Baseline Survey of the Nawiri Resilience Food Security Activities in Kenya

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IMPEL | Implementer-Led Evaluation & Learning Associate Award

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ABOUT IMPEL

The Implementer-Led Evaluation & Learning Associate Award (IMPEL) works to improve the design and implementation of Bureau for Humanitarian Assistance (BHA)-funded resilience food security activities (RFSAs) through implementer-led evaluations and knowledge sharing. Funded by the USAID Bureau for Humanitarian Assistance (BHA), IMPEL will gather information and knowledge in order to measure performance of RFSAs, strengthen accountability, and improve guidance and policy. This information will help the food security community of practice and USAID to design projects and modify existing projects in ways that bolster performance, efficiency, and effectiveness. IMPEL is a seven-year activity (2019–2026) implemented by Save the Children (lead), TANGO International, Tulane University, Causal Design, Innovations for Poverty Action, and International Food Policy Research Institute.

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ACRONYMS

ANC	Antenatal Care
APHRC	African Population and Health Research Center
ASAL	Arid and Semi-Arid Land
BCS	Body Condition Score
BHA	Bureau for Humanitarian Assistance
BL	Baseline
CEFM	Child Early and Forced Marriage
CHC	Centre for Humanitarian Change
CIDP	County Integrated Development Plan
CNAP	County Nutrition Action Plan
CPR	Contraceptive Prevalence Rate
CRS	Catholic Relief Services
CSPro	Census and Survey Processing System
DHS	Demographic and Health Survey
FAO	Food and Agriculture Organization
FCS	Food Consumption Score
FFP	Food for Peace
FIES	Food Insecurity Experience Scale
FTF	Feed the Future
GAIN	Global Alliance for Improved Nutrition
GAM	Global Acute Malnutrition
GDP	Gross Domestic Product
GHT	Gendered Household Type
HDI	Human Development Index
HSNP	Hunger Safety Net Programme
IBTCI	International Business & Technical Consultants, Inc.
IMPEL	Implementer-Led Evaluation and Learning
IP	ImplementingPartner
IPC	Integrated Phase Classification
KDHS	Kenya Demographic and Health Survey
kg	Kilogram
KNAP	Kenya Nutrition Action Plan
LSMS	Living Standards Measurement Survey
LZ	Livelihood Zone
MAD	Minimum Acceptable Diet
MC	Mercy Corps
MDD-C	Children's Minimum Dietary Diversity
MDD-W	Women's Minimum Dietary Diversity
MFI	Microfinance Institution
NFNSP	National Food and Nutrition Security Policy

NRM	Natural Resource Management
OFDA	Office of Foreign Disaster Assistance
ORS	Oral Rehydration solution
ORT	Oral Rehydration Therapy
PBS	Population-Based Survey
PEA	Political Economy Analysis
PPP	Purchasing Power Parity
PREG	Partnership for Resilience and Economic Growth
RFSA	Resilience Food Security Activity
RTI	Research Triangle Institute
SC	Save the Children
TANGO	Technical Assistance to NGOs
TMG	The Manoff Group
ToT	Training of Trainers
USAID	United States Agency for International Development
VE	Village Enterprise
VSLA	Village Savings and Loan Association
WASH	Water, Sanitation, and Hygiene
WFP	World Food Programme

ANNEX A: NAWIRI RESILIENCE FOOD SECURITY ACTIVITIES IN KENYA BASELINE STUDY PROTOCOL

Nawiri Resilience Food Security Activities in Kenya Baseline Study Protocol – FINAL

Bureau of Humanitarian Assistance (BHA)

Cooperative Agreement Number: 72DFFP19LA00003

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ABBREVIATIONS

BHA	Bureau for Humanitarian Assistance (BHA)
BL	Baseline
CAPI	Computer-assisted personal interview
CSPro	Census and Survey Processing System
FFP	Office of Food for Peace
FTF	Feed the Future
GHT	Gendered household type
IDEAL	Implementer-Led Design, Evidence, Analysis and Learning
IMPEL	Implementer-Led Evaluation and Learning
IP	Implementing partner
KNBS	Kenya National Bureau of Statistics
MCHN	Maternal and Child Health and Nutrition
NDMA	National Drought Management Authority
PBS	Population-based survey
PPS	Probability proportional to size
PREG	Partnership for Resilience and Economic Growth
RFSA	Resilience Food Security Activity
ToT	Training of Trainers
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene

1. INTRODUCTION

The United States Agency for International Development (USAID) Bureau for Humanitarian Assistance (BHA) supports multi-year resilience food security activities (RFSAs) around the world that improve and sustain the food and nutrition security of vulnerable populations. In 2019 the USAID Office of Food for Peace (FFP) funded two five-year RFSAs in Kenya.[1] The Nawiri RFSAs are being implemented by Catholic Relief Services (CRS) in the Isiolo and Marsabit counties and by Mercy Corps (MC) in the Samburu and Turkana counties. The Nawiri RFSAs aim to sustainably reduce persistent acute malnutrition among vulnerable subpopulations. The first two years (Years 1 – 2) include a refine and implement (R & I) period in which the implementing partners conduct formative research to refine their approaches, tools, and processes for the implementation phase (Years 3 – 5).

Under the Implementer-Led Evaluation and Learning (IMPEL) activity to improve the design and implementation of the USAID BHA RFSAs[2], Technical Assistance to NGOs (TANGO) International in collaboration with the implementing partners (IPs) will be conducting a baseline (BL) study of the BHA RFSAs in October 2021. The implementer-led approach provides greater ownership of the evaluation process and promotes wider dissemination and learning within the implementer community.

The BL study includes: 1) a population-based household survey to measure standard BHA indicators, and 2) a review of qualitative data from secondary sources. The information generated through the baseline study will be used to inform the implementation phase of the RFSAs, measure performance of the RFSAs, strengthen accountability, and improve guidance and policy. Kimetrica, a local firm, is hired to perform the data collection for the BL survey with close oversight and quality control by TANGO. This protocol describes the data collection tools, field procedures, data collection, quality assurance and data analysis for the BL study.

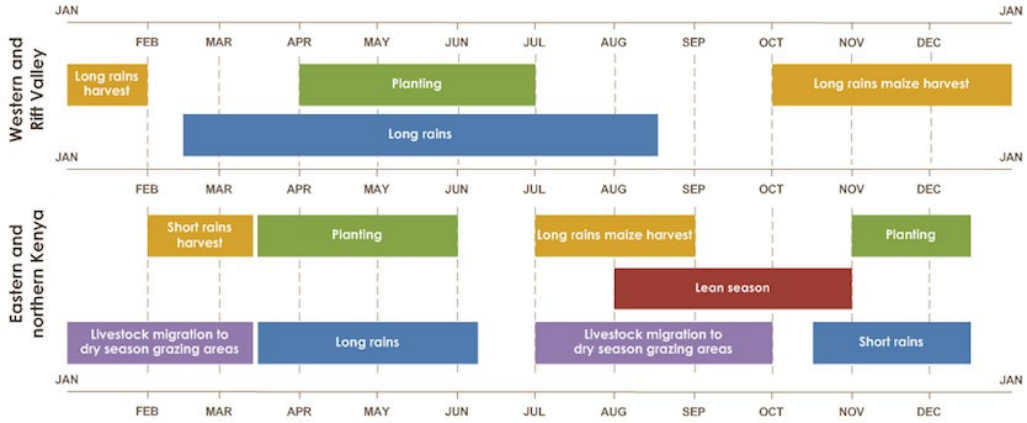
2. QUANTITATIVE DATA COLLECTION AND ANALYSIS

The BL study includes a population-based household survey (PBS) conducted among a random sample representative of the entire population of households living in RFSA areas. The primary purpose of the PBS is to provide population-level estimates on standard BHA indicators, and possibly a limited number of questions and indicators proposed by the USAID Mission and IPs. These indicators will serve as points of comparison for the endline survey. The results will be stratified by implementing partner (IP) and county so that they are representative of each county within the IP's implementation area. Data collection for the BL study is scheduled to take place in October 2021 to overlap with the lean season in order to capture food security conditions when households are in seasonal stress (see Figure 1). The BL survey will be conducted using face-to-face interviewing with COVID-19 mitigation procedures in place.

[1] In 2020, FFP merged with the Office of Foreign Disaster Assistance (OFDA) to form the Bureau for Humanitarian Assistance (BHA) to streamline USAID humanitarian responses.

[2] Formerly referred to as development food security activities (DFSAs).

Figure 1. Seasonal calendar, Kenya



Source: FEWS NET

2.1 Sampling Design

The BL survey sampling strategy uses a cross-sectional, multi-stage cluster design. In the first stage, clusters are randomly selected from each county in the IPs sampling frame using probability proportional to the size of the county (PPS). The sampling frame consists of all sublocations/villages within the RFSA target areas, i.e., areas that are expected to receive the activity's interventions.[3] Table 1 illustrates the number of clusters and households included in the BL sampling frame.

Table 1. Number of Clusters and Households Included in the BL Sampling Frames

	Number of clusters	Number of Households
CRS		
Isiolo	34	1,000
Marsabit	34	1,000
Mercy Corps		
Samburu	34	1,000
Turkana	34	1,000
TOTAL	136	4,000

Note: Clusters refer to census-defined enumeration areas. Based on the final list of geographies provided by the IPs, TANGO, via its local partner, will work with the Kenya National Bureau of Statistics to identify the EAs that best correspond to the list of targeted sublocations/villages. The number of clusters per county was determined based on an equal allocation of 30 households per cluster and the minimum required sample size of 1,000 households per county (see Section 2.1.1 for sample size calculations). The number of clusters = 1,000 / 30 = 33.3 which is rounded up to 34.

2.1.1 Sample size

The sample size calculation for the BL survey is based on the prevalence of poverty (percent of people living on less than $1.90/day 2011 PPP) and the prevalence of moderate and severe food insecurity (based on the FIES). Although the primary objective of the RFSAs is to reduce acute malnutrition, the BL survey will not include anthropometric measures because this information will be collected by the IPs through a routine monitoring system. For this reason, the survey uses the indicators of poverty and food insecurity as the basis of the sample size calculations. Furthermore, FIES is considered a resilience-

[3] CRS provided a list of sublocations, and Mercy Corps provided a list of villages. The list of sublocations/villages represent areas the IPs intend to target with the understanding that the intervention areas may shift overtime depending on the results of the ongoing formative research, and that the intensity of the interventions may vary by area.

based indicator. Statistical information from the 2018 baseline survey of the USAID Partnership for Resilience and Economic Growth (PREG) Initiative in Northern Kenya Phase II and guidance from the Feed the Future Population-based Sampling Guide were used to inform the selection of the parameters for the sample size calculations. The sample size formula used is for detecting changes in proportion variables. The following parameter values were applied in the calculations:

- Design effect of 5[4]
- 95 percent confidence level for one-tailed test
- 80 percent power for one-tailed test
- Expected change of 13 to 14 percentage points over the three-year implementation phase (approximately 4 to 5 percentage points per year)[5]
- Non-response factor of 20 percent to account for estimated household nonresponse rate[6]

Applying these values and selecting the largest value results with a minimum required sample size of 965 households per county which was rounded to a minimum required sample size of 1,000 households per county and 4,000 households in total. Table 2 summarizes the sample size requirements for the BL study.

With a sample size of 2,000 households per IP RFSA area, the BL study is powered to detect a 10-percentage point reduction in poverty and FIES at the IP level (see Table 3).

Table 2. BL PBS Sample Size Requirements for Each County

Indicator*	Estimate of proportion at time point 1 (PE_1)[1]	Estimate of proportion at time point 2 (PE_2)	Estimated Design Effect[1]	Household Sample Size Needed Per County	Households Needed Per County with 20 Percent Nonresponse Adjustment
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	0.63	0.49	5	772	965
Prevalence of moderate and severe food insecurity (FIES)	0.80	0.67	5	708	885

NOTE: Assumptions for all calculations: one-sided test, alpha=0.05, beta=0.80, clusters per county = 34, households per cluster=30.
[1] Based on a subsample of the 2018 PREG II baseline survey that overlaps geographically with the RFSA counties (i.e., Isiolo, Marsabit, Samburu and Turkana).

[4] The 2018 PREG II baseline survey shows a design effect of 10.4 for the FIES indicator and 12.6 for the prevalence of poverty among the subsample that overlaps with the counties of this study (Isiolo, Marsabit, Samburu, and Turkana). However, the Feed the Future Population-based Sampling Guide recommends a design effect value of 5 for sample size calculations that utilize the prevalence of moderate and severe food insecurity (based on the FIES) and the prevalence of poverty.

[5] Although the RFSAs are five-year awards, Years 1–2 mark the research phase and Years 3–5 are the implementation phase. An expected change of 13 to 14 percentage points was selected as the minimum difference that can be detected in the indicators on the county level over the three-year implementation phase given the recommended parameters for sample size calculations prescribed in the FTF sampling guide as well as budgetary constraints on the maximum sample size. This comes out to a 22.2 percent reduction in the prevalence of poverty at the county level over the three-year year implementation period (7.4 percent per year) and a 16.3 percent reduction in FIES (5.4 percent per year).

[6] The estimated non-response rate is based on the 80 percent response rate of the PREG surveys.

Table 3. BL PBS Sample Size Requirements for Each IP RFSA area

Indicator*	Estimate of proportion at time point 1 (PE_1)[1]	Estimate of proportion at time point 2 (PE_2)	Estimated Design Effect[1]	Household Sample Size Needed per IP area	Households Needed per IP area with 20 Percent Nonresponse Adjustment
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	0.63	0.53	5	1,501	1,876
Prevalence of moderate and severe food insecurity (FIES)	0.80	0.71	5	1,407	1,759

NOTE: Assumptions for all calculations: one-sided test, alpha=0.05, beta=0.80, clusters per county = 34, households per cluster=30.
[1] Based on a subsample of the 2018 PREG II baseline survey that overlaps geographically with the RFSA counties (i.e., Isiolo, Marsabit, Samburu and Turkana).

2.2.2 Sample selection

The sample for each county will be selected using multi-stage cluster sampling with two stages of sampling: 1) selection of clusters, and 2) selection of households.

In the first stage, clusters are randomly selected from each county in each IP's sampling frame using probability proportional to size (PPS). To mitigate against possible inaccessibility, a "random-generated reserve sample" will be drawn using a two-phase approach as stipulated in the Feed the Future Population-based Survey Sampling Guide.[7] This entails selecting the required 34 clusters for each county plus 9 reserve clusters (25 percent of the required number of EAs) in case a cluster needs to be replaced, resulting with a total of 43 clusters selected per county. Census enumeration areas (EAs) will be used as clusters rather than villages because the boundaries of EAs are well-defined and easier to locate in contrast to the boundaries of a village.

For the CRS Nawiri RFSA areas, the first stage sample selection will be based on a list of EAs that correspond to the sublocations provided by the partner. The first stage sample selection for the MC Nawiri RFSA areas will be based on a list of EAs that correspond to the villages and sublocations MC plans to implement its interventions.[8] TANGO will provide KNBS with the list of sublocations/villages and

[7] At the first phase of the first stage of sample selection a total of 43 (34 plus 9 reserve) EAs are sampled in each county using systematic PPS sampling. At the second phase of the first stage, 9 out of the 43 EAs are randomly subsampled using fractional interval systematic sampling. The survey will be conducted in the 34 EAs that are not selected at the second phase. The nine reserve EAs selected in the second phase are numbered 1 through 9 in the order in which they were randomly sampled to define the sequence of their release. If only one reserve EA is needed, the reserve EA labeled "number 1" will replace the first EA from among the original 34 EAs that cannot be accessed. Inaccessible EAs are replaced with reserve EAs using this approach as needed in order to achieve the overall number of required EAs (34). For additional details see: https://www.fantaproject.org/sites/default/files/resources/FTF-PBS-Sampling%20Guide-Apr2018.pdf.

[8] Given that the geographies in CRS' sampling frame was comprised of sublocations, the first stage sampling of EAs for the Isiolo and Marsabit counties was conducted in two phases. In Phase 1, TANGO selected 43 sublocations for each county (Isiolo and Marsabit) using probability proportional to size (PPS). In some cases, a sublocation was

request KNBS to map those areas to the overlapping EAs and subsequently select 43 clusters (EAs) from each county. Annex 1a illustrates the guidance provided by TANGO to Kimetrica to inform KNBS' selection of clusters and a note regarding the calculation of sampling weights that takes into account the different sampling approaches used for each IP's areas. Annex 1b provides the sampling frame for each IP. In the second sampling stage, households are selected within each selected cluster from completed lists of all households compiled through a household listing conducted in the sampled clusters by Kimetrica.[9] BHA surveys define a household as "a person or group of people who live together and share meals" or "eating from the same pot."[10] The name of the head of household will be recorded for each identified household. A total of 30 households will be selected per cluster using systematic random sampling from the household listing. During the listing exercise, Global Positioning System (GPS) coordinates for each cluster will be taken by using a commonly accepted central point in the cluster. GPS coordinates will also be taken for each surveyed household to facilitate locating sampled households during the main data collection. Thus, GPS coordinates will not be collected again during data collection. The data entry program used during data collection will be fitted with the serial number assigned to the household during the listing so that the GPS coordinates from the listing exercise can be linked to the household survey data.

All household members eligible for each module are selected.[11] For modules requiring data about the household (e.g., food consumption; resilience; poverty, and water, sanitation, and hygiene), no individuals are sampled because the household is the sampling unit. Household survey respondents for those modules are typically the head of household, spouse, or the adult most knowledgeable about the module topic (e.g., the adult responsible for food preparation for the module on food security or food consumption expenditures). Other modules have specific eligibility criteria. The following is the protocol for selecting eligible respondents:

- All children under 24 months will be selected for questions on children's feeding practices. The mother or caretaker of the eligible children (i.e., all children under 24 months) will be interviewed as a proxy respondent.
- All children under five years will be selected for questions on diarrhea. The mother or caretaker of the eligible children (i.e., all children under five years) will be interviewed as a proxy respondent.
- All women between the ages of 15-49 will be selected for questions on dietary diversity, antenatal care (ANC), contraceptive prevalence rate (CPR) and family planning.
- All women and men in a union who earned cash will be selected for questions on gender and cash.

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selected more than once given its relative size. In Phase 2, KNBS selected EAs from the list of selected sublocations that TANGO provided. The EAs were selected using PPS. The number of EAs to be selected per sublocation equals the number of times the sublocation was selected in the first phase. The sampling frame for the Mercy Corps Nawiri areas is a mix of villages and sublocations, so the first stage sampling of EAs was conducted in one phase. KNBS listed all EAs that best correspond to the list of MC geographies. From this stacked list of EAs, for each county (Samburu and Turkana), KNBS selected 43 EAs using PPS.

[9] The household listing will be conducted using tablets loaded with the CSPro data entry application.

[10] Enumerators will be trained on how to record polygamous households. If co-wives live in the same house and eat from the same pot, they are recorded as members of the same household. If the co-wives sleep in different houses and one co-wife prepares food for all household members, then they are all considered eating from the same pot and members of the same household. However, if the co-wives sleep in different houses and prepare food separately, they are not members of the same household.

[11] Although there is no need to adjust for the probability of selecting individuals since all eligible individuals are selected, weights are calculated to compensate for individual non-response.

- All women and men in a union will be selected for questions on access to credit and group membership.
- All farmers with access to a plot of land over which they make decisions or who have animals that they manage will be selected for Module G questions on agriculture.[12] All farmers who manage cattle, goats, and camels will be selected for Modules 7.50, 7.51, and 7.53, respectively. See Annex 2 for the list of targeted commodities by IP. Alternative respondents can be interviewed if they are knowledgeable about the farmer's agricultural practices and decisions.

2.2 Questionnaire

The questionnaire to be used for the BL PBS is adapted from the standard BHA PBS questionnaire. The survey tool will not collect anthropometric measurements for children and women.[13] Given that yield estimates for crops that are based on self-reported data are not reliable, the baseline survey will not collect information on crop yield. Information on yield from the production of livestock (cattle, goats, and camels) will be collected. However, in lieu of self-reported data on livestock weight, the survey will ask farmers to report the average condition of their livestock by type to triangulate with information on livestock weight. Data on the average weight for each category of animal (male, female, young, old) will be obtained from secondary sources such as the International Livestock Research (ILRI), the Food and Agriculture Organization (FAO), Kenya Agricultural and Livestock Research organization (KALRO) and Kenya Ministry of Agriculture, Livestock and Fisheries. Modules on the agricultural production of livestock were streamlined from the standard questionnaire – i.e., detailed questions on decision-making, breeding, housing, nutrition, and pest/disease control were omitted given that the module on agriculture covers these topics.

The BL survey questionnaire includes modules on the following topics:

Module A: Household Identification and Informed Consent
Module B: Household Roster
Module C: Food Security
Module D: Child Feeding Practices and Diarrhea
Module E: Women's Health, Nutritional Status, Dietary Diversity and Family Planning
Module F: Water, Sanitation and Hygiene
Module G: Agriculture (financial services, value chains, improved management practices)
Module J: Gender and Cash
Module K: Access to Credit and Group Membership
Module R: Resilience Measurement
Module 7.50: Agricultural Production – Cattle (Beef and Dairy cows)
Module 7.51: Agricultural Production – Goats
Module 7.53: Agricultural Production – Camels
Module 8: Poverty Measurement

[12] The agriculture-related modules will be administered only to farmers working with the commodities of interest identified by the IPs. IPs identified commodities of interest (i.e., crops, livestock and/or aquaculture) based on the value chains they plan to support. This decision is informed by findings from extensive desk reviews as well as ongoing formative research on which value chains are most strongly associated with reduction in chronic malnutrition, the primary objective of the RFSAs.

[13] Although the primary objective of the RFSAs is to reduce acute malnutrition in its target areas, the baseline survey will not include anthropometric measures because this information is being collected by IPs through a recurrent monitoring system.

Questions and response options will be adapted to the Kenya country context, such as those that involve food as part of Modules C, D, E, and Module 8, and the types of containers and sanitation facilities as part of Module F. Additionally, the types of improved agricultural practices and value chain activities promoted may vary by IP (Module G), which would then also require contextualization. There will be a single household questionnaire in which IP-specific contextualization are incorporated. For example, the list of improved practices will include practices promoted by both IPs, including those that differ by IP. See Annex 2 for the list of targeted commodities and improved agricultural practices. The questionnaire will be first developed by TANGO in English and then translated by Kimetrica into local languages – namely, Kiswahili and Turkana. [14] The Translation, Review, Adjudication, Pre-testing and Documentation (TRAPD) model for survey translation will be utilized, where the questionnaire will be

- translated into the local language by one translator,
- reviewed by a second translator,
- adjudicated for discrepancies in the presence of the survey manager or cluster coordinator that speaks the language
- pretested and
- documented.

Translations of the questionnaire will be made available in MS Excel and on the CAPI application. The translated version of the questionnaire will use locally appropriate and easy-to-understand terms and concepts to ensure accurate understanding and valid responses. The English version of the main household questionnaire[15] is presented in Annex B1 and the modified full household resilience questionnaire[16] is presented in Annex B2.

Table 4 illustrates the indicators to be measured and the level of disaggregation.

Table 4. Indicators to be Measured in the Baseline Survey of the BHA RFSAs in Kenya

Indicator	Disaggregation Level
Prevalence of moderate and severe food insecurity in the household, based on the Food Insecurity Experience Scale (FIES)	Gendered household type (GHT)[1] Level of Severity: Moderate, Severe
Percentage of households with poor, borderline, and adequate Food Consumption Score (FCS); Mean FCS	GHT
POVERTY	
Daily per capita expenditures (as a proxy for income) in USG assisted areas	GHT

[14] The local firm will recruit enumerators who are well versed in local languages. During training sessions, team leads and enumerators will sit in language groups (Kiswahili and Turkana) and review the questionnaire with a view to ensuring that every day, appropriate local language, terms and concepts are used. Enumerators will have ample time during the training to practice conducting interviews in local languages and entering responses in the data entry forms on the tablets.

[15] The main household questionnaire was adapted using the 2018 PREG BL/EL survey and the 2014 Kenya Demographic and Health Survey. However, some items require further contextualization (e.g., volume of water containers) and will be finalized based on input from the local firm. Items that require further refinement pending receipt of inputs from the implementing partners (e.g., value chain commodities, improved practices, etc…) are highlighted in yellow.

[16] The resilience module for the 2021 baseline survey of the BHA RFSAs in Kenya is based on the modified full resilience questionnaire used for the 2018 baseline survey of the DFSAs in Uganda. For Uganda, the household questionnaire was modified to include questions needed to assess the community components of resilience and therefore the community questionnaire was not used. An additional module on COVID-19 impacts and coping strategies was incorporated to the resilience questionnaire of this study using the module from the 2020 PREG Phase 1 Recurrent Monitoring Household Survey (RMS) Questionnaire – Round 4.

Indicator	Disaggregation Level
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	GHT
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	GHT
WATER, SANITATION AND HYGIENE	
Percent of households using basic drinking water services	GHT
Percent of households in target areas practicing correct use of recommended household water treatment technologies	Technology Type: Chlorination, Flocculant/Disinfectant, Filtration, Solar Disinfection, Boiling
Percent of households with access to a basic sanitation service	GHT
Percent of households in target areas practicing open defecation	GHT
Percent of households with soap and water at a hand-washing station on premises	GHT
AGRICULTURE	
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	Sex: Female, Male
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	Sex: Female, Male
Percent of producers who have applied targeted improved management practices or technologies[2]	Commodity Sex: Female, Male Age (15-29, 30+) Management practice or technology type
Yield of targeted agricultural commodities within target areas[2]	Livestock: commodity, production system, sex, age
WOMEN'S HEALTH AND NUTRITION	
Percentage of women of reproductive age consuming a diet of minimum diversity (MDD-W)	Age: <19, 19+ years
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	None
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	Age: 15-19, 20-29 and 30-49
Percent of women in union who made decisions about modern family planning methods in the past 12 months	Decision-making: alone, jointly, spouse Age: 15-19, 20-29, 30-49
Contraceptive prevalence rate (CPR)	Traditional, modern
CHILD HEALTH AND NUTRITION[3]	
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	Sex: Female, Male
Prevalence of children 6-23 months consuming a diet of minimum diversity (MDD-C)	Sex: Female, Male
Prevalence of exclusive breastfeeding of children under six months of age	Sex: Female, Male
Percent of children under age five (0-59 months) who had diarrhea in the prior two weeks	Sex: Female, Male
Percent of children under age five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	Sex: Female, Male

Indicator	Disaggregation Level
GENDER - CASH	
Percent of women and men in union who earned cash in the past 12 months	Sex; Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	Age: 15-19, 20-29, 30-49, ≥50
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	Age: 15-19, 20-29, 30-49, ≥50
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	Age: 15-19, 20-29, 30-49, ≥50
GENDER CREDIT AND GROUP PARTICIPATION	
Percent of women/men who are members of a community group	Sex: Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50
Percent of women/men in union with access to credit	Sex: Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50
Percent of women/men in a union who make decisions about credit	Decision actors: alone, jointly Sex: Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50
RESILIENCE	
Ability to recover from shocks and stresses index	GHT
Percent of households that believe local government will respond effectively to future shocks and stresses	GHT
Index of social capital at the household level	Social capital components: overall index, bonding sub-index, bridging sub-index; GHT
Proportion of households participating in group-based savings, micro-finance or lending programs	Financing type; GHT
Adaptive Capacity Index	None
Absorptive Capacity Index	None
Transformative Capacity Index	None

NOTES: [1] Following FFP indicator descriptions, FTF defines four gendered household types: households with i) female and male adults, ii) adult female, no adult male, ii) adult male, no adult female, and iv) child, no adults. USAID, 2020. Food for Peace Indicators Handbook. Part I: Indicators for Baseline and Endline Surveys for Development Food Security Activities. May 2020.
[2] Total number of commodities will not exceed six for crops and livestock combined.
[3] Anthropometric measures will be collected by IPs through a recurrent monitoring system.

2.3 Field Procedures

Data for the BL survey will be collected with tablets using Computer-Assisted Personal Interviewing (CAPI). Tablets will be loaded with the Census and Survey Processing System (CSPro) data entry application which will be developed by Kimetrica. Field procedures will be adapted with COVID-19 safety mitigation protocols at every stage of data collection to mitigate the risk of the virus transmission and safeguard the wellbeing of staff, households, and communities:[17]

- Avoid/minimize travel between counties and between counties and the capital
- Minimize duration of contact between data collection teams and households and time spent in the communities[18]
- Abide by local rules, regulations, and social/physical distancing guidelines (see Box 1)
- Avoid large gatherings and minimize proximity
- Ensure adequate training of all staff and data collection teams on Do No Harm and safe approaches for face-to-face interviewing and knowledge of COVID-19 transmission and mitigation (including frequent handwashing with water and soap)
- Ensure availability of needed equipment/materials to mitigate virus spread (i.e., face covers, hand sanitizer, soap, and thermometers)
- Maintain close oversight and adherence to Do No Harm protocols
- Provide information on what to do/whom to contact in the event of a suspected COVID case (i.e., referral to health clinic)

Box 1. Guidance to listing agents and data collection teams

- ✓ Be respectful if households express concern or apprehension to participate in the interview
- ✓ Perform temperature checks every day before deploying
- ✓ Wear a mask or facial cover before, during, and after the interview
- ✓ Encourage the respondent to wear a face cover
- ✓ Conduct the interview outside or in a well-ventilated space
- ✓ Discourage other household members from congregating, if this is not possible, try to minimize the number of people present
- ✓ Maintain at least one-meter distance apart throughout the interview
- ✓ Avoid handshakes or physical contact
- ✓ Wash hands with water and soap or use sanitizer/hand alcohol – before and after
- ✓ Sanitize frequently touches surfaces (e.g., tablets)

2.3.1 Field Manuals

Prior to the start of training, TANGO will develop Enumerator, Team Lead, and Household Listing Manuals based on prior BL surveys and FFP and FTF guidelines. The manuals provide guidance on field procedures and the survey protocol. TANGO will customize the manuals to the BLS questionnaire and

[17] The underlying principle guiding the adaptations to the BLS data collection procedures is Do No Harm. Per the USAID/FFP and USAID/OFDA Interim Guidance for Applicants Engaging in COVID-19 Humanitarian Response: in all programming, the safety and security of community members and implementing partner staff are critical; and where remote monitoring is not feasible, update data collection tools and protocols to limit proximity, frequency, and duration of face-to-face contact.

[18] Field teams will be instructed to be thorough while adhering to COVID-19 mitigation protocols. The local firm is expected to hire enough enumerators to minimize the overall time spent in each EA. Other ways to minimize frequency of contact include identifying a time of the day when household members are most likely to be home to conduct the interview, and pre-arranging revisits by phone, where possible, since phone numbers will be collected during the listing exercise.

for country-specific field protocols. The Team Lead's Manual will describe the study design and objectives, roles and responsibilities, rules and regulations, ethics in data collection, field work preparation and data quality assurance protocols. The Enumerator's Manual will cover similar topics and provides question-by-question guidance for completing the questionnaire including the correct selection of eligible respondents for each module and appropriate interviewing techniques and procedures. The Enumerator's Manual will also include guidance on operating tablets and understanding CSPro, the software used to program the questionnaire and to capture the data on the tablets. Guidance for COVID-sensitive fieldwork procedures is provided in both the Enumerator and Team Lead Manuals.

2.3.2 Training

TANGO will plan to lead a virtual training of trainers (ToT) for the field coordinators, independent survey monitors, and team leads.

Training of trainers (ToT): The ToT will be conducted in Nairobi over a five-day period and will be held using Zoom. Kimetrica field coordinators, team leads at IT specialists, as well as the independent survey monitors will participate in the training . During this time, TANGO will lead the training remotely.[19] The ToT will focus on roles and responsibilities, organization and supervision of fieldwork, and data quality assurance and performance monitoring. TANGO will also perform a question-by-question review of the instrument. The training includes time for mock interviews and role-playing using tablets to ensure all participants are well versed in the instrument and in navigating the CSPro program in order to effectively lead the enumerator training. Following the completion of the ToT, each trainer (local firm field coordinators and team leads) will lead an in-person training of enumerators in their respective county.

Main training: The main (enumerator) training will be conducted over a seven-day period in Nakuru and will cover all survey modules, followed by one day of field testing of the survey with tablets and revising and finalizing the survey instrument prior to the commencement of data collection. Kimetrica field coordinators and team leads, and the independent survey monitors, previously trained by TANGO during the ToT, will conduct the main training with remote support from TANGO.[20]

The enumerator training will include a combination of plenary sessions for question-by-question guidance and break-out groups to practice and role-play using the tablets. The break-out groups will be followed by a plenary session debrief to discuss issues experienced and how to handle them. The local survey monitors, previously trained during the ToT, will participate in the main training, and observe the mock interviews and provide feedback.

Kimetrica will arrange to hold the training in venues with break-out rooms to ensure that participants are spaced out and can abide by local social distancing requirements. Depending on conditions at the time of the training, the local firm may rent marquis tents and arrange to conduct most of the training outdoors. During the days that the training is held in-doors, the local firm will require participants to wear masks. Physical/social distancing will be adhered to at all times. The local firm will instruct participants to wash their hands with water and soap and use hand sanitizer frequently. COVID-kits, comprising hand sanitizers and face covers/masks, will be distributed to participants at the start of the training. Temperature checks will be taken at the start of each day and anyone presenting with a fever of 100.4° F (38° C) or greater will not be allowed to participate in the training and will self-isolate for a

[19] TANGO will conduct the training of trainers in English.

[20] TANGO and the trainers will be connected on a WhatsApp group and communicate daily and as needed when issues arise during the training. In addition, TANGO staff will connect via ZOOM and participate in the daily de-brief plenary sessions where issues are discussed among trainers and participants.

period of 14 days. Kimetrica will train an additional 20 percent of the total number of required enumerators as back-up.

The timeline for training is based on best practices from TANGO's previous experience training local firms, including TANGO's more recent experience conducting virtual trainings (e.g., Burkina Faso, Niger, Madagascar and Sudan). Four TANGO staff members will lead the ToT remotely and the same TANGO staff members will be available to serve as resource persons during the main training that will be led by the local firm.[21]

Prior to the start of trainings, TANGO will develop the training curriculum in collaboration with the local firm and IPs.[22] Annex 3 provides the training curriculum for the ToT and main training. Training topics will include data gathering, sampling strategy, human subjects research and informed consent, a review of the survey questionnaire, use of and how to gather data using mobile devices, data checks for quality control, creating backup copies of data, and data archiving and transfer. Participants will be trained on Do No Harm principles and COVID-sensitive data collection protocols, in addition to the standard training on the instrument. Trainings will include background on how COVID-19 is transmitted and methods to prevent its spread. COVID training will also cover enumerator conduct outside of official business, to make sure that enumerators follow health protocols as much as possible in the evenings, when they are not working, and may be more likely to be exposed to the virus.

Pilot: At the end of the seven days of the enumerator training, there will be a one-day pilot test conducted in rural areas surrounding Nakuru followed by a discussion session of challenges (e.g., skip logic, wording, sequence/clarity of questions) and needed modifications to the survey, as well as final logistical planning. Each enumerator will complete two full interviews during the pilot test, and team leads and field coordinators will observe enumerators and make notes on their performance which they will share during the debrief. Table 5 summarizes the pre-data collection activities.

Table 5. Pre-Data Collection Activities

Activity	Duration	Participants
Listing training/household listing exercise	12 days	Listing agents
Training of trainers	5 days	TANGO, Local Firm Field Coordinators, Independent Survey Monitors, IT Specialists
Fieldwork Training	7 days	Enumerators, Team Leads, Local Firm Coordinators and IT Specialists, Independent Survey Monitors
Pilot test of survey instrument and field procedures De-brief and adjustments to questionnaire, tablet, field data collection planning, and other fieldwork logistics. All changes communicated by TANGO to BHA for approval.	1 day	

[21] As indicated above, TANGO will be connected to the trainers on a WhatsApp group to communicate daily, and as needed when issues arise during the training. In addition, TANGO staff will participate in the daily de-brief plenary sessions where issues are discussed among trainers and participants.

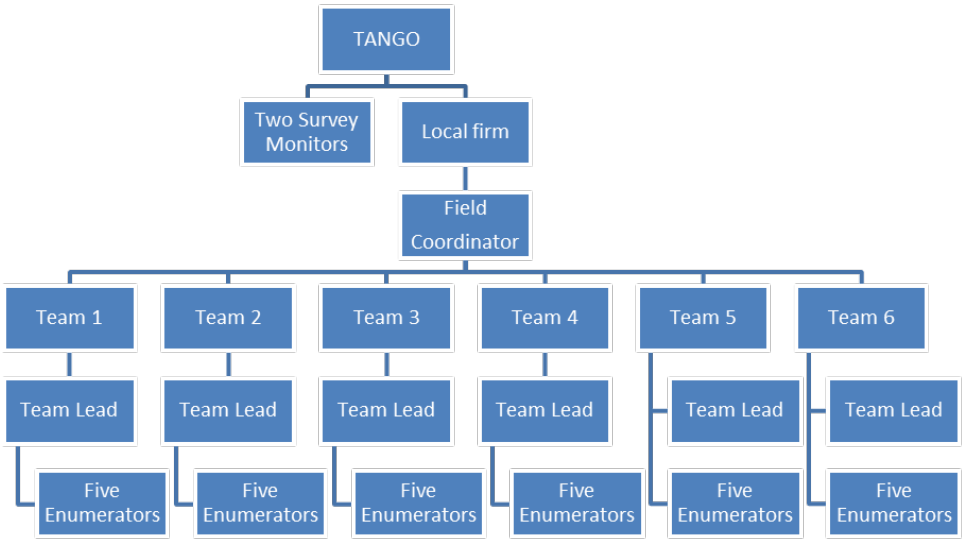
[22] IPs will be requested to provide input in the development of definitions for improved management practices. TANGO will also request IPs to provide technical presentations during the training of trainers and the main training to ensure that enumerator teams are knowledgeable of the RFSA's key target populations and main interventions.

2.3.3 Quantitative Data Collection

Data collection will commence on October 12 immediately after the pilot study and will end by November 1, 2021.[23] A quantitative data collection team will be formed for each county and consist of enumerators, team leads, a local firm field coordinator and two local independent survey monitors.

To collect data from 4,000 households in Nawiri RFSA areas, there will be 24 teams (six teams per county), each consisting of one team lead and five enumerators. Accordingly, the local data collection firm will hire a total of 120 enumerators, 24 team leads, and four field coordinators. One information technology (IT) specialist will be hired to support data collection. TANGO will hire two local independent survey monitors for each county, who will accompany the six teams assigned to their county for the entire duration of data collection to provide quality control and oversight of field work.[24] Figure 2 illustrates the structure of the data collection teams for each county.

Figure 2. Data Collection Team Structure Per County



To the extent possible, Kimetrica will recruit enumerators/team leads from the respective county in which data collection will take place to minimize travel between counties and to minimize security risks and risk of transmission associated with travel. All teams will be trained in the same location (Nakuru) to facilitate cross-learning and consistency in standards and approaches, and they will be deployed for data collection at the same time.[25] TANGO staff, independent survey monitors, key personnel from the local data collection firm, and field coordinators will provide continued training and close oversight during the data collection to ensure high quality data collection.

Kimetrica field coordinators will organize fieldwork logistics and oversee the progress and quality of fieldwork. Field coordinators will travel with the enumerator teams throughout the data collection

[23] Monday, October 11 is an official holiday, therefore data collection is slated to start on October 12 to allow time for a courtesy visit to the County Commission Office and the County Governor's Office to introduce the survey before the teams begin interviewing households.

[24] The exact number will be determined by the availability of qualified local survey monitors who are based in the county.

[25] Kimetrica will train an additional 20 percent of enumerators as backup resulting with a total of 144 enumerators trained for the baseline survey (6 enumeration teams per county * 5 enumerators per team per county * 4 counties * 1.20 = 144).

phase and will provide direct supervision of team leads. The field coordinator monitors the progress of field work and make adjustments to the field movement plan as needed.

To ensure adequate oversight of field teams, TANGO will hire independent survey monitors (two per county) and train them during the ToT. Survey monitors will be trained on all aspects of field work, including the instrument, operating the CSPro program, entering data in tablets, and monitoring field completion and enumerator performance.[26] The local survey monitors will travel with the data collection teams and provide an additional layer of oversight and quality control independent of the local firm field supervisors, who will also be travelling with the field teams. TANGO will form two WhatsApp groups, one with the local firm Survey Director and another with the independent survey monitors. TANGO will communicate daily with both groups in addition to convening daily debriefs to receive updates from the field on any issues encountered.

Data collection teams will work with community focal points to identify a time of the day when household members are most likely to be home to reduce the frequency of contact/revisits needed to complete the interviews. Data collection teams will be staffed to minimize the time teams spend in each community. COVID kits will be distributed to data collection teams at the start of field work. Temperature checks will be taken at the start of each day and anyone presenting with a fever will not be allowed to participate in the data collection and will replaced by back-up enumerators.

2.3.4 Quality Control

Quality control of the PBS begins with an effective and comprehensive training followed by monitoring and oversight throughout data collection. TANGO will facilitate a virtual ToT. Local IP staff will provide training on program-specific information, including activity details, to the local firm (enumerators, team leads, and field coordinators).[27] The training will cover required technical, logistical, and leadership aspects. This includes field coordinator, team lead, and enumerator roles and responsibilities, rules, behaviors, and ethics (including gender sensitivity), respondent selection, and use of field control sheets. This will be followed by mock interviews/role playing using the tablets and a one-day pilot test of the survey where the data collection teams will practice in detail the survey tool.

With oversight by TANGO and the local independent survey monitors, Kimetrica will organize, manage, and implement the data collection activities for the BL survey. Kimetrica was selected based on prior experience conducting quantitative CAPI-based surveys, including FFP/FTF surveys in similar geographies. Kimetrica will be responsible for identifying and hiring competent enumerators and field coordinators, organizing, and leading the enumerator training, arranging data collection field logistics, overseeing, supervising, and providing quality control of data collection, management, and transmission of data from the field, and delivery of a final dataset to TANGO for analysis. TANGO will request Kimetrica prioritize the recruitment of enumerators who have prior experience with CAPI and experience conducting food, nutrition, and/or agriculture surveys. Based on input from the IPs, TANGO will strongly recommend that the local firm strive for a 50-50 female-male split in the recruitment of field team staff.

[26] Team leads will maintain field completion forms and review enumerator's assignment sheets.

[27] Local IP staff will determine for themselves whether they wish to participate in-person in the main training or whether they wish to join remotely.

During the period of data collection, the independent survey monitors and local firm field coordinators and team leads will utilize several data quality monitoring controls including observation, spot-check re-interviews and daily review of completed interviews (see Box 2). Quality monitoring controls will be adapted to mitigate against COVID-19 risks associated with in-person re-interviews and verification procedures.

Team leads will review data from the enumerators' mobile devices to ensure data quality prior to uploading specific data to the TANGO server. At the end of each day, team leads will collect all mobile devices from enumerators and review a subset of household interview records and questions that are collected that day – verifying enumerators are collecting accurate data.

Survey monitors will accompany the data collection teams assigned to their county. Survey monitors will travel independently and will visit all six teams throughout the entire duration of data collection to ensure the understanding and proper practice of quality control procedures. Survey monitors will provide regular updates to TANGO on fieldwork progress, or any issues encountered. Local survey monitors will be hired based on substantial prior experience managing and implementing surveys in Kenya, preferably related to food security and nutrition, fluency in local languages, knowledge of the regions in which data collection will take place, and prior experience with CAPI surveys.

TANGO will remotely monitor data consistency throughout the ongoing data collection process using data periodically downloaded from the cloud server and by reviewing field check tables. TANGO will review the data and provide feedback on data quality, survey progress, and highlight specific issues to be discussed with each field team. Kimetrica will develop field check tables to check for response rates, missing data, outliers, age displacement and value heaping. Feedback will be provided to each field team so that inconsistencies can be corrected. The CSPro dataset will be converted into a Stata (Version 15) database for data management and analysis. Validated data will be accumulated in the main Stata database. TANGO and Kimetrica will conduct daily debriefs with the independent survey monitors and field coordinators to troubleshoot issues with the instrument, CSPro programming or understanding of the survey protocols.

Box 2. Quality Control Checks During Data Collection

Observation: Observing at least 10 percent of interviews conducted by each enumerator with the heaviest observation happening at the beginning and toward the end of data collection when errors are the most likely to happen. Observation exercises will be conducted by Team Leads and Field Coordinators.

Spot-check re-interviews: Conducting spot-check re-interviews of at least 15 percent of completed interviews. Spot-checks are done by returning to certain households and conducting a short partial re-interview in which the Team Lead independently collects the household roster data, which in this survey, is most prone to fraud or error, and compares the results to the questionnaire completed by the enumerator.

Daily de-briefs and review of completed interviews: At the end of each day, Team Leads will collect all mobile devices from enumerators. Upon receiving the tablets from the enumerators, the team leads will review, finalize, and then upload the forms to the TANGO cloud server through a secure transmission, per guidelines provided during the training.

2.4 Data Processing and Analysis

2.4.1 Data entry programming and testing

Electronic data capture devices or tablets will be used as part of data collection, complemented with CSPro software. The use of mobile devices and an electronic questionnaire improves data quality by allowing data validation rules and consistency checks to be integrated as part of data collection. Mobile devices reduce data entry burden as data are entered at the enumerator level and records are uploaded to a cloud server using the built-in internet connectivity of the devices. This will allow the data analysis team to frequently review data consistency and ensure the data are ready for analysis almost immediately after the completion of data collection for all sampled households.

The CSPro application will be designed by Kimetrica based on the English-language version of the questionnaire incorporating skipping rules and other interview logic. To ensure the correct identification and selection of eligible household members, only the name(s) and line number(s) of eligible household members will appear on the tablet at the start of each module when the enumerator is prompted to select the respondent. Thus, the CSPro form will be designed to pull information collected from the household roster that will auto-fill the respondent selection items. Once the English version of the electronic form is tested and validated, the local language(s) translation will be added to the CSPro application.[28] TANGO will test the data entry program for errors and functionality prior to the training. Tablets will be used during the ToT and enumerator training to ensure that data collection teams are adequately trained in the skip logic of the program and in translating into local languages. The survey tool and the data entry program will be tested during the one-day pilot. Modifications to the survey tool and data entry program will be made as needed to address any issues found during the pilot test.

2.4.2 Data transmission

After reviewing completed interviews, the team leads will upload finalized data to the cloud server through a secure transmission. Data will be uploaded to the cloud server daily subject to connectivity, and once every three days at a minimum.

2.4.3 Data analysis

TANGO will clean and analyze household survey data, using Stata data analysis and statistical software. Data from the four counties will be pooled and analyzed as one data set, with stratification by IP and county.

Point estimates: Point estimates and variance estimations are derived using Taylor series expansion and consider the design effect associated with the complex sampling design; and 95 percent confidence intervals are provided for all indicators.

Bivariate and Multivariate analyses: TANGO will conduct additional analyses to explore associations with key outcome indicators for a select number of indicators. All descriptive, bivariate, and multivariate analyses will be determined following preliminary calculation of the indicators and presented to BHA for approval prior to the start of data analysis.

Sampling weights: Separate weights are calculated for indicators and adjusted to compensate for household and individual non-response.

[28] Given the complexity and length of the survey instrument, and based on prior experience, TANGO strongly recommends finalizing the questionnaire one-month in advance of the training to allow adequate time to test the program in-house before the start of training.

Missing Data: Missing data points are not included in calculations for BHA and program-specific indicators (i.e., they are excluded from the denominator and numerator). "Don't Know" responses are recoded to the null value and included in the denominator; i.e., "Yes", "No" and "Don't Know" responses are included in the denominator, but only "Yes" responses are counted in the numerator.

2.4.4 Final datasets

TANGO will deliver final datasets following the completion of the data analysis and the vetting of results with stakeholders. Datasets will be submitted in .CSV, STATA, and SPSS formats. To ensure the anonymity of respondents, all personal identifying information will be removed from the datasets prior to their delivery to BHA. The final data files will include:

- Sampling frames and sampling weights for each county
- Raw data files generated from the CSPro data entry application
- Edit rules and programming specifications for each final dataset
- Codebook for the final dataset

3. QUALITATIVE DATA ANALYSIS

Due to a plethora of desk reviews and formative research conducted by the IPs, the BL study will use available secondary data, and when necessary, work directly with IP technical leads to provide further triangulation and explanation of unexpected quantitative results. Use of existing data reinforces the focus by USAID on use and dissemination of data and lessons learned across countries and within the IDEAL-supported food security and nutrition community of practice of IPs. TANGO will consult with BHA and the IPs to determine the secondary sources of qualitative data to be reviewed.

4. ETHICAL CONSIDERATIONS AND INFORMED CONSENT

Ethical approval to conduct the BLS in Kenya will be obtained from the National Commission for Science, Technology, and Innovation (NACOSTI). TANGO will work with Kimetrica to obtain permission to access the study communities in each of the counties. The local firm will secure the permission of local/village authorities to enter the communities to conduct face-to-face interviews prior to beginning field work. The mission will be requested to provided official letters that will be carried by the local firm data collection teams.

Enumerators will obtain verbal consent before each interview after explaining the objectives and purpose of the study and information safeguards. Module A of the household questionnaire describes the guidelines for requesting informed consent. TANGO has updated the consent statement to include COVID-19 risks. Annex 4 provides the introduction and consent statement that each enumerator will read prior to beginning the interview. The enumerator must certify that: (a) each eligible respondent 18 years and older has provided verbal consent to participate in the interview before being personally interviewed; (b) guardians (e.g., parents, grandparents) of minors under the age of 18 years have provided consent; and (c) respondents under the age of 18 years have provided assent to be interviewed, unless they are married or living alone which in this case only the consent of the respondent would be required.

Enumerators will explain the risks associated with participating in a face-to-face interview in the context of the COVID-19 pandemic. Respondents are informed that participation is voluntary and may choose

to decline to participate in the interview. Respondents may refuse to answer a question and request to move to the next question, and they may request to stop the interview at any time.

Participation in the survey is expected to carry no direct costs, risks, or benefits. The survey is expected to take approximately three to four hours to complete. It is expected to carry a low burden on respondents since no single respondent will be interviewed for the entire questionnaire. Respondents will not incur transportation costs. The survey does not include invasive procedures. Respondents will not be compensated for participating in the study.

5. LIMITATIONS AND POTENTIAL CHALLENGES

Limitations of the BL study design and potential challenges encountered during the BL study implementation are discussed below as well as contingency plans to address them as they arise.

5.1 Limitations of the study design

Validity and Reliability of Self-Reported Data: Most of the data collected for the household survey are self-reported. Limitations of self-reported data include the potential for exaggeration or omission of information, inaccurate recall, social-desirability bias, or reporting of untruthful information, and reduced validity if respondents do not fully understand a question. Enumerators will be trained in techniques to help mitigate these types of measurement bias. Where possible, enumerators will use photos, such as photos of water containers and livestock body condition score charts, to improve data quality.

Timing of the Survey: Data collection is scheduled to take place in October. However, measures of food security and dietary diversity could be impacted given that data collection spills into the period when maize availability increases in the country.[29] Additionally, the timing of the survey overlaps with livestock migration to dry season grazing lands. This could create challenges for locating and interviewing livestock farmers.

5.2 Potential challenges and contingency plans

Non-response: Respondents may be reluctant to participate in the survey due to general mistrust that may arise in politically volatile situations and due to fears of falling ill in the present context of the COVID-10 pandemic. The field teams will be trained to explain to respondents the objectives of the study and measures taken to preserve the anonymity of their responses. It is also possible that households may relocate or move due to the political situation. For this reason, the study design takes into consideration a higher than usual nonresponse factor of 20 percent.

Security and travel risks and difficulties locating pastoral communities: Changes in COVID-19 conditions and the security situation may impact the ability of field teams to reach certain clusters. Additionally, it may be difficult to locate pastoral communities. To address these challenges, TANGO and the local firm will implement the following strategies:

- The household listing will be conducted shortly ahead of the start of data collection (see Section 7. Timeline) so that clusters that cannot be reached will be replaced by reserve clusters at that time.

[29] The FEWS NET seasonal calendar for Kenya indicates that the hungry season in Northern and Eastern Kenya lasts until November, when maize availability from the rest of the country increases after the start of the long rains maize harvest in the Western and Rift Valley (October – February).

- The local firm will contact local authorities in advance of fieldwork about the BL survey and secure permission to enter communities. The Mission will be requested to provide official letters that will be carried by the data collection teams.
- The local firm will communicate regularly with the local authorities as necessary, and prior to entering communities, to remain informed of local conditions and the security situation to minimize security risks to the data collection teams.
- Field teams operating in areas with restricted access will coordinate their movement with the local authorities. Clusters that are deemed dangerous to reach due to the security situation will be replaced by other clusters at that time.
- Field teams will be comprised of enumerators who reside in the counties in which data collection is slated to take place to minimize travel risks.
- TANGO will coordinate closely with the independent survey monitors and local firm field supervisors to monitor travel between different locations and obtain regular updates on local (COVID-19) conditions and the security situation. Field movement plans will be adjusted as needed ahead of any anticipated issues if possible.
- Kimetrica will develop the deployment plan at the cluster level in consultation with village chiefs and time visits when household members are at home, or if needed, arrange to meet farmers where they are currently located.

Poor Connectivity: Poor or intermittent network connectivity may result in the need to extend the training period due to the need to reschedule make-up training sessions.

Compact Schedule: The proposed timeline (see Section 7. Timeline) assumes ethical review and approvals can be completed within six weeks. However, this process can take up to two months.[30] An Ethical Clearance Certificate must first be obtained from AMREF, one of the institutions delegated by the National Commission for Science, Technology, and Innovation (NACOSTI) to review applications and provide certification.[31] Upon receipt of the Ethical Clearance Certificate, TANGO will apply to obtain a Research Permit from NACOSTI. TANGO will modify the training schedules as needed to maintain the proposed timeline to the extent possible. TANGO will coordinate closely with its independent survey monitors and the local firm field coordinators to ensure that fieldwork is progressing as planned and is completed on time.

6. DISSEMINATION OF FINDINGS

TANGO will prepare one BL study report (approximately 50-60 pages) in English, in which results are stratified by IP and county. The report will be reviewed (two rounds of revisions) and finalized under BHA approval. Due to the COVID-19 pandemic, TANGO's current assumption is that BHA will host webinar briefings for Washington, DC and the field to present findings from the BL survey and the synthesis of findings from secondary qualitative data.

7. TIMELINE

Table 6 illustrates the projected timeline for milestone activities for the BL study. Data collection was expected to start on August 30 and end on September 24. Under the revised timeline, data collection will begin on October 12 and end on November 1. The lag from the initial timeline is due to several

[30] Prior to submitting the study protocol and instrument for review and certification, the instrument must first be translated in Kiswahili and the protocol and questionnaire must be formatted per requirements.
[31] Examples of institutions tasked to review and provide certification are The African Medical and Research Foundation (AMREF) and the University of Nairobi/Kenyatta National Hospital ERC.

factors: (1) delays in issuing Kimetrica's contract, (2) the need for multiple rounds of discussions with BHA and IPs to finalize the questionnaire; (3) difficulty recruiting qualified listers in Northern Kenya; and (4) the need make revisions to the sampling approach to account for the mix of villages and sublocations.

Although TANGO completed the firm selection on July 13, there were delays in determining whether BHA approval is needed prior to issuing a contract to the local data collection firm, given that the contractor's bid exceeded the estimated budget for data collection. In the absence of a contract, the local data collection firm was unable to initiate the IRB approval process, which can take up to six weeks.

In addition, although TANGO received comments on the protocol and questionnaire on July 15, multiple rounds of consultations and revisions with the IPs were needed to clarify and streamline the agriculture-related modules, particularly to achieve consensus on a set of clearly defined, measurable practices and to develop a module on camels, which is not part of the core BHA/FTF questionnaires.[32]

The need to clarify the geographies in Mercy Corp's sampling frame contributed to additional delays due to the need to revisit the sampling approach to account for the mix of villages and sublocations in one frame.

Given the projected end-date for data collection, all subsequent tasks, including indicator calculation and report-writing have also shifted as illustrated in the table below.

Table 6. BHA Nawiri RFSAs Baseline Study Timeline of Milestone Activities

Activity	Date
Obtain list of commodities and targeted improved practices from IPs Obtain list of sublocations/villages from IPs	June 18
Draft 1 of study protocol submitted to BHA for review	June 30
Local data collection firm selected	July 13
BHA/Partner comments on draft protocol received	July 15
Kick-off conference call with local data collection firm List of sublocations/villages sent to Kimetrica to perform first stage sample selection with KNBS support	July 27
Draft 2 of study protocol submitted to BHA	August 18
Research protocol submitted to local ethics/IRB committee[1]	August 20
CSPro data entry template for Listing Exercise finalized and tested	August 25
Questionnaire finalized	August 20
Training manuals provided for BHA review and approval (one week review period) Team Lead Manual and Enumerators Question-by Question Manual Household Listing Manual	 August 30 September 1
CSPro data entry template for Baseline Survey finalized and tested	September 24
Household listing training and operation in sampled EAs Data cleaning	September 12 – September 23 September 24 – September 29
Training of Trainers (ToT) – five days	September 24 – September 29
Field team training (main training) – seven days	October 1 – October 7

[32] Additional inputs on the questionnaire were received from the IPs on July 28, July 31, August 5, and August 19.

Activity	Date
All required ethics approvals are obtained[1]	October 7
Pilot test of questionnaire and field protocols Pilot debrief and questionnaire/tablet adjustments (if needed) Logistics of fieldwork Updates to instrument/CS-PRO program	October 8
Revised instruments and field movement plan provided for BHA approval (COB)	October 9
BHA approval of post-pilot questionnaire (close of business)	October 10
Start of field work	October 12
End of fieldwork	November 1
Receipt of clean datasets from local subcontractor	November 5
Qualitative data analysis (synthesis of secondary data sources)	November – December 2021
Preliminary indicator results (staggered schedule)	
Food security, WASH, MCHN	November 22
Cut-off to receive all secondary sources of qualitative data to be reviewed	November 30
Consumption Expenditures (poverty) and Resilience	December 3
Agriculture	January 14
Summary of topline findings – excluding agriculture results[2]	December 6
Draft baseline study report	February 14
Comments on draft report received (two weeks turn-around)	February 28
Briefing to IP field technical/M&E staff[3]	TBD
Submission of final baseline study report[4]	March 31
BHA confirms final edits & approves (repeat as necessary)	April 7
Submission of final datasets	April 15
Final report (508 compliant and uploaded to DEC)	TBD (Save the Children)
BHA/Washington briefing	TBD
Learning events[5]	TBD

NOTES:

[1] The ethical review and approvals process includes obtaining approvals from AMREF and NACOSTI. This two-stage process can take up to two months but TANGO through its local partner will apply for an expedited review.

[2] TANGO will submit indicator estimates with sampling statistics and a summary of topline findings. The topline findings will include bulleted lists that summarize the methodology and main findings under each topical area (e.g., food security, poverty, WASH, MCHN, etc.). This summary will focus on the indicator estimates and will not include additional analyses (i.e., descriptive, bivariate, or multivariate analyses), figures, or the synthesis of qualitative data.

[3] The briefing is intended to review and discuss the results of the baseline study to validate and contextualize findings. A separate learning event focused on programming implications is planned for a later date. Based on TANGO's most recent experience from the Burkina Faso and Niger baseline studies, it is more effective and efficient to review/discuss the results before engaging stakeholders in a learning event. This staggered approach allows stakeholders to reflect on the information before drawing conclusions on programming implications.

[4] Assumes a turnaround of approximately five weeks from the receipt of comments on the first draft.

[5] Objective and format of the learning event(s) to be determined in consultation with BHA.

ovation (NACOSTI). TANGO will work with Kimetrica to obtain permission to access the study communities in each of the counties. The local firm will secure the permission of local/village authorities

to enter the communities to conduct face-to-face interviews prior to beginning field work. The mission will be requested to provided official letters that will be carried by the local firm data collection teams.

