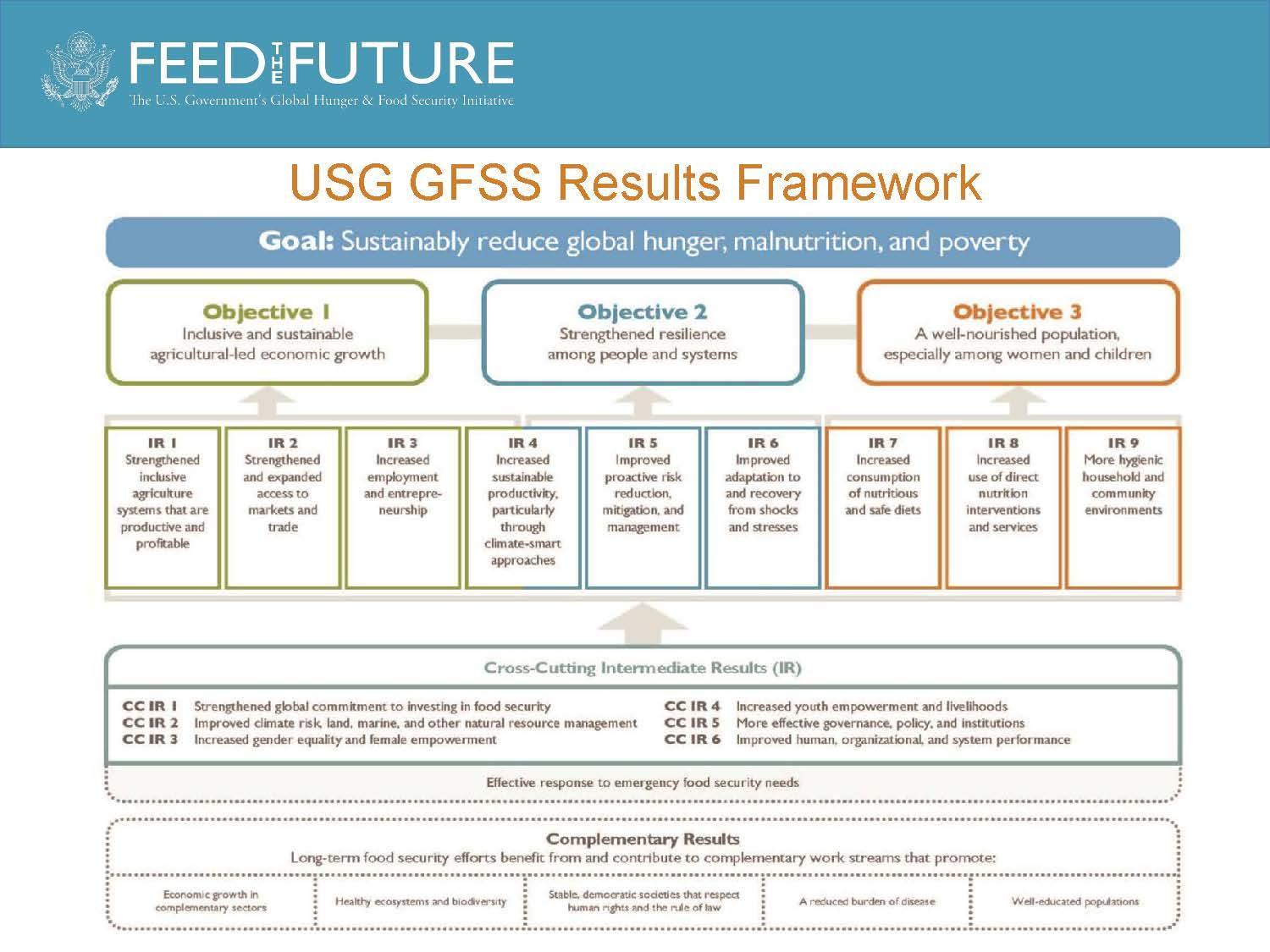
**Note:** Anthropometry data were not collected at midline, so midline estimates for the four anthropometry indicators are computed using Demographic and Health Survey (DHS) data collected in the ZOI from the [Year(s) of most recent DHS] [Country] DHS. To ensure maximum comparability, the midline estimates are compared to estimates from the prior DHS ([Year(s) of second most recent DHS] [Country] DHS) rather than to ZOI Baseline Survey estimates.

The Abbreviated Women’s Empowerment in Agriculture Index (A-WEAI) could not be calculated because data were not collected from primary adult male decision-makers at midline; however, the data collected in the Women’s Empowerment in Agriculture module were used to calculate the following:[[3]](#footnote-2)

* Five domains of empowerment (5DE) score
* Percent of women who are empowered
* Average adequacy score of disempowered women
* Percent of disempowered women who are adequate in each A-WEAI indicator

In addition, data on climate change knowledge, climate adaptation, and participation in the types of programming promoted by USAID [Country] were collected as part of the ZOI Midline Survey. Climate findings are presented in descriptive tables in Chapter 5, and program participation findings are presented in descriptive tables sections of the relevant chapters (i.e., water, sanitation, and hygiene [WASH] in Chapter 3; resilience in Chapter 5; agriculture in Chapter 7; and nutrition in Chapter 8).

**Figure ES1: U.S. Government Global Food Security Strategy 2012–2021 Results Framework**



Feed the Future ZOI indicator estimates—in total and by key disaggregates—are presented in **Table ES1.**

**Table ES1: Feed the Future ZOI Indicator Estimates, in Total and by Key Disaggregates: [Country] [Baseline Year(s)]-[Midline Year(s)]**

| **Indicator** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.** | **95% CI** | **na** |  | **Est.** | **95% CI** | **na** |
| **Percent of households with access to basic sanitation service** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |  |  |
| **Percent of households with soap and water at handwashing station on premises** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of household water insecurity, based on the Brief Household Water Insecurity Experiences Scale (HWISE-4)** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of poverty: Percent of people living on less than $1.90/day (2011 PPP)** | | | | | | | | | | |
| **All individualsd** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Depth of poverty of the poor: Mean percent shortfall of the poor relative to the $1.90/day (2011 PPP) poverty line** | | | | | | | | | | |
| **All individualsd** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Percent of people who are near-poor, living on 100 percent to less than 125 percent of the $1.90/day (2011 PPP) poverty line** | | | | | | | | | | |
| **All individualsd** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of moderate and severe food insecurity in the population, based on the Food Insecurity Experience Scale** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Severity** |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| Severe |  |  |  |  |  |  |  |  |  |  |
| **Ability to Recover from Shocks and Stresses Index** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Index of social capital at the household level** | | | | | | | | | | |
| **Overall index** |  |  |  |  |  |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Bonding sub-index** |  |  |  |  |  |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Bridging sub-index** |  |  |  |  |  |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Percent of households that believe local government will respond effectively to future shocks and stresses** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Percent of households participating in group-based savings, micro-finance, or lending programs** | | | | | | | | | | |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Five Domains of Empowerment score** | | |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Percent of women who are empowered** | | |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Average adequacy score of disempowered women** | | | |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Percent of disempowered women who are adequate in each A-WEAI indicator** | | | | | | | |  |  |  |
| **Input in productive decisions** | |  |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Ownership of assets** |  |  |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Access to and decisions on credit** | |  |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Control over income** |  |  |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Group membership** |  |  |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Workload** |  |  |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |  |  |  |  |
| **Percent of producers who have applied targeted improved management practices or technologies in targeted areas** | | | | | | | | | | |
| **All producers** |  |  |  |  |  |  |  |  |  |  |
| **Farmers’ sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Farmers’ age** |  |  |  |  |  |  |  |  |  |  |
| 15-29 years |  |  |  |  |  |  |  |  |  |  |
| 30 years and older |  |  |  |  |  |  |  |  |  |  |
| **Commodity** |  |  |  |  |  |  |  |  |  |  |
| Maize |  |  |  |  |  |  |  |  |  |  |
| Fishponds |  |  |  |  |  |  |  |  |  |  |
| Dairy cows |  |  |  |  |  |  |  |  |  |  |
| **Management practice or technology type** | | |  |  |  |  |  |  |  |  |
| Crop genetics |  |  |  |  |  |  |  |  |  |  |
| Cultural practices |  |  |  |  |  |  |  |  |  |  |
| Natural resource or ecosystem management |  |  |  |  |  |  |  |  |  |  |
| Pest and disease management |  |  |  |  |  |  |  |  |  |  |
| Soil-related fertility and conservation |  |  |  |  |  |  |  |  |  |  |
| Irrigation |  |  |  |  |  |  |  |  |  |  |
| Water management, non-irrigation-based |  |  |  |  |  |  |  |  |  |  |
| Climate adaptation or climate risk management |  |  |  |  |  |  |  |  |  |  |
| Post-harvest, handling, and storage |  |  |  |  |  |  |  |  |  |  |
| Marketing and distribution |  |  |  |  |  |  |  |  |  |  |
| Value-added processing |  |  |  |  |  |  |  |  |  |  |
| Aquaculture management |  |  |  |  |  |  |  |  |  |  |
| Livestock management |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| **Percent of women of reproductive age consuming a diet of minimum diversitye** | | | | | | | | | | |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 15-19 years |  |  |  |  |  |  |  |  |  |  |
| 20-49 years |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of exclusive breastfeeding among children under 6 months of agee** | | | | | | | | | | |
| **All children** |  |  |  |  |  |  |  |  |  |  |
| **Children’s sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of children 6-23 months of age receiving a minimum acceptable diete** | | | | | | | | | | |
| **All children** |  |  |  |  |  |  |  |  |  |  |
| **Children’s sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of underweight (BMI < 18.5) women of reproductive age (15-49 years)e** | | | | | | | | | | |
| **All non-pregnant women** |  |  |  |  |  |  |  |  |  |  |
| **Women’s age** |  |  |  |  |  |  |  |  |  |  |
| 15-19 years |  |  |  |  |  |  |  |  |  |  |
| 20-49 years |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of stunted (HAZ < -2) children under five (0-59 months)e** | | | | | | | | | | |
| **All children** |  |  |  |  |  |  |  |  |  |  |
| **Children’s sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of wasted (WHZ < -2) children under five (0-59 months)e** | | | | | | | | | | |
| **All children** |  |  |  |  |  |  |  |  |  |  |
| **Children’s sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Prevalence of healthy weight (WHZ ≤ 2 and ≥-2) among children under five (0-59 months)e** | | | | | | | | | | |
| **All children** |  |  |  |  |  |  |  |  |  |  |
| **Children’s sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

PPP=purchasing power parity

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

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

d For the poverty indicators, the n's presented are the number of households—not the number of household members—even though the indicator estimates are calculated using a household member sample weight.

e Estimates are based on de facto household members.

Notes:

Estimates are sample-weighted; numbers are unweighted.

Individual-level estimates are based on de jure household members, except where noted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]; [Additional data sources if applicable]

## Feed the Future [Country] P2-ZOI [Year(s) of fieldwork] Midline Indicator Assessment data sources

The ZOI Baseline Survey was implemented by [Contractor and partners], with fieldwork taking place from [start month and year] to [end month and year], and the ZOI Midline Survey was implemented by [Contractor and partners], with fieldwork taking place from [start month and year] to [end month and year].

Data for the ZOI indicators presented in this assessment are also drawn from [XX] secondary data sources in addition to the Baseline and Midline Surveys. **Table ES2** summarizes, by indicator, the secondary data sources used and the dates of data collection for each.

**Table ES2: Midline Indicator Assessment Secondary Data Sources**

| **Indicator** | **Secondary source** | **Dates of data collection** |
| --- | --- | --- |
| **Baseline** |  |  |
| [Indicator] | [Source] | [Month(s)] [Year(s)] |
| [Indicator] | [Source] | [Month(s)] [Year(s)] |
| **Midline** |  |  |
| [Indicator] | [Source] | [Month(s)] [Year(s)] |
| [Indicator] | [Source] | [Month(s)] [Year(s)] |

## Summary of key findings

### Water, sanitation, and hygiene

#### Percent of households with access to a basic sanitation service

***Percent of households with soap and water at a handwashing station commonly used by family members***

***Prevalence of household water insecurity, based on the Brief Water Insecurity Experiences Scale (HWISE-4)***

***Participation in water, sanitation, and hygiene programming***

### Household economic status

***Prevalence of poverty: Percent of people living on less than $1.90/day (2011 PPP)***

***Depth of poverty of the poor: Mean percent shortfall of the poor relative to the $1.90/day (2011 PPP) poverty line***

***Percent of people who are near-poor, living on 100 percent to less than 125 percent of the $1.90/day (2011 PPP) poverty line***

***Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index***

### Food security and resilience

***Prevalence of moderate and severe food insecurity in the population, based on the Food Insecurity Experience Scale***

***Ability to Recover from Shocks and Stresses Index***

***Index of social capital at the household level***

***Percent of households that believe local government will respond effectively to future shocks and stresses***

***Percent of households participating in group-based savings, micro-finance, or lending programs***

***Climate change knowledge and participation in climate adaptation programming***

***Participation in other resilience programming***

### Abbreviated Women’s Empowerment in Agriculture Index (A-WEAI)

***Five Domains of Empowerment (5DE) score***

***Percent of women who are empowered***

***Average adequacy score of disempowered women***

***Percent of disempowered women who are adequate in each A-WEAI indicator***

### Agriculture

***Percent of producers who have applied targeted improved management practices or technologies***

***Participation in agriculture programming***

### Dietary intake

***Percent of women of reproductive age consuming a diet of minimum diversity***

***Prevalence of exclusive breastfeeding of children under 6 months of age***

***Percent of children 6-23 months receiving a minimum acceptable diet***

***Participation in nutrition programming***

### Anthropometry

***Prevalence of underweight (BMI < 18.5) women of reproductive age (15-49 years)***

***Prevalence of stunted (HAZ < -2) children under 5 (0-59 months)***

***Prevalence of wasted (WHZ < -2) children under 5 (0-59 months)***

***Prevalence of healthy weight (WHZ ≤ 2 and ≥-2) among children under 5 (0-59 months)***

# Background

This chapter provides background information on Feed the Future in [Country], including a description of the Feed the Future program and the Feed the Future phase two Zone of Influence (henceforth referred to as “ZOI”), the rationale for selecting the ZOI, demographic information on the ZOI population, and information on climate and agriculture in the ZOI.

## 1.1 Feed the Future overview

[Describe the Feed the Future phase two objectives, strategies, and intervention areas in [Country].

Feed the Future in [Country] includes both direct- and systems-level interventions in support of agriculture-led growth; resilience; improved nutrition; and water, sanitation, and hygiene. Direct-level interventions are defined as those that are directed to households and individuals and are expected to exert direct effects on participants’ well-being. Feed the Future [Country] direct-level interventions include [training, counseling, producers’ and other community-based groups, cash or food transfers, and building water or sanitation facilities]. Systems-level interventions are intended to strengthen the capacity or commitment of institutions (national or other) for delivering services to households or individuals, and therefore contribute indirectly to changes in key outcomes for the population living in the ZOI. Feed the Future [Country] systems-level interventions include [strengthening small and medium enterprises to expand the availability of agriculture inputs for producers, strengthening community health systems to support access to treatment among acutely malnourished children, and strengthening community water or sanitation systems to improve access to these communal resources at the household and individual levels]. The reach of systems-level interventions is not limited to those who participate directly as systems actors. It is manifest at the household level in the ZOI by households using the services provided by these systems.

## 1.2 Feed the Future ZOI profile

The Feed the Future ZOI is the geographic area where the Feed the Future program is expected to have an impact on hunger, poverty, and nutrition.

[Geographic description of the ZOI]

A map of the Feed the Future ZOI in [Country] is provided in Figure 1.2.

**Figure 1.2: Map of [Country]: Feed the Future ZOI**

[Map of ZOI]

Source: [Source of map]

### 1.2.1 Rationale for ZOI selection

[Insert rationale.]

### 1.2.2 Demography of the ZOI

**Table 1.2.1** to **Table 1.2.3** present individual and household population estimates for the ZOI at baseline in [Baseline Survey year(s)] and at midline in [Midline Survey year(s)]. Estimates of the total population as well as key sub-populations of the ZOI are presented. The sub-population categories correspond to the various sub-populations for the Feed the Future indicators and disaggregates.

[Summary of the data and methods used to determine the values presented in Tables 1.2.1 to 1.2.3]

[Describe results in the table.]

**Table 1.2.1: Population of Individuals in the ZOI, by Category, [Country] [Baseline Year(s)]-[Midline Year(s)]**

| **Category of individuals** | | **Baseline**  **([Year(s)])** | | |  | | **Midline**  **([Year(s)])** | | | | **Diff.** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Na** | | **Percent** |  | | **Na** | | **Percent** | |
| **Total number of individuals** |  | | 100 | | |  | |  | | 100 | |  |
| **Total number of individuals, by key sub-population** | | | | | |  | |  | |  | |  |
| Children 0-5 monthsb |  | |  | | |  | |  | |  | |  |
| Children 6-23 monthsb |  | |  | | |  | |  | |  | |  |
| Children 0-23 monthsb |  | |  | | |  | |  | |  | |  |
| Children 0-59 monthsb |  | |  | | |  | |  | |  | |  |
| Youth 15-29 yearsb |  | |  | | |  | |  | |  | |  |
| Women of reproductive age (15-49 years) |  | |  | | |  | |  | |  | |  |
| Primary adult female decision-makers |  | |  | | |  | |  | |  | |  |
| Primary adult female decision-makers who participate in household agricultural productionc |  | |  | | |  | |  | |  | |  |
| **Total number of individuals, by residenced** | | | | | | | | | |  | |  |
| Urban |  | |  | | |  | |  | |  | |  |
| Rural |  | |  | | |  | |  | |  | |  |
| **Total number of individuals, by [Admin 1]** | | |  | | |  | |  | |  | |  |
| [Admin 1 #1] |  | |  | | |  | |  | |  | |  |
| [Admin 1 #2] |  | |  | | |  | |  | |  | |  |
| [Admin 1 #3] |  | |  | | |  | |  | |  | |  |
| [Admin 1 #4] |  | |  | | |  | |  | |  | |  |
| **Total number of individuals, by gendered household type** | | | | | |  | |  | |  | |  |
| Male and female adults |  | |  | | |  | |  | |  | |  |
| Female adults only |  | |  | | |  | |  | |  | |  |
| Male adults only |  | |  | | |  | |  | |  | |  |
| Children only (no adults) |  | |  | | |  | |  | |  | |  |
| **Children 0-5 months, by sex** |  | |  | | |  | |  | |  | |  |
| Male |  | |  | | |  | |  | |  | |  |
| Female |  | |  | | |  | |  | |  | |  |
| **Children 6-23 months, by sex** |  | |  | | |  | |  | |  | |  |
| Male |  | |  | | |  | |  | |  | |  |
| Female |  | |  | | |  | |  | |  | |  |
| **Children 0-23 months, by sex** |  | |  | | |  | |  | |  | |  |
| Male |  | |  | | |  | |  | |  | |  |
| Female |  | |  | | |  | |  | |  | |  |
| **Children 0-59 months, by sex** |  | |  | | |  | |  | |  | |  |
| Male |  | |  | | |  | |  | |  | |  |
| Female |  | |  | | |  | |  | |  | |  |
| **Youth 15-29 years, by sex** |  | |  | | |  | |  | |  | |  |
| Male |  | |  | | |  | |  | |  | |  |
| Female |  | |  | | |  | |  | |  | |  |
| **Primary adult female decision-makers, by age** | | | | | | | | | |  | |  |
| 18-29 years |  | |  | | |  | |  | |  | |  |
| 30 years or older |  | |  | | |  | |  | |  | |  |

a Number is the number of individuals in the ZOI population.

b At baseline, the weighted percentage is determined using age-in-month information obtained in the children's nutrition module, so the weighted percentage does not account for eligible children who did not complete the module. At midline, required age-in-month information was obtained for all children under 1 year of age in the household roster, so the weighted percentage accounts for all children.

c The weighted percentage is determined using information on participation in economic activities obtained in the Women's Empowerment in Agriculture module, so the weighted percentage does not account for eligible women who did not complete the module.

d The urban/rural disaggregate uses the [Country]-specific definition of urban and rural reflected in the sampling frame at the time the sample was drawn.

Sources: [Source of ZOI population data]; [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

[Describe results in the table.]

**Table 1.2.2: Population of Farmers Responsible for Cultivating or Raising Targeted Value Chain Commodities in the ZOI, by Category, [Country] [Baseline Year(s)]-[Midline Year(s)]**

|  | **Baseline  ([Year(s)])** | |  | | **Midline  ([Year(s)])** | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Category of individuals** | **Na** | **Percent** |  | | **Na** | | | **Percent** | | **Diff.** |
| **Any targeted VCC** |  |  | |  | |  |  | |  | |
| **Total number of farmers** |  |  | |  | |  |  | |  | |
| **Farmers’ sex** |  |  | |  | |  |  | |  | |
| Male |  |  | |  | |  |  | |  | |
| Female |  |  | |  | |  |  | |  | |
| **Farmers’ age** |  |  | |  | |  |  | |  | |
| 15-29 years |  |  | |  | |  |  | |  | |
| 30 years and older |  |  | |  | |  |  | |  | |
| **Maize** |  |  | |  | |  |  | |  | |
| **Total farmers** |  |  | |  | |  |  | |  | |
| **Farmers’ sex** |  |  | |  | |  |  | |  | |
| Male |  |  | |  | |  |  | |  | |
| Female |  |  | |  | |  |  | |  | |
| **Farmers’ age** |  |  | |  | |  |  | |  | |
| 15-29 years |  |  | |  | |  |  | |  | |
| 30 years and older |  |  | |  | |  |  | |  | |
| **Fishpond aquaculture** |  |  | |  | |  |  | |  | |
| **Total farmers** |  |  | |  | |  |  | |  | |
| **Farmers’ sex** |  |  | |  | |  |  | |  | |
| Male |  |  | |  | |  |  | |  | |
| Female |  |  | |  | |  |  | |  | |
| **Farmers’ age** |  |  | |  | |  |  | |  | |
| 15-29 years |  |  | |  | |  |  | |  | |
| 30 years and older |  |  | |  | |  |  | |  | |
| **Dairy cows** |  |  | |  | |  |  | |  | |
| **Total farmers** |  |  | |  | |  |  | |  | |
| **Farmers’ sex** |  |  | |  | |  |  | |  | |
| Male |  |  | |  | |  |  | |  | |
| Female |  |  | |  | |  |  | |  | |
| **Farmers’ age** |  |  | |  | |  |  | |  | |
| 15-29 years |  |  | |  | |  |  | |  | |
| 30 years and older |  |  | |  | |  |  | |  | |

VCC=value chain commodity

a Number of individuals in the population

Sources: [Source of ZOI population data]; [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

[Describe results in the table.]

**Table 1.2.3: Number of Households in the ZOI, by Category, [Country] [Baseline Year]-[Midline Year]**

| **Category of households** | | **Baseline**  **([Year(s)])** | | |  | | **Midline**  **([Year(s)])** | | | | **Diff.** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Na** | **Percent** | |  | | **Na** | | **Percent** | |
| **Total number of households** |  | | | 100 | |  | |  | | 100 | |  |
| **Total number of households, by gendered household type** | | | | | | | | | | | | |
| Male and female adults |  | | |  | |  | |  | |  | |  |
| Female adults only |  | | |  | |  | |  | |  | |  |
| Male adults only |  | | |  | |  | |  | |  | |  |
| Children only |  | | |  | |  | |  | |  | |  |
| **Total number of households, by residenceb** | | | | | | | | | | | | |
| Urban |  | | |  | |  | |  | |  | |  |
| Rural |  | | |  | |  | |  | |  | |  |
| **Total number of households, by [Admin 1]** | | | |  | |  | |  | |  | |  |
| [Admin 1 #1] |  | | |  | |  | |  | |  | |  |
| [Admin 1 #2] |  | | |  | |  | |  | |  | |  |
| [Admin 1 #3] |  | | |  | |  | |  | |  | |  |
| [Admin 1 #4] |  | | |  | |  | |  | |  | |  |
| **Total number of households, by targeted value chain commodityc** | | | | | | | | | |  | |  |
| Maize |  | | |  | |  | |  | |  | |  |
| Dairy cows |  | | |  | |  | |  | |  | |  |
| Fish |  | | |  | |  | |  | |  | |  |

a Number of households in the ZOI

b The urban/rural disaggregate uses the [Country]-specific definition of urban and rural reflected in the sampling frame at the time the sample was drawn.

c Number of households with at least one producer of the value chain commodity

Sources: [Source of ZOI population data]; [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 1.2.3 Climate and agriculture in the ZOI

[Insert contextual description of climate and agriculture according to instructions.]

## 1.3 Purpose of this assessment

The purpose of the Feed the Future [Country] Phase Two ZOI [Year(s) of midline fieldwork] Midline Indicator Assessment is to provide the U.S. Government interagency partners, the United States Agency for International Development (USAID) Bureau for Resilience and Food Security, USAID [Country], the Government of [Country], and development partners with information to monitor long-term progress of the Feed the Future ZOI indicators in [Country]. The assessment presents indicator estimates for the ZOI at midline and compares them to baseline, but it is not designed to detect statistically significant changes in indicator estimates between baseline and midline. It is possible, however, to detect a statistically significant change if the difference between baseline and midline estimates is large enough. Furthermore, the Midline Indicator Assessment is not designed to support conclusions of causality or program attribution.

The program participation questions included in the Midline Survey questionnaire seek to capture data about how households in the ZOI accessed or participated in the kind of services or activities that Feed the Future supports in [Country]. Participation in direct-level interventions is measured by asking directly about whether households participated in the intervention. Participation in systems-level interventions at the household level in the ZOI is measured by asking whether households are using the services provided by these systems.

These data offer important insight into the reach of promoted direct- and systems-level interventions and provide context for how Feed the Future programming may be contributing to desired outcomes in the ZOI. Although it is not the intent of these questions to directly link household participation to [Country]’s Feed the Future activities specifically, these data provide descriptive information on the types of interventions and activities Feed the Future supports. Results related to water, sanitation, and hygiene programming are included in Chapter 3, Section 3.5; results related to resilience programming are included in Chapter 5, Section 5.6; results related to agriculture programming are included in Chapter 7, Section 7.5; and results related to nutrition are included in Chapter 8, Section 8.2 (women) and Section 8.4 (children).

# Methodologies for obtaining baseline and midline values for Feed the Future indicators

Chapter 2 describes the methodology used to obtain the Feed the Future Zone of Influence (ZOI) indicators at baseline and midline. It provides information on the data sources used in the assessment and describes measures and reporting conventions used throughout the report.

## 2.1 Data sources

Data for the indicators presented in this assessment are drawn from [XX] sources: [list sources]. **Table 2.1.1** summarizes the data sources and their respective fieldwork dates, by ZOI indicator, for both baseline and midline. Primary and secondary data sources are described in the sections that follow.

**Table 2.1.1: Feed the Future ZOI Indicator Data Sources and Dates of Data Collection**

| **Indicator** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |
| --- | --- | --- | --- | --- | --- |
| **Data source** | **Dates collected** |  | **Data source** | **Date collected** |
| Percent of households with access to basic sanitation service | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Percent of households with soap and water at handwashing station on premises | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of household water insecurity, based on the Brief Household Water Insecurity Experiences Scale (HWISE-4) | na | na |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of poverty: Percent of people living on less than $1.90/day (2011 PPP)a | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Depth of poverty of the poor: Mean percent shortfall of the poor relative to the $1.90/day (2011 PPP) poverty linea | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Percent of people who are near-poor, living on 100 percent to less than 125 percent of the $1.90/day (2011 PPP) poverty linea | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of moderate and severe food insecurity in the population, based on the Food Insecurity Experience Scale | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Ability to recover from shocks and stresses index | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Index of social capital at the household level | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Percent of households that believe local government will respond effectively to future shocks and stresses | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Percent of households participating in group-based savings, micro-finance, or lending programs | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Percent of producers who have applied targeted improved management practices or technologies in targeted areas | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Percent of women of reproductive age consuming a diet of minimum diversity | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of exclusive breastfeeding among children under 6 months of age | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of children 6-23 months of age receiving a minimum acceptable diet | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of stunted (HAZ < -2) children under 5 (0-59 months) | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of wasted (WHZ < -2) children under 5 (0-59 months) | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of healthy weight (WHZ ≤ 2 and ≥-2) among children under 5 (0-59 months) | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of underweight (BMI < 18.5) women of reproductive age (15-49 years) | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |

PPP=purchasing power parity, na=not applicable

a Indicator estimates imputed using survey to survey imputation at midline. Model developed using data from [Feed the Future P2-ZOI Baseline Survey].

### 2.1.1 Baseline

[Contractor] conducted the Feed the Future [Country] phase two baseline assessment. [Insert information according to the instructions.]

#### Primary data

The ZOI Baseline Survey was implemented by [Contractor and in-country implementer]. Data collection took place in [regions or areas] from [data collection start month and year] to [data collection end month and year].

[Insert information according to the instructions.]

#### Secondary data

The secondary data sources used to calculate Feed the Future ZOI indicators at baseline include [list secondary data sources]. **Table 2.1.2** presents population sampled, sample sizes, and response rates for secondary data sources used at baseline by data source and ZOI indicator.

**Table 2.1.2: Baseline Secondary Data Source Sample Sizes and Response Rates**

| **Data source** | **Indicator** | **Population sampled** | **Sample size in the ZOI** | **Response rate for sampled population** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Sources: [Insert secondary sources]

##### **[Baseline secondary data source #1]**

[Insert information according to instructions.]

### 2.1.2 Midline

[Contractor] conducted the Feed the Future [Country] phase two ZOI (P2-ZOI) [Year(s) of midline fieldwork] Midline Indicator Assessment. [Insert information according to the instructions.]

#### Primary data

The ZOI Midline Survey was implemented by [Contractor and in-country implementer]. Data collection took place in [regions or areas] from [data collection start month and year] to [data collection end month and year].

In addition to the main survey, a parallel survey was completed as part of the ZOI Midline Survey. The parallel survey collected consumption expenditure and crop yield information in [XXX] households. The consumption expenditure data collected in the parallel survey were used to validate the model used for survey-to-survey imputation of the per capita consumption aggregate and also provided a backup method to compute all three poverty indicators. The crop yield data collected includes the farmers’ ability to identify their plots on interviewers’ tablets at the household, the area and perimeters (in a plot polygon shape file) of farmers’ plots as measured by interviewers when walking the plot perimeters, and production information for the crop value chain commodities ([crop VCCs]) included in the main survey. The crop plot and production data were not analyzed as part of this P2-ZOI Midline Indicator Assessment, but rather were shared with the United States Agency for International Development for separate analysis.

#### Secondary data

This section discusses the use of secondary data sources for the calculation of Feed the Future ZOI indicators at midline. **Table 2.1.3** presents the population sampled, sample sizes, and responses rates for secondary data sources used at midline by data source and ZOI indicator.

