

[PHOTO]

Feed the Future [COUNTRY]

Zone of Influence Survey Endline Assessment

[Baseline Month Year]–[Endline Month Year]



This publication was prepared for review by the United States Agency for International Development. It was prepared by [Survey Contractor] for the United States Agency for International Development, USAID Contract Number [Contract Number].

Recommended Citation:

Feed the Future. [Year]. Feed the Future [COUNTRY] Zone of Influence Endline Assessment [Baseline Month Year]–[Endline Month Year].

USAID Bureau for Food Security Contact:

bfs.mel@usaid.gov

**INSTRUCTIONS ON HOW TO USE THIS TEMPLATE:**

The content and the text have been pre-approved by the Bureau for Food Security (BFS) and should be modified where noted. We use the following conventions in this template to indicate where modifications should or may be made:

* Where country-specific words or phrases need to be inserted, the word or concept is highlighted in yellow in the text. Substitute the appropriate word or phrase.
* Where a choice needs to be made between several text options, those options are highlighted in green. Delete the option that does not apply to your country.
* Where a section, phrase, sentence, or paragraph may need to be customized or deleted due to irrelevance to your country or survey, instructions are provided in a comment box in the margin. Address the instructions by adding, revising, or deleting text or a table. Highlight the addition or revision or strikethrough the deletion to facilitate BFS’s review. Add a note after the instruction in the comment box that explains what you did (e.g., revised, deleted).

While, in principle, you should only modify the designated parts of the assessment template, read the entire document carefully to ensure that all sections and text apply to your country and are customized appropriately. If you need to change anything other than the parts designated for modification, please use track changes to facilitate USAID’s review of your changes.

**TABLE OF CONTENTS**

[List of tables v](#_Toc31122461)

[List of figures x](#_Toc31122462)

[List of abbreviations xi](#_Toc31122463)

[Executive summary xii](#_Toc31122464)

[Background xii](#_Toc31122465)

[Feed the Future [Country] Phase One ZOI Survey endline assessment indicators xii](#_Toc31122466)

[Feed the Future [Country] Phase One ZOI Survey endline assessment secondary data sources xv](#_Toc31122467)

[Summary of key findings xvi](#_Toc31122468)

[Household economic status xvi](#_Toc31122469)

[*Daily per capita expenditures (2010 USD)* xvi](#_Toc31122470)

[*Prevalence of poverty: Percentage of people living on less than $1.25/day (2005 PPP)* xvi](#_Toc31122471)

[*Depth of poverty: Mean percentage shortfall relative to the $1.25/day (2005 PPP) poverty line* xvi](#_Toc31122472)

[Women’s empowerment in agriculture xvi](#_Toc31122473)

[*A-WEAI* xvi](#_Toc31122474)

[Household hunger and dietary intake xvi](#_Toc31122475)

[*Prevalence of moderate and severe hunger* xvi](#_Toc31122476)

[*Women’s dietary diversity: Mean number of food groups consumed by women of reproductive age* xvi](#_Toc31122477)

[*Prevalence of exclusive breastfeeding of children under 6 months of age* xvi](#_Toc31122478)

[*Prevalence of children 6-23 months of age receiving a minimum acceptable diet* xvi](#_Toc31122479)

[Nutritional status of women and children xvii](#_Toc31122480)

[*Prevalence of underweight women of reproductive age* xvii](#_Toc31122481)

[*Prevalence of stunted children under 5 years of age* xvii](#_Toc31122482)

[*Prevalence of wasted children under 5 years of age* xvii](#_Toc31122483)

[*Prevalence of underweight children under 5 years of age* xvii](#_Toc31122484)

[1. Background 1](#_Toc31122485)

[1.1 Feed the Future overview 1](#_Toc31122486)

[1.2 Feed the Future Phase One ZOI profile 1](#_Toc31122487)

[1.2.1 Rationale for Phase One ZOI selection 2](#_Toc31122488)

[1.2.2 Demography of the ZOI 2](#_Toc31122489)

[1.3 Purpose of this assessment 3](#_Toc31122490)

[2. Methodologies for obtaining baseline and endline values for Feed the Future indicators 5](#_Toc31122491)

[2.1 Data sources 5](#_Toc31122492)

[2.1.1 Baseline 6](#_Toc31122493)

[Primary data 6](#_Toc31122494)

[Secondary data 6](#_Toc31122495)

[2.1.2 Endline 6](#_Toc31122496)

[Primary data 6](#_Toc31122497)

[Secondary data 9](#_Toc31122498)

[2.1.3 Comparability of data sources 9](#_Toc31122499)

[Seasonality 9](#_Toc31122500)

[[Other Issues Regarding Comparability] 10](#_Toc31122501)

[2.2 Measures and reporting conventions used throughout this report 10](#_Toc31122502)

[2.2.1 Standard disaggregates 10](#_Toc31122503)

[Age in years 10](#_Toc31122504)

[Age in months 10](#_Toc31122505)

[Sex 11](#_Toc31122506)

[Educational attainment (household) 11](#_Toc31122507)

[Educational attainment (individual) 11](#_Toc31122508)

[Gendered household type 11](#_Toc31122509)

[Household hunger 12](#_Toc31122510)

[Poverty status 12](#_Toc31122511)

[2.2.2 Reporting conventions 12](#_Toc31122512)

[3. Population in the Zone of Influence 14](#_Toc31122513)

[3.1 Demographics 14](#_Toc31122514)

[3.2 Education 18](#_Toc31122515)

[3.3 Dwelling characteristics and living conditions 21](#_Toc31122516)

[3.4 Water, sanitation, and hygiene 23](#_Toc31122517)

[4. Household economic status 26](#_Toc31122518)

[4.1 Daily per capita consumption expenditures 26](#_Toc31122519)

[4.2 Prevalence and depth of poverty in the ZOI 28](#_Toc31122520)

[4.2.1 The USD $1.25 poverty threshold 29](#_Toc31122521)

[4.2.2 The national extreme poverty threshold 32](#_Toc31122522)

[4.2.3 The national poverty threshold 35](#_Toc31122523)

[5. Women’s empowerment in agriculture 38](#_Toc31122524)

[5.1 Overview 38](#_Toc31122525)

[5.2 Summary of A-WEAI results 41](#_Toc31122526)

[5.3 A-WEAI domain and indicator results 44](#_Toc31122527)

[5.4 Descriptive statistics for A-WEAI domains and indicators 47](#_Toc31122528)

[5.4.1 Production 47](#_Toc31122529)

[5.4.2 Resources 49](#_Toc31122530)

[5.4.3 Income 52](#_Toc31122531)

[5.4.4 Leadership 53](#_Toc31122532)

[5.4.5 Time 54](#_Toc31122533)

[6. Hunger and dietary intake 57](#_Toc31122534)

[6.1 Household hunger 57](#_Toc31122535)

[6.2 Women’s dietary diversity 59](#_Toc31122536)

[6.3 Infant and young child feeding 61](#_Toc31122537)

[6.3.1 Exclusive breastfeeding 61](#_Toc31122538)

[6.3.2 Minimum acceptable diet 62](#_Toc31122539)

[7. Nutritional status of women and children 67](#_Toc31122540)

[7.1 Women’s nutritional status 67](#_Toc31122541)

[7.2 Stunting, wasting, and underweight among children under 5 years of age 70](#_Toc31122542)

[7.2.1 Stunting (low height-for-age) 70](#_Toc31122543)

[7.2.2 Wasting (low weight-for-height) 72](#_Toc31122544)

[7.2.3 Underweight (low weight-for-age) 77](#_Toc31122545)

[8. [Country-specific module(s)] 80](#_Toc31122546)

[9. Summary and conclusions 81](#_Toc31122547)

[References 82](#_Toc31122548)

[Appendix 1. Supplementary data 84](#_Toc31122549)

[A1.1. ZOI Survey [endline survey year(s)] Feed the Future indicator estimates 84](#_Toc31122550)

[A1.2. Supplementary results tables 88](#_Toc31122551)

[Chapter 2: Methodologies 88](#_Toc31122552)

[Chapter 3: Population in the ZOI 90](#_Toc31122553)

[Chapter 4: Household economic status 92](#_Toc31122554)

[Chapter 5: A-WEAI 98](#_Toc31122555)

[Chapter 6: Household hunger and dietary intake 104](#_Toc31122556)

[Chapter 7: Nutritional status 110](#_Toc31122557)

[Appendix 2. Methodology 128](#_Toc31122558)

[A2.1 Sampling and weighting 128](#_Toc31122559)

[Sampling 128](#_Toc31122560)

[Weighting 128](#_Toc31122561)

[A2.2 Poverty prevalence and consumption expenditure methods 129](#_Toc31122562)

[Data source 129](#_Toc31122563)

[Data preparation 129](#_Toc31122564)

[Data excluded from analysis: 129](#_Toc31122565)

[Imputations: 129](#_Toc31122566)

[Prices: 130](#_Toc31122567)

[Other adjustments: 130](#_Toc31122568)

[Currency conversions using consumer price indices and purchasing power parity 130](#_Toc31122569)

[Poverty thresholds 130](#_Toc31122570)

[Appendix 3. Data quality 131](#_Toc31122571)

[Appendix 4. Abbreviated Women’s Empowerment in Agriculture Index adequacy criteria and fact sheet 140](#_Toc31122572)

[A4.1 Criteria for achieving adequacy for A-WEAI indicators 140](#_Toc31122573)

[A4.2 [COUNTRY] Abbreviated Women’s Empowerment in Agriculture Index data fact sheet 144](#_Toc31122574)

[Key findings 144](#_Toc31122575)

[Sample 144](#_Toc31122576)

[WEAI score 144](#_Toc31122577)

[5DE score 144](#_Toc31122578)

[GPI score 144](#_Toc31122579)

[Top contributors to disempowerment 144](#_Toc31122580)

[WEAI application in programming 144](#_Toc31122581)

[WEAI research 145](#_Toc31122582)

# List of tables

[Table ES1: Feed the Future Phase One ZOI Indicator Estimates, by Key Disaggregates: [Country] [Baseline Year]-[Endline Year] xiv](#_Toc31119337)

[Table ES2: Feed the Future Phase One ZOI Survey Endline Assessment Secondary Data Sources xvi](#_Toc31119338)

[Table 1.2.1: Population of Individuals in the Phase One ZOI, by Category, [Country] [Baseline Year(s)]-[Endline Year(s)] 2](#_Toc31119339)

[Table 1.2.2: Number of Households in the Phase One ZOI, by Category, [Country] [Baseline Year]-[Endline Year] 3](#_Toc31119340)

[Table 2.1.1: Feed the Future Phase One Baseline and Endline ZOI Indicator Data Sources and Dates of Data Collection 5](#_Toc31119341)

[Table 2.1.2: Sample Sizes and Response Rates for Secondary Data Sources used at Baseline 6](#_Toc31119342)

[Table 2.1.3: Comparison of Results of Household and Individual Interviews in the Phase One ZOI, in Total and by Residence, Feed the Future Phase One Baseline and Endline ZOI Surveys 8](#_Toc31119343)

[Table 2.1.4: Sample Sizes and Response Rates for Secondary Data Sources Used at Endline 9](#_Toc31119344)

[Table 2.1.5: Season in which Data Collection Took Place for Feed the Future Phase One Baseline and Endline, by Indicator 9](#_Toc31119345)

[Table 3.1.1: Comparison of Household Demographic Characteristics in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys 15](#_Toc31119346)

[Table 3.1.2: Comparison of Characteristics of Primary Adult Female Decisionmakers in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys 16](#_Toc31119347)

[Table 3.1.3: Comparison of Characteristics of Primary Adult Male Decisionmakers in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys 17](#_Toc31119348)

[Table 3.2.1: Comparison of School Attendance at Time of Survey among Children and Youth 5-24 Years of Age in the Phase One ZOI, in Total and by Age and Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 19](#_Toc31119349)

[Table 3.2.2: Comparison of Completion of Primary Education among Individuals 10 Years of Age or Older in the Phase One ZOI, in Total and by Age and Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 19](#_Toc31119350)

[Table 3.2.3: Comparison of Household Member Educational Attainment in the Phase One ZOI, in Total and by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 21](#_Toc31119351)

[Table 3.3.1: Comparison of Household Dwelling Characteristics in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys 22](#_Toc31119352)

[Table 3.3.2: Comparison of Household Dwelling Characteristics in the Phase One ZOI, by Gendered Household Type and Residence, Feed the Future Phase One Baseline and Endline ZOI Surveys 22](#_Toc31119353)

[Table 3.4.1: Comparison of Household Water, Sanitation, and Hygiene Characteristics in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys 24](#_Toc31119354)

[Table 4.1.1: Comparison of Mean Daily Per Capita Consumption Expenditures in Constant 2010 USD at 2005 PPP in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 27](#_Toc31119355)

[Table 4.1.2: Comparison of Median Daily Per Capita Consumption Expenditures in Constant 2010 USD at 2005 PPP in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 28](#_Toc31119356)

[Table 4.2.1: Comparison of Prevalence of Poverty at the USD $1.25 (2005 PPP) Per Person Per Day Threshold in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 29](#_Toc31119357)

[Table 4.2.2: Comparison of Depth of Poverty at the USD $1.25 (2005 PPP) Per Person Per Day Threshold in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 30](#_Toc31119358)

[Table 4.2.3: Comparison of Average Consumption Shortfall of the Poor at the USD $1.25 (2005 PPP) Per Person Per Day Threshold in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 31](#_Toc31119359)

[Table 4.2.4: Comparison of Prevalence of Poverty at the National Extreme Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 32](#_Toc31119360)

[Table 4.2.5: Comparison of Depth of Poverty at the National Extreme Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 33](#_Toc31119361)

[Table 4.2.6: Comparison of Average Consumption Shortfall of the Poor at the National Extreme Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 34](#_Toc31119362)

[Table 4.2.7: Comparison of Prevalence of Poverty at the National Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 35](#_Toc31119363)

[Table 4.2.8: Comparison of Depth of Poverty at the National Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 36](#_Toc31119364)

[Table 4.2.9: Comparison of Average Consumption Shortfall of the Poor at the National Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 37](#_Toc31119365)

[Table 5.1.1: A-WEAI Domains, Indicators, and Definitions of Adequacy 39](#_Toc31119366)

[Table 5.2.1: Comparison of A-WEAI, 5DE, and GPI Scores, and Average Empowerment Gap in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys 41](#_Toc31119367)

[Table 5.2.2: Comparison of Empowerment in the Phase One ZOI by Sex, Age, Education, Poverty Status, Region, and Child Feeding Behavior, Feed the Future Phase One Baseline and Endline ZOI Surveys 42](#_Toc31119368)

[Table 5.3.1: Comparison of Average Percent of Primary Adult Decisionmakers in the Phase One ZOI Achieving Adequacy in the Six A-WEAI Indicators, by Sex and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys 44](#_Toc31119369)

[Table 5.3.2: Comparison of Adequate Achievement in Each A-WEAI Indicator in the Phase One ZOI Using Censored Headcount Ratios, by Sex and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys 45](#_Toc31119370)

[Table 5.4.1: Comparison of Participation in Economic Activities, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 47](#_Toc31119371)

[Table 5.4.2: Comparison of Input into Decisionmaking on Production, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 48](#_Toc31119372)

[Table 5.4.3: Comparison of Ownership of Productive Resources, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 49](#_Toc31119373)

[Table 5.4.4: Comparison of Credit Access, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 50](#_Toc31119374)

[Table 5.4.5: Comparison of Source of Credit Accessed, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 51](#_Toc31119375)

[Table 5.4.6: Comparison of Input into Decisionmaking on Use of Income and Major Household Expenditures, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 52](#_Toc31119376)

[Table 5.4.7: Comparison of Group Membership, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 53](#_Toc31119377)

[Table 5.4.8: Comparison of Time Allocation, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 54](#_Toc31119378)

[Table 6.1: Comparison of Household Hunger in the Phase One ZOI, by Severity, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 57](#_Toc31119379)

[Table 6.2.1: Comparison of Mean Number of Food Groups Consumed by Women of Reproductive Age in the Phase One ZOI, in Total and by Selected Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 58](#_Toc31119380)

[Table 6.2.2: Comparison of Percent of Women of Reproductive Age in the Phase One ZOI Who Consumed Specified Foods in the ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys 59](#_Toc31119381)

[Table 6.3.1: Comparison of Exclusive Breastfeeding among Children 0-5 Months of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 60](#_Toc31119382)

[Table 6.3.2: Comparison of Children 6-23 Months of Age in the Phase One ZOI Who Received a Minimum Acceptable Diet, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 62](#_Toc31119383)

[Table 6.3.3: Comparison of Percent of Children 6-23 Months of Age in the Phase One ZOI Achieving Minimum Feeding Frequency, Dietary Diversity, and Consuming Specified Foods, in Total and by Breastfeeding Status and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys 64](#_Toc31119384)

[Table 7.1: Comparison of Mean BMI and Prevalence of Underweight, Normal Weight, Overweight, and Obese Women of Reproductive Age in the Phase One ZOI, in Total and by Individual and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 67](#_Toc31119385)

[Table 7.2.1: Comparison of the Prevalence of Stunting and Mean Height-for-Age Z-Scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 69](#_Toc31119386)

[Table 7.2.2: Comparison of Prevalence of Wasting and Mean Weight-for-Height Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 72](#_Toc31119387)

[Table 7.2.3: Comparison of Prevalence of Healthy Weight, Overweight, and Obesity among Children Under 5 Years of Age in the ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 74](#_Toc31119388)

[Table 7.2.4: Comparison of Prevalence of Underweight and Mean Weight-for-Age Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 77](#_Toc31119389)

[Table A1.1: Feed the Future Phase One ZOI Indicator Estimates, by Key Disaggregates: [Country] [Baseline Year(s)]-[Endline Year(s)] 84](#_Toc31119390)

[Table A1.2.1: Comparison of Response Rates in the Phase One ZOI, by Module, Feed the Future Phase One Baseline and Endline ZOI Surveys 87](#_Toc31119391)

[Table A1.3.1: Household Demographic Characteristics in the Phase One ZOI, by Gendered Household Type, Feed the Future Phase One Endline ZOI Survey 89](#_Toc31119392)

[Table A1.3.2: Characteristics of Primary Adult Female and Male Decisionmakers in the ZOI, Feed the Future Phase One Endline Survey 90](#_Toc31119393)

[Table A1.4.1.1: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], USD (2005 PPP), in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 91](#_Toc31119394)

[Table A1.4.1.2: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], Percent of Poverty Line, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 92](#_Toc31119395)

[Table A1.4.2.1: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], USD (2005 PPP), in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 93](#_Toc31119396)

[Table A1.4.2.2: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], Percent of Poverty Line, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 94](#_Toc31119397)

[Table A1.4.3.1: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Threshold of [Threshold], USD (2005 PPP), in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 95](#_Toc31119398)

[Table A1.4.3.2: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Threshold of [Threshold], Percent of Poverty Line, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 96](#_Toc31119399)

[Table A1.5.1: Comparison of Adequate Achievement in Each A-WEAI Indicator in the Phase One ZOI Using Uncensored Headcount Ratios, by Sex and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys 97](#_Toc31119400)

[Table A1.5.2: Comparison of Participation in Activities, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 99](#_Toc31119401)

[Table A1.5.3: Comparison of Mean Hours Devoted to Activities, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys 101](#_Toc31119402)

[Table A1.6.1.1: Comparison of Moderate to Severe Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 103](#_Toc31119403)

[Table A1.6.1.2: Comparison of Severe Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 104](#_Toc31119404)

[Table A1.6.1.3: Comparison of Moderate Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 105](#_Toc31119405)

[Table A1.6.1.4: Comparison of Little to No Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 106](#_Toc31119406)

[Table A1.6.2: Comparison of Percent of All Children 6-23 Months in the Phase One ZOI Achieving Minimum Feeding Frequency, Dietary Diversity, and Consuming Specified Foods, in Total and by Breastfeeding Status, Feed the Future Phase One Baseline and Endline ZOI Surveys 107](#_Toc31119407)

[Table A1.7.1.1: Comparison of Mean Body Mass Index among Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 109](#_Toc31119408)

[Table A1.7.1.2: Comparison of Prevalence of Underweight Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 110](#_Toc31119409)

[Table A1.7.1.3: Comparison of Prevalence of Normal Weight Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 111](#_Toc31119410)

[Table A1.7.1.4: Comparison of Prevalence of Overweight Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 112](#_Toc31119411)

[Table A1.7.1.5: Comparison of Prevalence of Obese Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 113](#_Toc31119412)

[Table A1.7.2.1: Comparison of Prevalence of Severe Stunting (<-3 SD) among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 114](#_Toc31119413)

[Table A1.7.2.2: Comparison of Prevalence of Stunting (<-2 SD) among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 115](#_Toc31119414)

[Table A1.7.2.3: Comparison of Mean Height-for-Age Z-Scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 116](#_Toc31119415)

[Table A1.7.3.1: Comparison of Prevalence of Severe Wasting among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 117](#_Toc31119416)

[Table A1.7.3.2: Comparison of Prevalence of Wasting among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 118](#_Toc31119417)

[Table A1.7.3.3: Comparison of Prevalence of Healthy Weight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 119](#_Toc31119418)

[Table A1.7.3.4: Comparison of Prevalence of Overweight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 120](#_Toc31119419)

[Table A1.7.3.5: Comparison of Prevalence of Obese Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 121](#_Toc31119420)

[Table A1.7.3.6: Comparison of Mean Weight-for-Height Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 122](#_Toc31119421)

[Table A1.7.4.1: Comparison of Prevalence of Severely Underweight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 123](#_Toc31119422)

[Table A1.7.4.2: Comparison of Prevalence of Underweight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 124](#_Toc31119423)

[Table A1.7.4.3: Comparison of Mean Weight-for-Age Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys 125](#_Toc31119424)

[Table A3.1: Household Completion Rate 131](#_Toc31119425)

[Table A3.2: Primary Male and Female Decisionmakers 133](#_Toc31119426)

[Table A3.3: Age Heaping in the Household Roster 135](#_Toc31119427)

[Table A3.4: Eligible Women per Household 136](#_Toc31119428)

[Table A3.5: Eligible Children per Household 136](#_Toc31119429)

[Table A3.6: Module 6 (Women) Women’s Empowerment in Agriculture Module, Eligibility and Response Rate 137](#_Toc31119430)

[Table A3.7: Module 6 (Men) Women’s Empowerment in Agriculture Module, Eligibility and Response Rate 138](#_Toc31119431)

[Table A4.1: Women’s Empowerment in Agriculture Five Dimensions of Empowerment: Domains, Indicators, ZOI Survey Questions and Variables, Adequacy and Inadequacy Criteria, and Weights 140](#_Toc31119432)

# List of figures

[Figure 1.1: Map of the Feed the Future [Country] Phase One ZOI 1](#_Toc31119433)

# List of abbreviations

5DE five domains of empowerment

A-WEAI Abbreviated Women’s Empowerment in Agriculture Index

BMI body mass index

CI confidence interval

CPI Consumer Price Index

DEFF design effect

EA enumeration area

GPI Gender Parity Index

HHS Household Hunger Scale

ICC intercluster correlation coefficient

LCU local currency unit

LSMS Living Standards Measurement Study

MAD minimum acceptable diet

MDD minimum dietary diversity

PPP purchasing power parity

SD standard deviation

SDG Sustainable Development Goal

USAID United States Agency for International Development

WDDS women’s dietary diversity score

WEAI Women’s Empowerment in Agriculture Index

WHO World Health Organization

ZOI Zone of Influence

# Executive summary

## Background

Feed the Future 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. Progress in achieving Feed the Future’s objectives is tracked using population-based performance indicators collected at baseline then periodically thereafter.