Enumerators will obtain verbal consent before each interview after explaining the objectives and purpose of the study and information safeguards. Module A of the household questionnaire describes the guidelines for requesting informed consent. TANGO has updated the consent statement to include COVID-19 risks. Annex 4 provides the introduction and consent statement that each enumerator will read prior to beginning the interview. The enumerator must certify that: (a) each eligible respondent 18 years and older has provided verbal consent to participate in the interview before being personally interviewed; (b) guardians (e.g., parents, grandparents) of minors under the age of 18 years have provided consent; and (c) respondents under the age of 18 years have provided assent to be interviewed, unless they are married or living alone which in this case only the consent of the respondent would be required.

Enumerators will explain the risks associated with participating in a face-to-face interview in the context of the COVID-19 pandemic. Respondents are informed that participation is voluntary and may choose to decline to participate in the interview. Respondents may refuse to answer a question and request to move to the next question, and they may request to stop the interview at any time.

Participation in the survey is expected to carry no direct costs, risks, or benefits. The survey is expected to take approximately three to four hours to complete. It is expected to carry a low burden on respondents since no single respondent will be interviewed for the entire questionnaire. Respondents will not incur transportation costs. The survey does not include invasive procedures. Respondents will not be compensated for participating in the study.

ANNEX 1A: FIRST STAGE SAMPLE SELECTION GUIDANCE

Background

TANGO International in collaboration with Kimetrica is conducting a baseline (BL) survey of the United States Agency (USAID) Bureau for Humanitarian Assistance (BHA) Resilience Food Security activities (RFSAs) in Kenya. The Nawiri RFSAs are being implemented by Catholic relief Services (CRS) in the counties of Isiolo, Marsabit and by Mercy Corps (MC) in the counties of Samburu and Turkana. Quantitative data collection for the baseline study includes a population-based household survey (PBS) conducted among a random sample representative of the entire population of households living in RFSA areas. The primary purpose of the PBS is to provide population-level estimates on standard BHA indicators. These indicators will serve as points of comparison for the endline survey. The results will be stratified by implementing partner (IP) and county so that they are representative of each county within the IP's implementation area. Data collection for the BL study is scheduled to take place in September 2021 to overlap with the lean season. The BL survey will be conducted using face-to-face interviewing with COVID-19 mitigation procedures in place.

Sampling Design and Size

The BL survey sampling strategy uses a cross-sectional, multi-stage cluster design. In the first stage, clusters are randomly selected from each county in the IPs sampling frame using probability proportional to the size of the county (PPS). The sampling frame consists of sublocations/villages within the RFSA target areas, i.e., all sublocations/villages that are expected to receive the activity's interventions.[33] The minimum required sample is 1,000 households per county and 4,000 households in total. Table 1 illustrates the number of clusters and households included in the BL sampling frame.

Table 7. Number of Clusters and Households Included in the BL Sampling Frames

	Number of clusters[1]	Number of Households
Catholic Relief Services (CRS)		
Isiolo	34	1,000
Marsabit	34	1,000
Mercy Corps (MC)		
Samburu	34	1,000
Turkana	34	1,000
TOTAL	136	4,000

NOTES:

[1] The number of clusters per county was determined based on an equal allocation of 30 households per cluster and the minimum required sample size of 1,000 households per county. The number of clusters = 1,000 / 30 = 33.3 which is rounded up to 34.

[33] CRS provided a list of sublocations, and MC provided a list comprised of both villages and sublocations. The list of sublocations/villages represent areas the IPs intend to target with the understanding that the intervention areas may shift overtime depending on the results of the ongoing formative research, and that the intensity of the interventions may vary by area.

Sample selection

The sample for each county will be selected using multi-stage cluster sampling with two stages of sampling: 1) selection of clusters, and 2) selection of households.

In the first stage, clusters are systematically selected from each county in each IP's sampling frame using probability proportional to size (PPS). Census enumeration areas (EAs) will be used as clusters rather than villages because the boundaries of EAs are well-defined and easier to locate in contrast to the boundaries of a village. To mitigate against possible inaccessibility, a "random-generated reserve sample" will be drawn using a two-phase approach as stipulated in the Feed the Future Population-based Survey Sampling Guide. [34] This entails selecting the required 34 clusters for each county plus 25 percent reserve clusters (9) in case a cluster needs to be replaced to give a total of 43 EAs per county.

At the first phase of the first stage of sample selection a total of 43 (34 plus 9 reserve) EAs are sampled using systematic PPS sampling. At the second phase of the first stage, 9 out of the 43 EAs are randomly subsampled using fractional interval systematic sampling[35]. The survey will be conducted in the 34 EAs that are not selected at the second phase. The nine reserve EAs selected in the second phase are numbered 1 through 9 in the order in which they were randomly sampled to define the sequence of their release. If only one reserve EA is needed, the reserve EA labeled "number 1" will replace the first EA from among the original 34 EAs that cannot be accessed. Inaccessible EAs are replaced with reserve EAs using this approach as needed to achieve the overall number of required EAs (34).

For the CRS Nawiri RFSA areas, the first stage sample selection was based on a list of EAs that correspond to the sublocations provided by the partner. The first stage sample selection for the MC Nawiri RFSA areas was based on a list of EAs that correspond to the villages and sublocations MC plans to implement its interventions. Below are the instructions for first stage sample selection. [36]

First Stage Sample Selection - CRS: Given that CRS provided a list of sublocations, the first stage sampling of EAs for the Isiolo and Marsabit counties was conducted in two phases:

- **Phase 1 - Selection of Sublocations:** For each county (Isiolo and Marsabit) TANGO selected 43 sublocations using probability proportional to size (PPS). In some cases, a sublocation was selected more than once given its relative size. The list of selected sublocations, including the number of times the sublocation was selected, was provided to KNBS to perform Phase 2 of the first stage sample selection in the CRS Nawiri areas.

- **Phase 2 - Selection of EAs within the Selected Sublocations:** KNBS selected EAs from the list of selected sublocations that TANGO provided. The EAs were selected using PPS. The number of EAs to be selected per sublocation equals the number of times the sublocation was selected in the first phase.

Thus, the sampling weights for the first stage of probability of selection in the CRS Nawiri areas will include two probabilities of selection - i.e., the probability of the sublocation being selected and the probability of the EA(s) within the sampled sublocation being selected.

[34] For additional details see: https://www.fantaproject.org/sites/default/files/resources/FTF-PBS-Sampling%20Guide-Apr2018.pdf.

[35] See Section 8.1 in the FtF guidance available at https://www.fantaproject.org/sites/default/files/resources/FTF-PBS-Sampling%20Guide-Apr2018.pdf.

[36] Section 5.3 on Systematic PPS Sampling in Feed the Future Population-based Survey Sampling Guide.

First Stage Sample Selection – MC: The sampling frame for the Mercy Corps Nawiri areas is a mix of villages and sublocations, so the first stage sampling of EAs was conducted in one phase only. Because KNBS does not share village-level population estimates, the sampling selection was performed by KNBS with guidance from TANGO as described below:

- KNBS listed all EAs that best correspond to the list of MC geographies.
- From this stacked list of EAs, for each county (Samuburu and Turkana), KNBS selected 43 EAs using PPS.

The sampling weights for the first stage of probability of selection in the Mercy Corps Nawiri areas will only include one probability of selection - i.e., the probability of the EA being selected from the full list of EAs that correspond to all of the geographies.

Instructions for first stage sample selection per stratum (county)

Step 1. Identify the EAs that correspond to all the sublocations/villages in the stratum (county) that are within the RFSA implementation area based on the list provided by TANGO.[37]

Step 2. Obtain the count of the number of households per EA and calculate the **cumulative total number of households** within the county that correspond to the RFSA implementation area.

Step 3. Calculate a sampling interval by dividing the total number of households in the stratum (county) by the number of EAs that are to be selected. For example, if the total number of households in the stratum is 6,000 and the number of EAs to be selected is 43 (34 required + 9 reserve), the unrounded sampling interval is 7,000/43 = 162.8.

Step 4. Generate a random start (rs) number that is less than the sampling interval calculated in step three. This can be performed in Microsoft Excel using the *rand( )* function.

Step 5. Select the first EA in the stratum (county) per the following FtF guidance: "identify the pair of consecutive EAs in the list for which the cumulative total corresponding to the first EA is less than the random start and for which the cumulative total corresponding to the second EA is greater than or equal to the random start. Choose the second EA in the pair."[38]

Step 6. Select the second EA in the stratum by first computing the number (a_2) that equals the sum of the random start number (identified in Step 4) and the sampling interval (calculated in Step 3) then follow the procedure outlined in Step 5 – namely, "identify the pair of consecutive EAs in the list for which the cumulative total corresponding to the first EA is less than a_2 and for which the cumulative total corresponding to the second EA is greater than or equal to $a_{2..}$" [39]

Step 7. Select the third EA in the stratum by first computing the number (a_3) that is equal to the sum of the random start number and twice the sampling interval then follow the procedure outlined in Step 5.

Step 8. Continue to follow this procedure until the required number of EAs (37) is reached. Large EAs may be selected more than once, however this is unlikely since EAs are usually about the same size. In this case, the number of households to be selected from an EA that is selected more than once equals 30 (number of households to be sampled) multiplied by the number of times the EA was selected.

[37] The boundaries of a village may not overlap perfectly with the boundaries of a EA. In some cases, a village may overlap with more than one EA. Also, the boundaries of a village can be smaller than the EA (i.e., one EA can be comprised of several villages). Please select the EA(s) that best overlap with the village.
[38] See page 50, Section 5.3, Feed the Future Population-based Survey Sampling Guide.
[39] Ibid.

ANNEX 1B: SAMPLING FRAME BY IP AND COUNTRY

2021 Baseline Study of the BHA RFSA in Kenya - Mercy Corps Sampling Frame								
	County	District / Sub-county	Ward	Location	Sub-location	Village	Livelihood Zone	Notes
1	Turkana	Turkana North	Kaeris	Kaeris	Kanakurdio	Kanakurudio	Pastoral	KNBS reports this geography is a sublocation rather than a village.
2	Turkana	Turkana North	Kaeris	Kaeris	Kaeris	Kaeris	Pastoral	KNBS reports this geography is a sublocation rather than a village.
3	Turkana	Turkana North	Kaeris	Kaeris	Nadunga	Nandunga	Pastoral	KNBS reports this geography is a sublocation rather than a village.
4	Turkana	Turkana North	Kaeris	Kaeris	Kangakipur and Milimatatu	Kangakipur and Milimatatu	Pastoral	
5	Turkana	Turkana North	Lapur	Yapakuno	Kaaleng	Kaalem	Pastoral	KNBS reports this geography is a sublocation rather than a village.
6	Turkana	Turkana North	Lapur	Yapakuno	Kaaleng	Kakelae	Pastoral	Not found in KNBS records.
7	Turkana	Turkana North	Lake Zone	Kataboi	kataboi	Kataboi	Fisheries	KNBS reports this geography is a sublocation rather than a village.
8	Turkana	Turkana North	Lake Zone	Kataboi	Lomekui	Lomekui	Fisheries	
9	Turkana	Turkana North	Lake Zone	Kataboi	Katiko	Katiko	Fisheries	KNBS reports this geography is a sublocation rather than a village.
10	Turkana	Turkana North	Lake Zone	Ngisiger	Nachukui	Nachukui	Fisheries	
11	Turkana	Turkana North	Lake Zone	Riokomor	Kokuselei	Kokuselei	Fisheries	KNBS reports this geography is a sublocation rather than a village.
12	Turkana	Turkana North	Lake Zone	Riokomor	Riokomor	Riokomor	Fisheries	KNBS reports this geography is a sublocation rather than a village.
13	Turkana	Turkana North	Lake Zone	Ngisiger	Lowarengak	Lowarengak	Fisheries	KNBS reports this geography is a sublocation rather than a village.
14	Turkana	Turkana North	Lake Zone	Todongonyang	Kanamkuny	Todonyang and Kanamkuny	Fisheries	
15	Turkana	Turkana North	Lake Zone	Ngisiger	Lowarengak	Natooo	Fisheries & Pastoral	
16	Turkana	Turkana North	Lapur	Lokitaung	Nakalale	Nakalale	Fisheries & Pastoral	KNBS reports this geography is a sublocation rather than a village.
17	Turkana	Turkana North	Lapur	Lokitaung	Kachoda	Kachoda	Fisheries & Pastoral	
18	Turkana	Turkana North	Lapur	Karebur	Karebur	Karebur	Fisheries & Pastoral	
19	Turkana	Turkana North	Lapur	Karebur	Nabulukok	Nabulukok	Fisheries & Pastoral	
20	Turkana	Turkana North	Lapur	Kokuro	Kokuro	Kokuro	Fisheries & Pastoral	KNBS reports this geography is a sublocation rather than a village.
21	Turkana	Turkana North	Lapur	Kokuro	Sasame and Liwan	Sasame and Liwan	Fisheries & Pastoral	KNBS reports this geography is a sublocation rather than a village.
22	Turkana	Turkana North	Kaaleng/ Kalikor	Kaikor	Kaikor	Loitanit	Pastoral	
23	Turkana	Turkana North	Kaaleng/ Kalikor	Kaikor	Kaikor	Lokolio	Pastoral	KNBS reports this geography is a sublocation rather than a village.
24	Turkana	Turkana North	Kaaleng/ Kalikor	Kaikor	Loruth	Kotome	Pastoral	KNBS reports this geography is a sublocation rather than a village.
25	Turkana	Turkana North	Kaaleng/ Kalikor	Kaikor	Loruth	Karach II	Pastoral	KNBS reports this geography is a sublocation rather than a village.
26	Turkana	Turkana North	Kaaleng/ Kalikor	Kaikor	Kaikor	Nalita	Pastoral	
27	Turkana	Turkana North	Kaaleng/ Kalikor	Kaikor	Loruth	loruth Esekon	Pastoral	KNBS reports this geography is a sublocation rather than a village.
28	Turkana	Turkana North	Kibish	kibish	Natapar	Karach I	Pastoral	KNBS reports this geography is a sublocation rather than a village.
29	Turkana	Turkana North	Kibish	kibish	Natapar	Koyasa	Pastoral	KNBS reports this geography is a sublocation rather than a village.
30	Turkana	Turkana North	Kibish	kibish	Kibish	Lokomarinyang	Pastoral	KNBS reports this geography is a sublocation rather than a village.
31	Turkana	Turkana North	Kibish	kibish	Kibish	Kibish	Pastoral	KNBS reports this geography is a sublocation rather than a village.
32	Turkana	Turkana North	Kibish	kibish	Naita	Naita	Pastoral	
33	Turkana	Turkana North	Kibish	kibish	Natapar	Natapar	Pastoral	
34	Turkana	Turkana North	Kibish	Kibish	Natapar	Kaitede	Pastoral	KNBS reports this geography is a sublocation rather than a village.
35	Turkana	Turkana North	Nakalale	Nakalale	Nakalale	Nakalale	Pastoral	
36	Turkana	Turkana North	Nakalale	Nakalale	Kobuin	Kobwin	Pastoral	KNBS reports this geography is a sublocation rather than a village.
37	Turkana	Turkana North	Nakalale	Pelekech	Lokore	Lokore	Pastoral	KNBS reports this geography is a sublocation rather than a village.
38	Turkana	Turkana North	Nakalale	Nakalale	Losajait	Losajait	Pastoral	
39	Turkana	Turkana Central	Kerio Delta	Kang'irisae	Kang'irisae	Kang'irisae	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
40	Turkana	Turkana Central	Kerio Delta	Kang'irisae	Nakoret	Nakoret	Agro-Pastoral	
41	Turkana	Turkana Central	Kerio Delta	Lorengelup	Lorengelup	Lorengelup	Agro-Pastoral	
42	Turkana	Turkana Central	Kerio Delta	Kerio	Nakurio	Nakurio	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
43	Turkana	Turkana Central	Kerio Delta	Kerio	Kerio	Kerio	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
44	Turkana	Turkana Central	Kerio Delta	Lorengelup	Kakimat	Kakimat	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
45	Turkana	Turkana Central	Kerio Delta	Lorengelup	Kang'agetei	Kang'agetei	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
46	Turkana	Turkana Central	Kerio Delta	Kerio	Nadoto	Nadoto	Agro-Pastoral	
47	Turkana	Turkana Central	Kangatotha	Kangathotha	Ille	Ille	Fisheries	KNBS reports this geography is a sublocation rather than a village.
48	Turkana	Turkana Central	Kangatotha	Kangathotha	Naoros	Naoros	Fisheries	
49	Turkana	Turkana Central	Kangatotha	Kangathotha	Lomopus	Lomopus	Fisheries	KNBS reports this geography is a sublocation rather than a village.

2021 Baseline Study of the BHA RFSA in Kenya - Mercy Corps Sampling Frame								
	County	District / Sub-county	Ward	Location	Sub-location	Village	Livelihood Zone	Notes
51	Turkana	Turkana Central	Kalokol	Kalokol	Kalokol	Kalokol	Pastoral	KNBS reports this geography is a sublocation rather than a village.
52	Turkana	Turkana Central	Kalokol	Kapua	Kapua	Kapua	Pastoral	KNBS reports this geography is a sublocation rather than a village.
53	Turkana	Turkana Central	Kalokol	Namukuse	Lochor Ekeny	Lochor Ekeny	Pastoral	
54	Turkana	Turkana Central	Kalokol	Namukuse	Namukuse	Namukuse	Pastoral	KNBS reports this geography is a sublocation rather than a village.
55	Turkana	Turkana Central	Lodwar Township	Lodwar	Lodwar Town	Lodwar Town	Urban	
56	Turkana	Turkana Central	Lodwar Township	Nakwamekwi	Nakwamekwi	Nakwamekwi	Urban	KNBS reports this geography is a sublocation rather than a village.
57	Turkana	Turkana Central	Lodwar Township	Lodwar	Napetet	Napetet	Urban	KNBS reports this geography is a sublocation rather than a village.
58	Turkana	Turkana Central	Kanamkemer	Kanamkemer	Kanamkemer	Kanamkemer	Pastoral	
59	Turkana	Turkana Central	Kanamkemer	Kanamkemer	Nawoitorong	Nawoitorong	Pastoral	
60	Turkana	Turkana West	Letea	Letea	Tulabalany	Tulabalany	Pastoral	
61	Turkana	Turkana West	Letea	Letea	Loritit	Loritit	Pastoral	KNBS reports this geography is a sublocation rather than a village.
62	Turkana	Turkana West	Letea	Loreng	Loreng	Loreng	Pastoral	KNBS reports this geography is a sublocation rather than a village.
63	Turkana	Turkana West	Songot	Lorau	Lokangae	Lokangae	Pastoral	
64	Turkana	Turkana West	Songot	Lorau	Lotikipi	Lotikipi	Pastoral	KNBS reports this geography is a sublocation rather than a village.
65	Turkana	Turkana West	Songot	Songot	Lopwarin	Lopwarin	Pastoral	KNBS reports this geography is a sublocation rather than a village.
66	Turkana	Turkana West	Songot	Songot	Lokudule	Lokudule	Pastoral	KNBS reports this geography is a sublocation rather than a village.
67	Turkana	Loima	Kotaruk/Lobei	Kotaruk	Kotaruk	Kotaruk	Agro-Pastoral	
68	Turkana	Loima	Kotaruk/Lobei	Kotaruk	Naipa	Naipa	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
69	Turkana	Loima	Kotaruk/Lobei	Lokipetot-Arengan	Lokipetot-Arengan	Lokipetot-Arengan	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
70	Turkana	Loima	Kotaruk/Lobei	Lorugum	Kalemunyang	Kalemunyang	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
71	Turkana	Loima	Kotaruk/Lobei	Lobei	Lobei	Lobei	Agro-Pastoral	
72	Turkana	Loima	Turkwel	Turkwel	Turkwel	Turkwel	Pastoral	
73	Turkana	Loima	Turkwel	Nadapal	Napeikar	Napeikar	Pastoral	
74	Turkana	Loima	Turkwel	Nadapal	Tiya	Tiya	Pastoral	
75	Turkana	Loima	Turkwel	Lorugum	Lorugum	Lorugum	Pastoral	
76	Turkana	Loima	Turkwel	Lomeyana	Kapus	Kapus	Pastoral	KNBS reports this geography is a sublocation rather than a village.
77	Turkana	Loima	Turkwel	Nadapal	Nadapal	Nadapal	Pastoral	KNBS reports this geography is a sublocation rather than a village.
78	Turkana	Loima	Turkwel	Nadapal	Kawalathe	Kawalathe	Pastoral	KNBS reports this geography is a sublocation rather than a village.
79	Turkana	Loima	Turkwel	Nadapal	Lomeyan	Lomeyan	Pastoral	
80	Turkana	Loima	Turkwel	Lomeyana	Nachuro	Nachuro	Pastoral	
81	Turkana	Loima	Loima	Loima	Puch	Puch	Pastoral	KNBS reports this geography is a sublocation rather than a village.
82	Turkana	Loima	Loima	Loima	Namoruputh	Namoruputh	Pastoral	
83	Turkana	Loima	Loima	Loima	Lochor-Ekuyen	Lochor-Ekuyen	Pastoral	
84	Turkana	Loima	Loima	Loima	Lochor Edome	Lochor Edome	Pastoral	
85	Turkana	Loima	Lokiriama/ Lorengippi	Lokiriama	Lokiriama	Lokiriama	Pastoral	KNBS reports this geography is a sublocation rather than a village.
86	Turkana	Loima	Lokiriama/ Lorengippi	Urum	Lochor-Alomala	Lochor-Alomala	Pastoral	
87	Turkana	Loima	Lokiriama/ Lorengippi	Lokiriama	Atalokamusio	Atalokamusio	Pastoral	
88	Turkana	Loima	Lokiriama/ Lorengippi	Lorengippi	Lorengippi	Lorengippi	Pastoral	KNBS reports this geography is a sublocation rather than a village.
89	Turkana	Loima	Lokiriama/ Lorengippi	Lorengippi	Kaemanik	Kaemanik	Pastoral	
90	Turkana	Loima	Lokiriama/ Lorengippi	Lorengippi	Nakurio	Nakurio	Pastoral	
91	Turkana	Loima	Lokiriama/ Lorengippi	Lorengippi	Lodwat	Lodwat	Pastoral	
92	Turkana	Loima	Lokiriama/ Lorengippi	Lorengippi	Loya a	Loya a	Pastoral	
93	Turkana	Turkana South	Kaputir	Kaputir	Kalomwae	Kalomwae	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
94	Turkana	Turkana South	Kaputir	Kaputir	Nakwamoru	Nakamoru	Agro-Pastoral	
95	Turkana	Turkana South	Kaputir	Kaputir	Lorogon	Lorogon	Agro-Pastoral	KNBS reports this geography is a sublocation rather than a village.
96	Turkana	Turkana South	Katilu	Katilu	Katilu	Katilu	Pastoral	KNBS reports this geography is a sublocation rather than a village.
97	Turkana	Turkana South	Katilu	Katilu	Lokapel	Lokapel	Pastoral	KNBS reports this geography is a sublocation rather than a village.
98	Turkana	Turkana South	Katilu	Katilu	Kalemgorok	Kalemgorok	Pastoral	KNBS reports this geography is a sublocation rather than a village.
99	Turkana	Turkana South	Katilu	Katilu	Kanaodon	Kanaodon	Pastoral	

2021 Baseline Study of the BHA RFSA in Kenya - Mercy Corps Sampling Frame								
	County	District / Sub-county	Ward	Location	Sub-location	Village	Livelihood Zone	Notes
100	Turkana	Turkana South	Lobokat	Kainuk	Kainuk	Kainuk	Pastoral	KNBS reports this geography is a sublocation rather than a village.
101	Turkana	Turkana South	Lobokat	Kainuk	Kakongu	Kakongu	Pastoral	KNBS reports this geography is a sublocation rather than a village.
102	Turkana	Turkana South	Lobokat	Kainuk	Kainuk	Loyapat	Pastoral	Not found in KNBS records.
103	Turkana	Turkana South	Kalapata	Kalapata	Kalapata	Kalapata	Pastoral	KNBS reports this geography is a sublocation rather than a village.
104	Turkana	Turkana South	Kalapata	Kalapata	Loperot	Loperot	Pastoral	
105	Turkana	Turkana South	Kalapata	Kalapata	Nakaalei	Nakaalei	Pastoral	
106	Turkana	Turkana South	Lokichar	Lokichar	Lokichar	Lokichar	Pastoral	KNBS reports this geography is a sublocation rather than a village.
107	Turkana	Turkana South	Lokichar	Lokichar	Kapese	Kapese	Pastoral	
108	Turkana	Turkana South	Lokichar	Lochwaa	Lochwaa	Lochwangikamatak	Pastoral	KNBS reports this geography is a sublocation rather than a village.
109	Turkana	Turkana South	Lokichar	Lochwaa	Napusimoru	Napusimoru	Pastoral	
110	Turkana	Turkana East	Katilia	Katilia	Elelea	Elelea	Pastoral	KNBS reports this geography is a sublocation rather than a village.
111	Turkana	Turkana East	Katilia	Katilia	Paragati	Paragati	Pastoral	
112	Turkana	Turkana East	Katilia	Katilia	Katilia	Katilia	Pastoral	
113	Turkana	Turkana East	Lokori/ Kochodin	Lokori	Lokori	Lokori	Pastoral	KNBS reports this geography is a sublocation rather than a village.
114	Turkana	Turkana East	Lokori/ Kochodin	Lokori	Kang'itit	Kang'itit	Pastoral	
115	Turkana	Turkana East	Lokori/ Kochodin	Lokori	Lotubae	Lotubae	Pastoral	KNBS reports this geography is a sublocation rather than a village.
116	Turkana	Turkana East	Lokori/ Kochodin	Kochodin	Lopii	Lopii	Pastoral	
117	Turkana	Turkana East	Lokori/ Kochodin	Kochodin	Kochodin	Kochodin	Pastoral	KNBS reports this geography is a sublocation rather than a village.
118	Turkana	Turkana East	Lokori/ Kochodin	Lochakula	Lokwamosing	Lokwamosing	Pastoral	
119	Turkana	Turkana East	Lokori/ Kochodin	Lochakula	Kakulit	Kakulit	Pastoral	
120	Turkana	Turkana East	Lokori/ Kochodin	Lochakula	Lochakula	Lochakula	Pastoral	
~~121~~	~~Turkana~~	~~Turkana East~~	~~Katilia~~	~~Katilia~~	~~Elelea~~	~~Elelea~~	~~Agro-Pastoral + small pastoral~~	DUPLICATE
~~122~~	~~Turkana~~	~~Turkana East~~	~~Katilia~~	~~Katilia~~	~~Paragati~~	~~Paragati~~	~~Agro-Pastoral + small pastoral~~	DUPLICATE
~~123~~	~~Turkana~~	~~Turkana East~~	~~Katilia~~	~~Katilia~~	~~Katilia~~	~~Katilia~~	~~Agro-Pastoral + small pastoral~~	DUPLICATE
.	Turkana	Turkana Central	Kalokol	Kalokol	Namadak	Namadak	Pastoral	KNBS reports this geography is a sublocation rather than a village.
124	Samburu	Samburu West	Suguta Marmar	Suguta Marmar	Logorate	Logorate	Agro-Pastoral + small pastoral	KNBS reports this geography is a sublocation rather than a village.
125	Samburu	Samburu West	Suguta Marmar	Suguta Marmar	Suguta Marmar	Suguta Marmar	Agro-Pastoral + small pastoral	KNBS reports this geography is a sublocation rather than a village.
126	Samburu	Samburu West	Suguta Marmar	Amaiya	Longewan	Longewan	Agro-Pastoral + small pastoral	
127	Samburu	Samburu West	Suguta Marmar	Amaiya	Amaiya	Amaiya	Agro-Pastoral + small pastoral	KNBS reports this geography is a sublocation rather than a village.
128	Samburu	Samburu West	Suguta Marmar	Suguta Marmar	Suguta	Nasur	Agro-Pastoral + small pastoral	Not found in KNBS records.
129	Samburu	Samburu West	Suguta Marmar	Suguta Marmar	Lolmolog	Lolmolog	Agro-Pastoral + small pastoral	KNBS reports this geography is a sublocation rather than a village.
130	Samburu	Samburu West	Maralal	Maralal	Maralal	Maralal Town	Urban + Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.
131	Samburu	Samburu West	Maralal	Maralal-urban	Shabaa	Lkoroto, Shabaa	Urban + Agro-pastoral	
132	Samburu	Samburu West	Maralal	Maralal-urban	Shabaa	Shabaa	Urban + Agro-pastoral	
~~133~~	~~Samburu~~	~~Samburu West~~	~~Maralal~~	~~Maralal-town~~	~~Maralal~~	~~Maralal Town~~	~~Urban + Agro-pastoral~~	DUPLICATE
134	Samburu	Samburu West	Maralal	Maralal-urban	Shabaa	Lkoroto	Urban + Agro-pastoral	
~~135~~	~~Samburu~~	~~Samburu West~~	~~Maralal~~	~~Maralal-urban~~	~~Shabaa~~	~~Shabaa~~	~~Urban + Agro-pastoral~~	DUPLICATE
136	Samburu	Samburu West	Maralal	Maralal-urban	Ng'ari	Ng'ari	Urban + Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.
137	Samburu	Samburu West	Maralal	Maralal	Ledero	Ledero	Urban + Agro-pastoral	
138	Samburu	Samburu West	Maralal	Maralal-urban	Milimani	Milimani	Urban + Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.
139	Samburu	Samburu West	Maralal	Maralal-town	Lpartuk	Lpartuk	Urban + Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.
140	Samburu	Samburu West	Porro	Porro	Siambu	Siambu	Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.
141	Samburu	Samburu West	Porro	Porro	Seketet	Seketet	Agro-pastoral	
142	Samburu	Samburu West	Porro	Porro	Mugur	Mugur	Agro-pastoral	
143	Samburu	Samburu West	Porro	Porro	Lporowuai	Lporowuai	Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.
144	Samburu	Samburu West	Porro	Porro	Mugur	Lemisigiyo	Agro-pastoral	
145	Samburu	Samburu West	Porro	Sirata Oirobi	Sirata Oirobi	Sirata Oirobi	Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.
146	Samburu	Samburu West	Porro	Lodongojek	Kisima	Nauneri	Agro-pastoral	
147	Samburu	Samburu West	Porro	sirata oirobi	Ngejumuny	Ngejumuny	Agro-pastoral	KNBS reports this geography is a sublocation rather than a village.

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	County	District / Sub-county	Ward	Location	Sub-location	Village	Livelihood Zone	Notes
148	Samburu	Samburu North	El Barta	Baragoi	Bendera	Bendera	Pastoral	
149	Samburu	Samburu North	El Barta	Baragoi	Nachola	Naling'ango'or	Pastoral	Not found in KNBS records.
150	Samburu	Samburu North	El Barta	Baragoi	Baragoi	Baragoi Town	Pastoral	
151	Samburu	Samburu North	El Barta	Waso rongai	Simale	Ngilai	Pastoral	Not found in KNBS records.
152	Samburu	Samburu North	El Barta	Marti	kalele	Marti	Pastoral	Not found in KNBS records.
153	Samburu	Samburu North	El Barta	Suyna	Suyan	Suyan	Pastoral	
154	Samburu	Samburu North	El Barta	El Barta	Maskita	Maskita	Pastoral	
155	Samburu	Samburu North	Nachola	Nachola	Nachola	Nachola	Pastoral	
156	Samburu	Samburu North	Nachola	Nachola	Nakuparat	Nakuparat	Pastoral	
157	Samburu	Samburu North	Nachola	Nachola	Terter	Terter	Pastoral	KNBS reports this geography is a sublocation rather than a village.
158	Samburu	Samburu North	Nachola	Kawop	Lonyangaten	Lonyangaten	Pastoral	KNBS reports this geography is a sublocation rather than a village.
159	Samburu	Samburu North	Nachola	Marti	Kalele	Kalele	Pastoral	KNBS reports this geography is a sublocation rather than a village.
160	Samburu	Samburu North	Nachola	Marti	Lokorkor	Lokorkor	Pastoral	
161	Samburu	Samburu North	Nachola	Marti	Muru akiring	Emuru-Akiring	Pastoral	KNBS reports this geography is a sublocation rather than a village.
162	Samburu	Samburu North	Ndoto	Ndoto	Lesirikan	Lesirikan	Pastoral	
163	Samburu	Samburu North	Ndoto	Ndoto	Lodua	Lodua	Pastoral	
164	Samburu	Samburu North	Ndoto	Arsim	Arsim	Arsim	Pastoral	KNBS reports this geography is a sublocation rather than a village.
165	Samburu	Samburu North	Ndoto	Arsim	Illarut	Illarut	Pastoral	
166	Samburu	Samburu North	Ndoto	Latakweny	Loikumkum	Loikumkum	Pastoral	
167	Samburu	Samburu North	Ndoto	Arsim	Nguronit	Nguronit	Pastoral	KNBS reports this geography is a sublocation rather than a village.
168	Samburu	Samburu North	Ndoto	Latakweny	Latakweny	Latakweny	Pastoral	KNBS reports this geography is a sublocation rather than a village.
169	Samburu	Samburu North	Ndoto	Ndoto	Seren	Seren	Pastoral	
170	Samburu	Samburu North	Nyiro	Loruko	Loruko	Lkotikal	Pastoral	
171	Samburu	Samburu North	Nyiro	Uaso Rongai	Uaso Rongai	Uaso Rongai	Pastoral	
172	Samburu	Samburu North	Nyiro	Simale	Simale	Simale	Pastoral	
173	Samburu	Samburu North	Nyiro	South Horr	South Horr	South Horr	Pastoral	
174	Samburu	Samburu North	Nyiro	Tuum	Tuum	Tuum	Pastoral	
175	Samburu	Samburu North	Nyiro	Parkati	Parkati	Parkati	Pastoral	
176	Samburu	Samburu North	Nyiro	Tuum	Tuum	Ijuk	Pastoral	Not found in KNBS records.
177	Samburu	Samburu North	Nyiro	Loonjorin	Loonjorin	Loonjorin	Pastoral	
178	Samburu	Samburu North	Nyiro	Parkati	Lkayo	Lkayo	Pastoral	KNBS reports this geography is a sublocation rather than a village.
179	Samburu	Samburu North	Nyiro	Tuum	Lusurkoi	Lusurkoi	Pastoral	
180	Samburu	Samburu North	Nyiro	Kawap	Kawap	Nakweny	Pastoral	
181	Samburu	Samburu North	Angata/ Nanyuikie	Barsaloi	Lulu	Lulu	Pastoral	KNBS reports this geography is a sublocation rather than a village.
182	Samburu	Samburu North	Angata/ Nanyuikie	Angata/ Nanyuikie	Morijo	Morijo	Pastoral	
183	Samburu	Samburu North	Angata/ Nanyuikie	Angata/ Nanyuikie	Morijo	Soit Naibor	Pastoral	KNBS reports this geography is a sublocation rather than a village.
184	Samburu	Samburu North	Angata/ Nanyuikie	Barsaloi	Barsaloi	Barsaloi	Pastoral	KNBS reports this geography is a sublocation rather than a village.
~~184~~	~~Samburu~~	~~Samburu North~~	~~Angata/ Nanyuikie~~	~~Barsaloi~~	~~Barsaloi~~	~~Barsaloi~~	~~Pastoral~~	DUPLICATE
185	Samburu	Samburu North	Angata/ Nanyuikie	Angata/ Nanyuikie	Loibashai	Loibashai	Pastoral	
186	Samburu	Samburu North	Angata/ Nanyuikie	Angata Nyokie	Angata Nyokie	Angata Nyokie	Pastoral	KNBS reports this geography is a sublocation rather than a village.
~~187~~	~~Samburu~~	~~Samburu North~~	~~Angata/ Nanyuikie~~	~~Barsaloi~~	~~Lulu~~	~~Lulu~~	~~Pastoral~~	DUPLICATE
188	Samburu	Samburu North	Angata/ Nanyuikie	Angata/ Nanyuikie	Morijo	Morijo	Pastoral	
~~189~~	~~Samburu~~	~~Samburu North~~	~~Angata/ Nanyuikie~~	~~Angata/ Nanyuikie~~	~~Morijo~~	~~Soit Naibor~~	~~Pastoral~~	DUPLICATE
~~191~~	~~Samburu~~	~~Samburu North~~	~~Angata/ Nanyuikie~~	~~Angata/ Nanyuikie~~	~~Loibashai~~	~~Loibashai~~	~~Pastoral~~	DUPLICATE
192	Samburu	Samburu North	Angata/ Nanyuikie	Angata/ Nanyuikie	Morijo	Angata Nyokie	Pastoral	
193	Samburu	Samburu North	Baawa	Mbukoi	Moru	Moru	Pastoral	
194	Samburu	Samburu North	Baawa	Baawa	Baawa	Baawa	Pastoral	KNBS reports this geography is a sublocation rather than a village.
195	Samburu	Samburu North	Baawa	Lbukoi	Lbukoi	Lbukoi	Pastoral	KNBS reports this geography is a sublocation rather than a village.
196	Samburu	Samburu North	Baawa	Opiroi	Mabati	Mabati	Pastoral	KNBS reports this geography is a sublocation rather than a village.

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	County	District / Sub-county	Ward	Location	Sub-location	Village	Livelihood Zone	Notes
197	Samburu	Samburu North	Baawa	Opiroi	Opiroi	Opiroi	Pastoral	KNBS reports this geography is a sublocation rather than a village.
198	Samburu	Samburu North	Baawa	Opiroi	Lorrok-lolmong'o	Lorrok-lolmong'o	Pastoral	
199	Samburu	Samburu North	Baawa	Iodokejek	Nonkeek	Nonkeek	Pastoral	KNBS reports this geography is a sublocation rather than a village.
200	Samburu	Samburu East	Waso	Waso East	Archer's Post	Archer's Post	Pastoral	KNBS reports this geography is a sublocation rather than a village.
201	Samburu	Samburu East	Waso	Waso East	Lerata	Lerata	Pastoral	
202	Samburu	Samburu East	Waso	Waso East	Losesia	Losesia	Pastoral	KNBS reports this geography is a sublocation rather than a village.
203	Samburu	Samburu East	Waso	Sere-Olipi	Sere-Olipi	Sere-Olipi	Pastoral	
204	Samburu	Samburu East	Waso	Ndonyo Wasin	Ndonyo Wasin	Ndonyo	Pastoral	
205	Samburu	Samburu East	Waso	Ndonyo Wasin	Ndonyo Wasin	Wuasin	Pastoral	KNBS reports this geography is a sublocation rather than a village.
206	Samburu	Samburu East	Waso	Waso West	Lengusaka	Lengusaka	Pastoral	KNBS reports this geography is a sublocation rather than a village.
207	Samburu	Samburu East	Waso	Waso East	Laresoro	Laresoro	Pastoral	KNBS reports this geography is a sublocation rather than a village.
208	Samburu	Samburu East	Wamba West	Waso West	Lpus Leluai	Lpus Leluai	Pastoral	
209	Samburu	Samburu East	Wamba West	Waso West	Ngutuk Ong'iron	Ngutuk Ong'iron	Pastoral	KNBS reports this geography is a sublocation rather than a village.
210	Samburu	Samburu East	Wamba West	Waso West	Remot	Remot	Pastoral	KNBS reports this geography is a sublocation rather than a village.
211	Samburu	Samburu East	Wamba West	Waso East	Sesia	Sesia	Pastoral	
212	Samburu	Samburu East	Wamba West	Lodungokwe	Lengei	Lengei	Pastoral	KNBS reports this geography is a sublocation rather than a village.
213	Samburu	Samburu East	Wamba West	Lodungokwe	Ltrimin	Ltrimin	Pastoral	KNBS reports this geography is a sublocation rather than a village.
214	Samburu	Samburu East	Wamba West	Lodungokwe	Lpus	Lpus	Pastoral	
215	Samburu	Samburu East	Wamba West	NKaroni	Lkisin	Nkaroni	Pastoral	
216	Samburu	Samburu East	Wamba West	NKaroni	Resim	Resim	Pastoral	
217	Samburu	Samburu East	Wamba West	NKaroni	Silango Nayokie	Silango Nayokie	Pastoral	KNBS reports this geography is a sublocation rather than a village.
218	Samburu	Samburu East	Wamba East	Koiting	Lpashe	Lpashe	Pastoral	KNBS reports this geography is a sublocation rather than a village.
219	Samburu	Samburu East	Wamba East	Koiting	Koiting	Koiting	Pastoral	
220	Samburu	Samburu East	Wamba East	Wamba	Wamba	Wamba	Pastoral	
221	Samburu	Samburu East	Wamba East	Wamba	Matakwani	Matakwani	Pastoral	

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	County	Sub-county	Division	Ward	Location	Sub Location	Livelihood Zone
1	Isiolo	Garbatulla	Garbatulla	Garbatulla	Boji	Boji	Pastoral
2	Isiolo	Garbatulla	Garbatulla	Garbatulla	Boji	Tanna	Pastoral
3	Isiolo	Garbatulla	Garbatulla	Garbatulla	Eskot	Eskot	Pastoral
4	Isiolo	Garbatulla	Garbatulla	Garbatulla	Gafarsa	Belgesh	Pastoral
5	Isiolo	Garbatulla	Garbatulla	Garbatulla	Gafarsa	Gafarsa	Agro-Pastoral
6	Isiolo	Garbatulla	Garbatulla	Garbatulla	Garbatulla	Garbatula South	Peri-urban/petty trade, Pastoral
7	Isiolo	Garbatulla	Garbatulla	Garbatulla	Garbatulla	Garbatulla North	Peri- urban/petty trade, Pastoral
8	Isiolo	Garbatulla	Garbatulla	Garbatulla	Kombola	Kombola	Agro-Pastoral
9	Isiolo	Garbatulla	Garbatulla	Garbatulla	Malkadaka	Malkadaka	Agro-Pastoral
10	Isiolo	Garbatulla	Garbatulla	Garbatulla	Malkadaka	Kuroftu Mollu	Agro-Pastoral
11	Isiolo	Garbatulla	Garbatulla	Garbatulla	Muchuro	Muchuro	Agro-Pastoral
12	Isiolo	Garbatulla	Sericho	Sericho	Badana	Badana	Pastoral
13	Isiolo	Garbatulla	Sericho	Sericho	Badana	Harr Adhi	Pastoral
14	Isiolo	Garbatulla	Sericho	Sericho	Eldera	Eldera	Pastoral
15	Isiolo	Garbatulla	Sericho	Sericho	Eldera	Quri	Pastoral
16	Isiolo	Garbatulla	Sericho	Sericho	Iresa Boru	Iresa Boru	Agro-Pastoral
17	Isiolo	Garbatulla	Sericho	Sericho	Iresa Boru	Forosa	Pastoral
18	Isiolo	Garbatulla	Sericho	Sericho	Iresa Boru	Mogore	Agro-Pastoral
19	Isiolo	Garbatulla	Sericho	Sericho	Komor-Bulla	Komor-Bulla	Pastoral
20	Isiolo	Garbatulla	Sericho	Sericho	Komor-Bulla	Modogashe North	Peri-urban/petty trade, Pastoral
21	Isiolo	Garbatulla	Sericho	Sericho	Modogashe	Burquqe	Pastoral
22	Isiolo	Garbatulla	Sericho	Sericho	Modogashe	Modogashe South	Peri-urban/petty trade, Pastoral
23	Isiolo	Garbatulla	Sericho	Sericho	Sericho	Sericho	Pastoral
24	Isiolo	Garbatulla	Sericho	Sericho	Sericho	Gubatu	Pastoral
25	Isiolo	Garbatulla	Sericho	Sericho	Sericho	Qone	Pastoral
26	Isiolo	Garbatulla	Sericho	Sericho	Sericho	Biliki	Pastoral
27	Isiolo	Isiolo	Ngaremara	Ngaremara	Attan	Attan	Agro-Pastoral
28	Isiolo	Isiolo	Ngaremara	Ngaremara	Gotu	Gotu	Pastoral
29	Isiolo	Isiolo	Ngaremara	Ngaremara	Gotu	Boji Dera	Pastoral
30	Isiolo	Isiolo	Ngaremara	Ngaremara	Nakuprat	Nakuprat	Pastoral

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	County	Sub-county	Division	Ward	Location	Sub Location	Livelihood Zone
31	Isiolo	Isiolo	Ngaremara	Ngaremara	Ngaremara	Ngaremara	Peri-urban, Pastoral
32	Isiolo	Isiolo	Ngaremara	Ngaremara	Ngaremara	Manyatta Zebra	Peri-urban, Pastoral
33	Isiolo	Isiolo	Ngaremara	Ngaremara	Attan	Aregae	Agro-Pastoral
34	Isiolo	Isiolo	Central	Bullapesa	Central	Central	Peri-urban
35	Isiolo	Isiolo	Central	Bullapesa	Central	Bullapesa	Peri-urban
36	Isiolo	Isiolo	Oldonyiro	Oldonyiro	Kipsing	Kipsing	Pastoral
37	Isiolo	Isiolo	Oldonyiro	Oldonyiro	Lenguruma	Lenguruma	Pastoral
38	Isiolo	Isiolo	Oldonyiro	Oldonyiro	Longopito	Longopito	Pastoral
39	Isiolo	Isiolo	Oldonyiro	Oldonyiro	Longopito	Tuale	Pastoral
40	Isiolo	Isiolo	Oldonyiro	Oldonyiro	Oldonyiro	Oldonyiro	Peri-urban, Pastoral
41	Isiolo	Isiolo	Oldonyiro	Oldonyiro	Oldonyiro	Rumate	Pastoral
42	Isiolo	Merti	Cherab	Cherab	Dadacha Basa	Dadacha Basa	Pastoral
43	Isiolo	Merti	Cherab	Cherab	Dadacha Basa	Alango	Pastoral
44	Isiolo	Merti	Cherab	Cherab	Korbesa	Korbesa	Pastoral
45	Isiolo	Merti	Cherab	Cherab	Korbesa	Biliqi	Pastoral
46	Isiolo	Merti	Cherab	Cherab	Korbesa	Saleti	Pastoral
47	Isiolo	Merti	Cherab	Cherab	Malka Galla	Malka Galla	Pastoral
48	Isiolo	Merti	Cherab	Cherab	Malka Galla	Dadacha Lafe	Pastoral
49	Isiolo	Merti	Cherab	Cherab	Mata Arba	Mata Arba	Pastoral
50	Isiolo	Merti	Cherab	Cherab	Mata Arba	Bulto Bonsa	Pastoral
51	Isiolo	Merti	Cherab	Cherab	Yamicha	Yamicha	Pastoral
52	Isiolo	Merti	Cherab	Cherab	Yamicha	Urura	Pastoral
53	Isiolo	Merti	Cherab	Cherab	Yamicha	Duma	Pastoral
54	Isiolo	Merti	Merti	Cherab	Merti North	Merti North	Peri-urban, Agro pastoral
55	Isiolo	Merti	Merti	Cherab	Merti North	Lakole	Pastoral
56	Isiolo	Merti	Kom	Chari	Bisan Biliqo	Bisan Biliqo	Pastoral
57	Isiolo	Merti	Kom	Chari	Bulesa	Bulesa	Agro-Pastoral
58	Isiolo	Merti	Kom	Chari	Bulesa	Awarsitu	Agro-Pastoral
59	Isiolo	Merti	Kom	Chari	Bulesa	Goda	Pastoral
60	Isiolo	Merti	Merti	Chari	Merti South	Merti South	Peri-urban, Agro pastoral

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	County	Sub-county	Division	Ward	Location	Sub Location	Livelihood Zone
61	Isiolo	Merti	Merti	Chari	Merti South	Godarupa	Pastoral
1	Marsabit	North Horr	North Horr	North Horr	North Horr	North Hoor	Pastoral+Petty Trading
2	Marsabit	North Horr	North Horr	North Horr	North Horr	Darade	Pastoral
3	Marsabit	North Horr	North Horr	North Horr	North Horr	Qorqa	Pastoral
4	Marsabit	North Horr	North Horr	North Horr	North Horr	Elbesso	Pastoral
5	Marsabit	North Horr	North Horr	North Horr	Galas	Galas	Pastoral
6	Marsabit	North Horr	North Horr	North Horr	Galas	Charigolo	Pastoral
7	Marsabit	North Horr	North Horr	North Horr	Malabot	Malabot	Pastoral
8	Marsabit	North Horr	Illeret	Illeret	Illeret	Illeret	Pastoral
9	Marsabit	North Horr	Illeret	Illeret	Illeret	Telesgaye	Pastoral
10	Marsabit	North Horr	Dukana	Dukana	Dukana	Dukana	Pastoral+Petty Trading
11	Marsabit	North Horr	Dukana	Dukana	Dukana	Garwole	Pastoral
12	Marsabit	North Horr	Dukana	Dukana	Balesa Saru	Bales-Saru	Pastoral
13	Marsabit	North Horr	Dukana	Dukana	Balesa Saru	Sabarei	Pastoral
14	Marsabit	North Horr	Dukana	Dukana	Balesa Saru	Buluk	Pastoral
15	Marsabit	North Horr	Dukana	Dukana	El-Hadi	El-Hadi	Pastoral
16	Marsabit	North Horr	Dukana	Dukana	El-Hadi	Marime	Pastoral
17	Marsabit	North Horr	Dukana	Dukana	Balesa	Balesa/Sabalei	Pastoral
18	Marsabit	North Horr	Dukana	Dukana	Balesa	Buluk	Pastoral
19	Marsabit	Marsabit North	Maikona	Maikona	Maikona	Maikona	Pastoral+Petty Trading
20	Marsabit	Marsabit North	Maikona	Maikona	Maikona	Arano	Pastoral
21	Marsabit	Marsabit North	Maikona	Maikona	Maikona	Medate Kuro	Pastoral
22	Marsabit	Marsabit North	Kalacha	Maikona	Hurri-Hills	Hurri-Hills	Pastoral
23	Marsabit	Marsabit North	Kalacha	Maikona	Hurri-Hills	Burarat	Pastoral
24	Marsabit	Marsabit North	Kalacha	Maikona	Forole	Forole	Pastoral
25	Marsabit	Marsabit North	Kalacha	Maikona	Kalacha	Kalacha	Pastoral+Petty Trading
26	Marsabit	Marsabit North	Kalacha	Maikona	Kalacha	Hilleri/Takka	Pastoral
27	Marsabit	Marsabit North	Kalacha	Maikona	Elgade	Rage/Kutur	Pastoral

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	County	Sub-county	Division	Ward	Location	Sub Location	Livelihood Zone
28	Marsabit	Marsabit North	Turbi	Turbi	Turbi	Turbi	Pastoral+Petty Trading
29	Marsabit	Marsabit North	Turbi	Turbi	Turbi	Demo	Pastoral
30	Marsabit	Marsabit North	Turbi	Turbi	Burgabo	Tigo	Pastoral
31	Marsabit	Marsabit North	Turbi	Turbi	Burgabo	Burgabo	Pastoral
32	Marsabit	Marsabit North	Turbi	Turbi	Bubisa	Horronderi	Pastoral
33	Marsabit	Marsabit North	Turbi	Turbi	Bubisa	Bubisa	Pastoral
34	Marsabit	Marsabit North	Turbi	Turbi	Shurr	Hawaye	Pastoral
35	Marsabit	Marsabit North	Turbi	Turbi	Shurr	Shurr	Pastoral
36	Marsabit	Marsabit South	Laisamis	Laisamis	Laisamis	Laisamis	Pastoral/Petty trading
37	Marsabit	Marsabit South	Laisamis	Laisamis	Laisamis	Nairibi	Pastoral
38	Marsabit	Marsabit South	Laisamis	Laisamis	Laisamis	Salabani	Pastoral
39	Marsabit	Marsabit South	Laisamis	Laisamis	Merille	Merille	Pastoral/Petty trading
40	Marsabit	Marsabit South	Laisamis	Laisamis	Merille	Irrir	Pastoral
41	Marsabit	Marsabit South	Laisamis	Laisamis	Lontolio	Lontolio	Pastoral/petty trading
42	Marsabit	Marsabit South	Laisamis	Laisamis	Lontolio	Ndigir	pastoral
43	Marsabit	Marsabit South	Laisamis	Laisamis	Lontolio	Losidan	Pastoral
44	Marsabit	Marsabit South	Laisamis	Laisamis	Koya	Koya	Pastoral
45	Marsabit	Marsabit South	Laisamis	Laisamis	Koya	Sakardalla	Pastoral
46	Marsabit	Marsabit South	Loglogo	Loglogo	Loglogo	Loglogo	Pastoral/agro-pastoral
47	Marsabit	Marsabit South	Loglogo	Loglogo	Loglogo	Gudas /Soriadi	Pastoral
48	Marsabit	Marsabit South	Loglogo	Loglogo	Loglogo	Lolkileleng'i	Pastoral
49	Marsabit	Marsabit South	Loglogo	Loglogo	Loglogo	Lbarok	Pastoral
50	Marsabit	Marsabit South	Loglogo	Loglogo	Kamboe	Kamboe	Pastoral/agro-pastoral/petty trading
51	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Korr	Korr	Pastoral/petty trading
52	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Korr	Orotiilkes	Pastoral
53	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Korr	Alisurwa	Pastoral
54	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Illaut	Illaut	Pastoral
55	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Ngurunit	Ngurunit	Pastoral/petty trading
56	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Ngurunit	Mpagas	pastoral
57	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Ngurunit	Lonyoripechau/Namarei	Pastoral

2021 Baseline Study of the BHA RFSA in Kenya - CRS Sampling Frame							
	County	Sub-county	Division	Ward	Location	Sub Location	Livelihood Zone
58	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Balla	Balla	Pastoral
59	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Balla	HAfare	Pastoral
60	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	Ngurunit	Lapendera	Pastoral
61	Marsabit	Marsabit South	Korr/Ngurunit	Korr/Ngurunit	illaut	Farakoren	Pastoral
62	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Loiyangalani	Loiyangalani	Pastoral/Fisher folk/Petty trading
63	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Loiyangalani	Gas	Pastoral
64	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Loiyangalani	El-molo	Fisherfolk
65	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Loiyangalani	Moite	Pastoral/Fisher folk
66	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Mt. Kulal	Gatab	Pastoral/agro-pastoral
67	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Mt. Kulal	Larachi	Pastoral
68	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Mt. Kulal	Arapal	Pastoral
69	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Mt. Kulal	Olotorot	Pastoral
70	Marsabit	Loiyangalani	Loiyangalani	Loiyangalani/Gatab	Mt. Kulal	Sarima	Pastoral
71	Marsabit	Loiyangalani	Kargi/South Horr	Kargi/South Horr	Kargi	Kargi	Pastoral/petty trading
72	Marsabit	Loiyangalani	Kargi/South Horr	Kargi/South Horr	Kargi	Kambinye	Pastoral
73	Marsabit	Loiyangalani	Kargi/South Horr	Kargi/South Horr	South Horr	South Horr	Pastoral/Agro-pastoral
74	Marsabit	Loiyangalani	Kargi/South Horr	Kargi/South Horr	South Horr	Arge	Pastoral
75	Marsabit	Loiyangalani	Kargi/South Horr	Kargi/South Horr	South Horr	Kurungu	Pastoral/Agro-pastoral
76	Marsabit	Loiyangalani	Kargi/South Horr	Kargi/South Horr	South Horr	Kurkum	Pastoral

ANNEX 2. LIST OF TARGETED COMMODITIES AND IMPROVED AGRICULTURAL MANAGEMENT PRACTICES AND TECHNOLOGIES

This annex provides the list of value chain commodities and improved agricultural management practices and technologies that the implementing partners (IP) plan to target in their respective Resilience Food Security Activity (RFSA) areas.[40] IPs provided detailed descriptions including examples that enumerators can draw on to probe for and elicit better responses from respondents. Detailed descriptions will be entered into the training manual. In addition, agriculture experts from each of the IPs will be invited to the training to review these practices with participants to ensure a thorough understanding.

Table 1. Targeted value chain commodities in the BHA RFSAs in Kenya

Commodity	IP	
	CRS	MC
Crops		
Cowpeas	X	
Orange fleshed sweet potatoes		X
Green Grams	X	X
Sorghum		X
Livestock		
Camels	X	X
Cattle	X	X
Goats	X	X

Table 2. Targeted improved livestock management practices in the BHA RFSAs in Kenya

Practice (G19A, G19B, G19C)	IP		Description
	CRS	MC	
Use of improved livestock breeds/species	Camels; Cattle; Goats	Cattle; Goats	Process of choosing animals that meet the requirements of the breeding objective and will pass particular traits onto their progeny, e.g., animals that improve both milk and meat production. Promoted breeds include dual-purpose breed varieties developed by KALRO such as the Galla goat, and drought-adapted livestock breeds such as the Somali camel, dairy goats, and Sahiwal and boron cows. Breeding using improved bulls.
Use of livestock health services and products	Camels; Cattle; Goats	Cattle; Goats	Use or consultations with public or licensed private animal health service providers for veterinary services such as prevention/treatment of livestock disease production, artificial insemination, etc.
Use of improved shelters	Camels; Cattle; Goats	Camels; Cattle; Goats	Construction of cages, sheds, or pens (enclosures for holding livestock) using local material to house livestock. The shelter be airy and waterproof. The place should also be lit to facilitate the consumption of food for a long time.

[40] The corresponding questionnaire item number for each practice is listed in parentheses.