**Table 2.1.3: Midline Secondary Data Source Sample Sizes and Response Rates**

| **Data source** | **Indicator** | **Population sampled** | **Sample size in the ZOI** | **Response rate for sampled population** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Sources: [Insert secondary sources]

##### **[Midline secondary data source #1]**

[Insert information according to the instructions.]

### 2.1.3 Comparability of data

This section discusses the comparability of data sources used to calculate ZOI indicators with respect to factors other than questionnaire content, which was discussed in Sections 2.1.1 and 2.1.2, including seasonality and [any other external issues affecting comparability].

#### Seasonality

[Insert description per instructions.]

#### [Other issues regarding comparability]

## 2.2 ZOI Midline Survey methodology

This section describes the ZOI Midline Survey, including discussion of the sample design (including targeted sample size), questionnaire customization, fieldwork, response rates, and limitations of the survey.[[4]](#footnote-3) Appendix 2.1 provides additional details on the sampling and weighting methodology.

### 2.2.1 Survey sample design

The ZOI Midline Survey included a representative, random sample of the entire population living in the ZOI for the Midline Indicator Assessment. The ZOI Survey used a cross-sectional multi-stage cluster sampling design. The design ensured that the total sample size included the necessary number of households in the ZOI to estimate midline values for phase two indicators at a 5 percent margin of error, while maintaining the minimum sample size required in the parallel survey to validate the survey-to-survey imputation model used to produce estimates for poverty indicators at midline.[[5]](#footnote-4)

The sampling frame was stratified by [Country-specific strata] to create [XX] strata. The number of clusters selected in each stratum was proportional to the population in the strata, with at least two clusters selected in each stratum. A total of [XX] clusters were selected based on [XX] households to be interviewed per cluster. The [XX] indicator had the largest final sample size requirement and was, therefore, used to set the overall sample size for the survey at [XX] households. More information about the sample size calculation and weighting methodology is presented in Appendix 2.1. In addition, a reserve sample of [XX] clusters was identified for [list the regions/districts/communes with a reserve sample of clusters]. This was due to the [add country-specific reasons why a reserve sample was required].

In the first stage of sampling, enumeration areas (EAs) were selected as primary sampling units using systematic probability proportional to size sampling. The reserve sample of EAs was selected during this first stage of sampling using a two-phase sampling approach. The two-phase sampling approach involved the selection of a combined sample of EAs for both the main and reserve sample during the first phase, with a random sub-sample of these EAs using fractional interval systematic sampling being selected for the reserve sample during the second phase. EAs found to be exceptionally large compared to other EAs in the population underwent segmentation and an additional stage of sampling to select a segment within the EA using probability proportional to size sampling.[[6]](#footnote-5) Therefore, the sampled clusters for the survey are either an entire EA or a segment of an EA. Before main fieldwork began, a complete household listing was conducted in each cluster, from which [XX] households were selected for interview using fractional interval systematic sampling; this constituted the second stage of sampling for clusters that are EAs and a third stage of sampling for clusters that are segments. In the final stage, eligible individuals were selected within the households using a “take all” approach—that is, all eligible individuals were selected into the sample. During the fieldwork, if any additional households that were not listed separately were discovered in the dwelling unit of a sampled household, the sampled household and the additional households found not to be listed separately were interviewed for the survey.

The parallel survey sample was selected as an additional sample of households within the same clusters selected for the main survey using a two-phase sampling approach during the household sample selection stage. The two-phase sampling approach involved the selection of a combined random sample of households for both surveys during the first phase, with a random sub-sample of households being selected for the parallel survey during the second phase. Sample selection at the individual level followed standard ZOI survey sampling guidance using a take-all approach within sampled households for the parallel survey.

### 2.2.2 Questionnaire design

[Insert description per instructions.]

### 2.2.3 Timing of the survey

[Insert description per instructions.]

### 2.2.4 Listing

[Insert description per instructions.]

### 2.2.5 Training for main fieldwork

Prior to fieldwork, all field staff were trained on survey procedures, including preparing for fieldwork, main and parallel survey questionnaire content, human subjects protection, fieldwork procedures, data management, reporting, and communications. Training included hands-on training and practice sessions that covered the use of all technical equipment that was used in the survey, as well as a computer-assisted personal interviewing pretest and a survey pilot to test the tablet-based data collection system and ensure understanding of survey methods among survey staff. [Number of field teams] field teams, composed of a field supervisor, two two-person interview teams, and a driver, collected data over [XX] weeks, from [Start date] to [End date].

### 2.2.6 Fieldwork

[Insert description per instructions.]

### 2.2.7 Data management and analysis

[Insert description per instructions.]

Estimates for individual-level indicators presented in the report may be reported for de jure or de facto populations, depending on the indicator.

* Promoted improved agriculture practice and women’s empowerment in agriculture indicators are calculated for de jure household members—that is, usual household members—regardless of whether they stayed in the household the night before the survey.
* Women’s and children’s dietary intake indicators are calculated for de facto household members—that is, individuals who stayed in the household the night before the survey—regardless of whether they are usual household members.

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. For the Food Insecurity Experience Scale analysis, the data were imported into R, and “*svydesign*” and the “*moe\_complex survey design.R*” functions were used to describe and calculate the sampling errors by taking into account the sampling stratification. All analysis performed is documented in Stata do files and R syntax files.

### 2.2.8 Implementation challenges and limitations of the survey

[Insert description per instructions.]

### 2.2.9 Response rates

**Table 2.2.1** presents the response rates for the ZOI Midline Survey, compared to those for the ZOI Baseline Survey. The table presents response rates for sampled households, women of reproductive age (15-49 years), primary adult female decision-makers, children 0-6 months of age (midline only), children 6-23 months of age (midline only), children under 2 years of age (baseline only), children under 5 years of age, farmers of any targeted commodity, and farmers of each targeted commodity separately.

[Describe results in the table.]

**Table 2.2.1: Comparison of Results of Household and Individual Interviews in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Respondent group** | **Baseline  ([Year(s)])** |  | **Midline  ([Year(s)])** |
| --- | --- | --- | --- |
| **Households** | |  |  |
| Number of households selected |  |  |  |
| Number of households occupied |  |  |  |
| Number of households interviewed |  |  |  |
| Household response rate (%)a |  |  |  |
| **Children 0-5 months of age** |  |  |  |
| Number of eligible children |  |  |  |
| Number of eligible children whose caregiver was interviewed |  |  |  |
| Eligible children 0-5 months of age response rate (%)b,c |  |  |  |
| **Children 6-23 months of age** |  |  |  |
| Number of eligible children |  |  |  |
| Number of eligible children whose caregiver was interviewed |  |  |  |
| Eligible children 6-23 months of age response rate (%)b,c |  |  |  |
| **Children under 2 years of age** |  |  |  |
| Number of eligible children |  |  |  |
| Number of eligible children whose caregiver was interviewed |  |  |  |
| Eligible children under 2 years of age response rate (%)b,c |  |  |  |
| **Children under 5 years of age** |  |  |  |
| Number of eligible children |  |  |  |
| Number of eligible children whose caregiver was interviewed |  |  |  |
| Eligible children under 5 years of response rate (%)b,c |  |  |  |
| **Women of reproductive age (15-49 years)** |  |  |  |
| Number of eligible women |  |  |  |
| Number of eligible women interviewed |  |  |  |
| Eligible women or reproductive age response rate (%)b,c |  |  |  |
| **Primary adult female decision-makers (18+ years)** |  |  |  |
| Number of eligible women |  |  |  |
| Number of eligible women interviewed |  |  |  |
| Eligible primary adult female decision-makers response rate (%)b,d |  |  |  |
| **Farmers of any targeted value chain commoditye** |  |  |  |
| Number of eligible farmers |  |  |  |
| Number of eligible farmers interviewed |  |  |  |
| Eligible value chain commodity farmer response rate (%)b,d |  |  |  |
| **Maize farmers** |  |  |  |
| Number of eligible farmers |  |  |  |
| Number of eligible farmers interviewed |  |  |  |
| Eligible maize farmer response rate (%)b,d |  |  |  |
| **Fishpond farmers** |  |  |  |
| Number of eligible farmers |  |  |  |
| Number of eligible farmers interviewed |  |  |  |
| Eligible fishpond farmer response rate (%)b,d |  |  |  |
| **Dairy farmers** |  |  |  |
| Number of eligible farmers |  |  |  |
| Number of eligible farmers interviewed |  |  |  |
| Eligible dairy farmer response rate (%)b,d |  |  |  |

a The household response rate is calculated based on the household result code on the household questionnaire cover page and is defined as the number of households completed divided by the number of households occupied. Households are considered completed if the household result code is completed—that is, both Modules 1 and 2 are completed. Households are considered to be occupied if the household result code is any of the following: completed, no household member at home, postponed/unavailable, refused, dwelling not found, household member too ill to respond/cognitively impaired, or partial complete. Households are considered to be unoccupied, and thus excluded from the household response rate calculations, if the household result code is any of the following: entire household absent for an extended period of time, dwelling vacant, address not a dwelling, dwelling destroyed, or other.

b Individual-level response rates are calculated based on the result codes in the relevant individual modules (i.e., Modules 4, 5, 6, and 7). These rates are defined as the number of eligible individuals interviewed divided by the number of eligible individuals. Eligibility determination for Modules 4, 5, and 6 is initiated in the household roster and confirmed in the respective module. If eligibility could not be confirmed (i.e., the individual did not complete the individual-level module), and the individual is eligible according to the information in the household roster, the individual was included in the relevant response rate calculation. (Note that for children under 2 years of age [Module 5], the primary caregivers of the children served as the respondents, not the children directly, but children—not primary caregivers—are included in response rate calculations.) Eligibility determination for Module 7 is determined in Module 2.

c De facto household members only

d De jure household members only

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 2.3 Measures and reporting conventions used throughout this report

### 2.3.1 Standard indicator disaggregates

A standard set of indicator 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 Feed the Future P2-ZOI Baseline and Midline Surveys, and [secondary data sources], there are minor cross-source variations in the data used to derive the standard disaggregates. These are noted in the variable descriptions that follow. 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 years

Data on household members’ age in years are collected in the household roster. For women 15-49 years of age and primary adult female decision-makers, age in years is captured in subsequent individual-level questionnaire modules to confirm module eligibility. Age in years captured in individual-level modules is used whenever it is available. Age in years is used to create age categories for tables presenting indicators for women of reproductive age (de facto household members), primary adult female decision-makers (de jure household members), and farmers (de jure household members). These categories include 5- or 10-year age groups, categories distinguishing younger women of reproductive age from older women of reproductive age (i.e., 15-19 years of age and 20-49 years of age), and categories distinguishing youth from non-youth (e.g., 15-29 years of age and 30 years of age or older for farmers, and 18-29 years of age and 30 years of age or older for primary adult decision-makers).

#### Age in months

The age of children in months is collected in Module 5, *Children’s nutrition*, rather than in the household roster, so that children’s parents or primary caregivers can be prompted to provide the most accurate age possible. Date of birth is also collected in Module 5 and is used to ensure that the age in months and age in years provided for the children is as accurate as possible. Children’s age in months is used to create age categories for tables presenting children’s dietary intake indicators (de facto household members). For example, for the minimum acceptable diet table (**Table 8.3.3**), which presents the minimum acceptable diet indicator for children 6-23 months of age, children’s age in months is disaggregated into 6-month age groups as follows: 6-11 months, 12-17 months, and 18-23 months.

#### Sex

Sex—male or female—is a standard disaggregate in tables presenting children’s dietary indicators and agricultural indicators. The sex of household members is collected in the household roster.

#### Gendered household type

Feed the Future disaggregates all standard household-level indicators for the ZOI by gendered household type—that is: (1) households that include both male and female adults, 18 years of age or older; (2) households that include female adults, but no male adults; (3) households that include male adults, but no female adults; and (4) households with only members under 18 years of age (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. This variable is calculated using data on the age and sex of de jure household members, which are collected in the household roster.

#### Wealth quintile

Households are characterized into wealth quintiles according to their asset-based wealth index score, which takes into account several household and dwelling characteristics and household ownership of various assets, which are collected in Module 2, *Dwelling characteristics*. Wealth quintiles are survey-specific, and thus, as a disaggregate they allow comparison of indicator estimates based on relative, rather than absolute, asset-based wealth of the individuals in the sample. Wealth quintile is used as a disaggregate for many household-level indicators, as well as some person-level nutrition and agriculture indicators. More details can be found in Section 4.2, and additional information about construction of the wealth index can be found in Appendix 2.2.b.

#### Poverty status

As described in greater detail in Section 4.1 of this report, poverty status characterizes households as poor if household members live below the poverty threshold—that is, on less than $1.90 per person per day at 2011 purchasing power parity (PPP), or as non-poor if household members live at or above the poverty threshold—that is, on $1.90 or more per person per day (2011 PPP). Poverty status is used as a disaggregate for many household-level indicators, as well as some person-level nutrition and agriculture indicators.

#### Shock exposure severity

The shock exposure index (SEI) assigns households a score depending on the number and severity of shocks the household experienced during the 12 months preceding the ZOI Survey. For the shock exposure severity disaggregate, households are categorized into one of four categories based on their score: did not experience any shocks (SEI score of 0), low (SEI scores [A]-[B]), moderate (SEI scores [C]-[D]), and high (SEI scores [E]-[F]). Households with an SEI score of 0 are assigned to the first category because they did not experience any shocks. The remaining three categories are meant to split households with an SEI score higher than 0 into roughly even categories. Thus, the shock exposure severity disaggregate allows comparison of indicator estimates based on relative, rather than absolute, shock exposure of the households in the sample. The SEI is calculated using data collected in Module 3, *Food security and resilience*. The SEI is used as a disaggregate for many household-level indicators, as well as some person-level nutrition and agriculture indicators. See Section 5.1 for greater detail on the SEI.

### 2.3.2 Reporting conventions

This Midline Indicator Assessment is primarily comparative in nature. This section provides an overview of the conventions used in reporting the results.

* In the tables throughout this report, weighted point estimates and unweighted sample sizes are presented.
* Estimates are shown to one decimal place, except for the five domains of empowerment and the average adequacy score of the disempowered, which are shown to two decimal places, and unweighted sample sizes are shown as whole numbers.
* Estimates are suppressed when the unweighted sample size is insufficient to calculate a reliable point estimate (n<30); this is denoted by the symbol “^” in the results table cell, and a table footnote defines the symbol.
* If there are no observations for a result or disaggregate category (n=0), the symbol “-” is used in the results table to indicate that an estimate is not available.
* If there are observations for a result or disaggregate category (n>0) but data are not available to calculate an estimate, N/A (not available) is entered for the estimate, 95 percent confidence interval (CI), and number of observations.
* Tests of difference (Rao-Scott chi-squared test of association for proportions and two-sample t-tests for means) are performed to determine whether there is a statistically significant difference between the baseline and midline estimates.
  + For all standard Feed the Future indicators, the five domains of empowerment, the percent of women who are empowered, and the average adequacy score of disempowered women being compared over time, the 95 percent CIs for the baseline and midline estimates, the percentage point difference (proportions) or difference in means (means) between midline and baseline estimates, associated p-value, and level of significance (\* indicates p<0.05, \*\* indicates p<0.01, \*\*\* indicates p<0.001, n/s indicates not significant, and na=not applicable) are reported in results tables.
  + For all non-standard Feed the Future indicator results being compared over time, only the test of difference level of significance is presented in results tables; the percentage point difference and associated p-value are not presented.
  + P-values are presented according to the style used by the New England Journal of Medicine: p-values larger than 0.01 are reported to two decimal places, and those between 0.01 and 0.001 to three decimal places; p-values smaller than 0.001 are reported as p<0.001. However, p-values between 0.045 and 0.049 are presented to three decimal places to show that the difference is statistically significant at the 0.05 level.
  + If a test of difference could not be conducted, na (not applicable) is entered for the difference, p-value, and level of significance.
* For all results presented for only midline (i.e., climate, program participation, and Brief Household Water Insecurity Experiences), tests of association (Rao-Scott chi-squared test of association for proportions and two-sample t-tests for means) are performed to determine whether there is a statistically significant association between the outcome and background characteristic (disaggregate variable). The test of difference level of significance is presented in results tables; the percentage point difference and associated p-value and 95 percent CIs are not presented.

# Demographic characteristics in the ZOI

Chapter 3 describes the background characteristics of the Zone of Influence (ZOI) population using data from the Feed the Future [Country] ZOI Baseline and Midline Surveys, and also documents changes in demographic and household characteristics that occurred between the two surveys. Because changes in these characteristics over time may influence changes in the Feed the Future ZOI indicators, results of tests of statistical difference between baseline and midline are provided. Section 3.1 presents household demographics; Section 3.2 presents dwelling characteristics and living conditions; Section 3.3 presents water, sanitation, and hygiene results; Section 3.4 presents water insecurity results; and Section 3.5 presents participation in water, sanitation, and hygiene programming.

## 3.1 Household demographics

**Table 3.1.1** presents demographic characteristics of households in the ZOI, comparing estimates at baseline and at midline.[[7]](#footnote-6) Estimates include the average household size, the average numbers of household members by key sub-populations, and the percent distributions of households by size.

[Describe results in the table.]

**Table 3.1.1: Comparison of Household Demographic Characteristics in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Baseline  ([Year(s)])** | |  | **Midline ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Est.** | **95% CI** |  | **Est.** | **95% CI** | **Sig.a** |
| Mean household size |  |  |  |  |  |  |
| Mean number of children under 2 years of age |  |  |  |  |  |  |
| Mean number of children under 5 years of age |  |  |  |  |  |  |
| Mean number of children 5 years of age or older (5-17 years) |  |  |  |  |  |  |
| Mean number of youth (15-29 years) |  |  |  |  |  |  |
| Mean number of women of reproductive age (15-49 years) |  |  |  |  |  |  |
| Mean number of adult male household members (18+ years)b |  |  |  |  |  |  |
| Mean number of adult female household members (18+ years)b |  |  |  |  |  |  |
| Mean number of farmers of any targeted value chainc |  |  |  |  |  |  |
| **Household size (%)** |  |  |  |  |  |  |
| Small (1-5 members) |  |  |  |  |  |  |
| Medium (6-10 members) |  |  |  |  |  |  |
| Large (11 or more members) |  |  |  |  |  |  |
| **Number of households (*n*)** |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Feed the Future defines an adult as an individual 18 years of age or older. Females and males 15-17 years of age are of reproductive age but are not considered adults by this definition

c Targeted value chain commodities included in the Feed the Future phase two ZOI Baseline and Midline Surveys are maize, fishponds, and dairy cows.

Note: Estimates are based on de jure household members. Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 3.1.2** present characteristics of primary adult female decision-makers in the ZOI, comparing estimates at baseline and at midline. Primary adult decision-makers are household members who are 18 years of age or older and who self-identify as the primary adult male or primary adult female responsible for both social and economic decision-making in the household. When both exist in a single household, primary adult female and male decision-makers are typically, but not necessarily, husband and wife. The characteristics include age group, marital status, participation in economic activities and participation in economic activities by type.

[Describe results in the table.]

**Table 3.1.2: Comparison of Characteristics of Primary Adult Female Decision-makers in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Characteristic** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |
| **Age** |  |  |  |  |  |  |
| 18-24 |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |
| 50-55 |  |  |  |  |  |  |
| 55-59 |  |  |  |  |  |  |
| 60+ |  |  |  |  |  |  |
| **Marital status** | | | | |  |  |
| Married |  |  |  |  |  |  |
| Living in a consensual union |  |  |  |  |  |  |
| Widowed |  |  |  |  |  |  |
| Divorced or separated |  |  |  |  |  |  |
| Never married or in a union |  |  |  |  |  |  |
| **Economic activityb** |  |  |  |  |  |  |
| Participates in some form of economic activity |  |  |  |  |  |  |
| **Participation in economic activity by typec** |  |  |  |  |  |  |
| Farm |  |  |  |  |  |  |
| Non-farm |  |  |  |  |  |  |
| Wage/salaried |  |  |  |  |  |  |
| **Number of primary adult female decision-makers (*n*)** |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Both paid and unpaid types of economic activity are included. Domestic work, such as caring for children and the elderly or cooking and cleaning, is not included.

c Farm work includes food crop farming, cash crop farming, livestock raising, or fishing/fishpond culture; non-farm work includes running small businesses or self-employment; and wage/salaried employment includes both agriculture and non-agriculture-based work that is salaried. Percentages do not add up to 100 percent because individuals can engage in more than one type of economic activity.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 3.2 Dwelling characteristics and living conditions

**Table 3.2.1** and **Table 3.2.2** present dwelling characteristics and living conditions of households in the ZOI, comparing estimates at baseline and at midline. **Table 3.2.1** presents the percent distribution of households by main construction material used for roofing, exterior walls, and flooring, in total and by residence.

[DESCRIBE RESULTS IN THE TABLE.]

**Table 3.2.1: Comparison of Household’s Main Dwelling Construction Materials in the [Country] ZOI, in Total and by Residence, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Residence and construction material** | **Baseline  ([Year(s)])** | | |  | | **Midline ([Year(s)])** | | | |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | |  | | **%** | | **95% CI** | | **Sig.a** | |
| **All households** |  |  | |  | |  | |  | |  | |
| **Roofingb** | | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Exterior wallsc** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Flooringd** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Total number of households (*n*)** |  |  | |  | |  | |  | |  | |
| **Urban households** |  |  | |  | |  | |  | |  | |
| **Roofingb** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Exterior wallsc** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Flooringd** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Total number of urban households (*n*)** |  |  | |  | |  | |  | |  | |
| **Rural households** |  |  | |  | |  | |  | |  | |
| **Roofingb** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Exterior wallsc** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Flooringd** |  |  | |  | |  | |  | |  | |
| Natural |  |  | |  | |  | |  | |  | |
| Rudimentary |  |  | |  | |  | |  | |  | |
| Finished |  |  | |  | |  | |  | |  | |
| Other |  |  | |  | |  | |  | |  | |
| **Total number of rural households (*n*)** |  |  | |  | |  | |  | |  | |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Natural roofs include no roof, thatch (palm leaf, straw, reed), sod, and bamboo. Rudimentary roofs include wood planks and cardboard. Finished roofs include metal, wood, calamine/cement fiber, ceramic tiles, cement, and roofing shingles.

c Natural walls include no walls, dirt, cane/palm/tree trunks, bamboo with mud, and stone with mud. Rudimentary walls include plywood, cardboard, reused wood, and unbaked bricks. Finished walls include wood planks/shingles, unbaked bricks covered with plaster, bricks, cement blocks, cement, and stone with lime/cement.

d Natural floors include earth/sand, dung, and palm leaves. Rudimentary floors include wood planks and bamboo slats. Finished floors include parquet/polished wood, vinyl or asphalt strips, ceramic tiles, cement, and wall-to-wall carpet.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 3.2.2** presents the percentages of households that use solid cooking fuel and that have access to electricity as well as the average number of people per sleeping room in total and by residence.

[Describe results in the table.]

**Table 3.2.2: Comparison of Household Dwelling Characteristics in the [Country] ZOI, in Total and by Residence, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Indicator and residence** | **Baseline  ([Year(s)])** | | |  | **Midline ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.** | **95% CI** | ***n*a** |  | **Est.** | **95% CI** | ***n*a** | **Sig.b** |
| **Percent using solid fuel for cooking (%)c** | | | |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |
| **Percent with access to electricity (%)** | | |  |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |
| **Mean number of persons per sleeping roomd,e** | | | | |  |  |  |  |
| **All households** |  |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |

a Number of households

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Solid cooking fuels are not considered clean fuels and can have negative health impacts (Smith & Pillarisetti, 2015). Solid fuel is defined as charcoal, wood, animal dung, straw/shrubs/grass, and agriculture crop residue. Households in the no food cooked in household category are removed from the estimates.

d The average number of persons per sleeping room is a common indicator of crowding (United Nations Development Group, 2003).

e Estimates are based on de jure household members.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 3.3 Water, sanitation, and hygiene

This section presents water, sanitation, and hygiene indicators that align with the Sustainable Development Goals definitions.[[8]](#footnote-7) **Table 3.3.1** presents the percentages of households in the ZOI that use an improved drinking water source and practice an appropriate drinking water treatment method or technology, comparing estimates at baseline and at midline. The results are presented for all households and by gendered household type and by residence.

[Describe results in the table.]

**Table 3.3.1: Comparison of Household Drinking Water Characteristics in the [Country] ZOI, in Total and by Residence and Gendered Household Type, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Indicator and household characteristic** |  | | **Baseline  ([Year(s)])** | |  |  | | **Midline  ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | | **na** |  | **%** | **95% CI** | | **na** | **Sig.b** |
| **Use a regularly available improved water sourcec** | | | | |  |  |  | |  |  |
| **All households** |  |  | |  |  |  |  | |  |  |
| **Gendered household type** | |  | |  |  |  |  | |  |  |
| Male and female adults |  |  | |  |  |  |  | |  |  |
| Female adults only |  |  | |  |  |  |  | |  |  |
| Male adults only |  |  | |  |  |  |  | |  |  |
| Children only |  |  | |  |  |  |  | |  |  |
| **Residence** | | | | | | | | | | |
| Urban |  |  | |  |  |  |  | |  |  |
| Rural |  |  | |  |  |  |  | |  |  |
| **Use appropriate water treatment practice or technologyd** | | | | | | | | | | |
| **All households** |  |  | |  |  |  |  | |  |  |
| **Gendered household type** | |  | |  |  |  |  | |  |  |
| Male and female adults |  |  | |  |  |  |  | |  |  |
| Female adults only |  |  | |  |  |  |  | |  |  |
| Male adults only |  |  | |  |  |  |  | |  |  |
| Children only |  |  | |  |  |  |  | |  |  |
| **Residence** | | | | | | | | | | |
| Urban |  |  | |  |  |  |  | |  |  |
| Rural |  |  | |  |  |  |  | |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Improved water sources include piped water into the dwelling, piped water into the yard, public tap/standpipe, tubewell/borehole, protected dug well, protected spring, rainwater, bottled water, sachet water, tanker-truck, and cart with small drum (UNICEF & WHO, 2018). The indicator presented includes an indication of regularity in access to the water source–namely, that (a) water is available from this source all year round and (b) water from this source was available every day in the 2 weeks preceding the survey.

d Appropriate water treatment practice or technology refers to methods that effectively kill or remove pathogens. This includes boiling the water, adding bleach or chlorine, using a water filter (ceramic, sand, composite), and solar disinfection (WHO & UNICEF, 2006). Practices such as straining through a cloth and letting it stand and settle are not considered effective approaches to water treatment. Other is also not considered an effective approach.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

A household has a basic sanitation service if it has an improved sanitation facility that is not shared with people outside the household. A handwashing station is a location where people wash their hands. They are fixed locations or movable devices that can be placed in a convenient spot for use. During data collection, the interviewer visits the handwashing facility and observes whether water and soap are present. The soap may be in bar, powder, or liquid form.

**Table 3.3.2** presents the percentage of households in the ZOI that have a handwashing station with soap and water present on premises, and the percentage of households that have a basic sanitation service, comparing estimates at baseline and at midline. The results are presented for all households, and also by gendered household type and by residence.

[Describe results in the table.]

**Table 3.3.2: Comparison of the Availability of Handwashing Stations with Soap and Water on Households’ Premises and Basic Sanitation Services in the [Country] ZOI, in Total and by Residence and Gendered Household Type, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Indicator and household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  | **p-valueb** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** | **Diff.** | **Sig.c** |
| **Have soap and water at handwashing station on premisesd,e** | | | | | | | | | | |
| **All households** |  |  |  |  | |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  | |  |  |  |  |  |
| Female adults only |  |  |  |  | |  |  |  |  |  |
| Male adults only |  |  |  |  | |  |  |  |  |  |
| Children only |  |  |  |  | |  |  |  |  |  |
| **Residence** | | | | | | | | | | |
| Urban |  |  |  |  | |  |  |  |  |  |
| Rural |  |  |  |  | |  |  |  |  |  |
| **Have a basic sanitation service (improved sanitation, not shared)** | | | | | | | | | | |
| **All households** |  |  |  |  | |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  | |  |  |  |  |  |
| Female adults only |  |  |  |  | |  |  |  |  |  |
| Male adults only |  |  |  |  | |  |  |  |  |  |
| Children only |  |  |  |  | |  |  |  |  |  |
| **Residence** | | | | | | | | | | |
| Urban |  |  |  |  | |  |  |  |  |  |
| Rural |  |  |  |  | |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

d A handwashing station is a location where people wash their hands. These can be fixed locations or movable devices that may be placed in a convenient spot for use. The soap may be in bar, powder, or liquid form. The cleansing product must be at the handwashing station or reachable by hand when standing in front of it. The proportion of the population with a basic handwashing facility with soap and water available on premises is Sustainable Development Goal indicator 6.2.1b (United Nations Statistics Division, n.d.).

e The number of households for which a handwashing station was observed includes those households that do not have a handwashing station on premises but excludes households that do not provide permission to see the handwashing facility or where it is not seen for some other reason.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 3.3.3** presents the percentages of households in the ZOI that use an improved sanitation facility that is shared with other households, use an unimproved sanitation facility, and practice open defecation, comparing estimates at baseline and at midline. The results are presented for all households, and also by gendered household type and by residence.

[Describe results in the table.]