The purpose of this report is to provide the U.S. Government interagency partners, the United States Agency for International Development (USAID) Bureau for Food Security, USAID/[Country], the Government of [Country], and development partners with an assessment that compares indicator estimates and select demographic and household characteristics from the [endline survey year(s)] ZOI Survey, which serves as the Feed the Future Phase One endline survey, with the baseline assessment conducted in [baseline survey year(s)]. This report assesses trends and tests for statistically significant differences in indicator estimates between the two time periods in the Phase One ZOI in [Country]. This report includes only Feed the Future Phase One indicators, when data from both baseline and endline are available.[[1]](#footnote-2)

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

This assessment provides information about progress in Feed the Future Phase One ZOI indicators. The assessment is designed to show changes in key indicator estimates from the Feed the Future Phase One baseline assessment to the endline assessment. The Feed the Future ZOI Survey endline assessment, however, was not designed to support conclusions of causality or program attribution.

## Feed the Future [Country] Phase One ZOI Survey endline assessment indicators

The Feed the Future Phase One ZOI indicators included in this assessment are as follows:

1. Daily per capita expenditures (2010 USD)
2. Prevalence of poverty: Percentage of people living on less than $1.25/day 2005 purchasing power parity (PPP)
3. Depth of poverty: Mean percentage shortfall of the poor, relative to the $1.25/day 2005 PPP poverty line
4. Abbreviated Women’s Empowerment in Agriculture Index (A-WEAI)[[2]](#footnote-3)
5. Prevalence of moderate and severe hunger
6. Women’s dietary diversity score: Mean number of food groups consumed by women of reproductive age (15-49)
7. Prevalence of exclusive breastfeeding of children under 6 months of age
8. Prevalence of children 6-23 months of age receiving a minimum acceptable diet
9. Prevalence of underweight women of reproductive age (15-49)
10. Prevalence of stunted children under 5 years of age
11. Prevalence of wasted children under 5 years of age
12. Prevalence of underweight children under 5 years of age

These 12 performance indicators at the goal level measure hunger, malnutrition, and poverty among the population in the [Country] Feed the Future Phase One ZOI. Indicator estimates—in total and by key disaggregates—at Phase One baseline and at endline are presented in **Table ES1.** The unweighted number of observations, the difference between the baseline and endline estimates, the 95 percent confidence interval around the difference, the p-value associated with the difference, and the p-value’s level of significance are also presented.

Table ES1: Feed the Future Phase One ZOI Indicator Estimates, by Key Disaggregates: [Country] [Baseline Year]-[Endline Year]

| **Indicator** | **Baseline**  **([Year(s)])** | | |  | | **Endline**  **([Year(s)])** | | | |  | | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.** | **95% CI** | **na** | |  | | **Est.** | **95% CI** | **na** | | **Diff.** |
| **Mean daily per capita consumption expenditure in constant 2010 USD (2005 PPP)** | | | | | | | | | | | | | |
| **All households** |  |  |  | |  | |  |  |  | |  |  |  |
| **Gendered household type** | |  |  | |  | |  |  |  | |  |  |  |
| Male and female adults |  |  |  | |  | |  |  |  | |  |  |  |
| Female adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Male adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Children only |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of poverty: Percentage of people living on less than $1.25/day (2005 PPP)** | | | | | | | | | | | | | |
| **All households** |  |  |  | |  | |  |  |  | |  |  |  |
| **Gendered household type** | |  |  | |  | |  |  |  | |  |  |  |
| Male and female adults |  |  |  | |  | |  |  |  | |  |  |  |
| Female adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Male adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Children only |  |  |  | |  | |  |  |  | |  |  |  |
| **Depth of poverty: Mean percent shortfall relative to the $1.25/day poverty line (2005 PPP)** | | | | | | | | | | | | | |
| **All households** |  |  |  | |  | |  |  |  | |  |  |  |
| **Gendered household type** | |  |  | |  | |  |  |  | |  |  |  |
| Male and female adults |  |  |  | |  | |  |  |  | |  |  |  |
| Female adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Male adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Children only |  |  |  | |  | |  |  |  | |  |  |  |
| **Abbreviated Women’s Empowerment in Agriculture Indexd** | | | | | | | | | | | | | |
| **All women** |  |  |  | |  | |  |  |  | |  |  |  |
| **Woman’s age** |  |  |  | |  | |  |  |  | |  |  |  |
| 18-29 years |  |  |  | |  | |  |  |  | |  |  |  |
| 30 years or older |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of moderate and severe hunger** | | | | | | | | | | | | | |
| **All households** |  |  |  | |  | |  |  |  | |  |  |  |
| **Gendered household type** | |  |  | |  | |  |  |  | |  |  |  |
| Male and female adults |  |  |  | |  | |  |  |  | |  |  |  |
| Female adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Male adults only |  |  |  | |  | |  |  |  | |  |  |  |
| Children only |  |  |  | |  | |  |  |  | |  |  |  |
| **Women’s dietary diversity: Mean number of food groups consumed by women of reproductive agee** | | | | | | | | | | | | | |
| All women 15-49 years of age |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of exclusive breastfeeding among children under 6 months of agee** | | | | | | | | | | | | | |
| **All children** |  |  |  | |  | |  |  |  | |  |  |  |
| **Child’s sex** |  |  |  | |  | |  |  |  | |  |  |  |
| Male |  |  |  | |  | |  |  |  | |  |  |  |
| Female |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of children 6-23 months of age receiving a minimum acceptable diete** | | | | | | | | | | | | | |
| **All children** |  |  |  | |  | |  |  |  | |  |  |  |
| **Child’s sex** |  |  |  | |  | |  |  |  | |  |  |  |
| Male |  |  |  | |  | |  |  |  | |  |  |  |
| Female |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of underweight women of reproductive agee** | | | | | | | | | | | | | |
| All non-pregnant women 15-49 years of age |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of stunted children under 5 years of agee** | | | | | | | | | | | | | |
| **All children** |  |  |  | |  | |  |  |  | |  |  |  |
| **Child’s sex** |  |  |  | |  | |  |  |  | |  |  |  |
| Male |  |  |  | |  | |  |  |  | |  |  |  |
| Female |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of wasted children under 5 years of agee** | | | | | | | | | | | | | |
| **All children** |  |  |  | |  | |  |  |  | |  |  |  |
| **Child’s sex** |  |  |  | |  | |  |  |  | |  |  |  |
| Male |  |  |  | |  | |  |  |  | |  |  |  |
| Female |  |  |  | |  | |  |  |  | |  |  |  |
| **Prevalence of underweight children under 5 years of agee** | | | | | | | | | | | | | |
| **All children** |  |  |  | |  | |  |  |  | |  |  |  |
| **Child’s sex** |  |  |  | |  | |  |  |  | |  |  |  |
| Male |  |  |  | |  | |  |  |  | |  |  |  |
| Female |  |  |  | |  | |  |  |  | |  |  |  |

Est.=estimate, n/a=not available, CI=confidence interval

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The Women’s Empowerment in Agriculture Index (WEAI) was calculated at baseline, but only data for the Abbreviated WEAI (A-WEAI) were collected at endline. Therefore, a baseline value for the A-WEAI was calculated so that endline-baseline comparisons could be made.

e Estimates are based on de facto household members.

Notes:

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

Estimates are based on de jure household members, except where noted.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## Feed the Future [Country] Phase One ZOI Survey endline assessment secondary data sources

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

Table ES2: Feed the Future Phase One ZOI Survey Endline Assessment Secondary Data Sources

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

## Summary of key findings

### Household economic status

#### *Daily per capita expenditures (2010 USD)*

#### *Prevalence of poverty: Percentage of people living on less than $1.25/day (2005 PPP)*

#### *Depth of poverty: Mean percentage shortfall relative to the $1.25/day (2005 PPP) poverty line*

### Women’s empowerment in agriculture

#### *A-WEAI*

### Household hunger and dietary intake

#### *Prevalence of moderate and severe hunger*

#### *Women’s dietary diversity: Mean number of food groups consumed by women of reproductive age*

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

#### *Prevalence of children 6-23 months of age receiving a minimum acceptable diet*

### Nutritional status of women and children

#### *Prevalence of underweight women of reproductive age*

#### *Prevalence of stunted children under 5 years of age*

#### *Prevalence of wasted children under 5 years of age*

#### *Prevalence of underweight children under 5 years of age*

# Background

Chapter 1 provides background information on Feed the Future in [Country], including a description of the program and the demography of the Feed the Future Phase One Zone of Influence.

## 1.1 Feed the Future overview

[Insert text according to the instructions.]

## 1.2 Feed the Future Phase One ZOI profile

The geographic focus of the Feed the Future [Country] Phase One ZOI Survey endline assessment is the Phase One ZOI, the geographic area where the Feed the Future program is expected to have had an impact on hunger, poverty, and nutrition during the first phase of the Initiative.

[Insert geographic description of the Phase One ZOI.]

A map of the Feed the Future Phase One ZOI in [Country] is provided in **Figure 1.1**.

Figure 1.1: Map of the Feed the Future [Country] Phase One ZOI

[Insert map]

Source: [Source of map]

### Rationale for Phase One ZOI selection

[Insert rationale.]

### Demography of the ZOI

**Table 1.2.1** and **Table 1.2.2** present individual and household population estimates for the Phase One ZOI at baseline in [baseline survey year(s)] and at endline in [endline survey year(s)]. The tables include estimates of the total population and sub-populations. The sub-population categories correspond to the sub-populations for the Feed the Future indicators and disaggregates.

[Add a summary of the values presented in Tables 1.2.1 and 1.2.2.]

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

| **Category of individuals** | **Baseline**  **([Year(s)])** | |  | **Endline**  **([Year(s)])** | | **Diff.** |
| --- | --- | --- | --- | --- | --- | --- |
| **Na** | **Percent** |  | **Na** | **Percent** |
| **Total number of individuals** |  | 100 |  |  | 100 |  |
| **Total number of individuals, by key sub-population** | | |  |  |  |  |
| Children 0-5 months |  |  |  |  |  |  |
| Children 0-23 months |  |  |  |  |  |  |
| Children 6-23 months |  |  |  |  |  |  |
| Children 0-59 months |  |  |  |  |  |  |
| Youth 15-29 years |  |  |  |  |  |  |
| Women of reproductive age (15-49 years) |  |  |  |  |  |  |
| Primary adult female decisionmakers |  |  |  |  |  |  |
| **Total number of individuals, by residenceb** | | |  |  |  |  |
| Urban |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |
| **Total number of individuals, by gendered household type** | | | | | | |
| Male and female adults |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |
| **Children 0-5 months, by sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Children 0-23 months, by sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Children 6-23 months, by sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Children 0-59 months, by sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Youth 15-29 years, by sex** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| **Women of reproductive age, by pregnancy status** | |  |  |  |  |  |
| Pregnant |  |  |  |  |  |  |
| Non-pregnant |  |  |  |  |  |  |
| **Primary adult female decisionmakers, by age** | | | |  |  |  |
| 18-29 years |  |  |  |  |  |  |
| 30 years or older |  |  |  |  |  |  |

a Number of individuals in the population

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.

Source(s): [National Statistics Office data] [Elaborate here]

Table 1.2.2: Number of Households in the Phase One ZOI, by Category, [Country] [Baseline Year]-[Endline Year]

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Category of households** | **Baseline**  **([Year(s)])** | |  | **Endline**  **([Year(s)])** | | **Diff.** |
| **Na** | **Percent** |  | **Na** | **Percent** |
| **Total number of households** |  |  |  |  |  |  |
| **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 residenced** | | | | | | |
| Urban |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |
| **Total number of households, by [region]** | |  |  |  |  |  |
| [Region 1] |  |  |  |  |  |  |
| [Region 2] |  |  |  |  |  |  |
| [Region 3] |  |  |  |  |  |  |
| [Region 4] |  |  |  |  |  |  |

a Number of households in the population

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.

Source(s): [National Statistics Office data] [Elaborate here]

## 1.3 Purpose of this assessment

The purpose of this assessment is to provide the U.S. Government interagency partners, the United States Agency for International Development (USAID) Bureau for Food Security, the [Country] USAID Mission, the Government of [Country], and development partners with information to monitor long-term progress of the Feed the Future Phase One ZOI indicators in [Country].

The assessment is designed to measure changes in key indicator estimates between the Feed the Future Phase One baseline ZOI Survey, which was conducted in [baseline survey year(s)], and the Feed the Future Phase One endline ZOI Survey, which was conducted in [endline survey year(s)]. Feed the Future ZOI Survey sample calculations, however, are not designed to support conclusions of causality or program attribution.

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

Chapter 2 describes the methodology used to obtain the Feed the Future Phase One ZOI indicators at baseline and endline. 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 Phase One ZOI indicator, for both baseline and endline. Primary and secondary data sources are described in the sections that follow.

Table 2.1.1: Feed the Future Phase One Baseline and Endline ZOI Indicator Data Sources and Dates of Data Collection

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Indicator** | **Baseline**  **([Year(s)])** | |  | **Endline**  **([Year(s)])** | |
| **Data source** | **Date collected** |  | **Data source** | **Date collected** |
| Daily per capita expenditures (2010 USD) | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of poverty: Percentage of people living on less than $1.25/day (2005 PPP) | [Source] | [Month(s)] [Year] |  | [Source] | [Month(s)] [Year(s)] |
| Depth of poverty: Mean percentage shortfall relative to the $1.25/day (2005 PPP) poverty line | [Source] | [Month(s)] [Year] |  | [Source] | [Month(s)] [Year(s)] |
| Abbreviated Women’s Empowerment in Agriculture Index | [Source] | [Month(s)] [Year] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of moderate and severe hunger | [Source] | [Month(s)] [Year] |  | [Source] | [Month(s)] [Year(s)] |
| Women’s dietary diversity: Mean number of food groups consumed by women of reproductive age | [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)] |
| Percent of children 6-23 months of age receiving a minimum acceptable diet | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of underweight women of reproductive age | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of stunted children under 5 years of age | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of wasted children under 5 years of age | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |
| Prevalence of underweight children under 5 years of age | [Source] | [Month(s)] [Year(s)] |  | [Source] | [Month(s)] [Year(s)] |

PPP=purchasing power parity

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 2.1.1 Baseline

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

#### Primary data

The Feed the Future [Country] Phase One baseline ZOI Survey [baseline survey year(s)] 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]. See **Table 2.1.3** for the sample sizes and responses rates for the baseline ZOI Survey side by side with the endline ZOI Survey by ZOI indicator.

[Describe how the baseline ZOI Survey data were comparable to endline data used to enable the calculations of change over time.]

#### Secondary data

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

Table 2.1.2: Sample Sizes and Response Rates for Secondary Data Sources used at Baseline

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data source** | **Indicator** | **Population sampled** | **Sample size in the Phase One ZOI** | **Response rate** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Sources:

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

[Insert information according to instructions.]

### 2.1.2 Endline

[Contractor] conducted the Feed the Future [Country] Phase One endline assessment. [Insert information according to the instructions.]

#### Primary data

This section describes the Feed the Future [Country] ZOI Survey [endline survey year(s)], including discussion of the sample design and sample size, questionnaire customization, timing of the survey, listing exercise, training, fieldwork, data management and analysis, limitations, and response rates. The Feed the Future [Country] Phase One endline ZOI Survey [endline survey year(s)] was implemented by [Contractor and in-country implementer].

##### Survey sample design

The Feed the Future [Country] ZOI Survey [endline survey year(s)] included a representative, random sample of the entire population living in the Phase One ZOI for the Phase One endline 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 Phase One ZOI to assess changes in key Phase One indicators from the baseline ZOI Survey to the endline ZOI Survey. In the case of the Feed the Future [Country] ZOI Survey [endline survey year(s)], the design also ensured that the sample size included the necessary number of households in the Feed the Future phase two ZOI to calculate baseline estimates for the phase two ZOI indicators. Changes in these indicators will be assessed from the [endline survey year(s)] ZOI Survey to the next ZOI Survey.

The Feed the Future [Country] ZOI Survey [endline survey year(s)] sampling frame was stratified by [COUNTRY-SPECIFIC STRATA] to create [XX] strata. The number of enumeration areas (EAs) in each stratum was proportional to the population in the strata, with at least one EA in a stratum. A total of [XX] EAs were selected based on [XX] households to be interviewed per EA. The [XX] indicator had the largest final sample size requirement and was, therefore, used to set the overall sample size for the survey: [XX] households.

Before main fieldwork began, a complete household listing was conducted in each EA or segment, from which [XX] households were selected for interview using fractional interval systematic sampling; this constituted the second stage of sampling. In the third stage, eligible individuals were selected within the households using a “take all” approach; that is, all eligible individuals were selected for the sample. During main fieldwork, if more than one household was discovered in a single dwelling unit and the additional households were not listed separately, all households at the residence were interviewed. Appendix 2.1 provides additional details on the sampling and weighting methodology.

##### Questionnaire design

[Insert description per instructions.]

##### Timing of the survey

[Insert description per instructions.]

##### Listing

[Insert description per instructions.]

##### Training for main fieldwork

Prior to fieldwork, all field staff were trained on survey procedures, including preparing for fieldwork, 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 tablet pretest and a survey pilot test. [Number of field teams] field teams, composed of a field supervisor, two two-person interview teams, an agricultural interviewer, and a driver, collected data over [XX] weeks, from [Start date] to [End date].

##### Fieldwork

[Insert description per instructions.]

##### Data management and analysis

[Insert description per instructions.]

##### Limitations of the survey

[Insert description per instructions.]

##### Response rates

**Table 2.1.3** presents the response rates for the Feed the Future [Country] ZOI Survey [endline survey year(s)] compared to those for the baseline ZOI Survey. The table presents components and the response rates for sampled households, women of reproductive age (15-49 years), primary adult male and female decisionmakers, children under 5 years of age, and children under 2 years of age. Response rates are presented by rural and urban residence, as well as for the total sample.

Table 2.1.3: Comparison of Results of Household and Individual Interviews in the Phase One ZOI, in Total and by Residence, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Response rate** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Total** | **Residence** | |  | **Total** | **Residence** | |
| **Urban** | **Rural** |  | **Urban** | **Rural** |
| **Households** | | | |  |  |  |  |
| Number of households selected |  |  |  |  |  |  |  |
| Number of households occupied |  |  |  |  |  |  |  |
| Number of households interviewed |  |  |  |  |  |  |  |
| Household response rate (%)a |  |  |  |  |  |  |  |
| **Women of reproductive age (15-49 years)** | | | |  |  |  |  |
| Number of eligible women |  |  |  |  |  |  |  |
| Number of eligible women interviewed |  |  |  |  |  |  |  |
| Eligible women response rate (%)b |  |  |  |  |  |  |  |
| **Primary adult female decisionmakers (18+ years)** | | | |  |  |  |  |
| Number of eligible women |  |  |  |  |  |  |  |
| Number of eligible women interviewed |  |  |  |  |  |  |  |
| Eligible women response rate (%)b |  |  |  |  |  |  |  |
| **Primary adult male decisionmakers (18+ years)** | | | |  |  |  |  |
| Number of eligible men |  |  |  |  |  |  |  |
| Number of eligible men interviewed |  |  |  |  |  |  |  |
| Eligible men response rate (%)b |  |  |  |  |  |  |  |
| **Children under 5 years of age** | | | |  |  |  |  |
| Number of eligible children |  |  |  |  |  |  |  |
| Number of caregivers of eligible children interviewed |  |  |  |  |  |  |  |
| Eligible children response rate (%)b |  |  |  |  |  |  |  |
| **Children under 2 years of age** | | | |  |  |  |  |
| Number of eligible children |  |  |  |  |  |  |  |
| Number of caregivers of eligible children interviewed |  |  |  |  |  |  |  |
| Eligible children response rate (%)b |  |  |  |  |  |  |  |

a Household response rates are calculated based on the result codes of Module 1, the household roster, and are defined as the number of households interviewed divided by the number of households occupied. Households that were found to be vacant, not a dwelling unit, or destroyed were considered unoccupied and thus excluded from the response rates.

b Individual response rates are calculated based on the result codes in the relevant individual modules (Modules 4, 5, and 6). 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. (Note that for children under 5 years of age [Module 5], the primary caregivers of the children served as the respondents, not the children directly.)

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

#### Secondary data

This section discusses the use of secondary data sources for the calculation of Feed the Future Phase One ZOI indicators at endline. **Table 2.1.4** presents the sample sizes and responses rates for secondary data sources used at endline by data source and ZOI indicator.

Table 2.1.4: Sample Sizes and Response Rates for Secondary Data Sources Used at Endline

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data source** | **Indicator** | **Population sampled** | **Sample size in the Phase One ZOI** | **Response rate** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Sources:

##### [Endline secondary data source #1]

[Insert information according to the instructions.]

### 2.1.3 Comparability of data sources

This section discusses the comparability of data sources used to calculate Feed the Future Phase One ZOI indicators with respect to seasonality and [any other issues affecting comparability].

#### Seasonality

**Table 2.1.5** presents the season in which data collection took place for each indicator at baseline and at endline. [Insert description per instructions.]

Table 2.1.5: Season in which Data Collection Took Place for Feed the Future Phase One Baseline and Endline, by Indicator

| **Indicator** | **Season of data collection** | |
| --- | --- | --- |
| **Baseline**  **([Year(s)])** | **Endline**  **([Year(s)])** |
| Daily per capita expenditures (2010 USD) |  |  |
| Prevalence of poverty: Percent of people living on less than $1.25/day (2005 PPP) |  |  |
| Depth of poverty: Mean percentage shortfall of the poor relative to the $1.25/day (2005 PPP) poverty line |  |  |
| Abbreviated Women’s Empowerment in Agriculture Index |  |  |
| Prevalence of moderate and severe hunger |  |  |
| Prevalence of exclusive breastfeeding of children under 6 months of age |  |  |
| Percent of children 6-23 months of age receiving a minimum acceptable diet |  |  |
| Prevalence of women of reproductive age consuming a diet of minimum diversity |  |  |
| Prevalence of stunted children under 5 years of age |  |  |
| Prevalence of wasted children under 5 years of age |  |  |
| Prevalence of underweight children under 5 years of age |  |  |
| Prevalence of underweight women of reproductive age |  |  |

PPP=purchasing power parity

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

#### [Other Issues Regarding Comparability]

## 2.2 Measures and reporting conventions used throughout this report

### 2.2.1 Standard disaggregates

A standard set of disaggregate variables is used in tables throughout this report. This section lists each of the standard disaggregate variables and defines how each variable is calculated.

These variables are coded consistently; however, because data have been drawn from the Feed the Future Phase One baseline and endline ZOI 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 below. The data source used for each Feed the Future indicator is also the data source used to produce the disaggregate variables presented in the associated descriptive tables.

#### Age in years

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

#### Age in months

The age of children in months is collected in the child nutrition survey module, rather than in the household roster, so that the children’s parent or primary caregiver can be prompted to provide the most accurate age possible. Children’s age in months is presented by age categories for the children’s dietary intake and anthropometry tables. For example, the minimum acceptable diet (MAD) tables (**Tables 6.3.2** and **6.3.3**) present children’s age disaggregated in 6-month age groups as follows: 6‑11 months, 12-17 months, and 18-23 months. For the children’s anthropometry tables (**Tables 7.2.1**, **7.2.2**, **7.2.3,** and **7.2.4**), which present the prevalence of stunting, wasting, and underweight for all children under 5 years of age, children’s age is disaggregated into 12-month age groups as follows: 0‑11 months, 12-23 months, 24-35 months, 36-47 months, and 48-59 months.