Practice (G19A, G19B, G19C)	IP		Description
	CRS	MC	
Use of improved calving techniques	Camels; Cattle; Goats	Camels; Cattle; Goats	**Promotion of colostrum intake for the newborn calf to enhance calf's immune system**: -The calf must rely on colostrum from the cow until its own immune system is totally functional (about 1 to 2 months of age). **Promote general management** such as keeping of clean, dry area for cows that are calving to limit the spread of disease in the newborn calves- (Calves born in muddy, damp pens or calves that nurse udders contaminated with fecal materials are at increased risk for a number of disease conditions).
Use of improved milking techniques	Camels; Cattle; Goats	Camels; Cattle; Goats	Use of food grade containers, udder and teat cleaning using clean water before milking, treatment of wounds, adoption of personal hygiene practices prior to and during milking.
Use of more nutritious pasture varieties	Camels; Cattle; Goats	Camels; Cattle; Goats	Use of more nutritious pasture varieties.
Utilization of set grazing areas	Camels; Cattle; Goats	Cattle; Goats	Development of grazing plans, setting aside grazing lands for dry season, enforcing grazing plans.
Improved fodder production	Camels; Cattle; Goats	Cattle; Goats	Fodder production refers to the exercise of deliberately planting certain types of grasses in pastures to improve the quality and quantity of natural grasslands, e.g., use of legumes or oilseeds to produce fodder, or veld reinforcement by planting legumes, grasses, or oilseeds to increase the nitrogen content of the soil.
Reseeding of degraded lands with drought resistant grass species		Cattle; Goats	Facilitate range land rehabilitation through the use of drought-resistant grass seeds and the use of seed broadcasting techniques on degraded lands.
Fencing off pasture plots	Camels; Cattle; Goats	Camels; Cattle; Goats	Establishment of pasture plots by digging holes and fencing plots with poles and barbed wire to conserve pasture.
Rehabilitation of degraded grazing lands	Camels; Cattle; Goats	Camels; Cattle; Goats	Rehabilitation of degraded grazing lands through the construction of soil and water conservation structures and fencing degraded lands from grazing by livestock
Use of solarized boreholes for livestock	Camels; Cattle; Goats	Camels; Cattle; Goats	Using solar technology as a source of power to pump water from the water hole and for onward distribution for livestock
Use of water pans for livestock	Camels; Cattle; Goats	Camels; Cattle; Goats	Water pans are ponds / holes excavated on the ground surface to collect and store runoff water from various surfaces including from hillsides, roads, rocky areas, and open rangelands. Water harvesting in ASALs is an important practice to ensure water availability during the dry season. Collection of surface runoff water helps to control soil erosion.
Use of sand dams for livestock	Camels; Cattle; Goats	Camels; Cattle; Goats	A sand dam is a reinforced stone masonry wall built across a seasonal sandy river. Water trapped behind the wall raises the water table in the surrounding area. Water is stored under the sand and is used during the dry spells. Sand dam improves the soil, creating better conditions for crops and grazing. More trees can be planted ensuring more water infiltrates the

Practice (G19A, G19B, G19C)	IP		Description
	CRS	MC	
			ground, and less soil is washed away. This creates a virtuous cycle of soil and water conservation.
Use of rock catchments for livestock	Camels; Cattle; Goats		

Table 3. Targeted improved crop management practices in the BHA RFSAs in Kenya – ALL CROPS

Practice	IP		Description
	CRS	MC	
Crop genetics (G14A, G14B, G14C, G14D)			
Improved/certified seed	X	X	Use of improved/certified seeds that are high-yielding, higher in nutritional content, drought tolerant (i.e., through bio-fortification, such as vitamin A-rich sweet potatoes, \, high-protein beans and pulses and cowpeas), and/or more resilient to climate impacts (i.e., drought tolerant pulses and beans).
Cultural practices (G14A, G14B, G14C, G14D)			
Seedling production and transplantation	X	X	Production of drought-tolerant seedlings for grains, pulses, sweet potato, and pasture.
Crop rotation (rotating grains with nitrogen fixing legumes)	X	X	Involves changing the type of crop that is grown on a piece of land, including farrowing, in order to maintain soil fertility and/or break pest and disease cycles. This involves rotating grains with nitrogen fixing legumes such as beans, soybeans, and groundnuts.
Kitchen gardens using sunken pits	X	X	Use of sunken water harvesting vegetable beds and pitting to control water loss through evaporation and spoilage.
Pest and disease management (G14A, G14B, G14C, G14D)			
See list of improved post-harvest handling and storage practices promoted by the RFSAs.			
Soil-related fertility and conservation (G14A, G14B, G14C, G14D)			
Use of organic manure	X	X	Use of manure for fertilization of soil. Organic manure typically refers to cow dung, chicken droppings, goat or sheep droppings or any other waste produced by domesticated animals.
Soil testing	X	X	Testing soil for pH, phosphorus, and potassium.
Inoculant		X	Inoculant application in legumes/ pulses to improve productivity
Construction of soil conservation structures (gabions)	X	X	Construction of gabions and rock terraces to conserve soil and prevent erosion
Use of natural barriers/cover crops	X	X	Use of grass strips and cover crops to conserve soil and prevent erosion
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	X	X	Use of organic materials such as grain straw, fresh or old hay and other crop residues to improve soil fertility and control soil erosion
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	X	X	Planting of agroforestry trees, such as Lucaena andgrevillea, along riverbanks and in farms to prevent/control erosion, counter soil acidification and salinization, and improve water retention and soil fertility
Zaï pits (pot-holing)		X	Traditional agricultural technique used to cultivate and rehabilitate hard or heavily degraded soil. Holes are dug by hand, and are approximately 20 to 40 cm in diameter, 20 cm deep and spaced 90 cm apart. Zaï pits act as micro catchments within the field for collecting runoff water and minimizing erosion. During crop production, inputs such as fertilizers/manure, seed, water, and lime

Practice	IP		Description
	CRS	MC	
			all concentrate in the prepared hole as opposed to being spread over an area in furrow cultivation.
Use of minimum tillage practices	X	X	Leave crop residue on the soil surface to reduce water and wind erosion (i.e., by not ploughing after harvest). Soil and the surface residues are minimally disturbed between harvesting one crop and planting the next.
Planting nitrogen-fixing trees		X	Planting nitrogen fixing trees and fruit trees (e.g., acacia) in irrigated gardens to improve soil fertility on the long term.
Irrigation (G14A, G14B, G14C, G14D)			
Use of drip or sprinkler irrigation technologies	X		Use of micro-drip or sprinkler irrigation systems to increase food production such as vegetables and fruit trees.
Agriculture water management-non-irrigation-based (G14A, G14B, G14C, G14D)			
Use of rainwater harvesting technologies	X	X	Use of rainwater harvesting technologies like water pans, rock catchment and roof catchments.
Use of flood-based farming technologies (Spate irrigation)		X	Diversion of water from normally dry riverbeds when the river is in spate (i.e., during seasonal floods of rivers, streams, ponds and lakes) to fill water storage canals. This is done using spurs or bunds that are built across the riverbed.
Climate adaptation/climate risk management (G14A, G14B, G14C, G14D)			
Production planning and crop rotation in irrigation schemes	X	X	Use of a cropping calendar for crop rotation by irrigation scheme. The cropping calendar will promote crop rotation and will ensure consistency in supplying markets with commodities through-out the year. The current practice is based on a 6-month cropping cycle, but we will support farmers to come up with a 12-month crop calendar showing the crops to be grown after each 3-month cycle starting on January 1st.
Use of drought early warning information/systems	X	X	Use of early warning indicators such as vegetation condition for timely planning and reduction of the impact of a drought hazard. Use of weather forecast from meteorological department which shall be disseminated using vernacular radio stations and SMS based platforms. Early warning information can also be disseminated through the following channel: 1) Personal contact or contact via mobile phones, including Short Message Service; 2) Messages transmitted by community leaders; 3) Messages transmitted by agricultural extension agents; 4) Meetings held by grassroots organizations; 5) Meetings in churches; and 6) Meetings in schools

NOTES: Applies to all crops (Cowpeas; Orange fleshed sweet potatoes; Green Grams; Sorghum).

Marketing and distribution - value chain activities (G11)			
	CRS	**MC**	**Definition**
Contract farming	X	X	Use of contract farming to improve access to markets by smallholder farmers
Use of training and extension services	X	X	Storage and preservation farm and livestock products
Selling products through community farmer associations	X	X	Promoting the farmers/livestock herders to bring their commodities together to sell on better prices (bargaining power)
Improved bulking	X	X	Aggregation of animals, animal products such as milk for better bargaining power
Sorting and grading	X	X	Using physical characteristics such as size, shape, weight or color to separate food produce into categories

Applies to all crops (Cowpeas; Orange fleshed sweet potatoes; Green Grams; Sorghum) and all livestock (cattle, goats, and camels).

Post-harvest handling and storage (G16A, G16B, G16C, G16D)			
	CRS	**MC**	**Definition**
Aflatoxin prevention and control[1]	X	X	Proper drying and sensitization of modern and traditional moisture content indicators for cow peas and pasture seeds and proper post-harvest storage of grains.
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	X	X	Improved transportation of raw milk or fresh meat through use of aluminum cans. Use of food grade containers like crates.
Use of well-equipped food storage structures	X	X	Use of rodent-proof food storage facilities. Proper air circulation structures.
Temperature and humidity control	X	X	Use of shed nets and/or air conditioner or fans to lower the perceived temperature, dehumidify the air, and ensure the proper drying of harvested crops of vegetables.
Solar drying for grains and pulses	X		Use of solar drying equipment to reduce moisture to required levels for proper storage

NOTES: Applies to all crops (Cowpeas; Orange fleshed sweet potatoes; Green Grams; Sorghum).

Natural resource Management (G21)			
	CRS	**MC**	**Definition**
Reseeding of degraded lands with drought resistant grass species		X	Facilitate range land rehabilitation through the use of drought-resistant grass seeds and the use of seed broadcasting techniques on degraded lands.
Fencing off pasture plots	X	X	Establishment of pasture plots by digging holes and fencing plots with poles and barbed wire to conserve pasture.
Rehabilitation of degraded grazing lands	X	X	Rehabilitation of degraded grazing lands through the construction of soil and water conservation structures and fencing degraded lands from grazing by livestock
Construction of soil conservation structures (gabions)	X	X	Construction of gabions and rock terraces to conserve soil and prevent erosion
Use of natural barriers/cover crops	X	X	Use of grass strips and cover crops to conserve soil and prevent erosion
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	X	X	Use of organic materials such as grain straw, fresh or old hay and other crop residues to improve soil fertility and control soil erosion

Natural resource Management (G21)			
	CRS	**MC**	**Definition**
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	X	X	Planting of agroforestry trees, such as Lucaena andgrevillea, along riverbanks and in farms to prevent/control erosion, counter soil acidification and salinization, and improve water retention and soil fertility
Zaï pits (pot-holing)		X	Traditional agricultural technique used to cultivate and rehabilitate hard or heavily degraded soil. Holes are dug by hand, and are approximately 20 to 40 cm in diameter, 20 cm deep and spaced 90 cm apart. Zaï pits act as micro catchments within the field for collecting runoff water and minimizing erosion. During crop production, inputs such as fertilizers/manure, seed, water, and lime all concentrate in the prepared hole as opposed to being spread over an area in furrow cultivation.
Use of minimum tillage practices	X	X	Leave crop residue on the soil surface to reduce water and wind erosion (i.e., by not ploughing after harvest). Soil and the surface residues are minimally disturbed between harvesting one crop and planting the next.
Planting nitrogen-fixing trees		X	Planting nitrogen fixing trees and fruit trees (e.g., acacia) in irrigated gardens to improve soil fertility on the long term.

NOTES: Applies to all crops (Cowpeas; Orange fleshed sweet potatoes; Green Grams; Sorghum) and all livestock (cattle, goats, and camels).

Table 4. List of value chain activities promoted in the BHA RFSA in Kenya by value chain commodity[41]

Value Chain Type	Targeted value-chain practices (FOR G11)
Fodder Value Chain **Screening question: Do you produce fodder with the intention to sell or resell it to earn income?**	Use of improved pasture inputs (e.g., quality seeds) (MC) Use of mechanized pasture harvesting and baling technologies (MC) Construction and use of hay stores by farmer organizations (MC) Use of fodder seeds (MC) Use of harvesting, drying, packaging, storage, and marketing technologies (MC)

NOTE: Includes practices that are adopted at the household level. Practices that are undertaken by traders or farmers' associations are not included.

[41] See also activities listed under "Marketing and Distribution."

ANNEX 3. SCHEDULE TRAINING OF TRAINERS AND MAIN TRAINING OF ENUMERATORS

SCHEDULE TRAINING OF TRAINERS AND MAIN TRAINING OF ENUMERATORS

2021 Population-based Baseline Survey of the Bureau for Humanitarian Assistance Resilience Food Security Activities in Kenya

Training of Trainers (ToT)
Nairobi, Kenya
September 25 – September 29

TRAINING OF TRAINERS – led by TANGO virtually					
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**	**Location**
Saturday, September 25 (Day 1)	09:00 – 12:30	Review background documents: protocol, questionnaires, and manuals	N/A (reading period)	Participants will review background materials and familiarize themselves with the paper questionnaires and survey procedures	Pride Inn Hotel (Westlands)
	12:30 – 13:30	**Lunch**			
	13:30 – 15:00	Document review (cont'd.)	N/A (reading period)		(Same as previous session)
	15:00 – 15:15	Welcome and Introduction	TANGO	Introduction to BHA; Background on BHA population-based surveys; Purpose of the baseline study	https://us02web.zoom.us/j/83408803195?pwd=QnZjS1IyRG9UQzFYU2dEaHQ3Unl6QT09 Password: tango
	15:15 – 17:00	• BHA survey methodology • Importance of using local, respondent-friendly language and socio-cultural concepts • Pre-fieldwork activities • COVID-19 awareness, and mitigation strategies • Roles and responsibilities • Preparing for field work	TANGO	• Survey design and modules • Review of pre-fieldwork activities (listing, main training, and pilot) • Background on COVID-19 and mitigation strategies • Discussion of survey organization and responsibilities of coordinators, team leads, and survey monitors • Planning, logistics, and communication procedures and protocols	

TRAINING OF TRAINERS – led by TANGO virtually					
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**	**Location**
	17:00 – 17:15	**Tea break**			
	17:15 – 19:00	• Organizing and supervising fieldwork • Monitoring enumerator performance • Finalizing work	TANGO	• Locating clusters and household, selecting individuals • Assigning work to enumerators • Maintaining field completion forms and enumerator assignment sheets • Reducing non-response; Handling pending interviews; Maintaining morale • Observing interviews, conducting spot-checks, evaluating performance • Questionnaire review and closing the cluster	(Same as previous session)
Sunday, September 26 (Day 2)	09:00 – 12:30*	Introduction to CAPI and CSPro basics Distribution of tablets CSPro Menu system	Kimetrica	Tablets are distributed and a walk-though the CSPro program is performed. Participants will familiarize themselves navigating the CSPro data entry application	Pride Inn Hotel (Westlands)
	12:30 – 13:30	**Lunch**			
	13:30 – 15:00	CAPI/CSPro session (cont'd.)	Kimetrica		Pride Inn Hotel (Westlands)
	15:00 – 15:15	Recap of Day-1	TANGO	Discuss comments and questions on topics covered in Day-1	https://us02web.zoom.us/j/83408803195?pwd=QnZjS1IyRG9UQzFYU2dEaHQ3Unl6QT09 Password: tango
	15:15 – 17:00	Discussion on Modules A, B and C	TANGO	Q by Q discussion of Modules on: • Household identification and informed consent • Household Roster • Food Consumption Score/Food Insecurity Experience Scale	(Same as previous session)
	17:00 – 17:15	**Tea break**			

TRAINING OF TRAINERS – led by TANGO virtually					
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**	**Location**
	17:15 – 19:00	Discussion on Modules F and R (paper-based questionnaires)	TANGO	Q by Q discussion of the following modules: • Water, Sanitation, and Hygiene • Resilience/COVID-19	(Same as previous session)
Monday, September 27 (Day 3)	09:00 – 10:00	Background on RFSAs (objective, geographic coverage, target populations)	IP M&E and Technical staff	IPs will introduce their RFSA and describe their activities. Separate sessions for each RFSA running in parallel.	Pride Inn Hotel (Westlands)
	10:00 – 11:00	WASH interventions			
	11:00 – 12:30	Agri./livelihoods interventions			
	12:30 – 13:30	**Lunch**			
	13:30 – 15:00	Gender and MCHN interventions	IP staff		(Same as previous session)
	15:00 – 15:15	Recap of Day-2	TANGO	Discuss comments and questions on topics covered in Day-2	https://us02web.zoom.us/j/83408803195?pwd=QnZjS1IyRG9UQzFYU2dEaHQ3Unl6QT09 Password: tango
	15:15 – 17:00	Discussion of Module R (cont'd.) Discussion of Modules D (paper-based questionnaires)	TANGO	Q by Q discussion of the following modules: • Resilience/COVID-19 • Children's Feeding Practices and Diarrhea	(Same as previous session)
	17:00 – 17:15	**Tea break**			
	17:15 – 19:00	Discussion of Modules E, J and K (paper-based questionnaires)	TANGO	Q by Q discussion of the following modules: • Women's Health, Nutritional Status, Dietary Diversity and Family Planning • Gender and Cash • Access to Credit and Group Membership	(Same as previous session)

TRAINING OF TRAINERS – led by TANGO virtually					
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**	**Location**
Tuesday, September 28 (Day 4)	09:00 – 12:30	Practice and role play using tablets	Kimetrica	Participants will review materials from the previous day and role play using tablets to identify comments and questions to discuss with TANGO team.	Pride Inn Hotel (Westlands)
	12:30 – 13:30	**Lunch**			
	13:30 – 15:00	Practice and role play using tablets (cont'd.)	Kimetrica	Role play on tablets	(Same as previous session)
	15:00 – 15:15	Recap of Day-3	TANGO	Discuss comments and questions on topics covered in Day-3	https://us02web.zoom.us/j/83408803195?pwd=QnZjS1IyRG9UQzFYU2dEaHQ3Unl6QT09 Password: tango
	15:15 – 17:00	Discussion of Module 8 (paper-based questionnaires)	TANGO	Q by Q discussion of poverty-related modules	(Same as previous session)
	17:00 – 17:15	**Tea break**			
	17:15 – 19:00	Discussion of Modules G, 7.50, 7.51, and 7.53	TANGO	Q by Q discussion of ag-related modules	(Same as previous session)
Wednesday, September 29 (Day 5)	09:00 – 12:30	Mock interviews with CAPI (all modules)	Break-out groups	CAPI training/practice running through full questionnaire skip logic	Pride Inn Hotel (Westlands)
	12:30 – 13:30	**Lunch**			
	13:30 – 15:00	Mock interviews with CAPI (all modules)	Break-out groups	CAPI training/practice running through full questionnaire skip logic	(Same as previous session)
	15:00 – 15:15	Mock interviews with CAPI (all modules)	TANGO	Discuss comments and questions on topics covered in Day-4	https://us02web.zoom.us/j/83408803195?pwd=QnZjS1IyRG9UQzFYU2dEaHQ3Unl6QT09 Password: tango
	15:15 – 17:00	Mock interviews with CAPI (all modules)	TANGO	Makeup session to be used to finalize review of materials not completed within the timeframe	(Same as previous session)
	17:00 – 17:15	**Tea break**			
	17:15 – 19:00	Mock interviews with CAPI (all modules)	TANGO	Makeup session	(Same as previous session)

Enumerator Training
Nakuru, Kenya
October 1 – October 7

ENUMERATOR TRAINING – led by Kimetrica Field Coordinators with remote support from TANGO				
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**
Friday, October 1 (Day 1)	08:00 – 08:30	Registration	Kimetrica trainers/coordinators	
	08:30 – 08:45	Welcome and Introduction	Kimetrica trainers/coordinators	Introduction to BHA; Background on BHA population-based surveys; Purpose of the baseline study
	08:45 – 10:30	Survey methodology General rules, norms, and guidance on survey implementation Importance of using local, respondent-friendly language and socio-cultural concepts COVID-19 awareness, and mitigation strategies Overview of the paper questionnaire and respondent eligibility/selection	Kimetrica trainers/coordinators	• Sampling design and field procedures • Survey organization and responsibilities of coordinators, team leads, and survey monitors • Performance standards in interviewing • Description of modules and respondent eligibility criteria
	10:30 – 10:45	**Tea Break**		
	10:45 – 11:30	Introduction to CAPI and CSPro basics Distribution of tablets CSPro Menu system	Kimetrica trainers/coordinators	Tablets are distributed on the first day and participants are trained on navigating the CSPro program
	11:30 – 12:30	Discussion on Module A and Module B (paper-based)	Kimetrica trainers/coordinators	Q by Q discussion of the following modules: • Household identification and informed consent • Household Roster
	12:30 – 13:30	**Lunch**		

ENUMERATOR TRAINING – led by Kimetrica Field Coordinators with remote support from TANGO				
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**
	13:30 – 15:00	Discussion on Modules C and F (paper-based)	Kimetrica/IM	Q by Q discussion of the following modules: • Food Consumption Score/Food Insecurity Experience Scale: • Water, Sanitation, and Hygiene
	15:00 – 16:00	Practice and role play: Modules A, B, C and F	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	16:00 – 16:30	**Tea break**		
	16:30 – 17:30	Practice and role play: Modules A, B, C and F (cont'd.) De-brief: Modules A, B, C and F	Kimetrica/IM	
	17:30 – 18:00	**Break**		
	18:00 – 18:30	Daily de-brief	Kimetrica coordinators/IM/TANGO	Virtual
Saturday, October 2 (Day 2)	08:30 – 09:00	Recap of Day-1	Kimetrica	Discuss comments and questions on topics covered in Day-1
	09:00 – 10:30	Discussion on Module R (paper-based)	Kimetrica	Q by Q discussion of the following modules: • Resilience/COVID-19
	10:30 – 10:45	**Tea break**		
	10:45 – 12:00	Practice and role play: Module R	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	12:00 – 12:30	De-brief: Modules R	Kimetrica/IM	Plenary session
	12:30 – 13:30	**Lunch**		
	13:30 – 14:15	Discussion on Module D (paper-based)	Kimetrica	Q by Q discussion of the following modules: • Children's Feeding Practices and Diarrhea
	14:15 – 15:00	Discussion on Module E (paper-based)	Kimetrica	Q by Q discussion of the following modules: • Women's Health, Nutritional Status, Dietary Diversity and Family Planning

ENUMERATOR TRAINING – led by Kimetrica Field Coordinators with remote support from TANGO				
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**
	15:00 – 16:00	Practice and role play: Modules D and E	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	16:00 – 16:30	**Tea**		
	16:30 – 17:30	Practice and role play: Modules D and E (cont'd.) Debrief: Modules D and E	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	17:30 – 18:00	**Break**		
	18:00 – 18:30	Daily de-brief	Kimetrica coordinators/IM/TANGO	Virtual
Sunday, October 3 (Day 3)	08:30 – 09:00	Recap of Day-2	Kimetrica	Discuss comments and questions on topics covered in Day-2
	09:00 – 10:30	Discussion on Modules J and K (paper-based)		Q by Q discussion of the following modules: • Gender and Cash • Access to Credit and Group Membership
	10:30 – 10:45	**Tea break**		
	10:45 – 12:00	Practice and role play: Modules J and K	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	12:00 – 12:30	Debrief: Modules J and K	Kimetrica/IM	Plenary session
	12:30 – 13:30	**Lunch**		
	13:30 – 15:30	Discussion on Module 8 (paper-based)	Kimetrica	Q by Q discussion of poverty-related modules
	15:30 – 16:00	Practice and role play: Module 8	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	16:00 – 16:30	**Tea break**		
	16:30 – 17:30	Practice and role play: Module 8 (cont'd) Debrief: Module 8	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	17:30 – 18:00	**Break**		
	18:00 – 17:30	Daily de-brief	Kimetrica coordinators/IM/TANGO	Virtual

ENUMERATOR TRAINING – led by Kimetrica Field Coordinators with remote support from TANGO				
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**
Monday, October 4 (Day 4)	08:30 – 09:00	Recap of Day-3	Kimetrica	Discuss comments and questions on topics covered in Day-3
	09:00 – 09:30	Introduction to RFSA	IP staff	Background, strategic objectives of the RFSAs (to increase contextual and conceptual understanding)
	09:30 – 10:30	RFSA agriculture/livelihoods interventions	IP Agriculture/ Livelihoods Specialists	Presentation on targeted improved agricultural practices, value chains
	10:30 – 10:45	**Tea break**		
	10:45 – 12:30	Discussion on Module G (paper-based)	Kimetrica	Q by Q discussion of Module G
	12:30 – 13:30	**Lunch**		
	13:30 – 15:00	Discussion on ag-related modules (paper-based): Mod 7.50 – Cattle Mod 7.51 – Goats Mod 7.53 – Camels	Kimetrica	Q by Q discussion of Module G
	15:00 – 16:30	Practice and role play: Modules G, 7.50, 7.51, 7.53	Kimetrica	Practice and role play using tablets (break-out groups)
	16:00 – 16:30	**Tea break**		
	16:30 – 17:30	Practice and role play: Modules G, 7.50, 7.51, 7.53 (cont'd.) Debrief: Ag-related modules (G, 7.51, 7.50, 7.53)	Kimetrica/IM	Practice and role play using tablets (break-out groups)
	17:30 – 18:00	**Break**		
	18:00 – 18:30	Daily de-brief	Kimetrica coordinators/IM/TANGO	Virtual

ENUMERATOR TRAINING – led by Kimetrica Field Coordinators with remote support from TANGO				
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**
Tuesday, October 5 (Day 5)	08:30 – 09:00	Recap of Day-4	Kimetrica	Discuss comments and questions on topics covered in Day-4
	09:00 – 10:30	RFSA WASH Interventions	IP WASH Specialists	Description of WASH interventions
	10:30 – 10:45	**Tea break**		
	10:45 – 12:30	RFSA MCHN/Gender Interventions	IP MCHN and Gender Specialists	Description of MCHN and gender-related interventions
	12:30 – 13:30	**Lunch**		
	13:30 – 16:00	Mock interviews in local languages with CAPI (all modules)	Kimetrica/IM	CAPI training/practice running through full questionnaire skip logic and translating into local languages (break-out groups)
	16:00 – 16:30	**Tea break**		
	16:30 – 17:30	Mock interviews in local languages with CAPI (all modules)	Kimetrica/IM	CAPI training/practice
	17:30 – 18:00	**Break**		
	18:00 – 18:30	Daily de-brief	Kimetrica coordinators/IM/TANGO	Virtual
Wednesday, October 6 (Day 6)	08:30 – 10:30	Mock interviews in local languages with CAPI (all modules)	Kimetrica/IM	CAPI training/practice running
	10:30 – 10:45	**Tea break**		
	10:45 – 12:30	Mock interviews in local languages with CAPI (all modules)	Kimetrica/IM	CAPI training/practice
	12:30 – 13:30	**Lunch**		
	13:30 – 16:00	Review of managing tablets in the field/transferring data Practice finalizing work in a cluster	Kimetrica/IM	Coordinators and Team Leads only
	16:00 – 16:30	**Tea break**		
	16:30 – 18:30	Planning for the pretest	Kimetrica/IM/ TANGO	Planning for the pretest
Thursday, October 7 (Day 7)	09:00 – 15:00	Mock interviews in local languages with CAPI (all modules)	Kimetrica/IM	CAPI training/practice
Friday, October 8 Pilot and debrief (Day 8)	07:30 – 08:00	Travel for pilot test	Kimetrica/IM	
	08:00 – 12:30	Field practice	Kimetrica/IM	
	12:30 – 13:30	**Lunch break**		

ENUMERATOR TRAINING – led by Kimetrica Field Coordinators with remote support from TANGO				
Date	**Local Time**	**Topic**	**Facilitation**	**Notes**
	13:30 – 16:30	Field practice	Kimetrica/IM	
	16:30 – 17:00	Travel back from field	Kimetrica/IM	
	17:00 – 19:00	Debrief: Pilot test and adjustment	Kimetrica/IM	Review of questionnaire; feedback on administering survey; final changes to survey
	19:00 – 20:00	Discussion on field practice and adjustment	Kimetrica/IM/ TANGO	Pilot debriefing Deployment plan/logistics
Saturday, October 9 (Day 9)	08:30 – 10:30	Closing Deployment to counties	Kimetrica	

ANNEX 4: INFORMED CONSENT STATEMENT

The text below is excerpted from Module A of the questionnaire and indicates the informed consent language that will be used.

Introduction

Hello. My name is _____. I am working with Kimetrica on behalf of TANGO International. We are conducting a survey to learn about household characteristics, agriculture, food security, expenditures, and nutrition of women and children. Your household was selected to participate in an interview that may take up to three hours to complete. We will interview you and other members of your household as needed.

Your participation is completely voluntary. There are risks associated with participating in this survey because of the possibility of transmission of COVID-19 /CORONA. COVID-19 can be spread through droplets in the air when an infected person coughs, sneezes or speaks, or by touching a contaminated surface and then touching your eyes, nose, or mouth before washing your hands. Our team will take precautions to mitigate the risk of spreading the virus, such as wearing a face covering, standing at least one meter apart throughout the interview and washing/sanitizing hands before and after.

There will be no benefit provided to you because of your participation. We hope you will agree to answer the questions since your views and experiences are important. If I ask you any questions you don't want to answer, let me know and I will go on to the next question. You can also stop the interview at any time. The data collected in this survey may be used as part of a study in the future. If your household is selected for the future study, then a second survey will be conducted. If you agree to participate in the second survey, the data from this survey will be used for comparison. If you decide not to participate in either survey, or if you withdraw from participating at any time, you will not be penalized in any way.

Your privacy is important to us. No part of this interview is being recorded or videoed. If you agree to participate, some of the information you provide will be available on a public website that researchers and others will be able to access without identifying you. The information will be entered into a database that will NOT contain confidential information such as your name or the name of your village that could be used to identify you. Any data attached to your personal information will be stored in a password protected electronic format.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints, we welcome you to contact Kimetrica by calling [xxxxxxxxx]. We will leave a copy of this statement and our organization’s complete contact information with you so that you may contact us at any time.

Do you agree to participate in the survey?

ANNEX B: SURVEY QUESTIONNAIRES

Household Questionnaire

BHA 2021 BASELINE QUESTIONNAIRE FOR KENYA (FINAL VERSION)

Module A. Identification and Informed Consent (Head of HH or Responsible Adult)

IDENTIFICATION (1)

A01	CLUSTER CODE	
A02	HOUSEHOLD NUMBER (HH)	
A03	COUNTY	
A04	LOCATION	
A04	SUBLOCATION	

INTERVIEWER VISITS

	FIRST VISIT	SECOND VISIT	THIRD VISIT	FINAL VISIT
A05 DATE				A09 DAY
A06 ENUMERATOR				A10 MONTH
A07 DAY OF VISIT				A11 YEAR 2021
A08 RESULT (USE CODES BELOW)				A12 TOTAL NUMBER OF VISITS
NEXT VISIT: DATE				A15 TOTAL PERSONS IN THE HOUSEHOLD
TIME				A16 LINE NO. OF RESPONDENT TO HOUSEHOLD ROSTER
				A17 TOTAL CHILDREN UNDER SIX YRS
				A18 TOTAL WOMEN 15-49 YRS
				A19 TOTAL FARMERS

A14 FINAL OUTCOME OF INTERVIEW (CIRCLE ONE)

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED/PARTIALLY COMPLETED
5 REFUSED
9 OTHER _____ (SPECIFY)

A20 SUPERVISOR
NAME _____ CODE

A21 INTERVIEWER
NAME _____ CODE

A22 INTERVIEWER SEX 1=MALE 2=FEMALE

A23 INTERVIEWER LOCALE

A00: START TIME HOUR : MINUTE

INFORMED CONSENT

IT IS NECESSARY TO INTRODUCE THE SURVEY TO THE RESPONDENT HOUSEHOLD AND OBTAIN THE CONSENT OF ALL RESPONDENTS BEFORE ASKING ANY QUESTIONS. FIRST IDENTIFY THE HEAD OF HOUSEHOLD AND READ THE INFORMED CONSENT WITH HIM/HER. AFTER READING THE INFORMED CONSENT, IF THE PERSON AGREES THEN CONTINUE WITH THE QUESTIONS IN MODULE B TO IDENTIFY ADDITIONAL HOUSEHOLD MEMBERS. IF THE PERSON REFUSES TO ANSWER, ASK IF THERE IS ANOTHER MEMBER OF THE HOUSEHOLD WHO IS WILLING TO PARTICIPATE. READ THE INFORMED CONSENT TO THE OTHER ADULT MEMBER AND ONLY PROCEED WITH HER/HIS CONSENT. READ THE INFORMED CONSENT STATEMENT TO EACH ELIGIBLE RESPONDENT PRIOR TO THE START OF EACH MODULE AND ONLY ASK QUESTIONS WITH THEIR CONSENT. IF NO HOUSEHOLD MEMBERS ARE WILLING TO GIVE CONSENT TO PARTICIPATE, THEN THE HOUSEHOLD IS CONSIDERED A NONRESPONDING HOUSEHOLD AND SHOULD BE CODED AS A REFUSAL.

Hello. My name is _____. I am working with Kimetrica on behalf of TANGO International. We are conducting a survey to learn about household characteristics, agriculture, food security, expenditures, and nutrition of women and children. Your household was selected to participate in an interview that may take up to three hours to complete. We will interview you and other members of your household as needed.

Your participation is completely voluntary. There are risks associated with participating in this survey because of the possibility of the transmission of COVID-19 /CORONA. COVID-19 can be spread through droplets in the air when an infected person coughs, sneezes or speaks, or by touching a contaminated surface and then touching your eyes, nose, or mouth before washing your hands. Our team will take precautions to mitigate the risk of spreading the virus, such as wearing a face covering, standing at least one meter apart throughout the interview and washing/sanitizing hands before and after.

There will be no benefit provided to you because of your participation. We hope you will agree to answer the questions since your views and experiences are important. If I ask you any questions you don't want to answer, let me know and I will go on to the next question. You can also stop the interview at any time. The data collected in this survey may be used as part of a study in the future. If your household is selected for the future study then a second survey will be conducted. If you agree to participate in the second survey, the data from this survey will be used for comparison. If you decide not to participate in either survey or if you withdraw from participating at any time, you will not be penalized in any way.

Your privacy is important to us. No part of this interview is being recorded or videoed. If you agree to participate, some of the information you provide will be available on a public website that researchers and others will be able to access without identifying you. The information will be entered into a database that will NOT contain confidential information such as your name or the name of your village that could be used to identify you. Any data attached to your personal information will be stored in a password protected electronic format.

Do you have any questions about the survey or what I have said? If in the future you have any questions regarding the survey or the interview, or concerns or complaints, we welcome you to contact Kimetrica by calling Sophia Githinji (+254 731 176 566), a Senior Rsearcher. We will leave a copy of this statement and our organization's complete contact information with you so that you may contact us at any time.

Do you agree to participate in the survey?

	HEAD OF HOUSEHOLD OR RESPONSIBLE ADULT		RESPONDENT AGREED	RESPONDENT DID NOT AGREE
1	NAME_____	Do you agree to participate in the survey?	____	____
	ADDITIONAL ELIGIBLE HOUSEHOLD MEMBERS		**RESPONDENT/ GUARDIAN AGREED**	**RESPONDENT /GUARDIAN DID NOT AGREE**
2.	NAME_____	Do you agree to participate in the survey?	____	____
3.	NAME_____	Do you agree to participate in the survey?	____	____
4.	NAME_____	Do you agree to participate in the survey?	____	____
5.	NAME_____	Do you agree to participate in the survey?	____	____
6.	NAME_____	Do you agree to participate in the survey?	____	____
7.	NAME_____	Do you agree to participate in the survey?	____	____
8.	NAME_____	Do you agree to participate in the survey?	____	____
9.	NAME_____	Do you agree to participate in the survey?	____	____

My signature affirms that I have read the verbal informed consent statement to the respondent(s), and I have answered any questions asked about the study.

INTERVIEWER'S NAME AND CODE _____ [ ][ ][ ]

SIGNATURE AND DATE _____ DAY [ ][ ] • MONTH [ ][ ] • YEAR 2021

INTERVIEWER'S NAME AND CODE _____ [ ][ ][ ]

SIGNATURE AND DATE _____ DAY [ ][ ] • MONTH [ ][ ] • YEAR 2021

A26: END TIME [ ][ ] HOUR : [ ][ ] MINUTE

MODULE B. HOUSEHOLD ROSTER (HEAD OF HH OR RESPONSIBLE ADULT) B00A CLUSTER CODE ☐☐☐ B00B HOUSEHOLD ID ☐☐☐

						IF UNDER 6 YEARS	IF AGE 15 OR OLDER									IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS	
					ELIGIBILITY														
LINE NO.	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	MODULE D	PRIMARY CAREGIVER	MODULE C, H1	MODULE E	MODULE F, H2-H7, R	MODULE G	MODULE J	MODULE J	MARITAL STATUS	MODULE K	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE	
B01	B02	B03	B04	B05	B06	B07	B08	B09	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19
	Please tell me the name and sex of each person who lives here, starting with the head of the household. For our purposes today, members of a household are adults or children that live together and eat from the "same pot". It should include anyone who has lived in your house for at least 6 of the last 12 months, but it does not include anyone who lives here but eats separately. AFTER LISTING NAMES, RELATIONSHIP, SEX, AGE FOR EACH PERSON ASK QUESTIONS 2A-2C TO BE SURE ROSTER IS COMPLETE. THEN ASK QUESTIONS B06 TO B23 FOR EACH PERSON	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	How old is (NAME)? IF 95 OR MORE, RECORD 95. '98'=DON'T KNOW. USE ONLY FOR PERSONS WHO ARE ≥ 50. USE '00' IF CHILD IS LESS THAN 1 YEAR	IS THIS PERSON UNDER 6 YEARS OF AGE?	Who is the primary caregiver of [NAME]? *SEE DEFINITION BELOW ENTER LINE NUMBER OF PRIMARY CAREGIVER	Is [NAME] responsible for food preparation in the household?	IS THIS A WOMAN 15-49 YEARS OF AGE?	IS THIS PERSON THE HEAD OF THE HH OR A RESPON-SIBLE ADULT IF HEAD OF HH IS ABSENT?	Is (NAME) a farmer? ***READ DEFINI-TION OF FARMER BELOW TO RESPON-DENT.	Has (NAME) done any work in the last 12 months? **READ DEFINITION OF "WORK" BELOW TO RESPON-DENT.	During the last 12 months, was (NAME) usually paid in cash or kind for this work or was (NAME) not paid at all? 1= CASH ONLY 2= CASH AND KIND 3= IN KIND ONLY 4= NOT PAID	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	IS THIS A WOMAN ≥15 YEARS OF AGE AND MARRIED OR LIVING TOGETHER **OR** HER PARTNER?	Has (NAME) ever attended school?	What is the highest grade (NAME) has completed? SEE CODES BELOW.	Did (NAME) attend school at any time during the **2021** school year?	During this school year, what grade is (NAME) attending? SEE CODES BELOW.
			M F	IN YEARS	Y N		Y N	Y N	Y N	Y N	Y N			Y N	Y N	LEVEL GRADE	Y N	LEVEL GRADE
01		0 1	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
02		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
03		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
04		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
05		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
06		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
07		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
08		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐
09		☐☐	1 2	☐☐	1 2	☐☐	1 2	1 2	1 2	1 2	1 2 → GO TO B14	☐	☐	1 2	1 2 → NEXT LINE	☐☐ ☐☐	1 2 → NEXT LINE	☐☐ ☐☐

						IF UNDER 6 YEARS	IF AGE 15 OR OLDER								IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS	
					ELIGIBILITY													
LINE NO.	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	MODULE D	PRIMARY CAREGIVER	MODULE C, H1	MODULE E	MODULE F, H2-H7, R	MODULE G	MODULE J	MODULE J	MARITAL STATUS	MODULE K	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE	
B01	**B02**	**B03**	**B04**	**B05**	**B06**	**B07**	**B08**	**B09**	**B10**	**B11**	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**
	Please tell me the name and sex of each person who lives here, starting with the head of the household. For our purposes today, members of a household are adults or children that live together and eat from the "same pot". It should include anyone who has lived in your house for at least 6 of the last 12 months, but it does not include anyone who lives here but eats separately. AFTER LISTING NAMES, RELATIONSHIP, SEX, AGE FOR EACH PERSON ASK QUESTIONS 2A-2C TO BE SURE ROSTER IS COMPLETE. THEN ASK QUESTIONS B06 TO B23 FOR EACH PERSON	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	How old is (NAME)? IF 95 OR MORE, RECORD 95. '98'=DON'T KNOW. USE ONLY FOR PERSONS WHO ARE ≥ 50. USE '00' IF CHILD IS LESS THAN 1 YEAR	IS THIS PERSON UNDER 6 YEARS OF AGE?	Who is the primary caregiver of [NAME]? *SEE DEFINITION BELOW ENTER LINE NUMBER OF PRIMARY CAREGIVER	Is [NAME] responsible for food preparation in the household?	IS THIS A WOMAN 15-49 YEARS OF AGE?	IS THIS PERSON THE HEAD OF THE HH OR A RESPON-SIBLE ADULT IF HEAD OF HH IS ABSENT?	Is (NAME) a farmer? ***READ DEFINI-TION OF FARMER BELOW TO RESPON-DENT.	Has (NAME) done any work in the last 12 months? **READ DEFINITION OF "WORK" BELOW TO RESPON-DENT.	During the last 12 months, was (NAME) usually paid in cash or kind for this work or was (NAME) not paid at all? 1= CASH ONLY 2= CASH AND KIND 3= IN KIND ONLY 4= NOT PAID	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	IS THIS A WOMAN ≥15 YEARS OF AGE AND MARRIED OR LIVING TOGETHER **OR** HER PARTNER?	Has (NAME) ever attended school?	What is the highest grade (NAME) has completed? SEE CODES BELOW.	Did (NAME) attend school at any time during the **2021** school year?	During this school year, what grade is (NAME) attending? SEE CODES BELOW.

CODES FOR B03: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

*The primary caregiver is the person who knows the most about how and what the child is fed. Usually, but not always, this will be the child's mother.

**Work includes jobs in the formal and/or informal sector, full time, part time, or seasonal work that is done within and/or outside the home. It includes, but is not limited to agricultural daily wage labor, off-farm daily wage labor, income generation activities, sale of goods produced or processed outside the home or at the home, homestead garden or farm (e.g., vegetables, eggs, fish, livestock, artisanal goods), or petty trading. It can also include participating in cash for work, food for work, or conditional cash transfers and/or productive safety net programs. For this indicator, work does not include caring for own children, cooking, cleaning or doing other routine chores for own household (e.g., fetching water, collecting firewood) or being involved in agricultural production solely for household consumption.

***Farmers, including herders and fishers, are: 1) men and women who have access to a plot of land (even if very small) over which they make decisions about what will be grown, how it will be grown, and how to dispose of the harvest; AND/OR 2) men and women who have animals and/or aquaculture products over which they have decision-making power. Farmers produce food, feed, and fiber, where "food" includes agronomic crops(crops grown in large scale, such as grains), horticulture crops (vegetables, fruit, nuts, berries, and herbs), animal and aquaculture products, as well as natural products (e.g., non-timber forest products, wild fisheries). These farmers may engage in processing and marketing of food, feed, and fiber and may reside in settled communities, mobile pastoralist communities, or refugee/internally displaced person camps. An adult member of the household who does farm work but does not have decision-making responsibility over the plot OR animals would not be considered a "farmer." For instance, a woman working on her husband's land who does not control a plot of her own would not be interviewed.

CODES FOR Qs. B17 AND B19: EDUCATION

LEVEL
0 = PREPRIMARY
1 = PRIMARY
2 = POST-PRIMARY, VOCATIONAL
3 = SECONDARY/"A" LEVEL
4 = COLLEGE(MIDDLE LEVEL)
5 = UNIVERSITY
8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED
(USE '00' FOR B17 ONLY. THIS CODE IS NOT ALLOWED FOR B19.)
98 = DON'T KNOW

			M F	IN YEARS	Y N		Y N	Y N	Y N	Y N	Y N			Y N	Y N	LEVEL GRADE	Y N	LEVEL GRADE
10			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
11			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
12			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
13			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
14			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
15			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
16			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
17			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	
18			1 2		1 2		1 2	1 2	1 2	1 2	1 2 GO TO B14			1 2	1 2 NEXT LINE		1 2 NEXT LINE	

						IF UNDER 6 YEARS	IF AGE 15 OR OLDER								IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS	
LINE NO.	USUAL RESIDENTS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	AGE	ELIGIBILITY: MODULE D	PRIMARY CAREGIVER	MODULE C, H1	MODULE E	MODULE F, H2-H7, R	MODULE G	MODULE J	MODULE J	MARITAL STATUS	MODULE K	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE	
B01	**B02**	**B03**	**B04**	**B05**	**B06**	**B07**	**B08**	**B09**	**B10**	**B11**	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**
	Please tell me the name and sex of each person who lives here, starting with the head of the household. For our purposes today, members of a household are adults or children that live together and eat from the "same pot". It should include anyone who has lived in your house for at least 6 of the last 12 months, but it does not include anyone who lives here but eats separately. AFTER LISTING NAMES, RELATIONSHIP, SEX, AGE FOR EACH PERSON ASK QUESTIONS 2A-2C TO BE SURE ROSTER IS COMPLETE. THEN ASK QUESTIONS B06 TO B23 FOR EACH PERSON	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	How old is (NAME)? IF 95 OR MORE, RECORD 95. '98'=DON'T KNOW. USE ONLY FOR PERSONS WHO ARE ≥ 50. USE '00' IF CHILD IS LESS THAN 1 YEAR	IS THIS PERSON UNDER 6 YEARS OF AGE?	Who is the primary caregiver of [NAME]? *SEE DEFINITION BELOW ENTER LINE NUMBER OF PRIMARY CAREGIVER	Is [NAME] responsible for food preparation in the household?	IS THIS A WOMAN 15-49 YEARS OF AGE?	IS THIS PERSON THE HEAD OF THE HH OR A RESPON-SIBLE ADULT IF HEAD OF HH IS ABSENT?	Is (NAME) a farmer? ***READ DEFINI-TION OF FARMER BELOW TO RESPON-DENT.	Has (NAME) done any work in the last 12 months? **READ DEFINITION OF "WORK" BELOW TO RESPON-DENT.	During the last 12 months, was (NAME) usually paid in cash or kind for this work or was (NAME) not paid at all? 1= CASH ONLY 2= CASH AND KIND 3= IN KIND ONLY 4= NOT PAID	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	IS THIS A WOMAN ≥15 YEARS OF AGE AND MARRIED OR LIVING TOGETHER **OR** HER PARTNER?	Has (NAME) ever attended school?	What is the highest grade (NAME) has completed? SEE CODES BELOW.	Did (NAME) attend school at any time during the **2021** school year?	During this school year, what grade is (NAME) attending? SEE CODES BELOW.

2A) Just to make sure that I have a complete listing: are there any other persons such as small children or infants that we have not listed? YES → ADD TO TABLE / NO

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES → ADD TO TABLE / NO

2C) Does anyone else live here even if they are not at home now? INCLUDE CHILDREN IN SCHOOL OR HOUSEHOLD MEMBERS AT WORK OR MIGRATED. YES → ADD TO TABLE / NO

CODES FOR B03: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD OF HOUSEHOLD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

*The primary caregiver is the person who knows the most about how and what the child is fed. Usually, but not always, this will be the child"s mother.

**Work includes jobs in the formal and/or informal sector, full time, part time, or seasonal work that is done within and/or outside the home. It includes, but is not limited to agricultural daily wage labor, off-farm daily wage labor, income generation activities, sale of goods produced or processed outside the home or at the home, homestead garden or farm (e.g., vegetables, eggs, fish, livestock, artisanal goods), or petty trading. It can also include participating in cash for work, food for work, or conditional cash transfers and/or productive safety net programs. For this indicator, work does not include caring for own children, cooking, cleaning or doing other routine chores for own household (e.g., fetching water, collecting firewood) or being involved in agricultural production solely for household consumption.

***Farmers, including herders and fishers, are: 1) men and women who have access to a plot of land (even if very small) over which they make decisions about what will be grown, how it will be grown, and how to dispose of the harvest; AND/OR 2) men and women who have animals and/or aquaculture products over which they have decision-making power. Farmers produce food, feed, and fiber, where "food" includes agronomic crops(crops grown in large scale, such as grains), horticulture crops (vegetables, fruit, nuts, berries, and herbs), animal and aquaculture products, as well as natural products (e.g., non-timber forest products, wild fisheries). These farmers may engage in processing and marketing of food, feed, and fiber and may reside in settled communities, mobile pastoralist communities, or refugee/internally displaced person camps. An adult member of the household who does farm work but does not have decision-making responsibility over the plot OR animals would not be considered a "farmer." For instance, a woman working on her husband's land who does not control a plot of her own would not be interviewed.

CODES FOR Qs. B17 AND B19: EDUCATION

LEVEL
0 = PREPRIMARY
1 = PRIMARY
2 = POST-PRIMARY, VOCATIONAL
3 = SECONDARY/"A" LEVEL
4 = COLLEGE(MIDDLE LEVEL)
5 = UNIVERSITY
8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR B21 ONLY. THIS CODE IS NOT ALLOWED FOR B23.)
98 = DON'T KNOW

B24: END TIME

HOUR ☐☐ MINUTE ☐☐

→ **GO TO NEXT MODULE**

Module C. Household Food Access (Person responsible for food preparation)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
C00	INSERT TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐
C01	CLUSTER CODE AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐
C02	PERSON IN CHARGE OF FOOD PREPARATION FROM THE HOUSEHOLD ROSTER (B08) = 1) OR RESPONSIBLE ADULT	LINE NUMBER **(B01)** ☐☐
C03	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . . . 1 NO . . . . . 2 NOT AVAILABLE 3 → C24
	FCS QUESTIONS	
	Now I would like to ask you about the types of foods that you or the majority of household members ate during the past 7 days. READ THE QUESTION INSERTING THE NAME OF THE FOOD ITEM LISTED IN QUESTIONS C04 TO C15 AND RECORD THE RESPONSE IN THE BOXES PROVIDED.	**How many days did you or members of your household eat ….. during the past 7 days both inside and outside your home?** **1= 1 day** **2= 2 days** **3= 3 days** **4= 4 days** **5= 5 days** **6= 6 days** **7= 7 days** **9= Not consumed**
C04	Any bread, rice, pasta, injera, biscuits, or other foods made from teff, barley, millet, sorghum, maize, rice, wheat, Nang'aria, Atap/ugali, Epeipe/maize, Echurukum/Ng'iimua/soughum, Lokiteiteyo, Mashisha, or Lkitege ?	NUMBER OF DAYS ☐☐
C05	Any foods made with potatoes, yams, sweet potatoes, irish potatoes, manioc, cassava, plantain, kocho, godere, anchote, amicho, boina and boye, taro or bula or any other foods made from roots or tubers?	NUMBER OF DAYS ☐☐
C06	Any food made with vegetables such as onions, tomato, cucumber, radishes, green beans, peas, cabbage, lettuce, green leafy vegetables (e.g., sukumu wiki, spinach, broccoli, amaranth, cassava leaves, gathered wild green leaves), pumpkin, mushroom, kale, leak, green pepper, beet root, garlic, carrots, Akaideit/pumpkin leaves, or traditional herbs (Seketet, Lmakutikuti, Lkinyil, Ljurman)?	NUMBER OF DAYS ☐☐
C07	Any food or fruit juices made from fruits such as apple, mango, banana, oranges, pineapple, papaya, paw paw, guava, avocado, wild fruit, lemon, Ng'akator, Edome, Eng'oomo, Edung, Eng'ol, Ekadala, Ng'akalalio, Ebei, Ng'abulalae, Ng'apedur, Elamach, Epat, Ng'achokio, or Ng'alam?	NUMBER OF DAYS ☐☐
C08	Any food made from beef, lamb, goat, pork, wild game, chicken, or other birds, other meats, liver, kidney, heart, Lookot, Enyas, Ng'amorumoru, Emur/ghee, Edapal, Blood (Lodo) (from a cow or camel), or other organ meats?	NUMBER OF DAYS ☐☐
C09	Any eggs?	NUMBER OF DAYS ☐☐
C10	Any fresh fish, smoked fish, canned tuna, fish soup/sauce or dried fish or shellfish?	NUMBER OF DAYS ☐☐
C11	Any foods made from beans (white, brown, horse), peas, lentils, chick peas, rape seed, linseed, sesame, sunflower, vetch soybean flour or nuts (groundnuts, groundnut flour)?	NUMBER OF DAYS ☐☐
C12	Any cheese, yogurt, milk, powder milk, butter milk, camel milk or other milk products?	NUMBER OF DAYS ☐☐
C13	Any foods made with oil, fat, or butter?	NUMBER OF DAYS ☐☐
C14	Any sugar or sweet things such as sugar cane, honey, jam, cakes, candy, pastries, sugary drinks, Eminae, Ekaamit, Apinet, or Lchang'aro?	NUMBER OF DAYS ☐☐
C15	Any other foods, such as condiments, traditional beer, beer, wine, coffee or tea?	NUMBER OF DAYS ☐☐
	FIES QUESTIONS	
	Now I would like to ask you some questions about your food consumption during the last 30 days. READ EACH QUESTION AS WRITTEN.	
C16	During the past 30 days, was there a time when you or others in your household were worried you would not have enough food to eat because of a lack of money or other resources?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C17	During the past 30 days, was there a time when you or others in your household were unable to eat healthy and nutritious food because of a lack of money or other resources?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C18	During the past 30 days, was there a time when you or others in your household ate only a few kinds of foods because of a lack of money or other resources?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C19	During the past 30 days, was there a time when you or others in your household had to skip a meal because there was not enough money or other resources to get food?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C20	During the past 30 days, was there a time when you or others in your household ate less than you thought you should because of a lack of money or other resources?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C21	During the past 30 days, was there a time when your household did not have food because of a lack of money or other resources?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C22	During the past 30 days, was there a time when you or others in your household were hungry but did not eat because there was not enough money or other resources for food?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C23	During the past 30 days, was there a time when you or others in your household went without eating for a whole day because of a lack of money or other resources?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 98
C24	**INSERT TIME MODULE ENDED**	HOUR ☐☐☐ MINUTE ☐☐ → GO TO NEXT MODULE

Module F. Water, Sanitation and Hygiene (Head of HH or Responsible Adult)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
F00	INSERT TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐	
F01	CLUSTER CODE AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐	
F02	HEAD OF THE HOUSEHOLD OR RESPONSIBLE ADULT **(B10 = 1)** FROM HOUSEHOLD ROSTER	LINE NUMBER **(B01)** ☐☐	
F03	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . 1 NO . . . 2 NOT AVAILABLE . . . 3	→ F17
DRINKING WATER			
F04	What is currently the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING . . . 11 PIPED TO YARD/PLOT . . . 12 PIPED TO NEIGHBOR . . . 13 PUBLIC TAP/STANDPIPE . . . 14 TUBEWELL OR BOREHOLE . . . 21 **DUG WELL** PROTECTED WELL . . . 31 UNPROTECTED WELL . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . 41 UNPROTECTED SPRING . . . 42 RAINWATER . . . 51 TANKER TRUCK . . . 61 CART WITH SMALL TANK 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/IRRIGATION CHANNEL) . 81 BOTTLED WATER . . . 91 OTHER 96 _____ (SPECIFY)	→ F07 → F07
F05	Where is that water source located?	IN OWN DWELLING . . . 1 IN OWN YARD/PLOT . . . 2 ELSEWHERE . . . 3	→ F07
F06	How long does it take to go there, get water, and come back?	MINUTES . . . ☐☐☐ DON'T KNOW . . . 998	
F07	Is water available from this source all year round?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	
F08	In the last two weeks, was water **unavailable** from this source for a day or longer?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	
F09	Do you do anything to the water to make it safer to drink?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ F10A

Module F. Water, Sanitation and Hygiene (Head of HH or Responsible Adult)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
F10	What do you usually do to make the water safer to drink? Anything else? **REFER TO THE MANUAL FOR INSTRUCTIONS ON OBSERVATIONS NEEDED TO VERIFY EACH METHOD. RECORD ALL RESPONSES AFTER VERIFICATION.**	CHLORINATION . . . . . A FLOCCULENT/DISINFECTANT (physio-chemical disinfection) B FILTRATION (physical removal) . . . . . C SOLAR DISINFECTION (UV/heat disinfection) D BOILING (disinfection via heat) . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Y	
F10A	What types of containers do you usually use to collect water for your household? SHOW PICTURES TO RESPONDENT **IF MORE THAN ONE TYPE OF CONTAINER IS USUALLY USED, RECORD ALL THAT APPLY.**	Small jerry can (5-9 liter) . . . . . A Large jerry can (20 liter) . . . . . B Small bucket (5-9 liter) . . . . . C Large bucket (10-20 liter) . . . . . D Clay jars or pots (10-20 liter) . . . . . E Large rolling containter (90 liter) . . . . . F Large plastic drum (150-200 liter) . . . . . G OTHER _____ H (SPECIFY) Do not collect water X	→ F11
F10B	How many of these containers do you usually fill when collecting water for your household? **REPEAT QUESTION 10B FOR EACH TYPE OF CONTAINER REPORTED IN 10A**	Number of containers ☐☐	
F10C	How often do you usually fill the containters? **REPEAT QUESTION 10C FOR EACH TYPE OF CONTAINER REPORTED IN 10A**	Twice every day . . . . . 1 Once every day . . . . . 2 Once every other day . . . . . 3 Once every third day . . . . . 4 OTHER _____ 6 (SPECIFY)	
SANITATION			
F11	What kind of toilet facility do members of your household usually use ? IF RESPONDENT CANNOT GIVE CLEAR RESPONSE, THEN OBSERVE THE TOILET AND RECORD THE CORRECT RESPONSE.	**FLUSH OR POUR FLUSH TOILET** FLUSH TO PIPED SEWER SYTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 **PIT LATRINE** VENTILATED IMPROVED PIT LATRIN . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE 51 NO FACILITY/BUSH/FIELD . . . . . 71 OTHER _____ 96 (SPECIFY)	→ F14
F12	Does your household share the toilet facility with other households?	YES . . . . . 1 NO 2	→ F14
F13	How many households share that toilet facility?	NUMBER OF HOUSEHOLDS IF LESS THAN 10 . . . . . 0☐ 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	

Module F. Water, Sanitation and Hygiene (Head of HH or Responsible Adult)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
HANDWASHING			
F14	Please show me where members of your household most often wash their hands.	OBSERVED . . . . . 1 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 2 NOT OBSERVED, NO PERMISSION TO SEE . . . . . 3 NOT OBSERVED, OTHER REASON 4	(SKIP TO F17)
F15	**OBSERVATION ONLY:** **OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING.**	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
F15A	**OBSERVATION ONLY:** **OBSERVE WHETHER THE HANDWASHING STATION IS FIXED OR MOBILE**	HANDWASHING STATION IS FIXEI . . . . . 1 HANDWASHING STATION IS MOBILE 2	
F16	**OBSERVATION ONLY:** **OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING.**	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . 1 ASH . . . . . 2 MUD OR SANI . . . . . 3 OTHER CLEANSING AGENT . . . . . 4 NONE 5	
F17	INSERT TIME MODULE FINISHED	HOUR ☐☐ MINUTE ☐☐	**GO TO NEXT MODULE**

Module D. Children's Feeding Practices and Diarrhea (Primary Caregivers)

D00	INSERT TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐		
D01	CLUSTER CODE AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐		
NO.	QUESTIONS AND FILTERS	**FIRST ELIGIBLE CHILD FROM ROSTER** NAME	**SECOND ELIGIBLE CHILD FROM ROSTER** NAME	**THIRD ELIBIBLE CHILD FROM ROSTER** NAME
D02	CHILD UNDER 6 YEARS OLD **(B06= 1)** FROM THE HOUSEHOLD ROSTER	LINE NO. CHILD (B01) ☐☐	LINE NO. CHILD (B01) ☐☐	LINE NO. CHILD (B01) ☐☐
D03	CAREGIVER'S LINE NUMBER FROM THE HOUSEHOLD ROSTER **(B07A)**	LINE NO. CAREGIVER ☐☐	LINE NO. CAREGIVER ☐☐	LINE NO. CAREGIVER ☐☐
D04	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . . . 1 NO . . . . . 2 (SKIP TO D57) NOT AVAILABLE . 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO D57) NOT AVAILABLE 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO D57) NOT AVAILABLE 3
D05	What is [CHILD NAME]'s sex?	MALE . . . . . 1 FEMALE 2	MALE . . . . . 1 FEMALE 2	MALE . . . . . 1 FEMALE 2
D06	I would like to ask you some questions about [CHILD'S NAME]. Does [CHILD'S NAME] have a health/vaccination card or other document with the birth date recorded? IF THE HEALTH/VACCINTATION CARD IS SHOWN AND THE RESPONDENT CONFIRMS THE INFORMATION IS CORRECT, RECORD THE DATE OF BIRTH AS DOCUMENTED ON THE CARD. RECORD THE DAY, MONTH, AND YEAR OF BIRTH. IF A DOCUMENT WITH THE BIRTHDATE IS NOT SHOWN THEN ASK: In what month and year was [CHILD'S NAME] born? What is [HIS/HER] birthday? RECORD BIRTH DAY, MONTH AND YEAR IF THE CAREGIVER DOES NOT KNOW THE EXACT DAY OF BIRTH, ENTER "98", INDICATING "DON'T KNOW" FOR DAY. YOU DO NOT NEED TO PROBE FURTHER FOR DAY OF BIRTH. NOTE THAT YOU ARE NOT ALLOWED TO ENTER "DON'T KNOW" FOR MONTH OR YEAR OF BIRTH.	DAY ☐☐ MONTH ☐☐ YEAR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YEAR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YEAR ☐☐☐☐
D07	How old was [CHILD'S NAME] at [HIS/HER] last birthday? RECORD AGE IN COMPLETED YEARS	YEARS ☐☐	YEARS ☐☐	YEARS ☐☐
D08	How many months old is [CHILD'S NAME]? RECORD AGE IN COMPLETED MONTHS	MONTHS ☐☐	MONTHS ☐☐	MONTHS ☐☐
	CHECK D06, D07, AND D08 TO VERIFY CONSISTENCY A) IS THE YEAR RECORDED IN D06 CONSISTENT WITH THE AGE IN YEARS RECORDED IN D07? B) ARE YEAR AND MONTH OF BIRTH RECORDED IN D06 CONSISTENT WITH AGE IN MONTHS RECORDED IN D08? USE BIRTHDATE CONVERSION TABLE TO CHECK. IF THE ANSWER TO A OR B IS "NO" RESOLVE ANY INCONSISTENCIES.			