**Table 3.3.3: Comparison of Household Sanitation Characteristics in the [Country] ZOI, in Total and by Residence and Gendered Household Type, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Indicator and household characteristic** |  | | **Baseline  ([Year(s)])** | |  |  | | **Midline  ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | | **na** |  | **%** | **95% CI** | | **na** | **Sig.b** |
| **Use improved sanitation, sharedc** | | | | | | | | | |  |
| **All households** |  |  | |  |  | |  | |  |  |
| **Gendered household type** | |  | |  |  |  |  | |  |  |
| Male and female adults |  |  | |  |  | |  | |  |  |
| Female adults only |  |  | |  |  | |  | |  |  |
| Male adults only |  |  | |  |  | |  | |  |  |
| Children only |  |  | |  |  | |  | |  |  |
| **Residence** | | | | | | | | | | |
| Urban |  |  | |  |  | |  | |  |  |
| Rural |  |  | |  |  | |  | |  |  |
| **Use unimproved sanitationd** |  |  | |  |  |  |  | |  |  |
| **All households** |  |  | |  |  | |  | |  |  |
| **Gendered household type** | |  | |  |  |  |  | |  |  |
| Male and female adults |  |  | |  |  | |  | |  |  |
| Female adults only |  |  | |  |  | |  | |  |  |
| Male adults only |  |  | |  |  | |  | |  |  |
| Children only |  |  | |  |  | |  | |  |  |
| **Residence** | | | | | | | | | | |
| Urban |  |  | |  |  | |  | |  |  |
| Rural |  |  | |  |  | |  | |  |  |
| **Practice open defecatione** |  |  | |  |  |  |  | |  |  |
| **All households** |  |  | |  |  | |  | |  |  |
| **Gendered household type** | |  | |  |  |  |  | |  |  |
| Male and female adults |  |  | |  |  | |  | |  |  |
| Female adults only |  |  | |  |  | |  | |  |  |
| Male adults only |  |  | |  |  | |  | |  |  |
| Children only |  |  | |  |  | |  | |  |  |
| **Residence** | | | | | | | | | | |
| Urban |  |  | |  |  | |  | |  |  |
| Rural |  |  | |  |  | |  | |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Improved sanitation facilities are those that separate human excreta from human contact; they include the categories flush to piped sewer system, flush to septic tank, flush/pour flush to pit latrine, composting toilet, ventilated improved pit latrine (only if there is also a slab), and pit latrine with a slab (UNICEF & WHO, 2018).

d Unimproved sanitation facilities are those that do not adequately separate human excreta from human contact. This includes the following: flush/pour flush to open drain, flush/pour flush to elsewhere, pit latrine without a slab/open pit, bucket, and hanging toilet. Households that report having no sanitation facility or using the bush or field are considered as using an unimproved sanitation facility (UNICEF & WHO, 2018).

e Households that report having no sanitation facility or using the bush or field are considered as practicing open defecation.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 3.4 Water insecurity

This section presents the Brief Household Water Insecurity Experiences (HWISE-4) Scale indicator that measures household experiences with water insecurity. HWISE-4 is based on a subset of 4 questions from the longer, 12-question Household Water Insecurity Experiences (HWISE) Scale that was developed to measure water insecurity across low- and middle-income countries.[[9]](#footnote-8) The questions asked to enable the calculation of HWISE-4 relate to the frequency that households experienced the following over the 4 weeks preceding the survey: (a) worry about water availability for their household needs, (b) a disruption of plans due to problems arising from their water situation, (c) a lack of water availability for hand washing, and (d) a lack of household drinking water. Responses to each question—“never” (scored as 0), “rarely” (1-2 times, scored as 1), “sometimes” (3-10 times, scored as 2), and “often or always” (>10 times, scored as 3)—are summed to create a score ranging from 0 to 12,[[10]](#footnote-9) whereby households with a score of 4 or higher are considered water insecure.[[11]](#footnote-10) Findings for each component of the HWSE-4 indicator are presented in Appendix 1, Tables A1.3.4.1-A1.3.4.4.

**Table 3.4.1** presents the percentage of households in the ZOI that experienced water insecurity at midline in total and by selected household characteristics.[[12]](#footnote-11)

[Describe results in the table.]

**Table 3.4.1: Prevalence of Household Water Insecurity in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **%** | **Sig.a** | **Number of households (*n*)b** |
| --- | --- | --- | --- |
| **All households** |  |  |  |
| **Gendered household type** |  |  |  |
| Male and female adults |  |  |  |
| Female adults only |  |  |  |
| Male adults only |  |  |  |
| Children only |  |  |  |
| **Wealth quintile** |  |  |  |
| Highest (wealthiest) |  |  |  |
| Fourth |  |  |  |
| Middle |  |  |  |
| Second |  |  |  |
| Lowest (poorest) |  |  |  |
| **Poverty status** |  |  |  |
| Poor |  |  |  |
| Non-poor |  |  |  |
| **Residence** |  |  |  |
| Urban |  |  |  |
| Rural |  |  |  |
| **Shock exposure severity** |  |  |  |
| Did not experience any shocks |  |  |  |
| Low |  |  |  |
| Moderate |  |  |  |
| High |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

## 3.5 Participation in water, sanitation, and hygiene programming

[Intro to WASH programming captured in the Midline Survey]

**Table 3.5.1** presents the percentage of households in the ZOI that had at least one household member who participated in training or received support or services related to WASH of the types promoted by Feed the Future in [Country] during the 12 months preceding the P2-ZOI Midline Survey. The results are presented for all households and also by gendered household type, wealth quintile, poverty status, and shock exposure severity.

[Describe results in the table.]

**Table 3.5.1: Percentage of Households in the [Country] ZOI that Participated in WASH-related Training or Received WASH-related Support or Services of the Types Promoted by Feed the Future in the 12 Months Preceding the Survey, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **Percent** | **Sig.a** | **Number of households (*n*)b** |
| --- | --- | --- | --- |
| **All households** |  |  |  |
| **Gendered household type** |  |  |  |
| Male and female adults |  |  |  |
| Female adults only |  |  |  |
| Male adults only |  |  |  |
| Children only |  |  |  |
| **Wealth quintile** |  |  |  |
| Highest (wealthiest) |  |  |  |
| Fourth |  |  |  |
| Middle |  |  |  |
| Second |  |  |  |
| Lowest (poorest) |  |  |  |
| **Poverty status** |  |  |  |
| Poor |  |  |  |
| Non-poor |  |  |  |
| **Residence** |  |  |  |
| Urban |  |  |  |
| Rural |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 3.5.2** presents the percentage of households in the ZOI that had at least one member who engaged in specific types of WASH programming and practices of the types promoted by Feed the Future in [Country] during the 12 months preceding the survey. The table also presents the percentage of participants by sex and age when the data were collected.

[Describe results in the table.]

**Table 3.5.2: Percentage of Households in the [Country] ZOI that Participated in Specific Types of WASH Programming and Services of the Types Promoted by Feed the Future in the 12 Months Preceding the Survey and Percent Distribution of Program Participants by Sex and Age, Feed the Future Phase Two ZOI Midline Survey**

| **WASH programming and practices** | **Households** |  | **Participant sex** | |  | **Participant age** | | **Number of participants (*n*)a** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Male** | **Female** |  | **<30 years** | **30+ years** |
| **(%)** |  | **(%)** | **(%)** |  | **(%)** | **(%)** |
| Participated in training or counseling on hygiene practices |  |  |  |  |  |  |  |  |
| Received support to access soap for their home |  |  |  |  |  |  |  |  |
| Received support to have piped water source installed on the household's premises |  |  |  |  |  |  |  |  |
| Received support to have a toilet built or installed the household's premises |  |  |  |  |  |  |  |  |
| Received support to have a pit latrine built or installed on the household's premises |  |  |  |  |  |  |  |  |
| Received support to have other water or sanitation improvements made on the household's premises |  |  |  |  |  |  |  |  |
| Accessed an improved community water point |  |  |  |  |  |  |  |  |
| Accessed an improved community sanitation facility |  |  |  |  |  |  |  |  |
| Saw advertisements on toilets, pit-emptying services, or other sanitation related services |  |  |  |  |  |  |  |  |
| Received marketing materials on toilets, pit-emptying services, or other sanitation related services |  |  |  |  |  |  |  |  |
| Noticed it is easier to find sanitation and hygiene products |  |  |  |  |  |  |  |  |
| Uses a water or sanitation provider |  |  |  |  |  |  |  |  |
| **Number of households (*n*)** |  |  |  |  |  |  |  |  |
| Received new information from water or sanitation service provider about the services they provide |  |  |  |  |  |  |  |  |
| Noticed an increase the amount of money the water provider collects |  |  |  |  |  |  |  |  |
| Noticed water service provider has improved the services they provide |  |  |  |  |  |  |  |  |
| **Number of households that use a water or sanitation service provider (*n*)** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of de jure household members who participated in specific water, sanitation, or hygiene programming

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

Cells are greyed out when information on participants in the household was not collected.

Source: [Feed the Future P2-ZOI Midline Survey]

# Household economic status

This chapter includes a background discussion of monetary poverty in [Country], three poverty indicators—the prevalence of poverty, the depth of poverty of the poor, and the prevalence of near-poor, as well as the asset-based wealth index and the comparative wealth index.

Appendix A2.2a provides an overview of the methodology used to calculate the poverty indicators at midline. The methodology used to calculate the poverty indicators at baseline can be found in [Appendix 2.2a] of the [Country P2-ZOI Baseline Survey Report Year(s)]. Appendix A2.2b provides an overview of the methodology used to calculate the wealth indices. Additional details are provided in the *Guide to Feed the Future Statistics*.[[13]](#footnote-12)

## 4.1 Poverty in the ZOI

[Insert an overview of poverty within the country according to the instructions.]

In the Midline Survey, data to calculate the three poverty indicators were collected in the household roster and Module 2 of the main survey questionnaire. Per capita daily consumption was then estimated using a survey-to-survey imputation method developed by the World Bank. The approach required first creating a model to predict per capita consumption using data from the Baseline Survey, and then using the model's coefficients and Midline Survey data on the model's predictor variables to impute per capita consumption for each household at midline. Imputed per capita consumption values were then used to estimate the midline prevalence of poverty, depth of poverty of poor, and prevalence of near-poor indicator values and the poverty status disaggregate.

At baseline, per capita daily consumption was calculated by first determining the monetary value of daily household consumption expenditures per usual household member for specific categories of items (food consumption over the past 7 days; non-food expenditures over the past 7 days, 1 month, 3 months, and 12 months; housing; and durable goods) and then aggregating the values across all categories as detailed in the Guide to Feed the Future Statistics. Per capita consumption values were then used to estimate the baseline prevalence of poverty values.

The prevalence of poverty, sometimes called the poverty headcount ratio, is measured by determining the percentage of individuals living below a poverty threshold. Estimates of poverty prevalence are sensitive to the poverty thresholds used to identify the poor. A standardized poverty threshold of $1.90 per person per day in adjusted[[14]](#footnote-13) 2011 USD is used to track global changes in poverty across countries. $1.90 is in effect the extreme poverty threshold and represents the poverty line typical of the world’s poorest countries.[[15]](#footnote-14)

**Table 4.1.1** presents the comparison of the prevalence of poverty at the $1.90 per person per day (2011 purchasing power parity [PPP]) threshold between baseline and midline. This table presents prevalence of poverty estimates for all individuals in the ZOI, and disaggregated by household characteristics, including gendered household type, wealth quintile, and severity of shock exposure.

[Describe results in the table.]

**Table 4.1.1: Comparison of the Prevalence of Poverty at the $1.90 per Person per Day (2011 PPP) Threshold in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Diff.** | **Sig.c** |
| **All individuals** |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households—not the number of household members—even though the prevalence of poverty measures the percentage of individuals living below the $1.90 per person per day (2011 PPP) poverty threshold

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

c Statistical tests of difference could not be conducted, but an asterisk (\*) indicates statistical significance at p<0.05 based on the baseline and midline estimate 95% CIs not overlapping, and “uc” indicates unable to conclude whether the baseline/midline difference is statistically significant because the 95% CIs overlap.

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

The prevalence of poverty, sometimes referred to as the poverty incidence or poverty headcount ratio, presented in this table is the percentage of individuals living below the $1.90 per person per day (2011 PPP) threshold.

The prevalence of poverty was calculated by first converting the $1.90 per person per day (2011 PPP) poverty line into local currency units (LCU) by multiplying the $1.90 per person per day (2011 PPP) poverty line by the 2011 PPP conversion rate of the ZOI Survey country, where LCU 2011 PPP=[XX]. The resulting figure was then adjusted for the cumulative price inflation between 2011 and the ZOI Survey year by multiplying by the ratio of the ZOI Survey country’s Consumer Price Index (CPI) for the survey year and month to the 2011 CPI, where survey month and year CPI LCU=[XX] and 2011 CPI LCU=[XX]. Finally, after applying the household member sampling weight, the sum of the number of households in which the per capita daily consumption in LCU for the year and month of the ZOI Survey was less than the poverty line in LCU for the year and month of the ZOI Survey was divided by the sum of the number of households with consumption data.

At baseline, per capita daily consumption was calculated by first determining the monetary value of daily household consumption expenditures per usual household member for specific categories of items (food consumption over the past 7 days; non-food expenditures over the past 7 days, 1 month, 3 months, and 12 months; housing; and durable goods) and then aggregating the values across all categories, as detailed in the *Guide to Feed the Future Statistics.* Per capita consumption values were then used to estimate the baseline prevalence of poverty values.

At midline, per capita daily consumption was calculated using a survey-to-survey imputation method developed by the World Bank. The approach required first creating a model to predict per capita consumption using data from the phase two ZOI Baseline Survey, and then using the baseline model's coefficients and phase two ZOI Midline Survey data on the model's predictor variables to impute per capita consumption for each household at midline. Imputed per capita consumption values were then used to estimate the midline prevalence of poverty values.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

Although 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 of the poor is a useful poverty-related indicator because it describes the extremity of poverty by estimating the average gap between consumption expenditure levels and the poverty line among the poor.[[16]](#footnote-15) The prevalence and depth of poverty indicators complement each other to present a more complete picture of the poverty situation in the ZOI.

**Table 4.1.2** presents the comparison of the depth of poverty of the poor at the $1.90 per person per day (2011 PPP) threshold between baseline and midline. This table presents depth of poverty of the poor for all individuals and by selected household characteristics, including gendered household type, wealth quintile, and severity of shock exposure.

[Describe results in the table.]

**Table 4.1.2: Comparison of the Depth of Poverty of the Poor at the $1.90 per Person per Day (2011 PPP) Threshold in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mean** | **95% CI** | ***n*a,b** |  | **Mean** | **95% CI** | ***n*a,b** | **Diff.** |
| **All individuals** |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  | |  |  |  |
| Middle |  |  |  |  | |  |  |  |
| Second |  |  |  |  | |  |  |  |
| Lowest (poorest) |  |  |  |  | |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |
| Low |  |  |  |  | |  |  |  |
| Moderate |  |  |  |  | |  |  |  |
| High |  |  |  |  | |  |  |  |

^ Results not statistically reliable, n<30

a The "n" reflects the unweighted number of households—not the number of household members—even though the depth of poverty of the poor measures, on average, how far the consumption of individuals living below the $1.90 per person per day (2011 PPP) poverty threshold is below the threshold.

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

Notes:   
Estimates are sample-weighted; numbers of observations are unweighted.

The depth of poverty of the poor presented in this table measures, on average, how far the consumption of the poor is below the $1.90 per person per day (2011 PPP) poverty threshold.

The depth of poverty of the poor was calculated by first subtracting the per capita daily consumption expenditure in local currency units (LCU) for the year and month of the ZOI Survey of each poor household in the sample from the $1.90 per person per day (2011 PPP) poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the $1.90 per person per day (2011 PPP) poverty line in LCU for the year and month of the ZOI Survey. Finally, after applying the household member sampling weight, the value for each poor household was summed across all poor households and then divided by the number of sampled poor households with consumption data.

At baseline, per capita daily consumption was calculated by first determining the monetary value of daily household consumption expenditures per usual household member for specific categories of items (food consumption over the past 7 days; non-food expenditures over the past 7 days, 1 month, 3 months, and 12 months; housing; and durable goods) and then aggregating the values across all categories as detailed in the *Guide to Feed the Future Statistics.* Per capita consumption values were then used to estimate the baseline depth of poverty of the poor values.

At midline, per capita daily consumption was calculated using a survey-to-survey imputation method developed by the World Bank. The approach first required creating a model to predict per capita consumption using data from the phase two ZOI Baseline Survey, and then using the baseline model's coefficients and ZOI Midline Survey data on the model's predictor variables to impute per capita consumption for each household at midline. Imputed per capita consumption values were then used to estimate the midline depth of poverty of the poor values.

Due to the survey-to-survey imputation method used to calculate a consumption aggregate for each household, reliable standard error estimates are not available for the depth of poverty of the poor; therefore, statistical tests of difference were not performed, and only difference between baseline and midline are presented.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

A third indicator that provides additional context is the prevalence of people who are “near-poor,” or living on 100 percent to less than 125 percent of the $1.90 2011 PPP poverty line. The applicable “near-poor” line is 125 percent of the poverty line, or $2.38 per day at 2011 PPP. Many near-poor households find themselves technically above the poverty line but one adverse event away from falling into poverty. A high prevalence of near-poor individuals can make an agriculture and food system or an economic system vulnerable.[[17]](#footnote-16) A reduction in the prevalence of near-poor individuals is, therefore, a positive change in the resilience of the system.

**Table 4.1.3** presents comparison of the percentage of near-poor at the $1.90 per person per day (2011 PPP) threshold between baseline and midline. The table presents estimates for all individuals and by selected household characteristics, including gendered household type, wealth quintile, and severity of shock exposure.

[Describe results in the table.]

**Table 4.1.3: Comparison of the Percent of Near-poor at the $1.90 per Person per Day (2011 PPP) Threshold in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Diff.** |
| **All individuals** |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The "n" reflects the unweighted number of households—not the number of household members—even though the prevalence of near-poor measures the percentage of individuals living at or above the $1.90 per person per day poverty threshold (2011 PPP) but below 125 percent of that threshold, or $2.38 per day.

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

Notes:   
Estimates are sample-weighted; numbers of observations are unweighted.

The prevalence of near-poor presented in this table is the percentage of individuals living at or above the $1.90 per person per day (2011 PPP) poverty threshold but below 125 percent of that threshold, or $2.38 per day.

The prevalence of near-poor was calculated by first converting the $1.90 per person per day (2011 PPP) poverty line into local currency units (LCU) by multiplying the $1.90 per person per day (2011 PPP) poverty line by the 2011 PPP conversion rate of the ZOI Survey country, where LCU 2011 PPP=[XX]. The resulting figure was then adjusted for the cumulative price inflation between 2011 and the ZOI Survey year by multiplying by the ratio of the ZOI Survey country’s Consumer Price Index (CPI) for the survey year and month to the 2011 CPI, where survey month and year CPI LCU=[XX] and 2011 CPI LCU=[XX]. Finally, after applying the household member sampling weight, the sum of the number of households in which the per capita daily consumption in LCU for the year and month of the ZOI Survey was equal or greater than the to poverty line in LCU for the year and month of the ZOI Survey but below 125 percent of the poverty line in LCU for the year and month of the ZOI Survey was divided by the sum of the number of households with consumption data.

At baseline, per capita daily consumption was calculated by first determining the monetary value of daily household consumption expenditures per usual household member for specific categories of items (food consumption over the past 7 days; non-food expenditures over the past 7 days, 1 month, 3 months, and 12 months; housing; and durable goods) and then aggregating the values across all categories as detailed in the *Guide to Feed the Future Statistics.* Per capita consumption values were then used to estimate the baseline prevalence of near-poor values.

At midline, per capita daily consumption was calculated using a survey-to-survey imputation method developed by the World Bank. The approach first required creating a model to predict per capita consumption using data from the phase two ZOI Baseline Survey, and then using the baseline model's coefficients and ZOI Midline Survey data on the model's predictor variables to impute per capita consumption for each household at midline. Imputed per capita consumption values were then used to estimate the midline depth of poverty of the poor value.

Due to the survey-to-survey imputation method used to calculate a consumption aggregate for each household, reliable standard error estimates are not available for the prevalence of near-poor; therefore, statistical tests of difference were not performed, and only difference between baseline and midline are presented.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

The PPP is periodically updated based on the International Comparison Program, which is managed by the World Bank.[[18]](#footnote-17) The poverty indicators in the ZOI for the previous standardized poverty line ($1.25 per person per day at 2005 PPP) and the new standardized poverty line ($2.15 per person per day at 2017 PPP) are provided in this report for comparison purposes.

**Table 4.1.4** presents the prevalence of poverty, percentage of near-poor, and depth of poverty of the poor at the $1.25 per person per day (2005 PPP) threshold at midline. The table presents estimates for all individuals and by selected household characteristics, including gendered household type, wealth quintile, and severity of shock exposure.

[Describe results in the table.]

**Table 4.1.4: Poverty Indicators at the $1.25 per Person per Day (2005 PPP) Threshold in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **Prevalence of povertya** | |  | **Prevalence of  near-poorc** | **Number of households (*n*)d** |  | **Depth of poverty of the poore** | **Number of households (*n*)d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Percent** | **Sig.b** |  | **Percent** |  | **Mean** |
| **All households** |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |
| Children only (no adults) |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |
| **Shock exposure index** |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The prevalence of poverty is the percentage of individuals living below the $1.25 (2005 PPP) per person per day poverty threshold.

b Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant.

c The prevalence of near-poor is the percentage of individuals living at or above the $1.25 per person per day (2005 PPP) poverty threshold but below 125 percent of that threshold, or $1.56 per day.

d Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

e The depth of poverty of the poor measures, on average, how far the consumption of the poor is below the $1.25 per person per day (2005 PPP) poverty threshold.

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

Indicator estimates are calculated using de jure household members.

The prevalence of poverty was calculated by first converting the $1.25 per person per day (2005 PPP) poverty line into local currency units (LCU) by multiplying the $1.25 per person per day (2005 PPP) poverty line by the 2005 PPP conversion rate of the ZOI Survey country, where LCU 2005 PPP=[XX]. The resulting figure was then adjusted for the cumulative price inflation between 2005 and the ZOI Survey year by multiplying by the ratio of the ZOI Survey country’s Consumer Price Index (CPI) for the survey year and month to the 2005 CPI, where survey month and year CPI LCU=[XX] and 2005 CPI LCU=[XX]. Finally, after applying the household member sampling weight, the sum of the number of households in which the per capita daily consumption in LCU for the year and month of the ZOI Survey was less than the poverty line in LCU for the year and month of the ZOI Survey was divided by the sum of the number of households with consumption data.

The prevalence of near-poor was calculated in a similar manner as the prevalence of poverty, but in the final step, after applying the household member sampling weight, the sum of the number of households in which the per capita daily consumption in LCU for the year and month of the ZOI Survey was equal or greater than the to poverty line in LCU for the year and month of the ZOI Survey but below 125 percent of the poverty line in LCU for the year and month of the ZOI Survey was divided by the sum of the number of households with consumption data.

The depth of poverty of the poor was calculated by first subtracting the per capita daily consumption expenditure in LCU for the year and month of the ZOI Survey of each poor household in the sample from the $1.25 person per day (2005 PPP) poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the $1.25 per person per day (2005 PPP) poverty line in LCU for the year and month of the ZOI Survey. Finally, after applying the household member sampling weight, the value for each poor household was summed across all poor households and then divided by the number of sampled poor households with consumption data.

At midline, per capita daily consumption was calculated using a survey-to-survey imputation method developed by the World Bank. The approach required first creating a model to predict per capita consumption using data from the phase two ZOI Baseline Survey, and then using the baseline model’s coefficients and phase two ZOI Midline Survey data on the model’s predictor variables to impute per capita consumption for each household at midline. Imputed per capita consumption values were then used to estimate the midline prevalence of poverty values.

Due to the survey-to-survey imputation method used to calculate a consumption aggregate for each household, reliable standard error estimates are not available for the depth of poverty of the poor and prevalence of near-poor; therefore, statistical tests of association were not performed for these two indicators and the selected household characteristics.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 4.1.5** presents the prevalence of poverty, percentage of near-poor, and depth of poverty of the poor at the $2.15 per person per day (2017 PPP) threshold at midline. The table presents estimates for all individuals and by selected household characteristics, including gendered household type, wealth quintile, and severity of shock exposure.

[Describe results in the table.]

**Table 4.1.5: Poverty Indicators at the $2.15 per Person per Day (2017 PPP) Threshold in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **Prevalence of povertya** | |  | **Prevalence of  near-poorc** | **Number of households (*n*)d** |  | **Depth of poverty of the poore** | **Number of households (*n*)d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Percent** | **Sig.b** |  | **Percent** |  | **Mean** |
| **All households** |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |
| Children only (no adults) |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |
| **Shock exposure index** |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The prevalence of poverty is the percentage of individuals living below the $2.15 per person per day (2017 PPP) poverty threshold.

b Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant.

c The prevalence of near-poor is the percentage of individuals living at or above the $2.15 per person per day (2017 PPP) poverty threshold but below 125 percent of that threshold, or $2.69 per day.

d Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

e The depth of poverty of the poor measures, on average, how far the consumption of the poor is below the $2.15 per person per day (2017 PPP) poverty threshold.

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

Indicator estimates are calculated using de jure household members.

The prevalence of poverty was calculated by first converting the $2.15 per person per day (2017 PPP) poverty line into local currency units (LCU) by multiplying the $2.15 per person per day (2017 PPP) poverty line by the 2017 PPP conversion rate of the ZOI Survey country, where LCU 2017 PPP=[XX]. The resulting figure was then adjusted for the cumulative price inflation between 2017 and the ZOI Survey year by multiplying by the ratio of the ZOI Survey country’s Consumer Price Index (CPI) for the survey year and month to the 2017 CPI, where survey month and year CPI LCU=[XX] and 2017 CPI LCU=[XX]. Finally, after applying the household member sampling weight, the sum of the number of households in which the per capita daily consumption in LCU for the year and month of the ZOI Survey was less than the poverty line in LCU for the year and month of the ZOI Survey was divided by the sum of the number of households with consumption data.

The prevalence of near-poor was calculated in a similar manner as the prevalence of poverty, but in the final step, after applying the household member sampling weight, the sum of the number of households in which the per capita daily consumption in LCU for the year and month of the ZOI Survey was equal or greater than the to poverty line in LCU for the year and month of the ZOI Survey but below 125 percent of the poverty line in LCU for the year and month of the ZOI Survey was divided by the sum of the number of households with consumption data.

The depth of poverty of the poor was calculated by first subtracting the per capita daily consumption expenditure in LCU for the year and month of the ZOI Survey of each poor household in the sample from the $2.15 per person per day (2017 PPP) poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the $2.15 per person per day (2017 PPP) poverty line in LCU for the year and month of the ZOI Survey. Finally, after applying the household member sampling weight, the value for each poor household was summed across all poor households and then divided by the number of sampled poor households with consumption data.

At midline, per capita daily consumption was calculated using a survey-to-survey imputation method developed by the World Bank. The approach required first creating a model to predict per capita consumption using data from the phase two ZOI Baseline Survey, and then using the baseline model's coefficients and phase two ZOI Midline Survey data on the model's predictor variables to impute per capita consumption for each household at midline. Imputed per capita consumption values were then used to estimate the midline prevalence of poverty values.

Due to the survey-to-survey imputation method used to calculate a consumption aggregate for each household, reliable standard error estimates are not available for the depth of poverty of the poor and prevalence of near-poor; therefore, statistical tests of association were not performed for these two indicators and the selected household characteristics.

Source: [Feed the Future P2-ZOI Midline Survey]

## 4.2 Asset-based wealth index and comparative wealth index

Asset ownership can be used to predict a household’s long-term welfare—its capacity to earn income and withstand shocks in the future. The number and type of assets a household owns is associated with household resilience across national contexts,[[19]](#footnote-18),[[20]](#footnote-19) and asset-based wealth indices have increasingly been used as alternatives to income and consumption expenditure-based measures for several reasons, including the following: (1) they are more stable measures of socioeconomic well-being, (2) they are able to better detect differences in equity, and (3) they are easier to collect and require shorter interviews.[[21]](#footnote-20),[[22]](#footnote-21),[[23]](#footnote-22)

The asset-based wealth index was calculated using data on household characteristics from Module 2, *Dwelling characteristics and household assets*,in the P2-ZOI Midline Survey questionnaire. The index comprises the following variables: presence of domestic servants in the household; agricultural land ownership and amount of land; number of people per sleeping room; house ownership; drinking water source; type of sanitation facility; floor material; roof material; wall material; cooking fuel; type and number of farm animals; household possessions, including large and small durable goods; and whether any member of the household holds a bank account. A wealth score is generated for each surveyed household, and then households are grouped into quintiles based on their relative distribution. Appendix 2.2b contains additional information about the methodology used to calculate the wealth index.

**Table 4.2.1** presents a comparison of the percentage of households that have or own selected assets in the [Country] ZOI at baseline and at midline.

[Describe results in the table.]

**Table 4.2.1: Comparison of the Percent of Households in the [Country] ZOI that Have or Own Selected Assets, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Baseline  ([Year(s)])** | |  | **Midline ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Asset** | **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |
| Electricity |  |  |  |  |  |  |
| Radio |  |  |  |  |  |  |
| Television |  |  |  |  |  |  |
| Mobile phone |  |  |  |  |  |  |
| Non-mobile telephone |  |  |  |  |  |  |
| Computer |  |  |  |  |  |  |
| Refrigerator |  |  |  |  |  |  |
| Watch |  |  |  |  |  |  |
| Bank account |  |  |  |  |  |  |
| Bicycle |  |  |  |  |  |  |
| Motorcycle or motor scooter |  |  |  |  |  |  |
| Animal-drawn cart |  |  |  |  |  |  |
| Car or truck |  |  |  |  |  |  |
| Boat with a motor |  |  |  |  |  |  |
| **Number of households (*n*)** |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 4.2.2** presents wealth quintiles for the population living in the [Country] ZOI at baseline and midline. Estimates are shown for all households as well as disaggregated by selected household characteristics, including gendered household type, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 4.2.2: Percent Distribution of Households in the [Country] ZOI by Asset-based Wealth Quintile, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline** | | | | | ***n*a,b** |  | **Midline** | | | | | ***n*a,b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **([Year(s)])** | | | | | **([Year(s)])** | | | | |
| **Lowest** | **Second** | **Middle** | **Fourth** | **Highest** |  | **Lowest** | **Second** | **Middle** | **Fourth** | **Highest** |
| **All households** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

Although the wealth index is useful for studying economic inequalities in a particular country at a given time, it cannot be directly compared across countries or over time. Hence, Rutstein and Staveteig (2014) developed a methodology to calculate a comparative wealth index (CWI) that allows for direct comparison of economic status across countries and over time. Feed the Future adopted the CWI methodology to develop its ZOI-level indicator: the percent of households below the threshold of the poorest quintile of the asset-based CWI.

This indicator reflects the percentage of households in the ZOI whose ownership (or lack thereof) of selected assets places the household below a fixed threshold that defines the poorest quintile (bottom 20 percent) in the comparative baseline wealth index that was used to create a cross-nationally, cross-temporally comparable asset-based wealth index. The use of a fixed threshold across ZOIs is possible because the CWI indicator is calculated relative to the reference wealth index. This means that the CWI scores can be compared across ZOI Surveys and over time.

Constructing the CWI indicator involves calculating the wealth index for the selected reference survey—the 2017 Senegal Demographic and Health Survey—just as was done for the [Country] ZOI using ZOI Survey data at baseline and at midline. It also involves calculating anchoring points—four of which are based on unmet basic needs and four of which are based on asset ownership—for both the reference survey and ZOI Surveys.[[24]](#footnote-23) The wealth index scores for the households sampled for the ZOI Surveys are then converted into comparable CWI scores using the anchoring points calculated for the ZOI Surveys and the reference survey. Finally, the percentage of households below the comparative threshold for the poorest quintile of the reference survey is calculated using the reference survey quintile cutoffs.