#### Sex

Sex—either male or female—is a standard disaggregate for the tables presenting children’s indicators, (e.g., children’s dietary intake [**Tables 6.3.1** and **6.3.2]** and children’s anthropometry [**Tables 7.2.1, 7.2.2, 7.2.3,** and **7.2.4**). The sex of household members is collected in the household roster.

#### Educational attainment (household)

Household educational attainment reflects the highest level of education attained by any member of the household, as reported in the household roster. This variable is used in tables that present household‑level data and comprises five categories: no education (households with no member who has received formal education); less than primary (households with at least one member who has received formal schooling, but with no member who has completed primary); completed primary (households with at least one member who has completed primary, but with no member who has completed secondary); completed secondary (households with at least one member who has completed secondary, but with no member who has completed any higher formal education); and higher (households with at least one member who has completed formal education higher than secondary—even if only 1 year). Households are categorized in only one of the five categories. This variable is calculated using data on the education of household members, which are collected in the household roster.

#### Educational attainment (individual)

Educational attainment at the individual level reflects the highest level of education attained by individual household members, as reported in the household roster. This variable comprises five categories: no education (those who have not received any formal education); less than primary (those who have received formal education but who have not completed primary); completed primary (those who have completed primary but who have not completed secondary); completed secondary (those who have completed secondary but who have not completed any higher formal education); and higher (those who have completed formal education higher than secondary—even if only for 1 year). This variable is calculated using data on the education of household members, which are collected in the household roster.

#### Gendered household type

Feed the Future disaggregates household-level indicators 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 household members, which are collected in the household roster.

#### Household hunger

The household hunger disaggregate uses the categories created for the Household Hunger Scale (HHS) indicator, which characterizes households according to three categories of hunger severity: little to no household hunger, moderate household hunger, and severe household hunger. The indicator is described in greater detail in Section 6.1 of this report. Household hunger is used as a disaggregate for several household-level indicators, as well as some individual-level nutrition indicators. This variable is calculated using data collected in Module 3, *Food security and resilience*.

#### Poverty status

As described in greater detail in Section 4.2 of this report, poverty status characterizes households as poor if household members live below the poverty threshold—that is, on less than USD $1.25 per person per day at 2005 purchasing power parity (PPP), or as non-poor if household members live at or above the poverty threshold—that is, on USD $1.25 or more per person per day (2005 PPP). Poverty status is calculated using data collected in Module 8, *Household consumption expenditure*. Poverty status is used as a disaggregate for many household-level indicators, as well as some individual-level nutrition indicators.

### 2.2.2 Reporting conventions

The Feed the Future [Country] Phase One ZOI Survey endline assessment is primarily comparative in nature. This section provides an overview of the conventions used to report these results.

* In the tables throughout this report, weighted point estimates and unweighted sample sizes are presented.
* Most estimates are shown to one decimal place, with the specific exceptions of per capita expenditures, Abbreviated Women’s Empowerment in Agriculture Index (A-WEAI), five domains of empowerment (5DE), and Gender Parity Index (GPI) indicators, which are shown to two decimal places. Unweighted sample sizes in all tables and the population estimates in **Table 1.2.1** and **Table** **1.2.2** are shown as whole numbers.
* Values in the tables are suppressed when the unweighted sample size is insufficient to calculate a reliable point estimate (n<30); this is denoted by the use of the symbol “^” in the designated row and an explanatory footnote.
* Tests of difference are performed to determine whether there is a difference between the baseline and endline estimates. The 95 percent confidence intervals (CIs) for the baseline and endline estimates, the difference between endline and baseline estimates, and the associated p-value are reported in indicator tables throughout the report, with the exception of the average consumption shortfall, A-WEAI time allocation, HHS, and nutritional status indicator tables. Due to the amount of information in these tables, only the estimates and sample sizes are presented, with asterisks to the right of the endline estimate to designate statistically significant differences (\* indicates a p<0.05, \*\* indicates a p<0.01, and \*\*\* indicates a p<0.001). The full endline-baseline difference results are presented in appendix tables.
* Individual-level indicators and disaggregates generated using individual-level data (e.g., household educational attainment and gendered household type) are calculated for either de jure or de facto household members. All tables include a footnote or table note that indicates which subset of household members was used. If a table contains individual-level indicators, the disaggregates used reflect the same subset of household members used to calculate the indicator. For example, the women’s underweight indicator is calculated for de facto women of reproductive age, so the gendered household type disaggregate in the table is also calculated for de facto 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.

# Population in the Zone of Influence

Chapter 3 describes the background characteristics of the Phase One ZOI population using data from the Feed the Future [Country] Phase One baseline and endline ZOI Surveys and 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 Phase One ZOI indicators, results of tests of statistical difference between baseline and endline are provided. Section 3.1 presents demographic results; Section 3.2 presents education results; Section 3.3 presents dwelling characteristic and living condition results; and Section 3.4 presents water, sanitation, and hygiene results.

## 3.1 Demographics

**Table 3.1.1** presents demographic characteristics of households in the Phase One ZOI, comparing estimates at baseline and at endline.[[3]](#footnote-4) Estimates include the average household size—based on de jure household members, as well as the average numbers of de jure female adults, male adults, youth, women of reproductive age, and children in the household. Household education, defined as the highest level of education attained of any de facto member of the household, is also presented in this table, as is the percentage of de jure adults by sex.

[Describe the results presented in Table 3.1.1.]

Table 3.1.1: Comparison of Household Demographic Characteristics in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline ([Year(s)])** | | |  | **Endline ([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **Est.** | **95% CI** | **na** |  | **Est.** | **95% CI** | **na** |
| Mean household sized |  |  |  |  |  |  |  |  |  |  |
| Mean number of children under 2 years of aged |  |  |  |  |  |  |  |  |  |  |
| Mean number of children under 5 years of aged |  |  |  |  |  |  |  |  |  |  |
| Mean number of children 5 years of age or older (5-17 years)d |  |  |  |  |  |  |  |  |  |  |
| Mean number of youth (15-29 years)d |  |  |  |  |  |  |  |  |  |  |
| Mean number of women of reproductive age (15-49 years)d |  |  |  |  |  |  |  |  |  |  |
| Mean number of adult male household membersd,e |  |  |  |  |  |  |  |  |  |  |
| Mean number of adult female household membersd,e |  |  |  |  |  |  |  |  |  |  |
| Percent of adults who are male (%)d,e |  |  |  |  |  |  |  |  |  |  |
| Percent of adults who are female (%)d,e |  |  |  |  |  |  |  |  |  |  |
| **Number of households** |  |  |  |  |  |  |  |  |  |  |
| **Highest household educational attainment (%)f** | | | | | | | | | |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Number of households** |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

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, the sum of disaggregate sample sizes may not equal the overall sample size.

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

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d Estimates are based on de jure household members.

e Feed the Future defines 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.

f Estimates are based on de facto household members.

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

Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Table 3.1.2** and **Table 3.1.3** present characteristics of primary adult female and male decisionmakers in the Phase One ZOI, comparing estimates at baseline and at endline.[[4]](#footnote-5) Primary adult decisionmakers 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 decisionmaking in the household. When both exist in a single household, primary adult female and male decisionmakers are typically, but not necessarily, husband and wife. **Table 3.1.2** presents characteristics of primary adult female decisionmakers, and **Table 3.1.3** presents the same for primary adult male decisionmakers. The characteristics include age group, marital status, educational attainment, and participation in economic activities.

[Describe the results presented in Table 3.1.2.]

Table 3.1.2: Comparison of Characteristics of Primary Adult Female Decisionmakers in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline  ([Year(s)])** | | |  | **Endline  ([Year(s)])** | | | |  | | **p-** | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** |  | **%** | **95% CI** | | **na** | | **Diff.** | | **valueb** | **Sig.c** |
| **Age** |  |  |  |  |  |  | |  | |  | |  |  |
| 18-24 |  |  |  |  |  |  | |  | |  | |  |  |
| 25-29 |  |  |  |  |  |  | |  | |  | |  |  |
| 30-39 |  |  |  |  |  |  | |  | |  | |  |  |
| 40-49 |  |  |  |  |  |  | |  | |  | |  |  |
| 50-59 |  |  |  |  |  |  | |  | |  | |  |  |
| 60+ |  |  |  |  |  |  | |  | |  | |  |  |
| **Marital status** | | | | | |  | |  | |  | |  |  |
| Married |  |  |  |  |  |  | |  | |  | |  |  |
| Living in a consensual union |  |  |  |  |  |  | |  | |  | |  |  |
| Widowed |  |  |  |  |  |  | |  | |  | |  |  |
| Divorced or separated |  |  |  |  |  |  | |  | |  | |  |  |
| Never married or in a union |  |  |  |  |  |  | |  | |  | |  |  |
| **Education** | | | | | |  | |  | |  | |  |  |
| No education |  |  |  |  |  |  | |  | |  | |  |  |
| Less than primary |  |  |  |  |  |  | |  | |  | |  |  |
| Completed primary |  |  |  |  |  |  | |  | |  | |  |  |
| Completed secondary |  |  |  |  |  |  | |  | |  | |  |  |
| Higher |  |  |  |  |  |  | |  | |  | |  |  |
| **Economic activityd** |  |  |  |  |  |  | |  | |  | |  |  |
| Participates in some form of economic activity |  |  |  |  |  |  | |  | |  | |  |  |
| **Participation in economic activity by typee** | | | |  |  |  |  | |  | |  | |  |
| Farm |  |  |  |  |  |  | |  | |  | |  |  |
| Non-farm |  |  |  |  |  |  | |  | |  | |  |  |
| Wage/salaried |  |  |  |  |  |  | |  | |  | |  |  |
| **Number of primary adult female decisionmakers** |  |  |  |  |  |  | |  | |  | |  |  |

^ Results not statistically reliable, n<30

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, the sum of disaggregate sample sizes may not equal the overall sample size.

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

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d 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.

e 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.

Notes:

Estimates are based on primary adult female decisionmakers who are de jure household members.

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

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

[Describe the results presented in Table 3.1.3. Compare the results in Tables 3.1.2 and 3.1.3.]

Table 3.1.3: Comparison of Characteristics of Primary Adult Male Decisionmakers in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **Age** |  |  |  |  |  |  |  |  |  |  |
| 18-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-39 |  |  |  |  |  |  |  |  |  |  |
| 40-49 |  |  |  |  |  |  |  |  |  |  |
| 50-59 |  |  |  |  |  |  |  |  |  |  |
| 60+ |  |  |  |  |  |  |  |  |  |  |
| **Marital status** | | | | | |  |  |  |  |  |
| Married |  |  |  |  |  |  |  |  |  |  |
| Living in a consensual union |  |  |  |  |  |  |  |  |  |  |
| Widowed |  |  |  |  |  |  |  |  |  |  |
| Divorced or separated |  |  |  |  |  |  |  |  |  |  |
| Never married or in a union |  |  |  |  |  |  |  |  |  |  |
| **Education** | | | | | |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Economic activityd** | | | | | | | | | | |
| Participates in some form of economic activity |  |  |  |  |  |  |  |  |  |  |
| Farm |  |  |  |  |  |  |  |  |  |  |
| Non-farm |  |  |  |  |  |  |  |  |  |  |
| Wage/salaried |  |  |  |  |  |  |  |  |  |  |
| **Number of primary adult female decisionmakers** |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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, the sum of disaggregate sample sizes may not equal the overall sample size.

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

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d 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.

e 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.

Notes:

Estimates are based on primary adult male decisionmakers who are de jure household members.

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

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 3.2 Education

The tables in Section 3.2 present school attendance and educational attainment in the Phase One ZOI, comparing estimates at baseline and at endline. **Table 3.2.1** presents the percentage of all de facto household members between 5 and 24 years of age who were attending school by age category at the time of the baseline and endline ZOI Surveys. **Table 3.2.2** presents the percentage of all de facto household members 10 years of age or older who completed primary education by age category. **Table 3.2.3** presents the percent distribution of all de facto household members 10 years of age or older by highest educational attainment. All results are presented in total and by sex. **Table 3.2.1** and **Table 3.2.2** also include female-to-male ratios.

[Describe the results presented in Table 3.3.1.]

Table 3.2.1: Comparison of School Attendance at Time of Survey among Children and Youth 5-24 Years of Age in the Phase One ZOI, in Total and by Age and Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Sex and age (years)** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Total** |  |  |  |  |  |  |  |  |  |  |
| 5-9 |  |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| **Female** |  |  |  |  |  |  |  |  |  |  |
| 5-9 |  |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| **Male** | |  |  |  |  |  |  |  |  |  |
| 5-9 |  |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| **Female-male ratio** | | | | | | | | | | |
| 5-9 |  |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

Estimates are based on de facto household members.

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

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

In [Country], primary education is defined as [country-specific definition]. [Describe the results presented in Table 3.2.2.]

Table 3.2.2: Comparison of Completion of Primary Education among Individuals 10 Years of Age or Older in the Phase One ZOI, in Total and by Age and Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Sex and age (years)** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Total** |  |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| 50-54 |  |  |  |  |  |  |  |  |  |  |
| 55-59 |  |  |  |  |  |  |  |  |  |  |
| 60+ |  |  |  |  |  |  |  |  |  |  |
| **Female** |  |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| 50-54 |  |  |  |  |  |  |  |  |  |  |
| 55-59 |  |  |  |  |  |  |  |  |  |  |
| 60+ |  |  |  |  |  |  |  |  |  |  |
| **Male** | |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| 50-54 |  |  |  |  |  |  |  |  |  |  |
| 55-59 |  |  |  |  |  |  |  |  |  |  |
| 60+ |  |  |  |  |  |  |  |  |  |  |
| **Female-male ratio** | |  |  |  |  |  |  |  |  |  |
| 10-14 |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| 50-54 |  |  |  |  |  |  |  |  |  |  |
| 55-59 |  |  |  |  |  |  |  |  |  |  |
| 60+ |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

Estimates are based on de facto household members.

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

Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

[Describe the results presented in Table 3.2.3.]

Table 3.2.3: Comparison of Household Member Educational Attainment in the Phase One ZOI, in Total and by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sex and highest educational attainmenta** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Total** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Female** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Male** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Estimates include only de facto household members who are [XX] years of age or older.

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

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

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

Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 3.3 Dwelling characteristics and living conditions

**Table 3.3.1** and **Table 3.3.2** present dwelling characteristics and living conditions of households in the Phase One ZOI, comparing estimates at baseline and at endline. **Table 3.3.1** presents the percentages of all households that use solid cooking fuel and that have access electricity, the average number of de jure household members per sleeping room, and the main roof, exterior wall, and floor dwelling materials. **Table 3.3.2** presents the percentages of households that use solid cooking fuel and that have access electricity by gendered household type and residence.

[Describe the results presented in Table 3.3.1 and Table 3.3.2.]

Table 3.3.1: Comparison of Household Dwelling Characteristics in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.** | **95% CI** | **n** |  | **Est.** | **95% CI** | **n** |
| Use solid fuel for cooking (%)c |  |  |  |  |  |  |  |  |  |  |
| Have access to electricity (%) |  |  |  |  |  |  |  |  |  |  |
| Mean number of persons per sleeping roomd,e |  |  |  |  |  |  |  |  |  |  |
| **Household roof materials (%)f** | | | |  |  |  |  |  |  |  |
| Natural |  |  |  |  |  |  |  |  |  |  |
| Rudimentary |  |  |  |  |  |  |  |  |  |  |
| Finished |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| **Household exterior wall materials (%)g** | | | |  |  |  |  |  |  |  |
| Natural |  |  |  |  |  |  |  |  |  |  |
| Rudimentary |  |  |  |  |  |  |  |  |  |  |
| Finished |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| **Household floor materials (%)h** | | | |  |  |  |  |  |  |  |
| Natural |  |  |  |  |  |  |  |  |  |  |
| Rudimentary |  |  |  |  |  |  |  |  |  |  |
| Finished |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| **Number of households** |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Solid fuel is defined as *charcoal*, *wood*, *animal dung*, *straw/shrubs/grass*, and *agriculture crop residue*. The *no food cooked in household* category is removed from percentages.

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.

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

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

h 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 [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table 3.3.2: Comparison of Household Dwelling Characteristics in the Phase One ZOI, by Gendered Household Type and Residence, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Percent using solid fuel for cooking (%)c** | | | |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | | | | | | |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |  |  |
| **Percent with access to electricity (%)** | | | |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | | | | | |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Residence** |  |  |  |  |  |  |  |  |  |  |
| Urban |  |  |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |  |  |
| **Number of households** |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Solid fuel is defined as *charcoal*, *wood*, *animal dung*, *straw/shrubs/grass*, and *agriculture crop residue*. The *no food cooked in household* category is removed from percentages.

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

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 3.4 Water, sanitation, and hygiene

This section presents water, sanitation, and hygiene indicators that align with the Sustainable Development Goals (SDG).[[5]](#footnote-6) **Table 3.4.1** presents the percentages of households in the Phase One ZOI that use an improved water source and that use an improved sanitation facility as well as the percent distributions of households by main drinking water source and sanitation facility, comparing estimates at baseline and at endline.

Drinking water may be contaminated with human or animal feces containing pathogens, or with chemical and physical contaminants with harmful effects on health; therefore, obtaining drinking water from an improved source is critical to prevent transmission of diarrhea and other diseases. It is also important to improve accessibility and availability of drinking water, especially for women and girls, who often bear the primary responsibility for collecting water from distant sources.[[6]](#footnote-7) Therefore, the availability and accessibility of households’ main drinking water sources are important pieces of information that were collected at endline; however, because this information was not collected at baseline, this section focuses on the water sources themselves.

Inadequate sanitation and lack of sanitation are closely associated with diarrheal diseases, which in turn exacerbate malnutrition. Open defecation is when people use fields, forests, open bodies of water, or other open spaces rather than toilets. Open defecation and inadequate sanitation are dangerous because contact with human waste can cause the vicious and self-reinforcing cycle of undernutrition and infectious diseases, such as cholera, typhoid, hepatitis, diarrhea, and worm infestation. Although access to a hygienic toilet facility is critical to reduce the transmission of pathogens, sharing of sanitation facilities is also an important consideration, given the negative impacts on dignity, privacy, and personal safety, especially for women and girls.[[7]](#footnote-8) According to the World Health Organization (WHO)/UNICEF Joint Monitoring Programme for Water Supply, Sanitation, and Hygiene, a basic sanitation service consists of a sanitation facility that hygienically separates human excreta from human contact (i.e., an improved sanitation facility) that is not shared with other households.[[8]](#footnote-9) However, because information to determine whether sanitation facilities meet basic sanitation service criteria was not collected at baseline, this section focuses on sanitation facilities in the context of the information available at both baseline and endline.

[Describe the results in Table 3.4.1.]

Table 3.4.1: Comparison of Household Water, Sanitation, and Hygiene Characteristics in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Source or facility** | **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Use improved drinking water sourcec** |  |  |  |  |  |  |  |  |  |  |
| **Drinking water source** |  |  |  |  |  |  |  |  |  |  |
| Piped into dwelling |  |  |  |  |  |  |  |  |  |  |
| Piped into yard or plot |  |  |  |  |  |  |  |  |  |  |
| Public tap |  |  |  |  |  |  |  |  |  |  |
| Tubewell or borehole |  |  |  |  |  |  |  |  |  |  |
| Protected well or spring |  |  |  |  |  |  |  |  |  |  |
| Unprotected well or spring |  |  |  |  |  |  |  |  |  |  |
| Rainwater collection |  |  |  |  |  |  |  |  |  |  |
| Surface water |  |  |  |  |  |  |  |  |  |  |
| Tanker truck or vendor |  |  |  |  |  |  |  |  |  |  |
| Bottled water |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| **Use improved sanitation facilityd** |  |  |  |  |  |  |  |  |  |  |
| **Main sanitation facility** |  |  |  |  |  |  |  |  |  |  |
| Flush, shared |  |  |  |  |  |  |  |  |  |  |
| Flush, private |  |  |  |  |  |  |  |  |  |  |
| Ventilated improved pit latrine |  |  |  |  |  |  |  |  |  |  |
| Pit latrine |  |  |  |  |  |  |  |  |  |  |
| Bucket or pan |  |  |  |  |  |  |  |  |  |  |
| No toilet |  |  |  |  |  |  |  |  |  |  |
| Othere |  |  |  |  |  |  |  |  |  |  |
| **Number of households** |  |  |  |  |  |  |  |  |  |  |

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

cImproved water sources include *piped water into the dwelling, piped water into the yard, public tap/standpipe, tubewell/borehole, protected dug well, protected spring,* and *rainwater* (UNICEF & WHO, 2012).

dImproved 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).

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

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

# Household economic status

This chapter includes a background discussion of monetary poverty in [Country], including the logic of the Living Standards Measurement Study (LSMS)[[9]](#footnote-10) and consumption expenditures methodology. The methodology used to calculate the Feed the Future Phase One ZOI poverty indicators is provided in the *Guide to Feed the Future Statistics*.[[10]](#footnote-11)

The Feed the Future Phase One ZOI poverty indicators presented in this chapter include daily per capita expenditures in 2010 USD, prevalence of poverty, and depth of poverty. These indicators are presented for the USD $1.25 poverty line at 2005 PPP in Sections 4.1 and 4.2. In addition, prevalence of poverty and depth of poverty are presented for the [Country]’s national extreme poverty threshold ([national extreme poverty threshold]) in Section 4.3 and for [Country]’s national poverty threshold ([national poverty threshold]) in Section 4.4.

[Present a brief contextual discussion of poverty within [Country] and the Phase One ZOI.]

The ZOI Survey household roster and household consumption expenditure modules were used to calculate the poverty indicators. The household consumption expenditure module is similar to the LSMS, in which households’ consumption of various food and non-food items is measured to infer household income and well-being. Individuals’ per capita expenditures are then derived by dividing total household expenditures by the number of household members. From these data, household expenditure totals are calculated and used as a proxy for household incomes, based on the assumption that a household’s consumption is closely related to its income. Household consumption and expenditures are often preferred to income when measuring poverty due to the difficulty in accurately measuring income. According to Deaton, expenditure data are less prone to error, easier to recall, and more stable over time than income data.[[11]](#footnote-12)

In this approach, a per capita daily consumption aggregate is constructed by converting every purchased and non-purchased item consumed by each household to a daily monetary value, summing across all items to obtain a total daily expenditure in goods and services consumed by a household, and then dividing by the number of household members, to obtain each household’s daily per capita expenditures. Note that in this approach, every household member is assumed to have an equal share of the total consumption, regardless of age and other household member characteristics.[[12]](#footnote-13)

## 4.1 Daily per capita consumption expenditures

**Table 4.1.1** and **Table 4.1.2** present the daily per capita consumption expenditure estimates in the Phase One ZOI in constant 2010 USD using the 2005 PPP rate, comparing estimates at baseline and at endline. Table 4.1.1 presents means in total and by gendered household type, household educational attainment, and household hunger, and Table 4.1.2 presents medians in total and by the same selected household characteristics.