NO.	QUESTIONS AND FILTERS	FIRST ELIGIBLE CHILD FROM ROSTER NAME	SECOND ELIGIBLE CHILD FROM ROSTER NAME	THIRD ELIBIBLE CHILD FROM ROSTER NAME
	EXCLUSIVE BREASTFEEDING AND DIET OF MINIMUM DIVERSITY			
D14	CHECK **D08:** IS THE CHILD UNDER 60 MONTHS (5 YEARS)?	YES . . . . . 1 NO . . . . . 2 (GO TO D02 FOR NEXT CHILD OR TO D57 IF NO MORE CHILDREN) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO TO D02 FOR NEXT CHILD OR TO D57 IF NO MORE CHILDREN) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO TO D02 ON NEW PAGE FOR NEXT CHILD OR TO D57 IF NO MORE CHILDREN) DON'T KNOW 8
D15	CHECK **D08:** IS THE CHILD UNDER 24 MONTHS (2 YEARS)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO D52) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D52) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D52) DON'T KNOW 8
D16	Has [CHILD'S NAME] ever been breastfed?	YES . . . . . 1 NO . . . . . 2 (SKIP TO D18) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D18) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D18) DON'T KNOW 8
D17	Was [CHILD'S NAME] breastfed yesterday during the day or at night?	YES . . . . . 1 (SKIP TO D19) NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 (SKIP TO D19) NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 (SKIP TO D19) NO . . . . . 2 DON'T KNOW 8
D18	Sometimes babies are breastfed by another woman or given breast milk from another woman by spoon, cup, bottle, or some other way. This can happen if a mother cannot breastfeed her own baby for various reasons, such as the mother is sick or away, mastitis, etc. Did [CHILD'S NAME] consume breast milk in any of these ways yesterday during the day or at night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D19	Now I would like to ask you about some medicines and vitamins that are sometimes given to infants. Was [CHILD'S NAME] given any vitamin drops or other medicines as drops yesterday during the day or at night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D20	Was [CHILD'S NAME] given oral rehydration solution yesterday during the day or at night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
	Next I would like to ask you about some liquids that [CHILD'S NAME] may have had yesterday during the day or at night. Did [CHILD'S NAME] have:			
D21	Plain water?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D22	Any kind of Infant formula? (e.g, Lactogen, Nestle, Nan)	YES . . . . . 1 NO . . . . . 2 (SKIP TO D24) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D24) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D24) DON'T KNOW 8
D23	How many times yesterday during the day or at night did [CHILD'S NAME] consume any formula?	TIMES	TIMES	TIMES . . . .
D24	Did [CHILD'S NAME] have canned, powdered or fresh milk, such as camel, goat or cow's milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO D26) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D26) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D26) DON'T KNOW 8
D25	How many times yesterday during the day or at night did [CHILD'S NAME] consume any milk?	TIMES	TIMES	TIMES . . . .

NO.	QUESTIONS AND FILTERS	FIRST ELIGIBLE CHILD FROM ROSTER NAME	SECOND ELIGIBLE CHILD FROM ROSTER NAME	THIRD ELIBIBLE CHILD FROM ROSTER NAME
D26	Did [CHILD'S NAME] have any juice or juice drinks (e.g., sodas, coke, fanta, sprite, appy, banana juice etc.)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D27	Clear broth?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D28	Yogurt?	YES . . . . . 1 NO . . . . . 2 (SKIP TO D30) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D30) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO D30) DON'T KNOW 8
D29	How many times yesterday during the day or at night did [CHILD'S NAME] consume any yogurt?	TIMES	TIMES	TIMES . . . .
D30	Did [CHILD'S NAME] have any **THIN** porridge? **[insert local examples]** **LIMIT TO PORRIDGE MIXED VERY THIN OR THICK DRINKS MADE FROM CEREAL. THICKER LESS LIQUID PORRIDGE IS INCLUDED UNDER ITEM D33.**	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D31	Any other liquids such as black tea, rice water, or other liquids?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D32	Any other liquids?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
	Now I would like to ask you about (other) liquids or foods that (NAME) ate yesterday during the day or at night. I am interested in whether your child had the item even if it was combined with other foods. For example, if (NAME) ate a millet porridge made with a mixed vegetable sauce, you should reply yes to any food I ask about that was an ingredient in the porridge or sauce. Please do not include any food used in a small amount for seasoning or condiments (like chilies, spices, herbs, or fish powder), I will ask you about those foods separately. Yesterday, during the day or at night, did [CHILD'S NAME] eat any (ASK QUESTIONS D33A-D49)?			
D33	Food made from grains, such as bread, rice, noodles, porridge, ugali, Nang'aria, Atap/ugali, Epeipe/maize, Echurukum/Ng'iimua/soughum, Lokiteiteyo, Mashisha, or Lkitege **?**	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D34	Pumpkin, carrots, squash, sweet potatoes or any other foods made from dark yellow or orange-fleshed vegetables or roots or tubers?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D35	White potatoes, white yams, manioc, cassava, arrowroot, or any other foods made from roots or tubers?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D36A	Any dark green leafy vegetables such as sukumu wiki, kales, amaranths, spinach, bean leaves, cowpea leaves, pumpkin leaves, Akaideit/pumpkin leaves, traditional herbs (Seketet, Lmakutikuti, Lkinyil, Ljurman) or dishes made with dark green leafy vegetables?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D36B	Any other vegetables, such as eggplant, okra, sweet peppers or other vegetables?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D37A	Ripe mangoes, ripe papayas, pawpaw, or guava?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
D37B	Any other fruits such as oranges, wild berries, Ng'akator, Edome, Eng'oomo, Edung, Eng'ol, Ekadala, Ng'akalalio, Ebei, Ng'abulalae, Ng'apedur, Elamach, Epat, Ng'achokio, Ng'alam or other fruits?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	FIRST ELIGIBLE CHILD FROM ROSTER NAME	SECOND ELIGIBLE CHILD FROM ROSTER NAME	THIRD ELIBIBLE CHILD FROM ROSTER NAME
D38A	Any Lookot, Enyas, Ng'amorumoru, Emur/ghee, Edapal, Blood (Lodo) (from a cow or camel), liver, kidney, heart, blood or other organ meats from domesticated animals such as cow, camel, pig, lamb, goat, chicken, duck, or bbi ?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D38B	Any meat from domesticated animals, such as beef, camel meat, pork, lamb, goat, chicken, duck, or rabbit?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D39A	Any organs (liver, heart, kidney)from wild animals, such as game meat, bush rats, birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D39B	Any flesh from wild animals, such as game meat, bush rats, birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D40	Eggs?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D41	Fresh or dried fish, shellfish or seafood?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D42	Any foods made from beans (white, brown, horse), peas, lentils, or other legumes such as chick peas, rape seed, linseed, sesame, sunflower, vetch soybean flour or nuts (groundnuts, groundnut flour)?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D43	Any foods made from nuts and seeds such as pumpkin seeds, cashews, jackfruit, **[local nuts and seeds]**	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D44	Cheese, yogurt or other milk products?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D45	Any oils, fats, butter or foods made with any of these?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D46	Any sugary foods such as chocolates, sweets, candies, pastries, cakes, biscuits, Eminae, Ekaamit, Apinet, or Lchang'aro?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D47	Condiments for flavor, such as chilies, spices, herbs, or fish powder?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D48	Grubs, snails or insect such as white ants, grasshoppers, or locusts?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
D49	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8
	CHECK QUESTIONS **D33-D49**:	IF "NO" TO ALL → D50 IF AT LEAST ONE "YES" "DK" OR TO ALL → D51	IF "NO" TO ALL → D50 IF AT LEAST ONE "YES" OR "DK" TO ALL → D51	IF "NO" TO ALL → D50 IF AT LEAST ONE "YES" OR "DK" TO ALL → D51
D50	Did [CHILD'S NAME] eat any solid, semi-solid, or or soft foods yesterday during the day or at night? IF **"YES"** PROBE: What kind of solid, semi-solid, or soft foods did [CHILD'S NAME] eat?	YES . . . 1 GO BACK TO D33-D49 AND RECORD FOODS EATEN. THEN CONTINUE WITH **D51**. NO . . . 2 GO TO D52 DON'T KNOW . . . 8	YES . . . 1 GO BACK TO D33-D49 AND RECORD FOODS EATEN. THEN CONTINUE WITH **D51**. NO . . . 2 GO TO D52 DON'T KNOW . . . 8	YES . . . 1 GO BACK TO D33-D49 AND RECORD FOODS EATEN. THEN CONTINUE WITH **D51**. NO . . . 2 GO TO D52 DON'T KNOW . . . 8
D51	How many times did [child's name] eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?	TIMES . . . [ ][ ]	TIMES . . . [ ][ ]	TIMES . . . [ ][ ]

NO.	QUESTIONS AND FILTERS	FIRST ELIGIBLE CHILD FROM ROSTER NAME	SECOND ELIGIBLE CHILD FROM ROSTER NAME	THIRD ELIBIBLE CHILD FROM ROSTER NAME
	DIARRHEA			
D52	Has [CHILD'S NAME] had diarrhea in the last 2 weeks? DIARRHEA IS DEFINED AS 3 OR MORE WATERY STOOLS THE TERM(S) USED FOR DIARRHEA SHOULD ENCOMPASS THE EXPRESSIONS USED FOR ALL FORMS OF DIARRHEA, INCLUDING BLOODY STOOLS (CONSISTENT WITH DYSENTRY), WATERY STOOLS, ETC.	YES . . . . 1 NO . . . . 2 (GO TO D02 FOR NEXT CHILD OR TO D57 IF NO MORE CHILDREN) ← DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (GO TO D02 FOR NEXT CHILD OR TO D57 IF NO MORE CHILDREN) ← DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (GO TO D02 FOR NEXT CHILD OR TO D57 IF NO MORE CHILDREN) ← DON'T KNOW 8
D53	Was there any blood in the stools?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
D54	Now I would like to know how much [CHILD'S NAME] was given to drink during the period that [HE/SHE] had diarrhea (including breastmilk). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . 1 SOMEWHAT LESS...... 2 ABOUT THE SAME .... 3 MORE . . . . 4 NOTHING TO DRINK..... 5 DON'T KNOW 8	MUCH LESS . . . . 1 SOMEWHAT LESS...... 2 ABOUT THE SAME .... 3 MORE . . . . 4 NOTHING TO DRINK..... 5 DON'T KNOW 8	MUCH LESS . . . . 1 SOMEWHAT LESS...... 2 ABOUT THE SAME .... 3 MORE . . . . 4 NOTHING TO DRINK..... 5 DON'T KNOW 8
D55	When [CHILD'S NAME] had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . 1 SOMEWHAT LESS....... 2 ABOUT THE SAME...... 3 MORE . . . . 4 STOPPED FOOD......... 5 NEVER GAVE FOOD.... 6 DON'T KNOW 8	MUCH LESS . . . . 1 SOMEWHAT LESS....... 2 ABOUT THE SAME...... 3 MORE . . . . 4 STOPPED FOOD......... 5 NEVER GAVE FOOD.... 6 DON'T KNOW 8	MUCH LESS . . . . 1 SOMEWHAT LESS....... 2 ABOUT THE SAME...... 3 MORE . . . . 4 STOPPED FOOD......... 5 NEVER GAVE FOOD.... 6 DON'T KNOW 8
D56	Was he/she given any of the following to drink at any time since he/she started having the diarrhea: a) A fluid made from a special packet called **[LOCAL NAME FOR ORS PACKET]**? b) A reconstituted ORS liquid provided through government health facilities? c) A government-recommended homemade sugar salt solution (SSS)?	YES NO DK FLUID FROM ORS PKT...... 1 2 8 ORS LIQUID 1 2 8 HOMEMADE FLUID (SSS) 1 2 8	YES NO DK FLUID FROM ORS PKT.... 1 2 8 ORS LIQUIE 1 2 8 HOMEMADE FLUID (SSS 1 2 8	YES NO DK FLUID FROM ORS PKT.... 1 2 8 ORS LIQUIE 1 2 8 HOMEMADE FLUID (SSS 1 2 8
D57	INSERT TIME MODULE ENDED	HOUR [ ][ ]	MINUTE [ ][ ]	→ GO TO NEXT MODULE

Module E. Women's Health, Nutritional Status, Dietary Diversity and Family Planning (All Women 15-49)

NO.	QUESTIONS AND FILTERS	WOMAN'S NAME _____	WOMAN'S NAME _____	WOMAN'S NAME _____
E00	INSERT TIME MODULE STARTED	HOUR [ ][ ] MINUTE [ ][ ]	HOUR [ ][ ] MINUTE [ ][ ]	HOUR [ ][ ] MINUTE [ ][ ]
E01	CLUSTER CODE AND HOUSEHOLD NUMBER	CLUSTER [ ][ ][ ] HH [ ][ ][ ]	CLUSTER [ ][ ][ ] HH [ ][ ][ ]	CLUSTER [ ][ ][ ] HH [ ][ ][ ]
E02	LINE NUMBER OF WOMAN 15-49 YEARS OF AGE FROM ROSTER (B09=1)	LINE NUMBER (B01) [ ][ ]	LINE NUMBER (B01) [ ][ ]	LINE NUMBER (B01) [ ][ ]
E03	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . . . 1 NO . . . . . 2 SKIP TO E65 ← NOT AVAILABLE 8	YES . . . . . 1 NO . . . . . 2 SKIP TO E65 ← NOT AVAILABLE 8	YES . . . . . 1 NO . . . . . 2 SKIP TO E65 ← NOT AVAILABLE 8
E04	In what month and year were you born? IF DON'T KNOW MONTH RECORD "98" IF DON'T KNOW YEAR RECORD "9998"	MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]
E05	Please tell me how old you are. What was your age at your last birthday? RECORD AGE IN COMPLETED YEARS AND SKIP TO E06B. IF RESPONDENT CANNOT REMEMBER HOW OLD SHE IS, CIRCLE 98 AND ASK QUESTION E06A.	AGE IN YEARS [ ][ ] (SKIP TO E06B) DON'T KNOW 98	AGE IN YEARS [ ][ ] (SKIP TO E06B) DON'T KNOW 98	AGE IN YEARS [ ][ ] (SKIP TO E06B) DON'T KNOW 98
E06A	Are you between the ages of 15 and 49 years old?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E06B	CHECK E04, E05 AND E06A (IF APPLICABLE): IS THE RESPONDENT BETWEEN THE AGES OF 15 AND 49 YEARS? IF ANSWER IS 'NO' AND ANOTHER WOMAN IS INCLUDED, THAN QUESTIONS E02-E05 MUST BE REPEATED FOR THE NEW WOMAN. IF THE INFORMATION IN E04, E05 AND E06A CONFLICTS, DETERMINE WHICH IS MOST ACCURATE.	IF YES, THEN CONTINUE. IF NO, THEN GO TO E65	IF YES, THEN CONTINUE. IF NO, THEN GO TO E65	IF YES, THEN CONTINUE. IF NO, THEN GO TO E65
	WOMAN'S DIETARY DIVERSITY			
	Now I would like to ask you about liquids or foods that you ate yesterday during the day or at night. I am interested in whether you had the item even if it was combined with other foods. For example, if you ate a millet porridge made with a mixed vegetable sauce, you should reply yes to any food I ask about that was an ingredient in the porridge or sauce. Please do not include any food used in a small amount for seasoning or condiments (like chilies, spices, herbs, or fish powder), I will ask you about those foods separately. Yesterday during the day or night did you drink/eat any [ASK QUESTIONS E07 to E27]?			
E07	Food made from grains, such as bread, rice, noodles, porridge, ugali, Nang'aria, Atap/ugali, Epeipe/maize, Echurukum/Ng'iimua/soughum, Lokiteiteyo, Mashisha, or Lkitege?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E08	Pumpkin, carrots, squash, orange flesh sweet potatoes or or any other dark yellow or orange fleshed roots, tubers and vegetables?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E09	White potatoes, white yams, manioc, cassava, arrowroot, or any other foods made from roots or tubers?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E10	Any dark green leafy vegetables such as kales, amaranths, spinach, bean leaves, cowpea leaves, pumpkin leaves, Akaideit/pumpkin leaves, traditional herbs (Seketet, Lmakutikuti, Lkinyil, Ljurman), or dishes made with dark green leafy vegetables?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E11	Any other vegetables, such as eggplant, okra, sweet peppers or other vegetables?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E12	Ripe mangoes, ripe papayas, pawpaw or guava?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E13	Any other fruits such as oranges, wild berries, Ng'akator, Edome, Eng'oomo, Edung, Eng'ol, Ekadala, Ng'akalalio, Ebei, Ng'abulalae, Ng'apedur, Elamach, Epat, Ng'achokio, or Ng'alam, other fruits?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E14	Any Lookot, Enyas, Ng'amorumoru, Emur/ghee, Edapal, Blood (Lodo) (from a cow or camel), liver, kidney, heart, blood or other organ meats from domesticated animals such as cow, camel, pig, lamb, goat, chicken, duck, or rabbit?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
E15	Any meat from domesticated animals, such as beef, camel meat, pork, lamb, goat, chicken, duck, or rabbit?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8

Module E. Women's Health, Nutritional Status, Dietary Diversity and Family Planning (All Women 15-49)

NO.	QUESTIONS AND FILTERS	WOMAN'S NAME ____________________	WOMAN'S NAME ____________________	WOMAN'S NAME ____________________
E16	Any organs (liver, heart, kidney)from wild animals, such as game meat, bush rats, birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E17	Any flesh from wild animals, such as game meat, bush rats, birds, wild pigeons, guinea fowl, deer, wild boar, wild goat?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E18	Eggs?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E19	Fresh,canned, or dried fish, shellfish or seafood?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E20	Any foods made from beans (white, brown, horse), peas, lentils, or other legumes such as chick peas, rape seed, linseed, sesame, sunflower, vetch soybean flour or nuts (groundnuts, groundnut flour)?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E21	Any foods made from nuts and seeds such as pumpkin seeds, cashews, jackfruit, [local nuts and seeds]	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E22	Milk, cheese, yogurt or other milk products?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E23	Any oils, fats, butter or foods made with any of these?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E24	Any sugary foods such as chocolates, sweets, candies, pastries, cakes, biscuits, Eminae, Ekaamit, Apinet, or Lchang'aro?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E25	Condiments for flavor, such as chilies, spices, herbs, or fish powder?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E26	Grubs, snails or insect such as white ants, grasshoppers, or locusts?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E27	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce?	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
	HISTORY OF PREGNANCIES AND BIRTHS			
E28	Now I would like to ask you about pregnancies and births you may have had. Are you currently pregnant?	YES . . 1 (SKIP TO E30) ← NO . . 2 DON'T KNOW . . 8	YES . . 1 (SKIP TO E30) ← NO . . 2 DON'T KNOW . . 8	YES . . 1 (SKIP TO E30) ← NO . . 2 DON'T KNOW . . 8
E29	Have you ever been pregnant?	YES . . 1 NO . . 2 (SKIP TO E45) ←	YES . . 1 NO . . 2 (SKIP TO E45) ←	YES . . 1 NO . . 2 (SKIP TO E45) ←
E30	Have you ever given birth?	YES . . 1 NO . . 2 (SKIP TO E45) ←	YES . . 1 NO . . 2 (SKIP TO E45) ←	YES . . 1 NO . . 2 (SKIP TO E45) ←
E31	When was the last time you gave birth to a boy or girl who was born alive? IF THE RESPONDENT DOES NOT KNOW THE BIRTHDATE ASK: Do you have a health/vaccination card for that child with the birthdate recorded? IF THE HEALTH/VACCINATION CARD IS SHOWN, RECORD THE DATE OF BIRTH AS DOCUMENTED ON THE CARD	Date of Last Live Birth DAY.................... |___|___| If day is not known, enter '98' above MONTH................ |___|___| YEAR............ |___|___|___|___|	Date of Last Live Birth DAY.................... |___|___| If day is not known, enter '98' above MONTH................ |___|___| YEAR............ |___|___|___|___|	Date of Last Live Birth DAY.................... |___|___| If day is not known, enter '98' above MONTH................ |___|___| YEAR............ |___|___|___|___|
E32	**CHECK ANSWER TO QUESTION E31.** DID THE RESPONDENT'S LAST LIVE BIRTH OCCUR WITHIN THE PAST 5 YEARS, THAT IS, SINCE **[INSERT MONTH OF INTERVIEW]** ?	IF YES, THEN CONTINUE. IF NO, THEN SKIP TO E45	IF YES, THEN CONTINUE. IF NO, THEN SKIP TO E45	IF YES, THEN CONTINUE. IF NO, THEN SKIP TO E45
E33	What is the name of your child who was born on (DATE INDICATED IN E31)? ADD LINE NUMBER (B01) FROM HH ROSTER. WRITE 00 IF CHILD NOT IN HH.	NAME ____________________ LINE NUMBER (B01) |___|___|	NAME ____________________ LINE NUMBER (B01) |___|___|	NAME ____________________ LINE NUMBER (B01) |___|___|

Module E. Women's Health, Nutritional Status, Dietary Diversity and Family Planning (All Women 15-49)				
NO.	**QUESTIONS AND FILTERS**	**WOMAN'S NAME** ________	**WOMAN'S NAME** ________	**WOMAN'S NAME** ________
	ANTENATAL CARE			
E38	Did you see anyone for antenatal care during the pregnancy?	YES . . 1 NO . . 2 (SKIP TO E45) ←	YES . . 1 NO . . 2 (SKIP TO E45) ←	YES . . 1 NO . . 2 (SKIP TO E45) ←
E39	Whom did you see? Anyone else?	**HEALTH PERSONNEL** DOCTOR A NURSE B MIDWIFE C CLINICAL OFFICIER D SKILLED BIRTH ATTENDANT E **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT F OTHER PERSON ________ X (SPECIFY)	**HEALTH PERSONNEL** DOCTOR A NURSE B MIDWIFE C CLINICAL OFFICIER D SKILLED BIRTH ATTENDANT E **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT F OTHER PERSON ________ X (SPECIFY)	**HEALTH PERSONNEL** DOCTOR A NURSE B MIDWIFE C CLINICAL OFFICIER D SKILLED BIRTH ATTENDANT E **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT F OTHER PERSON ________ X (SPECIFY)
E40	How many months pregnant were you when you first received antenatal care during this pregnancy?	MONTHS	MONTHS	MONTHS
E41	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
	FAMILY PLANNING			
E45	**CHECK HOUSEHOLD ROSTER QUESTION B14 (MARITAL STATUS). IS PERSON MARRIED/LIVING**	IF YES, THEN CONTINUE IF NO, THEN SKIP TO E65	IF YES, THEN CONTINUE IF NO, THEN SKIP TO E65	IF YES, THEN CONTINUE IF NO, THEN SKIP TO E65
	Now I would like to ask about family planning - the various ways or methods a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?			
E46	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E47	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E48	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E49	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E50	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E51	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E52	Male Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E53	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E54	Diaphragm with spermicidal foam, cream or gel. PROBE: Women can apply a spermicide to a shallow, bendable cup and place it in their vagina before sexual intercourse.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E55	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E56	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E57	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8	YES . . 1 NO . . 2 DON'T KNOW . . 8
E58	Have you heard of any other modern methods that women or men can use to avoid pregnancy? ALL METHODS LISTED IN QUESTIONS E46-E57 ARE CONSIDERED MODERN METHODS.	YES . . 1 SPECIFY________ NO . . 2	YES . . 1 SPECIFY________ NO . . 2	YES . . 1 SPECIFY________ NO . . 2

Module E. Women's Health, Nutritional Status, Dietary Diversity and Family Planning (All Women 15-49)

NO.	QUESTIONS AND FILTERS	WOMAN'S NAME ________	WOMAN'S NAME ________	WOMAN'S NAME ________
E59	Did you or your partner use any of these modern contraceptive methods in the past 12 months?	YES . . . 1 NO . . . 2 → SKIP TO E62 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 → SKIP TO E62 DON'T KNOW . . . 8	YES . . . 1 NO . . . 2 → SKIP TO E62 DON'T KNOW . . . 8
E60	Who usually makes the decision on whether or not you should use contraception, you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . 1 HUSBAND/PARTNER . . . 2 RESPONDENT JOINTLY WITH HUSBAND/PARTNER . . . 3 SOMEONE ELSE . . . 4 OTHER________ 5 SPECIFY (1, 2, 4, 5) SKIP TO E62	RESPONDENT . . . 1 HUSBAND/PARTNER . . . 2 RESPONDENT JOINTLY WITH HUSBAND/PARTNER . . . 3 SOMEONE ELSE . . . 4 OTHER________ 5 SPECIFY (1, 2, 4, 5) SKIP TO E62	RESPONDENT . . . 1 HUSBAND/PARTNER . . . 2 RESPONDENT JOINTLY WITH HUSBAND/PARTNER . . . 3 SOMEONE ELSE . . . 4 OTHER________ 5 SPECIFY (1, 2, 4, 5) SKIP TO E62
E61	When making this decision with your (husband/partner), would you say that your opinion is more important, equally important, or less important than your (husband's/partner's) opinion?	MORE IMPORTANT.... 1 EQUALLY IMPORTANT.... 2 LESS IMPORTANT.... 3	MORE IMPORTANT.... 1 EQUALLY IMPORTANT.... 2 LESS IMPORTANT.... 3	MORE IMPORTANT.... 1 EQUALLY IMPORTANT.... 2 LESS IMPORTANT.... 3
	CONTRACEPTIVE PREVALENCE			
E62	**CHECK ANSWER TO QUESTION E28. IS THE WOMAN CURRENTLY PREGNANT?**	IF YES, THEN SKIP TO E65 IF NO, THEN CONTINUE.	IF YES, THEN SKIP TO E65 IF NO, THEN CONTINUE.	IF YES, THEN SKIP TO E65 IF NO, THEN CONTINUE.
E63	Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?	YES . . . 1 NO . . . 2 (SKIP TO E65)	YES . . . 1 NO . . . 2 (SKIP TO E65)	YES . . . 1 NO . . . 2 (SKIP TO E65)
E64	Which method are you using? RECORD ALL MENTIONED. NOTE: MOON BEADS ARE LOCALLY USED FOR STANDARD DAYS METHOD	FEMALE STERILIZATION ....A MALE STERILIZATION ....B IUD....C INJECTABLES ....D IMPLANTS....E PILL....F CONDOM....G FEMALE CONDOM....H EMERGENCY CONTRACEPTION ....I STANDARD DAYS METHOD ....J LACTATIONAL AMEN. METHOD....K RHYTHM METHOD....L WITHDRAWAL ....M OTHER MODERN METHOD ....N OTHER TRADITIONAL METHOD....O	FEMALE STERILIZATION ....A MALE STERILIZATION ....B IUD....C INJECTABLES ....D IMPLANTS....E PILL....F CONDOM....G FEMALE CONDOM....H EMERGENCY CONTRACEPTION ....I STANDARD DAYS METHOD ....J LACTATIONAL AMEN. METHOD....K RHYTHM METHOD....L WITHDRAWAL ....M OTHER MODERN METHOD ....N OTHER TRADITIONAL METHOD....O	FEMALE STERILIZATION ....A MALE STERILIZATION ....B IUD....C INJECTABLES ....D IMPLANTS....E PILL....F CONDOM....G FEMALE CONDOM....H EMERGENCY CONTRACEPTION ....I STANDARD DAYS METHOD ....J LACTATIONAL AMEN. METHOD....K RHYTHM METHOD....L WITHDRAWAL ....M OTHER MODERN METHOD ....N OTHER TRADITIONAL METHOD....O
E65	THERE ARE NO MORE QUESTIONS FOR THIS WOMAN.	GO TO E02A FOR NEXT WOMAN OR IF NO MORE WOMEN, GO TO E64.	GO TO E02A FOR NEXT WOMAN OR IF NO MORE WOMEN, GO TO E64.	GO TO E02A FOR NEXT WOMAN OR IF NO MORE WOMEN, GO TO E64.
E66	**INSERT TIME MODULE ENDED** HOUR [|] MINUTE [|]	→ GO TO NEXT MODULE		

Module J. Gender - Cash (All Men and Women in a Union who Earned Cash)

NO.	QUESTIONS AND FILTERS	FIRST ELIGIBLE PERSON FROM ROSTER	SECOND ELIGIBLE PERSON FROM ROSTER	THIRD ELIBIBLE PERSON FROM ROSTER
J00	INSERT TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐		
J01	CLUSTER CODE AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐		
J02	MAN/WOMAN WHO EARNED CASH **(B13 = 1 OR 2)** FROM THE HOUSEHOLD ROSTER	LINE NO. (B01) ☐☐	LINE NO. (B01) ☐☐	LINE NO. (B01) ☐☐
J03A	CHECK HOUSEHOLD ROSTER QUESTION **B14** (MARITAL STATUS). IS RESPONDENT MARRIED OR LIVING TOGETHER (B14=1)?	YES . ..... 1 NO..... 2 → GO TO J14	YES . ..... 1 NO..... 2 → GO TO J14	YES . ..... 1 NO..... 2 → GO TO J14
J03B	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES..... 1 NO..... 2 → GO TO J14 NOT AVAILABLE..... 3	YES..... 1 NO..... 2 → GO TO J14 NOT AVAILABLE..... 3	YES..... 1 NO..... 2 → GO TO J14 NOT AVAILABLE..... 3
J04	RESPONDENT'S SEX FROM HOUSEHOLD ROSTER (	MALE..... 1 FEMALE..... 2	MALE..... 1 FEMALE..... 2	MALE..... 1 FEMALE..... 2
J05	RESPONDENT'S AGE FROM HOUSEHOLD ROSTER **(B05)**	YEARS..... ☐☐	YEARS..... ☐☐	YEARS..... ☐☐
J06	Have you done any work in the past 12 months? READ DEFINITION OF WORK FROM MODULE B.	YES . ..... 1 NO..... 2 → GO TO J14	YES . ..... 1 NO..... 2 → GO TO J14	YES . ..... 1 NO..... 2 → GO TO J14
J06a	HAVE YOU PERFORMED ANY OF THE FOLLOWING TYPES OF WORK? READ AND SELECT ALL THAT APPLY	Farming/crop production and sales..... A Livestock production/ fattening and sales..... B Agri wage labor..... C Non-agri wage labor..... D Salaried work..... E Sale of wild/bush product (e.g. charcoal, firewood)..... F Honey prod. and sales..... G Petty trade - selling other products (e.g. oil, sugar, etc.)..... H Petty trade - selling own products (e.g. local beer)..... I Self-employment / own business -agri..... J Self-employment / own business - non-agri..... K Rental of land, house, rooms..... L	Farming/crop production and sales..... A Livestock production/ fattening and sales..... B Agri wage labor..... C Non-agri wage labor..... D Salaried work..... E Sale of wild/bush product (e.g. charcoal, firewood)..... F Honey prod. and sales..... G Petty trade - selling other products (e.g. oil, sugar, etc.)..... H Petty trade - selling own products (e.g. local beer)..... I Self-employment / own business - agri..... J Self-employment / own business - non-agri..... K Rental of land, house, rooms..... L	Farming/crop production and sales..... A Livestock production/ fattening and sales..... B Agri wage labor..... C Non-agri wage labor..... D Salaried work..... E Sale of wild/bush product (e.g. charcoal, firewood)..... F Honey prod. and sales..... G Petty trade -selling other products (e.g. oil, sugar, etc.)..... H Petty trade - selling own products (e.g. local beer)..... I Self-employment / own business - agri..... J Self-employment / own business - non-agri..... K Rental of land, house, rooms..... L
J07	During the past 12 months, were you usually paid in cash or kind for this work or were you not paid at all?	CASH ONLY..... 1 CASH AND KIND..... 2 IN KIND ONLY..... 3 → GO TO J14 NOT PAID..... 4	CASH ONLY..... 1 CASH AND KIND..... 2 IN KIND ONLY..... 3 → GO TO J14 NOT PAID..... 4	CASH ONLY..... 1 CASH AND KIND..... 2 IN KIND ONLY..... 3 → GO TO J14 NOT PAID..... 4
J08	When you were paid in cash for this work, was the payment usually made directly to you, to your spouse/partner or to someone else in your household? IF RESPONSE IS SOMEONE ELSE IN HH OR OTHER, THEN SPECIFY THE RELATIONSHIP TO THE RESPONDENT.	RESPONDENT..... 1 SPOUSE/PARTNER..... 2 SOMEONE ELSE IN HH..... 3 _____ (SPECIFY) OTHER _____ (SPECIFY)..... 4	RESPONDENT..... 1 SPOUSE/PARTNER..... 2 SOMEONE ELSE IN HH..... 3 _____ (SPECIFY) OTHER _____ (SPECIFY)..... 4	RESPONDENT..... 1 SPOUSE/PARTNER..... 2 SOMEONE ELSE IN HH..... 3 _____ (SPECIFY) OTHER _____ (SPECIFY)..... 4
J09A	Do you usually discuss with someone about how the cash you earn will be used?	YES..... 1 NO..... 2 → (SKIP TO J10)	YES..... 1 NO..... 2 → (SKIP TO J10)	YES..... 1 NO..... 2 → (SKIP TO J10)
J09B	With whom do you usually talk about how the cash you earn will be used? CIRCLE ALL THAT APPLY. FOR RESPONSES B AND C, SPECIFY THE RELATIONSHIP TO THE RESPONDENT.	SPOUSE/PARTNER..... A SOMEONE ELSE IN HH..... B _____ (SPECIFY RELATIONSHIP) OTHER _____ (SPECIFY)..... C	SPOUSE/PARTNER..... A SOMEONE ELSE IN HH..... B _____ (SPECIFY RELATIONSHIP) OTHER _____ (SPECIFY)..... C	SPOUSE/PARTNER..... A SOMEONE ELSE IN HH..... B _____ (SPECIFY RELATIONSHIP) OTHER _____ (SPECIFY)..... C

Module J. Gender - Cash (All Men and Women in a Union who Earned Cash)

NO.	QUESTIONS AND FILTERS	FIRST ELIGIBLE PERSON FROM ROSTER	SECOND ELIGIBLE PERSON FROM ROSTER	THIRD ELIBIBLE PERSON FROM ROSTER
J10	Who usually decides how the cash you earn will be used? READ ALL RESPONSES AND SELECT ONLY ONE. FOR RESPONSES #4 AND #5, SPECIFY THE RELATIONSHIP TO THE RESPONDENT.	YOURSELF.......... 1 SPOUSE/PARTNER.......... 2 YOURSELF AND SPOUSE/PARTNER JOINTLY.......... 3 YOURSELF AND OTHER JOINTLY.......... 4 ______ (SPECIFY) OTHER ______ .... 5 (SPECIFY)	YOURSELF.......... 1 SPOUSE/PARTNER.......... 2 YOURSELF AND SPOUSE/PARTNER JOINTLY.......... 3 YOURSELF AND OTHER JOINTLY.......... 4 ______ (SPECIFY) OTHER ______ .... 5 (SPECIFY)	YOURSELF.......... 1 SPOUSE/PARTNER.......... 2 YOURSELF AND SPOUSE/PARTNER JOINTLY.......... 3 YOURSELF AND OTHER JOINTLY.......... 4 ______ (SPECIFY) OTHER ______ .... 5 (SPECIFY)
	CHECK RESPONSE TO QUESTION J04. IS THE RESPONDENT A FEMALE?	IF YES CONTINUE IF NO GO TO J14.	IF YES CONTINUE IF NO GO TO J14.	IF YES CONTINUE IF NO GO TO J14.
J11	Has your spouse/partner done any work in the past 12 months? READ DEFINITION OF WORK FROM MODULE B.	YES .... 1 NO.......... 2 GO TO J14 ← DON'T KNOW.......... 8	YES .... 1 NO.......... 2 GO TO J14 ← DON'T KNOW.......... 8	YES .... 1 NO.......... 2 GO TO J14 ← DON'T KNOW.......... 8
J12	During the past 12 months, was he usually paid in cash or kind for this work or was he not paid at all?	CASH ONLY.......... 1 CASH AND KIND.......... 2 IN KIND ONLY.......... 3 GO TO J14 ← NOT PAID.......... 4	CASH ONLY.......... 1 CASH AND KIND.......... 2 IN KIND ONLY.......... 3 GO TO J14 ← NOT PAID.......... 4	`.......... 1 CASH AND KIND.......... 2 IN KIND ONLY.......... 3 GO TO J14 ← NOT PAID.......... 4
J13	Who usually decides how the cash he earns will be used? READ ALL RESPONSES AND SELECT ONLY ONE. FOR RESPONSES #4 AND #5, SPECIFY THE RELATIONSHIP TO THE RESPONDENT.	YOURSELF.......... 1 SPOUSE/PARTNER.......... 2 YOURSELF AND SPOUSE/PARTNER JOINTLY.......... 3 YOURSELF AND OTHER JOINTLY.......... 4 ______ (SPECIFY) OTHER ______ .... 5 (SPECIFY)	YOURSELF.......... 1 SPOUSE/PARTNER.......... 2 YOURSELF AND SPOUSE/PARTNER JOINTLY.......... 3 YOURSELF AND OTHER JOINTLY.......... 4 ______ (SPECIFY) OTHER ______ .... 5 (SPECIFY)	YOURSELF.......... 1 SPOUSE/PARTNER.......... 2 YOURSELF AND SPOUSE/PARTNER JOINTLY.......... 3 YOURSELF AND OTHER JOINTLY.......... 4 ______ (SPECIFY) OTHER ______ .... 5 (SPECIFY)
J14	THERE ARE NO MORE QUESTIONS FOR THIS CASH EARNER.	GO TO J02 FOR NEXT CASH EARNER, OR J15 IF NO MORE CASH EARNERS	GO TO J02 FOR NEXT CASH EARNER, OR J15 IF NO MORE CASH EARNERS	GO TO J02 FOR NEXT CASH EARNER, OR J15 IF NO MORE CASH EARNERS
J15	INSERT TIME MODULE ENDED	HOUR [ ][ ]	MINUTE [ ][ ]	→ GO TO NEXT MODULE

MODULE K. ACCESS TO CREDIT AND GROUP MEMBERSHIP (All Women and Men ages in a Union)

K00	INSERT TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐
K01	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐
K02	RESPONDENT LINE NUMBER FROM THE HOUSEHOLD ROSTER	LINE NUMBER ☐☐
K03A	CHECK HOUSEHOLD ROSTER QUESTION B14 (MARITAL STATUS). IS RESPONDENT MARRIED OR LIVING TOGETHER (B14=1)?	YES . . . . . 1 NO . . . . . 2 SKIP TO K12
K03B	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . . . 1 NO . . . . . 2 SKIP TO K12 NOT AVAILABLE 3
K04	RESPONDENT'S SEX FROM HOUSEHOLD ROSTER (B04)	MALE . . . . . 1 FEMALE 2
K05	RESPONDENT'S AGE FROM HOUSEHOLD ROSTER (B05)	YEARS ☐☐

ACCESS TO AND DECISIONS ABOUT CREDIT

CODE	LENDING SOURCE NAME	K06	K07	K08
	Now I'd like to ask about your household's experience with borrowing money or other items in the past 12 months."	Has anyone in your household taken any loans or borrowed cash/in-kind from [SOURCE] in the past 12 months?	Who made the decision to borrow from [SOURCE]? SELECT ALL THAT APPLY	Who makes the decision about what to do with the money/ item borrowed from [SOURCE]? SELECT ALL THAT APPLY
A	Non-governmental organization (NGO)	YES, CASH . . . . . 1 YES, IN-KIND . . . . . 2 YES, CASH AND IN-KIND . . 3 NO . . . . . 4 DON'T KNOW . . . . . 8 GO TO NEXT SOURCE	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X
B	Informal lender	YES, CASH . . . . . 1 YES, IN-KIND . . . . . 2 YES, CASH AND IN-KIND . . 3 NO . . . . . 4 DON'T KNOW . . . . . 8 GO TO NEXT SOURCE	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X
C	Formal lender (bank/financial institution)	YES, CASH . . . . . 1 YES, IN-KIND . . . . . 2 YES, CASH AND IN-KIND . . 3 NO . . . . . 4 DON'T KNOW . . . . . 8 GO TO NEXT SOURCE	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X
D	Friends or relatives	YES, CASH . . . . . 1 YES, IN-KIND . . . . . 2 YES, CASH AND IN-KIND . . 3 NO . . . . . 4 DON'T KNOW . . . . . 8 GO TO NEXT SOURCE	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X
E	Group based micro-finance or lending including Village Savings and Loan Association (VSLAs)/ Savings and Credit Cooperative Organization (SACCOs)	YES, CASH . . . . . 1 YES, IN-KIND . . . . . 2 YES, CASH AND IN-KIND . . 3 NO . . . . . 4 DON'T KNOW . . . . . 8 GO TO NEXT SOURCE	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X
F	Informal credit/savings groups such as merry-go-rounds, tontines, funeral societies, etc.	YES, CASH . . . . . 1 YES, IN-KIND . . . . . 2 YES, CASH AND IN-KIND . . 3 NO . . . . . 4 DON'T KNOW . . . . . 8 GO TO K09	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X
G	Mobile-based lending/digital loan (e.g., M-Pesa//M-Shwari, Airtel kenya)	YES, CASH . . . . . 1 YES, IN-KIND . . . . . 2 YES, CASH AND IN-KIND . . 3 NO . . . . . 4 DON'T KNOW . . . . . 8 GO TO K09	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X	SELF . . . . . A PARTNER/SPOUSE . . . . B OTHER HH MEMBER . . . . C OTHER NON-HH MEMBER . . D NOT APPLICABLE X

GROUP MEMBERSHIP

CODE	GROUP CATEGORIES	K09	K10	
	Now I'm going to ask some questions about different groups or organizations that may exist in your community	**Is there a [GROUP] in your community?**	**Are youa member of this [GROUP]?**	
A	Agricultural/livestock/fisheries producer's group (including marketing groups)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
B	Water users' group	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
C	Forest users' group	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
D	Credit or microfinance group including Savings and Credit Cooperative Organization (SACCOs)/merry-go-rounds/ Village Savings and Loan Association (VSLAs)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
E	Mutual help or insurance group (including burial societies)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
F	Trade and business association	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
G	Civic groups (people working together to improve their community) or charitable group (people working together to help people in need)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
H	Local government	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
I	Religious group	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
J	Other group ONLY INCLUDE A GROUP HERE IF IT DOES NOT FIT INTO ONE OF THE OTHER CATEGORIES	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 SKIP TO NEXT	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8 SKIP TO NEXT	
K	Any other formal or informal organization (SPECIFY)_____	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
K11	INSERT TIME MODULE ENDED	HOUR ☐☐ MINUTE ☐☐	→	GO TO NEXT MODULE

Module G. Agriculture (All Farmers)

G00	INSERT TIME MODULE STARTED	HOUR [ ][ ]	MINUTE [ ][ ]
G01	CLUSTER CODE AND HOUSEHOLD NUMBER	CLUSTER [ ][ ][ ]	HH [ ][ ][ ]

NO.	QUESTIONS AND FILTERS	FIRST FARMER NAME ______	SECOND FARMER NAME ______	THIRD FARMER NAME ______
	REGISTER NAME, SEX AND LINE NUMBER FROM THE HOUSEHOLD ROSTER FOR THE FIRST FARMER (B14=1). START WITH QUESTION G02 FOR THE FIRST FARMER. IF THERE IS MORE THAN ONE FARMER IN THE HOUSEHOLD THEN INTERVIEW ALL ADDITIONAL FARMERS AS NEEDED. IF THE FARMER IS ABSENT AFTER THREE TRIES AN ALTERNATE RESPONDENT MAY BE INTERVIEWED ONLY IF HE/SHE IS KNOWLEDGABLE ABOUT THE FARMER'S AGRICULTURAL PRACTICES AND DECISIONS.			
G02A	FARMER FROM THE HOUSEHOLD ROSTER **(B11 = 1)**	LINE NO. (B01) [ ][ ]	LINE NO. (B01) [ ][ ]	LINE NO. (B01) [ ][ ]
G02B	FARMER'S SEX FROM THE HOUSEHOLD ROSTER **(B04)**	MALE . . . 1 FEMALE . . . 2	MALE . . . 1 FEMALE . . . 2	MALE . . . 1 FEMALE . . . 2
G03	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . 1 NO . . . 2 (SKIP TO G22) NOT AVAILABLE . . . 3	YES . . . 1 NO . . . 2 (SKIP TO G22) NOT AVAILABLE . . . 3	YES . . . 1 NO . . . 2 (SKIP TO G22) NOT AVAILABLE . . . 3
G04	Do you have access to a plot of land (even if very small) over which you make decisions about what will be grown, OR how it will be grown, OR how to dispose/store/sell the harvest? **VERIFY THAT RESPONDENT UNDERSTANDS THAT HAVING "ACCESS" AND MAKING "DECISIONS" OVER A PLOT OF LAND DOES NOT REQUIRE "LEGAL OWNERSHIP" OF THE LAND. A PERSON CAN HAVE ACCESS AND MAKE DECISIONS OVER A PLOT OF LAND (E.G., A SMALL VEGETABLE GARDEN) EVEN IF HE/SHE DOES NOT LEGALLY OWN THE LAND. IF THERE IS JOINT DECISION-MAKING POWER OVER ONE SINGLE PLOT OF LAND (OR SET OF ANIMALS), ALL FARMERS THAT ARE INVOLVED IN THE DECISION MAKING SHOULD BE INTERVIEWED.**	YES . . . 1 NO . . . 2 (SKIP TO G05)	YES . . . 1 NO . . . 2 (SKIP TO G05)	YES . . . 1 NO . . . 2 (SKIP TO G05)
G04A	What is the tenure of the land over which you make decisions? SELECT ALL THAT APPLY.	OWNED WITH WRITTEN DOCUMENTATION . . . 1 OWNED WITHOUT WRITTEN DOCUMENTATION . . . 2 RENTED WITH WRITTEN DOCUMENTATION . . . 3 RENTED WITHOUT WRITTEN DOCUMENTATION . . . 4 SHARECROPPED WITH WRITTEN DOCUMENTATION . . . 3 SHARECROPPED WITHOUT WRITTEN DOCUMENTATION . . . 4 STATE/COMMUNAL LAND USED WITH WRITTEN AGREEMENT . . . 5 STATE/COMMUNAL LAND USED WITHOUT WRITTEN AGREEMENT . . . 6 OCCUPIED/SQUATTED WITHOUT PERMISSION . . . 7 NONE OF THESE . . . 8 (SKIP TO G05)	OWNED WITH WRITTEN DOCUMENTATION . . . 1 OWNED WITHOUT WRITTEN DOCUMENTATION . . . 2 RENTED WITH WRITTEN DOCUMENTATION . . . 3 RENTED WITHOUT WRITTEN DOCUMENTATION . . . 4 SHARECROPPED WITH WRITTEN DOCUMENTATION . . . 3 SHARECROPPED WITHOUT WRITTEN DOCUMENTATION . . . 4 STATE/COMMUNAL LAND USED WITH WRITTEN AGREEMENT . . . 5 STATE/COMMUNAL LAND USED WITHOUT WRITTEN AGREEMENT . . . 6 OCCUPIED/SQUATTED WITHOUT PERMISSION . . . 7 NONE OF THESE . . . 8 (SKIP TO G05)	OWNED WITH WRITTEN DOCUMENTATION . . . 1 OWNED WITHOUT WRITTEN DOCUMENTATION . . . 2 RENTED WITH WRITTEN DOCUMENTATION . . . 3 RENTED WITHOUT WRITTEN DOCUMENTATION . . . 4 SHARECROPPED WITH WRITTEN DOCUMENTATION . . . 3 SHARECROPPED WITHOUT WRITTEN DOCUMENTATION . . . 4 STATE/COMMUNAL LAND USED WITH WRITTEN AGREEMENT . . . 5 STATE/COMMUNAL LAND USED WITHOUT WRITTEN AGREEMENT . . . 6 OCCUPIED/SQUATTED WITHOUT PERMISSION . . . 7 NONE OF THESE . . . 8 (SKIP TO G05)
G04B	What was your farm size (the largest total area of your farmland) in any cropping season in the past 12 months? **INCLUDE LAND THAT IS OWNED, RENTED OR SHARE CROPPED**	[ ][ ][ ].[ ][ ][ ] AREA HECTARES . . . 1 SQUARE METERS . . . 2 ACRES . . . 3 OTHER (SPECIFY) . . . 4 ______	[ ][ ][ ].[ ][ ][ ] AREA HECTARES . . . 1 SQUARE METERS . . . 2 ACRES . . . 3 OTHER (SPECIFY) . . . 4 ______	[ ][ ][ ].[ ][ ][ ] AREA HECTARES . . . 1 SQUARE METERS . . . 2 ACRES . . . 3 OTHER (SPECIFY) . . . 4 ______
G05	Do you have animals and/or aquaculture products over which you make decisions about their management OR how to dispose/store/sell of the production?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
	CHECK ANSWERS TO QUESTIONS G04 AND G05. IS THE ANSWER TO QUESTION G04 OR G05 "YES"?	**IF YES, THEN CONTINUE. IF NO, SKIP TO G22.**	**IF YES, THEN CONTINUE. IF NO, SKIP TO G22.**	**IF YES, THEN CONTINUE. IF NO, SKIP TO G22.**

NO.	QUESTIONS AND FILTERS	FIRST FARMER NAME _____	SECOND FARMER NAME _____	THIRD FARMER NAME _____
FINANCIAL SERVICES				
G07	Did you take any agricultural credit, in cash or in kind, in the [PAST 12 MONTHS]? **PROBES:** Agri-dealers, contract farming, village savings and credit groups, farmers group, MFI, Bank etc	YES ..... 1 NO 2	YES ..... 1 NO 2	YES ..... 1 NO 2
G08	Did you save any cash in the [PAST 12 MONTHS]? **PROBES**: village savings and credit group, MFI, cooperatives, bank, mobile banking, etc.	YES ..... 1 NO 2	YES ..... 1 NO 2	YES ..... 1 NO 2
G09	Some people insure their agricultural production against negative unexpected circumstances, such as drought, floods, and pests by paying for this service. Did you buy agricultural insurance in the [PAST 12 MONTHS] ?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
VALUE CHAIN INTERVENTIONS				
	Now I want to ask you about farming and livestock practices about which you make decisions. This includes practices about crops, animals, and aquaculture products.			
G10	Do you cultivate any crops or raise/buy livestock with the specific intention to sell or resell to earn income?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G10A**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G10A**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G10A**)
G11	Which of the following activities related to farming and animal husbandry have you practiced or received services for during the [PAST 12 MONTHS]? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	CONTRACT FARMING ..... A SELLING PRODUCTS THROUGH COMMUNITY FARMER ASSOCIATIONS ..... B SORTING AND GRADING ..... C BULKING ..... D USE OF IMPROVED RECORD KEEPING, BUDGETING AND FINANCIAL MANAGEMENT ..... E USE OF TRAINING AND EXTENSION SERVICES ..... F DID NOT PRACTICE ANY OF THESE ACTIVITIES IN PAST 12 MONTHS ..... Y		
		A B C D E F Y	A B C D E F Y	A B C D E F Y
G10a	Do you produce fodder with the specific intention to sell or resell to earn income?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G12**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G12**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G12**)
G11a	Which of the following activities related to fodder production have you practiced or received services for during the [PAST 12 MONTHS]? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	USE OF IMPROVED PASTURE INPUTS (E.G., QUALITY SEEDS) ..... A USE OF MECHANIZED PASTURE HARVESTING AND BALING TECHNOLOGIES ..... B CONSTRUCTION AND USE OF HAY STORES BY FARMER ORGANIZATIONS ..... C USE OF FODDER SEEDS ..... D USE OF HARVESTING, DRYING, PACKAGING, STORAGE, AND MARKETING TECHNOLOGIES ..... E DID NOT PRACTICE ANY OF THESE ACTIVITIES IN PAST 12 MONTHS ..... Y		
		A B C D E Y	A B C D E Y	A B C D E Y
G12	**CHECK ANSWER TO QUESTION G04. IS THE ANSWER TO QUESTION G04 "YES"?**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G17.**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G17.**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G17.**
COWPEAS - REPEAT QUESTIONS G13-G16 FOR EACH CROP SELECTED BY THE ACTIVITY				
G13a	In the past 12 months, did you plant any COWPEAS in the plots over which you make decisions?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13B**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13B**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13B**)
G14a	Did you use any of these practices for cultivation of the COWPEAS in the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	IMPROVED/CERTIFIED SEED ..... A SEEDLING PRODUCTION AND TRANSPLANTATION ..... B CROP ROTATION (ROTATING GRAINS WITH NITROGEN FIXING LEGUMES) ..... C KITCHEN GARDENS USING SUNKEN PITS ..... D USE OF ORGANIC MANURE ..... E SOIL TESTING ..... F APPLICATION OF INOCULANT ..... G USE OF DRIP OR SPRINKLER IRRIGATION TECHNOLOGIES ..... H USE OF RAINWATER HARVESTING TECHNOLOGIES (E.G. WATER PANS, ROCK/ROOF CATCHMENT) ..... I USE OF FLOOD-BASED FARMING TECHNOLOGIES (SPATE IRRIGATION) ..... J PRODUCTION PLANNING AND CROP ROTATION IN IRRIGATION SCHEMES ..... K USE OF DROUGHT EARLY WARNING SYSTEMS OR INFORMATION ..... L DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS ..... Y		
		A B C D E F G H I J K L Y	A B C D E F G H I J K L Y	A B C D E F G H I J K L Y
G15a	Did you store the cowpeas that you harvested?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13B**) DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13B**) DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13B**) DID NOT HARVEST 3
G16a	Did you use any of these methods to store the cowpeas in the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	AFLATOXIN PREVENTION AND CONTROL ..... A USE OF ALUMINIUM CANS, CRATES, OTHER FOOD GRADE CONTAINERS DURING TRANSPORTATION ..... B USE OF WELL-EQUIPPED FOOD STORAGE STRUCTURES (RODENT PROOF; PROPER AIR CIRCULATION) ..... C TEMPERATURE AND HUMIDITY CONTROL (SHED NETS, AIR CONDITION, FANS) ..... D SOLAR DRYING FOR GRAINS AND PULSES ..... E DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS ..... Y		
		A B C D E Y	A B C D E Y	A B C D E Y

NO.	QUESTIONS AND FILTERS	FIRST FARMER NAME _____	SECOND FARMER NAME _____	THIRD FARMER NAME _____
GREENGRAMS - REPEAT QUESTIONS G13-G16 FOR EACH CROP SELECTED BY THE ACTIVITY				
G13b	In the past 12 months, did you plant any greengrams in the plots over which you make decisions?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13C**) ◄	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13C**) ◄	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13C**) ◄
G14b	Did you use any of these practices for cultivation of the greengrams in the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	IMPROVED/CERTIFIED SEED . . . . . A SEEDLING PRODUCTION AND TRANSPLANTATION . . . . . B CROP ROTATION (ROTATING GRAINS WITH NITROGEN FIXING LEGUMES) . . . . . C KITCHEN GARDENS USING SUNKEN PITS . . . . . D USE OF ORGANIC MANURE . . . . . E SOIL TESTING . . . . . F APPLICATION OF INOCULANT . . . . . G USE OF DRIP OR SPRINKLER IRRIGATION TECHNOLOGIES . . . . . H USE OF RAINWATER HARVESTING TECHNOLOGIES (E.G., WATER PANS, ROCK/ROOF CATCHMENT) . . . . . I USE OF FLOOD-BASED FARMING TECHNOLOGIES (SPATE IRRIGATION) . . . . . J PRODUCTION PLANNING AND CROP ROTATION IN IRRIGATION SCHEMES . . . . . K USE OF DROUGHT EARLY WARNING SYSTEMS OR INFORMATION . . . . . L DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E F G H I J K L Y	A B C D E F G H I J K L Y	A B C D E F G H I J K L Y
G15b	Did you store the greengrams that you harvested?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13C**) ◄ DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13C**) ◄ DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13C**) ◄ DID NOT HARVEST 3
G16b	Did you use any of these methods to store the green grams in the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	AFLATOXIN PREVENTION AND CONTROL . . . . . A USE OF ALUMINIUM CANS, CRATES, OTHER FOOD GRADE CONTAINERS DURING TRANSPORTATION . . . . . B USE OF WELL-EQUIPPED FOOD STORAGE STRUCTURES (RODENT PROOF; PROPER AIR CIRCULATION) . . . . . C TEMPERATURE AND HUMIDITY CONTROL (SHED NETS, AIR CONDITION, FANS) . . . . . D SOLAR DRYING FOR GRAINS AND PULSES . . . . . E DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E Y	A B C D E Y	A B C D E Y
ORANGE-FLESHED SWEET POTATOES - REPEAT QUESTIONS G13-G16 FOR EACH CROP SELECTED BY THE ACTIVITY				
G13c	In the past 12 months, did you plant any orange-fleshed sweet potatoes in the plots over which you make decisions?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13D**) ◄	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13D**) ◄	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13D**) ◄
G14c	Did you use any of these practices for cultivation of the orange-fleshed sweet potatoes in the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	IMPROVED/CERTIFIED SEED . . . . . A SEEDLING PRODUCTION AND TRANSPLANTATION . . . . . B CROP ROTATION (ROTATING GRAINS WITH NITROGEN FIXING LEGUMES) . . . . . C KITCHEN GARDENS USING SUNKEN PITS . . . . . D USE OF ORGANIC MANURE . . . . . E SOIL TESTING . . . . . F APPLICATION OF INOCULANT . . . . . G USE OF DRIP OR SPRINKLER IRRIGATION TECHNOLOGIES . . . . . H USE OF RAINWATER HARVESTING TECHNOLOGIES (E.G. WATER PANS, ROCK/ROOF CATCHMENT) . . . . . I USE OF FLOOD-BASED FARMING TECHNOLOGIES (SPATE IRRIGATION) . . . . . J PRODUCTION PLANNING AND CROP ROTATION IN IRRIGATION SCHEMES . . . . . K USE OF DROUGHT EARLY WARNING SYSTEMS OR INFORMATION . . . . . L DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E F G H I J K L Y	A B C D E F G H I J K L Y	A B C D E F G H I J K L Y
G15c	Did you store the orange-fleshed sweet potatoes that you harvested?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13D**) ◄ DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13D**) ◄ DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G13D**) ◄ DID NOT HARVEST 3
G16c	Did you use any of these methods to store the orange-fleshed sweet potatoes in the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	AFLATOXIN PREVENTION AND CONTROL . . . . . A USE OF ALUMINIUM CANS, CRATES, OTHER FOOD GRADE CONTAINERS DURING TRANSPORTATION . . . . . B USE OF WELL-EQUIPPED FOOD STORAGE STRUCTURES (RODENT PROOF; PROPER AIR CIRCULATION) . . . . . C TEMPERATURE AND HUMIDITY CONTROL (SHED NETS, AIR CONDITION, FANS) . . . . . D SOLAR DRYING FOR GRAINS AND PULSES . . . . . E DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E Y	A B C D E Y	A B C D E Y

NO.	QUESTIONS AND FILTERS	FIRST FARMER NAME _____	SECOND FARMER NAME _____	THIRD FARMER NAME _____
SORGHUM - REPEAT QUESTIONS G13-G14 FOR EACH CROP SELECTED BY THE ACTIVITY				
G13d	In the past 12 months, did you plant any sorghum in the plots over which you make decisions?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G17**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G17**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G17**)
G14d	Did you use any of these practices for cultivation of the sorghum In the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	IMPROVED/CERTIFIED SEED . . . . . A SEEDLING PRODUCTION AND TRANSPLANTATION . . . . . B CROP ROTATION (ROTATING GRAINS WITH NITROGEN FIXING LEGUMES) . . . . . C KITCHEN GARDENS USING SUNKEN PITS . . . . . D USE OF ORGANIC MANURE . . . . . E SOIL TESTING . . . . . F APPLICATION OF INOCULANT . . . . . G USE OF DRIP OR SPRINKLER IRRIGATION TECHNOLOGIES . . . . . H USE OF RAINWATER HARVESTING TECHNOLOGIES (E.G. WATER PANS, ROCK/ROOF CATCHMENT) . . . . . I USE OF FLOOD-BASED FARMING TECHNOLOGIES (SPATE IRRIGATION) . . . . . J PRODUCTION PLANNING AND CROP ROTATION IN IRRIGATION SCHEMES . . . . . K USE OF DROUGHT EARLY WARNING SYSTEMS OR INFORMATION . . . . . L DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E F G H I J K L Y	A B C D E F G H I J K L Y	A B C D E F G H I J K L Y
G15d	Did you store the sorghum that you harvested?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G17**) DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G17**) DID NOT HARVEST 3	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G17**) DID NOT HARVEST 3
G16d	Did you use any of these methods to store the sorghum in the [PAST 12 MONTHS] ? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	AFLATOXIN PREVENTION AND CONTROL . . . . . A USE OF ALUMINIUM CANS, CRATES, OTHER FOOD GRADE CONTAINERS DURING TRANSPORTATION . . . . . B USE OF WELL-EQUIPPED FOOD STORAGE STRUCTURES (RODENT PROOF; PROPER AIR CIRCULATION) . . . . . C TEMPERATURE AND HUMIDITY CONTROL (SHED NETS, AIR CONDITION, FANS) . . . . . D SOLAR DRYING FOR GRAINS AND PULSES . . . . . E DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E Y	A B C D E Y	A B C D E Y
G17	**CHECK ANSWER TO QUESTION G05.** **IS THE ANSWER TO QUESTION G05 "YES"?**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G20.**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G20.**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G20.**
CATTLE - REPEAT QUESTIONS G18-G19 FOR EACH LIVESTOCK SELECTED BY THE ACTIVITY				
G18a	In the past 12 months, did you raise any cattle (beef or milk)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G18B**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G18B**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G18B**)
G19a	Did you use any of the following practices when you cared for the cattle during the [PAST 12 MONTHS]? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	USE OF IMPROVED LIVESTOCK BREEDS/SPECIES . . . . . A USE OF LIVESTOCK HEALTH SERVICES AND PRODUCTS . . . . . B USE OF IMPROVED SHELTERS . . . . . C USE OF IMPROVED CALVING TECHNIQUES . . . . . D USE OF IMPROVED MILKING TECHNIQUES . . . . . E USE OF NUTRITIOUS PASTURE VARIETIES . . . . . F UTILIZATION OF SET GRAZING AREAS . . . . . G IMPROVED FODDER PRODUCTION . . . . . H USE OF SOLARIZED BOREHOLES FOR LIVESTOCK . . . . . I USE OF WATER PANS FOR LIVESTOCK . . . . . J USE OF SAND DAMS FOR LIVESTOCK . . . . . K USE OF ROCK CATCHMENTS FOR LIVESTOCK . . . . . L DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E F G H I J K L Y	A B C D E F G H I J K L Y	A B C D E F G H I J K L Y
GOATS - REPEAT QUESTIONS G18-G19 FOR EACH LIVESTOCK SELECTED BY THE ACTIVITY				
G18b	In the past 12 months, did you raise any goats?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G18C**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G18C**)	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G18C**)
G19b	Did you use any of the following practices when you cared for the goats during the [PAST 12 MONTHS]? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	USE OF IMPROVED LIVESTOCK BREEDS/SPECIES . . . . . A USE OF LIVESTOCK HEALTH SERVICES AND PRODUCTS . . . . . B USE OF IMPROVED SHELTERS . . . . . C USE OF IMPROVED CALVING TECHNIQUES . . . . . D USE OF IMPROVED MILKING TECHNIQUES . . . . . E USE OF NUTRITIOUS PASTURE VARIETIES . . . . . F UTILIZATION OF SET GRAZING AREAS . . . . . G IMPROVED FODDER PRODUCTION . . . . . H USE OF SOLARIZED BOREHOLES FOR LIVESTOCK . . . . . I USE OF WATER PANS FOR LIVESTOCK . . . . . J USE OF SAND DAMS FOR LIVESTOCK . . . . . K USE OF ROCK CATCHMENTS FOR LIVESTOCK . . . . . L DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E F G H I J K L Y	A B C D E F G H I J K L Y	A B C D E F G H I J K L Y

NO.	QUESTIONS AND FILTERS	FIRST FARMER NAME _____	SECOND FARMER NAME _____	THIRD FARMER NAME _____
CAMELS - REPEAT QUESTIONS G18-G19 FOR EACH LIVESTOCK SELECTED BY THE ACTIVITY				
G18c	In the past 12 months, did you raise any camels?	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G20**) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G20**) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO **G20**) ←
G19c	Did you use any of the following practices when you cared for the camels during the [PAST 12 MONTHS]? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	USE OF IMPROVED LIVESTOCK BREEDS/SPECIES . . . . . A USE OF LIVESTOCK HEALTH SERVICES AND PRODUCTS . . . . . B USE OF IMPROVED SHELTERS . . . . . C USE OF IMPROVED CALVING TECHNIQUES . . . . . D USE OF IMPROVED MILKING TECHNIQUES . . . . . E USE OF NUTRITIOUS PASTURE VARIETIES . . . . . F UTILIZATION OF SET GRAZING AREAS . . . . . G IMPROVED FODDER PRODUCTION . . . . . H USE OF SOLARIZED BOREHOLES FOR LIVESTOCK . . . . . I USE OF WATER PANS FOR LIVESTOCK . . . . . J USE OF SAND DAMS FOR LIVESTOCK . . . . . K USE OF ROCK CATCHMENTS FOR LIVESTOCK . . . . . L DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E F G H I J K L Y	A B C D E F G H I J K L Y	A B C D E F G H I J K L Y
G20	**CHECK ANSWERS TO QUESTIONS G04 AND G05.** **IS THE ANSWER TO QUESTION G04 OR G05 "YES"?**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G22.**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G22.**	**IF YES, THEN CONTINUE.** **IF NO, SKIP TO G22.**
NATURAL RESOURCE MANAGEMENT				
G21	Did you use any of the following natural resources management practices or techniques during the [PAST 12 MONTHS]? **CIRCLE ALL PRACTICES THAT ARE MENTIONED, IF NONE USED, CIRCLE Y.**	RESEEDING DEGRADED LANDS WITH DROUGHT RESISTANT GRASS SPECIES . . . . . A FENCING OFF PASTURE PLOTS TO CONSERVE PASTURE . . . . . B REHABILITATION OF DEGRADED GRAZING LANDS (SOIL/WATER CONSERVATION) . . . . . C CONSTRUCTION OF SOIL CONSERVATION STRUCTURES (GABIONS) . . . . . D USE OF NATURAL BARRIERS/COVER CROPS (GRASS STRIPS/CROP COVERS) . . . . . E UTILIZATION OF ORGANIC MATERIALS SUCH AS GRAIN STRAW, FRESH OR OLD HAY OR OTHER CROP RESIDUES . . . . . F PLANTING AGROFORESTRY TREES AND FRUITS (E.G., GREVILLEA, PAWPAW) . . . . . G ZAÏ PITS (POT-HOLING) . . . . . H USE OF MINIMUM TILLAGE PRACTICES (LEAVE CROP RESIDUE ON SOIL SURFACE) . . . . . I PLANTING NITROGEN-FIXING TREES (ACACIA) . . . . . J DID NOT USE ANY OF THESE PRACTICES IN PAST 12 MONTHS . . . . . Y		
		A B C D E F G H I J Y	A B C D E F G H I J Y	A B C D E F G H I J Y
G22	THERE ARE NO MORE QUESTIONS FOR THIS FARMER.	GO TO **G02** FOR ANOTHER FARMER. IF THERE ARE NO MORE FARMERS, GO TO G23.	GO TO **G02** FOR ANOTHER FARMER. IF THERE ARE NO MORE FARMERS, GO TO G23.	GO TO **G02** FOR ANOTHER FARMER. IF THERE ARE NO MORE FARMERS, GO TO G23.
G23	INSERT TIME MODULE ENDED	HOUR ☐☐	MINUTE ☐☐	→ GO TO NEXT MODULE

AGRICULTURAL PRODUCTION - CATTLE (DAIRY AND BEEF COWS)

7.50.00a CHECK QUESTIONNAIRE ITEM G18A TO DETERMINE IF THERE ARE ANY HOUSEHOLD MEMBERS ELIGIBLE TO RESPOND TO MODULE 7.50-CATTLE (DAIRY AND BEEF COWS). ADMINISTER THIS QUESTIONNAIRE INDIVIDUALLY TO ALL ELIGIBLE HOUSEHOLD MEMBERS.