**Table 4.2.3** presents a comparison of the percentage of households in the lowest wealth quintile according to the CWI between baseline and midline. Estimates are shown for all households as well as disaggregated by household characteristics, including gendered household type, poverty status, and shock exposure severity, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 4.2.3: Comparison of the Percent of Households in the [Country] ZOI in the Lowest Wealth Quintile According to the Comparative Wealth Index, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  | **p-valuec** | **Sig.d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Diff.** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  | |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  | |  |  |  |  |  |
| Non-poor |  |  |  |  | |  |  |  |  |  |
| **Shock exposure severity** | |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

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

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 4.2.4** presents a comparison of the percentage of households in the ZOI by CWI quintile between baseline and midline. The table presents estimates and high to low ratio for all households and disaggregated household characteristics, including gendered household type, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 4.2.4: Percent Distribution of Households in the [Country] ZOI by Wealth Quintile According to the Comparative Wealth Index, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline** | | | | | ***n*a,b** |  | **Midline** | | | | | ***n*a,b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **([Year(s)])** | | | | | **([Year(s)])** | | | | |
| **Lowest** | **Second** | **Middle** | **Fourth** | **Highest** |  | **Lowest** | **Second** | **Middle** | **Fourth** | **Highest** |
| **All households** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** | |  |  |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

# Food security and resilience

This chapter presents findings related to food security and resilience in the Zone of Influence (ZOI) at baseline and at midline. Section 5.1 includes food security findings, and the rest of the chapter is devoted to resilience. Section 5.2 presents information on shocks and stresses that households in the ZOI experienced during the 12 months preceding the surveys; Section 5.3 presents the ability to recover from the shocks and stresses index, the first of four standard Feed the Future phase two ZOI (P2-ZOI) resilience indicators; and Section 5.4 presents the other three standard Feed the Future P2-ZOI resilience indicators. The last two sections of the chapter present findings at midline related to climate change knowledge and climate adaptation services (Section 5.5) and households’ participation in resilience programming (Section 5.6).

## 5.1 Food insecurity

The experience of food insecurity is characterized by uncertainty and anxiety regarding food access and changes in the *quality* of the diet (i.e., less balanced and more monotonous diets). As food insecurity becomes severe, the *quantity* of food consumed by the household decreases as the portion sizes are reduced and meals are skipped, and when food insecurity is most severe, individuals are forced to go without eating. Research shows that the experience of food insecurity appears to be common across cultures.[[25]](#footnote-24)

For the ZOI Surveys, the prevalence of moderate and severe food insecurity indicator is based on the Food Insecurity Experience Scale (FIES), which measures the percentage of individuals in the population that experienced food insecurity at moderate or severe levels during the 12 months preceding the survey. FIES is a scale established by the United Nations’ Food and Agriculture Organization that is used to estimate the probability that each household (or individual) belongs to a specific category of food insecurity severity.[[26]](#footnote-25),[[27]](#footnote-26),[[28]](#footnote-27) The difficulty in accessing food due to *lack of money or other resources* is measured from answers to a set of eight questions that covers a range of severity of food insecurity in the 12 months preceding the survey.

According to the *United Nations Sustainable Development Goals Indicators Database*,[[29]](#footnote-28)[Insert information about food security trends in country per instruction.]

**Table 5.1.1** presents estimates of food insecurity overall in the ZOI population, as well as by household characteristics, including gendered household type, wealth quintile, poverty status, and severity of shock exposure, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 5.1.1: Comparison of the Prevalence of Moderate and Severe Food Insecurity in the [Country] ZOI in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  | **p-valuec** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Diff.** | **Sig.d** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  | |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  | |  |  |  |  |  |
| Non-poor |  |  |  |  | |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households—not the number of household members—even though the prevalence of food insecurity is calculated using household member weights

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

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 5.1.2** presents comparison of prevalence of moderate and the prevalence of severe food insecurity between baseline and midline in ZOI population. The table presents results for all individuals, and by disaggregated household characteristics, including gendered household type, wealth quintile, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 5.1.2: Comparison of the Prevalence of Moderate and the Prevalence of Severe Food Insecurity in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Characteristic** | **Baseline ([Year(s)]** | | | | | |  | **Midline ([Year(s)]** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Moderate** | |  | **Severe** | | ***n*a,b** | **Moderate** | | |  | **Severe** | | | ***n*a,b** |
| **%** | **95% CI** | **%** | **95% CI** |  | **%** | **95% CI** | **Sig.c** | **%** | **95% CI** | **Sig.c** |
| **All individuals** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households—not the number of household members—even though the prevalence of food insecurity is calculated using household member weights

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

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted numbers of households.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## Shock exposure and severity

According to the United States Agency for International Development (USAID) definition, resilience is “the ability of people, households, communities, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.”*[[30]](#footnote-29)* Shocks and stresses are events and trends that impact well-being outcomes and future resilience capacities. Resilience measurement comprises measures related to shocks and stresses experienced, coping capacities, and well-being outcomes.[[31]](#footnote-30) No single indicator measures resilience.

Respondents to the food security and resilience module of the ZOI Baseline and Midline Surveys were asked whether their households experienced 16 shocks or stresses during the 12 months preceding the survey. For any shocks or stresses experienced, the respondents were asked to rate the severity of the shock or stress on the household’s food consumption using the same four-point scale for each. This information is used to calculate the shock exposure index (SEI). In other words, the SEI is a sum of the incidence of each shock, weighted by perceived severity of the shock. Because each surveyed household did not experience the same types of shocks and stresses of the same severity, it is necessary to create the SEI to measure of the household’s ability to recover from the shocks and stresses that it experienced in a comparable way.

**Table 5.2.1** presents a comparison of the percentage of households that were exposed to each of the 16 shocks and stresses included in the ZOI surveys during the 12 months preceding the Baseline and Midline Surveys.

[Describe results in the table.]

**Table 5.2.1: Comparison of the Percent of Households in the [Country] ZOI Experiencing Each Shock or Stressor During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Shock or stress** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.** | **95% CI** |  | **Est.** | **95% CI** | **Sig.a** | |
| **Experienced (%)** |  |  |  |  |  |  |
| Too much rain |  |  |  |  |  |  | |
| Too little rain |  |  |  |  |  |  | |
| Erosion of land |  |  |  |  |  |  | |
| Loss of land |  |  |  |  |  |  | |
| Sharp increase in food prices |  |  |  |  |  |  | |
| Belongings stolen or destroyed |  |  |  |  |  |  | |
| Unable to access crop inputs |  |  |  |  |  |  | |
| Disease affecting crops |  |  |  |  |  |  | |
| Pests affecting crops |  |  |  |  |  |  | |
| Theft of crops |  |  |  |  |  |  | |
| Unable to access livestock inputs |  |  |  |  |  |  | |
| Disease affecting livestock |  |  |  |  |  |  | |
| Animals stolen |  |  |  |  |  |  | |
| Unable to sell crops, livestock, etc., at fair price |  |  |  |  |  |  | |
| Severe illness in family |  |  |  |  |  |  | |
| Death in household |  |  |  |  |  |  | |
| **No shocks experienced (%)** |  |  |  |  |  |  |
| **Mean number of shocks experienced** |  |  |  |  |  |  | |
| **Number of households (*n*)** |  |  |  |  |  |  | |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 5.2.2** presents the perceived severity of each shock or stress on the household’s food consumption among the households that experienced it. The table compares the perceived severity between baseline and midline.

[Describe results in the table.]

**Table 5.2.2: Comparison of the Percent Distribution of Households in the [Country] ZOI by Perceived Severity of Each Shock Experienced During the 12 Months Preceding the Survey on Household Food Consumption, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Not  severe** | | |  | **Somewhat  severe** | | |  | **Severe** | | |  | **Extremely  severe** | | | ***n*b,c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Shock or stress** | **%** | **95% CI** | **Sig.a** | **%** | **95% CI** | **Sig.a** | **%** | **95% CI** | **Sig.a** | **%** | **95% CI** | **Sig.a** |
| **Too much rain** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Too little rain** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Erosion of land** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Loss of land** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Sharp increase in food prices** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Belongings stolen or destroyed** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unable to access crop inputs** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Disease affecting crops** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Pests affecting crops** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Theft of crops** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unable to access livestock inputs** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Disease affecting livestock** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Animals stolen** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Unable to sell crops, livestock, etc., at fair price** | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Severe illness in family** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Death in household** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households that reported experiencing the shock or stress during the 12 months preceding the survey.

b Records missing information for severity have been excluded from the estimates. The unweighted sample size reflects this loss in observations.

c Significance tests were performed to determine whether a difference exits between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.  
Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 5.2.3** presents mean SEI scores—that is, a score that accounts for the number of shocks and stresses that households experienced during the 12 months preceding the survey and the severity of the impact of those shocks and stresses on household food consumption—comparing estimates at baseline and at midline.[[32]](#footnote-31) The table presents estimates for all households and also by household characteristics, including gendered household type, wealth quintile, and poverty status.

[Describe results in the table.]

**Table 5.2.3: Comparison of Mean SEI Scores in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** |  | **Baseline ([Year(s)]** | | |  | **Midline ([Year(s)]** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Mean** | **95% CI** | ***n*a,b** |  | **Mean** | **95% CI** | ***n*a,b** | **Sig.c** |
| **All households** |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households for which a shock exposure index score was calculated

b Records missing information for the severity variables have been excluded from the estimates. The unweighted sample size reflects this loss in observations.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

The P2-ZOI Midline Survey collected data on COVID-19 from respondents. **Table 5.2.4** shows the percentage of households in the ZOI who have heard of COVID-19, and among households that have heard of COVID-19, the percentage with at least one household member who had or was suspected of having COVID-19 and the percentage of households that were affected by COVID-19.

[Describe results in the table.]

**Table 5.2.4: COVID-19 Knowledge and its Effects on Households in the [Country] ZOI, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **%** | **Number of households**  **(*n*)b** |
| --- | --- | --- |
| Respondent has heard of COVID-19 |  |  |
| **Number of households (*n*)** |  |  |
| Someone in household has had or been suspected of having COVID-19 |  |  |
| Household has been affected by COVID-19 |  |  |
| **Number of respondents who have heard of COVID-19 (*n*)** |  |  |
| **Effect of COVID-19 on household** |  |  |
| [Effect #1] |  |  |
| [Effect #2] |  |  |
| [Effect #3] |  |  |
| [Effect #4] |  |  |
| [Effect #5] |  |  |
| **Number of households affected by COVID-19 (*n*)** |  |  |

^ Results not statistically reliable, n<30

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

## 5.3 Ability to Recover from Shocks and Stresses Index

In cross-sectional surveys, it is challenging to collect information on “actual recovery” from shocks and stresses; therefore, the ZOI Survey collects information on the Ability to Recover from Shocks and Stresses Index (ARSSI), a proxy indicator for “actual recovery” that captures a household’s self-perceived ability to recover from the shocks and stresses that occur in the ZOI. The index comprises two components: (1) a base ability to recover component that captures how households are currently able to meet food needs relative to the past year, and (2) a forward-looking component that captures how households expect to be able to manage shocks and stresses in the future. The ARSSI corrects the ability to recover index for differences in shock exposure among households and is therefore comparable across households.[[33]](#footnote-32)

The ARSSI includes the typical types of shocks and stresses that occur in the ZOI, such as loss of a family member, loss of income, hunger, drought, flood, conflict, or similar events, and is based on data regarding the shocks and stresses that households experienced in the year prior to the survey and their perceived ability to meet food needs currently and in the following year.

**Table 5.3.1** presents a comparison of the mean ARSSI score for all households and by household characteristics, including gendered household type, wealth quintile, and poverty status, between baseline and midline.

[Describe results in the table.]

**Table 5.3.1: Comparison of the Mean ARSSI Scores in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  | **p-valuec** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Household characteristic** | **Mean** | **95% CI** | ***n*a,b** |  | **Mean** | **95% CI** | ***n*a,b** | **Diff.** | **Sig.d** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households that experienced at least one shock or stress during the 12 months preceding the survey

b Records missing information for the severity variables have been excluded from the estimates. The unweighted sample size reflects this loss in observations.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 5.3.2** presents households’ self-perceived ability to meet their food needs at the time of the survey, compared to before shock or stress exposure—better, same, or worse—at both baseline and midline, in total and by selected household characteristics. The table also compares the findings at baseline to those at midline.

[Describe results in the table.]

**Table 5.3.2: Comparison of the Percent Distribution of Households in the [Country] ZOI by Their Self-perceived Ability to Meet Their Food Needs at the Time of the Survey, Compared to Before Shock Exposure, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | | | | | | | | |  | | **Midline  ([Year(s)])** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Better** | |  | **Same** | |  | **Worse** | | ***n*a,b** |  | | **Better** | | | |  | **Same** | | |  | **Worse** | | | ***n*a,b** |
| **%** | **95% CI** |  | **%** | **95% CI** |  | **%** | **95% CI** | **%** | | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |
| **All households** |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | | | | | | | | | | | | | | | | | | | | |
| Male and female adults |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households that experienced at least one shock or stress during the 12 months preceding the survey

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 5.3.3** presents households’ self-perceived ability to meet their food needs over the year after the survey, compared to before shock or stress exposure—better, same, or worse—at both baseline and midline, in total and by selected household characteristics. The table also compares the findings at baseline to those at midline.

[Describe results in the table.]

**Table 5.3.3: Comparison of the Percent Distribution of Households in the [Country] ZOI by Their Self-perceived Ability to Meet Their Food Needs During the Year After the Survey, Compared to Before Shock Exposure, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | | | | | | | |  | **Midline  ([Year(s)])** | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Better** | |  | **Same** | |  | **Worse** | | ***n*a,b** |  | | **Better** | | |  | **Same** | | |  | **Worse** | | | ***n*a,b** |
| **%** | **95% CI** |  | **%** | **95% CI** |  | **%** | **95% CI** | **%** | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |
| **All households** |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | | | | | | | | | | | | | | | | | |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households that experienced at least one shock or stress during the 12 months preceding the survey

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 5.4 Resilience capacities

There are multiple sources of resilience that Feed the Future calls resilience capacities—the four elements of risk reduction strategies (i.e., prevention, mitigation, coping, and recovery) that support the absorptive, adaptive, and transformative capacities that are essential to strengthen resilience. Some sources are captured in other parts of this report, such as input into decision-making and decision-making autonomy in Chapter 6 on women’s empowerment in agriculture. This section presents three resilience capacities that research has shown to strengthen resilience and improve adaptation and recovery from shocks and stresses:[[34]](#footnote-33),[[35]](#footnote-34),[[36]](#footnote-35),[[37]](#footnote-36),[[38]](#footnote-37) social capital; local government response; and participation in group-based savings, micro-finance, or lending programs. They are captured in three standard Feed the Future P2-ZOI-level indicators: (1) the index of social capital at the household level; (2) the proportion of households that believe local government will respond effectively to future shocks and stresses; and (3) the proportion of households participating in group-based savings, micro-finance, or lending programs.

### 5.4.1 Index of social capital

Social capital has been shown to be an important source of resilience across different shocks and stresses, geographies, and populations. *Bonding social capital* relates specifically to the ability of households to provide support to and receive support from other households in the same community, whereas *bridging social capital* relates to the ability of households to provide support to and receive support from households living outside of their community. The stronger the reciprocal obligation networks, the more likely it is that a household will be able to successfully manage shocks and stresses.

The index of social capital measures the ability of households in the ZOI to draw on social networks to get support to reduce the impact of shocks and stresses on their households. It measures both the degree of bonding among households in their own community and the degree of bridging between households in the area to households outside their own community. If household responses indicate that they have reciprocal, mutually reinforcing relationships through which household members can receive and provide support during times of need, they are considered to have social capital. The indicator is constructed by averaging two sub-indices: one measuring bonding social capital and one measuring bridging social capital.

**Table 5.4.1** presents a comparison of the index of social capital results overall for all households in the ZOI and by selected household characteristics, including gendered household type, wealth quintile, poverty status, and severity of shock exposure, between baseline and midline.[[39]](#footnote-38)

[Describe results in the table.]

**Table 5.4.1: Comparison of the Mean Social Capital Index Scores in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | | **Diff.** | **p-valuee** | **Sig.d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mean** | **95% CI** | ***n*a,b** |  | **Mean** | **95% CI** | ***n*a,b** |
| **All households** |  |  |  |  | |  |  |  | |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  | |  |  |  | |  |
| Non-poor |  |  |  |  | |  |  |  | |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 5.4.2** presents a comparison of the bonding sub-index of the social capital indicator at baseline and midline for all households in the ZOI and by selected household characteristics, including gendered household type, wealth quintile, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 5.4.2: Comparison of the Mean Bonding Social Capital Scores in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | | **Diff.** | **p-valuee** | **Sig.d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mean** | **95% CI** | ***n*a,b** |  | **Mean** | **95% CI** | ***n*a,b** |
| **All households** |  |  |  |  | |  |  |  | |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  | |  |  |  | |  |
| Non-poor |  |  |  |  | |  |  |  | |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 5.4.3** presents a comparison of the bridging sub-index of the social capital indicator at baseline and midline for all households in the ZOI and by selected household characteristics, including gendered household type, wealth quintile, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 5.4.3: Comparison of the Mean Bridging Social Capital Scores in the [Country] ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | | **Diff.** | **p-valuee** | **Sig.d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mean** | **95% CI** | ***n*a,b** |  | **Mean** | **95% CI** | ***n*a,b** |
| **All households** |  |  |  |  | |  |  |  | |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  | |  |  |  | |  |
| Non-poor |  |  |  |  | |  |  |  | |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 5.4.2 Proportion of households that believe local government will respond effectively to future shocks and stresses

Believing in the ability of one’s local government to respond to shocks and stresses is a proxy for trust, legitimacy, and effectiveness of local institutions and leadership. Such belief and trust contribute to transformative resilience capacity, or the enabling environment that supports—or limits—people’s ability to prevent or mitigate the impact of, deal with, and recover from shocks and stresses. The indicator reflects the proportion of households in the ZOI that believe their local government will help the community cope with difficult times (illustrated by a shock known to the community, such as drought or flood) in the future. Local government responsiveness can refer to either local leaders or institutions.

**Table 5.4.4** presents a comparison of the indicator results for all households and by selected household characteristics, including gendered household type, wealth quintile, poverty status, and severity of shock exposure, between baseline and midline.

[Describe results in the table.]

**Table 5.4.4: Comparison of the Percent of Households in the [Country] ZOI that Believe Local Government Will Help the Community Cope with Future Shocks and Stresses, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  | **p-valuec** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Diff.** | **Sig.d** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** | | | | | | | | | | |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households that reported, "Yes, the government would provide help" or "No, the government would not provide help." Estimates exclude households that reported local government will not need to help the community cope with shocks or stresses in the future.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 5.4.3 Proportion of households participating in group-based savings, micro-finance, or lending programs

This indicator helps track the financial inclusion of households in the ZOI. Financial inclusion allows for lower day-to-day transaction costs (e.g., Mobile Money), the ability to grow savings to ease the burden of stresses and shocks, and access to credit to invest. Group-based savings programs are formal or informal community programs that serve as a mechanism for people in poor communities, with otherwise limited access to financial services, to pool their savings. The specific composition and function of the savings groups vary and can include rotating disbursement as well as accumulating savings models. According to the World Bank, micro-finance can be defined as approaches to provide financial services to households and micro-enterprises that are excluded from traditional commercial banking services. Typically, participants are low-income, self-employed, or informally employed individuals, with no formalized ownership titles on their assets and with limited formal identification papers.[[40]](#footnote-39),[[41]](#footnote-40),[[42]](#footnote-41)

**Table 5.3.2** presents a comparison of the percentage of households participating in group-based savings, micro-finance, or lending programs between baseline and midline. A household is considered to be participating if any member of the household saved money with or took a loan or borrowed cash or in-kind from a group-based savings, micro-finance, or lending program in the 12 months preceding the survey. Findings are shown for all households and by household characteristics, including gendered household type, wealth quintile, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 5.3.2: Percent of Households in the [Country] ZOI Participating in Group-based Savings, Micro-finance, or Lending Programs, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Household characteristic** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  | **p-valuec** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Diff.** | **Sig.d** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of households

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 5.5 Climate adaptation

The Feed the Future initiative reflects the U.S. Government’s updated Global Food Security Strategy for fiscal years 2022-2026, with increased focus on COVID-19, conflict, inequity, and climate change. USAID’s Bureau for Resilience and Food Security added a module to the Midline Survey questionnaire to collect information related to this “priority [area] of emphasis and action to position Feed the Future to successfully adjust and pivot in a constantly changing global landscape.”[[43]](#footnote-42)

This section presents information on climate change knowledge and adaptation services in the ZOI that was collected as part of the Midline Survey. The information includes findings on climate change knowledge among survey respondents; whether households received information on managing weather-related challenges; whether households received training, or other support on managing weather-related challenges or on income diversification; whether households adopted practices and the barriers they faced to adopting practices; whether households participated in groups to improve the community’s ability to manage weather-related challenges and to promote better land use; whether households obtained insurance; and whether households received payments because they were affected by weather-related problems. Additional information on the sex and age (<30 years, 30+ years) of program participants or service recipients is also presented when it was collected.

In contrast to information on program participation presented in the rest of this Midline Indicator Assessment Report, the data on participation in climate adaption direct- and system-level interventions is not restricted to only the types of interventions that are promoted by Feed the Future. Interventions that are promoted by Feed the Future are noted with a double dagger (‡).

**Table 5.5.1** presents findings related to knowledge, perception, and concern about the impact of climate change on daily life among households in the ZOI. The findings are presented for all households and also by the sex and age of the survey module respondent.

[Describe results in the table.]

**Table 5.5.1: Knowledge, Perception, and Concern about Impacts of Climate Change on Daily Life among Households in the [Country] ZOI, Feed the Future Phase Two ZOI Midline Survey**

| **Knowledge, perception, or concern** | **All households (%)** |  | **Sex of household respondent** | |  | **Age of household respondent** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Male (%)** | **Female (%)** | **15-29 years (%)** | **30+ years (%)** |
| **Knowledge about climate change** |  |  |  |  |  |  |  |
| A lot |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |
| A little |  |  |  |  |  |  |  |
| None at all |  |  |  |  |  |  |  |
| **Perceive that weather has become more problematic** |  |  |  |  |  |  |  |
| **Concern about the impacts of climate change** | | | | | | | |
| Very concerned |  |  |  |  |  |  |  |
| Moderately concerned |  |  |  |  |  |  |  |
| Somewhat concerned |  |  |  |  |  |  |  |
| Not concerned |  |  |  |  |  |  |  |
| **Number of households (*n*)** |  |  |  |  |  |  |  |

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.2** presents the percentage of households in the ZOI that received information to help prepare for or manage weather-related challenges during the 12 months preceding the survey. The table also presents the source of the information (person or group) and how the information was received (mechanism).

[Describe results in the table.]

**Table 5.5.2: Percent of Households in the [Country] ZOI that Received Information to Help Prepare for or Manage Weather-related Challenges During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Information on weather-related challenges** | **%** |
| --- | --- |
| Received information |  |
| **Number of households (*n*)** |  |
| **Information provided by (person or group)a** |  |
| Friends or neighbors |  |
| Family |  |
| Community group |  |
| Community leaders |  |
| Government officials |  |
| Agrodealers or agrovets |  |
| Cooperative |  |
| Other |  |
| **Information provided via (mechanism)a** |  |
| Word of mouth |  |
| Community meeting |  |
| Training |  |
| Television |  |
| Radio |  |
| SMS/messaging application |  |
| Voice calls (call center, etc.) |  |
| Mobile application |  |
| Website |  |
| Email |  |
| Other |  |
| **Number of households that received information (*n*)** |  |

‡ Intervention of the type promoted by Feed the Future

a Multiple responses are allowed, so percentages may sum to more than 100 percent.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.3** presents the percentage of households in the ZOI that received training or support—on any topic and also on specific topics—to help manage weather-related challenges related to crop production during the 12 months preceding the survey. The table also presents the percentage of households that adopted practices—on any topic and also by specific topics.

[Describe results in the table.]

**Table 5.5.3: Percent of Households in the [Country] ZOI that Received Training or Support or Adopted Practices to Help Manage Weather-related Challenges Related to Crop Production During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Crop-specific information** | **Received training or support (%)** |  | **Adopted practice (%)** |
| --- | --- | --- | --- |
| Any topic |  |  |  |
| **Topica** |  |  |  |
| Weather-related information |  |  |  |
| Used weather-related information to make crop production decisions |  |  |  |
| New crops or varieties |  |  |  |
| Planting practices |  |  |  |
| Crop, pest, or disease management |  |  |  |
| Soil management |  |  |  |
| Water management |  |  |  |
| Post-harvest management |  |  |  |
| Other |  |  |  |
| **Number of households that grew crops (*n*)** |  |  |  |

‡ Intervention of the type promoted by Feed the Future

a Multiple responses are allowed, so percentages may sum to more than 100 percent.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.4** presents the percentage of households in the ZOI that received training or support—on any topic and also on specific topics—to help manage weather-related challenges related to raising livestock during the 12 months preceding the survey. The table also presents the percentage of households that adopted practices—on any topic and also by specific topics.

[Describe results in the table.]

**Table 5.5.4: Percent of Households in the [Country] ZOI that Received Training or Support or Adopted Practices to Manage Weather-related Challenges Related to Raising Livestock During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Livestock-specific information** | **Received training  or support (%)** |  | **Adopted practice (%)** |
| --- | --- | --- | --- |
| Any topic |  |  |  |
| **Topica** |  |  |  |
| Weather-related information |  |  |  |
| Used weather-related information to make livestock production decisions |  |  |  |
| New animals or breeds |  |  |  |
| Animal management |  |  |  |
| Feeding practices |  |  |  |
| Fodder storage |  |  |  |
| Water points |  |  |  |
| Animal health |  |  |  |
| Other |  |  |  |
| **Number of households that raised livestock (*n*)** |  |  |  |

‡ Intervention of the type promoted by Feed the Future

a Multiple responses are allowed, so percentages may sum to more than 100 percent.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.5** presents the percentage of households in the ZOI that faced barriers to adopting agricultural practices to help manage the impacts of weather-related problems during the 12 months preceding the survey. The table also presents the barriers that households faced.

[Describe results in the table.]

**Table 5.5.5: Percent of Households in the [Country] ZOI that Faced Barriers to Adopting Agricultural Practices to Help Manage the Impacts of Weather-related Problems During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Barrier** | **%** |
| --- | --- |
| Faced barriers adopting new agricultural practices |  |
| **Number of households (*n*)** |  |
| **Barriers faceda** |  |
| Land access |  |
| Money for inputs |  |
| Money for labor |  |
| Knowledge |  |
| Labor availability |  |
| Infrastructure or materials |  |
| Markets for buying and/or selling crops |  |
| Time |  |
| Other |  |
| **Number of households that faced barriers (*n*)** |  |

^ Results not statistically reliable, n<30

‡ Intervention of the type promoted by Feed the Future

a Multiple responses are allowed, so percentages may sum to more than 100 percent.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.6** presents the percentage of households in the ZOI that participated in a group working to strengthen the community's ability to manage weather-related problems. The table also presents the percentage of households that participated in a group that created a formal plan and that took action to strengthen their community’s resilience toward weather-related problems as well as the percent distribution of participants by sex and age.

[Describe results in the table.]

**Table 5.5.6: Percent of Households in the [Country] ZOI that Participated in a Group or Committee Working to Strengthen the Community’s Ability to Manage Weather-related Problems During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Group participation** | **%** |
| --- | --- |
| Participated in a group or committee |  |
| **Number of households (*n*)** |  |
| **Percent of households that participated in a group that:** |  |
| Created a formal plan |  |
| Took action |  |
| **Number of households with at least one member participating in a group (*n*)a** |  |
| **Percent distribution of group participants by sex** |  |
| Male |  |
| Female |  |
| **Percent distribution of group participants by age category** |  |
| <30 years old |  |
| 30+ years old |  |
| **Number of group participants (n)b** | |

^ Results not statistically reliable, n<30

‡ Intervention of the type promoted by Feed the Future

a Number of households that have at least one de jure household member who participated

b De jure household members only

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.7** presents the percentage of households in the ZOI that obtained any type of insurance during the 12 months preceding the survey. The table also presents, among households that obtained any type of insurance, the types of insurance obtained, whether the household received support to obtain the insurance, and whether the household obtained crop or livestock insurance with the intent to protect against weather-related problems. The percent distributions of individuals who received support to obtain insurance by sex and age of the individual are also presented.

[Describe results in the table.]

**Table 5.5.7: Percent of Households in the [Country] ZOI that Obtained Insurance, Type of Insurance and Whether Support Was Received, and Whether Crop or Livestock Insurance Was Obtained to Protect Against Weather-related Problems During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Insurance details** | **%** |
| --- | --- |
| Obtained insurance |  |
| **Number of households (*n*)** |  |
| **Type of insurance obtaineda** |  |
| Health |  |
| Life |  |
| Crop |  |
| Livestock |  |
| Received support obtaining the insurance |  |
| **Number of households that obtained insurance (*n*)** |  |
| Obtained insurance to protect against weather-related problems |  |
| **Number of households that obtained crop or livestock insurance (*n*)** |  |
| **Percent distribution of individuals who received support to obtain insurance by sex** |  |
| Male |  |
| Female |  |
| **Percent distribution of individuals who received support to obtain insurance by age category** |  |
| <30 years old |  |
| 30+ years old |  |
| **Number of individuals who received support to obtain insurance (*n*)b** |  |

^ Results not statistically reliable, n<30

‡ Intervention of the type promoted by Feed the Future

a Multiple responses are allowed, so percentages may sum to more than 100 percent.

b De jure household members only

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.8** presents the percentage of households in the ZOI that obtained payments for weather-related problems that affected their crop or animal production during the 12 months preceding the survey. The types of payments received and the providers of payments are also presented in the table. Finally, the percent distribution of payment recipients is also presented by sex and age of the recipient.

[Describe results in the table.]

**Table 5.5.8: Percent of Households in the [Country] ZOI that Obtained Payments for Weather-related Problems that Affected Their Crop or Livestock Production During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Cash payment details** | **%** |
| --- | --- |
| Received payment |  |
| **Number of households (*n*)** |  |
| **Type of payment receiveda** |  |
| Insurance payout |  |
| Cash transfer |  |
| Voucher |  |
| In-kind payment |  |
| Other |  |
| **Payment providera** |  |
| Government |  |
| Community group |  |
| Formal bank |  |
| Insurance company |  |
| Nongovernmental organization |  |
| Other |  |
| **Number of households that received a payment (*n*)** |  |
| **Percent distribution of payment recipients by sex** |  |
| Male |  |
| Female |  |
| **Percent distribution of payment recipient by age category** |  |
| <30 years old |  |
| 30+ years old |  |
| **Number of payment recipients (*n*)b** |  |

^ Results not statistically reliable, n<30

‡ Intervention of the type promoted by Feed the Future

a Multiple responses are allowed, so percentages may sum to more than 100 percent.

b De jure household members only

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.9** presents the percentage of households in the ZOI that participated in a land use group or committee. The table also presents, among households with at least one participant, percentage that participated in a group or committee that created a formal plan or took action to manage land use. The percent distribution of individuals who participated in a land use group or committee is also presented by sex and age of the participant.

[Describe results in the table.]

**Table 5.5.9: Percent of Households in the [Country] ZOI that Participated in a Group or Committee Working to Monitor or Influence Land Use During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Group participation** | **%** |
| --- | --- |
| Participated in a land use group or committee |  |
| **Number of households (*n*)** |  |
| **Percent of households that participated in a group that:** |  |
| Created a formal plan |  |
| Took action |  |
| **Number of households with at least one group participant (*n*)a** |  |
| **Percent distribution of group participants by sex** |  |
| Male |  |
| Female |  |
| **Percent distribution of group participants by age category** |  |
| <30 years old |  |
| 30+ years old |  |
| **Number of group participants (*n*)b** |  |

^ Results not statistically reliable, n<30

‡ Intervention of the type promoted by Feed the Future

a Number of households that have at least one de jure household member who participated

b De jure household members only

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.5.10** presents the percentage of households in the ZOI that participated in a training or received other support related to income diversification. For households that received training or other support, the source of income that was the focus is presented, as is the percent distribution of training or other support recipients by sex and age of the recipient.