Daily per capita consumption expenditures serve as a proxy for income. The World Bank raised the poverty line to USD $1.90 using 2011 PPP rates in October 2015,[[13]](#footnote-14) but to facilitate comparisons with baseline estimates, daily per capita consumption expenditures are provided using 2005 PPP rates. Examining the mean and median together provides information on the distribution of consumption expenditures. As is typical of consumption expenditure and income data, these estimates are positively skewed, with the majority of the population consuming or spending very little and a small portion of the population consuming much more. The mean, therefore, is a volatile summary statistic because it is affected by these outliers that consume much more. A more robust summary statistic is the median.

[Describe the results in Tables 4.1.1 and 4.1.2.]

Table 4.1.1: Comparison of Mean Daily Per Capita Consumption Expenditures in Constant 2010 USD at 2005 PPP in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** | |
| **Characteristic** | **Mean** | **95% CI** | **n** |  | **Mean** | **95% CI** | **n** |
| **All households** |  |  |  |  |  |  |  |  |  | |  |
| **Gendered household type** | | | | | | | | | | | |
| Male and female adults |  |  |  |  |  |  |  |  |  | |  |
| Female adults only |  |  |  |  |  |  |  |  |  | |  |
| Male adults only |  |  |  |  |  |  |  |  |  | |  |
| Children only (no adults) |  |  |  |  |  |  |  |  |  | |  |
| **Household education** | | | | | | | | | | | |
| No education |  |  |  |  |  |  |  |  |  | |  |
| Less than primary |  |  |  |  |  |  |  |  |  | |  |
| Completed primary |  |  |  |  |  |  |  |  |  | |  |
| Completed secondary |  |  |  |  |  |  |  |  |  | |  |
| Higher |  |  |  |  |  |  |  |  |  | |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  | |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  | |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  | |  |
| Severe hunger |  |  |  |  |  |  |  |  |  | |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

Daily per capita consumption expenditures measured in [local currency] were converted to constant 2010 USD using the 2005 and 2010 Consumer Price Index (CPI) and the 2005 Purchasing Power Parity (PPP) Index estimated by the World Bank. The following formula was used: [(2005 CPI in local currency units [LCU]/survey month and year CPI LCU)\*1/(2005 PPP LCU)]/[(2005 CPI USD/2010 CPI USD)] where 2005 PPP LCU=[XX], survey month and year CPI LCU=[XX], 2005 CPI LCU=[XX], 2010 CPI USD=218.06, and 2005 CPI USD=195.30. The conversion factor was [XX].

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table 4.1.2: Comparison of Median Daily Per Capita Consumption Expenditures in Constant 2010 USD at 2005 PPP in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| **Characteristic** | **Median** | **95% CI** | **n** |  | **Median** | **95% CI** | **n** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | | | | | | |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only (no adults) |  |  |  |  |  |  |  |  |  |  |
| **Household education** | | | | | | | | | | |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

Daily per capita consumption expenditures measured in [local currency] were converted to constant 2010 USD using the 2005 and 2010 Consumer Price Index (CPI) and the 2005 Purchasing Power Parity (PPP) Index estimated by the World Bank. The following formula was used: [(2005 CPI in local currency units [LCU]/survey month and year CPI LCU)\*1/(2005 PPP LCU)]/[(2005 CPI USD/2010 CPI USD)] where 2005 PPP LCU=[XX], survey month and year CPI LCU=[XX], 2005 CPI LCU=[XX], 2010 CPI USD=218.06, and 2005 CPI USD=195.30. The conversion factor was [XX].

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 4.2 Prevalence and depth of poverty in the ZOI

The prevalence of poverty, sometimes called the poverty headcount ratio, is measured by determining the percentage of individuals living below a poverty threshold.[[14]](#footnote-15) Estimates of poverty prevalence are sensitive to the poverty thresholds used to identify the poor. A standardized poverty threshold of USD $1.25 per person per day in 2005 PPP was used to track global changes in poverty across countries. The USD $1.25 threshold was in effect the extreme poverty threshold and represents the poverty line typical of the world’s poorest countries.[[15]](#footnote-16) Poverty estimates are also presented for [Country]’s poverty and extreme poverty thresholds.

Although prevalence of poverty indicates how *many* individuals are impacted by poverty, it does not speak to how *much* people are impacted by poverty. The depth of poverty, often called the poverty gap, is a useful poverty estimate because it captures the extremity of poverty. This measure indicates the average gap between consumption expenditure levels and the poverty line and is expressed as a proportion of the poverty line. The depth of poverty represents the entire Phase One ZOI population, with the non-poor counted as having a gap of zero. The average consumption expenditure shortfall of the poor, in contrast, is estimated for only those individuals living below the poverty line. These three indicators—prevalence and depth of poverty and the average consumption shortfall—complement each other to present a more complete picture of the poverty situation in the Phase One ZOI.

### 4.2.1 The USD $1.25 poverty threshold

The tables in this section presentpoverty estimates in the Phase One ZOI at the USD $1.25 per person per day (2005 PPP) threshold, comparing estimates at baseline and at endline. **Table 4.2.1** presents the prevalence of poverty, **Table 4.2.2** presents the depth of poverty, and **Table 4.2.3** presents the average consumption shortfall of the poor.[[16]](#footnote-17) Similar to the daily per capita consumption expenditures table, these tables present poverty estimates for all households in the Phase One ZOI, as well as disaggregated by gendered household type, household educational attainment, and household hunger.

**Prevalence of poverty.** [Describe the results presented in Table 4.2.1.]

Table 4.2.1: Comparison of Prevalence of Poverty at the USD $1.25 (2005 PPP) Per Person Per Day Threshold in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** |  |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ 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 poverty measures the percentage of individuals living below a poverty threshold. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

The prevalence of poverty, sometimes referred to as the poverty incidence or poverty headcount ratio, is the percentage of individuals living below the $1.25 (2005 PPP) per person per day threshold.

The prevalence of poverty was calculated by first converting the USD $1.25 per day (2005 PPP) poverty line into local currency units (LCU) by multiplying the USD $1.25 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.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Depth of poverty.** [Describe the results presented in Table 4.2.2.]

Table 4.2.2: Comparison of Depth of Poverty at the USD $1.25 (2005 PPP) Per Person Per Day Threshold in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **% of poverty line** | **95% CI** | **na** |  | **% of poverty line** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ 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 measures the average gap between the consumption level of individuals and the poverty line. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

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

The depth of poverty 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 household in the sample from the USD $1.25 per day poverty line in LCU for the year and month of the ZOI Survey, with the resulting difference set to zero for all non-poor households. The figure was then divided by the USD $1.25 per day 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 household was summed across all households and then divided by the sum of the number of all sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Average consumption shortfall of the poor.** [Describe the results presented in Table 4.2.3.]

Table 4.2.3: Comparison of Average Consumption Shortfall of the Poor at the USD $1.25 (2005 PPP) Per Person Per Day Threshold in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |
| **Characteristic** | **USD  (2005 PPP)** | **% of poverty line** | **na** |  | **USD  (2005 PPP)** | **% of poverty line** | **na** |
| **All households** |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |
| **Household education** | | |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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.

Estimates are based on de jure household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

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

The average consumption shortfall of the poor, expressed in USD (2005 PPP), 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 USD $1.25 per day poverty line in LCU for the year and month of the ZOI Survey. The figure was then converted to 2005 prices by multiplying by the ratio of the 2005 Consumer Price Index (CPI) LCU and the CPI for the year and month of the ZOI Survey LCU, where survey month and year CPI LCU=[XX] and 2005 CPI LCU=[XX]. The resulting figure was converted to 2005 USD by dividing by the 2005 PPP conversion rate of the ZOI Survey country ([XX]). 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 sum of the number of all poor sampled households with consumption data.

The average consumption shortfall of the poor, expressed as a percentage of the poverty line, 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 USD $1.25 per day poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the USD $1.25 per day 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 4.2.2 The national extreme poverty threshold

The tables in this section present poverty estimates in the Phase One ZOI at the national extreme poverty threshold ([national extreme poverty threshold]), comparing estimates at baseline and at endline. **Table 4.2.4** presents the prevalence of poverty, **Table 4.2.5** presents the depth of poverty, and **Table 4.2.6** presents the average consumption shortfall of the poor.[[17]](#footnote-18) Similar to the tables in Section 4.2.1, these tables present poverty estimates for all households in the Phase One ZOI, as well as disaggregated by gendered household type, household educational attainment, and household hunger.

**Prevalence of poverty.** [Describe the results presented in Table 4.2.4. Interpret the results in relation to the results presented in Table 4.2.1.]

Table 4.2.4: Comparison of Prevalence of Poverty at the National Extreme Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** |  |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ 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 poverty measures the percentage of individuals living below a poverty threshold. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

The prevalence of poverty, sometimes referred to as the poverty incidence or poverty headcount ratio, is the percentage of individuals living below the national extreme poverty threshold ([threshold]). [Insert description of the national extreme poverty threshold.]

The prevalence of poverty was calculated by [insert calculations used]. 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.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

**Depth of poverty.** [Describe the results presented in Table 4.2.5. Interpret the results in relation to the results presented in Table 4.2.5.]

Table 4.2.5: Comparison of Depth of Poverty at the National Extreme Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **% of poverty line** | **95% CI** | **na** |  | **% of poverty line** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ 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 measures the average gap between the consumption level of individuals and the poverty line. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

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

Estimates are based on de jure household members.

The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty using the national extreme poverty threshold.

The depth of poverty 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 household in the sample from the national extreme poverty line in LCU for the year and month of the ZOI Survey, with the resulting difference set to zero for all non-poor households. The figure was then divided by the national extreme 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 household was summed across all households and then divided by the sum of the number of all sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

**Average consumption shortfall of the poor.** [Describe the results presented in Table 4.2.5. Interpret the results in relation to the results presented in Table 4.2.3.]

Table 4.2.6: Comparison of Average Consumption Shortfall of the Poor at the National Extreme Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |
| **Characteristic** | **USD  (2005 PPP)** | **% of poverty line** | **na** |  | **USD  (2005 PPP)** | **% of poverty line** | **na** |
| **All households** |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |
| **Household education** | | |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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.

Estimates are based on de jure household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

The average consumption shortfall of the poor is the average amount below the national extreme poverty threshold of a person in poverty. This value is estimated only among individuals living in households that fall below the national extreme poverty threshold.

The average consumption shortfall of the poor, expressed in USD (2005 PPP), 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 national extreme poverty line in LCU for the year and month of the ZOI Survey. The figure was then converted to 2005 prices by multiplying by the ratio of the 2005 Consumer Price Index (CPI) LCU and the CPI for the year and month of the ZOI Survey LCU, where survey month and year CPI LCU=[XX] and 2005 CPI LCU=[XX]. The resulting figure was converted to 2005 USD by dividing by the 2005 PPP conversion rate of the ZOI Survey country ([XX]). 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 sum of the number of all poor sampled households with consumption data.

The average consumption shortfall of the poor, expressed as a percentage of the poverty line, 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 national extreme poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the national extreme 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

### 4.2.3 The national poverty threshold

The tables in this section present poverty estimates in the Phase One ZOI at the national poverty threshold ([national poverty threshold]), comparing estimates at baseline and at endline. **Table 4.2.7** presents the prevalence of poverty, **Table 4.2.8** presents the depth of poverty, and **Table 4.2.9** presents the average consumption shortfall of the poor.[[18]](#footnote-19) Similar to the tables in Sections 4.2.1 and 4.2.2, these tables present poverty estimates for all households in the Phase One ZOI, as well as disaggregated by gendered household type, household educational attainment, and household hunger.

**Prevalence of poverty.** [Describe the results presented in Table 4.2.7. Interpret the results in relation to the results presented in Table 4.2.1 and Table 4.2.4.]

Table 4.2.7: Comparison of Prevalence of Poverty at the National Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** |  |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ 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 poverty measures the percentage of individuals living below a poverty threshold. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

The prevalence of poverty, sometimes referred to as the poverty incidence or poverty headcount ratio, is the percentage of individuals living below the national poverty threshold ([threshold]). [Insert description of the national poverty threshold.]

The prevalence of poverty was calculated by [insert calculations used]. Finally, after applying the household member sampling weight, the sum of the number of households in which the per capita daily consumption in local currency units (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.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national poverty threshold, such as the National Statistics Office]

**Depth of poverty.** [Describe the results presented in Table 4.2.8. Interpret the results in relation to the results presented in Table 4.2.2 and Table 4.2.5.]

Table 4.2.8: Comparison of Depth of Poverty at the National Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **% of poverty line** | **95% CI** | **na** |  | **% of poverty line** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ 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 measures the average gap between the consumption level of individuals and the poverty line. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

Estimates are based on de jure household members.

The depth of poverty, or poverty gap, is the average consumption shortfall multiplied by the prevalence of poverty using the national poverty threshold.

The depth of poverty 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 household in the sample from the national poverty line in LCU for the year and month of the ZOI Survey, with the resulting difference set to zero for all non-poor households. The figure was then divided by the national 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 household was summed across all households and then divided by the sum of the number of all sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national poverty threshold, such as the National Statistics Office]

**Average consumption shortfall of the poor.** [Describe the results presented in Table 4.2.9. Interpret the results in relation to the results presented in Table 4.2.3 and Table 4.2.6.]

Table 4.2.9: Comparison of Average Consumption Shortfall of the Poor at the National Threshold of [Threshold] in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |
| **Characteristic** | **USD  (2005 PPP)** | **% of poverty line** | **na** |  | **USD  (2005 PPP)** | **% of poverty line** | **na** |
| **All households** |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |
| **Household education** | | |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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.

Estimates are based on de jure household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

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

The average consumption shortfall of the poor, expressed in USD (2005 PPP), 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 national poverty line in LCU for the year and month of the ZOI Survey. The figure was then converted to 2005 prices by multiplying by the ratio of the 2005 Consumer Price Index (CPI) LCU and the CPI for the year and month of the ZOI Survey LCU, where survey month and year CPI LCU=[XX] and 2005 CPI LCU=[XX]. The resulting figure was converted to 2005 USD by dividing by the 2005 PPP conversion rate of the ZOI Survey country ([XX]). 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 sum of the number of all poor sampled households with consumption data.

The average consumption shortfall of the poor, expressed as a percentage of the national poverty line, 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 national poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the national 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national poverty threshold, such as the National Statistics Office]

# Women’s empowerment in agriculture

This chapter presents findings related to the Women’s Empowerment in Agriculture Index (WEAI).[[19]](#footnote-20) 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.

## 5.1 Overview

The WEAI is the first-ever measure to directly capture women’s empowerment and inclusion in the agriculture sector and was originally developed to track changes in women’s empowerment that occur as a direct or indirect result of Feed the Future programming. Following its widespread uptake, the WEAI was improved and streamlined to make it less time-consuming and expensive to collect, resulting in the A-WEAI.[[20]](#footnote-21) All five domains of the original WEAI are retained, but the 10 indicators in the original WEAI are reduced to 6 in the A-WEAI.

The A-WEAI survey module is administered to the primary adult male decisionmaker and the primary adult female decisionmaker (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 decisionmakers 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 A-WEAI modules if there is only a self-identified primary adult male decisionmaker and no self-identified primary adult female decisionmaker, or if there are no adults 18 years of age or older.[[21]](#footnote-22)

The A-WEAI comprises two sub-indices: The 5DE and the GPI. 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.

The A-WEAI score is calculated as: *A-WEAI score=0.9(5DE)+0.1(GPI)*

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:[[22]](#footnote-23) *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

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 is composed of 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. An individual who has adequate achievements in 80 percent or more of the weighted indicators that compose the 5DE is identified as empowered (equivalent to four of the five A-WEAI domains).[[23]](#footnote-24) These indicators are also used to compute an inadequacy score for each individual, which is the weighted average of the indicators (0=adequate; 1=inadequate), and is used in the GPI calculation. **Table 5.1.1** presents the 5DE domains, indicators, and adequacy cut-offs. Appendix 4.1 presents more information, including the survey questions and criteria used to determine adequacy for each 5DE indicator.

Table 5.1.1: A-WEAI Domains, 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/he could decide to a medium or high extent if she/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/he makes decisions, has input into decisions, or feels she/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 dayc |

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.

c Respondents who reported the past 24 hours as being an atypical workday are excluded.

Source: Adapted from Malapit et al., 2015

The A-WEAI survey questions that are administered to the primary adult female decisionmaker and used to determine her empowerment status and calculate the inadequacy score are also administered to the primary adult male decisionmaker in the same household and used to determine his empowerment status and inadequacy score. The GPI is the second sub-index of the A-WEAI and is calculated using these data for the primary adult female and male decisionmakers in households that have both.

The GPI measures the extent of inequality in empowerment in a household between the primary adult male decisionmaker and the primary adult female decisionmaker. The GPI excludes households that lack both a primary adult male decisionmaker and a primary adult female decisionmaker. A household is considered to lack gender parity if the woman is disempowered and her inadequacy score is higher than that of the man. The GPI comprises two components: (1) proportion of gender parity-inadequate households, and (2) the average empowerment gap, which is the average normalized percentage gap in the censored inadequacy score of women and men in households that do not have gender parity.

The average normalized empowerment gap (*IGPI )* is calculated as:

*IGPI=(inadequacy scorewoman–inadequacy scoreman)/(1–inadequacy scoreman)*

Note that the empowerment gap is normalized because each household has a different threshold for gender parity that is based on the man’s inadequacy score in the household. The average empowerment gap is normalized by dividing each difference in inadequacy scores by the maximum possible gap for women, which is 1 (i.e., complete inadequacy) minus the man’s inadequacy score.

The GPI score is calculated as: *GPI=1–(HGPIxIGPI)*

Where:

*HGPI*=percentage of women without gender parity

*IGPI*=average normalized empowerment gap

The GPI score can be improved by increasing the percentage of women who have gender parity or, for those women who are less empowered than men, by reducing the empowerment gap between the woman and man in the same household.

This chapter presents findings on the A-WEAI and the indices and indicators that compose the index, comparing Phase One ZOI estimates at baseline and at endline. For additional details on calculating the A-WEAI, please refer to the *Guide to Feed the Future Statistics*.[[24]](#footnote-25)

## 5.2 Summary of A-WEAI results

This section presents the following A-WEAI results for women and men at baseline and at endline: (1) A-WEAI scores, disaggregated by age group and region/subzone, if applicable; (2) 5DE scores, representing the percentage of individuals achieving empowerment; (3) GPI scores, including percentage of women achieving gender parity; and (4) the average empowerment gap.

**Table 5.2.1** presents an overview of the A-WEAI, 5DE, and GPI scores, disaggregated by age group and region/subzone if applicable, comparing estimates at baseline and at endline.

[Describe the results presented in Table 5.2.1.]

Table 5.2.1: Comparison of A-WEAI, 5DE, and GPI Scores, and Average Empowerment Gap in the Phase One ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Indicator** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.** | **95% CI** | **n** |  | **Est.** | **95% CI** | **n** |
| **Womenc** |  |  |  |  |  |  |  |  |  |  |
| **A-WEAI score** |  |  |  |  |  |  |  |  |  |  |
| Age category |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| **5DE score** |  |  |  |  |  |  |  |  |  |  |
| Women achieving empowerment (%) |  |  |  |  |  |  |  |  |  |  |
| Weighted indicators in which disempowered individuals have adequate achievements (%)d |  |  |  |  |  |  |  |  |  |  |
| Number of women |  |  |  |  |  |  |  |  |  |  |
| **GPI score** |  |  |  |  |  |  |  |  |  |  |
| Women achieving gender parity (%) |  |  |  |  |  |  |  |  |  |  |
| Age category |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Average empowerment gap |  |  |  |  |  |  |  |  |  |  |
| Number of dual-adult households |  |  |  |  |  |  |  |  |  |  |
| **Mene** |  |  |  |  |  |  |  |  |  |  |
| **5DE score** |  |  |  |  |  |  |  |  |  |  |
| Men achieving empowerment (%) |  |  |  |  |  |  |  |  |  |  |
| Weighted indicators in which disempowered individuals have adequate achievements (%)d |  |  |  |  |  |  |  |  |  |  |
| Number of men |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Also referred to as the average adequacy score.

e Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

The WEAI was calculated at baseline, but only data for the A-WEAI were collected at endline; therefore, a baseline value for the A-WEAI was calculated so that baseline-endline comparisons could be made.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Table 5.2.2** presents the percentages of women and men achieving empowerment in the Phase One ZOI disaggregated by age, education, poverty status, region, and whether a woman’s child is being fed according to recommendations,[[25]](#footnote-26) comparing estimates at baseline and at endline.

[Describe the results presented in Table 5.2.2.]

Table 5.2.2: Comparison of Empowerment in the Phase One ZOI by Sex, Age, Education, Poverty Status, Region, and Child Feeding Behavior, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Est.a** | **95% CI** | **n** |  | **Est.a** | **95% CI** | **n** |
| **Women** |  |  |  |  |  |  |  |  |  |  |
| **All women** |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| **Education** | | | | |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **0-5 months old exclusively breastfedd** | | | |  |  |  |  |  |  |  |
| Yes |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  |  |  |  |  |  |  |
| **6-23 months old with minimum acceptable diete** | | | | | |  |  |  |  |  |
| Yes |  |  |  |  |  |  |  |  |  |  |
| No |  |  |  |  |  |  |  |  |  |  |
| **Men** |  |  |  |  |  |  |  |  |  |  |
| **All men** |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| **Education** | | | | |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

^ Results not statistically reliable, n<30

a Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data; estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

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

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ‘yes’ category indicates the percentage of primary adult female decisionmakers who achieved empowerment if any children 0-5 months of age for whom they are the primary caregiver were exclusively breastfed during the day and night preceding the survey. The ‘no’ category indicates percentage of primary adult female decisionmakers who achieved empowerment if none of the children 0-5 months of age for whom they are primary caregiver were exclusively breastfed during the day and night preceding the survey. Primary adult female decisionmakers who are not primary caregivers of children 0-5 months of age are excluded.

e The ‘yes’ category indicates the percentage of primary adult female decisionmakers who achieved empowerment if any children 6-23 months of age for whom they are primary caregivers received a minimum acceptable diet during the day and night preceding the survey. The ‘no’ category indicates the percentage of primary adult female decisionmakers who achieved empowerment if none of the children 6-23 months of age for whom they are primary caregivers received a minimum acceptable diet during the day and night preceding the survey. Primary adult female decisionmakers who are not primary caregivers of children 6-23 months of age are excluded.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Empowerment is a complex and multidimensional concept. Aggregating the different dimensions of empowerment into a single index to generate the A-WEAI score provides a simple way to communicate the status of women’s empowerment in agriculture, compare those scores across countries and over time, and analyze the relationship of women’s empowerment in agriculture to other outcomes of interest, such as hunger and malnutrition. A-WEAI scores also provide incentives for decisionmakers to reduce the prevalence and intensity of disempowerment.

Based on the A-WEAI methodology, empowerment in agriculture occurs when a woman has adequate achievements across the 80 percent of the indicators that compose the index. Therefore, decomposing the A-WEAI and examining its individual indicators 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.