• IF NO ONE IN THE HOUSEHOLD RAISED CATTLE FOR DAIRY OR BEEF IN THE PAST YEAR, PROCEED TO THE NEXT MODULE OR THANK THE RESPONDENT FOR THEIR TIME AND END THE INTERVIEW.

• FOR EACH MEMBER OF THE HOUSEHOLD WHO IS ELIGIBLE TO RESPOND TO MODULE 7.50 - CATTLE (DAIRY OR BEEF), CHECK THE INFORMED CONSENT REGISTER AND ENSURE THAT THE RESPONDENT HAS PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE INFORMED CONSENT PROCEDURE TO THE RESPONDENT.

7.50.00b "Next I would like to ask you about the cattle (dairy and beef cows) you raised during the past year."

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
7.5000A	INSERT TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐	
7.5000B	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐	
7.5000C	LINE NUMBER OF THE RESPONDENT TO THIS MODULE	LINE NUMBER . . . . . ☐☐	
7.5000D	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . . . 1 NO 2	→ 7.5019
7.5001a	How many adult male cows - animals that are over two years old, do you own?	NUMBER OF ADULT MALES . . . . . ☐☐ NONE 00	→ 7.5002a
7.5001b	What is the overall condition of your adult male cows? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5001c	In the past year, how many adult male cows did you sell?	NUMBER OF ADULT MALES SOLD . . . . . ☐☐ NONE 00	
7.5001d	In the past year, how many adult male cows did your household consume?	NUMBER OF ADULT MALES CONSUMED . . . . . ☐☐ NONE 00	
7.5001e	In the past year, how many adult male cows did you gift or loan out to others?	NUMBER OF ADULT MALES GIFTED/LOANED . . . . . ☐☐ NONE 00	
7.5002a	How many adult female cows - animals that are over two years old, do you own?	NUMBER OF ADULT FEMALES . . . . . ☐☐ NONE 00	→7.5003a
7.5002b	What is the overall condition of your adult female cows? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5002c	In the past year, how many adult female cows did you sell?	NUMBER OF ADULT FEMALES SOLD . . . . . ☐☐ NONE 00	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
7.5002d	In the past year, how many adult female cows did your household consume?	NUMBER OF ADULT FEMALES CONSUMED ☐☐ NONE 00	
7.5002e	In the past year, how many adult female cows did you gift or loan out to others?	NUMBER OF ADULT FEMALES GIFTED/LOANED ☐☐ NONE 00	
7.5002f	How many of your female cows gave birth in the past year?	TOTAL NUMBER OF FEMALES THAT GAVE BIRTH . . . . . ☐☐ NONE 00	
7.5003a	How many male young stock - animals one to two years old - do you own?	NUMBER OF MALE YOUNG STOCK . . . . . ☐☐ NONE 00	→ 7.5004a
7.5003b	What is the overall condition of your young male stock? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE . . . . . 1 THIN - FORE RIBS VISIBLE . . . . . 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE . . . . . 3 MODERATE - NEITHER FAT NOR THIN . . . . . 4 GOOD - SMOOTH APPEARANCE 5	
7.5003c	In the past year, how many young male stock did you sell?	NUMBER OF YOUNG MALE STOCK SOLD . . . . . ☐☐ NONE 00	
7.5003d	In the past year, how many young male stock did your household consume?	NUMBER OF YOUNG MALE STOCK CONSUMED . . . . . ☐☐ NONE 00	
7.5003e	In the past year, how many young male stock did you gift or loan out to others?	NUMBER OF YOUNG MALE STOCK GIFTED/LOANED . . . . . ☐☐ NONE 00	
7.5004a	How many female young stock - animals one to two years old - do you own?	NUMBER OF FEMALE YOUNG STOCK . . . . . ☐☐ NONE 00	→ 7.5005a
7.5004b	What is the overall condition of your young female stock? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE . . . . . 1 THIN - FORE RIBS VISIBLE . . . . . 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE . . . . . 3 MODERATE - NEITHER FAT NOR THIN . . . . . 4 GOOD - SMOOTH APPEARANCE 5	
7.5004c	In the past year, how many young female stock did you sell?	NUMBER OF YOUNG FEMALE STOCK SOLD . . . . . ☐☐ NONE 00	
7.5004d	In the past year, how many young female stock did your household consume?	NUMBER OF YOUNG FEMALE STOCK CONSUMED . . . . . ☐☐ NONE 00	
7.5004e	In the past year, how many young female stock did you gift or loan out to others?	NUMBER OF YOUNG FEMALE STOCK GIFTED/LOANED ☐☐ NONE 00	
7.5005a	How many male calves - animals under one year old - do you own?	NUMBER OF MALE CALVES . . . . . ☐☐ NONE 00	→ 7.5006a

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
7.5005b	What is the overall condition of your male calves? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5005c	In the past year, how many male calves did you sell?	NUMBER OF MALE CALVES SOLD . . . . . ☐☐ NONE 00	
7.5005d	In the past year, how many male calves did your household consume?	NUMBER OF MALE CALVES CONSUMED . . . . . ☐☐ NONE 00	
7.5005e	In the past year, how many male calves did you gift or loan out to others?	NUMBER OF MALE CALVES GIFTED/LOANED . . . . . ☐☐ NONE 00	
7.5006a	How many female calves - animals under one year old - do you own?	NUMBER OF FEMALE CALVES . . . . . ☐☐ NONE 00	→ 7.5007
7.5006b	What is the overall condition of your female calves? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5006c	In the past year, how many female calves did you sell?	NUMBER OF FEMALE CALVES SOLD . . . . . ☐☐ NONE 00	
7.5006d	In the past year, how many female calves did your household consume?	NUMBER OF FEMALE CALVES CONSUMED . . . . ☐☐ NONE 00	
7.5006e	In the past year, how many female calves did you gift or loan out to others?	NUMBER OF FEMALE CALVES GIFTED/LOANED . . . . . ☐☐ NONE 00	
7.5007	In the past year, how many of your cattle died?	NUMBER OF CATTLE DIED . . . . . ☐☐ NONE 00	
7.5008	Do you own dairy cows for milking?	YES . . . . . 1 NO 2	→ 7.5018
7.5009	How many cows did you collect milk from yesterday?	NUMBER OF COWS MILKED . . . . . ☐☐ NONE 00	→ 7.5013
7.5010	Yesterday morning, how much milk in total did your dairy cows produce?	QUANTITY: ☐☐☐ UNIT: LITRE . . . . . 1 NONE . . 0000 OTHER (SPECIFY) 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
7.5011	Yesterday evening, how much milk in total did your dairy cows produce?	QUANTITY: ☐☐☐ UNIT: LITRE . . . . . 1 NONE . . 0000 OTHER (SPECIFY) 6	
7.5012	ADD QUANTITIES IN ITEMS 7.5010 AND 7.5011. Your dairy cows produced [QUANTITY] [UNITS] of milk yesterday. How many [UNITS] of that milk did you sell?	QUANTITY: ☐☐☐ UNIT: LITRE . . . . . 1 NONE . . 0000 OTHER (SPECIFY) 6	
7.5013	Where do you usually sell your milk? SELECT ALL THAT APPLY	SELL TO FRIENDS/NEIGHBORS..... A SELL IT AT MARKET MYSELF/OTHER HH MEMBER..... B SELL TO A SCHOOL..... C SELL TO A MILK MARKETING COOPERATIVE..... D SELL TO AGGREGATOR/OFF-TAKER..... E SELL TO HOTEL (RESTAURANT)..... F DOES NOT SELL MILK..... G OTHER (SPECIFY) _____ X	→ 7.5018
7.5014	Do you usually sell only morning milk, only evening milk, or both morning and evening milk?	ONLY MORNING MILK . . . . . 1 ONLY EVENING MILK . . . . . 2 BOTH MORNING AND EVENING MILK 3	
7.5015	CHECK ITEM 7.5013: DOES FARMER SELL MILK TO A MILK MARKETING COOP (RESPONSE D)?	YES . . . . . 1 NO 2	→ 7.5018
7.5016	What services does your milk marketing cooperative provide you? SELECT ALL THAT APPLY	RECORDS AMOUNT OF MILK SOLD..... A RECORDS FAT CONTENT OF MILK SOLD..... B RECORDS ACIDITY OF MILK SOLD..... C PROVIDES EXTENSION SERVICES..... D PROVIDES ANIMAL HEALTH SERVICES..... E PROVIDES LOANS..... F OTHER (SPECIFY) _____ X	
7.5017	How do you receive payment for your milk from your cooperative? SELECT ALL THAT APPLY	CASH . . . . . A STORE CREDIT . . . . . B MPESA/MOBILE MONEY . . . . . C DIRECT DEPOSIT TO BANK ACCOUNT . . . . D OTHER (SPECIFY) _____ X	
7.5018	What information source do you rely on the most to help you raise your cattle well?	FRIEND/NEIGHBOR . . . . . 01 COMMUNITY ANIMAL HEALTH WORKER . . 02 LOCAL AGROVET SUPPLIER . . . . . 03 PRIVATE VETERINARY PHARMACY . . . . . 04 AG EXTENSION WORKER . . . . . 05 SCHOOL . . . . . 06 RADIO PROGRAM . . . . . 07 TELEVISION . . . . . 08 MOBILE PHONE MESSAGING . . . . . 09 INTERNET . . . . . 10 OTHER (SPECIFY) _____ 96	
7.5019	ENTER TIME MODULE FINISHED	HOUR ☐☐ MINUTE ☐☐	→ NEXT MODULE

MODULE 7.51 - AGRICULTURAL PRODUCTION - GOATS

CHECK MODULE G QUESTION G18B. IF FARMER ANSWERED YES THEN CONTINUE WITH 7.5100

7.5100 **"Next I would like to ask you about the goats you raised during the past year."**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
7.5100A	ENTER TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐	
7.5100B	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐	
7.5100C	LINE NUMBER OF FARMER	LINE NUMBER ..... ☐☐	
7.5100D	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES ..... 1 NO 2	7.5107
7.5101a	A herd of goats can include both adult goats and young goats. Adult goats are one year old or older. How many adult male goats do you own?	NUMBER OF ADULT MALES ..... ☐☐ NONE 00	7.5102a
7.5101b	What is the overall condition of your adult male goats? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5101c	In the past year, how many adult male goats did you sell?	NUMBER OF ADULT MALES SOLD ..... ☐☐ NONE 00	
7.5101d	In the past year, how many adult male goats did your household consume?	NUMBER OF ADULT MALES CONSUME ..... ☐☐ NONE 00	
7.5101e	In the past year, how many adult male goats did you gift or loan out to others?	NUMBER OF ADULT MALES GIFTED/LOANED ..... ☐☐ NONE 00	
7.5102a	How many adult female goats do you own?	NUMBER OF ADULT FEMALE ..... ☐☐ NONE 00	7.5103a
7.5102b	What is the overall condition of your adult female goats? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5102c	How many adult female goats gave birth in the last year?	TOTAL NUMBER OF FEMALES THAT GAVE BIRTH ..... ☐☐ NONE 00	
7.5102d	In the past year, how many adult female goats did you sell?	NUMBER OF ADULT FEMALES SOLI ..... ☐☐ NONE 00	

MODULE 7.51 - AGRICULTURAL PRODUCTION - GOATS			
7.5102e	In the past year, how many female goats did your household consume?	NUMBER OF FEMALES CONSUMED . . . . . NONE 00	
7.5102f	In the past year, how many adult female goats did you gift or loan out to others?	NUMBER OF ADULT FEMALES GIFTED/LOANED . . . . . NONE 00	
7.5103a	Young goats are less than one year old. How many young male goats do you own?	NUMBER OF YOUNG MALES . . . . . NONE 00	7.5104a
7.5103b	What is the overall condition of your young male goats? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE . . . . . 1 THIN - FORE RIBS VISIBLE . . . . . 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE . . . . . 3 MODERATE - NEITHER FAT NOR THIN . . . . . 4 GOOD - SMOOTH APPEARANCE 5	
7.5103c	In the past year, how many young male goats did you sell?	NUMBER OF YOUNG MALES SOLD . . . . . NONE 00	
7.5103d	In the past year, how many young male goats did your household consume?	NUMBER OF YOUNG MALES CONSUMED . . . . . NONE 00	
7.5103e	In the past year, how many young male goats did you gift or loan out to others?	NUMBER OF YOUNG MALES GIFTED/LOANED . . . . . NONE 00	
7.5104a	And how many young female goats do you own?	NUMBER OF YOUNG FEMALES . . . . . NONE 00	7.5105
7.5104b	What is the overall condition of your young female goats? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE . . . . . 1 THIN - FORE RIBS VISIBLE . . . . . 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE . . . . . 3 MODERATE - NEITHER FAT NOR THIN . . . . . 4 GOOD - SMOOTH APPEARANCE 5	
7.5104c	In the past year, how many young female goats did you sell?	NUMBER OF YOUNG FEMALES SOLD . . . . . NONE 00	
7.5104d	In the past year, how many young female goats did your household consume?	NUMBER OF YOUNG FEMALES CONSUME . . . . . NONE 00	
7.5104e	In the past year, how many young female goats did you gift or loan out to others?	NUMBER OF YOUNG FEMALES GIFTED/LOANED . . . . . NONE 00	
7.5105	In the past year, how many of your goats died?	NUMBER OF GOATS DIED . . . . . NONE 00	

MODULE 7.51 - AGRICULTURAL PRODUCTION - GOATS

7.5106	What information source do you rely on the most to help you increase the production from your goats?	FRIEND/NEIGHBOR . . . . . 1 COMMUNITY ANIMAL HEALTH WORKER . . 2 LOCAL AGROVET SUPPLIER . . . . . 3 PRIVATE VETERINARY PHARMACY . . . . . 4 AG EXTENSION WORKER . . . . . 5 SCHOOL . . . . . 6 RADIO PROGRAM . . . . . 7 TELEVISION . . . . . 8 MOBILE PHONE MESSAGING . . . . . 9 INTERNET . . . . . 10 OTHER (SPECIFY) _____ 96	
7.5107	ENTER TIME MODULE FINISHED	HOUR ☐☐ MINUTE ☐☐	→ GO TO NEXT MODULE

AGRICULTURAL PRODUCTION - CAMELS

7.53.00a CHECK QUESTIONNAIRE ITEM G18C TO DETERMINE IF THERE ARE ANY HOUSEHOLD MEMBERS ELIGIBLE TO RESPOND TO MODULE 7.53 - CAMELS. ADMINISTER THIS QUESTIONNAIRE INDIVIDUALLY TO ALL ELIGIBLE HOUSEHOLD MEMBERS.

• IF NO ONE IN THE HOUSEHOLD RAISED CAMELS IN THE PAST YEAR, PROCEED TO THE NEXT MODULE OR THANK THE RESPONDENT FOR THEIR TIME AND END THE INTERVIEW.

• FOR EACH MEMBER OF THE HOUSEHOLD WHO IS ELIGIBLE TO RESPOND TO MODULE 7.53 - CAMELS, CHECK THE INFORMED CONSENT REGISTER AND ENSURE THAT THE RESPONDENT HAS PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE INFORMED CONSENT PROCEDURE TO THE RESPONDENT.

7.53.00b "Next I would like to ask you about the camels you raised during the past year."

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
7.5300A	INSERT TIME MODULE STARTED	HOUR ☐☐ MINUTE ☐☐	
7.5300B	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐	
7.5300C	LINE NUMBER OF THE RESPONDENT TO THIS MODULE	LINE NUMBER . . . . . ☐☐	
7.5300D	OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY?	YES . . . . . 1 NO 2	→ 7.5316
7.5301a	Camels can include both mature and young stock. Mature camels are camels who have reached their full potential weight. How many mature male stock do you own?	NUMBER OF MATURE MALES . . . . . ☐☐ NONE 00	→ 7.5302a
7.5301b	What is the overall condition of your mature male camels? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5301c	In the past year, how many mature male camels did you sell?	NUMBER OF MATURE MALES SOLD . . . . . ☐☐ NONE 00	
7.5301d	In the past year, how many mature male camels did your household consume?	NUMBER OF MATURE MALES CONSUMED . . . . ☐☐ NONE 00	
7.5301e	In the past year, how many mature male camels did you gift or loan out to others?	NUMBER OF MATURE MALES GIFTED/LOANED ☐☐ NONE 00	
7.5302a	How many mature female stock do you own?	NUMBER OF MATURE FEMALE . . . . . ☐☐ NONE 00	→ 7.5303a
7.5302b	What is the overall condition of your mature female camels? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
7.5302c	How many of your female camels gave birth in the past year?	TOTAL NUMBER OF FEMALES THAT GAVE BIRTH . . . . . ☐☐ NONE 00	
7.5302d	In the past year, how many mature female camels did you sell?	NUMBER OF MATURE FEMALES SOLD . . . . . ☐☐ NONE 00	
7.5303e	In the past year, how many mature female camels did your household consume?	NUMBER OF MATURE FEMALES CONSUMED . . . . ☐☐ NONE 00	
7.5302f	In the past year, how many mature female camels did you gift or loan out to others?	NUMBER OF MATURE FEMALES GIFTED/LOANED ☐☐ NONE 00	
7.5303a	How many young male stock do you own?	NUMBER OF YOUNG MALES . . . . . ☐☐ NONE 00	→ 7.5304a
7.5303b	What is the overall condition of your young male camels? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th & 13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5303c	In the past year, how many young male camels did you sell?	NUMBER OF YOUNG MALES SOLD . . . . . ☐☐ NONE 00	
7.5303d	In the past year, how many young male camels did your household consume?	NUMBER OF YOUNG MALES CONSUMED . . . . ☐☐ NONE 00	
7.5303e	In the past year, how many young male camels did you gift or loan out to others?	NUMBER OF YOUNG MALES GIFTED/LOANED ☐☐ NONE 00	
7.5304a	How many young female stock do you own?	NUMBER OF YOUNG FEMALES . . . . . ☐☐ NONE 00	→ 7.5305
7.5304b	What is the overall condition of your young female camels? SHOW BODY CONDITION SCORE CHARTS.	EMACIATED - BONES VISIBLE..... 1 THIN - FORE RIBS VISIBLE..... 2 BORDERLINE - FORE RIBS NOT VISIBLE, 12th &13th RIBS VISIBLE..... 3 MODERATE - NEITHER FAT NOR THIN..... 4 GOOD - SMOOTH APPEARANCE..... 5	
7.5304c	In the past year, how many young female camels did you sell?	NUMBER OF YOUNG FEMALES SOLD . . . . . ☐☐ NONE 00	
7.5304d	In the past year, how many young female camels did your household consume?	NUMBER OF YOUNG FEMALES CONSUMED . . . . ☐☐ NONE 00	
7.5304e	In the past year, how many young female camels did you gift or loan out to others?	NUMBER OF YOUNG FEMALES GIFTED/LOANED ☐☐ NONE 00	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
7.5305	In the past year, how many of your camels died?	NUMBER OF CAMELS DIED . . . . . ☐☐ NONE 00	
7.5306	Do you collect milk from your camels?	YES . . . . . 1 NO . . . . . 2 →	7.5315
7.5307	How many camels did you collect milk from yesterday?	NUMBER OF CAMELS MILKED . . . . . ☐☐ NONE . . . . . 00 →	7.5311
7.5308	Yesterday morning, how much milk in total did your camels produce?	QUANTITY: ☐☐☐ UNIT: LITRE..... 1 NONE . . 0000 OTHER (SPECIFY)..... 6	
7.5309	Yesterday evening, how much milk in total did your camels produce?	QUANTITY: ☐☐☐ UNIT: LITRE..... 1 NONE . . 0000 OTHER (SPECIFY)..... 6	
7.5310	ADD QUANTITIES IN ITEMS 7.5308 AND 7.5309. Your camels produced [QUANTITY] [UNITS] of milk yesterday. How many [UNITS] of that milk did you sell?	QUANTITY: ☐☐☐ UNIT: LITRE..... 1 NONE . . 0000 OTHER (SPECIFY)..... 6	
7.5311	Where do you usually sell your milk? SELECT ALL THAT APPLY	SELL TO FRIENDS/NEIGHBORS..... A SELL IT AT MARKET MYSELF/OTHER HH MEMBER..... B SELL TO A SCHOOL..... C SELL TO A MILK MARKETING COOPERATIVE..... D SELL TO AGGREGATOR/OFF-TAKER..... E SELL TO HOTEL (RESTAURANT)..... F DOES NOT SELL MILK..... G → OTHER (SPECIFY) _____ X	7.5315
7.5312	CHECK ITEM 7.5311: DOES FARMER SELL MILK TO A MILK MARKETING COOP (RESPONSE D)?	YES . . . . . 1 NO . . . . . 2 →	7.5315
7.5313	What services does your milk marketing cooperative provide you? SELECT ALL THAT APPLY	RECORDS AMOUNT OF MILK SOLD..... A RECORDS FAT CONTENT OF MILK SOLD..... B RECORDS ACIDITY OF MILK SOLD..... C PROVIDES EXTENSION SERVICES..... D PROVIDES ANIMAL HEALTH SERVICES..... E PROVIDES LOANS..... F OTHER (SPECIFY) _____ X	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
7.5314	How do you receive payment for your milk from your cooperative? SELECT ALL THAT APPLY.	CASH..... A STORE CREDIT..... B MPESA/MOBILE MONEY..... C DIRECT DEPOSIT TO BANK ACCOUNT..... D OTHER (SPECIFY) _____..... X	
7.5315	What information source do you rely on the most to help you raise your livestock well?	FRIEND/NEIGHBOR . . . . . 1 COMMUNITY ANIMAL HEALTH WORKER 2 LOCAL AGROVET SUPPLIER . . . . . 3 PRIVATE VETERINARY PHARMACY . . . . 4 AG EXTENSION WORKER . . . . . 5 SCHOOL . . . . . 6 RADIO PROGRAM . . . . . 7 TELEVISION . . . . . 8 MOBILE PHONE MESSAGING . . . . . 9 INTERNET . . . . . 10 OTHER (SPECIFY) _____ 96	
7.5316	ENTER TIME MODULE FINISHED	HOUR ☐☐ MINUTE ☐☐	→ GO TO NEXT MODULE

HOUSEHOLD CONSUMPTION EXPENDITURE - FOOD CONSUMPTION OVER PAST 7 DAYS

8.1a ASK THESE QUESTIONS ABOUT ALL HOUSEHOLD MEMBERS. FOR THIS MODULE ASK WHOEVER IS MOST KNOWLEDGEABLE ABOUT FOODS THE HOUSEHOLD MEMBERS HAVE EATEN IN THE PAST WEEK. FOR THE SUBSEQUENT MODULES, ASK THE PERSON WHO IS MOST KNOWLEDGEABLE ABOUT OTHER HOUSEHOLD EXPENDITURES, INCLUDING NON-FOOD ITEMS THAT HOUSEHOLD MEMBERS HAVE BOUGHT.

8.1b CHECK THE INFORMED CONSENT REGISTER AND ENSURE THAT THE RESPONDENT(S) TO THIS MODULE HAS PREVIOUSLY PROVIDED INFORMED CONSENT; IF NOT, ADMINISTER THE INFORMED CONSENT FOR THIS MODULE.

8.100A ENTER TIME MODULE STARTED ..... HOUR [ ][ ] MINUTE [ ][ ]

8.100B CLUSTER AND HOUSEHOLD NUMBER ..... CLUSTER [ ][ ][ ] HH [ ][ ][ ]

8.100C LINE NUMBER OF RESPONDENT ..... LINE NUMBER [ ][ ]

8.100D **FOOD CONSUMPTION OVER PAST 7 DAYS**

"Now I would like to ask you about the kinds of foods that you and other members of your household have eaten over the past week. I'd also like to ask you about items that you or members of your household may have bought in the past week. Please include foods in meals that are shared with other members of the household, as well as foods that individual members of the household may have consumed independently of other family members. First we will ask about foods that were eaten at your home, or at the home of friends or other family. Later we will ask about foods that were purchased already prepared from a restaurant or a vendor."

8.100E OBTAIN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY? YES ..... 1; NO ..... 2 → GO TO Q.8.708

	8.101	8.102	8.103		8.104		8.105	8.106		8.106C	8.107		8.107C
	Over the past one week (7 days), did you or others in your household eat any [FOOD ITEM]? INCLUDE FOOD BOTH EATEN COMMUNALLY IN THE HOUSEHOLD AND SEPARATELY BY INDIVIDUAL HOUSEHOLD MEMBERS. DO NOT INCLUDE FOOD OR DRINKS EATEN IN RESTAURANTS, WHICH ARE MEASURED SEPARATELY	FIRST SELECT 1 (YES), 2 (NO), OR 8 (DK) FOR ALL THE FOOD ITEMS FROM 7001 TO 7186. GO BACK TO THE TOP OF THE LIST. FOR FOOD ITEMS SELECTED 1 (YES), ASK QS. 8.103 TO 8.107C	"Earlier, you told me you or other household members ate [FOOD ITEM] in the past week." How much in total did your household eat in the past week (7 days)?		How much of what you ate came from purchases? IF 8.104A = 0, THEN SKIP TO 8.106A		How much did you spend on what was eaten in the past week (7 days)? If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	CHECK 8.103 AND 8.104. IF QUANTITY IS EQUAL, GO TO NEXT ITEM. How much of what you ate came from your household's own production?		CHECK 8.106A IF 8.106A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much came from gifts and other sources?		CHECK 8.107A. IF 8.107A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
ITEM CODE	FOOD ITEMS	YES=1 NO=2 DON'T KNOW=8	8.103A QUANTITY	8.103B UNIT	8.104A QUANTITY	8.104B UNIT	KES	8.106A QUANTITY	8.106B UNIT	KES	8.107A QUANTITY	8.107B UNIT	KES
CEREALS, GRAINS AND CEREAL PRODUCTS (8001-8020)													
8001	Maize straight run (Normal flour)	1 2 8											
8002	Sifted maize (fine flour)	1 2 8											
8003	Maize rice (bran flour)	1 2 8											
8004	Maize grain	1 2 8											
8005	Green maize	1 2 8											
8006	Rice	1 2 8											
8007	Finger millet	1 2 8											
8008	Sorghum	1 2 8											
8009	Pearl millet	1 2 8											
8010	Wheat flour	1 2 8											
8011	Bread	1 2 8											
8012	Buns, scones	1 2 8											
8013	Biscuits	1 2 8											
8014	Spaghetti, macaroni, pasta	1 2 8											
8015	Breakfast cereal	1 2 8											
8016	Infant feeding cereals	1 2 8											

	8.101	8.102	8.103		8.104		8.105	8.106		8.106C	8.107		8.107C
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8017	Millet flour	1 2 8											
8018	Sorghum flour	1 2 8											
8019	Wheat grain	1 2 8											
8020	Other cereals (specify)	1 2 8											
ROOTS, TUBERS, AND PLANTAINS (8021-8031)													
8021	Cassava tubers	1 2 8											
8022	Cassava flour	1 2 8											
8023	White sweet potato	1 2 8											
8024	Orange sweet potato	1 2 8											
8025	Irish potato	1 2 8											
8026	Potato crisps	1 2 8											
8027	Plantain, cooking banana	1 2 8											
8028	Cocoyam	1 2 8											
8029	Yam	1 2 8											
8030	Arrowroot	1 2 8											
8031	Other roots, tubers, or plantains (specify)	1 2 8											
NUTS AND PULSES (8036-8046)													
8036	Pigeonpea	1 2 8											
8037	Groundnut	1 2 8											
8038	Groundnut flour	1 2 8											
8039	Soybean flour	1 2 8											
8040	Ground bean (bean flour)	1 2 8											
8041	Cowpea	1 2 8											
8042	Macadamia nuts	1 2 8											
8043	Black grams	1 2 8											
8044	Green grams	1 2 8											
8045	Common bean	1 2 8											
8046	Other nuts or pulses (specify)	1 2 8											

	8.101	8.102	8.103		8.104		8.105	8.106		8.106C	8.107		8.107C
	Over the past one week (7 days), did you or others in your household eat any [FOOD ITEM]? INCLUDE FOOD BOTH EATEN COMMUNALLY IN THE HOUSEHOLD AND SEPARATELY BY INDIVIDUAL HOUSEHOLD MEMBERS. DO NOT INCLUDE FOOD OR DRINKS EATEN IN RESTAURANTS, WHICH ARE MEASURED SEPARATELY	FIRST SELECT 1 (YES), 2 (NO), OR 8 (DK) FOR ALL THE FOOD ITEMS FROM 7001 TO 7186. GO BACK TO THE TOP OF THE LIST. FOR FOOD ITEMS SELECTED 1 (YES), ASK QS. 8.103 TO 8.107C	"Earlier, you told me you or other household members ate [FOOD ITEM] in the past week." How much in total did your household eat in the past week (7 days)?		How much of what you ate came from purchases? IF 8.104A = 0, THEN SKIP TO 8.106A		How much did you spend on what was eaten in the past week (7 days)? If your family ate part but not all of something you purchased, estimate what you spent only on the part that was consumed.	CHECK 8.103 AND 8.104. IF QUANTITY IS EQUAL, GO TO NEXT ITEM. How much of what you ate came from your household's own production?		CHECK 8.106A IF 8.106A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."	How much came from gifts and other sources?		CHECK 8.107A. IF 8.107A IS > 0, ASK: "Please tell me how much it would have cost to buy that much [FOOD ITEM] if you had to purchase it in the market today."
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VEGETABLES (8051-8068)													
8051	Onion, fresh or processed	1 2 8											
8052	Cabbage, fresh or processed	1 2 8											
8053	Pumpkin leaves, fresh or processed	1 2 8											
8054	Kale, fresh or processed	1 2 8											
8055	Gathered wild green leaves	1 2 8											
8056	Tomato, fresh or processed	1 2 8											
8057	Cucumber, fresh or processed	1 2 8											
8058	Pumpkin/butternut, fresh or processed	1 2 8											
8059	Okra/lady finger, fresh or processed	1 2 8											
8060	Mushroom, fresh or processed	1 2 8											
8061	Amaranths	1 2 8											
8062	Spinach	1 2 8											
8063	Eggplant	1 2 8											
8064	Carrot	1 2 8											
8065	Green beans	1 2 8											
8066	Bean leaves	1 2 8											
8067	Cowpea leaves	1 2 8											
8068	Other vegetables (specify)	1 2 8											

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MEAT, FISH, AND ANIMAL PRODUCTS (8069-8085)													
8069	Eggs	1 2 8											
8070	Dried fish	1 2 8											
8071	Fresh fish	1 2 8											
8072	Beef	1 2 8											
8073	Goat	1 2 8											
8074	Pork	1 2 8											
8075	Mutton (sheep meat)	1 2 8											
8076	Chicken	1 2 8											
8077	Other poultry - guinea fowl, doves, etc.	1 2 8											
8078	Small animal - rabbit, mice, etc.	1 2 8											
8079	Termites, other insects, for example caterpillar	1 2 8											
8080	Tinned meat or fish	1 2 8											
8081	Smoked fish	1 2 8											
8082	Fish Soup/Sauce	1 2 8											
8083	Omena (dagaa) fish	1 2 8											
8084	Camel	1 2 8											
8085	Other meat (specify)	1 2 8											
8086	Animal blood	1 2 8											

	8.101	8.102	8.103		8.104		8.105	8.106		8.106C	8.107		8.107C
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FRUITS (8089-8102)													
8089	Mango	1 2 8											
8090	Banana	1 2 8											
8091	Citrus – orange, lemon, tangerine, etc.	1 2 8											
8092	Pineapple	1 2 8											
8093	Papaya/pawpaw	1 2 8											
8094	Guava	1 2 8											
8095	Avocado	1 2 8											
8096	Wild fruit (wild berries, mulberry, zambarau, etc.)	1 2 8											
8097	Apple	1 2 8											
8098	Watermelon	1 2 8											
8099	Plums	1 2 8											
8100	Ebei	1 2 8											
8101	Ngakalalio	1 2 8											
8102	Other fruits (specify)	1 2 8											
8103	~~Other fruits (specify)~~	1 2 8											
8104	~~Other fruits (specify)~~	1 2 8											
8105	~~Other fruits (specify)~~	1 2 8											
8106	~~Other fruits (specify)~~	1 2 8											
8107	~~Other fruits (specify)~~	1 2 8											
8108	~~Other fruits (specify)~~	1 2 8											

	8.101	8.102	8.103		8.104		8.105	8.106		8.106C	8.107		8.107C
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MILK AND MILK PRODUCTS (8109-8117)													
8109	Fresh milk	1 2 8											
8110	Powdered milk	1 2 8											
8111	Margarine	1 2 8											
8112	Butter	1 2 8											
8113	Soured milk	1 2 8											
8114	Yoghurt	1 2 8											
8115	Cheese	1 2 8											
8116	Infant feeding formula (for bottle)	1 2 8											
8117	Other milk (specify)	1 2 8											
SUGAR, FATS, AND OILS (8124-8131)													
8124	Sugar	1 2 8											
8125	Sugar Cane (chewing)	1 2 8											
8126	Cooking oil (in liquid form)	1 2 8											
8127	Ghee	1 2 8											
8128	Jaggery sugar	1 2 8											
8129	Cooking fat/lard	1 2 8											
8130	Margarine	1 2 8											
8131	Other sugars, fats, or oils (specify)	1 2 8											

	8.101	8.102	8.103		8.104		8.105	8.106		8.106C	8.107		8.107C
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BEVERAGES (8134-8148)													
8134	Tea leaves (unprepared)	1 2 8											
8135	Coffee – instant (unprepared)	1 2 8											
8136	Cocoa/drinking chocolate (Milo/Raha) (unprepared)	1 2 8											
8137	Squash (Sobo drink, Quencher, concentrate)	1 2 8											
8138	Fruit juice (boxed for example Delmonte juice)	1 2 8											
8139	Freezes (flavoured ice)	1 2 8											
8140	Soft drinks (Coca-cola, Fanta, Sprite, etc.)	1 2 8											
8141	Sealed, bottled water (Keringet, Dasani, etc.)	1 2 8											
8142	Bottled / canned beer (Tusker, etc.)	1 2 8											
8143	Traditional beer (Busaa, Muratina, etc.)	1 2 8											
8144	Wine or commercial liquor/spirits	1 2 8											
8145	Locally brewed liquor (Changaa, etc.)	1 2 8											
8146	Tea bags (unprepared)	1 2 8											
8147	Coffe beans – ground (unprepared)	1 2 8											
8148	Other beverages (specify)	1 2 8											
SPICES AND MISCELLANEOUS (8152-8161)													
8152	Salt	1 2 8											
8153	Spices	1 2 8											
8154	Yeast, baking powder, bicarbonate of soda	1 2 8											
8155	Tomato sauce (bottle)	1 2 8											
8156	Hot sauce (chilli, etc…)	1 2 8											
8157	Jam, jelly	1 2 8											
8158	Sweets, candy, chocolates	1 2 8											
8159	Honey	1 2 8											
8160	Peanut butter	1 2 8											
8161	Other spices, condiments, etc. (specify)	1 2 8											

	8.101	8.102	8.103		8.104		8.105	8.106		8.106C	8.107		8.107C
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COOKED FOODS FROM VENDOR (8167-8179)													
8167	Maize - boiled or roasted (vendor)	1 2 8					SHADED -->						
8168	Chips (vendor)	1 2 8											
8169	Cassava - boiled (vendor)	1 2 8											
8170	Eggs - boiled (vendor)	1 2 8											
8171	Chicken (vendor)	1 2 8											
8172	Meat (vendor)	1 2 8											
8173	Fish (vendor)	1 2 8											
8174	Mandazai, Doughnut (vendor)	1 2 8											
8175	Samosa/sambusa (vendor)	1 2 8											
8176	Meal eaten at restaurant	1 2 8											
8177	Sausages/smokies (vendor)	1 2 8											
8178	Mkate mayai (egg souffle) (vendor)	1 2 8											
8179	Other cooked foods from vendors (specify)	1 2 8											

RESPONSE CATEGORIES FOR 8.103B/8.104B/8.106B/8.107B UNITS

GRAMS 01	LARGE GOROGORO (USAID TIN) . . . 08	TABLESPOON 15	HANDFUL 22
1/4 KG TIN 02	5 KG BAG 09	LITRE 16	BOWL 23
1/2 KG TIN 03	10 KG BAG 10	SMALL DEBE (10 KG) 17	CUP 24
1 KG TIN 04	25 KG BAG 11	LARGE DEBE (20 KG) 18	GLASS 25
KILOGRAMS 05	50 KG BAG 12	BUNCH 19	PLATE 26
SMALL GOROGORO (BABY FORMULA TIN) . . . 06	90 KG BAG 13	PIECE/NUMBER 20	PAKACHA 27
MEDIUM GOROGORO (FAT TIN) 07	MILLILITRE 14	HEAP 21	OTHER 96

Footnote:

NOTE: ANY UNIT LISTED MUST BE ABLE TO BE CONVERTED TO A STANDARDIZED UNIT. THIS CONVERSION WILL HAPPEN DURING DATA ANALYSIS; IT SHOULD NOT BE DONE IN THE FIELD BY THE INTERVIEWER.

FOOD CONSUMPTION OVER PAST 7 DAYS (CONTINUED)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
8.100F	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐	
8.100G	LINE NUMBER OF RESPONDENT	LINE NUMBER . . . . . ☐☐	
8.108	Over the past one week (7 days), did any people who are not members of your household eat any meals in your household?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→8.112
8.109	Over the past one week (7 days), how many people who are not members of your household ate meals in your household?	NUMBER OF PEOPLE . . . . ☐☐ DON'T KNOW 98	
8.110	Over the past one week (7 days), what was the total number of days in which any meal was shared with people who are not members of your household?	NUMBER OF DAYS . . . . . ☐☐ DON'T KNOW 98	
8.111	Over the past one week (7 days), what was the total number of meals that were shared with people who are not members of your household?	NUMBER OF MEALS . . . . . ☐☐ DON'T KNOW 98	
8.112	Does your household own a pet such as a dog or a cat?	YES . . . . . 1 NO 2	→8.200A
8.112A	Over the past one week (7 days), did your household purchase pet food for family pets like a cat or a dog?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 8.114
8.113	How much did you spend on pet food last week?	ENTER AMOUNT IN KES _____ DON'T KNOW 99998	
8.114	Over the past one week (7 days), were there any other expenditures on pets?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 8.200A
8.115	How much did you spend on other purchases for pets over the past one week (7 days)?	ENTER AMOUNT IN KES _____ DON'T KNOW 99998	

FOOTNOTE:
For item 8.108 to 8.115 choose 7 days or a week.

NON-FOOD EXPENDITURES OVER PAST 7 DAYS

8.200A	CLUSTER AND HOUSEHOLD NUMBER . . . . . CLUSTER	HH
8.200B	LINE NUMBER OF RESPONDENT . . . . . LINE NUMBER	

	8.201	8.202			8.203
	"Now I would like to ask you about items that you or members of your household may have bought in the past week."	Over the past one week (7 days), did your household purchase or pay for any [ITEM]?			How much did you pay in total?
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**KES**
8187	Charcoal	1	2	8	
8188	Paraffin or kerosene	1	2	8	
8189	Cigarettes or other tobacco	1	2	8	
8190	Candles	1	2	8	
8191	Matches	1	2	8	
8192	Newspapers or magazines	1	2	8	
8193	Public transport - Bicycle Taxi (include any used for school under education costs; include any used for obtaining health care under health expenditures)	1	2	8	
8194	Public transport - Bus/Minibus (include any used for school under education costs; include any used for obtaining health care under health expenditures)	1	2	8	
8195	Public transport - Other (truck, oxcart, etc.) (include any used for school under education costs; include any used for obtaining health care under health expenditures)	1	2	8	
8196	Firewood	1	2	8	
8197	Other (specify)	1	2	8	

FOOTNOTE:
Item 8.203, replace with local currency. Country-specific items can be added for 'Other (specify)' for items 8196 to 8206. If there are no additional country-specific items the 'Other (specify)' rows should be removed from the final questionnaire.

NON-FOOD EXPENDITURES OVER PAST ONE MONTH

8.300A	CLUSTER AND HOUSEHOLD NUMBER ..... CLUSTER	HH
8.300B	LINE NUMBER OF RESPONDENT ..... LINE NUMBER	

	8.301	8.302			8.303
	"Now I would like to ask you about items that you or members of your household may have bought in the past month."	Over the past one month, did your household purchase or pay for any [ITEM]?			How much did you pay in total?
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**KES**
8207	Milling fees for grains (not including cost of grain itself)	1	2	8	
8208	Bar soap (body soap or clothes soap)	1	2	8	
8209	Clothes soap (powder, paste)	1	2	8	
8210	Toothpaste, toothbrush	1	2	8	
8211	Toilet paper	1	2	8	
8212	Glycerin, Vaseline, skin creams	1	2	8	
8213	Other personal products (shampoo, razor blades, cosmetics, hair products, etc.)	1	2	8	
8214	Light bulbs	1	2	8	
8215	Postage stamps or other postal fees	1	2	8	
8216	Donation - to church, charity, beggar, etc.	1	2	8	
8217	Petrol or diesel	1	2	8	
8218	Motor vehicle service, repair, or parts	1	2	8	
8219	Bicycle service, repair, or parts	1	2	8	
8220	Wages paid to servants	1	2	8	
8221	Repairs to household and personal items (radios, watches, etc., excluding battery purchases)	1	2	8	
8222	Utilities: cooking gas	1	2	8	
8223	Utilities: Electricity	1	2	8	
8224	Utilities: Water services and fees (including water usage fees, water tanker services)	1	2	8	
8225	Dry cells/Batteries	1	2	8	
8226	Recharging of batteries, cell phones, etc.	1	2	8	
8227	Air time and other telecommunication bills (e.g., phone service, internet)	1	2	8	
8228	Household cleaning products	1	2	8	
8229	Personal care services (e.g., hair cuts, hair dressing, massages)	1	2	8	
8230	Contribution to a rotating credit society, burial society, or other community savings group	1	2	8	
8231	Loan repayments in monthly installments	1	2	8	
8232	Other items that you buy or expenses that you incur on a monthly basis	1	2	8	
8232-8240	**HEALTH EXPENDITURES (include estimated value of any in-kind payments, or borrowed amounts)**				
8232	Except for hospitalization, which we will ask you about later, did you pay for anything related to illnesses and injuries, including medicine, tests, consultation, and out-patient fees?	1	2	8	
8233	Medical care not related to an illness - preventative health care, pre-natal visits, check-ups, etc.	1	2	8	
8234	Non-prescription medicines, for example, Panadol, Fansidar, cough syrup, etc.	1	2	8	
8235	Transportation used to access health-related services or care that did not require an overnight stay in a health facility or at a traditional healer's dwelling	1	2	8	
8236	Other health expenditures: Specify_____	1	2	8	

NON-FOOD EXPENDITURES OVER PAST THREE MONTHS

8.400A	CLUSTER AND HOUSEHOLD NUMBER ..... CLUSTER	HH
8.400B	LINE NUMBER OF RESPONDENT ..... LINE NUMBER	

	8.401	8.402			8.403
	"Next I would like to ask you about items that you or members of your household may have bought over the past three months."	Over the past three months, did your household purchase or pay for any [ITEM]?			How much did you pay in total?
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**KES**
8237	Infant clothing	1	2	8	
8238	Baby nappies or diapers	1	2	8	
8239	Boy's trousers	1	2	8	
8240	Boy's shirts	1	2	8	
8241	Boy's jackets	1	2	8	
8242	Boy's undergarments	1	2	8	
8243	Boy's other clothing	1	2	8	
8244	Men's trousers	1	2	8	
8245	Men's shirts	1	2	8	
8246	Men's jackets	1	2	8	
8247	Men's undergarments	1	2	8	
8248	Men's other clothing	1	2	8	
8249	Girl's blouse/shirt	1	2	8	
8250	Girl's dress/skirt	1	2	8	
8251	Girl's undergarments	1	2	8	
8252	Girl's other clothing	1	2	8	
8253	Women's blouse/shirt	1	2	8	
8254	Kikoy (wrap) cloth	1	2	8	
8255	Women's dress/skirt	1	2	8	
8256	Women's undergarments	1	2	8	
8257	Women's other clothing	1	2	8	
8258	Boys shoes	1	2	8	
8259	Men's shoes	1	2	8	
8260	Girl's shoes	1	2	8	
8261	Women's shoes	1	2	8	
8262	Cloth, thread, other sewing material	1	2	8	
8263	Laundry, dry cleaning, tailoring fees	1	2	8	
8264	Bowls, glassware, plates, silverware, etc.	1	2	8	
8265	Cooking utensils (cookpots, stirring spoons and whisks, etc.)	1	2	8	
8266	Cleaning utensils (brooms, brushes, etc.)	1	2	8	
8267	Torch/flashlight/lightbulbs	1	2	8	

	8.401	8.402			8.403
	"Next I would like to ask you about items that you or members of your household may have bought over the past three months."	Over the past three months, did your household purchase or pay for any [ITEM]?			How much did you pay in total?
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**KES**
8268	Umbrella	1	2	8	
8269	Paraffin lamp (hurricane or pressure)	1	2	8	
8270	Stationery items, writing utensils, postage stamps (excluding school related)	1	2	8	
8271	Recreational books, newspapers, or magazines (excluding school related)	1	2	8	
8272	Music or video cassette or CD/DVD	1	2	8	
8273	Admission tickets to recreational activities, such as sporting events, cinemas, national parks, night clubs, discos, etc.	1	2	8	
8274	House decorations	1	2	8	
8275	Night's lodging in rest house or hotel for vacation or personal travel (excluding work, school or health related travel)	1	2	8	
8276	Other: Specify_____	1	2	8	

NON-FOOD EXPENDITURES OVER PAST 12 MONTHS					
8.500A	CLUSTER AND HOUSEHOLD NUMBER ..... CLUSTER			HH	
8.500B	LINE NUMBER OF RESPONDENT ..... LINE NUMBER				
	8.501	**8.502**			**8.503**
	"Now I would like to ask you about items that you or members of your household may have bought over the past one year."	Over the past one year (twelve months), did your household purchase or pay for any [ITEM]?			How much did you pay in total?
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**KES**
8287	Carpet, rugs, drapes, curtains	1	2	8	
8288	Linen - towels, sheets, blankets	1	2	8	
8289	Mat - for sleeping or drying harvested crops	1	2	8	
8290	Mosquito net	1	2	8	
8291	Mattress	1	2	8	
8292	Sports & hobby equipment, musical instruments, toys	1	2	8	
8293	Film, film processing, camera	1	2	8	
8294	Cement	1	2	8	
8295	Bricks	1	2	8	
8296	Construction timber	1	2	8	
8297	Council rates	1	2	8	
8298	Formal insurance payments through an institution - health (MASM, etc.), auto, home, life	1	2	8	
8299	Government fines, legal fees, taxes, fees for licenses and certificates, etc.	1	2	8	
8300	Bridewealth costs	1	2	8	
8301	Marriage ceremony costs, graduation, rite of passage for household members or others	1	2	8	
8302	Funeral costs, household members	1	2	8	
8303	Funeral costs, non-household members (relatives, neighbors/friends)	1	2	8	
8303-8304	**HEALTH EXPENDITURES over last 12 months (include estimated value of any in-kind payments or borrowed amounts)**				
8304	Hospitalizations or overnight stay in any hospital – total cost for treatment	1	2	8	
8305	Travel to and from the medical facility for any overnight stay(s) or hospitalization	1	2	8	
8306	Food costs during overnight stay(s) at the medical facility or hospitalization (if not already included above)	1	2	8	
8307	Over-night(s) stay at a traditional healer's or faith healer's dwelling – total costs for treatment	1	2	8	
8308	Travel costs to the traditional healer's or faith healer's dwelling for overnight stay(s)	1	2	8	
8309	Food costs during overnight stay(s) at the traditional healer's or faith healer's dwelling	1	2	8	

	8.501	8.502			8.503
	"Now I would like to ask you about items that you or members of your household may have bought over the past one year."	Over the past one year (twelve months), did your household purchase or pay for any [ITEM]?			How much did you pay in total?
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**KES**
8309-8310	**EDUCATION EXPENDITURES over last 12 months (include estimated value of any in-kind payments or borrowed amounts)**				
8310	Tuition, including extra tuition fees	1	2	8	
8311	Expenditures on after school programs and tutoring	1	2	8	
8312	School books and stationery	1	2	8	
8313	School uniform	1	2	8	
8314	Boarding fees	1	2	8	
8315	Contribution to school building maintenance	1	2	8	
8316	Transport to and from school	1	2	8	
8317	Parent/Teacher Association and other related fees	1	2	8	
8318	Other: Specify_____	1	2	8	

NON-FOOD ITEMS THAT MAY OR MAY NOT HAVE BEEN PURCHASED

8.500C	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐
8.500D	LINE NUMBER OF RESPONDENT	☐☐

	8.504	8.505	8.505-1		8.506	8.507	8.508
	ONE YEAR (12 MONTH) RECALL (NOTE THAT THE VALUE OF THESE ITEMS SHOULD BE ENTERED ONLY IF THEY WERE PURCHASED OR USED FOR HOUSEHOLD USE, NOT FOR INVESTMENT PURPOSES)	Over the past one year (12 months) did your household gather, or did your household pay for any [ITEM]?	What was the estimated total quantity of [ITEM] used?		Did your household gather the [ITEM], or did your household pay for the [ITEM]?	FOR ITEMS THAT WERE GATHERED: What was the total estimated value of [ITEM] that you used ?	FOR ITEMS THAT WERE BOUGHT: How much did you spend in total on [ITEM]?
ITEM CODE	**PRODUCT**		**8.505a QUANTITY**	**8.505b UNIT**		**KES**	**KES**
8319	Woodpoles, bamboo	YES . . . . . 1 NO . . . . . 2 → NEXT ITEM			GATHERED . . . . . 1 PAID FOR . . . . . 2 → GO TO 8.508	→ SKIP TO NEXT ITEM	
8320	Grass for thatching roof or other use	YES . . . . . 1 NO . . . . . 2 → NEXT ITEM			GATHERED . . . . . 1 PAID FOR . . . . . 2 → GO TO 8.508	→ SKIP TO NEXT ITEM	
~~8321~~	~~Other: (SPECIFY)~~	~~YES . . . . . 1~~ ~~NO . . . . . 2 → SKIP TO 8.600A~~			~~GATHERED . . . . . 1~~ ~~PAID FOR . . . . . 2 → GO TO 8.508~~	~~→ SKIP TO 8.600A~~	

FOOTNOTE:

Country-specific items can be added for 'Other (specify)' for items 8321. If there are no additional country-specific items the 'Other (specify)' row(s) should be removed from the final questionnaire.

HOUSING EXPENDITURES

8.6a "Now, I would like to ask you some questions about your home."

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
8.600A	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐	
8.600B	LINE NUMBER OF RESPONDENT	LINE NUMBER ☐☐	
8.601	Do you own this house, are you purchasing this house, is this house provided to you by an employer, are you living in this house for free, or do you rent this house?	OWN 1 PURCHASED 2 EMPLOYER PROVIDES 3 FREE 4 RENTED 5 DON'T KNOW 8	→ 8.604 → 8.605
8.602	If you sold this dwelling today, how much would you receive for it?	☐☐☐☐☐☐ (ENTER AMOUNT IN KES) DON'T KNOW 999998	
8.603	How old is this house, in years?	☐☐☐ DON'T KNOW 998	→ 8.606
8.604	If you rented this dwelling out today, how much rent would you receive?	E8.604A ☐☐☐☐☐☐ (ENTER AMOUNT IN KES) DON'T KNOW 999998 E8.604B DAY 1 WEEK 2 MONTH 3 YEAR 4 DON'T KNOW 8	→ 8.609 → 8.609
8.605	How much do you pay to rent this dwelling?	E8.605A ☐☐☐☐☐☐ (ENTER AMOUNT IN KES) DON'T KNOW 999998 E8.605B DAY 1 WEEK 2 MONTH 3 YEAR 4 DON'T KNOW 8	→ 8.609 → 8.609
8.606	Do you pay a mortgage on this house, that is, a regular payment towards purchasing the house?	YES 1 NO 2	→ 8.609

HOUSING EXPENDITURES

8.6a "Now, I would like to ask you some questions about your home."