[Describe results in the table.]

**Table 5.5.10: Percent of Households in the [Country] ZOI that Participated in a Training to Help Diversify their Sources of Income During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

| **Participation** | **%** |
| --- | --- |
| Participated in a training or received support on income diversification |  |
| **Number of households (*n*)** |  |
| **Participated in training or received support on:** |  |
| New crops or products |  |
| Planting trees for cash or credit |  |
| Diversification into the livestock sector |  |
| Wage labor on other farms |  |
| Non-farm wage labor |  |
| Salaried off-farm agricultural employment |  |
| Salaried off-farm non-agricultural employment |  |
| Petty trade |  |
| Agricultural-related self-employment |  |
| Non-agriculturally-related self-employment |  |
| Migration or remittances |  |
| Renting out farming equipment |  |
| Renting out land |  |
| Other |  |
| **Number of households with at least one member participating in training or receiving support on income diversification (*n*)a** |  |
| **Percent distribution of individuals who received income diversification support by sex** |  |
| Male |  |
| Female |  |
| **Percent distribution of individuals who received income diversification support by age category** |  |
| <30 years old |  |
| 30+ years old |  |
| **Number of individuals who received income diversification training or support (*n*)b** |  |

^ Results not statistically reliable, n<30

‡ Intervention of the type promoted by Feed the Future

a Number of households that have at least one de jure household member who participated in training or received support on income diversification

b De jure household members only

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

## 5.6 Participation in resilience programming

The climate services described in Section 5.5 are designed to increase household resilience to climate change, some/all of which are promoted by Feed the Future in the ZOI. In addition to these climate-related resilience services, Feed the Future promotes other types of direct- and system-related interventions to increase individual, household, and community resilience in the ZOI.

[Intro to resilience programming captured in the Midline Survey]

**Table 5.6.1** presents the percentage of households in the ZOI that had at least one household member who participated in training or received support or services to increase resilience of the types promoted by Feed the Future in [Country] during the 12 months preceding the P2-ZOI Midline Survey. The results are presented for all households and also by gendered household type, wealth quintile, poverty status, and shock exposure severity.

[Describe results in the table.]

**Table 5.6.1: Percentage of Households in the [Country] ZOI that Participated in Resilience Strengthening Training or Received Resilience Strengthening Support of the Types Promoted by Feed the Future During the 12 Months Preceding the Survey, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **%** | **Sig.a** | **Number of households (*n*)b** |
| --- | --- | --- | --- |
| **All households** |  |  |  |
| **Gendered household type** |  |  |  |
| Male and female adults |  |  |  |
| Female adults only |  |  |  |
| Male adults only |  |  |  |
| Children only |  |  |  |
| **Wealth quintile** |  |  |  |
| Highest (wealthiest) |  |  |  |
| Fourth |  |  |  |
| Middle |  |  |  |
| Second |  |  |  |
| Lowest (poorest) |  |  |  |
| **Poverty status** |  |  |  |
| Poor |  |  |  |
| Non-poor |  |  |  |
| **Shock exposure severity** |  |  |  |
| Did not experience any shocks |  |  |  |
| Low |  |  |  |
| Moderate |  |  |  |
| High |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant: na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 5.6.2** presents the percentage of households in the ZOI with members who engaged in specific types of resilience programming and practices of the types promoted by Feed the Future in [Country] during the 12 months preceding the survey. The table also presents the percent distribution of participants by sex and age.

[Describe results in the table.]

**Table 5.6.2: Percentage of Households in the [Country] ZOI that Participated in Specific Types of Resilience Programming of the Types Promoted by Feed the Future During the 12 Months Preceding the Survey and Percent Distribution of Program Participants by Sex and Age, Feed the Future Phase Two ZOI Midline Survey**

| **Resilience programming** | **Households** |  | **Sex of participant** | |  | **Age of participant** | | **Number of participants (*n*)a** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Male** | **Female** |  | **<30 years** | **30+ years** |
| **(%)** |  | **(%)** | **(%)** |  | **(%)** | **(%)** |
| Participated in financial training |  |  |  |  |  |  |  |  |
| Received support to access financial services |  |  |  |  |  |  |  |  |
| Received a conditional cash transfer or voucher |  |  |  |  |  |  |  |  |
| Received an unconditional cash transfer or voucher |  |  |  |  |  |  |  |  |
| Received food or food vouchers |  |  |  |  |  |  |  |  |
| Participated in a local development group or committee |  |  |  |  |  |  |  |  |
| Participated in a disaster reduction training or group |  |  |  |  |  |  |  |  |
| Contributed to the development of a disaster reduction plan |  |  |  |  |  |  |  |  |
| Participated in a program or group working to improve local governance |  |  |  |  |  |  |  |  |
| Participated in reading or writing training |  |  |  |  |  |  |  |  |
| Participated in math training |  |  |  |  |  |  |  |  |
| Participated in vocational training |  |  |  |  |  |  |  |  |
| Participated in life skills training |  |  |  |  |  |  |  |  |
| Participated in an empowerment group for girls or young women |  |  |  |  |  |  |  |  |
| **Number of households (*n*)** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a De jure household members only

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

# 6. Women’s empowerment in agriculture

This chapter presents findings related to the Abbreviated Women’s Empowerment in Agriculture Index (A-WEAI). Although women play a prominent role in agriculture, they face persistent economic and social constraints. Closing the gender gap in agriculture is critical to achieving Feed the Future’s objectives of increasing agricultural productivity and efficiency, reducing hunger and malnutrition, and achieving food security.

## 6.1 Overview

The Women’s Empowerment in Agriculture Index (WEAI) is the first-ever measure to directly capture women’s empowerment and inclusion in the agriculture sector, and it was originally developed to track changes in women’s empowerment that occur as a direct or indirect result of Feed the Future’s programming.[[44]](#footnote-43) Following its widespread uptake, the WEAI was improved and streamlined to make it less time-consuming and expensive to collect, resulting in A-WEAI.[[45]](#footnote-44) All 5 domains of the original WEAI are retained, but the 10 indicators in the original WEAI are reduced to 6 in the A-WEAI.

To enable calculation of the A-WEAI, the Women’s Empowerment in Agriculture survey module is administered to the primary adult male decision-maker and the primary adult female decision-maker (18 years of age or older) in each household so that the relative empowerment of women and men in the same household can be compared. The primary adult male and female decision-makers self-identify as the man or woman who makes more social and economic decisions than other men or women in the household; this information is collected as part of the household roster module. Households are excluded from responding to questions in the Women’s Empowerment in Agriculture survey module if there is only a self-identified primary adult male decision-maker and no self-identified primary adult female decision-maker, or if there are no adults 18 years of age or older.[[46]](#footnote-45)

The A-WEAI comprises two sub-indices: The five domains of empowerment (5DE) and the gender parity index (GPI).[[47]](#footnote-46) The A-WEAI applies the same weights to the 5DE and the GPI as the original WEAI. The 5DE is weighted 90 percent, and the GPI is weighted 10 percent. In the ZOI Midline Surveys, however, the Women’s Empowerment in Agriculture module is administered to only primary adult female decision-makers. Because the module is not also administered to primary adult male decision-makers, the GPI—and thus the A-WEAI—cannot be calculated. As such, the focus of this chapter is the comparison of the 5DE and its component indicators between baseline and midline.

The 5DE score captures two things: (1) the percentage of women who are empowered and (2) the average percentage of indicators that compose the 5DE in which disempowered women have adequate achievements.

The formula to calculate the 5DE score is as follows:[[48]](#footnote-47) *5DE score=He+Hn(Aa)*

Where:

*He*=percentage of women who are empowered

*Hn*=percentage of disempowered women

*Aa*=average percentage of indicators in which disempowered women have adequate achievements (which is equivalent to the average adequacy score of the disempowered multiplied by 100)

The 5DE score can be improved by increasing the percentage of empowered women or, for those women who are disempowered, by increasing the percentage of women among the disempowered who achieve adequacy in the indicators that compose the 5DE.

The 5DE comprises five domains: (1) productive decisions, (2) resources, (3) income, (4) group membership, and (5) time allocation; and six indicators. Each domain of the 5DE is equally weighted at one-fifth. The productive decisions, income, group membership, and time allocation domains are composed of a single indicator, and thus these domains and the corresponding indicator carry the same weight of one-fifth. The resources domain is also weighted one-fifth but is composed of two indicators: ownership of assets, with the corresponding weight of two-fifteenths, and access to and decisions on credit, with the corresponding weight of one-fifteenth.

The indicators that compose the 5DE measure whether an individual reaches a certain threshold for that indicator, defined as achieving adequacy (1=adequate; 0=inadequate). These indicators are used to compute an adequacy score for each individual, which is the weighted average of the six indicators. An individual who has an adequacy score of 0.80 or greater (i.e., she has adequate achievement in 80 percent or more of the weighted indicators that compose the 5DE) is identified as empowered (equivalent to four of the five domains of empowerment).[[49]](#footnote-48) For additional details on calculating the A-WEAI and its components, please refer to the *Guide to Feed the Future Statistics*.[[50]](#footnote-49)

**Table 6.1.1** presents the 5DE domains, indicators, and adequacy cut-offs. Appendix 2.3 presents more information, including the survey questions and criteria used to determine adequacy for each 5DE indicator.

**Table 6.1.1: Domains of Empowerment, Indicators, and Definitions of Adequacy**

| **Domain** | **Indicator** | **Definition of indicator adequacy** |
| --- | --- | --- |
| **Production** | Input in productive decisions | Adequate if for at least one activity, an individual decides alone; OR participates and has input into some, or most or all decisions regarding the activity; OR someone else decides but feels she or he could decide to a medium or high extent if she or he wanted to |
| **Resources** | Ownership of assets | Adequate if individual owns—alone or jointly—at least one large asset or at least two small asset types |
| Access to and input into decisions on credit | Adequate if individual—alone or jointly—makes decisions about at least one source of credit accessed by her householda |
| **Income** | Control over use of income | Adequate if individual participates in and has input into some, most, or all decisions about income generated from an activity; OR she or he makes decisions, has input into decisions, or feels she or he could make decisions (if desired) about employment or major household expenditures (excluding minor expenditures) |
| **Leadership** | Group membership | Adequate if individual is an active member of at least one groupb |
| **Time** | Workload | Adequate if individual worked less than 10.5 hours during the previous day |

a Respondents who live in households that did not access credit are considered inadequate on access to credit and decisions on credit and receive a score of 0.

b Respondents who report that no groups exist in their communities or who are not aware of any groups in their community are considered inadequate on group membership.

Source: Adapted from Malapit, et al., 2015

## 6.2 Summary of 5DE and empowerment results

This section summarizes the 5DE and empowerment findings for women at midline and at baseline.

**Table 6.2.1** presents the following results for women—in total and by age category (18-29 years of age and 30 years of age and older): (1) average 5DE score, (2) percentage of women achieving empowerment, and (3) average adequacy score of disempowered women.

[Describe results in the table.]

**Table 6.2.1: Comparison of 5DE Scores and Components in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Indicator and age** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.** | **95% CI** | ***n*a** |  | **Est.** | **95% CI** | ***n*a** |
| **5DE score** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |  |  |
| **Women achieving empowerment (%)** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |  |  |
| **Average adequacy score of disempowered womend** |  |  |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |  |  |

a Number of primary adult female decision-makers who are de jure household members

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

d Also referred to as the weighted indicators in which disempowered individuals have adequate achievements

Notes:   
Estimates are sample-weighted; numbers of observations are unweighted.  
Women are not included in the estimates if they do not participate in household agricultural production and therefore do not have input into productive decisions or if they are missing a value for any of the other five A-WEAI indicators.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 6.2.2** presents the percentage of women achieving empowerment in the P2-ZOI, disaggregated by additional background characteristics, including wealth quintile, poverty status, and shock exposure severity, comparing estimates at baseline and at midline.[[51]](#footnote-50)

[Describe results in the table.]

**Table 6.2.2: Comparison of Empowerment in the [Country] ZOI in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Characteristic** | **Baseline  ([Year(s)])** | | | |  | **Midline  ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Sig.c** |
| **All women** |  | |  |  |  |  |  |  |  |
| **Wealth quintile** |  | |  |  |  |  |  |  |  |
| Highest (wealthiest) |  | |  |  |  |  |  |  |  |
| Fourth |  | |  |  |  |  |  |  |  |
| Middle |  | |  |  |  |  |  |  |  |
| Second |  | |  |  |  |  |  |  |  |
| Lowest (poorest) |  | |  |  |  |  |  |  |  |
| **Poverty status** |  | |  |  |  |  |  |  |  |
| Poor |  | |  |  |  |  |  |  |  |
| Non-poor |  | |  |  |  |  |  |  |  |
| **Shock exposure severity** |  | |  |  |  |  |  |  |  |
| Did not experience any shocks |  | |  |  |  |  |  |  |  |
| Low | |  |  |  |  |  |  |  |  |
| Moderate | |  |  |  |  |  |  |  |  |
| High | |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of primary adult female decision-makers who are de jure household members

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Notes:   
Estimates are sample-weighted; numbers of observations are unweighted.

Women are not included in the estimates if they do not participate in household agricultural production and therefore do not have input into productive decisions or if they are missing a value for any of the other five A-WEAI indicators.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 6.3. A-WEAI indicator results

Based on the A-WEAI methodology, empowerment in agriculture occurs when a woman has adequate achievement across the five domains that compose the 5DE. Therefore, decomposing the 5DE and examining the individual indicators in each domain is critical for identifying the greatest constraints to empowerment, designing policies and programs to reduce those constraints, and understanding how and why those constraints change over time.

This section presents A-WEAI indicator findings for three populations: (1) all women with data for all six A-WEAI indicators, (2) disempowered women, and (3) all women who completed the Women’s Empowerment in Agriculture module.

**Table 6.3.1** presents the comparison of adequate achievement in each A-WEAI indicator among all women with data for all six A-WEAI indicators, in total and by age, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 6.3.1: Comparison of Adequate Achievement in Each A-WEAI Indicator among Women with Data for All Six A-WEAI Indicators in the [Country] ZOI, in Total and by Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **A-WEAI indicator and women’s age (years)** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a** |  | **%** | **95% CI** | ***n*a** | **Sig.b** |
| **Input in productive decisions** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Ownership of assets** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Access to and decisions on credit** | | | | | | | | |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Control over income** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Group membership** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Workload** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of primary adult female decision-makers who are de jure household members

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

Estimates are equivalent to uncensored headcounts.

Women are not included in the estimates if they do not participate in household agricultural production and therefore do not have input into productive decisions or if they are missing a value for any of the other five A-WEAI indicators.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

A-WEAI indicator results for disempowered women identify those indicators in which the lowest percentages of women who are *disempowered* have adequate achievement. This helps focus attention on those indicators that are the biggest constraints to empowerment *among the* disempowered.

**Table 6.3.2** presents the comparison of adequate achievement in each A-WEAI indicator among disempowered women in the ZOI, in total and by age, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 6.3.2: Comparison of Adequate Achievement in Each A-WEAI Indicator among Disempowered Women in the [Country] ZOI, In Total and by Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **A-WEAI indicator**  **and age (years)** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **na** | **Sig.b** |
| **Input in productive decisions** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Ownership of assets** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Access to and decisions on credit** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Control over income** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Group membership** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |
| **Workload** |  |  |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |  |  |
| 30+ years |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of primary adult female decision-makers who are de jure household members

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Notes:   
Estimates are sample-weighted; numbers of observations are unweighted.  
Women are not included in the estimates if they do not participate in household agricultural production and therefore do not have input into productive decisions or if they are missing a value for any of the other five A-WEAI indicators.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

The last findings presented in this section are those for all women in the ZOI, regardless of whether they participated in agricultural activities. Examining findings for all women helps understand the extent to which women in the ZOI are adequate in key elements of women’s empowerment, even if they are not involved in agricultural activities.

**Table 6.3.3** presents the comparison of adequate achievement in each A-WEAI indicator among all women in the ZOI, in total and by age, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 6.3.3: Comparison of Adequate Achievement in Each A-WEAI Indicator among All Women in the [Country] ZOI, in Total and by Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **A-WEAI indicator**  **and age (years)** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a** |  | **%** | **95% CI** | ***n*a** | **Diff.** | **Sig.b** |
| **Input in productive decisions** |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |
| **Ownership of assets** |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |
| **Access to and decisions on credit** | | | | | | | | | |
| 18-29 |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |
| **Control over income** |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |
| **Group membership** |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |
| **Workload** |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of primary adult female decision-makers who are de jure household members

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 6.4 Descriptive statistics for domains of empowerment and indicators

The following section presents more granular information and statistics on data collected in the Women’s Empowerment in Agriculture module. The subsections are organized by domains of empowerment.

### 6.4.1 Production

Adequacy in *production* is measured by input into decisions about agricultural activities in which an individual participates. Respondents are considered adequate in production if they make decisions alone, have input into most or all decisions, or feel that they could make decisions if they wanted to for at least one agricultural activity.

**Table 6.4.1** presents the percentages of women in the ZOI who are involved in agriculture-related activities (i.e., food crop farming, cash crop farming, livestock raising, or fishing), non-farm economic activities, and wage or salaried employment, comparing estimates at baseline and at midline, to capture the breadth of economic activities in which individuals are engaged. **Table 6.4.2** presents the percentages of women who have input into the decisions made about specific activities, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 6.4.1 Comparison of Women’s Participation in Economic Activities in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Economic activity** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |
| **Any economic activity** |  |  |  |  |  |  |
| **Any agriculture economic activity** |  |  |  |  |  |  |
| Food crop farming |  |  |  |  |  |  |
| Cash crop farming |  |  |  |  |  |  |
| Livestock raising |  |  |  |  |  |  |
| Fishing or fishpond culture |  |  |  |  |  |  |
| Non-farm economic activities |  |  |  |  |  |  |
| Wage or salaried employment |  |  |  |  |  |  |
| **Number of women (*n*)b** |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of primary adult female decision-makers who are de jure household members

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

[Describe results in the table.]

**Table 6.4.2: Comparison of Women’s Input in Decision-making on Economic Activities in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Economic activity** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a** |  | **%** | **95% CI** | ***n*a** | **Sig.b** |
| **Any economic activity** |  |  |  |  |  |  |  |  |
| **Any agriculture economic activity** |  |  |  |  |  |  |  |  |
| Food crop farming |  |  |  |  |  |  |  |  |
| Cash crop farming |  |  |  |  |  |  |  |  |
| Livestock raising |  |  |  |  |  |  |  |  |
| Fishing or fishpond culture |  |  |  |  |  |  |  |  |
| Non-farm economic activities |  |  |  |  |  |  |  |  |
| Wage or salaried employment |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of primary adult female decision-makers who are de jure household members and participated in the economic activity

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 6.4.2 Resources

Adequacy in *resources* is measured by two indicators: (1) ownership of assets, and (2) access to and decisions related to credit. Women are considered adequate in asset ownership if they own, alone or jointly, at least two small asset types or one large asset. Women are considered adequate to access to credit if they decide alone or jointly whether to borrow cash or in-kind or what to do with the money or item borrowed.

**Table 6.4.3** presents the findings for ownership of productive resources in the ZOI, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 6.4.3: Comparison of Women’s Ownership of Productive Resources in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Productive resource** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |
| **At least 1 large or 2 small assetsb** |  |  |  |  |  |  |
| Agricultural land |  |  |  |  |  |  |
| Large livestock |  |  |  |  |  |  |
| Small livestock |  |  |  |  |  |  |
| Chickens, ducks, turkeys, and pigeons |  |  |  |  |  |  |
| Fishpond or fishing equipment |  |  |  |  |  |  |
| Hand tools for farming |  |  |  |  |  |  |
| Non-mechanized farm equipment |  |  |  |  |  |  |
| Mechanized farm equipment |  |  |  |  |  |  |
| Non-farm business equipment |  |  |  |  |  |  |
| House or other structures |  |  |  |  |  |  |
| Large consumer durables |  |  |  |  |  |  |
| Small consumer durables |  |  |  |  |  |  |
| Cell phone |  |  |  |  |  |  |
| Non-agricultural land |  |  |  |  |  |  |
| Means of transportation |  |  |  |  |  |  |
| **Number of women (*n*)c** |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Small assets include chickens, hand tools for farming, non-mechanized farming equipment, and small consumer durables. Large assets include fishpond or fishing equipment, mechanized farm equipment, agricultural land, non-agricultural land, a house or other structures, large consumer durables, non-farm business equipment, means of transportation, large or small livestock, and cell phones.

c Number of primary adult female decision-makers who are de jure household members

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 6.4.4** shows the second indicator of the *resources* domain—access to and decision-making on credit. This table presents the percentage of women who report that a member of their household received any loan in the 12 months preceding the survey—overall and disaggregated by source, comparing estimates at baseline and at midline. The in-kind and cash loan categories are not mutually exclusive; a household could have received both types of loans. For women living in households that received a loan, the table also presents the percentages who report having contributed to the decision to take the loan or the decisions on how to use the loan.

[Describe results in the table.]

**Table 6.4.4: Comparison of Women’s Credit Access in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Characteristic** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |
| **Household received a loan** |  |  |  |  |  |  |
| Any loan |  |  |  |  |  |  |
| In-kind loan |  |  |  |  |  |  |
| Cash loan |  |  |  |  |  |  |
| **Source of loan** |  |  |  |  |  |  |
| Nongovernmental organization |  |  |  |  |  |  |
| Informal lender |  |  |  |  |  |  |
| Formal lender |  |  |  |  |  |  |
| Friends or relatives |  |  |  |  |  |  |
| Group-based micro-finance or lending |  |  |  |  |  |  |
| Informal credit or savings groups |  |  |  |  |  |  |
| **Number of women (*n*)b** |  |  |  |  |  |  |
| **Woman contributed to credit decision** | |  |  |  |  |  |
| Any decision |  |  |  |  |  |  |
| On whether to borrow |  |  |  |  |  |  |
| On how to use loan |  |  |  |  |  |  |
| **Number of women whose household received a loan (*n*)b** |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of primary adult female decision-makers who are de jure household members

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 6.4.3 Income

Adequacy in *income* is measured by input into decisions related to income and expenditures. Respondents are considered adequate if they have substantial input into most or all decisions or feel that they can make a decision for at least one economic activity or major household expenditure.

**Table 6.4.5** shows the percentages of women in the ZOI who have input into the decisions made regarding the use of income derived from an activity, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 6.4.5: Comparison of Women’s Input in Decision-making on Use of Income and Household Expenditures in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Economic activity** | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | ***n*a** |  | **%** | **95% CI** | ***n*a** | **Sig.b** |
| **Any economic activity** |  |  |  |  |  |  |  |  |
| **Any agriculture economic activity** |  |  |  |  |  |  |  |  |
| Food crop farming |  |  |  |  |  |  |  |  |
| Cash crop farming |  |  |  |  |  |  |  |  |
| Livestock raising |  |  |  |  |  |  |  |  |
| Fishing or fishpond culture |  |  |  |  |  |  |  |  |
| Non-farm economic activities |  |  |  |  |  |  |  |  |
| Wage or salaried employment |  |  |  |  |  |  |  |  |
| Minor household expendituresc |  |  |  |  |  |  |  |  |
| Major household expendituresd |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of primary adult female decision-makers who are de jure household members and participated in the economic activity

b Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Minor household expenditures include food for daily consumption or other household needs.

d Major household expenditures include large appliances such as a refrigerator.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 6.4.4 Leadership

Adequacy in *leadership* is measured through anindividual’s active involvement with community groups. Respondents are considered adequate if they are active members of at least one community group. **Table 6.4.6** shows the percentages of women in the phase two ZOI who are active members of groups in their community, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 6.4.6: Comparison of Group Membership Among Women in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Type of group** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  |
| --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |
| **Any group** |  |  |  |  |  |  |
| Agricultural producers’ group |  |  |  |  |  |  |
| Water users’ group |  |  |  |  |  |  |
| Forest users’ group |  |  |  |  |  |  |
| Credit or micro-finance group |  |  |  |  |  |  |
| Mutual help or insurance group |  |  |  |  |  |  |
| Trade and business association |  |  |  |  |  |  |
| Civic or charitable group |  |  |  |  |  |  |
| Local government |  |  |  |  |  |  |
| Religious group |  |  |  |  |  |  |
| Other women’s group |  |  |  |  |  |  |
| Other group |  |  |  |  |  |  |
| **Number of women (*n*)b** |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of primary adult female decision-makers who are de jure household members

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

Estimates include all interviewed individuals, even those who reported that no group exists or that they are unaware of the existence of a group in their community. These individuals, who report that none of the groups exist or who are unaware of any groups, are counted as having inadequate achievement of this empowerment indicator.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 6.4.5 Time

Adequacy in the last domain, *time*, assesses women’s workloads, as measured using a time allocation log. Respondents are considered adequate if they spend 10.5 hours or less performing work activities in a 24-hour period. **Table 6.4.7** shows the percentages of women in the ZOI who performed the listed activities the day prior to the survey and the average number of hours that they spent performing each activity, comparing estimates at baseline and at midline. The percentages indicate those individuals who reported performing the activity, irrespective of the length of time that they spent performing the activity. The average hours spent performing an activity is the average across all individuals, assigning zero hours to individuals who did not perform an activity.

[Describe results in the table.]

**Table 6.4.7: Comparison of Women’s Time Allocation in the [Country] ZOI, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Performed activity** | | | | | |  | **Mean time devoted (hours: minutes)** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  |  | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | |  |
| **Activity** | **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |  | **Mean** | **95% CI** |  | **Mean** | **95% CI** | **Sig.a** |
| **Work activities** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sleeping and resting |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eating and drinking |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Personal care |  |  |  |  |  |  |  |  |  |  |  |  |  |
| School and homeworkb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Work as employedb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own business workb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farming, livestock, fishingb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Shopping, getting servicesb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Weaving, sewing, textile careb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cookingb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Domestic work (including fetching water)b |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fetching waterb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Care for children, adults, elderlyb |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commuting (for work or school)b |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Travel (not for work or school) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Watching TV, listening to radio, reading |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exercising |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Social activities and hobbies |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Religious activities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of women (*n*)c** |  |  |  |  |  |  |  |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Activities considered to be work in the workload indicator calculation

c Number of primary adult female decision-makers who are de jure household members

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

Women who did not partake in an activity are included with a time of 0 hours for that activity when estimating the mean time devoted to the activity.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

# 7. Targeted agriculture value chains

This chapter presents the results for the targeted value chains—maize, fishpond aquaculture, and dairy farming—included in the both the Zone of Influence (ZOI) Baseline and Midline Surveys, including background information about each value chain and its farmers and the use of Feed the Future promoted improved agriculture technologies and management practices. Individuals responsible for making management decisions about one or more maize plot, one or more fishpond, or one or more herd of dairy cows during the year preceding the ZOI Survey were eligible to respond to the corresponding survey modules. Throughout this chapter, these interviewed individuals are referred to as farmers. There may be more than one farmer of a specific value chain in the same household if the farmers were responsible for different plots of maize, different fishponds, or different herds of dairy cows. Multiple farmers in the same household, therefore, may have been interviewed about the same value chains. In addition, the same farmer may have been responsible for more than one targeted value chain; in which case, the same farmer may have been interviewed about multiple value chains.

Results for each targeted value chain are presented across all farmers of that value chain and disaggregated by sex and age (15-29 years and 30 years or older) and compared between baseline and midline estimates. Statistically significant results are indicated in the tables and discussed in the narrative.

Knowing which promoted improved management practices and technologies farmers use to cultivate their crops and raise their fish or livestock fosters a better understanding of what farmers are already doing well and what they could do better to increase their productivity. Collecting information about promoted improved management practices and technologies that farmers use through the ZOI Survey enables an examination of use of promoted practices and technologies beyond those who have directly participated in Feed the Future programming. Promoted improved management practices or technologies are those supported through Feed the Future as a way to increase agriculture productivity or support stronger and better-functioning systems.

## Looking across maize, fishponds, and dairy cows

This section examines farmers’ use of improved management practices and technologies promoted by Feed the Future in the [Country] ZOI across all targeted value chains—maize, fishponds, and dairy cows.

**Table 7.1.1** shows the percentage of farmers of one or more Feed the Future targeted value chain commodities (VCCs) in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future in [Country] during the 12 months preceding the ZOI Survey, comparing estimates at baseline and at midline. The table also includes the percentage of targeted VCC farmers in the ZOI who used specific promoted improved management practices and technologies by category.

[Describe results in the table.]

**Table 7.1.1: Comparison of the Percentage of Farmers of Targeted Value Chain Commodities in the [Country] P2-ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Category and promoted improved practice or technology** | **Baseline** | | | |  | **Midline** | | | | | | |  | | | **p-valuea** | | |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[Year(s)]** | | | | **[Year(s)]** | | | | | | |  | | |  | |
| **%** | **95% CI** | | | **%** | | | **95% CI** | | | | **Diff.** | | | **Sig.b** | |
| **Across all categories** |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Crop genetics |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Cultural practices |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Natural resource or ecosystem management |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Pest and disease management |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Soil-related fertility and conservation |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Irrigation |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Water management, non-irrigation-based |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Climate adaptation or climate risk management |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Post-harvest, handling, and storage |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Marketing and distribution |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Value-added processing |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Aquaculture management |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| Livestock management |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  |  |  | | |  | | | |  | | |  | | |  | | | |
| Food safety |  |  | |  |  | | |  | | | |  | | |  | | |  | | |
| [Insert practice] |  |  | | | |  |  | | |  | | | |  | | |  | | |  |
| [Insert practice] |  |  | | | |  |  | | |  | | | |  | | |  | | |  |
| Other |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| [Insert practice] |  |  | | |  |  | | |  | | | |  | | |  | | |  | |
| **Number of farmers of targeted VCCs (*n*)c** |  |  | | |  |  | | |  | | | |  | | |  | | |  | |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Number of de jure household members who are farmers responsible for cultivating maize, raising fish, or raising dairy cows. Farmers of more than one targeted VCC are counted only once.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.1.2** shows the percentage of targeted VCC farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ sex, comparing estimates at baseline and at midline. The table also includes the percentage of targeted VCC farmers in the ZOI who used specific promoted improved management practices and technologies by category.

[Describe results in the table.]

**Table 7.1.2: Comparison of the Percentage of Farmers of Targeted Value Chain Commodities in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers’ Sex, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Category and promoted improved practice or technology** | **Male targeted VCC farmers** | | | | | |  | **Female targeted VCC farmers** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | | **[Year(s)]** | |  |  | **[Year(s)]** | |  | **[Year(s)]** | |  |
| **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crop genetics |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cultural practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Natural resource or ecosystem management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pest and disease management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soil-related fertility and conservation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Irrigation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Water management, non-irrigation-based |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Climate adaptation or climate risk management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Post-harvest, handling, and storage |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marketing and distribution |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Value-added processing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aquaculture management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Livestock management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of farmers of targeted VCCs (*n*)b** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for cultivating maize, raising fish, or raising dairy cows. Farmers of more than one targeted VCC are counted only once.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.1.3** shows the percentage of farmers of targeted VCCs in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ age, comparing estimates at baseline and at midline. The table also includes the percentage of farmers of targeted VCCs in the ZOI who used specific promoted improved management practices and technologies by category.