## 5.3 A-WEAI domain and indicator results

This section presents A-WEAI results for the Feed the Future Phase One baseline and endline ZOI Surveys, disaggregated by age and decomposed by: (1) average percentage of individuals achieving adequacy across the six A-WEAI indicators; (2) contribution of each indicator to empowerment; and (3) percentage of individuals with adequate achievements in each A-WEAI indicator, using censored headcount ratios. Examining censored headcount ratios (i.e., percentages) helps focus attention on those indicators that are the biggest constraints to empowerment *among the disempowered.* Uncensored headcount ratios present indicator results *regardless of empowerment status* by identifying those indicators that report the lowest percentages achieving adequacy.[[26]](#footnote-27)

**Table 5.3.1** presents the average censored headcount ratios (i.e., percentages) of women achieving adequacy in the six A-WEAI indicators, which is also a Feed the Future phase two context indicator. The purpose of reporting on the average percentage of women achieving adequacy across the six A‑WEAI indicators overall and for individual indicators is two-fold: to bring greater attention to the composition of empowerment and disempowerment, and to identify the individual indicators that present the greatest constraints to empowerment for women and men.

[Describe the results presented in Table 5.3.1.]

Table 5.3.1: Comparison of Average Percent of Primary Adult Decisionmakers in the Phase One ZOI Achieving Adequacy in the Six A-WEAI Indicators, by Sex and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A-WEAI indicator** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Womenc** |  |  |  |  |  |  |  |  |  |  |
| Averaged |  |  |  |  |  |  |  |  |  |  |
| **Age category** | |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| **Mene** |  |  |  |  |  |  |  |  |  |  |
| Averaged |  |  |  |  |  |  |  |  |  |  |
| **Age category** | |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Average percentage (censored headcount ratio)

e Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

The Feed the Future ZOI context indicator, “Average percent of women achieving adequacy across the six indicators of the A-WEAI,” is calculated as the sum of the censored headcount ratios for primary adult female decisionmakers for each of the six A-WEAI indicators, divided by six (the number of indicators). It shows the average across the six indicators of the proportion of primary adult female decisionmakers in the ZOI population who are disempowered but still achieved adequacy in an individual A-WEAI indicator.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Table 5.3.2** presents the percentage of individuals in the Phase One ZOI achieving adequacy in each indicator, comparing estimates at baseline and at endline.

[Describe the results in Table 5.3.2.]

Table 5.3.2: Comparison of Adequate Achievement in Each A-WEAI Indicator in the Phase One ZOI Using Censored Headcount Ratios, by Sex and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **A-WEAI indicator and characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Womenc** |  |  |  |  |  |  |  |  |  |  |
| Input in productive decisions |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Ownership of assets |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Access to and decisions on credit |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Control over income |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Group membership |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Workload |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| **Mend** |  |  |  |  |  |  |  |  |  |  |
| Input in productive decisions |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Ownership of assets |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Access to and decisions on credit |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Control over income |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Group membership |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Workload |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 5.4 Descriptive statistics for A-WEAI domains and indicators

This section presents more granular information on data collected in the A-WEAI ZOI Survey module. The sub-sections are organized by A-WEAI domains.

### 5.4.1 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 two agricultural activities.

**Table 5.4.1** presents the percentages of women and men in the Phase One ZOI who are involved in economic and agriculture-related activities (i.e., food crop farming, cash crop farming, livestock raising, fishing, non‑farm economic activities, and wage or salaried employment), comparing estimates at baseline and at endline, to capture the breadth of economic activities in which individuals are engaged and any changes over time. **Table 5.4.2** presents the percentages of women and men in the Phase One ZOI who have input into the decisions made about specific activities, comparing estimates at baseline and at endline.

[Describe the results in Tables 5.4.1 and 5.4.2.]

Table 5.4.1: Comparison of Participation in Economic Activities, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Economic activity** |  | **Baseline ([Year(s)])** | | |  |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | | **95% CI** | **n** |  | **%** | | **95% CI** | **n** |
| **Womenc** |  | |  |  |  |  | |  |  |  |  |  |
| Food crop farming |  | |  |  |  |  | |  |  |  |  |  |
| Cash crop farming |  | |  |  |  |  | |  |  |  |  |  |
| Livestock raising |  | |  |  |  |  | |  |  |  |  |  |
| Fishing or fishpond culture |  | |  |  |  |  | |  |  |  |  |  |
| Non-farm economic activities |  | |  |  |  |  | |  |  |  |  |  |
| Wage or salaried employment |  | |  |  |  |  | |  |  |  |  |  |
| **Mend** |  | |  |  |  |  | |  |  |  |  |  |
| 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 Significance tests were performed to determine whether a difference exists between the baseline and endline estimates.

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table 5.4.2: Comparison of Input into Decisionmaking on Production, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Economic activity** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Womenc** |  |  |  |  |  |  |  |  |  |  |
| Food crop farming |  |  |  |  |  |  |  |  |  |  |
| Cash crop farming |  |  |  |  |  |  |  |  |  |  |
| Livestock raising |  |  |  |  |  |  |  |  |  |  |
| Fishing or fishpond culture |  |  |  |  |  |  |  |  |  |  |
| Non-farm economic activities |  |  |  |  |  |  |  |  |  |  |
| Wage or salaried employment |  |  |  |  |  |  |  |  |  |  |
| **Mend** |  |  |  |  |  |  |  |  |  |  |
| 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 Significance tests were performed to determine whether a difference exists between the baseline and endline estimates.

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Having input means that the individual reported having input into most or all decisions regarding the activity.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 5.4.2 Resources

Adequacy in *Resources* is measured by two indicators: (1) ownership of assets, and (2) access to and decisions related to credit. Women and men are considered adequate in asset ownership if they own alone or jointly at least two small assets or one large asset. They are considered adequate in 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 5.4.3** presents ownership of assets in the Phase One ZOI, comparing estimates at baseline and at endline.

[Describe the results presented in Table 5.4.3.]

Table 5.4.3: Comparison of Ownership of Productive Resources, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Productive resource** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Woman owns solely or jointlyc** |  |  |  |  |  |  |  |  |  |  |
| Agricultural land |  |  |  |  |  |  |  |  |  |  |
| Large livestock |  |  |  |  |  |  |  |  |  |  |
| Small livestock |  |  |  |  |  |  |  |  |  |  |
| Chickens, ducks, turkeys, and pigeons |  |  |  |  |  |  |  |  |  |  |
| Fishpond or fishing equipment |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |
| **Man owns solely or jointlyd** |  |  |  |  |  |  |  |  |  |  |
| Agricultural land |  |  |  |  |  |  |  |  |  |  |
| Large livestock |  |  |  |  |  |  |  |  |  |  |
| Small livestock |  |  |  |  |  |  |  |  |  |  |
| Chickens, ducks, turkeys, and pigeons |  |  |  |  |  |  |  |  |  |  |
| Fishpond or fishing equipment |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Table 5.4.4** and **Table 5.4.5** show the second indicator of the *Resources* domain—access to and decisionmaking on credit. **Table 5.4.4** presents the percentage of women and men in the Phase One ZOI who report that a member of their household received any loan in the 12 months preceding the ZOI Surveys, comparing estimates at baseline and at endline. The in-kind and cash loan categories are not mutually exclusive; a household could have received both types of loans. For women and men living in households that received a loan, the table also presents the percentages of women and men who report having contributed to the decision to take the loan or the decisions on how to use the loan. **Table 5.4.5** presents the sources of credit accessed by households in the 12 months preceding the ZOI Surveys, comparing estimates at baseline and at endline.

[Describe the results presented in Table 5.4.4.]

Table 5.4.4: Comparison of Credit Access, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Womenc** |  |  |  |  |  |  |  |  |  |  | |
| **Household received a loan** | |  |  |  |  |  |  |  |  |  | |
| Any loan |  |  |  |  |  |  |  |  |  |  | |
| In-kind loan |  |  |  |  |  |  |  |  |  |  | |
| Cash loan |  |  |  |  |  |  |  |  |  |  | |
| **Woman contributed to credit decision** | | | | | | | | | | | |
| Any decision |  |  |  |  |  |  |  |  |  |  | |
| On whether to borrow |  |  |  |  |  |  |  |  |  |  | |
| On how to use loan |  |  |  |  |  |  |  |  |  |  | |
| **Mend** |  |  |  |  |  |  |  |  |  |  | |
| **Household received a loan** | |  |  |  |  |  |  |  |  |  | |
| Any loan |  |  |  |  |  |  |  |  |  |  | |
| In-kind loan |  |  |  |  |  |  |  |  |  |  | |
| Cash loan |  |  |  |  |  |  |  |  |  |  | |
| **Man contributed to credit decision** | | | | | | | | | | |
| Any decision |  |  |  |  |  |  |  |  |  |  | |
| On whether to borrow |  |  |  |  |  |  |  |  |  |  | |
| On how to use loan |  |  |  |  |  |  |  |  |  |  | |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

[Describe the results presented in Table 5.4.5.]

Table 5.4.5: Comparison of Source of Credit Accessed, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Credit source** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%a** | **95% CI** | **n** |  | **%a** | **95% CI** | **n** |
| **Womend** |  |  |  |  |  |  |  |  |  |  |
| Any source |  |  |  |  |  |  |  |  |  |  |
| Nongovernmental organization |  |  |  |  |  |  |  |  |  |  |
| Informal lender |  |  |  |  |  |  |  |  |  |  |
| Formal lender |  |  |  |  |  |  |  |  |  |  |
| Friends or relatives |  |  |  |  |  |  |  |  |  |  |
| Group-based micro-finance |  |  |  |  |  |  |  |  |  |  |
| Informal credit/savings groups |  |  |  |  |  |  |  |  |  |  |
| No credit needed |  |  |  |  |  |  |  |  |  |  |
| **Mene** |  |  |  |  |  |  |  |  |  |  |
| Any source |  |  |  |  |  |  |  |  |  |  |
| Nongovernmental organization |  |  |  |  |  |  |  |  |  |  |
| Informal lender |  |  |  |  |  |  |  |  |  |  |
| Formal lender |  |  |  |  |  |  |  |  |  |  |
| Friends or relatives |  |  |  |  |  |  |  |  |  |  |
| Group-based micro-finance |  |  |  |  |  |  |  |  |  |  |
| Informal credit/savings groups |  |  |  |  |  |  |  |  |  |  |
| No credit needed |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a Percentages may sum to more than 100 percent for women and men because loans may have been received from more than one source.

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

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

e Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 5.4.3 Income

Adequacy in *Income* is measured by input into decisions related to income and expenditures. Women and men 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 expenditures. **Table 5.4.6** presents the percentages of women and men in the Phase One ZOI who have input into the decisions made regarding the use of income derived from an activity, comparing estimates at baseline and at endline.

[Describe the results presented in Table 5.4.6.]

Table 5.4.6: Comparison of Input into Decisionmaking on Use of Income and Major Household Expenditures, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Economic activity** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **n** |  | **%** | **95% CI** | **n** |
| **Womenc** |  |  |  |  |  |  |  |  |  |  |
| Food crop farming |  |  |  |  |  |  |  |  |  |  |
| Cash crop farming |  |  |  |  |  |  |  |  |  |  |
| Livestock raising |  |  |  |  |  |  |  |  |  |  |
| Fishing or fishpond culture |  |  |  |  |  |  |  |  |  |  |
| Non-farm economic activities |  |  |  |  |  |  |  |  |  |  |
| Wage or salaried employment |  |  |  |  |  |  |  |  |  |  |
| **Mend** |  |  |  |  |  |  |  |  |  |  |
| 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 Significance tests were performed to determine whether a difference exists between the baseline and endline estimates.

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 5.4.4 Leadership

Adequacy in *Leadership* is measured through anindividual’s active involvement with community groups. Women and men are considered adequate if they are active members of at least one community group. **Table 5.4.7** presents the percentages of women and men in the Phase One ZOI who are active members of groups in their community, comparing estimates at baseline and at endline.

[Describe the results presented in Table 5.4.7.]

Table 5.4.7: Comparison of Group Membership, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Type of group** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **Womend** |  |  |  |  |  |  |  |  |  |  |
| Any group |  |  |  |  |  |  |  |  |  |  |
| Agricultural producer’s 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 |  |  |  |  |  |  |  |  |  |  |
| **Mene** |  |  |  |  |  |  |  |  |  |  |
| Any group |  |  |  |  |  |  |  |  |  |  |
| Agricultural producer’s 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 |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a 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 in this empowerment indicator.

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

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

e Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 5.4.5 Time

Adequacy in the last domain, *Time,* assesses the workloads of women and men, as measured using a time allocation log. Women and men are considered adequate if they spend 10.5 hours or less performing work activities in a 24-hour period. **Table 5.4.8** presents the percentages of women and men in the Phase One ZOI that performed the listed activities the day prior to the ZOI Surveys and the average number of hours that they spent performing each activity, comparing estimates at baseline and at endline.[[27]](#footnote-28) 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 the results presented in Table 5.4.8.]

Table 5.4.8: Comparison of Time Allocation, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Performed activity  (%)** | | |  | **Mean hours devoted (hours:minutes)** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **Baseline  ([Year(s)])** |  | **Endline  ([Year(s)])** |  | **Baseline  ([Year(s)])** |  | **Endline  ([Year(s)])** |
| **Womenc** |  |  |  |  |  |  |  |
| Sleeping and resting |  |  |  |  |  |  |  |
| Eating and drinking |  |  |  |  |  |  |  |
| Personal care |  |  |  |  |  |  |  |
| School and homeworkd |  |  |  |  |  |  |  |
| Work as employedd |  |  |  |  |  |  |  |
| Own business workd |  |  |  |  |  |  |  |
| Farming, livestock, fishingd |  |  |  |  |  |  |  |
| Shopping, getting servicesd |  |  |  |  |  |  |  |
| Weaving, sewing, textile cared |  |  |  |  |  |  |  |
| Cookingd |  |  |  |  |  |  |  |
| Domestic work (fetching food and water)d |  |  |  |  |  |  |  |
| Care for children, adults, elderlyd |  |  |  |  |  |  |  |
| Commuting (for work or school)d |  |  |  |  |  |  |  |
| Travel (not for work or school) |  |  |  |  |  |  |  |
| Watching TV, listening to radio, reading |  |  |  |  |  |  |  |
| Exercising |  |  |  |  |  |  |  |
| Social activities and hobbies |  |  |  |  |  |  |  |
| Religious activities |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |
| **Number of women** |  |  |  |  |  |  |  |
| **Mene** |  |  |  |  |  |  |  |
| Sleeping and resting |  |  |  |  |  |  |  |
| Eating and drinking |  |  |  |  |  |  |  |
| Personal care |  |  |  |  |  |  |  |
| School and homeworkd |  |  |  |  |  |  |  |
| Work as employedd |  |  |  |  |  |  |  |
| Own business workd |  |  |  |  |  |  |  |
| Farming, livestock, fishingd |  |  |  |  |  |  |  |
| Shopping, getting servicesd |  |  |  |  |  |  |  |
| Weaving, sewing, textile cared |  |  |  |  |  |  |  |
| Cookingd |  |  |  |  |  |  |  |
| Domestic work (fetching food and water)d |  |  |  |  |  |  |  |
| Care for children, adults, elderlyd |  |  |  |  |  |  |  |
| Commuting (for work or school)d |  |  |  |  |  |  |  |
| Travel (not for work or school) |  |  |  |  |  |  |  |
| Watching TV, listening to radio, reading |  |  |  |  |  |  |  |
| Exercising |  |  |  |  |  |  |  |
| Social activities and hobbies |  |  |  |  |  |  |  |
| Religious activities |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |
| **Number of men** |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Activities considered to be work in the A-WEAI calculations

e Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:

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

Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

# Hunger and dietary intake

This chapter presents findings related to hunger and women’s and young children’s dietary intake in the Phase One ZOI.

## 6.1 Household hunger

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 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. The HHS is used to assess, geographically target, monitor, and evaluate hunger in settings affected by substantial food insecurity.

The HHS is used to measure the prevalence of households in the Phase One ZOI experiencing moderate or severe hunger. The HHS was developed by the USAID-funded Food and Nutrition Technical Assistance II Project (FANTA-2/FHI 360) in collaboration with the United Nations Food and Agriculture Organization. It has been cross-culturally validated to allow comparison across different food-insecure contexts.[[28]](#footnote-29) The HHS is used to estimate the percentage of households affected by severity: little to no household hunger (HHS score 0–1), moderate household hunger (HHS score 2–3), and severe household hunger (HHS score 4–6). The HHS should be measured at the same time each year and, ideally, at the most vulnerable time of year, such as right before the harvest or during the dry season.[[29]](#footnote-30),[[30]](#footnote-31)

The hungry season in [Country] occurs [insert description of the hunger season in the ZOI]. Data for the HHS at baseline were collected in [insert description of the timing of the Feed the Future Phase One baseline ZOI Survey in relation to the hungry season and food insecurity], and data for the HHS at endline were collected in [insert description of the timing of the Feed the Future Phase One endline ZOI Survey in relation to the hungry season and food insecurity].

**Table 6.1** presents estimates of household hunger in the Phase One ZOI, comparing estimates at baseline and at endline for all households, as well as by gendered household type, household educational attainment, and poverty status.[[31]](#footnote-32)

[Describe the results presented in Table 6.1.]

Table 6.1: Comparison of Household Hunger in the Phase One ZOI, by Severity, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline ([Year(s)])** | | | | |  | **Endline ([Year(s)])** | | | | |
| **Characteristic** | **Little to none (%)** | **Moderate (%)** | **Severe  (%)** | **Moderate or severe (%)** | **na** |  | **Little to none (%)** | **Moderate (%)** | **Severe  (%)** | **Moderate or severe (%)** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |  |
| **Household education** | | | | | |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** | | | | | |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 6.2 Women’s dietary diversity

This section presents information on the dietary diversity of women of reproductive age (15-49 years) in the Phase One ZOI.

Women of reproductive age 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.[[32]](#footnote-33) The Phase One Feed the Future women’s dietary diversity indicator—the mean women’s dietary diversity score (WDDS)—is a proxy for the probability of micronutrient adequacy of women’s diets. The indicator reports the mean number of food groups that women of reproductive age consumed during the day and night preceding the survey.

The WDDS indicator is calculated using nine food groups: (1) grains, roots, and tubers; (2) legumes and nuts; (3) dairy products; (4) organ meat; (5) eggs; (6) flesh food and small animal protein; (7) vitamin A‑rich dark green leafy vegetables; (8) other vitamin A-rich vegetables and fruits; and (9) other fruits and vegetables. The number of food groups that each woman consumed the day and night preceding the survey is averaged across all women of reproductive age in the sample for whom dietary diversity data were collected to produce the mean WDDS.

**Table 6.2.1** presents WDDS estimates for all women of reproductive age in the Phase One ZOI, comparing estimates at baseline and at endline. The estimates are shown for all women and by selected characteristics—women’s age groups, women’s educational attainment, gendered household type, poverty status, and household hunger.

[Describe the results presented in Table 6.2.1.]

Table 6.2.1: Comparison of Mean Number of Food Groups Consumed by Women of Reproductive Age in the Phase One ZOI, in Total and by Selected Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Mean** | **95% CI** | **na** |  | **Mean** | **95% CI** | **na** |
| **All women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Woman’s age** |  |  |  |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Woman’s education** |  |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Table 6.2.2** presents the percentages of women of reproductive age in the Phase One ZOI who consumed each of the nine food groups, comparing estimates at baseline and at endline.

[Describe the results presented in Table 6.2.2.]

Table 6.2.2: Comparison of Percent of Women of Reproductive Age in the Phase One ZOI Who Consumed Specified Foods in the ZOI, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline ([Year(s)])** | |  | **Endline ([Year(s)])** | | **Diff.** | **p-valuea** | **Sig.b** |
| **Food group** | **%** | **95% CI** | **%** | **95% CI** |
| Grains, roots, and tubers |  |  |  |  |  |  |  |  |
| Legumes, 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** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 6.3 Infant and young child feeding

This section presents young children’s dietary intake measures, including two Feed the Future indicators: the prevalence of exclusive breastfeeding among children 0-5 months of age and the percent of children 6-23 months of age consuming a MAD.

### 6.3.1 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.[[33]](#footnote-34) Exclusive breastfeeding means that the infant receives breast milk (including expressed breast milk or breast milk from a wet nurse) and may receive oral rehydration salts, vitamins, minerals, or medicines, but does not receive any other food or liquid. This indicator measures the percentage of children 0‑5 months of age who were exclusively breastfed during the day preceding the survey.

**Table 6.3.1** presents the prevalence of exclusive breastfeeding among children 0-5 months of age in the Phase One ZOI, comparing estimates at baseline and at endline. Estimates are shown for all children, as well as by selected characteristics—child’s sex, educational attainment of the child’s primary caregiver, poverty status, and household hunger. Note that the data are collected from each child’s self-identified primary caregiver and not strictly from the biological mother, although it is often the same person.

[Describe the results presented in Table 6.3.1.]

Table 6.3.1: Comparison of Exclusive Breastfeeding among Children 0-5 Months of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All children 0-5 months of age** |  |  |  |  |  |  |  |  |  |  |
| **Child’s sex** | | | |  |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 6.3.2 Minimum acceptable diet

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 and is calculated separately for breastfed and non-breastfed children. This composite indicator measures both the minimum meal frequency and minimum dietary diversity (MDD) based on caregiver reports of the frequency with which the child was fed and the foods that the child consumed during the day and night preceding the survey. Calculation of the indicator requires data on children’s age in months, breastfeeding status, foods consumed, number of semi-solid or solid feeds, and number of milk feeds.

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. Breastfed children 6-23 months of age must have consumed foods from at least 4 of 7 food groups[[34]](#footnote-35) (MDD) and eaten solid, semi-solid, or soft foods at least 2 times if they were 6-8 months of age or at least 3 times if they were 9-23 months of age (minimum meal frequency). Non-breastfed children 6-23 months of age must have consumed foods from at least 4 of 6 food groups[[35]](#footnote-36) (MDD), received at least 2 milk feedings, and eaten solid, semi-solid, or soft foods at least 4 times (minimum meal frequency). As recommended by WHO, the ZOI Survey disaggregates the indicator for the following age groups: 6-11 months, 12-17 months, and 18‑23 months.[[36]](#footnote-37)

**Table 6.3.2** presents the MAD indicator for children 6-23 months of age in the Phase One ZOI, comparing estimates at baseline and at endline. Estimates are shown for all children, as well as by selected characteristics—child’s sex and age, caregiver’s educational attainment, poverty status, and household hunger.

[Describe the results presented in Table 6.3.2.]

Table 6.3.2: Comparison of Children 6-23 Months of Age in the Phase One ZOI Who Received a Minimum Acceptable Diet, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |  | **p-valueb** | **Sig.c** |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** | **Diff.** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

**Table 6.3.3** presents the percentages of children in the Phase One ZOI who achieved minimum meal frequency and MDD, as well as the percentages of children who consumed each of the food groups included in the MAD indicator, comparing estimates at baseline and at endline.[[37]](#footnote-38) Estimates are shown for all children and by age categories, and are presented for all children and separately for breastfed children and non‑breastfed children.

[Describe the results presented in Table 6.3.3.]