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
8.607	How often do you make mortgage payments?	ONCE A MONTH . . . . . 1 ONCE EVERY 3 MONTHS . . . . . 2 ONCE EVERY 6 MONTHS . . . . . 3 ONCE A YEAR . . . . . 4 OTHER (SPECIFY) . . . . . 6 _____	
8.608	How much do you pay each time you make a payment on your mortgage?	☐☐☐☐☐ (ENTER AMOUNT IN KES) AMOUNT IS VARIABLE . . . . . 99996 DON'T KNOW 99998	
8.609	In the past one month, how much did you spend on repairs and maintenance to this house?	☐☐☐☐☐ (ENTER AMOUNT IN KES) DON'T KNOW 99998	

DURABLE GOODS EXPENDITURE

8.7a "Now I'd like to ask you some questions about items that may be owned by your household."

8.700A	CLUSTER AND HOUSEHOLD NUMBER	CLUSTER ☐☐☐ HH ☐☐☐
8.700B	LINE NUMBER OF RESPONDENT	☐☐

	8.701	8.702			8.703	8.704	8.705	8.706
	Does your household own a [ITEM]?	FIRST SELECT 1 (YES), 2 (NO), OR 8 (DK) FOR ALL THE DURABLE GOODS FROM 8322 TO 8352. GO BACK TO THE TOP OF THE LIST. FOR DURABLE GOODS SELECTED 1 (YES), ASK QS. 8.703 TO 8.706			How many [ITEMS] do you own?	What is the age of these [ITEM]s? IF MORE THAN ONE ITEM, AVERAGE AGE	If you wanted to sell these [ITEM]s today, how much would you receive? IF MORE THAN ONE ITEM, AVERAGE VALUE	How much did you pay for all these [ITEM]s when you purchased it? IF MORE THAN ONE ITEM, AVERAGE VALUE
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**NUMBER OF ITEMS**	**NUMBER OF YEARS**	**KES**	**KES**
8322	Bed	1	2	8				
8323	Table	1	2	8				
8324	Chair	1	2	8				
8325	Fan	1	2	8				
8326	Air conditioner	1	2	8				
8327	Radio	1	2	8				
8328	Tape or CD/DVD player/VCR	1	2	8				
8329	Television	1	2	8				
8330	Cell phone	1	2	8				

	8.701	8.702			8.703	8.704	8.705	8.706
	Does your household own a [ITEM]?	FIRST SELECT 1 (YES), 2 (NO), OR 8 (DK) FOR ALL THE DURABLE GOODS FROM 8322 TO 8352. GO BACK TO THE TOP OF THE LIST. FOR DURABLE GOODS SELECTED 1 (YES), ASK QS. 8.703 TO 8.706			How many [ITEMS] do you own?	What is the age of these [ITEM]s? IF MORE THAN ONE ITEM, AVERAGE AGE	If you wanted to sell these [ITEM]s today, how much would you receive? IF MORE THAN ONE ITEM, AVERAGE VALUE	How much did you pay for all these [ITEM]s when you purchased it? IF MORE THAN ONE ITEM, AVERAGE VALUE
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**NUMBER OF ITEMS**	**NUMBER OF YEARS**	**KES**	**KES**
8331	Sewing machine	1	2	8				
8332	Charcol stove	1	2	8				
8333	Kerosene or paraffin stove	1	2	8				
8334	Electric stove or hot plate	1	2	8				
8335	Gas stove	1	2	8				
8336	Refrigerator	1	2	8				
8337	Washing machine	1	2	8				
8338	Bicycle	1	2	8				
8339	Boat	1	2	8				
8340	Motorcycle/scooter	1	2	8				
8341	Car	1	2	8				
8342	Mini-bus	1	2	8				
8343	Lorry	1	2	8				
8344	Beer-brewing drum	1	2	8				
8345	Upholstered chair, sofa set	1	2	8				
8346	Coffee table (for sitting room)	1	2	8				
8347	Cupboard, drawers, bureau	1	2	8				
8348	Lantern (paraffin)	1	2	8				
8349	Desk	1	2	8				
8350	Clock	1	2	8				
8351	Iron (for pressing clothes)	1	2	8				

	8.701	8.702			8.703	8.704	8.705	8.706
	Does your household own a [ITEM]?	FIRST SELECT 1 (YES), 2 (NO), OR 8 (DK) FOR ALL THE DURABLE GOODS FROM 8322 TO 8352. GO BACK TO THE TOP OF THE LIST. FOR DURABLE GOODS SELECTED 1 (YES), ASK QS. 8.703 TO 8.706			How many [ITEMS] do you own?	What is the age of these [ITEM]s? IF MORE THAN ONE ITEM, AVERAGE AGE	If you wanted to sell these [ITEM]s today, how much would you receive? IF MORE THAN ONE ITEM, AVERAGE VALUE	How much did you pay for all these [ITEM]s when you purchased it? IF MORE THAN ONE ITEM, AVERAGE VALUE
ITEM CODE	**ITEM**	**YES**	**NO**	**DK**	**NUMBER OF ITEMS**	**NUMBER OF YEARS**	**KES**	**KES**
8352	Computer equipment & accessories	1	2	8				
8353	Satellite dish	1	2	8				
8354	Solar panel	1	2	8				
8355	Generator	1	2	8				
8356	Water storage tank or water purification system	1	2	8				
8357	Microwave oven	1	2	8				
8358	Vacuum cleaner	1	2	8				
8359	Animal cart	1	2	8				

8.708	ENTER TIME MODULE FINISHED	HOUR ☐☐	MINUTE ☐☐	→ THANK THE RESPONDENT

8.709 OUTCOME OF THE MODULE

COMPLETED	01
NO HOUSEHOLD MEMBER AT HOME	02
ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME	03
POSTPONED/UNAVAILABLE	04
REFUSED	05
HOUSEHOLD MEMBER TOO ILL TO RESPOND/COGNITIVELY IMPAIRED	10
OTHER _____ (SPECIFY)	96

Resilience Questionnaire

(Modified Full Household Version) MODULE R1: SHOCKS AND STRESSORS

R01A CLUSTER CODE	R01B HOUSEHOLD NUMBER
The resilience module questions will be asked to the household head, or other responsible HH member.	
R02A RESPONDENT LINE NUMBER FROM MODULE B	
R02B OBTAIN WRITTEN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY? 1=Yes 2=No ⟶ skip to next module 3=Not available ⟶ skip to next module	

	R101	R102	R103	R104	R105	R106
"This module asks what shocks and stressors you have faced and the impacts on your household."	Over the **last year (12 months)** did your household experience [the shock]? 1= Yes 2 = No 8 = Don't know **>>If 2 or 99, Next shock**	In which month did [the shock] start? Note: If experienced [the shock] more than once, use the month of the most recent occurrence. **Enter code from list**	How severe was the overall impact on your household (income)? **Enter code from list** **Only ask if R101=1**	How severe was the impact on your household's food consumption? **Enter code from list**	How did you cope with the [shock]? **Enter code from list** **Select all that apply** **Only ask if R101=1**	To what extent has your household been able to recover? **Enter code from list** **Only ask if R103=2,3, or 4**
Climatic shocks						
1. Excessive rains						
2. Flooding						
3. Too little rain/drought						
4. Variable rain (early/late)						
5. Hail/frost						

R01A CLUSTER CODE	R01B HOUSEHOLD NUMBER
The resilience module questions will be asked to the household head, or other responsible HH member.	
R02A RESPONDENT LINE NUMBER FROM MODULE B	
R02B OBTAIN WRITTEN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY? 1=Yes 2=No ⟶ skip to next module 3=Not available ⟶ skip to next module	

6. Landslides/erosion						
Biological shocks						
7.. Crop disease (rust on wheat, sorghum)						
8. Crop pests (locusts, army worms, or animals eating crops)						
9. Weeds (e.g., associated with striga)						
10. Livestock disease						
11. Human disease outbreaks (from contaminated water)						
12. Soil degradation/loss of soil fertility/ or salination						
Conflict shocks						
13 Theft or destruction of assets						
14. Theft of livestock (raids/cattle rustling)						
15. Land conflict						
16. Water conflict						
17. Gender Based Violence						
18. Displacement (e.g., due to oil/gas extraction etc.)						

R01A CLUSTER CODE	R01B HOUSEHOLD NUMBER
The resilience module questions will be asked to the household head, or other responsible HH member.	
R02A RESPONDENT LINE NUMBER FROM MODULE B	
R02B OBTAIN WRITTEN CONSENT. DOES [NAME] AGREE TO PARTICIPATE IN THE SURVEY? 1=Yes 2=No ⟶ skip to next module 3=Not available ⟶ skip to next module	

19. Insecurity/violence (e.g., elections-related, tribal, extremism, etc.)						
Economic shocks						
20. Interruptions or delays in safety net or humanitarian assistance						
21. Increasing food prices						
22. Increased prices of agricultural or livestock inputs						
23. Decreased prices for agricultural or livestock products						
24.. Loss of land/rental property						
25. Unemployment						
26. Illness or death of breadwinners, or exceptional health expenses of household member						
27. Non-function of borehole						
28. Political strife						

SHOCKS CODE LIST

R102		R103, R104	R106
Month in which shock started		Severity of impact	Ability to recover
1. September 2020 2. October 2020 3. November 2020 4. December 2020 5. January 2021 6. February 2021	7. March 2021 8. April 2021 9. May 2021 10. June 2021 11. July 2021 12. August 2021 13. September 2021 99. Don't know	1. None (the same) 2. Slight decrease 3. Severe decrease 4. Worst ever happened 8. Don't know	1. Did not recover 2. Partially recovered 3. Fully recovered, same as before the shock 4. Fully recovered and better than before the shock 5. Not affected by [event] 8. Don't know

R105 (How coped with the shock)		
LIVESTOCK AND LAND HOLDINGS	**COPING STRATEGIES TO GET MORE FOOD OR MONEY**	**OTHER COPING STRATEGIES**
A. Send livestock in search of pasture	M. Take up new/additional work (casual labor, wage labor)	CC. Other (specify)
B. Sell livestock	N. Sell household items (e.g., radio, bed)	DD. Did nothing
C. Slaughter livestock	O. Sell productive assets (e.g., plough, water pump)	EE. Engaged in spiritual efforts (e.g., prayed, sacrifices, etc.)
D. Lease out land	P. Take out a loan (with interest) from a (formal) bank	
MIGRATION	Q. Take out a loan (with interest) from an MFI or village	
E. HH member migrated	R. Take out a loan (with interest) from a moneylender	
F. Migrate (the whole family)	S. Take out a loan (no interest) from friends or relatives within	
G. Send children or an adult to stay with relatives	T. Take out a loan (no interest) from friends or relatives outside of the community (bridging)	
	U. Gift of money (not remittances) or food from family, friends, church, or other group within community (bonding)	
COPING STRATEGIES TO REDUCE CURRENT EXPENDITURE	V. Gift of money (not remittances) or food from family, friends, church, or other group outside of community (bridging)	
H. Take children out of school (to work, or can't pay school) fees)	W. Send children to work for money (e.g., domestic service)	
I. Move to less expensive housing	X. Receive emergency food aid from the government or NGO	
J. Reduce food consumption (quantity/meal; # of	Y. Receive emergency cash transfer from the government or NGO	
K. Reduced non-essential HH expenses	Z. Participate in government or NGO food-for-work or cash-for-work activities	

R105 (How coped with the shock)		
L. Got food on credit from a local merchant	AA. Use money from savings	
	BB. Remittances from a relative that migrated	

Shock exposure and severity (cont'd)		
R107	To what extent has your ability to meet food needs returned to the level it was before all the shocks and stressors you experienced in the last 12 months? *[PROMPT]*	Ability to meet food needs is the same as before the shock……1 Ability to meet food needs is better than before the shock…… 2 Ability to meet food needs is worse than before the shock…… .3
R108	In light of the shocks and stressors you faced in the last 12 months, to what extent do you believe you will be able to meet your food needs in the next year? *[PROMPT]*	Ability to meet food needs will be the same as before the shock……1 Ability to meet food needs will be better than before the shock…….. 2 Ability to meet food needs will be worse than before the shock…… ……. 3 Don't know…… ……8
R109	What have you done to protect your household from the impact of shocks in the future? **Read list; select all that apply**	Increased savings…….A Put aside grains (for HH or animals) ……B Switched to different crop(s)……C Switched to different livestock……D Added additional agricultural activity……E Added additional non-agricultural activity……F Diversified into agricultural livelihood…….G Diversified into non-agricultural activity…….H Changed from ag to non-ag livelihood……I Changed from non-ag to ag livelihood…….J Acquired crop insurance……K Acquired livestock insurance……L Acquired other insurance (e.g., health) …….M Relocated temporarily……N Relocated permanently……O Nothing……P Other ……X Don't know……Y

MODULE R2. PRODUCTIVE ASSETS

		R201
	"This module asks about the assets owned by your household."	Number owned now 99. Don't know
1	Plough (oxen-pulled)	
2	Mechanical plough	
3.	Sickle	
4	Pick axe	
5.	Axe	
6	Pruning/cutting shears	
7	Hoe	
8	Spade or shovel	
9	Water trough	
10	Traditional beehive	
11	Modern beehive	
12	Knapsack chemical sprayer	
13	Mechanical water pump	
14	Motorized water pump	
15	Stone grain mill	
16	Motorized grain mill	
17	Broad bed maker (oxen-pulled)	
18	Small tractor	
19.	Hand-held motorized tiller	
20	Individual granary (at homestead) traditional	
21	Modern silo	
22	Grain bag	
23	Tarpaulin	
24	Bicycle	
25	Motorcycle	
26	Radio	
27.	Cell phone	
ab.	Agricultural land (hectares)	

MODULE R2A. LIVESTOCK ASSETS

		R201A
		Number owned now 99 Don't know
1	Oxen	
2	Cattle	
3	Goats	
4	Sheep	
5	Donkey/mule	
6	Poultry	
7	Horse	
8	Honey bees (hives)	
9	Camels	

MODULE R3. ACCESS TO MARKETS, INFRASTRUCTURE, AND SERVICES

		R301
"This module asks about your access to markets and public services."		Are the following services available **IN** or **WITHIN FIVE KM** of your village?[a] 1= Yes 2= No 8= Don't know
1	Institutions where people can borrow money	**If yes, go to R302**
2	Institutions where people can save money (including VSLA)	**If yes, go to R302a**
3	Primary school	**If yes, go to R303a**
4	Health center	**If yes, go to R304a**
5	Agricultural extension services	**If yes, go to R305a**
6	Veterinary services (mobile vet, vet center, etc.)	**If yes, go to R306a**
7	Electricity from public utility (main grid)	**If yes, go to R307**
8	Mobile phone service	
9	Early Childhood Development Education (ECDE) Centers	
10	Public transport service (boda/boda, bus)	**Go to R308**

[a]Interviewer: if respondent cannot estimate distance, ask how long to walk to the location. Assume that 60 minutes walking is equal to 5 KM.

MODULE R3. ACCESS TO MARKETS, INFRASTRUCTURE, AND SERVICES		
ASK ONLY IF R301a = YES		
R302	Who provides this service? **Select all that apply**	A. Banks B MFI (SACCO) C. Community savings/loan group D. Shops/merchants E. Money lender X. Other (specify): _____ Y. Don't know **>> Go to R301b**
ASK ONLY IF R301b = YES		
R302a	Who provides this service? **Select all that apply**	A. Banks B. MFI (SACCO) C. Community savings/loan group X. Other (specify): _____ Y. Don't know **>> Go to R301c**
ASK ONLY IF R301c = YES		
R303a	Are there enough teachers for the primary school that children in this village attend?	1. Yes 2. No 8. Don't know
R303b	What is the physical condition of the primary school that the children in this village attend?	1. Very good 2. Good 3. Poor 4. Very poor 8. Don't know **>> Go to R301d**
ASK ONLY IF R301d = YES		
R304a	What is the physical condition of the health facility used by people in this village?	1. Very good 2. Good 3. Poor 4. Very poor 8. Don't know
R304b	In the last year was there a time when your household needed health services but could not get them?	1. Yes 2. No → **Go to R301e** 8. Don't know

MODULE R3. ACCESS TO MARKETS, INFRASTRUCTURE, AND SERVICES		
R304c	If yes, why were you not able to get the health services? **Select all that apply**	A. No beds, facility was full B. No staff in the facility C. Health facility was destroyed D. Security problem (e.g., armed conflict) E No transportation F. No road or poor road condition G. No drugs at the health center H. No money for services I. Quality of the service is very poor X. Other (specify): _____ Y. Don't know **>> Go to R301e**
ASK ONLY IF R301e = YES		
R305a	In the last year was there a time when you needed agricultural extension services but could not get them?	1. Yes 2. No → **Go to R301f** 8. Don't know
R305b	Is yes, why were you not able to get agricultural extension services? **Select all that apply**	A. No service provider in area B. No equipment/inputs available from service provider C. No road or poor road condition D. Too busy/bad timing of extension agent visit E. Quality of the services is poor X. Other (specify): _____ Y. Don't know **>> Go to R301f**
ASK ONLY IF R301f = YES		
R306a	In the last year was there a time when you needed veterinary services but could not get them?	1. Yes 2. No → **Go to R301g** 8. Don't know
R306b	If yes, why were you not able to get the veterinary services? **Select all that apply**	A. No service provider (vet center, veterinarian) in area B. Service provision too expensive C. No vaccines/medicines available D. No road or poor road condition E. No money for services F. Quality of the services is poor X. Other (specify): _____ Y. Don't know **>> Go to R301g**

MODULE R3. ACCESS TO MARKETS, INFRASTRUCTURE, AND SERVICES		
ASK ONLY IF R301g = YES		
R307	Does your household have electricity from a public utility (main grid)?	1. Yes 2. No 8. Don't know **>> Go to R301h**

ASK AFTER COMPLETING R301j		
R308	Can the village be reached by a tarmac road all year around?	1. Yes 2. No 8. Don't know
R308a	Can the village be reached by a murram (graded) road	1. Yes 2. No 8. Don't know
R309	How far away is the nearest livestock market from this village?	_____ km 98. Don't know
R310	How far away is the nearest market for selling agricultural products from this village?	_____ km 98. Don't know
R311	How far away is the nearest market for purchasing agricultural inputs from this village?	_____ km 98. Don't know

MODULE 5. ACCESS TO FINANCIAL SERVICES/ CREDIT

"This module asks about your access to financial services, and your ability to borrow and save."		
R501	Have any household members taken out a cash loan in the last 12 months?	1. Yes → **Skip to R503** 2. No 99. Don't know → **Skip to next module**
R502	If no, why not? **Select all that apply**	A. Didn't need B. Couldn't find a loan that met my needs" (i.e. "is appropriate" in terms of size, terms, etc); C. Afraid I couldn't pay back D. No loan providers in my area X. Other (specify) Y. Don't know **>>Skip to next module**
R503	What is the primary source of loan taken out in the last year?	A. Friend/family within the village B. Friend/family outside of the village C. Money-lender D. MFI (SACCO)

"This module asks about your access to financial services, and your ability to borrow and save."		
	Select only one	E. Bank F. Village-based savings group (e.g., VSLA) G. Religious group H. Local trader/merchant X. Other Y. Don't know

MODULE R6. ACCESS TO FINANCIAL SERVICES/ SAVING

R601	Do you or any other household member regularly save cash?	1. Yes 2. No 8. Don't know → **Skip to next module**
R602	Where are the savings primarily held? **Select only one**	1. At home 2. MFI (SACCO) 3. Village savings/credit group (e.g., VSLA) 4. Bank 5. Mobile banking 6. Other 8. Don't know

MODULE R7. ACCESS TO INFORMATION

		R701	R702
"This module asks about your access to different types of information."		Did you receive any information on [topic] in the last 12 months? 1. Yes 2. No 8. Don't know **If 2, 99, skip to next topic**	What was your main source of information about [topic]? **See codes below**
1	Early warning for natural hazards (flooding, hail, landslide)		
2	Long-term changes in weather patterns		
3	Rainfall/ weather prospects for coming season		
4	Water prices and availability in local boreholes, shallow wells, etc		
5	Animal health (e.g., disease, epidemic) threats/prevention		
6	Crop health (e.g., pest outbreaks, disease) threats/prevention		
7	Improved crop production practices/technologies (CCA, seeds)		
8	Improved livestock production practices (fodder, husbandry)		
9	Current market prices for live animals in the area		
10	Market prices for animal products (milk, hides, skins, etc.)		
11	Grazing conditions in nearby areas		

		R701	R702
12	Conflict or security issues		
13	Business and investment opportunities		
14	Opportunities for borrowing money		
15	Market prices of the food that you buy		
16	Child nutrition and health information		
17	Equal rights for women and men		
18	Gender-based violence		
19	Natural resource management		

CODES FOR R702 - Main Information sources			
1	Relatives, friends, neighbors	8	Local market
2	Gov't officials	9	Government; rural development agents, health/agriculture extension
3	Village Development Committee	10	NGOs
4	School teachers	11	Newspaper /Radio / TV
5	Group in community (e.g., savings, forest users, farmers)	12	Internet or SMS
6	Religious leaders	13	Private sector (input supplier, veterinarian, etc.)
7	Clan Elders	99	Don't know
14	Health facility	96	Other

MODULE R8. GROUP PARTICIPATION

		R801	R802
"This module asks about your participation in community groups and community-based initiatives."		Are any of the following groups active in this village? **Read list** 1= Yes 2= No 8. Don't know **If =2 or 99, skip to next topic**	For any HH member who is in the group, how active is s/he in the group's decision-making? 1. No HH member in group 2. HH member does not participate in decision-making 3. Somewhat active 4. Very active 5. HH member is a leader 8. Don't know
1	Communal water users' group	**If yes, go to R803**	
2	Farmers'/cattle rearing cooperative		
3	Communal grazing land users' group	**If yes, go to R805**	

		R801	R802
4	Communal natural resources group (Area Land Committee)	**If yes, go to R806**	
5	Disaster planning /response group (Resilience Action Committee)		
6	Credit or micro-finance group		
7	Savings groups (VLSA, merry-go-round, etc.)`		
8	Mutual help group (e.g., burial societies etc.)		
9	Trade or business associations		
10	Religious group (i.e. Mother's Union)		
11	Mothers' group		
12	Women's group		
13	Youth group		
14	Peace Committee		
15	Other (specify)		

ASK ONLY IF R801a = YES		
R803	Does the water user's group manage communal water for livestock in this village?	1. Yes 2. No 8. Don't know
R804	Does the water user's group manage communal water for irrigation in this village?	1. Yes 2. No 8. Don't know **>> Go to R802a**
ASK ONLY IF R801c = YES		
R805	Does the group decide who in the village can use communal grazing land and when they can use it?	1. Yes 2. No 8. Don't know **>> Go to R802c**
ASK ONLY IF R801d = YES		
R806	Does the communal natural resources group decide who in the village can gather firewood and how much?	1. Yes 2. No 8. Don't know **>> Go to R802d**

MODULE R9. COLLECTIVE ACTION

R901	In the last 12 months, have you worked with others in your village to do something for the benefit of everyone in the village?	1. Yes 2. No 8. Don't know → **skip to next module**
R902	What activities did you participate in that benefit the village? **Read list; select all that apply**	A. Soil conservation (terracing, bunds, half-moons, gabions, etc.) B. Flood diversion activities C. Repaired/built schools D. Repaired/built health posts or centers E. Road maintenance/construction F. Planted trees on communal land G Formed a cooperative H. Area enclosure I. Improving community access to drinking water J. Repaired/built communal irrigation system X. Other (specify)_____ Y. Don't know

MODULE R10. LIVELIHOOD ACTIVITIES

		R1001
	"This module asks about your household's livelihood and income-earning activities"	What were the sources of your household's food/income over the last 12 months? **Read each source**
1	Farming/crop production and sales	
2	Livestock production/fattening and sales	
3	Agricultural wage labor	
4	Non-agricultural wage labor	
5	Salaried work	
6	Sale of wild/bush products (including charcoal and firewood)	
7	Honey production and sales	
8	Petty trade (selling other products, e.g., grain, veggies, oil, sugar, etc.)	
9	Petty trade (selling own products, e.g., local beer, sex work)	
10	Other self-employment/own business (agricultural, e.g., buying/reselling chat)	
11	Other self-employment/own business (non-agricultural, e.g., stone cutting, hair braiding, etc.	
12	Rental of land, house, rooms	
13	Remittances	
14	Gifts/inheritance	
15	Safety net food/cash assistance	
16	Artisanal mining/quarrying	
17	Other (specify): _____	
Note: Enumerator does not record; number is automatically generated.		**R1003** Total number of sources

MODULE R13. SOCIAL AND CAPACITY-BUILDING SUPPORT

MODULE R13. SOCIAL AND CAPACITY-BUILDING SUPPORT		
INFORMAL SOURCES OF SOCIAL SUPPORT "Now I will read a number of statements and ask you to respond to each"		
R1300	During difficult times (e.g., drought, conflict, economic shocks such as price hikes, disease outbreak – among livestock or humans, etc…) members of my community have helped each other to cope.	(Scale:1-5; 1=Strongly disagree to 5=Strongly agree)
	Read list, single response	1 Strongly disagree 2 Somewhat disagree 3 No opinion 4 Somewhat agree 5 Strongly agree
R1302	During difficult times (e.g., drought, conflict, economic shocks such as price hikes, disease outbreak – among livestock or humans, etc…) members from different communities have helped each other to cope.	(Scale:1-5; 1=Strongly disagree to 5=Strongly agree)
	Read list, single response	1 Strongly disagree 2 Somewhat disagree 3 No opinion 4 Somewhat agree 5 Strongly agree
SOCIAL CAPITAL		
R1304	If your household had a problem and needed help urgently (e.g., food, money, labor, transport, etc.), **who IN THIS VILLAGE** could you turn to for help? **Read list; select all that apply**	A. Relatives B. Non-relatives in my ethnic group/clan C. Non-relatives in other ethnic group/clan D. No one X. Other (specify): _____ Y. Don't know
R1305	If your household had a problem and needed help urgently (e.g., food, money, labor, transport, etc.), **who OUTSIDE THIS VILLAGE** could you turn to for help? **Read list; select all that apply**	A. Relatives B. Non-relatives in my ethnic group/clan C. Non-relatives in other ethnic group/clan D. No one X. Other (specify): _____ Y. Don't know
R1306	Compared to one year ago has your ability to get this type of help (from someone within or outside of your village):	1. Increased 2. Stayed the same

MODULE R13. SOCIAL AND CAPACITY-BUILDING SUPPORT		
		3. Decreased 8. Don't know
R1307	Who **INSIDE THIS VILLAGE** would you help if they needed help urgently (e.g., food, money, labor, transport, etc.)? **Read list; select all that apply**	A. Relatives B. Non-relatives in my ethnic group/clan C. Non-relatives in other ethnic group/clan D. No one X. Other (specify): _____ Y. Don't know
R1308	Who **OUTSIDE THIS VILLAGE** would you help if they needed help urgently (e.g., food, money, labor, transport, etc.)? **Read list; select all that apply**	A. Relatives B. Non-relatives in my ethnic group/clan C. Non-relatives in other ethnic group/clan D. No one X. Other (specify): _____ Y. Don't know
LINKING SOCIAL CAPITAL		
R1309	Do you or does anyone else in your household personally know an elected government official?	1. Yes 2. No 8. Don't know → **Skip to R1312**
R1310	How do you (or other household member) know the government official? Is he or she a… **Read list; select all that apply**	A. Family member or relative B. Friend /neighbor C. Acquaintance (members of a group, friend of a friend, etc.) X. Other (specify): Y. Don't know
R1311	Could you ask the official to help your family or village if help was needed?	1. Yes 2. No 8. Don't know
R1312	Do you or does anyone else in your household personally know a staff member of an NGO?	1. Yes 2. No 8. Don't know → **Skip to R1327**
R1313	How do you (or another household member) know the NGO staff member? Is he or she a… **Read list; select all that apply**	A. Family member or relative B. Friend /neighbor C. Acquaintance (members of a group, friend of a friend, etc.) X. Other (specify): Y. Don't know
R1314	Could you ask the NGO staff member to help your family or community if help was needed?	1. Yes 2. No

MODULE R13. SOCIAL AND CAPACITY-BUILDING SUPPORT		
		8. Don't know
EDUCATION AND TRAINING SUPPORT		
R1327	Have you or anyone in your household ever received any vocational (job) or skills training?	1. Yes 2. No 8. Don't know
R1329	Have you or anyone in your household ever received any business development training (including financial literacy)?	1. Yes 2. No 8. Don't know
R1331	Have you or anyone in your household ever received any early warning training?	1. Yes 2. No 8. Don't know
R1333	Have you ever or anyone in your household received any natural resource management training?	1. Yes 2. No 8. Don't know
R1335	Have you or anyone in your household ever received adult education (literacy or numeracy or financial education)?	1. Yes 2. No 8. Don't know
R1337	Have you or anyone in your household ever received training in how to use your mobile phone to get market information like prices?	1. Yes 2. No 8. Don't know

MODULE R14. ASPIRATIONS AND CONFIDENCE TO ADAPT

"This module asks about some of your views and beliefs."		
R1401	Please tell me which one of these two views you most agree with.	1. "Each person is primarily responsible for his/her success or failure in life". 2. "One's success or failure in life is a matter of his/her destiny".
R1402	Please tell me which one of these two views you most agree with.	1. "To be successful, above all one needs to work very hard". 2. "To be successful above all one needs to be lucky".
R1403	Are you willing to move somewhere else to improve your life?	1. Yes 2. No
R1404	Are you hopeful about your children's future?	1. Yes 2. No
R1405	What level of education do you want for your children?	1. No preference 2. Any level of primary (but not graduated) 3. Graduated from primary 4. Graduated from secondary

"This module asks about some of your views and beliefs."		
		5. Post-secondary (college, university)
R1406	Do you agree that one should always follow the advice of the elders?	1. Yes 2. No
R1407	Do you communicate regularly with at least one person outside the village?	1. Yes 2. No
R1408	During the past week, have you engaged in any economic activities with other villages or clans? For example, farming, trading, employment, borrowing or lending money.	1. Yes 2. No
R1409	How many times in the past month have you gotten together with friends, family, neighbors, etc. to discuss issues or share food/drinks, either in someone's home or in a public place?	
R1410	How many times in the past month have you attended a church/ mosque or other religious service?	
R1411	In the last year, how many times have you stayed more than 2 days outside your village?	

"Below is a series of statements that you may agree or disagree with. Using the scales below indicate your agreement with each item."

		Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
R1412	My experience in my life has been that what is going to happen will happen.	1	2	3	4	5	6
R1413	My life is chiefly controlled by other powerful people.	1	2	3	4	5	6
R1414	It is not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.	1	2	3	4	5	6
R1415	I can mostly determine what will happen in my life.	1	2	3	4	5	6
R1416	When I get what I want, It is usually because I worked hard for it.	1	2	3	4	5	6
R1417	My life is determined by my own actions.	1	2	3	4	5	6
R1418	Most people are basically honest.	1	2	3	4	5	6
R1419	Most people can be trusted.	1	2	3	4	5	6
R1420	I trust my neighbors to look after my house if I am away.	1	2	3	4	5	6

MODULE R15: GOVERNMENT SUPPORT

	MODULE R15: GOVERNMENT SUPPORT	
R1501	Are there any government or NGO programs in this village?	1. Yes 2. No → **Skip to 1503** 8. Don't know → **Skip to 1503**
R1502	What types of programming do they provide? **Read list; Select all that apply**	A. Emergency food/cash assistance B. Food/cash transfers C. Household materials and non-food items D. Educational assistance E. Agricultural inputs (seeds, fertilizer, etc.) F. Livestock inputs (feed, fodder, medicine, etc.) G. WASH H. Disaster planning/response I. Safety net (FFW/CFW) J. Child malnutrition/infant feeding X. Other Y. Don't know
R1503	In the last 12 months, did you or your household receive any government or NGO assistance?	1. Yes 2. No → **Skip to 1505** 8. Don't know → **Skip to 1505**

	MODULE R15: GOVERNMENT SUPPORT	
R1504	What type(s) of assistance did you or your household receive? **Read list; Select all that apply**	A. Emergency food/cash assistance B. Food/cash transfers C. Household materials and non-food items D. Educational assistance E. Agricultural inputs (seeds, fertilizer, etc.) F. Livestock inputs (feed, fodder, medicine, etc.) G. WASH H. Disaster planning/response I. Safety net (FFW/CFW) J. Child malnutrition/infant feeding K. Install water points L. Install latrines X. Other Y. Don't know
R1505	Is there an emergency plan for livestock offtake if a drought hits your village?	1. Yes 2. No 8. Don't know
R1506	Do you have an active Peace Committee in your village?	1. Yes 2. No 8. Don't know
R1506a	Do you have an active Area Land Committee in your village?	1. Yes 2. No 8. Don't know
R1506b	Do you have an active Ward Development Committee in your village?	1. Yes 2. No 8. Don't know
R1507	Does this village have a security or police force?	1. Yes 2. No 8. Don't know → **Skip to next module**
R1508	Who provides the nearest security/police force?	1. National government 2. County government 3. Local militia 4. Community/vigilante groups 5. Other (specify): _____ 8. Don't know
R1509	How long does it take for the nearest security/police force to reach this village?	1. Over one hour 2. About one hour 3. Half an hour 4. Minutes

	MODULE R15: GOVERNMENT SUPPORT	
		8. Don't know

MODULE R16: GENDER NORMS

"This module asks about activities that spouses do."		
R1601	Generally, do adult men and women sit and eat together within households? **Select only one**	1. Yes, regularly 2. Yes, occasionally 3. No 8. Don't know
R1602	Generally, do you and your spouse sit and eat together? **Select only one**	1. Yes, regularly 2. Yes, occasionally 3. No 4. No spouse/spouse absent 8. Don't know
R1603	Generally, do adult men and women sit together at public meetings? **Select only one**	1. Yes, regularly 2. Yes, occasionally 3. No 8. Don't know
R1605	Generally, do men in the village help with childcare around the household? **Select only one**	1. Yes, regularly 2. Yes, occasionally 3. No 8. Don't know
R1606	Generally, who cares for your children? **Select only one**	1. Yourself 2. Your spouse/partner 3. You help your spouse/partner 4. Your spouse/partner helps you 5. No children in household 6. Other (specify) 8. Don't know
R1607	Generally, do men in the village help collect firewood or carry water for your household? **Select only one**	1. Yes, regularly 2. Yes, occasionally 3. No 8. Don't know
R1608	Generally, who collect firewood for your household? **Select only one**	1. Yourself 2. Your spouse/partner 3. You help your spouse/partner 4. Your spouse/partner helps you 5. No need 6. Other (specify)

"This module asks about activities that spouses do."		
		8. Don't know
R1609	Generally, who fetches water for your household? **Select only one**	1. Yourself 2. Your spouse/partner 3. You help your spouse/partner 4. Your spouse/partner helps you 5. No need 6. Other (specify) 8. Don't know

MODULE R17. COVID-19/CORONA AWARENESS AND IMPACTS

"This module asks some questions about SARS coronavirus 2, also referred to as COVID-19 or "CORONA"

	MODULE R17. COVID-19/CORONA AWARENESS AND IMPACTS	
R1701	Are you aware of COVID-19/CORONA?	1 Yes 2 No 8 DK 9 Refused } **GO TO END**
R1702	How did you find out about it? **SELECT ALL THAT APPLY.**	A Public announcement B Radio/television C Health officials (Including Health Extension Workers) D Other government officials E NGO workers F Religious leaders/ church/ mosque G Health Development Army H Mobile phone ringing effect I Family members/ relatives/ friends/ neighbors X Other (specify)_____
R1703	Has COVID-19/CORONA affected your household's livelihoods/income?	1 Yes 2 No 8 Don't know 9 Refused } **SKIP TO R1706**
R1704	How has COVID-19/CORONA affected your household's livelihoods/income? **SELECT ALL THAT APPLY**	
	A. Inability to access market to sell products or buy inputs (movement restrictions or market closed) B. Inability to access agricultural commodity market to sell products or buy inputs (movement restrictions or market closed) C. Inability to access markets for food and other necessities (movement restrictions or market closed) E. Inability to farm and/or care for livestock due to sickness of HH member F. Constrained access to land	

	MODULE R17. COVID-19/CORONA AWARENESS AND IMPACTS
	G. Constrained access to pasture H. Constrained access to water I. Shortage of crop inputs (seeds, fertilizer, pesticides) J. Shortage of livestock inputs (feed and veterinary services) K. Increase in price of crop inputs L. Increase in price of livestock inputs M. Increase in transportation costs O. Increase in storage costs P. Decrease in price of products sold Q. Increase in price of products sold R. Decrease in demand for products S. Difficulty accessing financial services and credit T. Labor shortages (lack of labor to help with farming and processing) U. Unable to engage with other community members in asset-building activities (dike construction, erosion control, road building, road maintenance, tree planting) V. Lost employment W. Looting/theft AA. Inability to access health care BB. Unwilling/afraid to access health care because of the perceived risks of contracting the virus/ disease CC. Delay or interruption of cash assistance DD. Illness EE. Death FF. Reduction in income GG. Increase in price of food and other items HH. Inability to repay loans X. Other (specify)_____ Y. Don't know Z. Refused
R1705	How has your household coped with the impacts of COVID-19/CORONA on your household's livelihoods? **SELECT ALL THAT APPLY**

Coping strategies	
LIVESTOCK AND LAND HOLDINGS	**ACQUIRING MORE FOOD OR MONEY**
A. Sent livestock in search of pasture	M. Took up new/additional work (casual labor, wage labor)
B. Sold livestock	N. Sold household items (e.g., radio, bed)
C. Slaughtered livestock	O. Sold productive assets (e.g., plough, water pump)

	MODULE R17. COVID-19/CORONA AWARENESS AND IMPACTS	
D. Leased out land		P. Took out a loan (with interest) from a (formal) bank
MIGRATION		Q. Took out a loan (with interest) from an MFI/RuSACCO
E. Migrate (only some family members)		R. Took out a loan (with interest) from a moneylender
F. Migrate (the whole family)		S. Took out a loan (no interest) from friends or relatives within the community
G. Sent children or an adult to stay with relatives		T. Took out a loan (no interest) from friends or relatives outside of the community
REDUCE CURRENT EXPENDITURE		U. Unconditional gift of money (not remittances) or food from family, friends, church/mosque, or other group within community
H. Took children out of school		V. Unconditional gift of money (not remittances) or food from family, friends, church/mosque, or other group outside of community
I. Moved to less expensive housing		W. Sent children to work for money (e.g., domestic service)
J. Reduced food consumption (quantity/meal; # meal/day)		1. Received emergency food aid from the government or NGO
K. Reduced non-essential HH expenses		2. Received emergency cash transfer from the government or NGO
L. Got food on credit from a local merchant		3. Received permanent direct support food from the government or NGO
CORONAVIRUS-SPECIFIC		4. Received permanent direct support cash transfer from the government or NGO
ff. Quarantine		5. Participated in government or NGO food-for-work or cash-for-work activities (conditional)
gg. Used physical separation to distance sick member from others		6. Used savings to buy livestock
hh. Avoided contact with sick member		7. Used savings to buy productive inputs
ii. Washed hands with water and soap		8. Used savings to pay for health-care expenses
jj. Washed hands more frequently		9. Used savings to feed the family
kk. Sought help at a health clinic		aa. Used savings to pay for education costs
mm. Got COVID-19 vaccine		bb. Used own savings to pay for other household necessities
X. Other (specify)		cc. Used own savings to pay for repairs to dwelling or structures
Y. Did nothing		dd. Relied on remittances from a relative that migrated
		ee. Engaged in spiritual efforts (e.g., prayed, sacrifices, etc.)

	MODULE R17.	
R1706	Has COVID-19/CORONA affected your household's access to food?	1 Yes 2 No 8 DK 9 Refused **SKIP TO R1709**
R1707	How has COVID-19/CORONA affected your household's access to food? **SELECT ALL THAT APPLY.**	A. Unable to go to market (movement restrictions or market closed) B. Traders are absent from the markets C. Products not available in the market D. Price of foods increased E. Delay of food aid X. Other (specify)_____ Y. Don't know Z. Refused
R1708	How has your household coped with the impacts of COVID-19/CORONA on your household's access to food? **SELECT ALL THAT APPLY**	

Coping strategies	
LIVESTOCK AND LAND HOLDINGS	**ACQUIRING MORE FOOD OR MONEY**
A. Sent livestock in search of pasture	N. Took up new/additional work (casual labor, wage labor)
B. Sold livestock	O. Sold household items (e.g., radio, bed)
C. Slaughtered livestock	P. Sold productive assets (e.g., plough, water pump)
D. Leased out land	Q. Took out a loan (with interest) from a (formal) bank
MIGRATION	R. Took out a loan (with interest) from an MFI/RuSACCO
F. Migrate (only some family members)	S. Took out a loan (with interest) from a moneylender
G. Migrate (the whole family)	T. Took out a loan (no interest) from friends or relatives within the community
H. Sent children or an adult to stay with relatives	U. Took out a loan (no interest) from friends or relatives outside of the community
REDUCE CURRENT EXPENDITURE	V. Unconditional gift of money (not remittances) or food from family, friends, church/mosque, or other group within community
I. Took children out of school	W. Unconditional gift of money (not remittances) or food from family, friends, church/mosque or other group outside of community
J. Moved to less expensive housing	1. Sent children to work for money (e.g., domestic service)

	MODULE R17.	
K. Reduced food consumption (quantity/meal; # meal/day)		2. Received emergency food aid from the government or NGO
L. Reduced non-essential HH expenses		3. Received emergency cash transfer from the government or NGO
M. Got food on credit from a local merchant		4. Received permanent direct support food from the government or NGO
CORONAVIRUS-SPECIFIC		5. Received permanent direct support cash transfer from the government or NGO
ff. Quarantine		6. Participated in government or NGO food-for-work or cash-for-work activities (conditional)
gg. Used physical separation to distance sick member from others		7. Used savings to buy livestock
hh. Avoided contact with sick member		8. Used savings to buy productive inputs
ii. Washed hands with water and soap or ash		9. Used savings to pay for health-care expenses
jj. Washed hands more frequently		aa. Used savings to feed the family
kk. Sought help at a health clinic		bb. Used savings to pay for education costs
		cc. Used own savings to pay for other household necessities
X. Other (specify)		dd. Used own savings to pay for repairs to dwelling or structures
Y. Did nothing		ee. Relied on remittances from a relative that migrated
		mm. Engaged in spiritual efforts (e.g., prayed, sacrifices, etc.)

	MODULE R17.	
R1709	How has COVID-19/CORONA affected your social relations? **SELECT ALL THAT APPLY**	A. Increased violence in household B. Increased violence in community C. Decreased violence in household D. Decreased violence in community E. Better relations with family/ friends/neighbors F. Worse relations with family/ friends/neighbors G. No impact on social relations X. Other (specify) Y. Don't know Z. Refused
R1710	How confident are you that your household can cope with the challenges associated with COVID-19/CORONA?	1 Not confident at all/it is impossible 2 Not confident 3 Neutral/not sure 4 Somewhat confident 5 Very confident 6 Not applicable (not facing any challenges) 8 Don't know 9 Refused
R1711	What would help you cope with COVID-19/CORONA? **SELECT ALL THAT APPLY**	A. Handwashing stations B. Provision of drinking water C. Soap D. Masks E. Gloves F. Better access to health care services G. Food aid H. Cash aid I. More information J . Vaccine X. Other (specify): _____ Y. Don't know Z. Refused
R1712	In the last 90 days, has anyone in your household contracted COVID-19/CORONA or showed any of sign/symptoms of COVID-19/CORONA (high fever, coughing, shortness of breath, difficulty breathing)?	1 Yes 2 No 8 Don't know 9 Refused } **SKIP TO END**

	MODULE R17.	
R1713	How did your household cope with a member contracting the COVID-19/CORONA or falling ill with its symptoms? **SELECT ALL THAT APPLY**	A. Used physical separation to distance sick member from others B. Avoided contact with sick member C. Washed hands with water and soap D. Washed hands more frequently E. Sought help at a health clinic F. Did nothing X. Other (specify): _____ Y. Don't know Z. Refused

ANNEX C: 2021 KENYA NAWIRI RFSA BASELINE STUDY PERSONNEL

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ANNEX D: DATA TREATMENT AND ANALYSIS PLAN

1. Introduction

This document provides information about the procedures used to clean and weight data and compute indicators from the 2021 baseline (BL) survey of NAWIRI, the Bureau for Humanitarian Assistance's (BHA) Resilience Food Security Activities (RFSAs) in Kenya. It also outlines the descriptive, inferential, and econometric data analysis that will be conducted.

2. Data Collection Mode and Data Transmission Procedures

The 2021 BL household survey data for the BHA RFSAs in Kenya were collected using Computer-Assisted Personal Interviewing (CAPI) by TANGO's local partner, Kimetrica. Tablets were loaded with the Census and Survey Processing System (CSPro) data entry application developed by Kimetrica. Enumerators entered data directly in CSPro and team leads reviewed and edited interviews in the field prior to transmitting them to a secure server. Completed interviews were uploaded to a cloud server via secure transmission. TANGO downloaded raw data from the server to Drop Box. Final datasets were received from Kimetrica via a password-protected folder in Drop Box.

2.1 CSPro Data Entry Training

A total of 144 enumerators[42], 24 team leads, 4 field coordinators, and 8 local independent survey monitors participated in a seven-day main training and one-day pilot prior to the start of fieldwork to ensure thorough understanding of the survey protocols, instrument, and the successful use of tablets during data collection. Pre-fieldwork CSPro entry training focused on the following:

- Basic use of tablets, including how to turn devices on/off; scrolling; swiping and charging batteries.
- Navigation of the CSPro application including how to start, edit, save, upload interviews, move between modules, and share modules with other enumerators.
- Review of CSPro-specific formatting and notation that provide instructions to the enumerators.
- Review of different types of responses and entering responses, including programmed numeric and alpha responses, open-ended numeric and text responses, and multiple responses.
- Mock interviews, including starting/stopping the interview, reading questions, entering different types of responses, and entering household roster information.
- Workflow, including assigning interviews, sending completed interviews to team leads, reviewing saved interviews and uploading finalized interviews to the server.

[42] Kimetrica trained 120 enumerators plus an additional 20 percent as backup resulting with a total of 144 enumerators trained for the baseline survey (6 enumeration teams per county x 5 enumerators per team per county x 4 counties x 1.20 = 144).

2.2 Field Quality Control Procedures

TANGO ensures high-quality data through a strong emphasis on training field staff, monitoring data collection and quality control during fieldwork. Quality control procedures established in the field included:

Fieldwork oversight: Assignment of one team lead to oversee every five enumerators.[43] Team leads observed at least 10 percent of interviews conducted by each enumerator with the heaviest observation happening at the beginning and toward the end of data collection when errors are the most likely to happen. A total of eight local survey monitors (two per county), hired directly by TANGO, provided an additional layer of quality control independent of the Kimetrica field coordinators. Survey monitors accompanied the data collection teams throughout the 21 days of fieldwork, overseeing fieldwork and providing feedback to Kimetrica field coordinators to communicate back to Team Leads. TANGO convened daily debriefs with the survey monitors to review issues encountered and how they were addressed.

Inconsistency checks: The CSPro data entry application included respondent eligibility checks, checks for questionnaire skip patterns and filters, valid response range checks and other quality control checks, such as checks on the internal consistency of information reported in the roster and self-reported information in other modules.

Data review: Team Leads reviewed saved interviews daily to identify any missing or problematic data items before uploading the completed interviews to the server. This included checking that all selected households have been interviewed (i.e., no missing interviews), ensuring all modules have been completed, and updating Field Completion Forms to show the final status of selected households in the cluster. Team leads communicated any issues to the enumerator and retrained the interviewer(s) on the question or field procedures if needed.

Re-interviews: Team leads performed spot-checks of at least 15 percent of completed interviews.[44] Team Leads returned to certain households and conducted a short partial re-interview of the household roster data, which in the BHA survey, is most prone to fraud or error, and compared the results to the questionnaire completed by the enumerator.

Completion of interviews*:* Enumerators made up to three visits to the household to interview a respondent and planned one to two visits with respondents to successfully complete the interview, when necessary. Few households could not be located because they were absent (i.e., migrated) for an extended period. Households that could not be accessed/interviewed were marked as incomplete; they were not replaced.

Field check tables**:** Field check tables were generated to: (a) examine the overall response rate and response rates by module; b) compare the mean numbers of key target populations (e.g., women 15-49 and children under five) per household reported for each team against expected targets based on the most recent census data; c) assess the presence of age heaping, indicating poor probing for accurate

[43] Data collection team were comprised of approximately 50 percent female enumerators and team leads.
[44] Spot-checks cover items that are more prone to enumerator fraud or error. In this survey, Module B, the household roster, is most prone to fraud or error. Some enumerators may deliberately subtract years from the age of women who are 15 or add years to women who are in their late forties to place them outside the age range of eligibility for Module E. Similarly, enumerators may deliberately add a year or two from the date of birth of a child to make him/her appear older than he/she really is, to avoid having to administer Module D. Or enumerators may omit a child or woman altogether from the roster listing, and in these ways, they reduce their workload.

information or age displacement, suggesting deliberate modifications to age of respondents to avoid administering eligible modules. Field check tables were automatically generated from the raw data using a program prepared by Kimetrica. TANGO reviewed the field check tables and discussed any issues with the survey monitors and Kimetrica survey manager.

2.3 Data Processing Quality Control Procedures

The CSPro data entry program was initially designed based on the English-language version of the questionnaire and incorporates valid data ranges, skip rules, filters, and consistency checks. The Kiswahili and Turkana translations were added to the program. The following quality control checks were used during the data processing cycle:

1) Data Capture (During field work/in the field)

a) Identifier integrity: CSPro data entry forms were prefilled with geographic identifiers (county, ward, and EA) and household identifiers (name of household head and unique household ID) using information from the household listing files. This step ensures that the correct identifier is associated with each record and that the correct household that was sampled is interviewed.

b) Correct member selection: The CSPro form was designed to auto-fill the respondent selection items with the names and line numbers of eligible members based on information collected from the household roster. This step ensures the correct identification and selection of eligible household members for each module. Discrepancies between self-reported information and information reported in the roster are flagged by the program, prompting the enumerator to verify and correct information if needed. This procedure ensures accurate and consistent reporting of eligibility criteria.

c) Range checks for close-ended numeric responses: The program ensured that only values within that range of numeric values listed in the CSPRO dictionary can be entered.

d) Range checks for alphabetic responses: The CSPro program was fitted so that only letters listed in the response options can be entered.

e) Multiple responses: For questions that allow multiple responses to be selected, the CSPro program was fitted so that responses that must appear in isolation from any other response do not appear in combination with any other letter/number.

f) “Other” responses: For questions that allow “other” responses, the program was designed to ensure that responses requiring an “other” text entry are not skipped.

g) Blank responses: The CSPro program was designed so that fields cannot be left blank. Enumerators could not move on to the next question without entering a valid response. The CSPro dictionary included pre-programmed codes for respondents who “don’t know” (usually ‘8’) and respondents who refuse to answer (usually ‘9’).

h) Skips: If a skip is present, then based on the respondent’s answer to the question, the skip was applied by the CSPro program. Responses that were skipped (i.e., valid skips) were designated as missing (“.”) by the CSPro program.

i) Filters: If a question should not be asked, for example, it was skipped. For example, children 24 months or older are not asked about their food and liquid intake and pregnant women are not asked about current use of contraception. In such cases, the question or set of questions was skipped over.

2) Structure Checks (During fieldwork at TANGO offices)

Data was downloaded from the server daily and the total number of completed surveys for that day and the aggregated number of completed surveys across all collection days was confirmed with the local field collection teams. The household response rate was tracked and flagged to field teams if it dropped below 95 percent. The numbers of eligible children under five and women ages 15-49 years was checked to ensure they are within range of the expected values. Age data was also checked for age displacement and age heaping. In addition, data from select modules was reviewed to ensure that the modules were completed correctly and that "no" responses for skip orders were not unexpectedly high.

3) Consistency Checks (After completion of fieldwork at TANGO offices)

Following the completion of field work and receipt of final datasets from Kimetrica, TANGO performed additional checks and data cleaning protocols that included: (a) consistency checks for information recorded in more than one module (e.g., age, sex, marital status, and work status); (b) checks on numeric responses to identify and address outliers; and (c) recoding "other" text responses and recoding them to available response codes if applicable.

2.4 Handling of Missing Data and "Don't know" Responses

Missing data points are not included in calculations for BHA indicators (i.e., they are excluded from the denominator and numerator). "Don't Know" responses are recoded to the null value and included in the denominator, i.e., "Yes," "No" and "Don't Know" responses are included in the denominator, but only "Yes" responses are counted in the numerator. For example, the indicator on the prevalence of diarrhea among children under five is set to missing for children that are missing information on whether the child had diarrhea in the two weeks prior to the survey. However, the indicator is set to '0' (null value) for children whose primary caregiver responded, "Don't know."

3. BHA Indicator Definitions

The questionnaire used for the BL PBS was adapted from the standard BHA PBS questionnaire.[45] Questions and response options were adapted to the country context, such as those that involve food in modules C, D and E, and F. The survey was also contextualized to capture information on different commodities and improved agricultural practices promoted in each RFSA area.

Modules on the agricultural production of livestock were streamlined from the standard questionnaire – i.e., detailed questions on decision-making, breeding, housing, nutrition, and pest/disease control were omitted given that the module on agriculture covers these topics. The module on resilience measurement uses the modified full version and was modified to include a subset of questions on exposure to COVID-19 impacts on food security and livelihoods and household coping mechanisms.

Given that self-reported yield estimates are generally unreliable, this baseline survey did not collect information on crop yield. Information on yield from the production of livestock (cattle, goats, and camels) was collected, however, in lieu of self-reported data on livestock weight, the survey asked farmers to report the average condition of their livestock by type to triangulate with information on livestock weight from secondary sources. Data on the average weight for each category of animal (male,

[45] Although the primary objective of the RFSAs is to reduce acute malnutrition in its target areas, the baseline survey will not include anthropometric measures because this information is being collected by IPs through a recurrent monitoring system.

female, young, old) was obtained from the Food and Agriculture Organization (FAO) and Kenya Ministry of Agriculture, Livestock and Fisheries. Appendix D2 describes the methodology for estimates average weight of cattle, camels, and goats.

Table 1 illustrates the indicators measured, the level of disaggregation as prescribed in the 2021 BHA Handbook supplement on indicator tabulations, and reference documents providing the indicator definition and method of calculation.

Table 1: Indicators measured in the 2021 baseline survey of the BHA RFSAs in Kenya

Indicator	Disaggregation Level	Reference Documents	
		Indicator Description/Reference Sheet[1]	Indicator Tabulation Instructions[2]
Prevalence of moderate and severe food insecurity in the household, based on the Food Insecurity Experience Scale (FIES)	Gendered household type (GHT)[1] Level of Severity: Moderate, Severe	BHA Indicators Handbook Part 1. pp. 15-18	Supplement to Part 1. pp. 24
Percentage of households with poor, borderline, and adequate Food Consumption Score (FCS); Mean FCS	GHT	BHA Indicators Handbook Part 1. pp. 19-21	Supplement to Part 1. pp. 22-24
POVERTY			
Daily per capita expenditures (as a proxy for income) in USG assisted areas	GHT	BHA Indicators Handbook Part 1. pp. 86-87	Supplement to Part 1. pp. 89
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	GHT	BHA Indicators Handbook Part 1. pp. 79-82	Supplement to Part 1. pp. 89-90
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	GHT	BHA Indicators Handbook Part 1. pp. 83-85	Supplement to Part 1. pp. 90-91
WATER, SANITATION AND HYGIENE			
Percent of households using basic drinking water services	GHT	BHA Indicators Handbook Part 1. pp. 52-54	Supplement to Part 1. pp. 63-64
Percent of households in target areas practicing correct use of recommended household water treatment technologies	Technology Type: Chlorination, Flocculant/Disinfectant, Filtration, Solar Disinfection, Boiling	BHA Indicators Handbook Part 1. pp. 55-56	Supplement to Part 1. pp. 64

Indicator	Disaggregation Level	Reference Documents	
		Indicator Description/Reference Sheet[1]	Indicator Tabulation Instructions[2]
Percent of households with access to a basic sanitation service	GHT	BHA Indicators Handbook Part 1. pp. 57-58	Supplement to Part 1. pp. 64
Percent of households in target areas practicing open defecation	GHT	BHA Indicators Handbook Part 1. pp. 59-60	Supplement to Part 1. pp. 64-65
Percent of households with soap and water at a hand-washing station on premises	GHT	BHA Indicators Handbook Part 1. pp. 61-62	Supplement to Part 1. pp. 65
AGRICULTURE			
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	Sex: Female, Male	BHA Indicators Handbook Part 1. pp. 63-65	Supplement to Part 1. pp. 80
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	Sex: Female, Male	BHA Indicators Handbook Part 1. pp. 66-68	Supplement to Part 1. pp. 80
Percent of producers who have applied targeted improved management practices or technologies[2]	Commodity Sex: Female, Male Age (15-29, 30+) Management practice or technology type	BHA Indicators Handbook Part 1. pp. 69-73	Supplement to Part 1. pp. 81
Yield of targeted agricultural commodities within target areas[2]	Livestock: commodity, production system, sex, age	BHA Indicators Handbook Part 1. pp. 74-78	Supplement to Part 1. pp. 82-83
WOMEN'S HEALTH AND NUTRITION			
Percentage of women of reproductive age consuming a diet of minimum diversity (MDD-W)	Age: <19, 19+ years	BHA Indicators Handbook Part 1. pp. 41-42	Supplement to Part 1. pp. 53-54
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	None	BHA Indicators Handbook Part 1. pp. 43-44	Supplement to Part 1. pp. 54
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	Age: 15-19, 20-29 and 30-49	BHA Indicators Handbook Part 1. pp. 45-46	Supplement to Part 1. pp. 54-55
Percent of women in union who made decisions about modern family planning methods in the past 12 months	Decision-making: alone, jointly, spouse Age: 15-19, 20-29, 30-49	BHA Indicators Handbook Part 1. pp. 47-49	Supplement to Part 1. pp. 55-56

Indicator	Disaggregation Level	Reference Documents	
		Indicator Description/Reference Sheet[1]	Indicator Tabulation Instructions[2]
Contraceptive prevalence rate (CPR)	Traditional, modern	BHA Indicators Handbook Part 1. pp. 50-51	Supplement to Part 1. pp. 56
CHILD HEALTH AND NUTRITION[3]			
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	Sex: Female, Male	BHA Indicators Handbook Part 1. pp. 30-32	Supplement to Part 1. pp. 36-38
Prevalence of children 6-23 months consuming a diet of minimum diversity (MDD-C)	Sex: Female, Male	BHA Indicators Handbook Part 1. pp. 37-38	Supplement to Part 1. pp. 39-40
Prevalence of exclusive breastfeeding of children under six months of age	Sex: Female, Male	BHA Indicators Handbook Part 1. pp. 28-29	Supplement to Part 1. pp. 36
Percent of children under age five (0-59 months) who had diarrhea in the prior two weeks	Sex: Female, Male	BHA Indicators Handbook Part 1. pp. 33-34	Supplement to Part 1. pp. 40
Percent of children under age five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	Sex: Female, Male	BHA Indicators Handbook Part 1. pp. 35-36	Supplement to Part 1. pp. 40-41
GENDER - CASH			
Percent of women and men in union who earned cash in the past 12 months	Sex; Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50	BHA Indicators Handbook Part 1. pp. 88-90	Supplement to Part 1. pp. 96
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	Age: 15-19, 20-29, 30-49, ≥50	BHA Indicators Handbook Part 1. pp. 91-92	Supplement to Part 1. pp. 96
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	Age: 15-19, 20-29, 30-49, ≥50	BHA Indicators Handbook Part 1. pp. 93-94	Supplement to Part 1. pp. 96-97
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	Age: 15-19, 20-29, 30-49, ≥50	BHA Indicators Handbook Part 1. pp. 95-96	Supplement to Part 1. pp. 97
GENDER CREDIT AND GROUP PARTICIPATION			
Percent of women/men who are members of a community group	Sex: Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50	BHA Indicators Handbook Part 1. pp. 97-99	Supplement to Part 1. pp. 104-105

Indicator	Disaggregation Level	Reference Documents	
		Indicator Description/Reference Sheet[1]	Indicator Tabulation Instructions[2]
Percent of women/men in union with access to credit	Sex: Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50	BHA Indicators Handbook Part 1. pp. 100-101	Supplement to Part 1. pp. 103
Percent of women/men in a union who make decisions about credit	Decision actors: alone, jointly Sex: Female, Male Age: female 15-19, 20-29, 30-49, ≥50; male 15-19, 20-29, 30-49, ≥50	BHA Indicators Handbook Part 1. pp. 102-103	Supplement to Part 1. pp. 103-104
RESILIENCE			
Ability to recover from shocks and stresses index	GHT	BHA Indicators Handbook Part 1. pp. 110-112	Supplement to Part 1. pp. 139-140
Percent of households that believe local government will respond effectively to future shocks and stresses	GHT	BHA Indicators Handbook Part 1. pp. 113-114	Resilience and Resilience Capacities Measurement Options – Full Approach pp. 30
Index of social capital at the household level	Social capital components: overall index, bonding sub-index, bridging sub-index; GHT	BHA Indicators Handbook Part 1. pp. 117-119	Resilience and Resilience Capacities Measurement Options – Full Approach pp. 29-30
Proportion of households participating in group-based savings, micro-finance or lending programs	Financing type; GHT	BHA Indicators Handbook Part 1. pp. 115-116	Supplement to Part 1. pp. 141
Adaptive Capacity Index	None	BHA Indicators Handbook Part 1. pp. 104-105	Supplement to Part 1. pp. 143-146
Absorptive Capacity Index	None	BHA Indicators Handbook Part 1. pp. 106-107	Supplement to Part 1. pp. 141-143
Transformative Capacity Index	None	BHA Indicators Handbook Part 1. pp. 108-109	Supplement to Part 1. pp. 146-151

NOTES:

[1] Bureau for Humanitarian Assistance Indicator Handbook Part I: Indicators for Baseline and Endline Surveys for Resilience Food Security Activities. Available at: https://www.usaid.gov/sites/default/files/documents/USAID-BHA_Handbook_Part_I_Baseline_and_Endline_Surveys_June_2021.pdf.