[Describe results in the table.]

**Table 7.1.3: Comparison of the Percentage of Farmers of Targeted Value Chain Commodities in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers' Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Category and promoted improved practice or technology** | **Targeted VCC farmers 15-29 years** | | | | | |  | **Targeted VCC farmers 30+ years** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | |  | **[Year(s)]** | |  |  | **[Year(s)]** | |  | **[Year(s)]** | |  |
| **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crop genetics |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cultural practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Natural resource or ecosystem management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pest and disease management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soil-related fertility and conservation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Irrigation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Water management, non-irrigation-based |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Climate adaptation or climate risk management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Post-harvest, handling, and storage |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marketing and distribution |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Value-added processing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Aquaculture management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Livestock management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of farmers of targeted VCCs (*n*)b** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for cultivating maize, raising fish, or raising dairy cows. Farmers of more than one targeted VCC are counted only once.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.1.4** shows the percent distribution of farmers of targeted VCCs in the ZOI who used promoted improved management practices and technologies by the number used at baseline and at midline.

[Describe results in the table.]

**Table 7.1.4: Percent Distribution of Farmers of Targeted Value Chain Commodities by Number of Promoted Improved Management Practices and Technologies Used in the [Country] ZOI, in Total and by Farmers’ Sex and Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Number of promoted improved practices or technologies used** | **Baseline  ([Year(s)])** | | | | | | |  | **Midline  ([Year(s)])** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | **Sex** | |  | **Age (years)** | |  |  | **Sex** | |  | **Age (years)** | |
| **Total** | **Male** | | **Female** |  | **15-29** | **30+** |  | **Total** | **Male** | **Female** |  | **15-29** | **30+** |
| **(%)** | **(%)** | | **(%)** |  | **(%)** | **(%)** |  | **(%)** | **(%)** | **(%)** |  | **(%)** | **(%)** |
| 0 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| 8+ |  |  | |  |  |  |  |  |  |  |  |  |  |  |
| **Number of farmers of targeted VCCs (*n*)a** |  |  | |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of de jure household members who are farmers responsible for cultivating maize, raising fish, or raising dairy cows. Farmers of more than one targeted VCC are counted only once.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## Maize: Use of improved management practices and technologies

This section examines maize farmers’ use of promoted improved management practices and technologies promoted by Feed the Future in the [Country] ZOI.

**Table 7.2.1** shows the percentage of maize farmers in the ZOI who applied one or more improved management practices or technologies promoted by the Feed the Future [Country] during the 12 months preceding the ZOI Survey, comparing estimates at baseline and at midline. The table also includes the percentage of maize farmers in the ZOI who used promoted improved management practices and technologies by category.

[Describe results in the table.]

**Table 7.2.1: Comparison of the Percentage of Maize Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, in Total, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Category and promoted improved practice or technology** | **Baseline** | |  | **Midline** | |  | **p-valuea** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[Year(s)]** | |  | **[Year(s)]** | |  |  |
| **%** | **95% CI** | **%** | **95% CI** | **Diff.** | **Sig.b** |
| **Across all categories** |  |  |  |  |  |  |  |  |
| Crop genetics |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Cultural practices |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Natural resource or ecosystem management |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Pest and disease management |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Soil-related fertility and conservation |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Irrigation |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Water management, non-irrigation-based |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Climate adaptation or climate risk management |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Post-harvest, handling, and storage |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Marketing and distribution |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Value-added processing |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| **Number of maize farmers (*n*)c** |  |  |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Number of de jure household members who are farmers responsible for cultivating maize

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.2.2** shows the percentage of maize farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ sex, comparing estimates at baseline and at midline. The table also includes the percentage of maize farmers in the ZOI who used specific promoted improved management practices and technologies by category.

[Describe results in the table.]

**Table 7.2.2: Comparison of the Percent Distribution of Maize Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers’ Sex, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Category and promoted improved practice or technology** | **Male maize farmers** | | | | | | |  | **Female maize farmers** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | | **[Year(s)]** | |  |  | | **[Year(s)]** | |  | **[Year(s)]** | |  |
| **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |  | | **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Crop genetics |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Cultural practices |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Natural resource or ecosystem management |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Pest and disease management |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Soil-related fertility and conservation |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Irrigation |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Water management, non-irrigation-based |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Climate adaptation or climate risk management |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Post-harvest, handling, and storage |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Marketing and distribution |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Value-added processing |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  | |  |  |  |  |  |  |
| **Number of maize farmers (*n*)b** |  |  |  |  |  |  |  | |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for cultivating maize

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.2.3** shows the percentage of maize farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ age, comparing estimates at baseline and at midline. The table also includes the percentage of maize farmers in the ZOI who used specific promoted improved management practices and technologies by category.

[Describe results in the table.]

**Table 7.2.3: Comparison of the Percentage of Maize Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers' Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Category and promoted improved practice or technology** | **Maize farmers 15-29 years** | | | | | |  | **Maize farmers 30+ years** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | | **[Year(s)]** | |  |  | **[Year(s)]** | | **[Year(s)]** | |  |
| **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crop genetics |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cultural practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Natural resource or ecosystem management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pest and disease management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soil-related fertility and conservation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Irrigation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Water management, non-irrigation-based |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Climate adaptation or climate risk management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Post-harvest, handling, and storage |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Marketing and distribution |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Value-added processing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of maize farmers (*n*)b** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for cultivating maize

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.2.4** shows the percent distribution of maize farmers in the ZOI in total and by farmer’s age and sex who used promoted improved management practices and technologies by the number used at baseline and at midline.

[Describe results in the table.]

**Table 7.2.4: Percent Distribution of Maize Farmers by Number of Promoted Improved Management Practices and Technologies Used in the [Country] ZOI, in Total and by Farmers’ Sex and Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Number of promoted improved practices or technologies used** | **Baseline** | | | | | |  | **Midline** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **([Year(s)])** | | | | | |  | **([Year(s)])** | | | | | |
|  | **Sex** | |  | **Age (years)** | |  |  | **Sex** | |  | **Age (years)** | |
| **Total** | **Male** | **Female** |  | **15-29** | **30+** |  | **Total** | **Male** | **Female** |  | **15-29** | **30+** |
| **(%)** | **(%)** | **(%)** |  | **(%)** | **(%)** |  | **(%)** | **(%)** | **(%)** |  | **(%)** | **(%)** |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8+ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of maize farmers (*n*)a** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of de jure household members who are farmers responsible for cultivating maize

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## Fishponds: Use of improved management practices and technologies

This section examines fishpond farmers’ use of improved technologies and management practices promoted by Feed the Future in the [Country] ZOI.

**Table 7.3.1** shows the percentage of fishpond farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, comparing estimates at baseline and at midline. The table also includes the percentage of fishpond farmers in the ZOI who used promoted improved management practices and technologies by aquaculture sub-category.

[Describe results in the table.]

**Table 7.3.1: Comparison of the Percentage of Fishpond Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, in Total, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Sub-category and**  **promoted improved**  **practice or technology** | **Baseline** | |  | **Midline** | |  | **p-valuea** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[Year(s)]** | | **[Year(s)]** | |  |  |
| **%** | **95% CI** | **%** | **95% CI** | **Diff.** | **Sig.b** |
| **Across all categories** |  |  |  |  |  |  |  |  |
| Improved fingerlings |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Improved feed and feeding practices | | | | | | | | |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Fish health and disease control |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Improved cage culture |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Improved pond culture |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Pond preparation |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Sampling and harvesting |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Management of carrying capacity | | | | | | | | |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |
| **Number of fishpond farmers (*n*)c** |  |  |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Number of de jure household members who are farmers responsible for raising fish

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.3.2** shows the percentage of fishpond farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ sex, comparing estimates at baseline and at midline. The table also includes the percentage of fishpond farmers in the ZOI who used specific promoted improved management practices and technologies by aquaculture sub-category.

[Describe results in the table.]

**Table 7.3.2: Comparison of the Percentage of Fishpond Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers’ Sex, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Sub-category and promoted improved practice or technology** | **Male fishpond farmers** | | | | | |  | **Female fishpond farmers** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | |  | **[Year(s)]** | |  |  | **[Year(s)]** | |  | **[Year(s)]** | |  |
| **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved fingerlings |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved feed and feeding practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fish health and disease control |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved cage culture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved pond culture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pond preparation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sampling and harvesting |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management of carrying capacity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of fishpond farmers (*n*)b** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for raising fish

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.3.3** shows the percentage of fishpond farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ age, comparing estimates at baseline and at midline. The table also includes the percentage of fishpond farmers in the ZOI who used specific promoted improved management practices and technologies by aquaculture sub-category.

[Describe results in the table.]

**Table 7.3.3: Comparison of the Percentage of Fishpond Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers' Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Sub-category and promoted improved practice or technology** | **Fishpond farmers 15-29 years** | | | | | |  | **Fishpond farmers 30+ years** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | |  | **[Year(s)]** | |  |  | **[Year(s)]** | |  | **[Year(s)]** | |  |
| **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved fingerlings |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved feed and feeding practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fish health and disease control |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved cage culture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved pond culture |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pond preparation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sampling and harvesting |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Management of carrying capacity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of fishpond farmers (*n*)b** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for raising fish

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.3.4** shows the percent distribution of fishpond farmers in the ZOI in total and by farmer’s sex and age who used promoted improved management practices and technologies by the number used at baseline and at midline.

[Describe results in the table.]

**Table 7.3.4: Percent Distribution of Fishpond Farmers by Number of Promoted Improved Management Practices and Technologies Used in the [Country] ZOI, in Total and by Farmers’ Sex and Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Number of promoted improved practices or technologies used** | **Baseline** | | | | | |  | **Midline** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **([Year(s)])** | | | | | | **([Year(s)])** | | | | | |
|  | **Sex** | |  | **Age (years)** | |  | **Sex** | |  | **Age (years)** | | |
| **Total** | **Male** | **Female** | **15-29** | **30+** | **Total** | **Male** | **Female** | **15-29** | **30+** | |
| **(%)** | **(%)** | **(%)** | **(%)** | **(%)** | **(%)** | **(%)** | **(%)** | **(%)** | **(%)** | |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 8+ |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| **Number of fishpond farmers (*n*)a** |  |  |  |  |  |  |  |  |  |  |  |  |  | |

^ Results not statistically reliable, n<30

a Number of de jure household members who are farmers responsible for raising fish

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## Dairy cows: Use of improved management practices and technologies

This section examines dairy farmers’ use of improved technologies and management practices promoted by Feed the Future in the [Country] ZOI to raise dairy cows and produce milk.

**Table 7.4.1** shows the percentage of dairy farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, comparing estimates at baseline and at midline. The table also includes the percentage of dairy farmers in the ZOI who used promoted improved management practices and technologies by livestock production and management sub-category.

[Describe results in the table.]

**Table 7.4.1: Comparison of the Percentage of Dairy Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, in Total, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Sub-category and promoted improved practice or technology** | **Baseline** | |  | | **Midline** | | |  | **p-valuea** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[Year(s)]** | |  | | **[Year(s)]** | | |  |  |
| **%** | **95% CI** | |  | | **%** | **95% CI** | **Diff.** | **Sig.b** |
| **Across all categories** |  |  | |  | |  |  |  |  |  |
| Improved livestock breeds |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Livestock health services and products |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Improved livestock handling practices and housing |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Improved feeding practices |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Improved grazing practices |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Improved waste management practices |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Improved fodder crops |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Cultivation of dual-purpose crops |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Food safety |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| Other |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| [Insert practice] |  |  | |  | |  |  |  |  |  |
| **Number of dairy farmers (*n*)c** |  |  | |  | |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

c Number of de jure household members who are farmers responsible for raising dairy cows

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.2.2** shows the percentage of dairy farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ sex, comparing estimates at baseline and at midline. The table also includes the percentage of dairy farmers in the ZOI who used specific promoted improved management practices and technologies by livestock production and management sub-category.

[Describe results in the table.]

**Table 7.4.2: Comparison of the Percentage of Dairy Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers’ Sex, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Sub-category and promoted improved practice or technology** | **Male dairy farmers** | | | | | |  | **Female dairy farmers** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | |  | **[Year(s)]** | |  |  | **[Year(s)]** | |  | **[Year(s)]** | |  |
| **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved livestock breeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Livestock health services and products |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved livestock handling practices and housing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved feeding practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved grazing practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved waste management practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved fodder crops |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cultivation of dual purpose crops |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of dairy farmers (*n*)b** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for raising dairy cows

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.4.3** shows the percentage of dairy farmers in the ZOI who applied one or more improved management practices or technologies promoted by Feed the Future [Country] during the 12 months preceding the ZOI Survey, disaggregated by farmers’ age, comparing estimates at baseline and at midline. The table also includes the percentage of dairy farmers in the ZOI who used specific promoted improved management practices and technologies by livestock production and management sub-category.

[Describe results in the table.]

**Table 7.4.3: Comparison of the Percentage of Dairy Farmers in the [Country] ZOI Who Applied One or More Promoted Improved Management Practices and Technologies by Category, by Farmers' Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Category and promoted improved practice or technology** | **Dairy farmers 15-29 years** | | | | | |  | **Dairy farmers 30+ years** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline** | |  | **Midline** | |  |  | **Baseline** | |  | **Midline** | |  |
| **[Year(s)]** | |  | **[Year(s)]** | |  |  | **[Year(s)]** | |  | **[Year(s)]** | |  |
| **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** |  | **%** | **95% CI** | **Sig.a** |
| **Across all categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved livestock breeds |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Livestock health services and products |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved livestock handling practices and housing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved feeding practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved grazing practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved waste management practices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Improved fodder crops |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cultivation of dual-purpose crops |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [Insert practice] |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of dairy farmers (*n*)b** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of de jure household members who are farmers responsible for raising dairy cows

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 7.4.4** shows the percent distribution of dairy farmers in the ZOI in total and by farmer’s sex and age who used promoted improved management practices and technologies by the number used at baseline and at midline.

[Describe results in the table.]

**Table 7.4.4: Percent Distribution of Dairy Farmers by Number of Promoted Improved Management Practices and Technologies Used in the [Country] ZOI, in Total and by Farmers’ Sex and Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Number of promoted improved practices or technologies used** | **Baseline** | | | | | |  | **Midline** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **([Year(s)])** | | | | | |  | **([Year(s)])** | | | | | |
|  | **Sex** | |  | **Age (years)** | |  |  | **Sex** | |  | **Age (years)** | |
| **Total** | **Male** | **Female** |  | **15-29** | **30+** |  | **Total** | **Male** | **Female** |  | **15-29** | **30+** |
| **(%)** | **(%)** | **(%)** |  | **(%)** | **(%)** |  | **(%)** | **(%)** | **(%)** |  | **(%)** | **(%)** |
| 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8+ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Number of dairy farmers (*n*)a** |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of de jure household members who are farmers responsible for raising dairy cows

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## Participation in agriculture programming

[Introduction to agriculture programming captured in the Midline Survey]

**Table 7.5.1** presents the percentage of agriculture households in the ZOI that had at least one household member who participated in an agriculture training or received agriculture support or services of the types promoted by Feed the Future in [Country] during the 12 months preceding the ZOI Midline Survey. The results are presented for all households and also by gendered household type, wealth quintile, and poverty status.

[Describe results in the table.]

**Table 7.5.1: Percentage of Households in the [Country] ZOI that Participated in Agriculture Training or Received Agriculture Support or Services of the Types Promoted by Feed the Future, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **%** | **Sig.a** | **Number of agriculture households**  **(*n*)b** |
| --- | --- | --- | --- |
| **All households** |  |  |  |
| **Gendered household type** |  |  |  |
| Male and female adults |  |  |  |
| Female adults only |  |  |  |
| Male adults only |  |  |  |
| Children only |  |  |  |
| **Wealth quintile** |  |  |  |
| Highest (wealthiest) |  |  |  |
| Fourth |  |  |  |
| Middle |  |  |  |
| Second |  |  |  |
| Lowest (poorest) |  |  |  |
| **Poverty status** |  |  |  |
| Poor |  |  |  |
| Non-poor |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant: na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 7.5.2** presents the percentage of agriculture households in the ZOI that had at least one household member who engaged or participated in specific types of agriculture programming or training of the types promoted by Feed the Future in [Country] during the 12 months preceding the survey. The table also presents the percent distribution of participants by sex and age.

[Describe results in the table.]

**Table 7.5.2: Percentage of Households in the [Country] ZOI that Engaged in Specific Types of Agriculture Programming of the Types Promoted by Feed the Future during the 12 Months Preceding the Survey and Age and Percent Distribution of Program Participants by Sex and Age, Feed the Future Phase Two ZOI Midline Survey**

| **Agriculture programming** | **Agriculture households** |  | **Sex of participant** | |  | **Age participants** | | **Number of participants (*n*)a** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Male** | **Female** |  | **<30 years** | **30+ years** |
| **(%)** |  | **(%)** | **(%)** |  | **(%)** | **(%)** |
| **Participated in any agriculture programming** |  |  |  |  |  |  |  |  |
| **Type of programming** |  |  |  |  |  |  |  |  |
| Participated in training on crop farming |  |  |  |  |  |  |  |  |
| Participated in training on livestock farming |  |  |  |  |  |  |  |  |
| Received support to obtain farm tools or equipment |  |  |  |  |  |  |  |  |
| Received support to obtain crop inputs |  |  |  |  |  |  |  |  |
| Received support to obtain livestock inputs |  |  |  |  |  |  |  |  |
| Received support to obtain veterinary services |  |  |  |  |  |  |  |  |
| Participated in a producers' cooperative |  |  |  |  |  |  |  |  |
| Received training or support to access market prices for farm products |  |  |  |  |  |  |  |  |
| Received training or support to advertise or promote farm products |  |  |  |  |  |  |  |  |
| Received training or other support to find new places to sell farm products or find new buyers |  |  |  |  |  |  |  |  |
| Received training or other support for growing crop varieties with higher nutritional value |  |  |  |  |  |  |  |  |
| **Number of agriculture households (*n*)b** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of de jure household members who participated in specific types of agriculture programming of the types promoted by Feed the Future during the 12 months preceding the survey

b Number of households that cultivated crops and/or owned livestock during the 12 months preceding the survey

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 7.5.3** presents the percentage of agriculture households in the ZOI that purchased agricultural inputs during the 12 months preceding the survey. The table also presents the percent distribution of agricultural input purchasers by sex and age.

[Describe results in the table.]

**Table 7.5.3: Percentage of Households that Purchased Agricultural Inputs in the [Country] ZOI During the 12 Months Preceding the Survey and the Percent Distribution of Purchasers by Sex and Age, Feed the Future Phase Two ZOI Midline Survey**

| **Characteristic** | **Households** |  | **Sex of purchaser** | |  | **Age of purchaser** | | **Number of purchasers (*n*)a** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Male** | **Female** |  | **<30 years** | **30+ years** |
| **(%)** |  | **(%)** | **(%)** |  | **(%)** | **(%)** |
| Purchased crop inputs |  |  |  |  |  |  |  |  |
| Purchased livestock inputs |  |  |  |  |  |  |  |  |
| **Number of agriculture households (*n*)b** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of purchasers of agricultural inputs during the 12 months preceding the survey

b Number of households that cultivated crops or owned livestock during the 12 months preceding the survey

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 7.5.4** presents the frequency with which agricultural inputs were available for purchasing during the 12 months preceding the survey among agriculture households that purchased inputs.

[Describe results in the table.]

**Table 7.5.4: Frequency with which Agriculture Inputs Were Available for Purchase According to Households in the [Country] ZOI that Purchased Agriculture Inputs During the 12 Months Preceding the Survey, Feed the Future Phase Two ZOI Midline Survey**

|  | **Crop inputs (%)** | **Livestock inputs (%)** |
| --- | --- | --- |
| **Frequency available** |
| Often/always |  |  |
| Sometimes |  |  |
| Rarely |  |  |
| **Number of agriculture households that purchased (*n*)** | | |

^ Results not statistically reliable, n<30

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

# 8. Dietary intake

This chapter presents findings related to women’s and young children’s dietary intake. The food insecurity indicators presented in Chapter 5 complement the dietary indicators; when used together, they offer a more comprehensive understanding of causes and consequences of food insecurity in the Zone of Influence (ZOI). The chapter also includes survey findings on participation in women’s and children’s health and nutrition programming of the types that Feed the Future in [Country] promotes.

## 8.1 Women’s minimum dietary diversity

This section presents information on the dietary diversity of women of reproductive age in the ZOI. 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.[[52]](#footnote-51) The Feed the Future women’s minimum dietary diversity (MDD) indicator is a proxy for the micronutrient adequacy of women’s diets.

The MDD indicator indicates the mean number of food groups consumed in the previous day by women of reproductive age. The indicator includes 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. Achievement of women’s MDD is defined as having consumed foods from at least 5 of the 10 food groups in the 24 hours preceding the survey. Thus, this indicator is a dichotomous variable, and the measure is reported as the percentage of women who achieve MDD.

**Table 8.1.1** shows the percentage of all women of reproductive age in the ZOI who have achieved MDD by women’s age and selected household-level characteristics, comparing estimates at baseline and at midline. Household-level characteristics include gendered household type, wealth quintile, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 8.1.1: Comparison of the Percent of Women of Reproductive Age in the [Country] ZOI Achieving Minimum Dietary Diversity, in Total and by Selected Woman and Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | |  | **p-valuec** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** | **Diff.** | **Sig.d** |
| **All women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Age** |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** | | | |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of women of reproductive age (15-49 years of age) who are de facto household members

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 8.1.2** shows the percentage of women 15-49 years of age who consumed each of the 10 food groups included in the MDD indicator, comparing estimates at baseline and at midline.

[Describe results in the table.]

**Table 8.1.2: Comparison of the Percent of Women of Reproductive Age in the [Country] ZOI Who Consumed Foods in Each Food Group during the 24 Hours Preceding the Survey, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

| **Food group** | **Baseline  ([Year(s)])** | |  | **Midline  ([Year(s)])** | | **Sig.a** |
| --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** |  | **%** | **95% CI** |
| Grains, roots, and tubers |  |  |  | |  |  |
| 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 |  |  |  | |  |  |
| Other vegetables |  |  |  | |  |  |
| **Number of women of reproductive age (*n*)b** |  |  |  |  |  |  |

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

b Number of women of reproductive age (15-49 years of age) who are de facto household members

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 8.2 Participation in women’s health and nutrition programming

[INTRO TO WOMEN’S HEALTH AND NUTRITION PROGRAMMING CAPTURED IN THE MIDLINE SURVEY]

**Table 8.2.1** presents the percentage of women 15-49 years of age in the ZOI who participated in training or received support or services related to women’s health and nutrition of the types promoted by Feed the Future in [Country] during the 12 months preceding the P2-ZOI Midline Survey. The results are presented for all women of reproductive age and also by women’s age, gendered household type, wealth quintile, and poverty status.

[Describe results in the table.]

**Table 8.2.1: Percentage of Women of Reproductive Age in the [Country] ZOI Who Participated in Training or Received Support or Services Related to Women's Health and Nutrition of the Types Promoted by Feed the Future During the 12 Months Preceding the Survey, in Total and by Selected Woman's and Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Characteristic** | **%** | **Sig.a** | **Number of women**  **(*n*)b,c** |
| --- | --- | --- | --- |
| **All women of reproductive age** | |  |  |
| **Woman's age** |  |  |  |
| 15-19 years |  |  |  |
| 20-49 years |  |  |  |
| **Gendered household type** |  |  |  |
| Male and female adults |  |  |  |
| Female adults only |  |  |  |
| Male adults only |  |  |  |
| Children only |  |  |  |
| **Wealth quintile** |  |  |  |
| Highest (wealthiest) |  |  |  |
| Fourth |  |  |  |
| Middle |  |  |  |
| Second |  |  |  |
| Lowest (poorest) |  |  |  |
| **Poverty status** |  |  |  |
| Poor |  |  |  |
| Non-poor |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; : na=not applicable.

b Number of women of reproductive age who are de facto household members

c Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table 8.2.2** presents the percentage of women 15-49 years of age in the ZOI who participated in specific types of women’s health and nutrition programming of the types promoted by Feed the Future in [Country] during the 12 months preceding the survey. The table also presents the percentage of women 15-49 years of age who were pregnant during the 12 months preceding the survey who received certain services, as well as the percentage of adolescent girls 10-14 years of age and women of reproductive age (15-49 years of age) who received daily or weekly iron supplements. All results are presented in total and also by women’s age.

[Describe results in the table.]

**Table 8.2.2: Percentage of Women in the [Country] ZOI Who Participated in Specific Types of Women’s Health and Nutrition Programming of the Types Promoted by Feed the Future During the 12 Months Preceding the Survey, in Total and by Age, Feed the Future Phase Two ZOI Midline Survey**

| **Women’s health and nutrition programming** | **Total** |  | **Woman’s age (years)** | |
| --- | --- | --- | --- | --- |
|  | **<20 years** | **20-49 years** |
| **(%)** |  | **(%)** | **(%)** |
| Received counseling on nutrition from a health worker |  |  |  |  |
| Received counseling on the healthy timing and spacing of pregnancies |  |  |  |  |
| Noticed it has become easier to find hygiene and sanitation products |  |  |  |  |
| Found it easier to remain clean and comfortable during their menstrual period |  |  |  |  |
| **Number of women of reproductive age (15-49 years) (*n*)a** |  |  |  |  |
| Received an antenatal check-up from a health worker |  |  |  |  |
| Received iron and folic acid while pregnant |  |  |  |  |
| Received multi-nutrients while pregnant |  |  |  |  |
| Received calcium while pregnant |  |  |  |  |
| **Number of women 15-49 years of age who were pregnant in the past 12 months (*n*)b** |  |  |  |  |
| Received daily or weekly iron supplements |  |  |  |  |
| **Number of adolescent girls and women of reproductive age (10-49 years) (*n*)c** |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of women of reproductive age who are de facto household members

b Number of women of reproductive age who were pregnant during the 12 months preceding the survey and are de facto household members

c Number of adolescent girls and women of reproductive age who are de facto household members

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

## 8.3 Infant and young child feeding

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

### 8.3.1 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.[[53]](#footnote-52) Exclusive breastfeeding means that the infant received breast milk (including expressed breast milk or breast milk from a wet nurse); the infant may also have received oral rehydration salts, vitamins, minerals, 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 the day preceding the survey.

**Table 8.3.1** shows the prevalence of exclusive breastfeeding among children 0-5 months of age in the ZOI, comparing estimates at baseline and at midline. Estimates are shown for all children, as well as by child’s sex, wealth quintile, poverty status, and severity of shock exposure. Note that the data are collected from the self-identified primary caregiver and not strictly from the biological mother, although it is often the same person.

[Describe results in the table.]

**Table 8.3.1: Comparison of Prevalence of Exclusive Breastfeeding among Children 0-5 Months of Age in the [Country] ZOI, in Total and by Selected Child and Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | | **Diff.** | **p-valuec** | **Sig.d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** |
| **All children 0-5 months of age** |  |  |  |  |  |  |  |  |  |  |
| **Child’s sex** | | | |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children 0-5 months of age who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

### 8.3.2 Minimum acceptable diet

MAD is one of the eight core indicators for assessing infant and young child feeding practices among children 6-23 months of age. The MAD indicator captures multiple dimensions of feeding, is calculated separately for breastfed and non-breastfed children, and includes information on two components—MDD and minimum meal frequency.

The indicator is calculated by combining the MDD and minimum meal frequency information for breastfed and non-breastfed children 6-23 months of age. Children who meet both the MDD and the minimum meal frequency criteria during the day preceding the survey are considered to meet the MAD criteria.[[54]](#footnote-53) For both breastfed and non-breastfed children 6-23 months of age, MDD is defined as having consumed foods from at least five of the eight food groups.[[55]](#footnote-54) There is however, a difference in minimum meal frequency for breastfed and non-breastfed children. Minimum meal frequency for breastfed children is defined as two or more feedings of solid, semi-solid, or soft food for children 6-8 months of age, and three or more feedings of solid, semi-solid, or soft food for children 9-23 months of age. Minimum meal frequency for non-breastfed children is defined as four or more feedings of solid, semi-solid, or soft food, or milk feeds for children 6-23 months of age, and at least two of these feedings must be milk feeds.

**Table 8.3.2** presents the MAD indicator for children 6-23 months of age in the ZOI, comparing estimates at baseline and at midline. Estimates are shown for all children, as well as by child’s sex and age, child’s breastfeeding status, gendered household type, wealth quintile, poverty status, and severity of shock exposure.

[Describe results in the table.]

**Table 8.3.2: Comparison of the Percent of Children 6-23 Months of Age in the [Country] ZOI Who Received a Minimum Acceptable Diet, in Total and by Selected Child and Household Characteristics, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  | **Baseline  ([Year(s)])** | | |  | **Midline  ([Year(s)])** | | | **Diff.** | **p-valuec** | **Sig.d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | ***n*a,b** |
| **All children 6-23 months of age** |  |  |  |  |  |  |  |  |  |  |
| **Child’s sex** | | | |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Child’s age** | | | |  |  |  |  |  |  |  |
| 6-11 months |  |  |  |  |  |  |  |  |  |  |
| 12-17 months |  |  |  |  |  |  |  |  |  |  |
| 18-23 months |  |  |  |  |  |  |  |  |  |  |
| **Child’s breastfeeding status** | | | |  |  |  |  |  |  |  |
| Breastfeeding |  |  |  |  |  |  |  |  |  |  |
| Not breastfeeding |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** | | | | | | | | | | |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children 6-23 months of age who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the baseline and midline estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

**Table 8.3.3** presents the percentage of children 6-23 months of age achieving the components of a MAD (i.e., minimum meal frequency and MDD) and consuming each of the food groups included in the MDD indicator, comparing estimates at baseline and at midline. Estimates are shown for all children, as well as by age categories, and are presented separately for breastfed and non-breastfed children.

[Describe results in the table.]