Table 6.3.3: Comparison of Percent of Children 6-23 Months of Age in the Phase One ZOI Achieving Minimum Feeding Frequency, Dietary Diversity, and Consuming Specified Foods, in Total and by Breastfeeding Status and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Breastfeeding status and food group consumed** | **Baseline**  **([Year(s)])** | | | |  | **Endline**  **([Year(s)])** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **All** | **Child age (months)** | | |  | **All** | **Child age (months)** | | |
| **children** | **6-11** | **12-17** | **18-23** |  | **children** | **6-11** | **12-17** | **18-23** |
| **All children 6-23 months of age** | | | | |  |  |  |  |  |
| Achieving minimum meal frequency |  |  |  |  |  |  |  |  |  |
| Achieving minimum dietary diversity |  |  |  |  |  |  |  |  |  |
| **Consuming:** | | | | |  |  |  |  |  |
| Grains, roots, and tubers |  |  |  |  |  |  |  |  |  |
| Legumes and nuts |  |  |  |  |  |  |  |  |  |
| Dairy products |  |  |  |  |  |  |  |  |  |
| Flesh foods |  |  |  |  |  |  |  |  |  |
| Eggs |  |  |  |  |  |  |  |  |  |
| Vitamin A-rich fruits and vegetables |  |  |  |  |  |  |  |  |  |
| Other fruits and vegetables |  |  |  |  |  |  |  |  |  |
| **Number of children** |  |  |  |  |  |  |  |  |  |
| **Breastfed children** | | | | |  |  |  |  |  |
| Achieving minimum meal frequency |  |  |  |  |  |  |  |  |  |
| Achieving minimum dietary diversity |  |  |  |  |  |  |  |  |  |
| **Consuming:** | | | | |  |  |  |  |  |
| Grains, roots, and tubers |  |  |  |  |  |  |  |  |  |
| Legumes and nuts |  |  |  |  |  |  |  |  |  |
| Dairy products |  |  |  |  |  |  |  |  |  |
| Flesh foods |  |  |  |  |  |  |  |  |  |
| Eggs |  |  |  |  |  |  |  |  |  |
| Vitamin A-rich fruits and vegetables |  |  |  |  |  |  |  |  |  |
| Other fruits and vegetables |  |  |  |  |  |  |  |  |  |
| **Number of breastfed children** |  |  |  |  |  |  |  |  |  |
| **Non-breastfed children** | | | | |  |  |  |  |  |
| Achieving minimum meal frequency |  |  |  |  |  |  |  |  |  |
| Achieving minimum milk feeding frequency |  |  |  |  |  |  |  |  |  |
| Achieving minimum dietary diversity |  |  |  |  |  |  |  |  |  |
| **Consuming:** | | | | |  |  |  |  |  |
| Grains, roots, and tubers |  |  |  |  |  |  |  |  |  |
| Legumes and nuts |  |  |  |  |  |  |  |  |  |
| Dairy products |  |  |  |  |  |  |  |  |  |
| Flesh foods |  |  |  |  |  |  |  |  |  |
| Eggs |  |  |  |  |  |  |  |  |  |
| Vitamin A-rich fruits and vegetables |  |  |  |  |  |  |  |  |  |
| Other fruits and vegetables |  |  |  |  |  |  |  |  |  |
| **Number of non-breastfed children** |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

Notes:

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

Estimates are based on de facto household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

# Nutritional status of women and children

This chapter presents findings on the nutritional status of women and children, including the Feed the Future Phase One anthropometry indicators: the percentage of women of reproductive age who are underweight, and the percentages of children under 5 years of age who are stunted, wasted, and underweight.

## 7.1 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 cut-off points, which is useful when assessing the nutritional status of adults. A high BMI can be an indicator of high body fat, but BMI is not diagnostic of the body fat or health of an individual. To determine whether a high BMI is a health risk, a healthcare provider would need to perform further assessments.

**Table 7.1** presents anthropometry results for women of reproductive age in the Phase One ZOI, comparing estimates at baseline and at endline.[[38]](#footnote-39) 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 selected characteristics—woman’s age and educational attainment, gendered household type, poverty status, and household hunger.

[Describe the results presented in Table 7.1.]

Table 7.1: Comparison of Mean BMI and Prevalence of Underweight, Normal Weight, Overweight, and Obese Women of Reproductive Age in the Phase One ZOI, in Total and by Individual and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | | | | |  | **Endline**  **([Year(s)])** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Mean BMI** | **BMI category (%)** | | | | **na** |  | **Mean BMI** | **BMI category (%)** | | | | **na** |
| **Under-weight** | **Normal weight** | **Over-weight** | **Obese** |  | **Under-weight** | **Normal weight** | **Over-weight** | **Obese** |
| **All non-pregnant women of reproductive age** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Woman’s age** | | | | | | |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Woman’s education** | | | | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Children only (no adults) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | | | | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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.

Notes:

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

Estimates are based on de facto household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

## 7.2 Stunting, wasting, and underweight 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 Phase One ZOI: stunting (low height-for-age), wasting (low weight-for-height), and underweight (low weight-for-age).

### 7.2.1 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.[[39]](#footnote-40) 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 more than two standard deviations (SDs) below the median of the 2006 WHO Child Growth Standard.[[40]](#footnote-41)

**Table 7.2.1** presents the prevalence of severe stunting (<-3 SD) and stunting (<-2 SD) and mean height-for-weight z-scores for children under 5 years of age in the Phase One ZOI, comparing estimates at baseline and at endline.[[41]](#footnote-42) Estimates are presented for all children and by selected characteristics—child’s sex and age, caregiver’s educational attainment, gendered household type, poverty status, and household hunger.

[Describe the results presented in Table 7.2.1.]

Table 7.2.1: Comparison of the Prevalence of Stunting and Mean Height-for-Age Z-Scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | | |  | **Endline**  **([Year(s)])** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Severely stunted  (<-3 SD) (%)** | **Stunted  (<-2 SD) (%)** | **Mean  z-score** | **na** |  | **Severely stunted  (<-3 SD) (%)** | **Stunted  (<-2 SD) (%)** | **Mean  z-score** | **na** |
|  |
| **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 |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationb** | | | | |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | | |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | | |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 7.2.2 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 Phase One ZOI who are acutely malnourished, as defined by a weight-for-height z-score[[42]](#footnote-43) more than 2 SDs below the median of the 2006 WHO Child Growth Standards.

**Table 7.2.2** presents the prevalence of severe wasting (<-3 SD), wasting (<-2 SD), and mean weight‑for-height z-scores for children under 5 years of age in the Phase One ZOI, comparing estimates at baseline and at endline.[[43]](#footnote-44) **Table 7.2.3** presents the prevalence of healthy weight (≥-2 SD and ≤+2 SD), overweight (>+2 SD), and obese (>+3 SD), children under 5 years of age in the Phase One ZOI, comparing estimates at baseline and at endline.[[44]](#footnote-45) Estimates are presented for all children and by selected characteristics—child’s sex and age, caregiver’s educational attainment, gendered household type, poverty status, and household hunger.

[Describe the results presented in Table 7.2.2 and Table 7.2.3.]

Table 7.2.2: Comparison of Prevalence of Wasting and Mean Weight-for-Height Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | | |  | **Endline**  **([Year(s)])** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Severely wasted  (<-3 SD) (%)** | **Wasted (<-2 SD) (%)** | **Mean  z-score** | **na** |  | **Severely wasted  (<-3 SD) (%)** | **Wasted (<-2 SD) (%)** | **Mean  z-score** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationb** | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table 7.2.3: Comparison of Prevalence of Healthy Weight, Overweight, and Obesity among Children Under 5 Years of Age in the ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | | |  | **Endline**  **([Year(s)])** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Healthy weight  (-2 SD to  +2 SD)  (%)** | **Overweight (> +2SD) (%)** | **Obese  (> +3SD) (%)** | **na** |  | **Healthy weight  (-2 SD to  +2 SD)  (%)** | **Overweight (> +2SD) (%)** | **Obese  (> +3SD) (%)** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationb** | |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### 7.2.3 Underweight (low weight-for-age)

Underweight is a weight-for-age measurement that reflects acute undernutrition, chronic undernutrition, or both. This indicator measures the percentage of children 0-59 months of age who are underweight, as defined by a weight-for-age z-score of more than two SDs below the median of the 2006 WHO Child Growth Standards.

**Table 7.2.4** shows the prevalence of severe underweight (<-3 SD), underweight (<-2 SD), and mean weight-for-age z-scores for children under 5 years of age in the Phase One ZOI.[[45]](#footnote-46) Estimates are presented for all children and by selected characteristics—child’s sex and age, caregiver’s educational attainment, gendered household type, poverty status, and household hunger.

[Describe the results presented in Table 7.2.4.]

Table 7.2.4: Comparison of Prevalence of Underweight and Mean Weight-for-Age Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | | |  | **Endline**  **([Year(s)])** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Severely underweight (<-3 SD) (%)** | **Underweight (<-2 SD) (%)** |  |  | **Severely underweight (<-3 SD) (%)** | **Underweight (<-2 SD) (%)** |  |  |
| **Mean  z-score** | **na** | **Mean  z-score** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationb** | |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |
| **Gendered household type** |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Significance tests were performed to determine whether a difference exists between the baseline and endline estimates. Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

# [Country-specific module(s)]

[This chapter is reserved for any country-specific modules, as applicable.]

# 9. Summary and conclusions

[This chapter summarizes the key findings and provides some conclusions for the Feed the Future Phase One ZOI Survey endline assessment, including a summary of changes in the Feed the Future indicators between baseline and endline. It will typically reiterate what is stated in the executive summary but should not be identical.]

# References

Alkire, S., Meinzen-Dick, R., Peterman, A., Quisumbing, A., Seymour, G., & Vaz, A. (2013). The Women’s Empowerment in Agriculture Index. *World Development, 52*(C), 71-91.

Ballard, T., Coates, J., Swindale, A., & Deitchler, M. (2011). *Household Hunger Scale: Indicator definition and measurement guide*. Washington, DC: Food and Nutrition Technical Assistance II Project, FHI 360.

Black, R.E., et al. (2008). Maternal and child undernutrition: Global and regional exposures and health consequences. *The Lancet, 371*(9608), 243-260.

Darnton-Hill, I., et al. (2005). Micronutrient deficiencies and gender: Social and economic costs. *American Journal of Clinical Nutrition, 81*(Supplement), 1198S-1205S.

Deaton, A. (2008). *The analysis of household surveys: A microeconomic approach to development policy*. Baltimore, MD: The Johns Hopkins University Press.

Deaton, A., & Zaidi, S. (2002). Guidelines for constructing consumption aggregates for welfare analysis. Working Paper No. 135. Washington, DC: The World Bank. Available at: [http://siteresources.worldbank.org/INTPA/Resources/429966-1092778639630/deatonZaidi.pdf](http://siteresources.worldbank.org/INTPA/Resources/429966-1092778639630/deatonZaidi.pdf%20)

Deitchler, M., Ballard, T., Swindale, A., & Coates, J. (2011). *FANTA Technical Note No. 12: Introducing a simple measure of household hunger for cross-cultural use.* Washington, DC: United States Agency for International Development.

Grosh, M., & Glewwe, P. (1995). A guide to living standards measurement study surveys and their data sets. Living Standards Measurement Study Group Working Paper No. 120. Washington, DC: The World Bank.

Johnson, K.B., Zalisk, K., & Kaur, J. (2018). *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.

Leroy, J.L., & Frongillo, E.A. (2019). Perspective: What does stunting really mean? A critical review of the evidence. *Advances in Nutrition*, 10, 196-204.

Malapit, H.J., Kovarik, C., Sproule, K., Meinzen-Dick, R.S., & Quisumbing, A.R. (2015). *Instructional guide on the Abbreviated Women’s Empowerment in Agriculture Index (A-WEAI).* Washington, DC: International Food Policy Research Institute. Available at: <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/129719>

Malapit, H.J., et al. (2014). *Measuring progress toward empowerment: Women’s empowerment in agriculture index: Baseline report.* Washington, DC: International Food Policy Research Institute. Available at: <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/128190>

Stukel, D.M. (2018). *Feed the Future population-based survey sampling guide.* Washington, DC: Food and Nutrition Technical Assistance Project, FHI 360.

UNICEF & World Health Organization (WHO). (2012). *Progress on drinking water and sanitation: Joint Monitoring Programme update 2012.* New York, NY: UNICEF and WHO. Available at: <https://www.who.int/water_sanitation_health/publications/jmp_report-2012/en/>

UNICEF & World Health Organization (WHO). (2018). *Core questions on water, sanitation and hygiene for household surveys: 2018 update.* New York, NY: UNICEF and WHO.

United Nations Development Group. (2003). *Indicators for monitoring the Millennium Development Goals: Definitions, rationale, concepts and sources*. New York: United Nations.

United States Agency for International Development (USAID). (2018a). *Feed the Future Indicator Handbook*. Washington, DC: USAID.

United States Agency for International Development (USAID). (2018b). *Feed the Future ZOI Survey methods toolkit.* Washington, DC: USAID. Available at: <https://www.agrilinks.org/post/feed-future-zoi-survey-methods>.

UNSTATS. (n.d.). SDG Indicators—Meta repository. Available at: <https://unstats.un.org/sdgs/metadata/>

Victora, C.G., et al. (2008). Maternal and child undernutrition: Consequences for adult health and human capital. *The Lancet*, *371*(9608), 340-357.

World Bank. (2015). Poverty & equality data FAQs. Available at: <http://go.worldbank.org/PYLADRLUN0>.

World Health Organization (WHO) & UNICEF. (2006). *WHO child growth standards and the identification of severe acute malnutrition in infants and children*. Geneva, Switzerland: WHO; New York, NY: UNICEF.

World Health Organization. (2018a). Infant and young child feeding. Available at: <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>.

World Health Organization. (2018b). Indicators for assessing infant and young child feeding practices. Part 1 Definitions. Conclusions of a consensus meeting held 6-8 November 2017, Washington, DC.

World Health Organization (WHO) & UNICEF. (2018). *JMP methodology. 2017 update & SDG baselines.* Geneva, Switzerland: WHO; New York, NY: UNICEF. Available at: <https://washdata.org/sites/default/files/JMP%20methodology-Apr-2018-5.pdf>.

Zalisk, K., Dupuis, G., Gauthier, M., Kaur, J., Khan, N., Swindale, A. and 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. Retrieved from:

<https://drive.google.com/drive/folders/1pgXHkUPJtf0og95ue_vq7cpI0z_GqVDx?usp=sharing>.

# Appendix 1. Supplementary data

## A1.1. ZOI Survey [endline survey year(s)] Feed the Future indicator estimates

**Table A1.1** presents Feed the Future Phase One Zone of Influence indicators at endline—in total and by key disaggregates. The table also presents for each indicator and key disaggregate: standard deviation (SD), 95% confidence interval (CI), design effect, inter-cluster correlation coefficient, non-response rate, weighted number of observations, unweighted number of observations, and the p-value for the statistical test performed to assess differences among disaggregate categories.

Table A1.1: Feed the Future Phase One ZOI Indicator Estimates, by Key Disaggregates: [Country] [Baseline Year(s)]-[Endline Year(s)]

| **Indicator** | **Estimate** | | **SD** | | **95% CI** | **DEFF** | **ICC** | **Non-response ratea** | | **Weighted number** | | **Unweighted numberb** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mean daily per capita consumption expenditures in constant 2010 USD (2005 PPP)** | | | | | | | | |  | |  | |  | |
| **All households** |  | |  | |  |  |  |  | |  | |  | |
| **Gendered household type** |  | |  | |  |  |  |  | |  | |  | |
| Male and female adults |  | |  | |  |  |  |  | |  | |  | |
| Female adults only |  | |  | |  |  |  |  | |  | |  | |
| Male adults only |  | |  | |  |  |  |  | |  | |  | |
| Children only |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of poverty: Percentage of people living on less than $1.25/day (2005 PPP)** | | | | | | | | |  | |  | |  | |
| **All households** |  | |  | |  |  |  |  | |  | |  | |
| **Gendered household type** |  | |  | |  |  |  |  | |  | |  | |
| Male and female adults |  | |  | |  |  |  |  | |  | |  | |
| Female adults only |  | |  | |  |  |  |  | |  | |  | |
| Male adults only |  | |  | |  |  |  |  | |  | |  | |
| Children only |  | |  | |  |  |  |  | |  | |  | |
| **Depth of poverty: Mean percentage shortfall relative to $1.25/day poverty line (2005 PPP)** | | | | | | | | |  | |  | |  | |
| **All households** |  | |  | |  |  |  |  | |  | |  | |
| **Gendered household type** |  | |  | |  |  |  |  | |  | |  | |
| Male and female adults |  | |  | |  |  |  |  | |  | |  | |
| Female adults only |  | |  | |  |  |  |  | |  | |  | |
| Male adults only |  | |  | |  |  |  |  | |  | |  | |
| Children only |  | |  | |  |  |  |  | |  | |  | |
| **Abbreviated Women’s Empowerment in Agriculture Indexc** | | | | | | | | | | | | | | |
| **All women** |  | |  | |  |  |  |  | |  | |  | |
| **Women’s age** |  | |  | |  |  |  |  | |  | |  | |
| 18-29 years |  | |  | |  |  |  |  | |  | |  | |
| 30 years or older |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of moderate and severe hunger** | |  | |  | |  |  | |  | |  | |  | |
| **All households** |  | |  | |  |  |  |  | |  | |  | |
| **Gendered household type** |  | |  | |  |  |  |  | |  | |  | |
| Male and female adults |  | |  | |  |  |  |  | |  | |  | |
| Female adults only |  | |  | |  |  |  |  | |  | |  | |
| Male adults only |  | |  | |  |  |  |  | |  | |  | |
| Children only |  | |  | |  |  |  |  | |  | |  | |
| **Women’s dietary diversity: Mean number of food groups consumed by women of reproductive aged** | | | | | | | | | | | | | | |
| All women 15-49 years of age |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of exclusive breastfeeding among children under 6 months of aged** | | | | | | | | | | | | | | |
| **All children** |  | |  | |  |  |  |  | |  | |  | |
| **Children’s sex** |  | |  | |  |  |  |  | |  | |  | |
| Male |  | |  | |  |  |  |  | |  | |  | |
| Female |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of children 6-23 months of age receiving a minimum acceptable dietd** | | | | | | | | | | | | | | |
| **All children** |  | |  | |  |  |  |  | |  | |  | |
| **Children’s sex** |  | |  | |  |  |  |  | |  | |  | |
| Male |  | |  | |  |  |  |  | |  | |  | |
| Female |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of underweight women of reproductive aged** | | | | | | | | | | | | | | |
| All non-pregnant women 15-49 years of age |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of stunted children under 5 years of aged** | | | | | | | | | | | | | | |
| **All children** |  | |  | |  |  |  |  | |  | |  | |
| **Children’s sex** |  | |  | |  |  |  |  | |  | |  | |
| Male |  | |  | |  |  |  |  | |  | |  | |
| Female |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of wasted children under 5 years of aged** | | | | | | | | | | | | | | |
| **All children** |  | |  | |  |  |  |  | |  | |  | |
| **Children’s sex** |  | |  | |  |  |  |  | |  | |  | |
| Male |  | |  | |  |  |  |  | |  | |  | |
| Female |  | |  | |  |  |  |  | |  | |  | |
| **Prevalence of underweight children under 5 years of aged** | | | | | | | | | | | | | | |
| **All children** |  | |  | |  |  |  |  | |  | |  | |
| **Children’s sex** |  | |  | |  |  |  |  | |  | |  | |
| Male |  | |  | |  |  |  |  | |  | |  | |
| Female |  | |  | |  |  |  |  | |  | |  | |

n/a=not available, PPP=purchasing power parity, ICC=intercluster correlation, DEFF=design effect

^ Results not statistically reliable, n<30

a Non-response rate is defined as: (Number of eligible individuals or households – Number of individuals or households included in the reported indicator)/Number of eligible individuals or 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 The Women’s Empowerment in Agriculture Index was calculated at baseline, but only data for the Abbreviated Women’s Empowerment in Agriculture Index (A-WEAI) were collected at endline. Therefore, a baseline value for the A-WEAI was calculated so that endline-baseline comparisons could be made.

d Estimates are based on de facto household members.

Notes:

Estimates are sample-weighted.

Estimates are based on de jure household members, except where noted.

Sources: Feed the Future [Country] ZOI Survey [endline survey year(s)]

## A1.2. Supplementary results tables

Appendix 1.2 presents supplementary results tables by report chapter.

### Chapter 2: Methodologies

Table A1.2.1: Comparison of Response Rates in the Phase One ZOI, by Module, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Response ratea** | **Baseline  ([Year(s)])** | **Endline  ([Year(s)])** |
| --- | --- | --- |
| **Module 1: Household roster** | |  |
| Number of households selected |  |  |
| Number of households occupied |  |  |
| Number of households interviewed |  |  |
| Household response rate (%) |  |  |
| **Module 2: Dwelling characteristics** | |  |
| Number of eligible households |  |  |
| Number of eligible households interviewed |  |  |
| Module 2 response rate (%) |  |  |
| **Module 3: Resilience and food security** | |  |
| Number of eligible households |  |  |
| Number of eligible households interviewed |  |  |
| Module 3 response rate (%) |  |  |
| **Module 4: Women's nutrition** | |  |
| Number of eligible women (15-49 years of age) |  |  |
| Number of eligible women interviewed |  |  |
| Module 4 response rate (%) |  |  |
| **Module 4A: Women's anthropometry** | |  |
| Number of eligible women (15-49 years of age, non-pregnant |  |  |
| Number of eligible interviewed |  |  |
| Module 4A response rate (%) |  |  |
| **Module 5: Children's nutrition** | |  |
| Number of eligible children (0-23 months of age) |  |  |
| Number of caregivers of eligible interviewed |  |  |
| Module 5 response rate (%)b |  |  |
| **Module 5A: Children's anthropometry** | |  |
| Number of eligible children (0-59 months of age) |  |  |
| Number of eligible children interviewed |  |  |
| Module 5A response rate (%) |  |  |
| **Module 6A: A-WEAI, women** | |  |
| Number of eligible women |  |  |
| Number of eligible women interviewed |  |  |
| Module 6A response rate (%) |  |  |
| **Module 6B: A-WEAI, men** | |  |
| Number of eligible men |  |  |
| Number of eligible men interviewed |  |  |
| Module 6B response rate (%) |  |  |
| **Module 8: Consumption expenditures** | |  |
| Number of eligible households |  |  |
| Number of eligible households interviewed |  |  |
| Module 8 response rate (%) |  |  |

a Module response rates are calculated based on the module outcome codes, except where otherwise noted. The response rates are defined as the number of eligible individuals or households interviewed divided by the number of eligible individuals or households. All occupied households are eligible for Modules 1, 2, 3, and 8. Eligibility determination for Modules 4, 4A, 5, 5A, and 6 is initiated in the household roster and confirmed in the respective module. Note that for Module 5, the primary caregivers of the children served as the respondents, not the children directly.

b Module 4A does not include an outcome code, so the module is considered to be complete if the currently pregnant field is complete, and the height and weight fields have values less than 999.4.

c Module 5A does not include an outcome code, so the module is considered to be complete if the length or height field is complete, the height field has a value less than 999.4, and the weight field has a value less than 99.94. Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### Chapter 3: Population in the ZOI

Table A1.3.1: Household Demographic Characteristics in the Phase One ZOI, by Gendered Household Type, Feed the Future Phase One Endline ZOI Survey

| **Characteristic** | **Gendered household type** | | | |
| --- | --- | --- | --- | --- |
| **Male and female adults** | **Female adults only** | **Male adults only** | **Children only** |
| Mean household sizea |  |  |  |  |
| Mean number of children under 2 years of agea |  |  |  |  |
| Mean number of children under 5 years of agea |  |  |  |  |
| Mean number of children 5 years of age or older (5-17 years)a |  |  |  |  |
| Mean number of youth (15-29 years)a |  |  |  |  |
| Mean number of women of reproductive age (15-49 years)a |  |  |  |  |
| Mean number of adult male household membersa,b |  |  |  |  |
| Mean number of adult female household membersa,b |  |  |  |  |
| Percent of adults who are male (%)a,b |  |  |  |  |
| Percent of adults who are female (%)a,b |  |  |  |  |
| **Highest household educational attainment (%)c** |  |  |  |  |
| No education |  |  |  |  |
| Less than primary |  |  |  |  |
| Completed primary |  |  |  |  |
| Completed secondary |  |  |  |  |
| Higher |  |  |  |  |
| **Number of households** |  |  |  |  |

^ Results not statistically reliable, n<30

a Estimates are based on de jure household members.

b Feed the Future defines 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 Estimates are based on de facto household members.