[2] Bureau for Humanitarian Assistance Indicator Handbook Supplement to Part I: BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities. Available at: https://www.usaid.gov/sites/default/files/documents/USAID-BHA_The_Supplement_Questionnaire_for_Handbook_July_2021.pdf.

4. Description of Promoted commodities and Agricultural Practices

This section describes the commodities and improved agricultural management practices and technologies promoted by the RFSAs in their respective implementation areas.

4.1 Targeted value chain commodities in the BHA RFSAs in Kenya

Commodity	Implementing Partner	
	CRS	MC
Crops		
Cowpeas	X	
Orange fleshed sweet potatoes		X
Green Grams	X	X
Sorghum		X
Livestock		
Camels	X	X
Cattle	X	X
Goats	X	X

4.2 Targeted Improved Agricultural Management Practices and Technologies

Practice	IP		Description
	CRS	MC	
Crop genetics (G14A, G14B, G14C, G14D)[46]			
Improved/certified seed	X	X	Use of improved/certified seeds that are high-yielding, higher in nutritional content, drought tolerant (i.e., through bio-fortification, such as vitamin A-rich sweet potatoes, \, high-protein beans and pulses and cowpeas), and/or more resilient to climate impacts (i.e., drought tolerant pulses and beans).
Cultural practices (G14A, G14B, G14C, G14D)[47]			
Seedling production and transplantation	X	X	Production of drought-tolerant seedlings for grains, pulses, sweet potato, and pasture.
Crop rotation (rotating grains with nitrogen fixing legumes)	X	X	Involves changing the type of crop that is grown on a piece of land, including farrowing, to maintain soil fertility and/or break pest and disease cycles. This involves rotating grains with nitrogen fixing legumes such as beans, soybeans, and groundnuts.
Kitchen gardens using sunken pits	X	X	Use of sunken water harvesting vegetable beds and pitting to control water loss through evaporation and spoilage.
Pest and disease management (G14A, G14B, G14C, G14D)[48]			

[46] Applies to all crops (Cowpeas; Orange fleshed sweet potatoes; Green Grams; Sorghum).
[47] Applies to all crops.
[48] Applies to all crops.

Practice	IP		Description
	CRS	MC	
See list of improved post-harvest handling and storage practices promoted by the RFSAs.			
Soil-related fertility and conservation (G14A, G14B, G14C, G14D)[49]			
Use of organic manure	X	X	Use of manure for fertilization of soil. Organic manure typically refers to cow dung, chicken droppings, goat or sheep droppings or any other waste produced by domesticated animals.
Soil testing	X	X	Testing soil for pH, phosphorus, and potassium.
Inoculant		X	Inoculant application in legumes/ pulses to improve productivity
Construction of soil conservation structures (gabions)	X	X	Construction of gabions and rock terraces to conserve soil and prevent erosion
Use of natural barriers/cover crops	X	X	Use of grass strips and cover crops to conserve soil and prevent erosion
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	X	X	Use of organic materials such as grain straw, fresh or old hay and other crop residues to improve soil fertility and control soil erosion
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	X	X	Planting of agroforestry trees, such as Lucaena and Grevillea, along riverbanks and in farms to prevent/control erosion, counter soil acidification and salinization, and improve water retention and soil fertility
Zaï pits (pot-holing)		X	Traditional agricultural technique used to cultivate and rehabilitate hard or heavily degraded soil. Holes are dug by hand, and are approximately 20 to 40 cm in diameter, 20 cm deep and spaced 90 cm apart. Zaï pits act as micro catchments within the field for collecting runoff water and minimizing erosion. During crop production, inputs such as fertilizers/manure, seed, water, and lime all concentrate in the prepared hole as opposed to being spread over an area in furrow cultivation.
Use of minimum tillage practices	X	X	Leave crop residue on the soil surface to reduce water and wind erosion (i.e., by not ploughing after harvest). Soil and the surface residues are minimally disturbed between harvesting one crop and planting the next.
Planting nitrogen-fixing trees		X	Planting nitrogen fixing trees and fruit trees (e.g., acacia) in irrigated gardens to improve soil fertility on the long term.
Irrigation (G14A, G14B, G14C, G14D)[50]			

[49] Applies to all crops.
[50] Applies to all crops.

Practice	IP		Description
	CRS	MC	
Use of drip or sprinkler irrigation technologies	X		Use of micro-drip or sprinkler irrigation systems to increase food production such as vegetables and fruit trees.
Agriculture water management-non-irrigation-based (G14A, G14B, G14C, G14D)[51]			
Use of rainwater harvesting technologies	X	X	Use of rainwater harvesting technologies like water pans, rock catchment and roof catchments.
Use of flood-based farming technologies (Spate irrigation)		X	Diversion of water from normally dry riverbeds when the river is in spate (i.e., during seasonal floods of rivers, streams, ponds and lakes) to fill water storage canals. This is done using spurs or bunds that are built across the riverbed.
Climate adaptation/climate risk management (G14A, G14B, G14C, G14D)[52]			
Production planning and crop rotation in irrigation schemes	X	X	Use of a cropping calendar for crop rotation by irrigation scheme. The cropping calendar will promote crop rotation and will ensure consistency in supplying markets with commodities through-out the year. The current practice is based on a 6-month cropping cycle, but we will support farmers to come up with a 12-month crop calendar showing the crops to be grown after each 3-month cycle starting on January 1st.
Use of drought early warning information/systems	X	X	Use of early warning indicators such as vegetation condition for timely planning and reduction of the impact of a drought hazard. Use of weather forecast from meteorological department which shall be disseminated using vernacular radio stations and SMS based platforms. Early warning information can also be disseminated through the following channel: 1) Personal contact or contact via mobile phones, including Short Message Service; 2) Messages transmitted by community leaders; 3) Messages transmitted by agricultural extension agents; 4) Meetings held by grassroots organizations; 5) Meetings in churches; and 6) Meetings in schools
Post-harvest handling and storage (G16A, G16B, G16C, G16D)[53]			
Aflatoxin prevention and control[1]	X	X	Proper drying and sensitization of modern and traditional moisture content indicators for cow peas and pasture seeds and proper post-harvest storage of grains.
Improved storage during transportation (e.g., aluminum cans, crates,	X	X	Improved transportation of raw milk or fresh meat through use of aluminum cans. Use of food grade containers like crates.

[51] Applies to all crops.
[52] Applies to all crops.
[53] Applies to all crops.

Practice	IP		Description
	CRS	MC	
other food grade containers)			
Use of well-equipped food storage structures	X	X	Use of rodent-proof food storage facilities. Proper air circulation structures.
Temperature and humidity control	X	X	Use of shed nets and/or air conditioner or fans to lower the perceived temperature, dehumidify the air, and ensure the proper drying of harvested crops of vegetables.
Solar drying for grains and pulses	X		Use of solar drying equipment to reduce moisture to required levels for proper storage
Natural resource Management (G21)[54]			
Reseeding of degraded lands with drought resistant grass species		X	Facilitate range land rehabilitation through the use of drought-resistant grass seeds and the use of seed broadcasting techniques on degraded lands.
Fencing off pasture plots	X	X	Establishment of pasture plots by digging holes and fencing plots with poles and barbed wire to conserve pasture.
Rehabilitation of degraded grazing lands	X	X	Rehabilitation of degraded grazing lands through the construction of soil and water conservation structures and fencing degraded lands from grazing by livestock
Construction of soil conservation structures (gabions)	X	X	Construction of gabions and rock terraces to conserve soil and prevent erosion
Use of natural barriers/cover crops	X	X	Use of grass strips and cover crops to conserve soil and prevent erosion
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	X	X	Use of organic materials such as grain straw, fresh or old hay and other crop residues to improve soil fertility and control soil erosion
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	X	X	Planting of agroforestry trees, such as Lucaena and Grevillea, along riverbanks and in farms to prevent/control erosion, counter soil acidification and salinization, and improve water retention and soil fertility
Zaï pits (pot-holing)		X	Traditional agricultural technique used to cultivate and rehabilitate hard or heavily degraded soil. Holes are dug by hand, and are approximately 20 to 40 cm in diameter, 20 cm deep and spaced 90 cm apart. Zaï pits act as micro catchments within the field for collecting runoff water and minimizing erosion. During crop production, inputs such as fertilizers/manure, seed, water, and lime all concentrate in the prepared hole as opposed to being spread over an area in furrow cultivation.

[54] Applies to all crops and all livestock. Some practices are also cross listed under soil fertility and conservation.

Practice	IP		Description
	CRS	MC	
Use of minimum tillage practices	X	X	Leave crop residue on the soil surface to reduce water and wind erosion (i.e., by not ploughing after harvest). Soil and the surface residues are minimally disturbed between harvesting one crop and planting the next.
Planting nitrogen-fixing trees		X	Planting nitrogen fixing trees and fruit trees (e.g., acacia) in irrigated gardens to improve soil fertility on the long term.
Livestock management and practices (G19A, G19B, G19C)			
Use of improved livestock breeds/species	Camels Cattle Goats	Cattle Goats	Process of choosing animals that meet the requirements of the breeding objective and will pass particular traits onto their progeny, e.g., animals that improve both milk and meat production. Promoted breeds include dual-purpose breed varieties developed by KALRO such as the Galla goat, and drought-adapted livestock breeds such as the Somali camel, dairy goats, and Sahiwal and boron cows. Breeding using improved bulls.
Use of livestock health services and products	Camels Cattle Goats	Cattle Goats	Use or consultations with public or licensed private animal health service providers for veterinary services such as prevention/treatment of livestock disease production, artificial insemination, etc.
Use of improved shelters	Camels Cattle Goats	Camels Cattle Goats	Construction of cages, sheds, or pens (enclosures for holding livestock) using local material to house livestock. The shelter be airy and waterproof. The place should also be lit to facilitate the consumption of food for a long time.
Use of improved calving techniques	Camels Cattle Goats	Camels Cattle Goats	Promotion of colostrum intake for the newborn calf to enhance calf's immune system: The calf must rely on colostrum from the cow until its own immune system is totally functional (about 1 to 2 months of age). Promote general management such as keeping of clean, dry area for cows that are calving to limit the spread of disease in the newborn calves- (Calves born in muddy, damp pens or calves that nurse udders contaminated with fecal materials are at increased risk for a number of disease conditions).
Use of improved milking techniques	Camels Cattle Goats	Camels Cattle Goats	Use of food grade containers, udder and teat cleaning using clean water before milking, treatment of wounds, adoption of personal hygiene practices prior to and during milking.
Use of more nutritious pasture varieties	Camels Cattle Goats	Camels Cattle Goats	Use of more nutritious pasture varieties.
Utilization of set grazing areas	Camels Cattle Goats	Cattle Goats	Development of grazing plans, setting aside grazing lands for dry season, enforcing grazing plans.
Improved fodder production	Camels Cattle Goats	Cattle Goats	Fodder production refers to the exercise of deliberately planting certain types of grasses in pastures to improve the quality and quantity of natural grasslands, e.g., use of legumes or oilseeds to produce fodder, or veld reinforcement by

Practice	IP		Description
	CRS	MC	
			planting legumes, grasses, or oilseeds to increase the nitrogen content of the soil.
Reseeding of degraded lands with drought resistant grass species		Cattle Goats	Facilitate range land rehabilitation through the use of drought-resistant grass seeds and the use of seed broadcasting techniques on degraded lands.
Fencing off pasture plots	Camels Cattle Goats	Camels Cattle Goats	Establishment of pasture plots by digging holes and fencing plots with poles and barbed wire to conserve pasture.
Rehabilitation of degraded grazing lands	Camels Cattle Goats	Camels Cattle Goats	Rehabilitation of degraded grazing lands through the construction of soil and water conservation structures and fencing degraded lands from grazing by livestock
Use of solarized boreholes for livestock	Camels Cattle Goats	Camels Cattle Goats	Using solar technology as a source of power to pump water from the water hole and for onward distribution for livestock
Use of water pans for livestock	Camels Cattle Goats	Camels Cattle Goats	Water pans are ponds / holes excavated on the ground surface to collect and store runoff water from various surfaces including from hillsides, roads, rocky areas, and open rangelands. Water harvesting in ASALs is an important practice to ensure water availability during the dry season. Collection of surface runoff water helps to control soil erosion.
Use of sand dams for livestock	Camels Cattle Goats	Camels Cattle Goats	A sand dam is a reinforced stone masonry wall built across a seasonal sandy river. Water trapped behind the wall raises the water table in the surrounding area. Water is stored under the sand and is used during the dry spells. Sand dam improves the soil, creating better conditions for crops and grazing. More trees can be planted ensuring more water infiltrates the ground, and less soil is washed away. This creates a virtuous cycle of soil and water conservation.
Use of rock catchments for livestock	Camels Cattle Goats		

4.3 Promoted Value Chain Interventions

Practice	IP		Description
	CRS	MC	
Value Chain Interventions – any crop or livestock commodity (G11)[55]			
Contract farming	X	X	Use of contract farming to improve access to markets by smallholder farmers
Use of training and extension services	X	X	Storage and preservation farm and livestock products
Selling products through community farmer associations	X	X	Promoting the farmers/livestock herders to bring their commodities together to sell on better prices (bargaining power)
Improved bulking	X	X	Aggregation of animals, animal products such as milk for better bargaining power
Sorting and grading	X	X	Using physical characteristics such as size, shape, weight or color to separate food produce into categories
Improved record keeping, budgeting and financial management	X		Maintaining more accurate records to identiy profit, loss, net worth and to assist in planning of cash/credit needs etc...
Value Chain Interventions – fodder production (G11a)[56]			
• Use of improved pasture inputs (e.g., quality seeds) (MC) • Use of mechanized pasture harvesting and baling technologies (MC) • Construction and use of hay stores by farmer organizations (MC) • Use of fodder seeds (MC) • Use of harvesting, drying, packaging, storage, and marketing technologies (MC)			

5. Data Analysis

One dataset will be prepared for the 2021 BL survey with RFSA and county variables to facilitate analysis by RFSA area and county. The baseline study includes the following analyses:

- Key demographic characteristics of the study population
- Calculation of BHA indicators and disaggregation by key sub-groups as defined by BHA (e.g., gendered household type, age, sex, decision actor, etc.…)
- Descriptive analyses of the components of composite indicators
- Bivariate analyses to explore associations among key variables based on the project theory of change
- Additional econometric analyses as appropriate

All analyses will be conducted using Stata Version 15. Results will be weighted to reflect the full target population, for each RFSA area separately, in total and by county. Details of the analyses for the baseline study are provided below. Appendix D2 provides the methodology for calculating sampling weights.

[55] Applies to all crops (Cowpeas; Orange fleshed sweet potatoes; Green Grams; Sorghum) and all livestock (cattle, goats, and camels).

[56] Applies to all crops (Cowpeas; Orange fleshed sweet potatoes; Green Grams; Sorghum) and all livestock (cattle, goats, and camels).

5.1 County comparison of indicator estimates

County comparisons of indicator estimates were performed for each RFSA (i.e., Marsabit compared to Isiolo in the CRS areas and Turkana compared to Samburu in the MC RFSA areas). Results are reported in a separate table and illustrate where differences are statistically significant.

5.2 Sociodemographic Characteristics of the Study Population

The baseline report provides an overview of the size and sociodemographic characteristics of the population in the RFSA areas. This includes the percentage and number of individuals in the following key target population groups:

- Individuals (15+ years), total and by sex
- Cash earners (15 + years), total and by sex
- Farmers (15+ years), total and by sex
- Women of reproductive age (15-49 years)
  - Married or in a union
  - With a live birth in the past 5 years
- Non-pregnant women of reproductive age
- Children under 5 years, total and by sex
- Children 6 -23 months, total and by sex

This analysis also includes the following household-level statistics:

- Average household size (number of persons)
- Average number of working age persons (15+ years) per household
- Percent of households with children under 5 years of age
- Percent of households with a child 6-23 months of age
- Percent of female-headed households (based on sex of household head as reported in the roster)
- Gendered household type (percent and number of households)

5.3 Calculation and Tabulation of Indicators

All indicators are generated using relevant sampling weights to represent the full target population and tabulated for the combined RFSA areas, and for each RFSA separately, in total and by county as specified in Table 1.[57] Point estimates with 95 percent confidence intervals and variance estimations using Taylor series expansion will be derived for all indicators for each RFSA area separately, in total and by county. The variance estimation considers the design effect associated with the complex sampling design. Separate sampling weights are calculated for indicators and adjusted to compensate for household and individual non-response. Sampling weights are calculated separately for each county and for each of the following distinct groups by taking the inverse of the probabilities of selection from each stage of sampling:

- Households (modules C, F, N, R)
- Children under five (Module D)
- Women 15-49 (Module E)
- Female and male cash earners married or in a union (Module J)
- Females and males married or in a union (Module K)

[57] This implies a total of seven estimates are produced for each indicator: one overall, two RFSA-level, and four county-level.

- Farmers (Module G)

Separate non-response adjustments are calculated for sub-populations with different response rates:

- Female cash earners versus male cash-earners (Module J)
- Females in a union versus males in a union (Module K)
- Livestock producers versus all farmers, specifically separate weights for each of the following:[58]
    - Cattle producers (Module 7.50)
    - Goat producers (Module 7.51)
    - Camel producers (Module 7.53)

Refer to Appendix D1 for details on the calculation of sampling weights.

5.4 Descriptive Analyses

Table 2 summarizes the descriptive analyses that will be conducted for the 2021 baseline study of the BHA RFSAs in Kenya. All analyses will be disaggregated by RFSA and county.

Table 2. Summary of descriptive analyses to be conducted for the 2021 baseline study of the BHA RFSAs in Kenya

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE STUDY AREA
Estimated population in the RFSA areas
Household characteristics in the RFSA areas
FOOD CONSUMPTION
Percent of households consuming FCS food groups and frequency of consumption in days
Percent of households responding 'Yes' to a set of eight questions on the experience of food insecurity (C16-C23) - FIES (30-day recall)
POVERTY
Distribution of Average Daily Per Capita Expenditures
AGRICULTURE
Percentage of farmers by age, in total and by farmers' sex, by livestock commodity[59]
Percentage of farmers by type of land access and farm size, in total and by farmers' sex
Percentage of farmers using financial services by type of financial service, in total and by farmers' sex

[58] The response rate of farmers for Module G differs from those of cattle, goat, and camel producers (Modules 7.50, 7.51, and 7.53, respectively) because of challenges in locating livestock producers in the household. Due to the prolonged drought, many livestock producers migrated in search of grazing lands and water for their herds and were absent from the household and therefore could not be interviewed. Therefore, the response rate for Module G is slightly lower than the response rates for the subsequent modules on livestock production since livestock producers who were present in the household and could be interviewed for Module G were interviewed for the subsequent modules on livestock production.

[59] The percentage of farmers by targeted crop commodity will not be disaggregated by sex or age to avoid unreliable results since sample size by county is relatively low. In the CRS RFSA areas where cowpeas and green grams are the targeted crop commodities, the number of farmers planting cowpeas was 0 and 13 in Marsabit and Isiolo, respectively, and the number of farmers planting green grams was 1 and 6 in Marsabit and Isiolo respectively. In the MC RFSA areas, where green grams, orange-fleshed sweet potatoes and sorghum are the targeted crop commodities, the number of farmers planting green grams was 30 in Turkana and 3 in Samburu; the number of farmers planting orange-fleshed sweet potatoes was 1 in Turkana and 3 in Samburu; and the number of farmers planting sorghum was 78 and 0 in Turkana and Samburu respectively.

Table 2. Summary of descriptive analyses to be conducted for the 2021 baseline study of the BHA RFSAs in Kenya

Percentage of farmers that plant crops or raise/buy livestock with the specific intention to sell or resell, in total and by farmers' sex
Percentage of farmers by type of value chain activity, in total and by famer's sex
Percentage of farmers who applied targeted improved agricultural practices and technologies by type, in total and by farmers' sex and age, by commodity
WATER, SANITATION, AND HYGIENE (WASH)
Percentage of households by type of sanitation facility, source of drinking water and treatment for drinking water
MATERNAL AND CHILD HEALTH AND NUTRITION (MCHN)
Percentage of women 15-49 years of age by food groups consumed
Use of antenatal care services (provider, number of visits, timing of first visit)
Percentage of non-pregnant women 15-49 years who are married or in a union and using a contraceptive method by type of method
Percentage of children 6-23 months by food groups consumed
Components of MAD indicators for children 6-23 months by breastfeeding status
Breastfeeding status for children 0-23 months by age in months
GENDER CASH, ACCESS TO CREDIT AND COMMUNITY PARTICIPATION
Distribution of male and female cash earners who are married or in a union by types of livelihood activities
Self-earned cash decision-making among males and females married or in union who work and are usually paid in cash or a combination of cash and in-kind
Percentage of women and men in a union participating in community groups, by type of group
RESILIENCE
Distribution of Households by Number and Types of Livelihood Activities in the Year Preceding the Survey
Distribution of Households by Type of Livestock Owned
Shock exposure index (mean) and average severity
Shocks experienced by households in the past 12 months
Coping strategies adopted to recover from any shock
Adoption of coping strategies by most salient shocks
Resilience capacity indices and their indicators
COVID-19 awareness and adoption of COVID-19 mitigation protocols
Percentage of households who experienced COVID-19 impacts on livelihoods, by type of impact
Percentage of households who experienced COVID-19 impacts on food security, by type of impact
Coping strategies for COVID-19 impacts on livelihoods
Coping strategies for COVID-19 impacts on food security

Note: Results are provided for each RFSA area separately, in total and by county. Sampling weights included.

5.5 Bivariate Analyses

Bivariate analyses will be conducted to explore relationships between key indicators and between indicators and important household and individual characteristics. These analyses are intended to provide useful information to help identify sub-groups on which to focus or to help inform program design by illustrating the factors that are associated with the indicators. Differences in means or proportions between groups or correlations are tested using appropriate statistical test of differences (such as t-test or chi square test). Table 3 summarizes the bivariate analyses that will be conducted for the 2021 baseline study of the BHA RFSAs in Kenya.

Table 3. Summary of bivariate analyses to be conducted for the 2021 baseline study of the BHA RFSAs in Kenya

	Impact indicators	Outcome indicators			Intermediate indicators	
	(1)	(II)	(III)	(IV)	(V)	(VI)
	Poverty/ Per capita exp.	FCS/ FIES	MDD-W	MDD-C/ MAD	Diarrhea	Agri. practices[1]
Women's characteristics						
Age			X			
Education level			X			
Pregnancy status			X			
Participation in cash-earning activities			X			
Child's characteristics						
Sex				X		
Age				X		
Household sociodemographic characteristics						
Number of children 0-4 years		X	X	X		
Number of children 5-17 years		X	X	X		
Number of adult females		X	X	X		
Number of adult males		X	X	X		
Male-headed household		X	X	X		
Household head age in years		X	X	X		
Household head education level	X	X	X	X		
Gendered household type	X	X	X	X		
Household food security						
Food consumption score/group			X	X		
Household WASH status						
Basic sanitation facility					X	
Basic drinking water services					X	
Correct water treatment					X	
Handwashing station with water soap/ash/cleaning agent					X	
Household livestock holding						
Household raises cattle	X	X	X	X		

Table 3. Summary of bivariate analyses to be conducted for the 2021 baseline study of the BHA RFSAs in Kenya

	Impact indicators	Outcome indicators			Intermediate indicators	
	(1)	(II)	(III)	(IV)	(V)	(VI)
	Poverty/ Per capita exp.	FCS/ FIES	MDD-W	MDD-C/ MAD	Diarrhea	Agri. practices[1]
Household raises goat	X	X	X	X		
Household raises camels	X	X	X	X		
Use of agriculture-related financial service[1]						
Participation in agriculture-related savings scheme	X	X	X	X		X
Borrowed agricultural credit	X	X	X	X		X
Has agricultural insurance	X	X	X	X		X
Access to community-based savings or credit groups						
Participation in group-based savings, microfinance, or lending programs		X	X	X		X
Participation in group-based saving programs		X	X	X		X
Participation in group-based credit programs		X	X	X		X
Use of value chain activities and targeted improved agricultural management practices[2]						
Value chain activities, Crop, Livestock, NRM – by type	X	X	X	X		
Resilience						
Absorptive capacity index and indicators	X	X				
Adaptive capacity index and indicators	X	X				
Transformative capacity index and indicators	X	X				
Exposure to COVID-19 impacts						
Household livelihood/income was impacted by COVID-19		X	X	X		
Household food security was impacted by COVID-19		X	X	X		

NOTES:
[1] Bivariate analysis of each type of activities/practice will be performed for each commodity separately.
Note: Results are provided for each RFSA area, in total and by county. Sampling weights included. Some variables may be omitted from the multivariate analyses to reduce multicollinearity.

5.6 Econometric Modeling

Based on the results of the bivariate analyses, indicators may be selected for additional econometric analyses. Multivariate regression models will include cluster fixed effects and key socio-economic and intervention-specific factors as covariates to explore whether intervention-specific factors may influence

the indicators, while controlling for background socio-economic factors and cluster-specific influences that are unrelated to the RFSA.

Appendix 1. Household weights

Household weights will be applied for household level indicators derived from modules C, F, H and R and included in the construction of individual weights for all other modules.[60]

Household design weights were calculated based on the separate sampling probabilities for each sampling stage and for each cluster (EA).

P_{1hi}= first-stage sampling probability[61] of the i-th cluster in stratum h

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

The probability of selecting cluster *i* in the sample is: $P_{1hi}= \frac{m_h \times N_{hi}}{N_h} \times b_{hi}$

The second-stage probability of selecting households in cluster *i* is: $P_{2hi} = \frac{n_{hi}}{L_{hi}}$

Where:

m_h= number of sample clusters selected in stratum h.

N_{hi}= total households in the frame for the i-th sample cluster in stratum h.

N_h= total households in the frame in stratum h.

b_{hi}= the number of selected segments divided by the total number of segments in the i-th sample cluster in stratum h

n_{hi} = number of sample households selected for the i-th sample cluster in stratum h.

L_{hi}= number of households listed in the household listing for the i-th sample cluster in stratum h.

The overall selection probability of each household in cluster *i* of stratum *h* is the product of the selection probabilities of the two (or three) stages:

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

[60] The sampling weight for poverty-related indicators is the household sampling weight adjusted by the household size.

[61] Given that the first stage sampling of EAs for the CRS areas was conducted in two phases (selection of sublocations followed by selection of EAs), the sampling weights for the first stage of probability of selection in the CRS areas will include two probabilities of selection - i.e., the probability of the sublocation being selected and the probability of the EA(s) within the sampled sublocation being selected. The sampling weights for the first stage of probability of selection in the Mercy Corps areas will only include one probability of selection - i.e., the probability of the EA being selected from the full list of EAs that correspond to all of the geographies in the Mercy Corps sampling frame. Refer to Annex 1a of the Study Protocol for details on the procedure followed for first stage sampling.

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

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

The household sampling weight is calculated using the household design weight corrected for household non-response in each of the selected clusters. Response rates are calculated at the cluster level as ratios of the number of interviewed households divided by the number of selected households. The household sampling weight is calculated by dividing the household design weight by the household response rate.

INDIVIDUAL WEIGHTS

Individual sampling weights will be applied for indicators derived from modules D (children), E (women of reproductive age), G (farmers), J (cash earners), K (women and men in a union). Since all eligible individuals will be selected for each module the probability of selecting eligible individuals within sampled households is always one. Therefore, the individual weights will consist of an individual non-response adjustment only. The individual nonresponse adjustment will be applied using the inverted proportion of the total number of completed interviews for each group divided by the total number of eligible individuals for each group. This non-response adjustment is calculated at the county level. The final individual weights will then be computed as the product of the household weights and the individual nonresponse adjustment.

Appendix 2. Methodology for estimating average yield from cattle, CAMEL, and goat production

The baseline study of the Bureau for Humanitarian Assistance Resilience Food Security Activities (RFSA) in Kenya (NAWIRI) provided estimates of average livestock yield (kilograms of offtake per head of livestock per producer) for targeted livestock commodities – namely, cattle, goat, and camel. Average livestock yield estimates were calculated based on the methodology prescribed in the Guide to Feed the Future Statistics. In lieu of self-reported estimates of livestock weight, which are prone to measurement error, this study utilized information on average live weight of livestock from secondary sources – namely, the Kenya Ministry of Agriculture, Livestock, Fisheries and Cooperatives' "Catalogue of Breeds" and FAO Domestic Animal Diversity Information System (DAD-IS). Secondary information on livestock weight was combined with self-reported information on total production and current herd size to estimate average yield per farmer in the RFSA areas. The following sections describes the study's approach to estimating average livestock weight and handling outliers in overall estimates of average yield.

Data on live weight of livestock by category were compiled for the most common breeds in the RFSA areas and were compared between the two sources. Data on average weight of livestock was usually reported for adult female and adult male livestock only, implying the need to impute weight for other categories of livestock (i.e., young stock, calves). Implementing partners were asked to review the compiled data and, if possible, provide input on average weight of livestock for categories with missing information. Based on the available data and feedback received from the partners, the following methodology was adopted to estimate average weight of livestock by category type:

1. Obtain the weight of male and female adult livestock for the most common breeds in the RFSA areas using the Kenya Ministry of Agriculture Catalogue;
2. Take the midpoint of the range for each breed;
3. Average the midpoint weight across breeds. This midpoint represents the average weight of the livestock category; and
4. Impute weight of young stock/calves were data were not available. Since weight data for young stock/calves were unavailable the weight for these categories of livestock were calculated based on the following assumptions: (a) cattle: young stock weigh approximately two-thirds the weight of adult livestock and calves weigh about one-fifth the weight of adult livestock; and (b) goats and camels: young stock weigh about one-half that of mature stock. See Table A1.1 – A1.3 for average weight of livestock by category.
5. Identify and remove outliers. Outliers, defined as cases where producer yield was less than 3 standard deviations (SD) below the county mean or more than 3 SD above the county mean, were excluded from the estimate. An alternative approach to trimming was also explored – namely, winsorizing at the 95th percentile. Given that results from the two approaches were fairly similar, yield estimates were reported based on the trimming approach, which is consistent with the methodology for handling outliers that is prescribed in the FTF guide.

Table A1.1 Weight of livestock by category: cattle

	Samburu Zebu		Somali Boran		Average across breeds		Estimated weight of young stock and calves			
	Adult female (kg)	Adult male (kg)	Adult female (kg)	Adult male (kg)	Adult female (kg)	Adult male (kg)	Young female stock (kg)	Young male stock (kg)	Female calves (kg)	Male calves (kg)
Minimum	120	150	150	200						
Maximum	200	250	250	400						
Average	160	200	200	300	180	250	120	167	24	33

Notes: Average weight of young stock and calves were estimated based on the following assumptions: (1) young stock weigh one-third that of mature stock and, (2) calves weigh one-fifth the weight of mature stock. Source: Kenya Livestock Breeds Catalogue 2019. Accessed at: https://kilimo.go.ke/wp-content/uploads/2021/07/CATALOGUE-BREEDS-PUBLISHED-VERSION.pdf .

Table A1.2 Weight of livestock by category: goats

	SEAG		Gala		Average across breeds		Estimated weight of young stock	
	Adult female (kg)	Adult male (kg)	Adult female (kg)	Adult male (kg)	Adult female (kg)	Adult male (kg)	Young female stock (kg)	Young male stock (kg)
Minimum	32	36	45	70				
Maximum	36	42	55	75				
Average	34	39	50	73	42	56	21	28

Notes: Average weight of young stock was estimated assuming tat young stock weigh one-half the weight of mature stock. Source: Kenya Livestock Breeds Catalogue 2019. Accessed at: https://kilimo.go.ke/wp-content/uploads/2021/07/CATALOGUE-BREEDS-PUBLISHED-VERSION.pdf.

Table A1.3 Weight of livestock by category: camels

	Somali	Gabbra	Rendille	Turkana	Average across breeds	Estimated weight of young stock
	Adult (kg)	Adult (kg)	Adult (kg)	Adult (kg)	Adult (kg)	Young stock (kg)
Minimum		300	300	250		
Maximum		550	500	500		
Average	450	425	400	375	413	206

Notes: Average weight of young stock was estimated assuming that young stock weigh about one-half the weight of mature stock. Source: Kenya Livestock Breeds Catalogue 2019. Accessed at: https://kilimo.go.ke/wp-content/uploads/2021/07/CATALOGUE-BREEDS-PUBLISHED-VERSION.pdf.

ANNEX E: BASELINE INDICATOR ESTIMATES

Annex E1: Tabular Summary of Baseline Indicator Estimates

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	88.4	85.7	91.1	3,873	174,049	28.8	1.4	2.9
Male and female adults	87.9	85.1	90.7	2,851	125,556	29.6	1.42	2.6
Adult female, no adult male	93.5	90.9	96.2	732	35,087	21.2	1.34	1.7
Adult male, no adult female	79.5	72.5	86.5	282	13,019	36.6	3.53	1.6
Child, no adults	^	^	^	8	387	^	^	^
Level of severity								
Moderate	37.8	36.3	39.3	3,873	174,049	22.9	0.77	2.1
Severe	50.6	47.9	53.4	3,873	174,049	29.3	1.4	2.9
Percentage of households with poor food consumption score (FCS)	29.8	25.8	33.9	3,875	174,087	45.8	2.03	2.8
Male and female adults	28.0	23.3	32.8	2,853	125,594	45.4	2.39	2.8
Adult female, no adult male	37.9	32.4	43.4	732	35,087	47.0	2.80	1.6
Adult male, no adult female	24.6	17.1	32.2	282	13,019	42.5	3.81	1.5
Child, no adults	^	^	^	8	387	^	^	^
Percentage of households with borderline FCS	19.3	17.3	21.3	3,875	174,087	39.5	1.01	1.6
Male and female adults	19.0	16.8	21.1	2,853	125,594	39.6	1.10	1.5
Adult female, no adult male	20.3	17.1	23.5	732	35,087	39.0	1.62	1.1
Adult male, no adult female	19.8	13.7	25.8	282	13,019	39.3	3.06	1.3
Child, no adults	^	^	^	8	387	^	^	^
Percentage of households with adequate FCS	50.8	46.9	54.8	3,875	174,087	50.0	2.00	2.5
Male and female adults	53.0	48.2	57.8	2,853	125,594	50.4	2.42	2.6
Adult female, no adult male	41.8	36.5	47.1	732	35,087	47.7	2.69	1.5
Adult male, no adult female	55.6	47.5	63.7	282	13,019	49.0	4.12	1.4
Child, no adults	^	^	^	8	387	^	^	^
Mean FCS	43.8	41.5	46.1	3,875	174,087	22.7	1.16	3.2
Male and female adults	45.1	42.4	47.8	2,853	125,594	23.2	1.39	3.2
Adult female, no adult male	38.2	35.9	40.6	732	35,087	19.4	1.18	1.6
Adult male, no adult female	46.9	41.9	52.0	282	13,019	24.4	2.54	1.7
Child, no adults	^	^	^	8	387	^	^	^
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	1.5	1.2	1.7	3,859	895,825	2.8	0.1	2.5
Male and female adults	1.5	1.2	1.7	2,846	733,363	2.6	0.12	2.4
Adult female, no adult male	1.1	0.9	1.3	726	137,182	2.0	0.09	1.2
Adult male, no adult female	3.3	2.4	4.1	279	23,991	10.1	0.43	0.7
Child, no adults	^	^	^	8	1,289	^	^	^
Prevalence of Poverty: Percent of people living on less thatn $1.90/day 2011 PPP	78.1	73.9	82.3	3,859	895,825	41.4	2.14	3.2
Male and female adults	77.9	73.5	82.3	2,846	733,363	39.3	2.22	3.0
Adult female, no adult male	83.4	79.3	87.5	726	137,182	41.2	2.06	1.3
Adult male, no adult female	51.3	40.2	62.4	279	23,991	82.1	5.60	1.1
Child, no adults	^	^	^	8	1,289	^	^	^

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	58.7	55.7	61.8	2,701	699,506	25.2	1.55	3.2
Male and female adults	58.2	54.9	61.4	2,091	571,529	23.7	1.67	3.2
Adult female, no adult male	62.2	59.0	65.4	522	114,421	23.8	1.61	1.5
Adult male, no adult female	52.6	42.7	62.5	81	12,303	34.7	5.01	1.3
Child, no adults	^	^	^	7	1,254	^	^	^
WASH INDICATORS								
Percent of households using basic drinking water services	6.2	4.4	8.0	3,844	173,168	24.1	0.9	2.4
On premise	1.8	1.1	2.5	3,844	173,168	13.4	0.4	1.7
≤ 30-minute roundtrip	4.4	2.8	6.0	3,844	173,168	20.5	0.8	2.4
Gendered household type								
Male and female adults	5.1	3.4	6.9	2,846	125,257	22.1	0.9	2.1
Adult female, no adult male	7.6	4.2	11.0	723	34,744	26.5	1.7	1.7
Adult male, no adult female	13.1	7.3	18.8	267	12,780	33.8	2.9	1.4
Child, no adults	^	^	^	8	387	^	^	^
Percent of households in target areas practicing correct use of recommended household water treatment technologies	10.3	8.6	12.0	3,887	174,545	30.4	0.9	1.8
Chlorination	3.6	2.6	4.6	3,887	174,545	18.7	0.50	1.7
Flocculant/Disinfectant	1.5	0.8	2.1	3,887	174,545	12.0	0.34	1.8
Filtration	1.2	0.7	1.7	3,887	174,545	10.8	0.25	1.5
Solar Disinfection	0.3	0.0	0.7	3,887	174,545	5.7	0.17	1.9
Boiling	4.7	3.5	6.0	3,887	174,545	21.3	0.6	1.9
Percentage of households with access to a basic sanitation service	7.0	4.7	9.3	3,887	174,545	25.5	1.18	2.9
Male and female adults	7.8	4.8	10.7	2,862	125,912	27.1	1.50	3.0
Adult female, no adult male	4.5	2.5	6.5	733	35,138	20.0	1.02	1.4
Adult male, no adult female	6.4	0.7	12.0	284	13,108	24.1	2.85	2.0
Child, no adults	^	^	^	8	387	^	^	^
Percent of households in target areas practicing open defecation	63.3	55.8	70.9	3,887	174,545	48.2	3.84	5.0
Male and female adults	64.3	56.8	71.7	2,862	125,912	48.4	3.77	4.2
Adult female, no adult male	67.9	58.9	76.9	733	35,138	45.2	4.55	2.7
Adult male, no adult female	41.4	31.1	51.8	284	13,108	48.6	5.23	1.8
Child, no adults	^	^	^	8	387	^	^	^
Percent of households with soap and water at a handwashing station on premises	45.2	36.3	54.0	386	16,444	49.8	4.44	1.7
Male and female adults	40.8	31.2	50.4	269	11,827	50.7	4.86	1.6
Adult female, no adult male	54.3	39.3	69.3	57	2,512	49.9	7.57	1.1
Adult male, no adult female	58.6	42.4	74.9	60	2,106	55.6	8.23	1.1
Child, no adults	NA	NA	NA		NA	NA	NA	NA

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	9.0	7.0	11.1	2,710	126,697	28.7	1.02	1.9
Male	10.1	7.9	12.3	1,620	71,424	31.0	1.13	1.5
Female	7.6	5.2	10.1	1,090	55,273	25.5	1.25	1.6
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	15.4	10.6	20.2	731	33,057	36.1	2.42	1.8
Male	15.1	9.9	20.3	485	20,318	38.3	2.63	1.5
Female	15.9	9.6	22.3	246	12,738	34.2	3.23	1.5
Percent of producers who have applied targeted improved management practices or technologies								
Greengrams	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Sorghum	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA	NA
Contract farming	NA	NA	NA	NA	NA	NA	NA	NA
Use of training and extension services	NA	NA	NA	NA	NA	NA	NA	NA
Selling products through community farmer associations	NA	NA	NA	NA	NA	NA	NA	NA
Improved bulking	NA	NA	NA	NA	NA	NA	NA	NA
Sorting and grading	NA	NA	NA	NA	NA	NA	NA	NA
Other improved practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	59.3	53.1	65.5	1,041	37,622	49.1	3.13	2.1
Sex								
Male	56.3	49.9	62.8	610	20,825	49.6	3.25	1.6
Female	63.0	55.8	70.3	431	16,797	48.3	3.63	1.6
Age								
15-29 years	63.5	54.5	72.6	184	6,899	48.3	4.52	1.3
30+ years	58.4	51.9	64.9	857	30,723	49.3	3.27	1.9
Use of improved livestock breeds/species	2.8	1.5	4.1	1,041	37,622	16.5	0.68	1.3
Use of livestock health services and products	23.1	18.0	28.2	1,041	37,622	42.2	2.56	2.0
Use of improved shelters	9.2	5.3	13.1	1,041	37,622	28.9	1.96	2.2
Use of improved calving techniques	1.7	0.3	3.0	1,041	37,622	12.9	0.68	1.7
Use of improved milking techniques	0.7	0.0	1.4	1,041	37,622	8.1	0.36	1.4
Use of more nutritious pasture varieties	2.6	1.2	4.1	1,041	37,622	16.1	0.71	1.4
Utilization of set grazing areas	22.8	17.9	27.6	1,041	37,622	41.9	2.45	1.9
Improved fodder production	1.4	0.3	2.5	1,041	37,622	11.6	0.55	1.5
Reseeding of degraded lands with drought resistant grass species	1.7	0.3	3.1	1,041	37,622	12.9	0.68	1.7

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Fencing off pasture plots	7.2	2.6	11.8	1,041	37,622	25.8	2.31	2.9
Rehabilitation of degraded grazing lands	1.3	0.3	2.2	1,041	37,622	11.2	0.47	1.3
Use of solarized boreholes for livestock	3.8	1.9	5.8	1,041	37,622	19.2	0.97	1.6
Use of water pans for livestock	7.7	5.3	10.1	1,041	37,622	26.6	1.21	1.5
Use of sand dams for livestock	4.6	2.8	6.4	1,041	37,622	20.9	0.92	1.4
Use of rock catchments for livestock	2.5	0.8	4.2	1,041	37,622	15.6	0.86	1.8
Goats (improved livestock management practices/technologies)	48.6	43.7	53.5	2,285	105,838	50.0	2.49	2.4
Sex								
Male	47.4	42.0	52.9	1,358	59,740	50.0	2.74	2.0
Female	50.1	44.5	55.6	927	46,097	50.0	2.82	1.7
Age								
15-29 years	52.0	46.0	57.9	412	18,446	50.0	3.00	1.2
30+ years	47.9	42.7	53.1	1,873	87,392	50.0	2.63	2.3
Use of improved livestock breeds/species	1.4	0.7	2.1	2,285	105,838	11.6	0.36	1.5
Use of livestock health services and products	12.8	9.2	16.3	2,285	105,838	33.4	1.80	2.6
Use of improved shelters	12.4	9.0	15.8	2,285	105,838	33.0	1.73	2.5
Use of improved calving techniques	0.0	0.0	0.1	2,285	105,838	2.0	0.04	1.0
Use of improved milking techniques	0.3	0.0	0.7	2,285	105,838	5.8	0.19	1.6
Use of more nutritious pasture varieties	2.1	1.3	2.9	2,285	105,838	14.4	0.40	1.3
Utilization of set grazing areas	19.9	16.7	23.2	2,285	105,838	40.0	1.64	2.0
Improved fodder production	0.7	0.2	1.3	2,285	105,838	8.5	0.27	1.5
Reseeding of degraded lands with drought resistant grass species	1.1	0.4	1.8	2,285	105,838	10.4	0.37	1.7
Fencing off pasture plots	3.2	1.6	4.9	2,285	105,838	17.6	0.83	2.3
Rehabilitation of degraded grazing lands	1.3	0.5	2.0	2,285	105,838	11.1	0.36	1.5
Use of solarized boreholes for livestock	2.9	1.6	4.1	2,285	105,838	16.7	0.61	1.7
Use of water pans for livestock	5.4	3.5	7.2	2,285	105,838	22.5	0.92	2.0
Use of sand dams for livestock	3.0	1.7	4.2	2,285	105,838	17.0	0.63	1.8
Use of rock catchments for livestock	2.0	0.9	3.0	2,285	105,838	13.9	0.55	1.9
Camels (improved livestock management practices/technologies)	43.0	36.7	49.3	808	30,670	49.5	3.15	1.8
Sex								
Male	43.1	37.3	48.9	507	17,861	49.6	2.91	1.3
Female	42.8	33.5	52.1	301	12,809	49.6	4.65	1.6
Age								
15-29 years	45.7	33.4	58.1	114	4,026	50.0	6.08	1.3
30+ years	42.5	36.3	48.8	694	26,644	49.5	3.15	1.7
Use of improved livestock breeds/species	0.5	0.0	0.9	808	30,670	6.8	0.24	1.0
Use of livestock health services and products	11.3	6.2	16.3	808	30,670	31.6	2.54	2.3
Use of improved shelters	7.9	3.4	12.3	808	30,670	26.9	2.24	2.4
Use of improved calving techniques	0.2	0.0	0.5	808	30,670	4.1	0.17	1.2
Use of improved milking techniques	0.4	0.0	0.8	808	30,670	6.2	0.20	0.9
Use of more nutritious pasture varieties	1.9	0.3	3.5	808	30,670	13.7	0.81	1.7
Utilization of set grazing areas	27.5	21.0	33.9	808	30,670	44.7	3.21	2.0

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved fodder production	0.5	0.0	1.3	808	30,670	7.4	0.37	1.4
Reseeding of degraded lands with drought resistant grass species	0.5	0.0	1.1	808	30,670	7.0	0.30	1.2
Fencing off pasture plots	4.7	0.0	9.4	808	30,670	21.2	2.35	3.2
Rehabilitation of degraded grazing lands	1.2	0.1	2.3	808	30,670	10.8	0.57	1.5
Use of solarized boreholes for livestock	5.8	2.8	8.7	808	30,670	23.3	1.49	1.8
Use of water pans for livestock	5.5	2.3	8.7	808	30,670	22.9	1.61	2.0
Use of sand dams for livestock	2.8	0.7	4.9	808	30,670	16.6	1.05	1.8
Use of rock catchments for livestock	3.0	1.1	4.8	808	30,670	17.0	0.94	1.6
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	14.6	12.3	17.0	984	34,000	22.7	1.19	1.6
Sex								
Male	16.2	13.6	18.9	574	18,815	23.5	1.32	1.3
Female	12.6	9.8	15.5	410	15,185	21.5	1.43	1.4
Age								
15-29 years	14.9	10.9	18.9	174	6,210	24.1	2.00	1.1
30+ years	14.6	12.1	17.1	810	27,790	22.3	1.25	1.6
Goats (kilogram of offtake per head of goat per producer)	6.1	5.3	6.9	2,238	94,313	7.1	0.41	2.7
Sex								
Male	6.5	5.8	7.3	1,329	53,159	6.9	0.38	2.0
Female	5.6	4.6	6.6	909	41,154	7.3	0.50	2.1
Age								
15-29 years	6.3	5.0	7.5	403	16,345	7.3	0.63	1.7
30+ years	6.1	5.3	6.9	1,835	77,968	7.0	0.40	2.4
Camels (kilogram of offtake per head of camel per producer)	13.2	10.4	16.0	779	26,811	31.4	1.41	1.2
Sex								
Male	12.9	9.1	16.8	487	15,611	30.3	1.94	1.4
Female	13.5	9.2	17.9	292	11,200	33.0	2.18	1.1
Age								
15-29 years	9.0	4.1	13.8	111	3,587	24.9	2.40	1.0
30+ years	13.8	10.8	16.9	668	23,223	32.3	1.53	1.2
Cow milk (liters per milking cow per day per producer)	1.4	1.1	1.7	121	4,126	1.2	0.14	1.3
Sex								
Male	1.3	0.9	1.7	76	2,557	1.2	0.18	1.3
Female	1.6	1.2	2.1	45	1,569	1.2	0.21	1.2
Age								
15-29 years	NA	NA	NA	28	831	NA	NA	NA
30+ years	1.4	1.1	1.8	93	3,295	1.2	0.17	1.3

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Camel milk (liters per milking camel per day per producer)	1.4	1.2	1.6	287	8,903	0.9	0.10	2.0
Sex								
Male	1.4	1.1	1.7	191	5,459	0.9	0.14	2.2
Female	1.4	1.2	1.6	96	3,445	0.9	0.11	1.2
Age								
15-29 years	1.5	1.2	1.9	35	901	0.8	0.16	1.2
30+ years	1.4	1.2	1.6	252	8,003	0.9	0.11	1.9
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	6.1	4.4	7.8	3,632	179,138	24.0	0.85	2.1
<19 years	5.3	3.0	7.6	764	32,911	24.0	1.18	1.4
19+ years	6.3	4.5	8.2	2,868	146,228	23.9	0.93	2.1
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	60.4	56.3	64.5	2,026	101,625	48.9	2.08	1.9
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	75.2	70.1	80.4	2,261	111,607	43.2	2.60	2.9
15-19 years	59.8	49.7	70.0	164	7,235	49.2	5.10	1.3
20-29 years	77.4	71.2	83.6	975	48,858	41.8	3.13	2.3
30-49 years	75.3	69.8	80.8	1,122	55,514	43.1	2.79	2.2
Percent of women in union who made decisions about modern family planning methods in the past 12 months	77.6	72.3	82.9	500	25,198	41.7	2.67	1.4
15-19	^	^	^	13	486	^	^	^
Alone	^	^	^	13	486	^	^	^
Jointly	^	^	^	13	486	^	^	^
20-29	73.7	65.9	81.5	258	13,598	44.1	3.94	1.4
Alone	33.7	27.9	39.4	258	13,598	47.4	2.89	1.0
Jointly	40.0	32.4	47.7	258	13,598	49.1	3.84	1.3
30-49	81.4	75.2	87.7	229	11,114	39.0	3.14	1.2
Alone	36.1	27.1	45.1	229	11,114	48.1	4.51	1.4
Jointly	45.3	35.2	55.5	229	11,114	49.9	5.10	1.5
Contraceptive prevalence rate (CPR)	25.0	20.8	29.2	1,941	95,320	43.3	2.12	2.2
Traditional	2.5	1.4	3.6	1,941	95,320	15.6	0.56	1.6
Modern	23.0	18.8	27.1	1,941	95,320	42.1	2.09	2.2
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	55.7	49.0	62.4	357	17,216	49.7	3.39	1.3
Male	53.8	44.6	62.9	173	8,239	49.5	4.64	1.2
Female	57.5	49.7	65.2	184	8,976	48.3	3.94	1.1
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	2.4	1.3	3.5	907	42,592	15.3	0.54	1.1
Male	2.4	0.9	3.9	476	22,610	15.2	0.76	1.1
Female	2.4	0.9	3.9	431	19,982	15.4	0.75	1.0
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	7.1	5.1	9.0	907	42,592	25.6	0.99	1.2
Male	7.1	4.6	9.6	476	22,610	25.6	1.26	1.1
Female	6.9	3.8	10.1	431	19,982	25.4	1.58	1.3

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	23.5	20.6	26.4	3,398	158,417	42.4	1.47	2.0
Male	24.6	20.7	28.6	1,752	81,234	43.2	2.00	1.9
Female	22.3	19.2	25.3	1,646	77,182	41.5	1.54	1.5
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	80.9	77.0	84.8	788	37,200	39.4	1.97	1.4
Male	82.5	77.9	87.0	413	20,007	37.5	2.30	1.2
Female	79.0	73.2	84.7	375	17,193	40.9	2.90	1.4
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	25.2	20.8	29.6	2,719	128,158	43.4	2.22	2.7
15-19 years	12.3	5.3	19.4	173	7,390	34.9	3.58	1.4
20-29 years	23.5	18.6	28.4	1,013	48,595	42.1	2.49	1.9
30-49 years	30.3	24.9	35.7	1,156	54,737	46.3	2.74	2.0
≥50 years	19.0	13.3	24.7	377	17,436	40.0	2.87	1.4
Male	42.5	36.3	48.7	2,628	128,429	49.4	3.15	3.3
15-19 years	^	^	^	23	959	^	^	^
20-29 years	56.8	47.7	65.9	381	21,526	45.7	4.60	2.0
30-49 years	48.2	41.9	54.5	1,371	65,717	50.1	3.20	2.4
≥50 years	26.3	19.8	32.8	853	40,227	44.5	3.30	2.2
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	82.0	77.1	86.9	477	30,270	38.5	2.46	1.4
15-19 years	^	^	^	14	860	^	^	^
20-29 years	82.5	75.2	89.9	165	10,899	32.3	3.71	1.5
30-49 years	81.4	75.3	87.5	252	15,634	34.7	3.10	1.4
≥50 years	82.1	69.0	95.2	46	2,877	33.8	6.63	1.3
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	32.9	26.7	39.2	477	30,270	47.1	3.17	1.5
15-19 years	^	^	^	14	860	^	^	^
20-29 years	37.4	27.8	47.0	165	10,899	41.2	4.84	1.5
30-49 years	32.2	25.8	38.6	252	15,634	41.7	3.22	1.2
≥50 years	20.6	7.5	33.8	46	2,877	35.6	6.65	1.3
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	48.9	43.9	53.9	897	47,952	50.0	2.52	1.5
15-19 years	^	^	^	2	57	^	^	^
20-29 years	53.8	46.5	61.0	174	10,555	44.2	3.65	1.1
30-49 years	47.2	40.4	54.1	557	28,486	48.7	3.47	1.7
≥50 years	48.8	36.4	61.3	164	8,853	47.4	6.30	1.7

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	38.4	33.6	43.1	2,611	118,767	48.6	2.40	2.5
15-19 years	36.8	24.5	49.1	166	6,714	51.6	6.2	1.6
20-29 years	39.9	34.5	45.4	970	45,244	48.5	2.74	1.8
30-49 years	38.7	33.4	43.9	1,116	50,878	49.0	2.66	1.8
≥50 years	33.8	25.5	42.2	359	15,931	48.4	4.21	1.6
Male	32.4	27.9	36.9	2,390	112,739	46.8	2.28	2.4
15-19 years	^	^	^	20	784	^	^	^
20-29 years	38.0	28.6	47.4	345	18,513	45.0	4.74	2.0
30-49 years	32.8	27.9	37.7	1,262	58,898	46.9	2.47	1.9
≥50 years	29.3	23.2	35.3	763	34,544	46.1	3.07	1.8
Percent of women/men in a union with access to credit								
Female	31.2	27.4	34.9	2,611	118,767	46.3	1.92	2.1
15-19 years	21.3	14.3	28.4	166	6,714	43.8	3.6	1.0
20-29 years	33.5	28.0	39.0	970	45,244	46.8	2.79	1.9
30-49 years	32.7	28.3	37.1	1,116	50,878	47.2	2.23	1.6
≥50 years	23.7	18.0	29.4	359	15,931	43.5	2.88	1.3
Male	31.9	28.1	35.7	2,390	112,739	46.6	1.91	2.0
15-19 years	^	^	^	20	784	^	^	^
20-29 years	35.0	29.5	40.4	345	18,513	44.3	2.76	1.2
30-49 years	35.3	30.9	39.6	1,262	58,898	47.7	2.21	1.6
≥50 years	25.0	20.6	29.3	763	34,544	43.8	2.19	1.4
Percent of women/men in a union who make decisions about credit								
Female	77.5	73.3	81.6	859	37,006	41.8	2.11	1.5
15-19	64.8	47.5	82.2	39	1,431	48.4	8.47	1.1
Alone	18.5	6.8	30.3	39	1,431	39.4	5.74	0.9
Jointly	46.3	25.0	67.7	39	1,431	50.5	10.42	1.3
20-29	78.2	72.0	84.4	336	15,162	41.4	3.15	1.4
Alone	34.5	29.1	39.8	336	15,162	47.6	2.70	1.0
Jointly	43.7	36.6	50.8	336	15,162	49.7	3.57	1.3
30-49	78.3	72.9	83.7	386	16,634	41.3	2.73	1.3
Alone	41.8	35.2	48.4	386	16,634	49.4	3.33	1.3
Jointly	36.5	29.6	43.5	386	16,634	48.2	3.49	1.4
≥50 years	75.5	64.3	86.8	98	3,780	43.2	5.64	1.3
Alone	37.6	23.0	52.1	98	3,780	48.7	7.26	1.5
Jointly	38.0	24.0	51.9	98	3,780	48.8	6.98	1.4
Male	81.7	77.6	85.8	805	35,978	38.7	2.06	1.5
15-19	^	^	^	3	101	^	^	^
Alone	^	^	^	3	101	^	^	^
Jointly	^	^	^	3	101	^	^	^
20-29	83.6	75.5	91.7	128	6,475	37.1	4.06	1.2

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Alone	43.4	30.0	56.8	128	6,475	49.8	6.73	1.5
Jointly	40.2	29.7	50.8	128	6,475	49.2	5.29	1.2
30-49	85.5	81.3	89.8	453	20,780	35.2	2.15	1.3
Alone	43.2	36.7	49.7	453	20,780	49.6	3.27	1.4
Jointly	42.3	35.9	48.8	453	20,780	49.5	3.26	1.4
≥50 years	71.4	63.5	79.3	221	8,622	45.3	3.98	1.3
Alone	29.4	20.9	37.9	221	8,622	45.7	4.29	1.4
Jointly	42.0	32.6	51.4	221	8,622	49.5	4.71	1.4
RESILIENCE-RELATED								
Adaptive Capacity Index	33.2	31.0	35.4	3,875	174,257	15.4	1.12	4.5
Absorptive Capacity Index	33.9	32.2	35.5	3,876	174,308	15.6	0.84	3.4
Transformative Capacity Index	37.3	32.9	41.6	3,880	174,457	22.2	2.19	6.1
Ability to recover from shocks and stresses index	3.7	3.7	3.8	3,427	155,339	1.3	0.05	2.1
Male and female adults	3.7	3.6	3.8	2,530	112,045	1.3	0.05	1.8
Adult female, no adult male	3.7	3.6	3.9	634	31,239	1.1	0.07	1.6
Adult male, no adult female	3.7	3.5	4.0	257	11,755	1.3	0.11	1.4
Child, no adults	^	^	^	6	300	^	^	^
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	5.6	4.1	7.1	3,880	174,457	23.0	0.78	2.1
Savings	3.9	2.6	5.2	3,880	174,457	19.4	0.65	2.1
Male and female adults	4.0	2.7	5.2	2,857	125,848	19.7	0.62	1.7
Adult female, no adult male	2.7	1.4	4.1	733	35,166	15.7	0.68	1.2
Adult male, no adult female	6.9	2.4	11.4	282	13,056	24.9	2.27	1.5
Child, no adults	^	^	^	8	387	^	^	^
Credit (including microfinance)	3.0	2.1	3.8	3,880	174,457	17.0	0.44	1.6
Male and female adults	3.3	2.2	4.3	2,857	125,848	18.0	0.53	1.6
Adult female, no adult male	1.7	0.6	2.8	733	35,166	12.5	0.54	1.2
Adult male, no adult female	3.4	1.2	5.7	282	13,056	18.0	1.14	1.1
Child, no adults	^	^	^	8	387	^	^	^
Index of social capital at the household level								
Overall index	67.0	64.8	69.2	3,881	174,473	24.7	1.11	2.8
Male and female adults	67.9	65.7	70.0	2,857	125,848	24.6	1.08	2.3
Adult female, no adult male	65.6	62.8	68.4	733	35,166	24.4	1.40	1.6
Adult male, no adult female	62.7	58.3	67.2	283	13,072	25.3	2.27	1.5
Child, no adults	^	^	^	8	387	^	^	^