**Table 8.3.3: Comparison of the Percent of Children 6-23 Months of Age in the [Country] ZOI Achieving Minimum Feeding Frequency, Dietary Diversity, and Consuming Foods from Each of the Food Groups in the Minimum Acceptable Diet Indicator, in Total and by Breastfeeding Status and Age, Feed the Future Phase Two ZOI Baseline and Midline Surveys**

|  |  |  |  |  | **Children's age** | | | | | | | | | | | ***n*b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **All children** | | |  | **6-11 months** | | |  | **12-17 months** | | |  | **18-23 months** | | |
| **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **Sig.a** |
| **All children 6-23 months of age** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Achieving minimum meal frequency** | | | | | | | | | | | | | | | | |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Achieving minimum dietary diversity** | | | | | | | | | | | | | | | | |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Consuming:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Grains, roots, and tubers** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Legumes and nuts** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Dairy products** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Flesh foods** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Eggs** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Breast milk** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vitamin A-rich fruits and vegetables** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other fruits and vegetables** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Breastfed children 6-23 months of age** | | | | | | | | | | | | | | | | |
| **Achieving minimum meal frequency** | | | | | | | | | | | | | | | | |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Achieving minimum dietary diversity** | | | | | | | | | | | | | | | | |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Consuming:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Grains, roots, and tubers** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Legumes and nuts** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Dairy products** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Flesh foods** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Eggs** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Breast milk** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vitamin A-rich fruits and vegetables** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other fruits and vegetables** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Non-breastfed children 6-23 months of age** | | | | | | | | | | | | | | | | |
| **Achieving minimum meal frequency** | | | | | | | | | | | | | | | | |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Achieving minimum dietary diversity** | | | | | | | | | | | | | | | | |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Consuming:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Grains, roots, and tubers** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Legumes and nuts** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Dairy products** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Flesh foods** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Eggs** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Breast milk** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Vitamin A-rich fruits and vegetables** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Other fruits and vegetables** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midline |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether a difference exists between the baseline and midline estimates. Differences found to be statistically significant are indicated by "s" when p<0.05.

b Number of children 6-23 months of age who are de facto household members

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Baseline Survey]; [Feed the Future P2-ZOI Midline Survey]

## 8.4 Participation in children’s health and nutrition programming

[Intro to children's health and nutrition programming captured in the Midline Survey]

**Table 8.4.1** presents the percentage of children under 5 years of age in the ZOI who received services or whose caregiver participated in training or services related to children’s health and nutrition of the types promoted by Feed the Future in [Country] during the 12 months preceding the P2-ZOI Midline Survey. The results are presented for all children and also by child’s sex and age categories, gendered household type, wealth quintile, and poverty status.

[Describe results in the table.]

**Table 8.4.1: Percentage of Children under 5 Years in the [Country] ZOI Who Received Services or Whose Caregiver Participated in Children's Health and Nutrition Programming of the Types Promoted by Feed the Future during the 12 Months Preceding the Survey, in Total and by Selected Child and Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Characteristic** | **%** | **Sig.a** | **Number of children  (*n*)b,c** |
| --- | --- | --- | --- |
| **All children under 5 years** |  |  |  |
| **Child's sex** |  |  |  |
| Male |  |  |  |
| Female |  |  |  |
| **Child's age** |  |  |  |
| 0-5 months |  |  |  |
| 6-23 months |  |  |  |
| 24-59 months |  |  |  |
| **Gendered household type** |  |  |  |
| Male and female adults |  |  |  |
| Female adults only |  |  |  |
| Male adults only |  |  |  |
| Children only |  |  |  |
| **Wealth quintile** |  |  |  |
| Highest (wealthiest) |  |  |  |
| Fourth |  |  |  |
| Middle |  |  |  |
| Second |  |  |  |
| Lowest (poorest) |  |  |  |
| **Poverty status** |  |  |  |
| Poor |  |  |  |
| Non-poor |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant: na=not applicable.

b Number of children 5 years of age who are de facto household members

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

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Midline Survey]

**Table 8.4.2** presents the percentage of children under 5 years of age in the ZOI who received specific services or whose caregiver participated in training or services related to children’s health and nutrition of the types promoted by Feed the Future in [Country] during the 12 months preceding the survey. The results are presented for all children and also by child’s sex and age.

[Describe results in the table.]

**Table 8.4.2: Percentage of Children in the [Country] ZOI Who Received Specific Types of Children's Health and Nutrition Programming of the Types Promoted by Feed the Future during the 12 Months Preceding the Survey, in Total and by Sex and by Age of the Child, Feed the Future Phase Two ZOI Midline Survey**

| **Children's health and nutrition programming** | **Total** | **Sex of child** | |  | **Age of child** | |
| --- | --- | --- | --- | --- | --- | --- |
| **Male** | **Female** | **<2 years** | **2+ years** |
| **(%)** | **(%)** | **(%)** | **(%)** | **(%)** |
| Child's caregiver received counseling on breastfeeding |  |  |  |  |  |  |
| Child's caregiver received counseling on infant and young child feeding |  |  |  |  |  |  |
| Child's caregiver received counseling on growth monitoring |  |  |  |  |  |  |
| Child's weight and height were checked by a health worker |  |  |  |  |  |  |
| **Number of children under 5 years (*n*)a** |  |  |  |  |  |  |
| Received treatment for malnutrition |  |  |  |  |  |  |
| **Number of children under 5 years diagnosed as malnourished (*n*)b** |  |  |  |  |  |  |
| Received deworming medication |  |  |  |  |  |  |
| Received vitamin A supplementation in the past 6 months |  |  |  |  |  |  |
| Received iron supplement daily or weekly |  |  |  |  |  |  |
| **Number of children 6-59 months (*n*)c** |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children 5 years of age who are de facto household members

b Number of children under 5 years of age who were diagnosed as malnourished and who are de facto household members

c Number of children 6-59 months of age who are de facto household members

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [Feed the Future P2-ZOI Midline Survey]

# 9. Anthropometry

Anthropometry data were not collected as part of the phase two Zone of Influence (P2-ZOI) Midline Survey—to reduce respondent burden and reduce the total amount of time of fieldwork. In place of primary Midline Survey data, [Year(s)] [Country] Demographic and Health Survey (DHS) data collected in the ZOI were used to compute midline estimates for the four Feed the Future P2-ZOI anthropometry indicators: (1) prevalence of underweight (BMI < 18.5) women of reproductive age (15-49 years), (2) prevalence of stunted (HAZ<-2) children under 5 (0-59 months), (3) prevalence of wasted (WHZ < -2) children under 5 (0-59 months), and (4) prevalence of healthy weight (WHZ ≤ 2 and ≥-2) among children under 5 (0-59 months).

Although baseline values for these four anthropometry indicators have previously been calculated using P2-ZOI Baseline Survey data, which were collected in [Year(s)], they have been recomputed using [Year(s)] [Country] DHS data. Although Feed the Future ZOI Survey methods to collect anthropometric data and calculate anthropometric indicators largely align with DHS methods, this was done to ensure maximum comparability. Please note that although fieldwork for the P2-ZOI Baseline Survey was conducted in [Year(s)], the DHS data were collected in [Year(s)], [X] years earlier. Because the DHS and ZOI baseline years do not align, throughout this chapter we refer to the two time points as “Round 1” and “Round 2.”

Section 9.1 presents findings on the nutritional status of women of reproductive age in the ZOI, and Section 9.2 presents findings on the nutritional status of children under 5 years of age in the ZOI.

## 9.1 Women’s nutritional status

Body mass index (BMI) is a calculation used to understand nutritional status, particularly of adults. BMI is the weight of the individual in kilograms divided by their height in meters squared (weight[kg]/ height[m]2). BMI is an inexpensive and easy-to-perform method of screening for weight category: underweight, normal or healthy weight, overweight, and obese. BMI is interpreted directly using categories with specific cutoff points, which is useful when assessing the nutritional status of adults.

**Table 9.1.1** presents the percentage of underweight women among the women of reproductive age in the [Country] ZOI, comparing estimates at Round 1 and at Round 2. Estimates are shown for all non-pregnant women, as well as by women’s age categories and household wealth quintile.

[Describe results in the table.]

**Table 9.1.1: Comparison of Prevalence of Underweight among Women of Reproductive Age in the [Country] ZOI, in Total and by Woman and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

| **Characteristic** | **Round 1  ([Year(s)] DHS)** | | |  | **Round 2 ([Year(s)] DHS)** | | |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na,b** |  | **%** | **95% CI** | **na,b** | **Diff.** | **p-valuec** | **Sig.d** |
| **All non-pregnant women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Woman's age** |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of non-pregnant women of reproductive age (15-49 years of age) who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [DHS survey 1]; [DHS survey 2]

**Table 9.1.2** presents anthropometry results for women of reproductive age in the ZOI, comparing estimates at Round 1 and at Round 2. It presents women’s mean BMI and the percentage of women by BMI category: 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 of reproductive age, as well as by woman’s age categories and household wealth quintile.

[Describe results in the table.]

**Table 9.1.2: Comparison of Mean BMI and Prevalence of Underweight, Normal Weight, Overweight, and Obese Women of Reproductive Age in the [Country] ZOI, in Total and by Individual and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

| **Characteristic** | **Weight-for-height measures** | | | | | | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **BMI** | | |  | **Underweight** | | |  | **Normal weight** | | |  | **Overweight** | | |  | **Obese** | | | **nb,c** |
| **Mean** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **Sig.a** |  | **%** | **95% CI** | **Sig.a** |
| **All non-pregnant women of reproductive age** | | | | | | | | | | | | | | | | | | | | |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Woman's age** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **15-19 years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **20-24 years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **25-29 years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **30-34 years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **35-39 years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **40-44 years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **45-49 years** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Highest (wealthiest)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Fourth** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Middle** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Second** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Lowest (poorest)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Round 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of non-pregnant women of reproductive age (15-49 years of age) who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Sources: [DHS survey 1]; [DHS survey 2]

## 9.2 Stunting, wasting, and healthy weight among children under 5 years of age

This section presents three indicators that rely on anthropometric measurements of children under 5 years of age in the ZOI: stunting (low height-for-age), wasting (low weight-for-height), and healthy weight (normal weight-for-height).

### 9.2.1 Stunting (low height-for-age)

Stunting, or linear growth retardation, is a consequence of an inadequate growth environment. Reducing the prevalence of stunting among children, particularly children 0-23 months of age, is important because linear growth retardation is causally linked to difficult birth and poor birth outcomes and is associated with—but may not cause—delayed child development, reduced earnings in adulthood, and chronic diseases.[[56]](#footnote-55) Stunting is a height-for-age measurement that reflects chronic undernutrition. This indicator measures the percentage of children 0-59 months of age who are stunted, as defined by a height-for-age z-score (HAZ) more than two standard deviations (SDs) below the median of the 2006 World Health Organization (WHO) Child Growth Standard.[[57]](#footnote-56)

**Table 9.2.1** presents the prevalence of stunting (HAZ<-2 SD) for children under 5 years of age in the ZOI, comparing estimates at Round 1 and at Round 2.[[58]](#footnote-57) Estimates are presented for all children and by selected characteristics—child’s sex and age, and household wealth quintile.

[Describe results in the table.]

**Table 9.2.1: Comparison of Prevalence of Stunting (Height-for-age Z-score<-2SD) among Children under 5 Years of Age in the [Country] ZOI, in Total and by Child and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

|  | **Round 1  ([Year(s)] DHS)** | | |  | **Round 2 ([Year(s)] DHS)** | | |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | **na,b** |  | **%** | **95% CI** | **na,b** | **Diff.** | **p-valuec** | **Sig.d** |
| **All children under 5 years of age** |  |  |  |  |  |  |  |  |  |  |
| **Child's sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Child's age** |  |  |  |  |  |  |  |  |  |  |
| 0-11 months |  |  |  |  |  |  |  |  |  |  |
| 12-23 months |  |  |  |  |  |  |  |  |  |  |
| 24-35 months |  |  |  |  |  |  |  |  |  |  |
| 36-47 months |  |  |  |  |  |  |  |  |  |  |
| 48-59 months |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children under 5 years who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [DHS survey 1]; [DHS survey 2]

**Table 9.2.2** presents the prevalence of severe stunting (HAZ<-3 SD) and stunting (HAZ<-2 SD) and mean height-for-age z-scores for children under 5 years of age in the ZOI, comparing estimates at Round 1 and at Round 2. Estimates are presented for all children and by selected characteristics—child’s sex and age categories and household wealth quintile.

[Describe results in the table.]

**Table 9.2.2: Comparison of Prevalence of Severe Stunting, Stunting, and Mean Height-for-age Z-scores among Children Under 5 Years of Age in the [Country] ZOI, in Total and by Child and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

| **Characteristic** | **Round 1 ([Year(s)] DHS)** | | | | | | | | |  | **Round 2  ([Year(s)] DHS)** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Severely stunted  (<-3 SD)** | |  | **Stunted  (<-2 SD)** | |  | **z-score** | |  |  | **Severely stunted  (<-3 SD)** | | |  | **Stunted  (<-2 SD)** | | |  | **z-score** | | | **na,b** |
| **%** | **95% CI** |  | **%** | **95% CI** |  | **Mean** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |  | **Mean** | **95% CI** | **Sig.c** |
| **All children under 5 years of age** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Child's sex** | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Child's age** | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-11 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-23 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24-35 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 36-47 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 48-59 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children under 5 years who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [DHS survey 1]; [DHS survey 2]

### 9.2.2 Wasting (low 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. The wasting ZOI indicator measures the percentage of children 0-59 months of age in the ZOI who are acutely malnourished, as defined by a weight-for-height z-score (WHZ)[[59]](#footnote-58) more than 2 SDs below the median of the 2006 WHO Child Growth Standards.

**Table 9.2.3** presents the prevalence of wasting for children under 5 years of age in the ZOI, comparing estimates at Round 1 and at Round 2. Estimates are presented for all children and by selected characteristics—child’s sex and age categories and household wealth quintile.

[Describe results in the table.]

**Table 9.2.3: Comparison of Prevalence of Wasting (Weight-for-height Z-score<-2SD) among Children under 5 Years of Age in the [Country] ZOI, in Total and by Child and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

| **Characteristic** | **Round 1  ([Year(s)] DHS)** | | |  | **Round 2 ([Year(s)] DHS)** | | |  | **p-valuec** | **Sig.d** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na,b** |  | **%** | **95% CI** | **na,b** | **Diff.** |
| **All children under 5 years of age** |  |  |  |  |  |  |  |  |  |  |
| **Child's sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Child's age** |  |  |  |  |  |  |  |  |  |  |
| 0-11 months |  |  |  |  |  |  |  |  |  |  |
| 12-23 months |  |  |  |  |  |  |  |  |  |  |
| 24-35 months |  |  |  |  |  |  |  |  |  |  |
| 36-47 months |  |  |  |  |  |  |  |  |  |  |
| 48-59 months |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children under 5 years who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [DHS survey 1]; [DHS survey 2]

**Table 9.2.4** presents the prevalence of severe wasting (WHZ<-3 SD) and wasting (WHZ<-2 SD) and mean weight-for-height z-scores among children under 5 years of age in the ZOI, comparing estimates at Round 1 and at Round 2. Estimates are presented for all children and by selected characteristics—child’s sex and age categories and household wealth quintile.

[Describe results in the table.]

**Table 9.2.4: Comparison of Prevalence of Severe Wasting, Wasting, and Mean Weight-for height Z-scores among Children under 5 Years of Age in the [Country] ZOI, in Total and by Child and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

| **Characteristic** | **Round 1 ([Year(s)] DHS)** | | | | | | | | |  | **Round 2  ([Year(s)] DHS)** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Severely wasted (<-3 SD)** | |  | **Wasted (<-2 SD)** | |  | **z-score** | |  |  | **Severely wasted (<-3 SD)** | | |  | **Wasted (<-2 SD)** | | |  | **z-score** | | | **na,b** |
| **%** | **95% CI** |  | **%** | **95% CI** |  | **Mean** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |  | **Mean** | **95% CI** | **Sig.c** |
| **All children under 5 years of age** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Child's sex** | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Child's age** | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-11 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-23 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24-35 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 36-47 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 48-59 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children under 5 years who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [DHS survey 1]; [DHS survey 2]

### 9.2.3 Healthy weight (normal weight-for-height)

**Table 9.2.5** presents the percentage of healthy weight children under 5 years of age in the [Country] ZOI, comparing estimates at Round 1 and at Round 2. Children who are of healthy weight have a weight-for-height z-score between -2 and +2. Estimates are presented for all children and by selected characteristics—child’s sex and age categories and household wealth quintile.

[Describe results in the table.]

**Table 9.2.5: Comparison of Prevalence of Healthy Weight (Weight-for-height Z-score≥-2 and ≤2) among Children under 5 Years of Age in the [Country] ZOI, in Total and by Child and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

| **Characteristic** | **Round 1  ([Year(s)] DHS)** | | |  | **Round 2 ([Year(s)] DHS)** | | |  | **p-valuec** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na,b** |  | **%** | **95% CI** | **na,b** | **Diff.** | **Sig.d** |
| **All children under 5 years of age** |  |  |  |  |  |  |  |  |  |  |
| **Child's sex** |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Child's age** |  |  |  |  |  |  |  |  |  |  |
| 0-11 months |  |  |  |  |  |  |  |  |  |  |
| 12-23 months |  |  |  |  |  |  |  |  |  |  |
| 24-35 months |  |  |  |  |  |  |  |  |  |  |
| 36-47 months |  |  |  |  |  |  |  |  |  |  |
| 48-59 months |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children under 5 years who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates.

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [DHS survey 1]; [DHS survey 2]

**Table 9.2.6** presents two additional weight-for-height z-score indicators for children under 5 years of age in the [Country] ZOI, comparing estimates at Round 1 and at Round 2. In addition to the percentage of children who are of healthy weight, the table presents the percentage of children who are overweight and the percentage of children who are obese. Estimates are presented for all children and by selected characteristics—child’s sex and age categories and household wealth quintile.

[Describe results in the table.]

**Table 9.2.6: Comparison of Prevalence of Healthy Weight, Overweight, and Obesity among Children under 5 Years of Age in the [Country] ZOI, in Total and by Selected Child and Household Characteristics, [Round 1 year(s)] and [Round 2 year(s)] Demographic and Health Surveys**

| **Characteristic** | **Round 1 ([Year(s)] DHS)** | | | | | | | | |  | **Round 2  ([Year(s)] DHS)** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Healthy weight  (-2 SD to +2 SD)** | |  | **Overweight  (> +2SD)** | |  | **Obese  (> +3SD)** | |  |  | **Healthy weight  (-2 SD to +2 SD)** | | |  | **Overweight  (> +2SD)** | | |  | **Obese  (> +3SD)** | | | **na,b** |
| **%** | **95% CI** |  | **%** | **95% CI** |  | **%** | **95% CI** | ***n*a,b** |  | **%** | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |  | **%** | **95% CI** | **Sig.c** |
| **All children under 5 years of age** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Child's sex** | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Child's age** | | | | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-11 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-23 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24-35 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 36-47 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 48-59 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Number of children under 5 years who are de facto household members

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

c Significance tests were performed to determine whether a difference exists between the Round 1 and Round 2 estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; na=not applicable.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [DHS survey 1]; [DHS survey 2]

# 10. [Country-specific module]

[This chapter is reserved for any country-specific modules, as applicable.]

# 11. Summary and conclusions

[This chapter summarizes the key findings and provides some conclusions for the ZOI Midline Indicator Assessment. It will typically reiterate what is stated in the Executive Summary but should not be identical.]

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# Appendix 1. Supplementary data

## A1.1 Feed the Future Zone of Influence Survey indicator estimates and module response rates

**Table A1.1: Feed the Future P2-ZOI Midline Assessment Indicator Estimates, by Key Disaggregates: [Country] [Midline Year(s)]**

| **Indicator** | **Estimate** | **SD** | **SE** | **DEFF** | **Indicator incompletion ratea** | **Unweighted number**  **(*n*)b** |
| --- | --- | --- | --- | --- | --- | --- |
| **Percent of households with access to basic sanitation service** | | | | |  |  |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |
| **Percent of households with soap and water at handwashing station on premises** | | | | | | |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |
| **Prevalence of household water insecurity, based on the Brief Household Water Insecurity Experiences Scale (HWISE-4)** | | | | | | |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |
| **Prevalence of poverty: Percent of people living on less than $1.90/day (2011 PPP)** | | | | | | |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Depth of poverty of the poor: Mean percent shortfall of the poor relative to the $1.90/day (2011 PPP) poverty line** | | | | | | |
| **All individualsc** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Percent of people who are near-poor, living on 100 percent to less than 125 percent of the $1.90/day (2011 PPP) poverty line** | | | | | | |
| **All individualsc** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index** | | | | | | |
| **All individualsc** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Prevalence of moderate and severe food insecurity in the population, based on the Food Insecurity Experience Scale** | | | | | | |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Severity** |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |
| Severe |  |  |  |  |  |  |
| **Ability to recover from shocks and stresses index** | | | | | | |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Index of social capital at the household level** | | | | | | |
| **Overall index** |  |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Bonding sub-index** |  |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Bridging sub-index** |  |  |  |  |  |  |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Percent of households that believe local government will respond effectively to future shocks and stresses** | | | | | | |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Percent of households participating in group-based savings, micro-finance, or lending programs** | | | | | | |
| **All households** |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Five domains of empowerment score** | | | | | | |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Percent of women empowered** |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Average adequacy score of disempowered women** | | | | | | |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Percent of disempowered women who are adequate in each A-WEAI indicator** | | | | | | |
| **Input in productive decisions** |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Ownership of assets** |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Access to and decisions on credit** |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Control over income** |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Group membership** |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Workload** |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |
| **Percent of producers who have applied targeted improved management practices or technologies in targeted areas** | | | | | | |
| **All producers** |  |  |  |  |  |  |
| **Farmers' sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Farmers' age** |  |  |  |  |  |  |
| 15-29 years |  |  |  |  |  |  |
| 30 years and older |  |  |  |  |  |  |
| **Commodity** |  |  |  |  |  |  |
| Maize |  |  |  |  |  |  |
| Fishponds |  |  |  |  |  |  |
| Dairy cows |  |  |  |  |  |  |
| **Management practice or technology type** |  |  |  |  |  |  |
| Crop genetics |  |  |  |  |  |  |
| Cultural practices |  |  |  |  |  |  |
| Natural resource or ecosystem management |  |  |  |  |  |  |
| Pest and disease management |  |  |  |  |  |  |
| Soil-related fertility and conservation |  |  |  |  |  |  |
| Irrigation |  |  |  |  |  |  |
| Water management, non-irrigation-based |  |  |  |  |  |  |
| Climate adaptation or climate risk management |  |  |  |  |  |  |
| Post-harvest handling and storage |  |  |  |  |  |  |
| Marketing and distribution |  |  |  |  |  |  |
| Value-added processing |  |  |  |  |  |  |
| Aquaculture management |  |  |  |  |  |  |
| Livestock management |  |  |  |  |  |  |
| Food safety |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |
| **Percent of women of reproductive age consuming a diet of minimum diversityd** | | | | | | |
| **All women** |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 15-19 years |  |  |  |  |  |  |
| 20-49 years |  |  |  |  |  |  |
| **Prevalence of children 6-23 months of age receiving a minimum acceptable dietd** | | | | | | |
| **All children** |  |  |  |  |  |  |
| **Children's sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Prevalence of exclusive breastfeeding among children under 6 months of aged** | | | | | | |
| **All children** |  |  |  |  |  |  |
| **Children's sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Prevalence of underweight (BMI < 18.5) women of reproductive aged** | | | | | | |
| All non-pregnant women |  |  |  |  |  |  |
| **Women's age** |  |  |  |  |  |  |
| 15-19 years |  |  |  |  |  |  |
| 20-49 years |  |  |  |  |  |  |
| **Prevalence of stunted (HAZ < -2) children under five (0-59 months)d** | | | | | | |
| **All children** |  |  |  |  |  |  |
| **Children's sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Prevalence of wasted (WHZ < -2) children under five (0-59 months)d** | | | | | | |
| **All children** |  |  |  |  |  |  |
| **Children's sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Prevalence of healthy weight (WHZ ≤ 2 and ≥-2) among children under five (0-59 months)d** | | | | | | |
| **All children** |  |  |  |  |  |  |
| **Children's sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

A-WEAI=Abbreviated Women’s Empowerment in Agriculture, BMI=body mass index, DEFF=design effect, HAZ=height-for-age z-score, HWISE-4=Brief Water Insecurity Experiences Scale, WHZ=weight-for-height z-score, ZOI=Zone of Influence, PPP=purchasing power parity

a Indicator incompletion rate is defined as: (Number of cases eligible for inclusion in indicator X estimate - Number of cases included in indicator X estimate) / Number of cases eligible for inclusion in indicator X estimate.

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

c For the poverty indicators, the n's presented are the number of households—not the number of household members—even though the indicator estimates are calculated using a household member sample weight.

d Estimates are based on de facto household members.

Notes:

Estimates are sample-weighted; numbers of observations are unweighted.

Individual-level estimates are based on de jure household members, except where noted.

Sources: [Feed the Future P2-ZOI Midline Survey]; [Additional data sources if applicable]

## A1.2 Additional water insecurity results

**Table A1.3.4.1: Percent of Households in the [Country] ZOI that Worried about Water Availability for Household Needs in the 4 Weeks Preceding the Survey, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **Average score**  **(range 0-4)** | **Sig.a** | **Never** | **Rarely  (1-2 times)** | **Some- times  (3-10 times)** | **Often/ always  (>10 times)** | **Number of households (n)b** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **All households** |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant; : na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table A1.3.4.2: Percent of Households in the [Country] ZOI that Had to Change Schedules or Plans Due to Their Water Situation in the Past 4 Weeks, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **Average score**  **(range 0-4)** | **Sig.a** | **Never** | **Rarely  (1-2 times)** | **Some- times  (3-10 times)** | **Often/ always  (>10 times)** | **Number of households (n)b** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **All households** |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant: na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table A1.3.4.3: Percent of Households in the [Country] ZOI that Had to Go Without Handwashing Due to Water Problems in the Past 4 Weeks, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **Average score**  **(range 0-4)** | **Sig.a** | **Never** | **Rarely  (1-2 times)** | **Some- times  (3-10 times)** | **Often/ always  (>10 times)** | **Number of households (n)b** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **All households** |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant: na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

**Table A1.3.4.4: Percent of Households in the [Country] ZOI that Experienced an Inadequate Amount of Drinking Water in the Household in the Past 4 Weeks, in Total and by Selected Household Characteristics, Feed the Future Phase Two ZOI Midline Survey**

| **Household characteristic** | **Average score**  **(range 0-4)** | **Sig.a** | **Never** | **Rarely  (1-2 times)** | **Some- times  (3-10 times)** | **Often/ always  (>10 times)** | **Number of households (n)b** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **All households** |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |
| **Wealth quintile** |  |  |  |  |  |  |  |
| Highest (wealthiest) |  |  |  |  |  |  |  |
| Fourth |  |  |  |  |  |  |  |
| Middle |  |  |  |  |  |  |  |
| Second |  |  |  |  |  |  |  |
| Lowest (poorest) |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |
| **Shock exposure severity** |  |  |  |  |  |  |  |
| Did not experience any shocks |  |  |  |  |  |  |  |
| Low |  |  |  |  |  |  |  |
| Moderate |  |  |  |  |  |  |  |
| High |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Significance tests were performed to determine whether an association exists between the outcome indicator and the disaggregate variables. Associations found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001; n/s=not significant: na=not applicable.

b Records missing information for the disaggregate variables have been excluded from the disaggregated estimates. The unweighted sample size reflects this loss in observations; therefore, the sum of disaggregate sample sizes may not equal the overall sample size.

Note: Estimates are sample-weighted; numbers of observations are unweighted.

Source: [Feed the Future P2-ZOI Midline Survey]

# Appendix 2. Methodology

## A2.1 Sampling and weighting

### Sample size determination

The main aim of the phase two Zone of Influence (P2-ZOI) Midline Indicator Assessment is to provide sample-weighted estimates of the P2-ZOI population-based indicators (including their standard errors and confidence intervals) to enable performance monitoring between the Baseline and Midline Surveys. This requires a descriptive population-based survey with a sample size that is adequate to enable the calculation of reliable indicator estimates at a single point in time (i.e., midline). Although the Midline Survey is not designed to detect statistically significant differences in indicator values since the Baseline Survey, it is still possible to detect statistically significant differences if the difference between baseline and midline values is large enough.

The sample size was determined following the guidance developed by the Bureau for Resilience and Food Security for P2-ZOI Midline Indicator Assessments.[[60]](#footnote-59) As per the guidance, the required sample sizes for the following directly collected and computed P2-ZOI midline indicators were determined:[[61]](#footnote-60)

* Prevalence of moderate and severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
* Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index (CWI)
* Percent of households participating in group-based savings, micro-finance, or lending programs
* Percent of households with access to a basic sanitation service
* Percent of households with soap and water at a handwashing station on premises
* Percent of children 6-23 months receiving a minimum acceptable diet
* Prevalence of exclusive breastfeeding of children under 6 months of age
* Percent of women of reproductive age consuming a diet of minimum diversity
* Ability to recover from shocks and stresses index
* Index of social capital at the household level
* Percent of households that believe local government will respond effectively to future shocks and stresses

Given the global coronavirus pandemic shock and the impact it has had on poverty and nutrition in low-income countries, determining the midline sample size based on pre-pandemic assumptions of improvement in indicator values from baseline may not be realistic. Preventing backsliding from baseline levels is considered a positive result under these circumstances. Therefore, the monitoring and evaluation guidance on the P2-ZOI Midline Indicator Assessment allows United States Agency for International Development missions to use baseline indicator values when computing the required midline sample size, except for the indicator *Prevalence of exclusive breastfeeding of children under 6 months of age,* for which the sample size is to be determined based on having a minimum of 70 children under 6 months of age in the sample to ensure statistically valid estimates of exclusive breastfeeding rates by sex for the population.

#### Calculation of the initial main survey sample size

The initial required sample sizes were computed for the directly collected and computed indicators listed previously. The initial sample size was determined based on an acceptable margin of error for the estimated level and precision of each of the directly collected and computed P2-ZOI indicators.

**Table A2.1.1** presents the calculation of the initial sample size for the main survey based on the input parameters for the indicators, as given in the table using the formula that follows.

**Table A2.1.1: Calculation of the Initial Sample Size for the P2-ZOI Midline Survey Indicators**

| **Indicator type** | **Indicator** |  |  |  | **\*** |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage/proportion | FIES |  | 5% | 1.96 | n/a |  |  |
| Percent households  (CWI) |  | 5% | 1.96 | n/a |  |  |
| Percent households  (savings programs) |  | 5% | 1.96 | n/a |  |  |
| Percent households  (basic sanitation) |  | 5% | 1.96 | n/a |  |  |
| Percent households  (handwashing) |  | 5% | 1.96 | n/a |  |  |
| Percent households  (local government) |  | 5% | 1.96 | n/a |  |  |
| Percent children  (minimum acceptable diet) |  | 5% | 1.96 | n/a |  |  |
| Percent women  (dietary diversity) |  | 5% | 1.96 | n/a |  |  |
| Mean | Ability to Recover from Shocks and Stresses Index |  | 5% | 1.96 |  |  |  |
| Social Capital Index (households) |  | 5% | 1.96 |  |  |  |

\* Estimated standard deviation for mean indicators

(1)[[62]](#footnote-61)

Where,

= estimated initial sample size required for the survey based on the indicator.

= the estimated design effect for the indicator in this survey. The estimate is based on the value from the P2-ZOI Baseline Survey for all indicators.