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

Source: Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.3.2: Characteristics of Primary Adult Female and Male Decisionmakers in the ZOI, Feed the Future Phase One Endline Survey

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Female** | |  | **Male** | |
| **%** | **na** | **%** | **na** |
| **Age** |  |  |  |  |  |
| 18-24 |  |  |  |  |  |
| 25-29 |  |  |  |  |  |
| 30-39 |  |  |  |  |  |
| 40-49 |  |  |  |  |  |
| 50-59 |  |  |  |  |  |
| 60+ |  |  |  |  |  |
| **Marital status** | | |  |  |  |
| Married |  |  |  |  |  |
| Living in a consensual union |  |  |  |  |  |
| Widowed |  |  |  |  |  |
| Divorced or separated |  |  |  |  |  |
| Never married or in a union |  |  |  |  |  |
| **Education** |  |  |  |  |  |
| No education |  |  |  |  |  |
| Less than primary |  |  |  |  |  |
| Completed primary |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |
| Higher |  |  |  |  |  |
| **Economic activityb** |  |  |  |  |  |
| Participates in some form of economic activity |  |  |  |  |  |
| **Participation in economic activity by typec** |  |  |  |  |  |
| Farm |  |  |  |  |  |
| Non-farm |  |  |  |  |  |
| Wage/salaried |  |  |  |  |  |
| **Number of primary adult decisionmakers** |  |  |  |  |  |

^ Results not statistically reliable, n<30

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, the sum of disaggregate sample sizes may not equal the overall sample size.

b Both paid and unpaid types of economic activity are included. Domestic work, such as caring for children or the elderly and cooking and cleaning, are 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.

Source: Feed the Future [Country] ZOI Survey [endline survey year(s)]

### Chapter 4: Household economic status

Table A1.4.1.1: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], USD (2005 PPP), in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | | **Endline**  **([Year(s)])** | | |  |  |  |
| **Characteristic** | **USD**  **(2005 PPP)** | **95% CI** | **na** | |  | **USD**  **(2005 PPP)** | **95% CI** | **na** | **Diff.** | **p-valueb** | **Sig.c** |
| **All households** |  |  |  | |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  | |  |  |  |  |  |  |  |
| Female adults only |  |  |  | |  |  |  |  |  |  |  |
| Male adults only |  |  |  | |  |  |  |  |  |  |  |
| Children only |  |  |  | |  |  |  |  |  |  |  |
| **Household education** | |  |  | |  |  |  |  |  |  |  |
| No education |  |  |  | |  |  |  |  |  |  |  |
| Less than primary |  |  |  | |  |  |  |  |  |  |  |
| Completed primary |  |  |  | |  |  |  |  |  |  |  |
| Completed secondary |  |  |  | |  |  |  |  |  |  |  |
| Higher |  |  |  | |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  | |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  | |  |  |  |  |  |  |  |
| Severe hunger |  |  |  | |  |  |  |  |  |  |  |

PPP=purchasing power parity

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

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

The average consumption shortfall of the poor, expressed in USD (2005 PPP), 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 $1.25 per day poverty line in LCU for the year and month of the ZOI Survey. The figure was then converted to 2005 prices by multiplying by the ratio of the 2005 Consumer Price Index (CPI) LCU and the CPI for the year and month of the ZOI Survey LCU, where survey month and year CPI LCU=[XX] and 2005 CPI LCU=[XX]. The resulting figure was converted to 2005 USD by dividing by the 2005 PPP conversion rate of the ZOI Survey country ([XX]). 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

Table A1.4.1.2: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], Percent of Poverty Line, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |  | **p-valueb** |  |
| **Characteristic** | **% of poverty line** | **95% CI** | **na** |  | **% of poverty line** | **95% CI** | **na** | **Diff.** | **Sig.c** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

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

The average consumption shortfall of the poor, expressed as a percentage of the poverty line, 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 $1.25 per day poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the $1.25 per day 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

Table A1.4.2.1: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], USD (2005 PPP), in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |  | **p-valueb** | **Sig.c** |
| **Characteristic** | **USD**  **(2005 PPP)** | **95% CI** | **na** |  | **USD**  **(2005 PPP)** | **95% CI** | **na** | **Diff.** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

PPP=purchasing power parity

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

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

The average consumption shortfall of the poor, expressed in USD (2005 PPP), 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 national extreme poverty line in LCU for the year and month of the ZOI Survey. The figure was then converted to 2005 prices by multiplying by the ratio of the 2005 Consumer Price Index (CPI) LCU and the CPI for the year and month of the ZOI Survey LCU, where survey month and year CPI LCU=[XX] and 2005 CPI LCU=[XX]. The resulting figure was converted to 2005 USD by dividing by the 2005 PPP conversion rate of the ZOI Survey country ([XX]). 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

Table A1.4.2.2: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Extreme Threshold of [Threshold], Percent of Poverty Line, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |  | **p-valueb** | **Sig.c** |
| **Characteristic** | **% of poverty line** | **95% CI** | **na** |  | **% of poverty line** | **95% CI** | **na** | **Diff.** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

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

The average consumption shortfall of the poor, expressed as a percentage of the poverty line, 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 national extreme poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the national extreme 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

Table A1.4.3.1: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Threshold of [Threshold], USD (2005 PPP), in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **USD**  **(2005 PPP)** | **95% CI** | **na** |  | **USD**  **(2005 PPP)** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

PPP=purchasing power parity

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

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

The average consumption shortfall of the poor, expressed in USD (2005 PPP), 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 national poverty line in LCU for the year and month of the ZOI Survey. The figure was then converted to 2005 prices by multiplying by the ratio of the 2005 Consumer Price Index (CPI) LCU and the CPI for the year and month of the ZOI Survey LCU, where survey month and year CPI LCU=[XX] and 2005 CPI LCU=[XX]. The resulting figure was converted to 2005 USD by dividing by the 2005 PPP conversion rate of the ZOI Survey country ([XX]). 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

Table A1.4.3.2: Comparison of Average Consumption Shortfall of the Poor in the Phase One ZOI at the National Threshold of [Threshold], Percent of Poverty Line, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **% of poverty line** | **95% CI** | **na** |  | **% of poverty line** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | |  |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

a The “n” reflects the unweighted number of households—not the number of household members—even though the average consumption shortfall of the poor measures the percentage of the poverty line at which poor individuals live and the average value of consumption of poor individuals. 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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

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

The average consumption shortfall of the poor, expressed as a percentage of the national poverty line, 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 national poverty line in LCU for the year and month of the ZOI Survey. The figure was then divided by the national 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 sum of the number of all poor sampled households with consumption data.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]; [Source of data for national extreme poverty threshold, such as the National Statistics Office]

### Chapter 5: A-WEAI

Table A1.5.1: Comparison of Adequate Achievement in Each A-WEAI Indicator in the Phase One ZOI Using Uncensored Headcount Ratios, by Sex and Age, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **A-WEAI indicator and characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | |  | **p-valuec** |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%a,b** | **95% CI** | **n** |  | **%a,b** | **95% CI** | **n** | **Diff.** | **Sig.d** |
| **Women** |  |  |  |  |  |  |  |  |  |  |
| Input in productive decisions |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Ownership of assets |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Access to and decisions on credit |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Control over income |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Group membership |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Workload |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| **Men** |  |  |  |  |  |  |  |  |  |  |
| Input in productive decisions |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Ownership of assets |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Access to and decisions on credit |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Control over income |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Group membership |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |
| Workload |  |  |  |  |  |  |  |  |  |  |
| **Age category** |  |  |  |  |  |  |  |  |  |  |
| 18-29 |  |  |  |  |  |  |  |  |  |  |
| 30+ |  |  |  |  |  |  |  |  |  |  |

A-WEAI=Abbreviated Women’s Empowerment in Agriculture Index

^ Results not statistically reliable, n<30

a Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

b Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

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

d Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.5.2: Comparison of Participation in Activities, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Activity** | **Participated in activity** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Baseline  ([Year(s)])** | |  | **Endline  ([Year(s)])** | | **Diff.** | **p-valuea** | **Sig.b** |
| **%** | **95% CI** | **%** | **95% CI** |
| **Womenc** |  |  |  |  |  |  |  |  |
| Sleeping and resting |  |  |  |  |  |  |  |  |
| Eating and drinking |  |  |  |  |  |  |  |  |
| Personal care |  |  |  |  |  |  |  |  |
| School and homeworkd |  |  |  |  |  |  |  |  |
| Work as employedd |  |  |  |  |  |  |  |  |
| Own business workd |  |  |  |  |  |  |  |  |
| Farming, livestock, fishingd |  |  |  |  |  |  |  |  |
| Shopping, getting servicesd |  |  |  |  |  |  |  |  |
| Weaving, sewing, textile cared |  |  |  |  |  |  |  |  |
| Cookingd |  |  |  |  |  |  |  |  |
| Domestic work (fetching food and water)d |  |  |  |  |  |  |  |  |
| Care for children, adults, elderlyd |  |  |  |  |  |  |  |  |
| Commuting (for work or school)d |  |  |  |  |  |  |  |  |
| Travel (not for work or school) |  |  |  |  |  |  |  |  |
| Watching TV, listening to radio, reading |  |  |  |  |  |  |  |  |
| Exercising |  |  |  |  |  |  |  |  |
| Social activities and hobbies |  |  |  |  |  |  |  |  |
| Religious activities |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| **Number of women** |  |  |  |  |  |  |  |  |
| **Mene** |  |  |  |  |  |  |  |  |
| Sleeping and resting |  |  |  |  |  |  |  |  |
| Eating and drinking |  |  |  |  |  |  |  |  |
| Personal care |  |  |  |  |  |  |  |  |
| School and homeworkd |  |  |  |  |  |  |  |  |
| Work as employedd |  |  |  |  |  |  |  |  |
| Own business workd |  |  |  |  |  |  |  |  |
| Farming, livestock, fishingd |  |  |  |  |  |  |  |  |
| Shopping, getting servicesd |  |  |  |  |  |  |  |  |
| Weaving, sewing, textile cared |  |  |  |  |  |  |  |  |
| Cookingd |  |  |  |  |  |  |  |  |
| Domestic work (fetching food and water)d |  |  |  |  |  |  |  |  |
| Care for children, adults, elderlyd |  |  |  |  |  |  |  |  |
| Commuting (for work or school)d |  |  |  |  |  |  |  |  |
| Travel (not for work or school) |  |  |  |  |  |  |  |  |
| Watching TV, listening to radio, reading |  |  |  |  |  |  |  |  |
| Exercising |  |  |  |  |  |  |  |  |
| Social activities and hobbies |  |  |  |  |  |  |  |  |
| Religious activities |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| **Number of men** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Activities considered to be work in the A-WEAI calculations

e Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:   
Estimates are sample-weighted; numbers of observations are unweighted.  
Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [BL survey year(s)]; Feed the Future [Country] ZOI Survey [EL survey year(s)]

Table A1.5.3: Comparison of Mean Hours Devoted to Activities, by Sex, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Mean hours devoted (hours:minutes)** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline  ([Year(s)])** | |  | **Endline  ([Year(s)])** | | **Diff.** | **p-valuea** | **Sig.b** |
| **Activity** | **Est.** | **95% CI** | **Est.** | **95% CI** |
| **Womenc** |  |  |  |  |  |  |  |  |
| Sleeping and resting |  |  |  |  |  |  |  |  |
| Eating and drinking |  |  |  |  |  |  |  |  |
| Personal care |  |  |  |  |  |  |  |  |
| School and homeworkd |  |  |  |  |  |  |  |  |
| Work as employedd |  |  |  |  |  |  |  |  |
| Own business workd |  |  |  |  |  |  |  |  |
| Farming, livestock, fishingd |  |  |  |  |  |  |  |  |
| Shopping, getting servicesd |  |  |  |  |  |  |  |  |
| Weaving, sewing, textile cared |  |  |  |  |  |  |  |  |
| Cookingd |  |  |  |  |  |  |  |  |
| Domestic work (fetching food and water)d |  |  |  |  |  |  |  |  |
| Care for children, adults, elderlyd |  |  |  |  |  |  |  |  |
| Commuting (for work or school)d |  |  |  |  |  |  |  |  |
| Travel (not for work or school) |  |  |  |  |  |  |  |  |
| Watching TV, listening to radio, reading |  |  |  |  |  |  |  |  |
| Exercising |  |  |  |  |  |  |  |  |
| Social activities and hobbies |  |  |  |  |  |  |  |  |
| Religious activities |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| **Number of women** |  |  |  |  |  |  |  |  |
| **Mene** |  |  |  |  |  |  |  |  |
| Sleeping and resting |  |  |  |  |  |  |  |  |
| Eating and drinking |  |  |  |  |  |  |  |  |
| Personal care |  |  |  |  |  |  |  |  |
| School and homeworkd |  |  |  |  |  |  |  |  |
| Work as employedd |  |  |  |  |  |  |  |  |
| Own business workd |  |  |  |  |  |  |  |  |
| Farming, livestock, fishingd |  |  |  |  |  |  |  |  |
| Shopping, getting servicesd |  |  |  |  |  |  |  |  |
| Weaving, sewing, textile cared |  |  |  |  |  |  |  |  |
| Cookingd |  |  |  |  |  |  |  |  |
| Domestic work (fetching food and water)d |  |  |  |  |  |  |  |  |
| Care for children, adults, elderlyd |  |  |  |  |  |  |  |  |
| Commuting (for work or school)d |  |  |  |  |  |  |  |  |
| Travel (not for work or school) |  |  |  |  |  |  |  |  |
| Watching TV, listening to radio, reading |  |  |  |  |  |  |  |  |
| Exercising |  |  |  |  |  |  |  |  |
| Social activities and hobbies |  |  |  |  |  |  |  |  |
| Religious activities |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| **Number of men** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

c Estimates for women exclude households that do not have a primary adult female decisionmaker or that have missing or incomplete indicator data.

d Activities considered to be work in the A-WEAI calculations

e Estimates for men exclude households that do not have a primary adult male decisionmaker or that have missing or incomplete indicator data.

Notes:   
Estimates are sample-weighted; numbers of observations are unweighted.  
Estimates are based on primary adult decisionmakers who are de jure household members.

Sources: Feed the Future [Country] ZOI Survey [BL survey year(s)]; Feed the Future [Country] ZOI Survey [EL survey year(s)]

### Chapter 6: Household hunger and dietary intake

Table A1.6.1.1: Comparison of Moderate to Severe Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** | | | |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.6.1.2: Comparison of Severe Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** | | | |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.6.1.3: Comparison of Moderate Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** | | | |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.6.1.4: Comparison of Little to No Household Hunger in the Phase One ZOI, in Total and by Selected Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| **Characteristic** | **%** | **95% CI** | **na** |  | **%** | **95% CI** | **na** |
| **All households** |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Household education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** | | | |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.6.2: Comparison of Percent of All Children 6-23 Months in the Phase One ZOI Achieving Minimum Feeding Frequency, Dietary Diversity, and Consuming Specified Foods, in Total and by Breastfeeding Status, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Breastfeeding status and food group consumed** | **Baseline ([Year(s)])** | |  | **Endline ([Year(s)])** | | **Diff.** | **p-valuea** | **Sig.b** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** |  | **%** | **95% CI** |
| **All children 6-23 months of age** | |  |  |  |  |  |  |  |
| Achieving minimum meal frequency |  |  |  |  |  |  |  |  |
| Achieving minimum dietary diversity |  |  |  |  |  |  |  |  |
| **Consuming:** | |  |  |  |  |  |  |  |
| Grains, roots, and tubers |  |  |  |  |  |  |  |  |
| Legumes and nuts |  |  |  |  |  |  |  |  |
| Dairy products |  |  |  |  |  |  |  |  |
| Flesh foods |  |  |  |  |  |  |  |  |
| Eggs |  |  |  |  |  |  |  |  |
| Vitamin A-rich fruits and vegetables |  |  |  |  |  |  |  |  |
| Other fruits and vegetables |  |  |  |  |  |  |  |  |
| **Number of children** |  |  |  |  |  |  |  |  |
| **Breastfed children** | |  |  |  |  |  |  |  |
| Achieving minimum meal frequency |  |  |  |  |  |  |  |  |
| Achieving minimum dietary diversity |  |  |  |  |  |  |  |  |
| **Consuming:** | |  |  |  |  |  |  |  |
| Grains, roots, and tubers |  |  |  |  |  |  |  |  |
| Legumes and nuts |  |  |  |  |  |  |  |  |
| Dairy products |  |  |  |  |  |  |  |  |
| Flesh foods |  |  |  |  |  |  |  |  |
| Eggs |  |  |  |  |  |  |  |  |
| Vitamin A-rich fruits and vegetables |  |  |  |  |  |  |  |  |
| Other fruits and vegetables |  |  |  |  |  |  |  |  |
| **Number of breastfed children** |  |  |  |  |  |  |  |  |
| **Non-breastfed children** | |  |  |  |  |  |  |  |
| Achieving minimum meal frequency |  |  |  |  |  |  |  |  |
| Achieving minimum milk feeding frequency |  |  |  |  |  |  |  |  |
| Achieving minimum dietary diversity |  |  |  |  |  |  |  |  |
| **Consuming:** | |  |  |  |  |  |  |  |
| Grains, roots, and tubers |  |  |  |  |  |  |  |  |
| Legumes and nuts |  |  |  |  |  |  |  |  |
| Dairy products |  |  |  |  |  |  |  |  |
| Flesh foods |  |  |  |  |  |  |  |  |
| Eggs |  |  |  |  |  |  |  |  |
| Vitamin A-rich fruits and vegetables |  |  |  |  |  |  |  |  |
| Other fruits and vegetables |  |  |  |  |  |  |  |  |
| **Number of non-breastfed children** |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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

b Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de jure household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

### Chapter 7: Nutritional status

Table A1.7.1.1: Comparison of Mean Body Mass Index among Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Est.** | **95% CI** | **na** |  | **Est.** | **95% CI** | **na** |
| **All non-pregnant women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Woman’s age** | | | |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Woman’s education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.1.2: Comparison of Prevalence of Underweight Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Est.** | **95% CI** | **na** |  | **Est.** | **95% CI** | **na** |
| **All non-pregnant women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Woman’s age** | | | |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Woman’s education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.1.3: Comparison of Prevalence of Normal Weight Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Est.** | **95% CI** | **na** |  | **Est.** | **95% CI** | **na** |
| **All non-pregnant women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Woman’s age** | | | |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Woman’s education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.1.4: Comparison of Prevalence of Overweight Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Est.** | **95% CI** | **na** |  | **Est.** | **95% CI** | **na** |
| **All non-pregnant women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Woman’s age** | | | |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Woman’s education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.1.5: Comparison of Prevalence of Obese Women of Reproductive Age in the Phase One ZOI, in Total and by Woman and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

|  | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Est.** | **95% CI** | **na** |  | **Est.** | **95% CI** | **na** |
| **All non-pregnant women of reproductive age** |  |  |  |  |  |  |  |  |  |  |
| **Woman’s age** | | | |  |  |  |  |  |  |  |
| 15-19 |  |  |  |  |  |  |  |  |  |  |
| 20-24 |  |  |  |  |  |  |  |  |  |  |
| 25-29 |  |  |  |  |  |  |  |  |  |  |
| 30-34 |  |  |  |  |  |  |  |  |  |  |
| 35-39 |  |  |  |  |  |  |  |  |  |  |
| 40-44 |  |  |  |  |  |  |  |  |  |  |
| 45-49 |  |  |  |  |  |  |  |  |  |  |
| **Woman’s education** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | | | |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** | | | |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

Est.=estimate

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.2.1: Comparison of Prevalence of Severe Stunting (<-3 SD) among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.2.2: Comparison of Prevalence of Stunting (<-2 SD) among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.2.3: Comparison of Mean Height-for-Age Z-Scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.3.1: Comparison of Prevalence of Severe Wasting among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.3.2: Comparison of Prevalence of Wasting among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.3.3: Comparison of Prevalence of Healthy Weight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.3.4: Comparison of Prevalence of Overweight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.3.5: Comparison of Prevalence of Obese Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.3.6: Comparison of Mean Weight-for-Height Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.4.1: Comparison of Prevalence of Severely Underweight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.4.2: Comparison of Prevalence of Underweight Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

Table A1.7.4.3: Comparison of Mean Weight-for-Age Z-scores among Children Under 5 Years of Age in the Phase One ZOI, in Total and by Selected Child, Caregiver, and Household Characteristics, Feed the Future Phase One Baseline and Endline ZOI Surveys

| **Characteristic** | **Baseline**  **([Year(s)])** | | |  | **Endline**  **([Year(s)])** | | | **Diff.** | **p-valueb** | **Sig.c** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **%** | **95% CI** | **na** | **%** | **95% CI** | **na** |
| **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 |  |  |  |  |  |  |  |  |  |  |
| **Caregiver’s educationd** | | | |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |  |  |
| Less than primary |  |  |  |  |  |  |  |  |  |  |
| Completed primary |  |  |  |  |  |  |  |  |  |  |
| Completed secondary |  |  |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |  |  |
| **Gendered household type** | |  |  |  |  |  |  |  |  |  |
| Male and female adults |  |  |  |  |  |  |  |  |  |  |
| Female adults only |  |  |  |  |  |  |  |  |  |  |
| Male adults only |  |  |  |  |  |  |  |  |  |  |
| Children only |  |  |  |  |  |  |  |  |  |  |
| **Poverty status** |  |  |  |  |  |  |  |  |  |  |
| Poor |  |  |  |  |  |  |  |  |  |  |
| Non-poor |  |  |  |  |  |  |  |  |  |  |
| **Household hunger** |  |  |  |  |  |  |  |  |  |  |
| Little to no hunger |  |  |  |  |  |  |  |  |  |  |
| Moderate hunger |  |  |  |  |  |  |  |  |  |  |
| Severe hunger |  |  |  |  |  |  |  |  |  |  |

^ Results not statistically reliable, n<30

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 endline estimates.

c Differences found to be statistically significant are indicated by level: \* p<0.05, \*\* p<0.01, \*\*\* p<0.001.

d The ZOI Survey identifies the primary caregiver of each age-eligible child. This person is likely, but not necessarily, the child’s biological mother.

Notes:

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

Estimates are based on de facto household members.