= the estimated prevalence or mean of the indicator at the midline. This value is derived from the baseline for this indicator.

= the critical value for the normal probability distribution. The significance level is set at = 0.05, giving a value of = 1.96.

= is the margin of error. The margin of error used for the P2-ZOI Midline Survey is 5 percent (i.e., M = 0.05).

Based on the initial sample size computation (see **Table A2.1**), the [XX] indicator had the largest initial sample size required across all indicators ([number of households] households).[[63]](#footnote-62)

#### Calculation of the final main survey sample size

To derive the final required household sample size, the initial sample size values calculated previously were adjusted to account for the number of households that need to be contacted to obtain the required number of individuals for the given sub-population for individual level-indicators and anticipated household non-response. Therefore, the final sample size, denoted by , is the product of the initial sample size and the adjustment for the number of households to contact for the given individual sub-population for individual-level indicators (i.e., ) and the adjustment for anticipated household non-response (i.e., ) for each indicator:

(2)

Where,

= estimated final sample size required for the survey based on the indicator.

= adjustment for the number of households to contact to obtain the required number of individuals for the given sub-population for an individual-level indicator.[[64]](#footnote-63)

= adjustment for anticipated household non-response, which is equal to the inverse of the expected response rate.

**Table A2.1.2** illustrates the computation of the final required sample size for the Feed the Future P2-ZOI population-based survey individual- and household-level indicators.[[65]](#footnote-64) An expected response rate of [XX] percent was assumed for the indicators based on the achieved response rates from the Baseline Survey.

**Table A2.1.2: Calculation of the Final Sample Size for the P2-ZOI Midline Survey Indicators**

| **Indicator type** | **Indicator** |  | **Estimated average number of individuals in the sampling group per household** |  | **Expected response rate** |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage/proportion | FIES |  | n/a | n/a | 99% |  |  |
| Percent households (CWI) |  | n/a | n/a | 99% |  |  |
| Percent households  (savings programs) |  | n/a | n/a | 99% |  |  |
| Percent households  (basic sanitation) |  | n/a | n/a | 99% |  |  |
| Percent households  (handwashing) |  | n/a | n/a | 99% |  |  |
| Percent households  (local government) |  | n/a | n/a | 99% |  |  |
| Percent children  (minimum acceptable diet) |  |  | 5.23 | 99% |  |  |
| Percent women  (dietary diversity) |  |  | 1.21 | 99% |  |  |
| Mean | Ability to Recover from Shocks and Stresses Index |  | n/a | n/a | 99% |  |  |
| Social Capital Index (households) |  | n/a | n/a | 99% |  |  |

The minimum required household sample size for the *Prevalence of exclusive breastfeeding of children under 6 months of age indicator* (or “EBF indicator”), which was determined using the following formula:

(3)

Where,

= minimum required household sample size for the EBF indicator

= estimated proportion of the P2-ZOI population that is under 6 months of age

= estimated average household size in the P2-ZOI

= inverse of the expected household response rate

**Table A2.1.3** shows the parameter values used in calculating the minimum required household sample size for the EBF indicator.

**Table A2.1.3: Minimum Sample Size Require for the EBF Indicator**

| **Indicator** |  |  | **Expected response rate** |  |  |
| --- | --- | --- | --- | --- | --- |
| EBF |  |  |  |  |  |

The EBF indicator requires a sample size of [XX number] households to enable at least an estimated 70 children under 6 months of age to be part of the midline sample.

Based on the sample size calculations in Tables A2.1.2 and A2.1.3, the indicator with the overall largest required final household sample size was [XX], requiring [XX number] households, and therefore this sample size was retained as the final sample size for the P2-ZOI Midline Survey.

### Sample design

The sample of households for the Midline Survey followed a multi-stage stratified cluster sampling design. The enumeration areas (EAs) from [the national Census frame] that fall within the ZOI form the first-stage sampling frame for the survey. Before sample selection, the frame was stratified by [list the administrative and/or geographic variables used to create the sampling strata for the survey] to meet the survey objectives and improve precision of survey estimates. **Table A2.1.4** presents the distribution of the number of EAs, households, and population across the sampling strata, together with the number of sampled clusters (where a cluster can be an EA or a segment of an EA) and households per stratum.

In the first stage, [xx number] EAs were selected as primary sampling units from [the national Census frame] in [xx number] [geographical administration unit] by systematic probability proportional to size sampling. Based on the information on the sampling frame, on average an EA in the survey area was found to contain [xx number] households. Following Feed the Future sampling guidance, the threshold for segmentation of EAs was set at [xx number] households. Based on this threshold, [xx number] EAs were found to be exceptionally large and were segmented. An additional stage of sampling was implemented to select one segment from each segmented EA using probability proportional to size sampling. In the next stage, [xx number] households were selected for interview using systematic sampling from a comprehensive list of households generated during a listing operation that was fielded from [date to date] within the sampled EAs and segments. At the final stage of sampling, eligible individuals within the selected households were sampled using a “take-all” approach (i.e., all eligible individuals found were included in the survey).

### Weighting

The weighting of survey data uses information available from the EA frame (i.e., the first-stage sampling frame), as well as information collected during the listing and data collection processes. This information includes the following: (1) EA measure of size used for selection of EAs (where the measure of size is in terms of the number of households in the EA), (2) number of households within the strata from which EAs are drawn, (3) number of households listed within the EA or segment (if the EA was segmented), and (4) response rates at household level as well at individual level for each of the individual sampling groups of the survey. Sampling weights were calculated for the following sampling groups in the survey accounting for the different stages of sampling (i.e., the design weights) as well as differing levels of non-response across these groups (i.e., the non-response adjustment per sampling group):

1. Households (Module 2—dwelling characteristics and household assets household-level indicators, 2A—climate adaptation knowledge and services household-level indicators, and 3—food security and resilience household-level indicators)
2. Primary female decision-makers (Module 6—female Women’s Empowerment in Agriculture indicators)
3. Farmers of any value chain commodity (Module 7—improved agriculture technologies and management practices indicator)
4. Farmers of [VCC1] (Module 7.[X]— improved agriculture technologies and management practices indicator for [VCC1])
5. Children under 5 years of age (Module 5—children’s program participation indicators)
6. Children under 2 years of age (Module 5—children’s nutrition indicators, baseline only)
7. Children 0-5 months of age (Module 5—exclusive breastfeeding indicator, midline only)
8. Children 6-23 months of age (Module 5—minimum acceptable diet indicator, midline only)
9. Women 15-49 years of age (Module 4—women’s dietary diversity and program participation indicators)

Design weights were calculated based on the separate sampling probabilities for each stage of sampling. The following notation is used to illustrate the sample weighting process:

= first-stage sampling probability of the *i*-th EA from stratum *h* (EA selection).

= second-stage sampling probability of the *j*-th segment, in sampled EA *i*, from stratum *h* (segment selection).

= third-stage sampling probability of the *k*-th household, in sampled segment *j*, in sampled EA *i*, from stratum *h* (household selection).

The probability of selecting the *i*-th EA from stratum *h*, in the P2-ZOI sample is calculated as follows:

Where,

= number of EAs selected from stratum *h*.

= total number of households in selected EA *i* from stratum *h* (as per the first-stage sampling frame)*.*

= total number of households according to the sampling frame across all EAs from stratum *h*.

The second-stage probability of selecting segment *j*, in sampled EA *i*, from stratum *h* is:

Where,

= total number of households estimated during segmentation in selected segment *j*, in sampled EA *i*, from stratum *h.*

= total number of households estimated during segmentation in sampled EA *i*, from stratum *h.*

The third-stage probability of selecting household *k*, in sampled segment *j*, in sampled EA *i,* from stratum *h* is:

Where,

= total number of households selected from segment *j,* in sampled EA *i*, from stratum *h.*

= total number of households listed in segment *j,* in sampled EA *i*, from stratum *h.*

Therefore, the overall probability of selecting a household *k* from segment *j* of EA *i* from stratum *h* is the product of the selection probabilities across these three stages:

and

The design weight for each household is the inverse of its overall selection probability:

and

= first-stage sampling probability of the *i*-th EA from stratum *h* (EA selection).

= second-stage sampling probability of the *j*-th household, in sampled EA *i*, from stratum *h* (household selection).

The probability of selecting the *i*-th EA from stratum *h*, in the P2-ZOI sample is calculated as follows:

Where,

= number of EAs selected from stratum *h*.

= total number of households in selected EA *i* from stratum *h* (as per the first-stage sampling frame)*.*

= total number of households according to the sampling frame across all EAs from stratum *h*.

The second-stage probability of selecting household *j*, in sampled EA *i*, from stratum *h* is:

Where,

= total number of households selected in sampled EA *i*, from stratum *h.*

= total number of households listed in sampled EA *i*, from stratum *h.*

Therefore, the overall probability of selecting a household *j,* in EA *i,* from stratum *h* is the product of the selection probabilities across these two stages:

The design weight for each household is the inverse of its overall selection probability:

The final sampling weight was calculated with the design weight adjusted for non-response for each of the selected EAs. Response rates were calculated at the EA level as ratios of the number of interviewed units over the number of eligible units within adjustment classes, where units could be household or individual (e.g., woman of reproductive age, child, farmer, or primary decision-maker).

**Table A2.1.4: Distribution of EAs, Households, and Total Population in Each Stratum**

| **Stratum** | **[Country-specific stratification variable 1]** | **[Country-specific stratification variable 2]** | **[Country-specific stratification variable 3]** | **[Country-specific stratification variable 4]** | **Population information** | | | **Sample information** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Number of EAs** | **Number of households** | **Total population** | **Number of sampled clusters** | **Number of sampled households** |
| 1 |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |  |  |  |

Note: The information presented in this table is from the latest Census.

## A2.2a Poverty prevalence and consumption expenditure methods

[Insert details.]

## A2.2b Asset-based wealth index

Asset-based wealth indices have increasingly been used as alternatives to income and consumption expenditure-based measures of wealth for several reasons, most notably because: (1) they are more stable measures of socioeconomic well-being, (2) they are better able to detect differences in equity, and (3) the data required are easier to collect and require shorter interviews. This appendix presents a short description of the methodology used for calculating the asset-based wealth index presented in this report.[[66]](#footnote-65) Additional details on how to prepare the data and perform the calculations for producing the asset-based wealth index are provided in the *Guide to Feed the Future Statistics*.[[67]](#footnote-66)

The methodology for computing a wealth index using the ZOI Survey data is based on the approach developed by the Demographic and Health Surveys (DHS). The DHS approach to computing a asset-based wealth index assumes that wealth is an underlying unobservable variable and that a set of variables can identify the relative position of households in the underlying distribution of the wealth factor. The table that follows summarizes assets that were used to construct the wealth index for the Midline Survey. Principal components analysis was performed to assign weights to the assets. Each household was then assigned a wealth score equal to the sum of the weighted indicators. Wealth scores were standardized with a mean of zero and a standard deviation of one and then categorized into quintiles based on the distribution of the household population.

| **Assets used to construct the wealth index** |
| --- |
| 1. Domestic servants |
| 1. Ownership of agricultural land and amount of land |
| 1. Number of usual household members per sleeping room |
| 1. House ownership |
| 1. Water source |
| 1. Toilet facility (main type of facility and whether the facility is shared with other households) |
| 1. Dwelling floor material |
| 1. Dwelling roof material |
| 1. Dwelling exterior wall material |
| 1. Cooking fuel |
| 1. Farm animals (type and number):   Cows  Other cattle  Horses, donkeys, or mules  Goats  Sheep  Chicken or other poultry  Fish  Other |
| 1. Household possessions:   Electricity  Radio  Television  Non-mobile telephone  Computer  Refrigerator  Watch  Mobile phone  Bicycle  Motorcycle or scooter  Animal-drawn cart  Car or truck  Boat with a motor |
| 1. Bank account |

The asset-based wealth index and associated quintiles are survey-specific and are not meant to be compared across countries or time as outcomes. Wealth quintiles, however, can be used to assess other outcomes by relative asset-based wealth across countries or over time. It is possible, for example, to look at social capital or food insecurity by survey-specific wealth quintiles over time.

It is possible to compare asset-based wealth across countries and time by using the asset-based wealth index generated for one reference survey and comparing the wealth indices generated for other surveys to it. A survey-specific asset-based wealth index can be anchored to the reference survey wealth index using eight anchoring points (four assets and four unmet basic need measures). Feed the Future adopted an indicator based on this comparative wealth index methodology—the *Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index (CWI).* This indicator reflects the percentage of households in the ZOI that, based on asset ownership, fall below a fixed threshold that defines the poorest quintile (bottom 20 percent of households) in the reference population.

The *Percent of households below the comparative threshold for the poorest quintile of the asset-based comparative wealth index (CWI)* ZOI Survey indicator reflects the percentage of households in the ZOI that, based on asset ownership, fall below a fixed threshold that defines the poorest quintile (bottom 20 percent) in the comparative baseline wealth index that was used to create a cross-nationally, cross-temporally comparable asset-based wealth index, the CWI. Use of a fixed threshold across ZOIs is possible because the CWI is an index with threshold values that are relative to the baseline wealth index that is used for comparison. This means that the index scores and thresholds can be compared across ZOI Surveys and over time.

## A2.3 Criteria for achieving adequacy for Women’s Empowerment in Agriculture Index indicators

The table that follows presents the Abbreviated Women’s Empowerment in Agriculture Index five dimensions of empowerment, the corresponding empowerment indicators and their weights, the survey questions that are used to elicit the data required to establish adequacy and inadequacy for each empowerment indicator, the corresponding variables in the survey dataset, and how adequacy criteria are defined for each empowerment indicator. For additional details, refer to the *Feed the Future Guide to Statistics.*[[68]](#footnote-67)

| **Domain** | **Indicator name and weight** | | **Survey questions** | | **Baseline question number** | **Midline question number** | | **Variables** | **Adequacy criteria** | | **Inadequacy criteria** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Production | | Indicator 1.1: Input in productive decisions  (weight: 1/5) | “When decisions are made regarding food crop farming, cash crop farming, livestock raising, and fishing or fishpond culture, who is it that normally takes the decision?”    “How much input did you have in making decisions about food crop farming, cash crop farming, livestock raising, and fishing or fishpond culture?”  “To what extent do you feel you can make your own decisions regarding these aspects of household life if you want(ed) to: food crop farming, cash crop farming, livestock raising, and fishing or fishpond culture if you wanted to?” | Q.6202  (a, b, c, f)  Q.6203  (a, b, c, f)  Q.6204  (a, b, c, f) | | Q.6202  (1, 2, 3, 6)  Q.6203  (1, 2, 3, 6)  Q.6204  (1, 2, 3, 6) | v6202\_01–v6202\_03,  v6202\_06  v6202\_01–v6202\_03,  v6202\_06  v6202\_01–v6202\_03,  v6202\_06 | | For at least one activity: decides alone; OR participates and has input into some; or most or all decisions regarding the activity; OR someone else decides but feels could decide to a medium or high extent if wanted to | Participates but does not have input into some; or most or all decisions regarding the activity; OR does not make the decision NOR feels he or she could to amedium or high extent (93 “no decision made” coded as missing) | |
| Resources | | Indicator 2.1: Ownership of assets  (weight: 2/15) | “Does anyone in your household currently have any [ITEM]: agricultural land, large livestock, small livestock, chickens/ducks/turkeys/ pigeons, fishpond or fishing equipment, hand tools, non-mechanized farm equipment, mechanized farm equipment, non-farm business equipment, house, large consumer durable goods, small consumer durable goods, cell phone, other land or structures, and means of transportation?”  “Do you own any of the item either by yourself or jointly with someone else?” | Q.6301  (a–n)  Q.6303  (a–n) | | Q.6301  (1–15)  Q.6303  (1–15) | v6301\_01–v6301\_15  v6303\_01–v6303\_15 | | Owns—alone or jointly—at least one large asset or two types of small assets (small assets are chickens/ducks/ turkeys/pigeons, hand tools, non-mechanized farm equipment, and small consumer durable goods) | Does not own any assets; OR owns only one type of small asset alone or jointly | |
|  | | Indicator 2.2: Access to and decisions over credit  (weight: 1/15) | “Has anyone in your household taken any loans or borrowed cash/in-kind from [SOURCE] in the past 12 months: NGO, informal lender, formal lender, friends or relatives, group-based microfinance or lending (savings/credit group), informal credit/savings groups such as merry-go-rounds, tontines, funeral societies, etc.”  “Who made the decision to borrow from [SOURCE]?”  “Who makes the decision about what to do with the money/item borrowed from [SOURCE]?” | Q.6308  (a–f)  Q.6309  (a–f)  Q.6310  (a–f) | | Q.6308  (1–6)  Q.6309  (1–6)  Q.6310  (1–6) | v6308\_1–v6303\_6  v6309\_1–v6309\_6  v6310\_1–v6310\_6 | | Can alone or jointly make at least one decision regarding at least one source of credit | Household has no credit; OR household has credit but respondent did not participate in any decision about it | |
| Income | | Indicator 3: Control of use of income | “How much input did you have in decisions on the use of income generated from food crop farming, cash crop farming, livestock raising, non-farm economic activities, wage and salary employment, and fishing or fishpond culture?”  “To what extent do you feel you can make your own personal decisions regarding these aspects of household life if you want(ed) to: non-farm activities, own wage and salary employment, minor household expenditures, major household expenditures?” | Q.6205  (a–f)  Q.6204  (d, e, g, h) | | Q.6205  (1–6)  Q.6204  (4, 5, 7, 8) | v6205\_01– v6206\_06  v6204\_04,  v6204\_05, v6204\_07,  v6204\_08 | | Has input into some; or most or all decisions on use of income for at least one productive/ economic activity; OR feels can make decisions to medium or high extent if respondent wanted for at least one income or expenditure decision, excluding minor household expenditures | Participates in activity but has no input in decisions about income, OR feels she or he has no or very little input into the decision regarding income from non-farm activities, wage and salary employment, or decisions regarding major household expenditures even if she or he wanted to | |
| Leadership | | Indicator 4.1: Membership in economic or social group | “Are you an active member of an agricultural/livestock/fisheries producers’ group, waters users’ group, forest users’ group, credit/microfinance group, mutual help/insurance group, trade and business association, trade and business association, civic groups, local government, religious group, other women’s/men’s group, or any other formal or informal organization?” | Q.6405  (a–k) | | Q.6405  (1–11) | v6405\_01–v6405\_11 | | Is an active member of at least one group | Is not an active member of at least one group | |
| Time | | Indicator 5.1: Workload | The survey collected information on respondents’ time allocation for a 24-hour period. Information was collected for primary activities and reported in 15-minute intervals. | Q.6601 | | Q.6601 | v6601p\_15\_[hour], v6601p\_30\_[hour], v6601p\_45\_[hour], v6601p\_60\_[hour]  where [hour] is a value 1–24 | | Works less than or equal to 10.5 hours in 24-hour period | Works more than 10.5 hours in 24-hour period | |

1. Text in brackets indicates the Feed the Future indicator number. See the Feed the Future Indicator Handbook for more information (<https://www.agrilinks.org/post/feed-future-indicator-handbook>). [↑](#footnote-ref-0)
2. The prevalence of household water insecurity will be reported as an indicator across P2-ZOI Midline Indicator Assessments, but it is not yet an official Feed the Future P2-ZOI population-based indicator. [↑](#footnote-ref-1)
3. In addition, the percent of all women who are adequate in each A-WEAI indicator and the percent of women with data for all six A-WEAI who are adequate in each A-WEAI indicator (uncensored headcounts). [↑](#footnote-ref-2)
4. Survey methodological requirements and supporting documentation for Feed the Future P2-ZOI Midline Surveys are available online at https://www.agrilinks.org/post/feed-future-zoi-survey-methods-toolkit-midline-2021. [↑](#footnote-ref-3)
5. Based on simulation studies across various sample sizes in the context of poverty measurement, a minimum sample size of 300 households for the parallel survey was determined to be adequate for validation of the survey-to-survey imputation model (see Carletto, et al., 2022). [↑](#footnote-ref-4)
6. Refer to Section 2.2.4. for a detailed description of the household listing and segmentation process. [↑](#footnote-ref-5)
7. Table A1.3.1 in Appendix 1 presents household demographic characteristics—the same as presented in Table 3.1.1—by gendered household type at midline. [↑](#footnote-ref-6)
8. UNSTATS, n.d. [↑](#footnote-ref-7)
9. Young, et al., 2021 [↑](#footnote-ref-8)
10. Young, et al., 2021 [↑](#footnote-ref-9)
11. Young et al., 2021 [↑](#footnote-ref-10)
12. Note that results are presented for midline only because data to calculate this indicator were not collected at baseline. [↑](#footnote-ref-11)
13. *Feed the Future ZOI Survey Methods Toolkit—Midline.* Available at: <https://www.agrilinks.org/post/feed-future-zoi-survey-methods-toolkit-midline-2021> [↑](#footnote-ref-12)
14. 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 $1.90 in 2011 PPP means that $1.90 could buy the same amount of goods in another country as $1.90 could in the United States in 2011. [↑](#footnote-ref-13)
15. World Bank, 2015 [↑](#footnote-ref-14)
16. This indicator differs from the depth of poverty indicator used by the World Bank and used previously by Feed the Future. As modified, this indicator only tracks the depth of poverty of households under the poverty threshold, rather than including all households and assigning non-poor households a shortfall of zero. Including the poor and non-poor households means the depth of poverty can decrease either because poor households have crossed the poverty threshold or because poor households have become less poor. One of the limitations of removing the non-poor households from the calculation is that it is possible that the depth of poverty of the poor may increase over time, because previously poor households cross the poverty threshold, leaving only households that may have started with deeper levels of poverty. Changes in this indicator must be analyzed in conjunction with changes in the prevalence of poverty indicator to capture that dynamic. [↑](#footnote-ref-15)
17. Diwakar, Albert, Vizamos, & Shepherd, 2019 [↑](#footnote-ref-16)
18. <https://www.worldbank.org/en/programs/icp> [↑](#footnote-ref-17)
19. Boukary, Diaw, & Wünscher, 2016 [↑](#footnote-ref-18)
20. Lokendra, Michelson, Winter-Nelson, & Goldsmith, 2019 [↑](#footnote-ref-19)
21. Chakraborty, Fry, Behl, & Longfield, 2016 [↑](#footnote-ref-20)
22. Dekker, 2006 [↑](#footnote-ref-21)
23. Filmer & Pritchett, 2001 [↑](#footnote-ref-22)
24. The reference country quintile cutoffs and anchoring points are calculated only once but used for the CWI indicator across all ZOI Surveys. [↑](#footnote-ref-23)
25. Coates, et al., 2006 [↑](#footnote-ref-24)
26. Food and Agriculture Organization of the United Nations, 2019 [↑](#footnote-ref-25)
27. Cafiero, Viviani, & Nord, 2018 [↑](#footnote-ref-26)
28. Ballard, et al., 2013 [↑](#footnote-ref-27)
29. https://unstats.un.org/sdgs/dataportal/database [↑](#footnote-ref-28)
30. USAID, 2012 [↑](#footnote-ref-29)
31. Resilience resources can be found on Resilience Evaluation, Analysis and Learning at <https://www.fsnnetwork.org/REAL> (Food Security and Nutrition Network, n.d.). [↑](#footnote-ref-30)
32. At baseline, the calculation of the SEI included the severity of each shock or stress experienced on household income and household food consumption—rather than only on household food consumption as presented in this report for both baseline and midline. The baseline SEI estimates presented in this report, therefore, differ from those presented in the baseline report. [↑](#footnote-ref-31)
33. At baseline, the calculation of the SEI included the severity of each shock or stress experienced on household income and household food consumption—rather than only on household food consumption as presented in this report for both baseline and midline. The baseline ARSSI estimates presented in this report, therefore, differ from those presented in the baseline report. [↑](#footnote-ref-32)
34. Mercy Corps, n.d. [↑](#footnote-ref-33)
35. Oxfam International, 2017 [↑](#footnote-ref-34)
36. Vaughan, 2018 [↑](#footnote-ref-35)
37. World Health Organization Regional Office for Europe, 2017 [↑](#footnote-ref-36)
38. To understand whether these resilience capacities actually strengthen resilience, a resilience analysis needs to be done. More information about resilience analyses can be found in the Food Security and Nutrition Network resource library at: <https://www.fsnnetwork.org/resilience-and-resilience-capacities-measurement-options>. [↑](#footnote-ref-37)
39. At baseline, the calculation of the index of social capital was based on an eight-point scale. The calculation of this indicator has since been updated to be based on a four-point scale to better capture reciprocity. The baseline index of social capital and its bonding and bridging sub-indices estimates presented in this report, therefore, differ from those presented in the baseline report. [↑](#footnote-ref-38)
40. Beck, 2015 [↑](#footnote-ref-39)
41. World Bank FINDEX: <http://www.worldbank.org/en/programs/globalfindex> [↑](#footnote-ref-40)
42. Cull & Morduch, 2017 [↑](#footnote-ref-41)
43. [Guidance and Tools for Feed the Future | Feed the Future](https://www.feedthefuture.gov/guidance-and-tools-for-global-food-security-programs/) [↑](#footnote-ref-42)
44. Alkire, et al., 2013 [↑](#footnote-ref-43)
45. For more information, please refer to the [Instructional Guide for the Abbreviated Women’s Empowerment in Agriculture Index.](http://www.ifpri.org/publication/instructional-guide-abbreviated-womens-empowerment-agriculture-index-weai) [↑](#footnote-ref-44)
46. The only respondents to the A-WEAI survey module are primary adult decision-makers in the household and, therefore, are not representative of the entire adult female and male populations in the P2-ZOI. It is thus essential to remember that the A-WEAI data reflect only the primary adult female and male decision-makers when interpreting the data. However, to streamline the text of this report, the generic terms “woman,” “female,” “man,” and “male” will be used to refer to the primary adult female or male decision-makers from whom the data were collected. [↑](#footnote-ref-45)
47. The GPI is the second sub-index of the A-WEAI and is calculated using these data for the primary adult female and male decision-makers in households that have both. The GPI measures the extent of inequality in empowerment in a household between the primary adult male decision-maker and the primary adult female decision-maker. [↑](#footnote-ref-46)
48. The *Feed the Future Guide to Statistics* calculates the 5DE as: 5DE score=1–(Hp\*Ap), where Hp=the number of disempowered respondents in the ZOI (respondents whose disempowerment score is greater than 0.2) divided by the total population of respondents in the ZOI with complete A-WEAI indicator data; and Ap=the average inadequacy score of disempowered women (i.e., the average censored inadequacy score). [↑](#footnote-ref-47)
49. In the original WEAI, an individual has to achieve adequacy in four of the five WEAI domains or in 80 percent of the weighted WEAI indicators. The A-WEAI is composed of fewer indicators, and therefore an individual must achieve adequacy in four of the five domains to reach the 80 percent threshold for empowerment. [↑](#footnote-ref-48)
50. Zalisk, K., et al., 2019 [↑](#footnote-ref-49)
51. The education and maternal behavior disaggregates were selected because they were positively associated with women’s empowerment scores when data were analyzed under Feed the Future phase one. Additional details can be found in the [WEAI Baseline Report](https://www.ifpri.org/publication/measuring-progress-toward-empowerment-womens-empowerment-agriculture-index-baseline). No clear relationship with poverty was found at baseline; however, it is important to understand how empowerment status varies for individuals in households living above or below the USD $1.90 poverty line. Further analysis should be considered on the basis of these results. All disaggregates should align with the indicator definitions presented in the Feed the Future Indicator Handbook. [↑](#footnote-ref-50)
52. Darnton-Hill, et al., 2005 [↑](#footnote-ref-51)
53. World Health Organization, 2018a [↑](#footnote-ref-52)
54. At baseline, the calculation of the MAD indicator used an old definition of MDD for breastfed and non-breastfed children. The baseline MDD and MAD estimates presented in this report, therefore, differ from those presented in the baseline report. [↑](#footnote-ref-53)
55. The eight food groups are as follows: (1) grains, roots, and tubers; (2) legumes and nuts; (3) dairy products; (4) flesh foods; (5) eggs; (6) vitamin A-rich fruits and vegetables; (7) Other fruits and vegetables; and (8) breastmilk. [↑](#footnote-ref-54)
56. Leroy & Frongillo, 2019 [↑](#footnote-ref-55)
57. World Health Organization & UNICEF, 2006 [↑](#footnote-ref-56)
58. Table 9.2.1 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and midline estimates. Confidence intervals, differences between baseline and midline estimates, and p-values for the differences in severe stunting, stunting, and mean z-score are tabulated in Appendix 1, Tables A1.9.2.1 through A1.9.2.3. [↑](#footnote-ref-57)
59. A weight-for-length z-score is calculated for children 0-23 months of age and any other children who are measured lying down. A weight-for-height z-score is calculated for children 24-59 months of age who are measured standing up. [↑](#footnote-ref-58)
60. See *Guidance on the Feed the Future Phase Two Zone of Influence Midline Indicator Assessment.* Feed the Future Monitoring and Evaluation Guidance Series. July 2021. [↑](#footnote-ref-59)
61. The indicator *Prevalence of water insecurity, based on the Brief Water Insecurity Experiences Scale (HWISE 4)* was not part of the sample size calculations because it is a new indicator that was added at midline. [↑](#footnote-ref-60)
62. For estimation of mean indicators, the term Pest1-Pest in formula (1) will be replaced by Xest2, which is the estimated variance for the distribution of the mean indicator, X. [↑](#footnote-ref-61)
63. Note for the *Prevalence of exclusive breastfeeding of children under 6 months of age indicator*, Bureau for Resilience and Food Security guidance indicates using a formula to estimate the minimum required household sample size for the survey to include at least 70 children under 6 months of age (see Equation [3]). The household sample size computed for this indicator will be compared with the largest final household sample size required across the other indicators to determine the final required household sample size. [↑](#footnote-ref-62)
64. This adjustment is determined based on the Stukel-Deitchler Inflator using the Nepal P2-ZOI baseline data on the average household size and proportion of the population made up of the given sub-population for each indicator. Please refer to Appendix A of the *Feed the Future Population-based Survey Sampling Guide* for a more detailed discussion of this adjustment factor. [↑](#footnote-ref-63)
65. For individual-level indicators, the final required sample size computation will include an additional adjustment to determine the number of households to contact for the given individual sub-population. [↑](#footnote-ref-64)
66. The asset-based wealth index that is survey-specific—not the comparative asset-based wealth index. [↑](#footnote-ref-65)
67. Zalisk, K., Dupuis, G., Gauthier, M., Kaur, J., Khan, N., Swindale, A., & Johnson, K.B. (2019). *Feed the Future Zone of Influence Surveys: Guide to Feed the Future statistics*. Washington, DC: Bureau for Food Security, United States Agency for International Development. [↑](#footnote-ref-66)
68. Zalisk, K., Dupuis, G., Gauthier, M., Kaur, J., Khan, N., Swindale, A., & Johnson, K.B. (2019). *Feed the Future Zone of Influence Surveys: Guide to Feed the Future statistics*. Washington, DC: Bureau for Food Security, United States Agency for International Development. [↑](#footnote-ref-67)