Sources: Feed the Future [Country] ZOI Survey [baseline survey year(s)]; Feed the Future [Country] ZOI Survey [endline survey year(s)]

# Appendix 2. Methodology

## A2.1 Sampling and weighting

### Sampling

The sample of households for the Feed the Future [Country] Zone of Influence (ZOI) Survey [endline survey year(s)] followed a two-stage stratified cluster sampling design. In the first stage, [xx number] enumeration areas (EAs) were selected from [national Census frame] in [xx number] districts by probability proportional to size sampling. In the second stage, [xx number] households were selected for interview at random from a comprehensive list of households generated during a listing operation that was fielded from [date to date]. Additional information about Feed the Future sampling methodology can be found in the *Feed the Future Population-Based Survey Sampling Guide*.[[46]](#footnote-47)

### Weighting

The weighting of survey data used 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 included the following: (1) measure of size of EAs (where size is in terms of the size of the population or number of households) used for selection of EAs; (2) measure of size of strata from which EAs were drawn; (3) measure of size of EAs at time of listing; and (4) response rates among households, women, and men. Weights were calculated for the following to account for differing levels of non-response:

1. Households (household-level indicators derived from Modules 2, 3, and 8)
2. Children under 5 years of age (Module 5—children’s anthropometry indicators)
3. Children under 2 years of age (Module 5—children’s nutrition indicators)
4. Women 15-49 years of age (Module 4—women’s dietary and underweight indicators)
5. Primary adult female decisionmakers (Module 6—female A-WEAI indicators)
6. Primary adult male decisionmakers (Module 6—male A-WEAI indicators)

Design weights were calculated based on the separate sampling probabilities for each sampling stage and for each EA. The following notation was used:

first-stage sampling probability of the i-th EA in stratum *h*.

second-stage sampling probability within the i-th EA (household selection).

The probability of selecting EA*i* from stratum *h*,in the sample is calculated as follows:

Where:

number of sample EAs selected in stratum *h*.

total number of households according to the sampling frame in all EAs in stratum *h*.

total number of households in selected EA *i* in stratum *h* (as per the first-stage sampling frame)*.*

The second-stage probability of selecting a household from EA *i* in stratum *h*, (**assuming that there is no segmentation within sampled** **EA** ***i***) is:

Where:

number of sample households selected for the *i*-th sample EA in stratum *h.*

total number of households listed for the *i*-th EA in stratum *h.*

Therefore, the overall selection probability of selecting a household from EA *i* of stratum *h* is the product of the selection probabilities of the two stages:

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

The sampling weight was calculated with the design weight corrected 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 households or individuals (women, children, or primary adult female or male decisionmakers).

## A2.2 Poverty prevalence and consumption expenditure methods

### Data source

[Insert details according to instructions.]

### Data preparation

#### Data excluded from analysis:

* [Insert details according to instructions.]

#### Imputations:

* [Insert details according to instructions.]

#### Prices:

* [Insert details according to instructions.]

#### Other adjustments:

* [Insert details according to instructions.]

### Currency conversions using consumer price indices and purchasing power parity

[Insert details according to instructions.]

### Poverty thresholds

[Insert details according to instructions.]

# Appendix 3. Data quality

This appendix presents information that reflects the quality of data collected in the Phase One Zone of Influence in the Feed the Future [Country] ZOI Survey [endline survey year(s)]. Data-driven decisions call for high-quality data collection. High-quality data was ensured in the endline ZOI Survey through the data collection program, field monitoring, data post-processing, and data analysis. The [Country] ZOI Survey used CSPro software and a standardized data collection program developed for all ZOI Survey implementers to use. The data collection program ensured a high level of data quality through validation constraints and automatic checks that were included in the program to check for correctness, consistency, and meaningfulness of data entered by interviewers. These checks included, but were not limited to, completion checks, structure checks, and consistency checks. The organization of the data file, including the validation constraints, is described in the ZOI Survey data dictionary.

Similarly, continuous data monitoring in the field is fundamental to the quality of data collection. In addition to using the data collection and monitoring approach described in the Feed the Future ZOI Survey Toolkit field manuals,[[47]](#footnote-48) the [Country] ZOI Survey in-country data manager ran field check tables that provided a management system for checking data quality. These tables cross-checked certain quality control indicators by field teams and individual interviewers to detect potential areas in which correction and remedial action were required. Any issues that were attributed to non-sampling error (i.e., field-based error) were communicated as feedback to the field teams.

In the post-processing stage, secondary editing procedures were implemented according to the Feed the Future ZOI Survey Data Processing Manual to ensure the data were clean and of the highest quality. During the analysis phase, any inconsistencies or issues identified by data analysts were communicated to the data processing manual for troubleshooting and resolution.

The remainder of this appendix focuses on final field check tables, which are a reflection of the quality of fieldwork, for the Feed the Future [Country] ZOI Survey [endline survey year(s)].

**Table A3.1** presents the household completion rate. [Describe the results presented in Table A3.1.]

Table A3.1: Household Completion Rate

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percent distribution of sampled households by result of household interview and household response rate by interviewer team, Feed the Future [Country] ZOI Survey [endline survey year(s)] | | | | | | | | | | | |
| **Team** | **Result of household interview** | | | | | | | |  | | |
| **Completed (1)** | **Not at home (2)** | **Extended absence (3)** | **Refused (5)** | **Dwelling vacant**  **(6)** | **Not a dwelling (7)** | **Ill or impaired (10)** | **Other**  **(96)** | **Total number** | **Total percentage** | **Household response rate**  **(%) a** |
| Team 1 |  |  |  |  |  |  |  |  |  |  |  |
| Team 2 |  |  |  |  |  |  |  |  |  |  |  |
| Team 3 |  |  |  |  |  |  |  |  |  |  |  |
| Team 4 |  |  |  |  |  |  |  |  |  |  |  |
| Team 5 |  |  |  |  |  |  |  |  |  |  |  |
| Team 6 |  |  |  |  |  |  |  |  |  |  |  |
| Team 7 |  |  |  |  |  |  |  |  |  |  |  |
| Team 8 |  |  |  |  |  |  |  |  |  |  |  |
| Team 9 |  |  |  |  |  |  |  |  |  |  |  |
| Team 10 |  |  |  |  |  |  |  |  |  |  |  |
| **All teams** |  |  |  |  |  |  |  |  |  |  |  |
|  | | | | | | | | | | | |

a Household response rate=(1)/[(1)+(2)+(3)+(5)+(10)]x100. The target is 95 percent for the household response rate.

**Table A3.2** presents information about the presence of primary adult decisionmakers in households with a completed roster. [Describe the results presented in Table A3.2.]

Table A3.2: Primary Male and Female Decisionmakers

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of households with a completed roster and, among those households, the percentage with at least one male member 18 years of age or older, the percentage with a male decisionmaker, the percentage with at least one female member 18 years of age or older, the percentage with a female decisionmaker, and the percentage of households with at least one decisionmaker, by interviewer team, Feed the Future [Country] ZOI Survey [endline survey year(s)] | | | | | | |
|  |  | **Male** | | **Female** | |  | |
| **Team** | **HH with Module 1 completed**  **(N)** | **HH with at least one male member 18+**  **(%)** | **HH with primary adult male decisionmaker**  **(%)** | **HH with at least one female member 18+**  **(%)** | **HH with primary adult female decisionmaker**  **(%)** | **HH with at least one primary adult decisionmaker**  **(%)** | |
| Team 1 |  |  |  |  |  |  | |
| Team 2 |  |  |  |  |  |  | |
| Team 3 |  |  |  |  |  |  | |
| Team 4 |  |  |  |  |  |  | |
| Team 5 |  |  |  |  |  |  | |
| Team 6 |  |  |  |  |  |  | |
| Team 7 |  |  |  |  |  |  | |
| Team 8 |  |  |  |  |  |  | |
| Team 9 |  |  |  |  |  |  | |
| Team 10 |  |  |  |  |  |  | |
| **All teams** |  |  |  |  |  |  | |

HH=household

Note: The target is [100% - expected prevalence of child-only households].

**Table A3.3** assesses age heaping in the household roster. [Describe the results presented in Table A3.3.]

Table A3.3: Age Heaping in the Household Roster

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage of household members in 5-year age groups with ages recorded as ending in 5 or 0 by interviewer team, Feed the Future [Country] ZOI Survey [endline survey year(s)] | | | | | | | | | | | | |
| **Team** | **Ages of household members** | | | | | | | | | |  | |
| **Ages 3-7 recorded as 5**  **(%)** | **Ages 8-12 recorded as 10**  **(%)** | **Ages 13‑17 recorded as 15**  **(%)** | **Ages 18‑22 recorded as 20**  **(%)** | **Ages**  **23-27 recorded as 25**  **(%)** | **Ages**  **28-32 recorded as 30 (%)** | **Ages**  **33-37 recorded as 35**  **(%)** | **Ages**  **38-42 recorded as 40**  **(%)** | **Ages**  **43-47 recorded as 45**  **(%)** | **Ages**  **48-52 recorded as 50**  **(%)** | **All ages ending in 5 or 0**  **(%)** | **Number of household members** |
| Team 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 4 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 6 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 7 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 8 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 9 |  |  |  |  |  |  |  |  |  |  |  |  |
| Team 10 |  |  |  |  |  |  |  |  |  |  |  |  |
| **All teams** |  |  |  |  |  |  |  |  |  |  |  |  |

Note: The target for all age ranges is 30 percent.

**Table A3.4** presents the mean number of eligible women of reproductive age per household. [Describe the results presented in Table A3.4.]

Table A3.4: Eligible Women per Household

|  |  |  |  |
| --- | --- | --- | --- |
| Mean number of eligible women 15-49 years of age per household, Feed the Future [Country] ZOI Survey [endline survey year(s)] | | | |
| **Team** | **Completed household**  **(N)** | **Eligible women in completed household**  **(N)** | **Mean number of eligible women per household** |
| Team 1 |  |  |  |
| Team 2 |  |  |  |
| Team 3 |  |  |  |
| Team 4 |  |  |  |
| Team 5 |  |  |  |
| Team 6 |  |  |  |
| Team 7 |  |  |  |
| Team 8 |  |  |  |
| Team 9 |  |  |  |
| Team 10 |  |  |  |
| **All teams** |  |  |  |

Note: The target is [XX] number of eligible women per household.

**Table A3.5** presents the mean number of eligible children under 6 years of age per household. [Describe the results presented in Table A3.5.]

Table A3.5: Eligible Children per Household

|  |  |  |  |
| --- | --- | --- | --- |
| Mean number of eligible children younger than 6 years of age per household, Feed the Future [Country] ZOI Survey [endline survey year(s)] | | | |
| **Team** | **Completed household (N)** | **Eligible children in household**  **(N)** | **Mean number of eligible children per household** |
| Team 1 |  |  |  |
| Team 2 |  |  |  |
| Team 3 |  |  |  |
| Team 4 |  |  |  |
| Team 5 |  |  |  |
| Team 6 |  |  |  |
| Team 7 |  |  |  |
| Team 8 |  |  |  |
| Team 9 |  |  |  |
| Team 10 |  |  |  |
| **All teams** |  |  |  |

Note: The target is [XX] number of eligible children per household.

**Table A3.6** presents the eligibility and response rate of primary adult female decisionmakers. [Describe the results presented in Table A3.6.]

Table A3.6: Module 6 (Women) Women’s Empowerment in Agriculture Module, Eligibility and Response Rate

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Percent distribution of eligible women (primary adult female decisionmaker) by result of individual outcome, by interviewer team, Feed the Future [Country] ZOI Survey [endline survey year(s)] | | | | | |
| **Team** | **Result of module** | |  | | |
| **Completed (code 1)** | **Respondent not at home (code 4)** | **Total**  **(%)** | **Number of women** | **Response ratea** |
| Team 1 |  |  |  |  |  |
| Team 2 |  |  |  |  |  |
| Team 3 |  |  |  |  |  |
| Team 4 |  |  |  |  |  |
| Team 5 |  |  |  |  |  |
| Team 6 |  |  |  |  |  |
| Team 7 |  |  |  |  |  |
| Team 8 |  |  |  |  |  |
| Team 9 |  |  |  |  |  |
| Team 10 |  |  |  |  |  |
| **All teams** |  |  |  |  |  |

a The response rate is the percentage of households completed divided by the number with response codes 1 and 5. The target response rate is 95 percent.

**Table A3.7** presents the eligibility and response rate of primary adult male decisionmakers. [Describe the results presented in Table A3.7.]

Table A3.7: Module 6 (Men) Women’s Empowerment in Agriculture Module, Eligibility and Response Rate

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Percent distribution of eligible men (primary adult male decisionmaker) by result of individual outcome, by interviewer team, Feed the Future [Country] ZOI Survey [endline survey year(s)] | | | | | | |
| **Team** | **Result of module** | | |  | | |
| **Completed (code 1)** | **Respondent not at home (code 4)** | **Refused (code 5)** | **Total**  **(%)** | **Number of men** | **Response ratea** |
| Team 1 |  |  |  |  |  |  |
| Team 2 |  |  |  |  |  |  |
| Team 3 |  |  |  |  |  |  |
| Team 4 |  |  |  |  |  |  |
| Team 5 |  |  |  |  |  |  |
| Team 6 |  |  |  |  |  |  |
| Team 7 |  |  |  |  |  |  |
| Team 8 |  |  |  |  |  |  |
| Team 9 |  |  |  |  |  |  |
| Team 10 |  |  |  |  |  |  |
| **All teams** |  |  |  |  |  |  |

a The response rate is the percentage of households completed divided by the number with response codes 1 and 5. The target response rate is 95 percent.

# Appendix 4. Abbreviated Women’s Empowerment in Agriculture Index adequacy criteria and fact sheet

## A4.1 Criteria for achieving adequacy for A-WEAI indicators

**Table A4.1** presents the Women’s Empowerment in Agriculture Index’s five dimensions of empowerment, their corresponding empowerment indicators, the survey questions that are used to elicit the data required to establish adequacy or inadequacy for each empowerment indicator, their corresponding variables in the Feed the Future [Country] Zone of Influence (ZOI) Survey [endline survey year(s)] dataset, and how adequacy criteria are defined for each empowerment indicator. For additional details refer to the *Guide to Feed the Future Statistics*.[[48]](#footnote-49)

Table A4.1: Women’s Empowerment in Agriculture Five Dimensions of Empowerment: Domains, Indicators, ZOI Survey Questions and Variables, Adequacy and Inadequacy Criteria, and Weights

| Domain | Indicator name | Survey questions | ZOI Survey (2018-2019)  questions | ZOI Survey (2018-2019)  variables | Adequacy criteria | Inadequacy criteria | Weight |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Decision-making over production | Indicator 1.1: Input in productive decisions | “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) | 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) | 1/5 |
| Access to resources | Indicator 2.1: Ownership of assets | “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.6301a–Q.6301n  Q.6303a–Q.6303n | 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 | 2/15 |
|  | Indicator 2.2: Access to and decisions over credit | “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 micro-finance 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.6308a–Q.6308f  Q.6309a–Q.6309f  Q.6310a–Q.6310f | 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 | 1/15 |
| Control over  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, major household expenditures” | Q.6205a–Q.6205f  Q.6204d,  Q.6204e,  Q.6204g | v6205\_01– v6206\_03, v6206\_06  v6204\_04,  v6204\_05, v6204\_07 | 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—excludes 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 | 1/5 |
| Group member-ship and 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/micro-finance 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.6405a–Q.6405k | v6405\_01–v6405\_11 | Is an active member of at least one group | Is not an active member of at least one group | 1/5 |
| Time allocation | 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 | 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 | 1/5 |

## A4.2 [COUNTRY] Abbreviated Women’s Empowerment in Agriculture Index data fact sheet

**[COUNTRY]**

*Feed the Future Phase One [baseline survey year(s)] baseline–[endline survey year(s)] endline Abbreviated Women’s Empowerment in Agriculture Index results*

### Key findings

[Describe key findings according to instructions.]

### Sample

[Describe key findings according to instructions.]

### WEAI score

[Describe key findings according to instructions.]

### 5DE score

[Describe key findings according to instructions.]

### GPI score

[Describe key findings according to instructions.]

### Top contributors to disempowerment

[Describe key findings according to instructions.]

### WEAI application in programming

[Describe key findings according to instructions.]

### WEAI research

[Describe key findings according to instructions.]

1. Data for measuring the prevalence of anemia among women of reproductive age and the prevalence of anemia among children 6-59 months of age were not collected for the Feed the Future [Country] ZOI Survey [endline survey year(s)] and, therefore, are not included in this assessment. [↑](#footnote-ref-2)
2. The full WEAI was calculated and reported on at baseline; however, an abbreviated version of the WEAI (A‑WEAI) has since been developed, and data for only the A-WEAI were collected in the Feed the Future [Country] ZOI Survey [endline survey year(s)]. Therefore, [Contractor] calculated A-WEAI using baseline data to enable the assessment of change over Phase One of Feed the Future. [↑](#footnote-ref-3)
3. 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 endline. [↑](#footnote-ref-4)
4. Table A1.3.2 in Appendix 1 presents a comparison of primary adult female decisionmakers and primary adult male decisionmakers at endline. [↑](#footnote-ref-5)
5. UNSTATS, n.d. [↑](#footnote-ref-6)
6. UNICEF & WHO, 2018 [↑](#footnote-ref-7)
7. UNICEF & WHO, 2018 [↑](#footnote-ref-8)
8. WHO & UNICEF, 2018 [↑](#footnote-ref-9)
9. Grosh & Glewwe, 1995 [↑](#footnote-ref-10)
10. Zalisk, K., Dupuis, G., Gauthier, M., Kaur, J., Khan, N., Swindale, A. and Johnson, K.B., 2019. [↑](#footnote-ref-11)
11. Deaton, 2008 [↑](#footnote-ref-12)
12. Guidelines on constructing the consumption aggregate can be found in Deaton & Zaidi, 2002. [↑](#footnote-ref-13)
13. World Bank, 2015 [↑](#footnote-ref-14)
14. Note that consumption expenditure data are not collected at the individual level but rather at the level of the household; individuals’ daily per capita consumption expenditures are then derived by dividing total household expenditures by the number of household members. [↑](#footnote-ref-15)
15. World Bank, 2015 [↑](#footnote-ref-16)
16. Table 4.2.3 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences are tabulated in Appendix 1, Table A1.4.1.1 (USD, 2005 PP) and Table A1.4.1.2 (percent of poverty line). [↑](#footnote-ref-17)
17. Table 4.2.6 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences are tabulated in Appendix 1, Table A1.4.2.1 (USD, 2005 PP) and Table A1.4.2.2 (percent of poverty line). [↑](#footnote-ref-18)
18. Table 4.2.9 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences are tabulated in Appendix 1, Table A1.4.3.1 (USD, 2005 PP) and Table A1.4.3.2 (percent of poverty line). [↑](#footnote-ref-19)
19. Alkire, et al., 2013 [↑](#footnote-ref-20)
20. 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-21)
21. The only respondents to the A-WEAI survey module are primary adult decisionmakers in the household and, therefore, are not representative of the entire adult female and male populations in the ZOI. It is thus essential to remember that the A‑WEAI data reflect only the primary adult female and male decisionmakers when interpreting the data. However, to streamline the text of this report, the generic terms “woman,” “female,” “man,” and “male” will be used to used refer to the primary adult female or male decisionmakers from whom the data were collected. [↑](#footnote-ref-22)
22. The *Feed the Future Guide to Statistics* calculates the 5DE as: 5DE score=1–(HpxAp), 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 5DE indicator data; and Ap=the average inadequacy score of disempowered women (i.e., the average censored inadequacy score). [↑](#footnote-ref-23)
23. 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-24)
24. Zalisk, K., Dupuis, G., Gauthier, M., Kaur, J., Khan, N., Swindale, A. and Johnson, K.B., 2019. [↑](#footnote-ref-25)
25. The education, and maternal behavior disaggregates were selected because they were positively associated with women’s empowerment scores when the data were analyzed at baseline under Feed the Future Phase One. More 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 for poverty was found at baseline; however, it is important to understand how empowerment status varies for individuals in households living above or below the $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-26)
26. The censored headcount ratios present results from respondents who are disempowered and have adequate achievements in a given indicator, divided by the total number of respondents. Uncensored headcount ratios present results from all individuals achieving adequacy in a given indicator, regardless of empowerment status, divided by the total number of respondents. Indicator results using uncensored headcount ratios can be found in Appendix 1.2, Table A1.5.1. [↑](#footnote-ref-27)
27. Table 5.4.8 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences are tabulated in Appendix 1.2, Table A1.5.2 (participation in activities) and Table A1.5.3 (mean time devoted to activities). [↑](#footnote-ref-28)
28. Ballard, Coates, Swindale, & Deitchler, 2011 [↑](#footnote-ref-29)
29. Deitchler, Ballard, Swindale, & Coates, 2011 [↑](#footnote-ref-30)
30. A more detailed description of the household hunger indicator and its calculation is given in the Feed the Future Indicator Handbook, available at: <http://feedthefuture.gov/resource/feed-future-handbook-indicator-definitions>. [↑](#footnote-ref-31)
31. Table 6.1 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences for each HHS category are tabulated in Appendix 1, Tables A1.6.1.1 through A1.6.1.4. [↑](#footnote-ref-32)
32. Darnton-Hill, et al., 2005 [↑](#footnote-ref-33)
33. WHO, 2018a [↑](#footnote-ref-34)
34. The seven food groups for breastfed children are as follows: (1) grains, roots, and tubers; (2) legumes and nuts; (3) dairy products (milk, yogurt, cheese); (4) flesh foods (meat, fish, poultry, and liver or organ meats); (5) eggs; (6) vitamin-A rich fruits and vegetables; and (7) other fruits and vegetables. [↑](#footnote-ref-35)
35. The six food groups for non-breastfed children are the same as for breastfed children, except that they exclude dairy products (milk, yogurt, cheese). [↑](#footnote-ref-36)
36. WHO, 2018b [↑](#footnote-ref-37)
37. Table 6.3.3 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences in minimum meal frequency, MDD, and the percentage of children consuming each food group, in total and by breastfeeding status, are tabulated in Appendix 1, Table A1.6.2. [↑](#footnote-ref-38)
38. Table 7.1 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences in mean BMI and each BMI category are tabulated in Appendix 1, Tables A1.7.1.1 through A1.7.1.5. [↑](#footnote-ref-39)
39. Leroy & Frongillo, 2019 [↑](#footnote-ref-40)
40. WHO & UNICEF, 2006 [↑](#footnote-ref-41)
41. Table 7.2.1 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals, differences between baseline and endline estimates, and p-values for the differences in severe stunting, stunting, and mean z-score are tabulated in Appendix 1, Tables A1.7.2.1 through A1.7.2.3. [↑](#footnote-ref-42)
42. 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-43)
43. Table 7.2.2 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences in severe wasting, wasting, and mean z-score are tabulated in Appendix 1, Tables A1.7.3.1, A1.7.3.2, and A1.7.3.6. [↑](#footnote-ref-44)
44. Table 7.2.3 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences in healthy weight, overweight, and obese children are tabulated in Appendix 1, Tables A1.7.3.3 through A1.7.3.5. [↑](#footnote-ref-45)
45. Table 7.2.4 includes the level of significance for tests of difference performed to determine whether a difference exists between the baseline and endline estimates. Confidence intervals for baseline and endline estimates, differences between baseline and endline estimates, and p-values for the differences in severe underweight, underweight, and mean z-score are tabulated in Appendix 1, Tables A1.7.4.1 through A1.7.4.3. [↑](#footnote-ref-46)
46. Stukel, D.M. (2018). *Feed the Future population-based survey sampling guide.* Washington, DC: Food and Nutrition Technical Assistance Project, FHI 360. [↑](#footnote-ref-47)
47. United States Agency for International Development (USAID). (2018b). *Feed the Future ZOI Survey methods toolkit.* Washington, DC: USAID. Available at: <https://www.agrilinks.org/post/feed-future-zoi-survey-methods>. [↑](#footnote-ref-48)
48. Zalisk, K., Dupuis, G., Gauthier, M., Kaur, J., Khan, N., Swindale, A. and 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-49)