Table A1.1. BHA Kenya Baseline Indicators - Combined RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Bonding sub-index	67.5	65.3	69.8	3,881	174,473	26.0	1.13	2.7
Male and female adults	68.5	66.2	70.7	2,857	125,848	26.0	1.13	2.3
Adult female, no adult male	65.6	62.3	68.9	733	35,166	25.8	1.66	1.7
Adult male, no adult female	64.0	60.7	67.2	283	13,072	25.7	1.63	1.1
Child, no adults	^	^	^	8	387	^	^	^
Bridging sub-index	66.5	64.1	68.8	3,881	174,473	27.1	1.20	2.8
Male and female adults	67.3	65.0	69.6	2,857	125,848	26.8	1.15	2.3
Adult female, no adult male	65.6	62.9	68.2	733	35,166	26.5	1.34	1.4
Adult male, no adult female	61.5	54.7	68.3	283	13,072	30.3	3.44	1.9
Child, no adults	^	^	^	8	387	^	^	^

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	87.0	84.1	90.0	1,974	51,322	28.9	1.5	2.3
Male and female adults	86.9	83.7	90.0	1,550	40,994	28.6	1.57	2.2
Adult female, no adult male	90.8	87.6	93.9	305	7,730	24.5	1.57	1.1
Adult male, no adult female	78.3	61.7	94.8	118	2,577	41.0	8.28	2.2
Child, no adults	^	^	^	1	20	^	^	^
Level of severity								
Moderate	51.5	48.5	54.6	1,974	51,322	27.7	1.53	2.5
Severe	35.5	32.3	38.7	1,974	51,322	29.2	1.6	2.4
Percentage of households with poor food consumption score (FCS)	11.6	8.4	14.9	1,976	51,359	32.1	1.62	2.2
Male and female adults	10.9	7.8	14.0	1,552	41,032	30.9	1.55	2.0
Adult female, no adult male	16.5	8.8	24.2	305	7,730	37.6	3.86	1.8
Adult male, no adult female	9.6	2.8	16.3	118	2,577	32.1	3.39	1.1
Child, no adults	^	^	^	1	20	^	^	^
Percentage of households with borderline FCS	15.9	13.6	18.2	1,976	51,359	36.6	1.15	1.4
Male and female adults	15.8	13.4	18.1	1,552	41,032	36.1	1.19	1.3
Adult female, no adult male	16.0	11.5	20.5	305	7,730	37.2	2.25	1.1
Adult male, no adult female	17.1	8.4	25.8	118	2,577	41.1	4.36	1.2
Child, no adults	^	^	^	1	20	^	^	^
Percentage of households with adequate FCS	72.5	68.1	76.8	1,976	51,359	44.7	2.17	2.2
Male and female adults	73.4	68.9	77.8	1,552	41,032	43.8	2.23	2.0
Adult female, no adult male	67.5	59.6	75.4	305	7,730	47.4	3.97	1.5
Adult male, no adult female	73.3	62.1	84.5	118	2,577	48.3	5.61	1.3
Child, no adults	^	^	^	1	20	^	^	^
Mean FCS	53.5	51.2	55.8	1,976	51,359	19.8	1.15	2.6
Male and female adults	53.9	51.6	56.2	1,552	41,032	19.3	1.17	2.4
Adult female, no adult male	50.4	46.8	53.9	305	7,730	20.6	1.77	1.5
Adult male, no adult female	56.7	47.3	66.1	118	2,577	24.6	4.71	2.1
Child, no adults	^	^	^	1	20	^	^	^
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	1.8	1.5	2.1	1,959	279,083	3.1	0.1	2.1
Male and female adults	1.8	1.4	2.1	1,542	243,592	3.1	0.16	2.1
Adult female, no adult male	1.6	1.4	1.8	300	30,872	2.1	0.11	0.9
Adult male, no adult female	2.7	2.1	3.4	116	4,578	4.4	0.33	0.8
Child, no adults	^	^	^	1	40	^	^	^
Prevalence of Poverty: Percent of people living on less thatn $1.90/day 2011 PPP	72.6	67.2	77.9	1,959	279,083	44.6	2.68	2.7
Male and female adults	73.4	67.8	79.0	1,542	243,592	41.9	2.79	2.6
Adult female, no adult male	70.5	64.0	77.1	300	30,872	53.7	3.27	1.1
Adult male, no adult female	42.2	26.0	58.5	116	4,578	93.9	8.13	0.9
Child, no adults	^	^	^	1	40	^	^	^

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	45.8	42.6	49.0	1,308	202,531	22.6	1.59	2.6
Male and female adults	46.2	42.8	49.5	1,087	178,783	21.1	1.69	2.6
Adult female, no adult male	43.4	39.4	47.4	190	21,775	23.6	1.98	1.2
Adult male, no adult female	40.7	29.1	52.4	30	1,934	34.5	5.83	0.9
Child, no adults	^	^	^	1	40	^	^	^
WASH INDICATORS								
Percent of households using basic drinking water services	4.7	2.3	7.2	1,953	50,909	21.2	1.2	2.5
On premise	1.6	0.9	2.4	1,953	50,909	12.7	0.4	1.3
≤ 30-minute roundtrip	3.1	1.1	5.1	1,953	50,909	17.4	1.0	2.6
Gendered household type								
Male and female adults	4.0	1.7	6.3	1,544	40,819	19.6	1.1	2.3
Adult female, no adult male	5.7	1.6	9.9	301	7,624	23.3	2.1	1.6
Adult male, no adult female	14.3	6.8	21.8	107	2,446	35.2	3.7	1.1
Child, no adults	^	^	^	1	20	^	^	^
Percent of households in target areas practicing correct use of recommended household water treatment technologies	9.5	6.5	12.5	1,979	51,436	29.3	1.5	2.3
Chlorination	4.8	2.7	7.0	1,979	51,436	21.5	1.09	2.2
Flocculant/Disinfectant	0.9	0.3	1.5	1,979	51,436	9.7	0.30	1.4
Filtration	1.5	0.5	2.5	1,979	51,436	12.1	0.49	1.8
Solar Disinfection	0.2	0.0	0.7	1,979	51,436	5.0	0.21	1.8
Boiling	3.3	2.0	4.6	1,979	51,436	17.8	0.6	1.6
Percentage of households with access to a basic sanitation service	7.8	4.9	10.7	1,979	51,436	26.9	1.44	2.4
Male and female adults	8.5	5.1	12.0	1,554	41,093	27.7	1.73	2.5
Adult female, no adult male	5.3	2.3	8.3	305	7,730	22.7	1.48	1.1
Adult male, no adult female	4.3	0.6	7.9	119	2,593	22.1	1.83	0.9
Child, no adults	^	^	^	1	20	^	^	^
Percent of households in target areas practicing open defecation	57.1	48.3	66.0	1,979	51,436	49.5	4.42	4.0
Male and female adults	57.7	48.6	66.8	1,554	41,093	49.0	4.54	3.7
Adult female, no adult male	58.0	46.6	69.3	305	7,730	50.0	5.69	2.0
Adult male, no adult female	45.5	27.6	63.4	119	2,593	54.4	8.97	1.8
Child, no adults	^	^	^	1	20	^	^	^
Percent of households with soap and water at a handwashing station on premises	33.6	16.4	50.7	163	4,282	47.4	8.45	2.3
Male and female adults	28.8	10.1	47.4	110	3,302	41.8	9.35	2.3
Adult female, no adult male	^	^	^	24	614	^	^	^
Adult male, no adult female	^	^	^	29	366	^	^	^
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	10.0	7.0	13.0	1,490	43,841	30.0	1.52	2.0
Male	10.3	7.5	13.0	984	28,191	30.8	1.37	1.4
Female	9.5	5.0	13.9	506	15,649	28.6	2.23	1.8
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	20.1	12.6	27.5	441	13,779	40.1	3.72	2.0
Male	20.1	11.4	28.8	326	9,889	40.3	4.36	2.0
Female	20.0	11.0	29.0	115	3,890	37.2	4.52	1.3
Percent of producers who have applied targeted improved management practices or technologies								
Greengrams	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Sorghum	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA	NA
Contract farming	NA	NA	NA	NA	NA	NA	NA	NA
Use of training and extension services	NA	NA	NA	NA	NA	NA	NA	NA
Selling products through community farmer associations	NA	NA	NA	NA	NA	NA	NA	NA
Improved bulking	NA	NA	NA	NA	NA	NA	NA	NA
Sorting and grading	NA	NA	NA	NA	NA	NA	NA	NA
Other improved practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	49.6	41.7	57.5	601	16,606	50.0	3.92	1.9
Sex								
Male	46.2	38.4	53.9	391	10,571	49.9	3.86	1.5
Female	55.7	44.6	66.8	210	6,035	49.8	5.48	1.6
Age								
15-29 years	58.5	44.6	72.4	84	2,354	49.6	6.79	1.3
30+ years	48.2	39.8	56.5	517	14,252	50.0	4.14	1.9
Use of improved livestock breeds/species	1.3	0.5	2.2	601	16,606	11.4	0.42	0.9
Use of livestock health services and products	11.1	4.6	17.6	601	16,606	31.4	3.23	2.5
Use of improved shelters	3.9	1.9	5.9	601	16,606	19.4	0.99	1.3
Use of improved calving techniques	2.4	0.0	4.8	601	16,606	15.2	1.23	2.0
Use of improved milking techniques	0.4	0.0	1.0	601	16,606	6.5	0.30	1.1
Use of more nutritious pasture varieties	2.5	0.3	4.7	601	16,606	15.6	1.10	1.7
Utilization of set grazing areas	32.8	25.9	39.6	601	16,606	47.0	3.40	1.8
Improved fodder production	1.3	0.4	2.2	601	16,606	11.4	0.44	0.9
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Fencing off pasture plots	1.2	0.0	2.3	601	16,606	10.7	0.55	1.3
Rehabilitation of degraded grazing lands	1.7	0.1	3.3	601	16,606	12.9	0.80	1.5
Use of solarized boreholes for livestock	6.1	3.2	9.0	601	16,606	23.9	1.44	1.5
Use of water pans for livestock	4.3	2.0	6.7	601	16,606	20.4	1.17	1.4
Use of sand dams for livestock	3.2	1.3	5.2	601	16,606	17.7	0.97	1.3
Use of rock catchments for livestock	3.1	0.8	5.5	601	16,606	17.5	1.17	1.6
Goats (improved livestock management practices/technologies)	53.8	47.9	59.7	1,332	39,444	49.9	2.97	2.2
Sex								
Male	52.1	46.2	58.0	858	24,772	50.0	2.96	1.7
Female	56.6	48.5	64.8	474	14,673	49.6	4.08	1.8
Age								
15-29 years	58.6	50.9	66.4	214	6,400	49.4	3.86	1.1
30+ years	52.9	46.9	58.9	1,118	33,044	49.9	3.01	2.0
Use of improved livestock breeds/species	1.5	0.3	2.6	1,332	39,444	12.0	0.56	1.7
Use of livestock health services and products	11.5	4.2	18.9	1,332	39,444	32.0	3.66	4.2
Use of improved shelters	5.2	2.4	8.0	1,332	39,444	22.2	1.39	2.3
Use of improved calving techniques	0.0	NA	NA	1,332	39,444	0.0	NA	0.0
Use of improved milking techniques	0.5	0.0	1.0	1,332	39,444	6.8	0.26	1.4
Use of more nutritious pasture varieties	3.4	1.9	4.9	1,332	39,444	18.0	0.75	1.5
Utilization of set grazing areas	31.5	25.3	37.7	1,332	39,444	46.5	3.09	2.4
Improved fodder production	1.6	0.3	2.9	1,332	39,444	12.6	0.65	1.9
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	2.3	0.9	3.7	1,332	39,444	14.9	0.70	1.7
Rehabilitation of degraded grazing lands	1.9	0.6	3.1	1,332	39,444	13.5	0.63	1.7
Use of solarized boreholes for livestock	6.3	3.6	9.1	1,332	39,444	24.4	1.39	2.1
Use of water pans for livestock	6.5	3.4	9.5	1,332	39,444	24.6	1.51	2.2
Use of sand dams for livestock	5.1	2.4	7.8	1,332	39,444	22.0	1.36	2.3
Use of rock catchments for livestock	2.4	0.9	3.9	1,332	39,444	15.3	0.77	1.8
Camels (improved livestock management practices/technologies)	54.0	46.0	62.1	669	21,048	49.9	3.98	2.1
Sex								
Male	50.8	43.6	57.9	441	13,426	50.1	3.53	1.5
Female	59.7	47.9	71.6	228	7,621	49.2	5.83	1.8
Age								
15-29 years	61.1	48.1	74.0	88	2,761	49.0	6.31	1.2
30+ years	53.0	44.7	61.2	581	18,287	50.0	4.06	2.0
Use of improved livestock breeds/species	0.7	0.0	1.4	669	21,048	8.2	0.34	1.1
Use of livestock health services and products	8.4	1.9	14.9	669	21,048	27.8	3.24	3.0
Use of improved shelters	5.2	1.3	9.1	669	21,048	22.2	1.92	2.2
Use of improved calving techniques	0.2	0.0	0.7	669	21,048	5.0	0.24	1.3
Use of improved milking techniques	0.6	0.0	1.2	669	21,048	7.5	0.30	1.0
Use of more nutritious pasture varieties	2.8	0.5	5.1	669	21,048	16.5	1.16	1.8
Utilization of set grazing areas	35.6	27.8	43.5	669	21,048	47.9	3.89	2.1

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved fodder production	0.8	0.0	1.9	669	21,048	8.9	0.54	1.6
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	1.8	0.0	3.8	669	21,048	13.3	1.01	2.0
Rehabilitation of degraded grazing lands	1.2	0.0	2.6	669	21,048	11.1	0.65	1.5
Use of solarized boreholes for livestock	8.0	3.9	12.1	669	21,048	27.1	2.03	1.9
Use of water pans for livestock	6.5	2.0	11.0	669	21,048	24.7	2.21	2.3
Use of sand dams for livestock	3.5	0.5	6.5	669	21,048	18.3	1.49	2.1
Use of rock catchments for livestock	2.8	0.8	4.7	669	21,048	16.4	0.98	1.5
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	14.8	11.7	17.9	564	15,074	22.3	1.54	1.6
Sex								
Male	15.7	11.9	19.5	367	9,624	23.1	1.89	1.6
Female	13.2	9.3	17.1	197	5,450	20.8	1.94	1.3
Age								
15-29 years	14.6	8.1	21.1	80	2,163	24.2	3.19	1.2
30+ years	14.9	11.4	18.3	484	12,911	22.0	1.73	1.7
Goats (kilogram of offtake per head of goat per producer)	7.9	7.2	8.7	1,304	35,479	7.1	0.38	1.9
Sex								
Male	8.2	7.4	9.0	840	22,337	6.9	0.40	1.7
Female	7.5	6.3	8.7	464	13,142	7.4	0.59	1.7
Age								
15-29 years	7.2	6.2	8.3	208	5,677	7.3	0.54	1.1
30+ years	8.0	7.3	8.8	1,096	29,802	7.1	0.39	1.8
Camels (kilogram of offtake per head of camel per producer)	14.6	11.5	17.8	644	18,430	31.4	1.56	1.3
Sex								
Male	14.3	10.5	18.1	423	11,678	30.1	1.90	1.3
Female	15.1	11.4	18.9	221	6,752	33.5	1.85	0.8
Age								
15-29 years	12.9	6.5	19.4	85	2,436	29.3	3.15	1.0
30+ years	14.9	11.4	18.3	559	15,994	31.7	1.72	1.3
Cow milk (liters per milking cow per day per producer)	1.0	0.8	1.2	68	1,912	0.9	0.10	0.9
Sex								
Male	0.9	0.6	1.3	49	1,375	0.9	0.16	1.2
Female	^	^	^	19	537	^	^	^
Age								
15-29 years	^	^	^	15	338	^	^	^
30+ years	0.9	0.7	1.1	53	1,574	0.8	0.09	0.9

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Camel milk (liters per milking camel per day per producer)	1.2	1.0	1.5	250	6,639	0.8	0.11	2.1
Sex								
Male	1.2	0.9	1.5	172	4,439	0.8	0.13	2.2
Female	1.3	1.1	1.4	78	2,201	0.8	0.07	0.8
Age								
15-29 years	1.4	1.1	1.8	31	775	0.7	0.16	1.2
30+ years	1.2	1.0	1.4	219	5,864	0.8	0.11	2.0
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	7.4	4.9	9.9	1,965	56,548	26.3	1.25	2.1
<19 years	7.0	3.8	10.2	468	12,478	26.6	1.60	1.3
19+ years	7.6	4.7	10.4	1,497	44,070	26.2	1.42	2.1
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	62.8	57.7	67.9	1,073	31,393	48.4	2.54	1.7
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	75.8	69.9	81.7	1,209	35,395	42.9	2.94	2.4
15-19 years	58.2	46.3	70.0	93	2,525	49.6	5.87	1.1
20-29 years	74.7	67.9	81.4	483	13,982	43.5	3.37	1.7
30-49 years	78.9	72.7	85.2	633	18,888	40.8	3.12	1.9
Percent of women in union who made decisions about modern family planning methods in the past 12 months	83.9	76.9	90.9	223	6,274	36.8	3.47	1.4
15-19	^	^	^	8	213	^	^	^
Alone	^	^	^	8	213	^	^	^
Jointly	^	^	^	8	213	^	^	^
20-29	81.9	72.9	91.0	111	2,956	38.7	4.48	1.2
Alone	12.4	5.8	18.9	111	2,956	33.1	3.27	1.0
Jointly	69.6	59.9	79.2	111	2,956	46.2	4.80	1.1
30-49	84.7	75.8	93.6	104	3,105	36.2	4.40	1.2
Alone	24.3	11.5	37.2	104	3,105	43.1	6.35	1.5
Jointly	60.3	44.2	76.4	104	3,105	49.2	7.97	1.7
Contraceptive prevalence rate (CPR)	21.8	17.3	26.3	1,046	30,451	41.3	2.25	1.8
Traditional	4.7	2.1	7.2	1,046	30,451	21.1	1.29	2.0
Modern	17.8	13.6	22.0	1,046	30,451	38.2	2.10	1.8
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	52.0	41.8	62.2	160	4,156	50.1	5.10	1.3
Male	48.9	37.4	60.4	88	2,265	51.2	5.77	1.1
Female	55.7	40.2	71.2	72	1,891	50.3	7.77	1.3
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	3.5	1.4	5.5	477	12,884	18.3	1.04	1.2
Male	3.3	0.9	5.7	251	6,838	17.9	1.18	1.1
Female	3.6	0.3	7.0	226	6,046	18.7	1.68	1.3
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	7.8	4.4	11.3	477	12,884	26.9	1.71	1.4
Male	8.1	4.3	11.9	251	6,838	27.2	1.89	1.1
Female	7.5	2.6	12.5	226	6,046	26.5	2.47	1.4

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	20.1	15.6	24.6	1,735	46,848	40.1	2.26	2.4
Male	19.9	14.9	24.9	914	24,598	40.0	2.50	1.9
Female	20.2	15.1	25.4	821	22,249	40.1	2.59	1.8
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	85.9	81.7	90.1	368	9,408	34.8	2.10	1.2
Male	86.6	80.2	93.0	192	4,905	34.9	3.21	1.3
Female	85.2	79.1	91.3	176	4,503	36.3	3.04	1.1
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	9.5	6.7	12.3	1,468	42,760	29.3	1.41	1.8
15-19 years	3.7	0.0	7.9	99	2,636	19.7	2.11	1.1
20-29 years	6.5	3.8	9.2	502	14,503	24.7	1.37	1.2
30-49 years	13.6	9.1	18.2	652	19,488	33.6	2.29	1.7
≥50 years	6.0	2.6	9.3	215	6,133	23.8	1.67	1.0
Male	30.7	25.2	36.2	1,443	41,011	46.1	2.78	2.3
15-19 years	^	^	^	10	295	^	^	^
20-29 years	40.3	29.0	51.6	162	4,079	52.4	5.68	1.4
30-49 years	37.6	30.7	44.6	760	22,094	47.9	3.49	2.0
≥50 years	17.8	13.6	22.1	511	14,543	38.5	2.11	1.2
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	85.8	79.2	92.5	127	3,674	35.0	3.29	1.1
15-19 years	^	^	^	3	^	^	^	^
20-29 years	78.9	65.1	92.6	34	891	42.9	6.89	0.9
30-49 years	88.4	81.0	95.8	80	2,424	30.9	3.70	1.1
≥50 years	^	^	^	10	262	^	^	^
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	45.0	33.6	56.4	127	3,674	49.9	5.65	1.3
15-19 years	^	^	^	3	98	^	^	^
20-29 years	46.4	27.3	65.5	34	891	52.4	9.57	1.1
30-49 years	48.2	34.8	61.5	80	2,424	48.3	6.69	1.2
≥50 years	^	^	^	10	262	^	^	^
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use	54.5	48.0	61.0	412	11,722	49.9	3.22	1.3
15-19 years	^	^	^	1	38	^	^	^
20-29 years	58.0	43.6	72.4	58	1,489	52.4	7.20	1.0
30-49 years	52.7	44.6	60.8	265	7,772	49.1	4.05	1.3
≥50 years	59.0	45.6	72.4	88	2,423	50.3	6.72	1.3

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	33.7	29.0	38.5	1,423	38,808	47.3	2.39	1.9
15-19 years	28.0	16.6	39.3	96	2,405	47.3	5.7	1.2
20-29 years	33.8	27.8	39.7	486	13,176	48.1	2.99	1.4
30-49 years	35.3	29.0	41.7	636	17,768	47.4	3.19	1.7
≥50 years	30.9	23.6	38.2	205	5,459	47.1	3.65	1.1
Male	28.2	23.6	32.8	1,333	37,897	45.0	2.28	1.9
15-19 years	^	^	^	10	300	^	^	^
20-29 years	27.2	16.7	37.7	148	3,721	47.0	5.25	1.4
30-49 years	28.2	22.4	33.9	707	20,543	44.0	2.89	1.7
≥50 years	28.6	23.1	34.1	468	13,332	44.8	2.76	1.3
Percent of women/men in a union with access to credit								
Female	36.4	31.4	41.4	1,423	38,808	48.1	2.50	2.0
15-19 years	22.4	13.7	31.1	96	2,405	43.9	4.4	1.0
20-29 years	38.6	31.5	45.8	486	13,176	49.5	3.59	1.6
30-49 years	37.5	31.9	43.2	636	17,768	48.0	2.82	1.5
≥50 years	33.2	26.2	40.2	205	5,459	48.0	3.52	1.0
Male	35.4	30.4	40.4	1,333	37,897	47.8	2.50	1.9
15-19 years	^	^	^	10	300	^	^	^
20-29 years	37.4	29.3	45.6	148	3,721	51.1	4.09	1.0
30-49 years	36.4	29.5	43.2	707	20,543	47.1	3.44	1.9
≥50 years	33.6	28.1	39.0	468	13,332	46.8	2.74	1.3
Percent of women/men in a union who make decisions about credit								
Female	75.6	69.1	82.1	501	14,110	43.0	3.24	1.7
15-19	^	^	^	21	538	^	^	^
Alone	^	^	^	21	538	^	^	^
Jointly	^	^	^	21	538	^	^	^
20-29	77.6	69.8	85.3	183	5,089	41.8	3.88	1.3
Alone	30.6	21.1	40.0	183	5,089	46.2	4.71	1.4
Jointly	47.0	35.0	59.0	183	5,089	50.0	6.01	1.6
30-49	75.8	67.4	84.3	230	6,669	42.9	4.23	1.5
Alone	34.1	24.8	43.5	230	6,669	47.5	4.67	1.5
Jointly	41.7	29.6	53.8	230	6,669	49.4	6.05	1.9
≥50 years	74.3	61.6	87.0	67	1,813	44.0	6.27	1.2
Alone	34.2	21.2	47.2	67	1,813	47.8	6.42	1.1
Jointly	40.1	28.9	51.3	67	1,813	49.4	5.55	0.9
Male	74.9	67.8	82.1	463	13,420	43.4	3.57	1.8
15-19	^	^	^	2	81	^	^	^
Alone	^	^	^	2	81	^	^	^
Jointly	^	^	^	2	81	^	^	^
20-29	74.9	59.5	90.3	57	1,394	43.8	7.58	1.3

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Alone	40.1	25.3	54.9	57	1,394	49.4	7.28	1.1
Jointly	34.8	21.5	48.1	57	1,394	48.1	6.55	1.0
30-49	80.1	73.8	86.5	251	7,470	40.0	3.18	1.3
Alone	33.6	26.5	40.8	251	7,470	47.3	3.59	1.2
Jointly	46.5	37.2	55.8	251	7,470	50.0	4.64	1.5
≥50 years	66.8	56.7	76.9	153	4,476	47.2	5.05	1.3
Alone	22.1	14.6	29.6	153	4,476	41.6	3.75	1.1
Jointly	44.7	33.4	56.0	153	4,476	49.9	5.65	1.4
RESILIENCE-RELATED								
Adaptive Capacity Index	34.1	31.6	36.6	1,973	51,312	13.9	1.26	4.0
Absorptive Capacity Index	37.8	35.4	40.1	1,973	51,312	15.2	1.16	3.4
Transformative Capacity Index	39.0	33.3	44.7	1,974	51,334	23.2	2.86	5.5
Ability to recover from shocks and stresses index	3.6	3.5	3.7	1,734	45,151	1.4	0.07	2.0
Male and female adults	3.6	3.4	3.7	1,362	35,914	1.3	0.07	2.0
Adult female, no adult male	3.6	3.4	3.8	260	6,766	1.3	0.10	1.3
Adult male, no adult female	3.8	3.5	4.1	111	2,451	1.4	0.17	1.2
Child, no adults	^	^	^	1	20	^	^	^
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	4.3	2.4	6.3	1,974	51,334	20.3	0.98	2.1
Savings	3.0	1.3	4.8	1,974	51,334	17.2	0.88	2.3
Male and female adults	2.8	1.2	4.5	1,550	41,006	16.5	0.85	2.0
Adult female, no adult male	4.3	1.0	7.5	305	7,730	20.5	1.62	1.4
Adult male, no adult female	2.4	0.0	6.8	118	2,577	16.7	2.22	1.4
Child, no adults	^	^	^	1	20	^	^	^
Credit (including microfinance)	2.2	1.1	3.3	1,974	51,334	14.6	0.56	1.7
Male and female adults	2.1	1.0	3.2	1,550	41,006	14.3	0.56	1.5
Adult female, no adult male	2.4	0.3	4.6	305	7,730	15.6	1.08	1.2
Adult male, no adult female	2.3	0.0	5.4	118	2,577	16.3	1.58	1.1
Child, no adults	^	^	^	1	20	^	^	^
Index of social capital at the household level								
Overall index	69.0	67.0	71.1	1,975	51,350	23.6	1.02	1.9
Male and female adults	69.1	67.0	71.3	1,550	41,006	23.2	1.07	1.8
Adult female, no adult male	68.6	65.6	71.7	305	7,730	24.3	1.51	1.1
Adult male, no adult female	68.4	63.6	73.2	119	2,593	27.3	2.40	1.0
Child, no adults	^	^	^	1	20	^	^	^

Table A1.2. BHA Kenya Baseline Indicators - CRS RFSA Areas

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Bonding sub-index	70.1	67.9	72.3	1,975	51,350	24.7	1.10	2.0
Male and female adults	70.3	68.0	72.6	1,550	41,006	24.3	1.14	1.8
Adult female, no adult male	70.1	66.9	73.4	305	7,730	25.1	1.62	1.1
Adult male, no adult female	66.6	61.7	71.5	119	2,593	29.2	2.47	0.9
Child, no adults	^	^	^	1	20	^	^	^
Bridging sub-index	68.0	65.9	70.1	1,975	51,350	25.5	1.04	1.8
Male and female adults	68.0	65.8	70.2	1,550	41,006	25.1	1.11	1.7
Adult female, no adult male	67.1	64.0	70.3	305	7,730	26.2	1.60	1.1
Adult male, no adult female	70.1	64.5	75.7	119	2,593	29.5	2.81	1.0
Child, no adults	^	^	^	1	20	^	^	^

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	90.4	87.5	93.4	979	26,455	25.1	1.4	1.8
Male and female adults	89.7	86.5	93.0	792	21,460	25.9	1.59	1.7
Adult female, no adult male	95.0	92.1	97.9	154	4,133	17.8	1.43	1.0
Adult male, no adult female	85.7	74.7	96.7	32	843	31.0	5.41	1.0
Child, no adults	^	^	^	1	20	^	^	^
Level of severity								
Moderate	43.6	41.0	46.3	979	26,455	24.9	1.29	1.6
Severe	46.8	42.2	51.3	979	26,455	29.7	2.2	2.3
Percentage of households with poor food consumption score (FCS)	18.3	12.2	24.4	981	26,493	38.7	3.00	2.4
Male and female adults	16.9	11.3	22.5	794	21,498	37.5	2.75	2.1
Adult female, no adult male	25.5	12.3	38.8	154	4,133	43.8	6.52	1.8
Adult male, no adult female	17.9	2.4	33.3	32	843	38.8	7.61	1.1
Child, no adults	^	^	^	1	20	^	^	^
Percentage of households with borderline FCS	19.6	16.2	23.0	981	26,493	39.7	1.66	1.3
Male and female adults	19.7	16.4	23.0	794	21,498	39.8	1.62	1.1
Adult female, no adult male	19.7	12.2	27.3	154	4,133	39.9	3.72	1.2
Adult male, no adult female	14.2	0.8	27.6	32	843	35.3	6.58	1.1
Child, no adults	^	^	^	1	20	^	^	^
Percentage of households with adequate FCS	62.1	54.6	69.5	981	26,493	48.5	3.66	2.4
Male and female adults	63.3	56.2	70.4	794	21,498	48.2	3.49	2.0
Adult female, no adult male	54.7	40.9	68.6	154	4,133	49.9	6.80	1.7
Adult male, no adult female	68.0	47.9	88.0	32	843	47.3	9.83	1.2
Child, no adults	^	^	^	1	20	^	^	^
Mean FCS	47.5	43.8	51.1	981	26,493	19.5	1.81	2.9
Male and female adults	48.2	44.7	51.7	794	21,498	19.4	1.73	2.5
Adult female, no adult male	43.5	37.5	49.4	154	4,133	19.5	2.92	1.9
Adult male, no adult female	48.5	39.2	57.9	32	843	19.4	4.60	1.3
Child, no adults	^	^	^	1	20	^	^	^
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	1.6	1.1	2.1	972	144,070	3.1	0.2	2.4
Male and female adults	1.6	1.1	2.2	788	124,893	3.1	0.26	2.3
Adult female, no adult male	1.4	1.2	1.6	151	16,969	1.8	0.11	0.8
Adult male, no adult female	2.1	1.4	2.8	32	2,168	1.9	0.34	1.0
Child, no adults	^	^	^	1	40	^	^	^
Prevalence of Poverty: Percent of people living on less thatn $1.90/day 2011 PPP	77.3	69.0	85.7	972	144,070	41.9	4.09	3.0
Male and female adults	77.7	69.0	86.5	788	124,893	40.2	4.30	3.0
Adult female, no adult male	78.3	70.8	85.8	151	16,969	47.4	3.69	1.0
Adult male, no adult female	47.4	21.0	73.9	32	2,168	73.8	13.00	1.0
Child, no adults	^	^	^	1	40	^	^	^

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	50.7	45.8	55.7	716	111,411	22.8	2.45	2.9
Male and female adults	51.2	46.1	56.4	591	97,060	21.9	2.55	2.8
Adult female, no adult male	47.8	42.0	53.6	112	13,283	23.2	2.85	1.3
Adult male, no adult female	^	^	^	12	1,028	^	^	^
Child, no adults	^	^	^	1	40	^	^	^
WASH INDICATORS								
Percent of households using basic drinking water services	5.0	0.6	9.3	981	26,500	21.7	2.1	3.1
On premise	0.5	0.0	1.1	981	26,500	6.7	0.3	1.4
≤ 30-minute roundtrip	4.5	0.7	8.3	981	26,500	20.8	1.9	2.8
Gendered household type								
Male and female adults	4.3	0.4	8.2	794	21,505	20.4	1.9	2.7
Adult female, no adult male	5.8	0.0	12.0	154	4,133	23.5	3.0	1.6
Adult male, no adult female	16.9	0.0	35.3	32	843	38.0	8.9	1.3
Child, no adults	^	^	^	1	20	^	^	^
Percent of households in target areas practicing correct use of recommended household water treatment technologies	12.7	7.8	17.7	983	26,534	33.3	2.4	2.3
Chlorination	6.2	3.1	9.3	983	26,534	24.1	1.52	2.0
Flocculant/Disinfectant	1.4	0.3	2.5	983	26,534	11.8	0.54	1.4
Filtration	2.9	0.9	4.9	983	26,534	16.8	0.98	1.8
Solar Disinfection	0.5	0.0	1.3	983	26,534	6.9	0.40	1.8
Boiling	4.1	2.0	6.1	983	26,534	19.7	1.0	1.6
Percentage of households with access to a basic sanitation service	4.3	1.6	7.1	983	26,534	20.4	1.35	2.1
Male and female adults	4.7	1.5	7.9	796	21,538	21.2	1.57	2.1
Adult female, no adult male	3.3	0.0	7.0	154	4,133	17.9	1.84	1.3
Adult male, no adult female	0.0	NA	NA	32	843	NA	NA	NA
Child, no adults	^	^	^	1	^	^	^	^
Percent of households in target areas practicing open defecation	79.3	66.9	91.7	983	26,534	40.5	6.11	4.7
Male and female adults	80.1	68.2	92.0	796	21,538	39.9	5.87	4.1
Adult female, no adult male	74.7	58.1	91.4	154	4,133	43.6	8.19	2.3
Adult male, no adult female	80.1	61.9	98.4	32	843	40.4	8.96	1.3
Child, no adults	^	^	^	1	20	^	^	^
Percent of households with soap and water at a handwashing station on premises	57.4	33.5	81.3	61	1,752	49.9	11.23	1.8
Male and female adults	59.2	34.3	84.1	43	1,274	47.2	12.24	1.7
Adult female, no adult male	^	^	^	15	415	^	^	^
Adult male, no adult female	^	^	^	3	63	^	^	^
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	6.0	3.7	8.3	976	30,041	23.7	1.12	1.5
Male	6.6	3.9	9.4	608	18,052	25.4	1.35	1.3
Female	5.0	2.8	7.2	368	11,989	21.2	1.10	1.0
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	20.4	10.6	30.1	301	9,582	40.3	4.77	2.1
Male	21.1	10.0	32.3	219	6,766	41.6	5.47	1.9
Female	18.5	7.2	29.9	82	2,816	36.5	5.57	1.4
Percent of producers who have applied targeted improved management practices or technologies								
Greengrams	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Sorghum	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA	NA
Contract farming	NA	NA	NA	NA	NA	NA	NA	NA
Use of training and extension services	NA	NA	NA	NA	NA	NA	NA	NA
Selling products through community farmer associations	NA	NA	NA	NA	NA	NA	NA	NA
Improved bulking	NA	NA	NA	NA	NA	NA	NA	NA
Sorting and grading	NA	NA	NA	NA	NA	NA	NA	NA
Other improved practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	61.0	53.6	68.3	382	11,090	48.8	3.59	1.4
Sex								
Male	58.2	50.4	66.0	235	6,520	49.4	3.82	1.2
Female	65.0	54.7	75.2	147	4,571	47.9	4.98	1.3
Age								
15-29 years	70.5	53.7	87.3	63	1,922	46.0	8.06	1.4
30+ years	59.0	50.5	67.4	319	9,169	49.3	4.13	1.5
Use of improved livestock breeds/species	1.9	0.7	3.1	382	11,090	13.6	0.58	0.8
Use of livestock health services and products	12.4	3.7	21.1	382	11,090	33.0	4.26	2.5
Use of improved shelters	5.9	3.2	8.6	382	11,090	23.5	1.32	1.1
Use of improved calving techniques	3.5	0.0	7.1	382	11,090	18.5	1.75	1.9
Use of improved milking techniques	0.6	0.0	1.6	382	11,090	7.9	0.45	1.1
Use of more nutritious pasture varieties	3.2	0.1	6.3	382	11,090	17.7	1.51	1.7
Utilization of set grazing areas	41.3	33.1	49.4	382	11,090	49.3	3.98	1.6
Improved fodder production	1.3	0.3	2.4	382	11,090	11.4	0.52	0.9
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Fencing off pasture plots	1.7	0.1	3.4	382	11,090	13.1	0.81	1.2
Rehabilitation of degraded grazing lands	2.1	0.0	4.4	382	11,090	14.5	1.10	1.5
Use of solarized boreholes for livestock	9.1	4.9	13.4	382	11,090	28.8	2.08	1.4
Use of water pans for livestock	6.2	2.6	9.8	382	11,090	24.2	1.75	1.4
Use of sand dams for livestock	3.3	0.6	6.0	382	11,090	17.8	1.33	1.5
Use of rock catchments for livestock	4.7	1.1	8.3	382	11,090	21.2	1.77	1.6
Goats (improved livestock management practices/technologies)	61.6	54.4	68.7	915	28,429	48.7	3.53	2.2
Sex								
Male	60.3	53.1	67.5	564	16,907	49.0	3.55	1.7
Female	63.4	54.3	72.6	351	11,522	48.2	4.50	1.7
Age								
15-29 years	69.1	58.7	79.5	154	4,816	46.4	5.08	1.4
30+ years	60.0	53.0	67.1	761	23,613	49.0	3.46	1.9
Use of improved livestock breeds/species	1.9	0.3	3.5	915	28,429	13.7	0.78	1.7
Use of livestock health services and products	9.8	2.7	16.9	915	28,429	29.7	3.48	3.5
Use of improved shelters	6.6	2.7	10.5	915	28,429	24.8	1.92	2.3
Use of improved calving techniques	0.0	NA	NA	915	28,429	0.0	NA	0.0
Use of improved milking techniques	0.7	0.0	1.4	915	28,429	8.1	0.36	1.3
Use of more nutritious pasture varieties	4.0	2.1	5.8	915	28,429	19.5	0.92	1.4
Utilization of set grazing areas	38.9	30.5	47.2	915	28,429	48.8	4.09	2.5
Improved fodder production	1.6	0.0	3.3	915	28,429	12.4	0.83	2.0
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	2.8	0.9	4.8	915	28,429	16.6	0.95	1.7
Rehabilitation of degraded grazing lands	2.3	0.6	4.1	915	28,429	15.1	0.85	1.7
Use of solarized boreholes for livestock	8.6	4.8	12.4	915	28,429	28.1	1.85	2.0
Use of water pans for livestock	7.1	3.1	11.1	915	28,429	25.7	1.96	2.3
Use of sand dams for livestock	4.2	0.9	7.4	915	28,429	20.0	1.59	2.4
Use of rock catchments for livestock	3.3	1.1	5.5	915	28,429	17.9	1.08	1.8
Camels (improved livestock management practices/technologies)	56.5	48.0	65.1	610	19,742	49.6	4.21	2.1
Sex								
Male	53.4	45.6	61.1	400	12,537	49.9	3.81	1.5
Female	62.0	49.8	74.3	210	7,206	48.6	6.00	1.8
Age								
15-29 years	64.9	51.3	78.6	80	2,596	48.0	6.61	1.2
30+ years	55.3	46.5	64.0	530	17,146	49.8	4.29	2.0
Use of improved livestock breeds/species	0.7	0.0	1.5	610	19,742	8.5	0.36	1.1
Use of livestock health services and products	8.5	1.6	15.5	610	19,742	28.0	3.42	3.0
Use of improved shelters	5.5	1.4	9.7	610	19,742	22.9	2.05	2.2
Use of improved calving techniques	0.3	0.0	0.8	610	19,742	5.2	0.26	1.2
Use of improved milking techniques	0.6	0.0	1.2	610	19,742	7.7	0.32	1.0
Use of more nutritious pasture varieties	3.0	0.5	5.5	610	19,742	17.0	1.24	1.8
Utilization of set grazing areas	37.0	28.7	45.4	610	19,742	48.3	4.08	2.1

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved fodder production	0.7	0.0	1.9	610	19,742	8.6	0.57	1.6
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	1.9	0.0	4.1	610	19,742	13.7	1.08	1.9
Rehabilitation of degraded grazing lands	1.3	0.0	2.8	610	19,742	11.5	0.70	1.5
Use of solarized boreholes for livestock	8.5	4.1	12.9	610	19,742	27.9	2.16	1.9
Use of water pans for livestock	6.9	2.1	11.8	610	19,742	25.4	2.37	2.3
Use of sand dams for livestock	3.7	0.4	7.0	610	19,742	18.9	1.60	2.1
Use of rock catchments for livestock	2.9	0.8	5.1	610	19,742	16.9	1.05	1.5
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	15.3	11.1	19.5	351	9,845	22.8	2.06	1.7
Sex								
Male	16.8	11.2	22.4	215	5,754	24.3	2.75	1.7
Female	13.2	8.2	18.1	136	4,091	20.4	2.39	1.4
Age								
15-29 years	14.9	7.0	22.9	60	1,756	23.7	3.78	1.2
30+ years	15.4	10.6	20.2	291	8,089	22.6	2.36	1.8
Goats (kilogram of offtake per head of goat per producer)	7.7	6.8	8.7	897	25,115	7.3	0.47	1.9
Sex								
Male	8.3	7.2	9.3	554	14,977	7.2	0.51	1.7
Female	6.9	5.5	8.4	343	10,138	7.5	0.71	1.7
Age								
15-29 years	7.6	6.4	8.9	150	4,230	7.5	0.61	1.0
30+ years	7.7	6.8	8.7	747	20,885	7.3	0.49	1.8
Camels (kilogram of offtake per head of camel per producer)	15.3	12.0	18.7	587	17,204	32.1	1.62	1.2
Sex								
Male	15.1	11.0	19.1	383	10,834	30.8	1.99	1.3
Female	15.8	11.9	19.7	204	6,370	34.3	1.90	0.8
Age								
15-29 years	13.7	6.9	20.5	78	2,297	30.0	3.29	1.0
30+ years	15.6	11.9	19.3	509	14,907	32.4	1.81	1.3
Cow milk (liters per milking cow per day per producer)	1.0	0.7	1.3	48	1,335	0.9	0.12	0.9
Sex								
Male	1.0	0.4	1.6	31	848	1.0	0.25	1.5
Female	^	^	^	17	487	^	^	^
Age								
15-29 years	^	^	^	13	303	^	^	^
30+ years	1.0	0.7	1.2	35	1,032	0.8	0.11	0.8

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Camel milk (liters per milking camel per day per producer)	1.2	1.0	1.4	216	5,955	0.8	0.11	2.1
Sex								
Male	1.2	0.9	1.5	149	3,947	0.8	0.14	2.2
Female	1.2	1.1	1.4	67	2,007	0.8	0.08	0.7
Age								
15-29 years	^	^	^	26	679	^	^	^
30+ years	1.2	0.9	1.4	190	5,276	0.8	0.12	2.0
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	2.6	0.8	4.5	930	28,612	16.0	0.90	1.7
<19 years	3.2	0.0	7.2	197	5,548	18.3	2.00	1.5
19+ years	2.5	0.9	4.1	733	23,065	15.5	0.77	1.3
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	56.2	48.5	63.9	553	17,095	49.7	3.78	1.8
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	63.7	54.4	72.9	628	19,368	48.1	4.55	2.4
15-19 years	46.7	30.5	63.0	59	1,615	50.3	7.94	1.2
20-29 years	62.0	51.2	72.7	245	7,562	48.6	5.28	1.7
30-49 years	67.7	58.1	77.2	324	10,191	46.8	4.69	1.8
Percent of women in union who made decisions about modern family planning methods in the past 12 months	80.3	65.0	95.7	61	1,698	40.1	7.36	1.4
15-19	^	^	^	4	105	^	^	^
Alone	^	^	^	4	105	^	^	^
Jointly	^	^	^	4	105	^	^	^
20-29	75.9	54.3	97.4	34	891	43.4	10.22	1.4
Alone	18.7	1.3	36.2	34	891	39.6	8.28	1.2
Jointly	57.1	32.0	82.3	34	891	50.2	11.93	1.4
30-49	^	^	^	23	702	^	^	^
Alone	^	^	^	23	702	^	^	^
Jointly	^	^	^	23	702	^	^	^
Contraceptive prevalence rate (CPR)	14.7	8.8	20.5	539	16,551	35.4	2.88	1.9
Traditional	6.5	2.1	11.0	539	16,551	24.8	2.21	2.1
Modern	9.1	4.4	13.8	539	16,551	28.8	2.32	1.9
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	46.8	31.5	62.1	75	2,102	50.2	7.47	1.3
Male	45.3	27.3	63.4	42	1,206	49.4	8.88	1.2
Female	48.7	27.6	69.9	33	896	50.2	10.40	1.2
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	1.3	0.0	2.9	255	6,970	11.3	0.81	1.1
Male	1.2	0.0	2.9	143	3,850	10.9	0.86	0.9
Female	1.5	0.0	4.4	112	3,120	11.9	1.45	1.3
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	5.0	2.2	7.8	255	6,970	21.8	1.37	1.0
Male	5.2	1.3	9.1	143	3,850	22.6	1.92	1.0
Female	4.7	0.5	8.9	112	3,120	21.1	2.06	1.0
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	24.7	17.3	32.2	911	25,257	43.2	3.66	2.6

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Male	24.6	16.8	32.3	488	13,368	43.3	3.81	1.9
Female	24.9	16.2	33.6	423	11,890	43.0	4.29	2.1
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	87.8	83.1	92.6	249	6,245	32.8	2.31	1.1
Male	87.9	80.4	95.4	130	3,283	34.0	3.69	1.2
Female	87.7	81.1	94.4	119	2,962	34.1	3.27	1.0
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	6.9	3.4	10.3	764	22,390	25.3	1.70	1.9
15-19 years	6.0	0.0	12.9	63	1,634	25.3	3.40	1.1
20-29 years	6.1	2.2	10.0	261	7,630	24.1	1.93	1.3
30-49 years	8.2	3.6	12.9	332	10,026	27.1	2.26	1.5
≥50 years	4.9	0.6	9.1	108	3,099	21.8	2.10	1.0
Male	20.6	13.6	27.7	745	22,190	40.5	3.45	2.3
15-19 years	^	^	^	8	241	^	^	^
20-29 years	31.8	11.2	52.3	62	1,614	49.7	10.10	1.6
30-49 years	26.0	17.7	34.2	398	12,135	43.1	4.06	1.9
≥50 years	11.2	5.9	16.4	277	8,201	31.5	2.57	1.4
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	85.6	74.7	96.6	53	1,385	35.4	5.23	1.1
15-19 years	^	^	^	3	98	^	^	^
20-29 years	^	^	^	19	464	^	^	^
30-49 years	^	^	^	26	703	^	^	^
≥50 years	^	^	^	5	119	^	^	^
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	37.9	19.5	56.2	53	1,385	49.0	8.78	1.3
15-19 years	^	^	^	3	98	^	^	^
20-29 years	^	^	^	19	464	^	^	^
30-49 years	^	^	^	26	703	^	^	^
≥50 years	^	^	^	5	119	^	^	^
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	45.5	35.3	55.8	144	4,099	50.0	4.97	1.2
15-19 years	NA	NA	NA	NA	NA	NA	NA	NA
20-29 years	^	^	^	18	451	^	^	^
30-49 years	45.0	33.4	56.5	95	2,789	49.3	5.68	1.1
≥50 years	45.5	21.4	69.6	31	859	51.4	11.85	1.3

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	32.5	25.7	39.4	731	20,606	46.9	3.36	1.9
15-19 years	29.2	12.9	45.6	60	1,496	49.4	8.0	1.3
20-29 years	28.5	19.9	37.1	249	7,048	46.1	4.23	1.4
30-49 years	34.6	26.1	43.1	321	9,289	47.4	4.18	1.6
≥50 years	37.6	28.6	46.7	101	2,773	49.9	4.44	0.9
Male	22.8	16.3	29.3	653	20,064	42.0	3.19	1.9
15-19 years	^	^	^	8	^	^	^	^
20-29 years	30.1	10.9	49.2	51	1,407	47.5	9.41	1.4
30-49 years	20.0	13.4	26.5	355	11,121	38.8	3.21	1.6
≥50 years	25.7	18.2	33.3	239	7,288	43.0	3.72	1.3
Percent of women/men in a union with access to credit								
Female	38.4	29.6	47.2	731	20,606	48.7	4.33	2.4
15-19 years	22.9	13.3	32.5	60	1,496	45.6	4.7	0.8
20-29 years	39.1	26.5	51.7	249	7,048	49.8	6.18	2.0
30-49 years	39.8	30.4	49.2	321	9,289	48.8	4.64	1.7
≥50 years	40.1	28.9	51.4	101	2,773	50.5	5.52	1.1
Male	33.9	26.9	41.0	653	20,064	47.4	3.47	1.9
15-19 years	^	^	^	8	247	^	^	^
20-29 years	30.8	16.2	45.4	51	1,407	47.9	7.17	1.1
30-49 years	33.5	25.6	41.4	355	11,121	45.8	3.88	1.6
≥50 years	35.8	26.8	44.9	239	7,288	47.2	4.43	1.5
Percent of women/men in a union who make decisions about credit								
Female	72.6	63.3	81.8	271	7,909	44.7	4.54	1.7
15-19	^	^	^	14	342	^	^	^
Alone	^	^	^	14	342	^	^	^
Jointly	^	^	^	14	342	^	^	^
20-29	76.3	64.9	87.6	93	2,754	42.8	5.54	1.2
Alone	44.6	33.0	56.3	93	2,754	50.0	5.67	1.1
Jointly	31.6	16.5	46.7	93	2,754	46.7	7.34	1.5
30-49	73.1	61.1	85.0	125	3,699	44.5	5.85	1.5
Alone	44.6	31.8	57.4	125	3,699	49.9	6.26	1.4
Jointly	28.5	14.0	42.9	125	3,699	45.3	7.08	1.7
≥50 years	68.3	48.7	88.0	39	1,113	47.1	9.36	1.2
Alone	49.1	30.5	67.8	39	1,113	50.6	8.86	1.1
Jointly	19.2	7.7	30.7	39	1,113	39.9	5.45	0.9
Male	65.3	53.9	76.6	221	6,811	47.7	5.57	1.7
15-19	^	^	^	1	43	^	^	^
Alone	^	^	^	1	43	^	^	^
Jointly	^	^	^	1	43	^	^	^
20-29	^	^	^	17	434	^	^	^

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Alone	^	^	^	17	434	^	^	^
Jointly	^	^	^	17	434	^	^	^
30-49	72.9	62.1	83.8	119	3,722	44.6	5.30	1.3
Alone	36.0	25.9	46.2	119	3,722	48.2	4.96	1.1
Jointly	36.9	21.8	52.0	119	3,722	48.5	7.39	1.7
≥50 years	54.7	40.6	68.8	84	2,612	50.1	6.87	1.3
Alone	23.2	14.3	32.0	84	2,612	42.4	4.31	0.9
Jointly	31.6	17.8	45.4	84	2,612	46.8	6.73	1.3
RESILIENCE-RELATED								
Adaptive Capacity Index	30.8	27.6	34.1	977	26,409	13.4	1.60	3.7
Absorptive Capacity Index	33.0	30.1	35.8	977	26,409	13.6	1.42	3.3
Transformative Capacity Index	28.3	21.3	35.3	978	26,431	19.3	3.44	5.6
Ability to recover from shocks and stresses index	3.8	3.6	4.0	879	23,904	1.4	0.09	1.9
Male and female adults	3.8	3.6	4.0	710	19,326	1.4	0.10	1.8
Adult female, no adult male	3.8	3.5	4.0	140	3,791	1.4	0.14	1.2
Adult male, no adult female	^	^	^	28	766	^	^	^
Child, no adults	^	^	^	1	20	^	^	^
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	2.8	1.4	4.2	978	26,431	16.5	0.67	1.3
Savings	0.6	0.0	1.2	978	26,431	7.8	0.30	1.2
Male and female adults	0.5	0.0	1.2	791	21,435	7.3	0.32	1.2
Adult female, no adult male	1.1	0.0	2.7	154	4,133	10.5	0.80	0.9
Adult male, no adult female	0.0	NA	NA	32	843	0.0	NA	0.0
Child, no adults	^	^	^	1	20	^	^	^
Credit (including microfinance)	2.3	1.2	3.3	978	26,431	14.9	0.53	1.1
Male and female adults	2.3	1.0	3.5	791	21,435	14.8	0.60	1.1
Adult female, no adult male	2.3	0.0	4.7	154	4,133	15.2	1.14	0.9
Adult male, no adult female	2.1	0.0	6.3	32	843	14.4	2.07	0.8
Child, no adults	^	^	^	1	20	^	^	^
Index of social capital at the household level								
Overall index	68.4	65.7	71.2	978	26,431	23.2	1.36	1.8
Male and female adults	68.3	65.5	71.1	791	21,435	23.2	1.38	1.7
Adult female, no adult male	69.6	65.7	73.4	154	4,133	23.1	1.88	1.0
Adult male, no adult female	66.4	58.6	74.3	32	843	22.6	3.86	1.0
Child, no adults	^	^	^	1	20	^	^	^

Table A1.3. BHA Kenya Baseline Indicators - MARSABIT

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Bonding sub-index	70.2	66.8	73.6	978	26,431	24.6	1.67	2.1
Male and female adults	70.2	66.7	73.6	791	21,435	24.7	1.70	1.9
Adult female, no adult male	70.9	66.5	75.2	154	4,133	24.2	2.16	1.1
Adult male, no adult female	67.7	59.1	76.3	32	843	25.1	4.23	1.0
Child, no adults	^	^	^	1	20	^	^	^
Bridging sub-index	66.7	64.2	69.1	978	26,431	25.3	1.19	1.5
Male and female adults	66.4	63.9	68.9	791	21,435	25.3	1.22	1.4
Adult female, no adult male	68.3	64.4	72.1	154	4,133	24.9	1.89	0.9
Adult male, no adult female	65.2	55.2	75.2	32	843	26.1	4.92	1.1
Child, no adults	^	^	^	1	20	^	^	^

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	83.0	77.5	88.5	995	24,866	31.7	2.7	2.7
Male and female adults	83.3	77.6	89.0	758	19,534	30.7	2.80	2.5
Adult female, no adult male	85.5	79.6	91.4	151	3,598	29.7	2.90	1.2
Adult male, no adult female	74.5	50.8	98.2	86	1,734	44.3	11.65	2.4
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Level of severity								
Moderate	53.8	48.8	58.7	995	24,866	28.3	2.44	2.7
Severe	29.2	25.1	33.3	995	24,866	27.9	2.0	2.3
Percentage of households with poor food consumption score (FCS)	4.5	3.1	6.0	995	24,866	20.8	0.73	1.1
Male and female adults	4.2	2.6	5.7	758	19,534	19.7	0.76	1.1
Adult female, no adult male	6.0	0.6	11.5	151	3,598	24.4	2.69	1.4
Adult male, no adult female	5.6	0.0	11.4	86	1,734	25.5	2.88	1.0
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percentage of households with borderline FCS	11.9	9.0	14.9	995	24,866	32.4	1.46	1.4
Male and female adults	11.4	8.4	14.4	758	19,534	31.3	1.48	1.3
Adult female, no adult male	11.8	6.3	17.3	151	3,598	33.1	2.7	1.0
Adult male, no adult female	18.5	6.9	30.1	86	1,734	43.3	5.7	1.2
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percentage of households with adequate FCS	83.5	79.9	87.1	995	24,866	37.1	1.76	1.5
Male and female adults	84.4	80.6	88.3	758	19,534	35.7	1.89	1.5
Adult female, no adult male	82.2	75.4	89.0	151	3,598	39.2	3.34	1.0
Adult male, no adult female	75.9	62.5	89.3	86	1,734	47.6	6.58	1.3
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Mean FCS	60.0	57.7	62.2	995	24,866	18.1	1.11	1.9
Male and female adults	60.2	57.9	62.6	758	19,534	17.3	1.16	1.8
Adult female, no adult male	58.3	55.6	61.0	151	3,598	18.8	1.31	0.9
Adult male, no adult female	60.6	48.2	73.1	86	1,734	25.7	6.13	2.2
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	1.9	1.5	2.3	987	135,013	3.1	0.2	1.8
Male and female adults	1.9	1.5	2.3	754	118,700	3.0	0.19	1.7
Adult female, no adult male	1.9	1.5	2.3	149	13,903	2.5	0.20	1.0
Adult male, no adult female	3.3	2.3	4.2	84	2,411	6.3	0.46	0.7
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Prevalence of Poverty: Percent of people living on less thatn $1.90/day 2011 PPP	67.5	60.8	74.1	987	135,013	46.9	3.27	2.2
Male and female adults	68.8	62.0	75.7	754	118,700	43.1	3.37	2.1
Adult female, no adult male	61.1	50.0	72.2	149	13,903	59.1	5.46	1.1
Adult male, no adult female	37.6	18.7	56.5	84	2,411	105.9	9.30	0.8
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	39.8	37.5	42.1	592	91,120	20.8	1.14	1.3
Male and female adults	40.1	37.5	42.8	496	81,722	18.9	1.31	1.5
Adult female, no adult male	36.6	32.2	40.9	78	8,492	22.1	2.15	0.9
Adult male, no adult female	^	^	^	18	906	^	^	^
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
WASH INDICATORS								
Percent of households using basic drinking water services	4.5	2.5	6.5	972	24,409	20.7	1.0	1.5
On premise	2.9	1.4	4.5	972	24,409	16.8	0.8	1.4
≤ 30-minute roundtrip	1.6	0.6	2.6	972	24,409	12.5	0.5	1.3
Gendered household type								
Male and female adults	3.6	1.4	5.8	750	19,314	18.6	1.1	1.6
Adult female, no adult male	5.6	0.0	11.2	147	3,492	23.0	2.8	1.5
Adult male, no adult female	13.0	5.8	20.1	75	1,603	33.8	3.4	0.9
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households in target areas practicing correct use of recommended household water treatment technologies	6.0	2.7	9.3	996	24,902	23.8	1.61	2.1
Chlorination	3.4	0.4	6.5	996	24,902	18.3	1.5	2.6
Flocculant/Disinfectant	0.5	0.0	0.9	996	24,902	6.7	0.2	1.0
Filtration	0.0	NA	NA	996	24,902	0.0	NA	0.0
Solar Disinfection	0.0	NA	NA	996	24,902	0.0	NA	0.0
Boiling	2.5	0.9	4.0	996	24,902	15.5	0.74	1.5
Percentage of households with access to a basic sanitation service	11.5	6.0	17.0	996	24,902	32.0	2.70	2.7
Male and female adults	12.7	5.9	19.5	758	19,554	32.8	3.35	2.8
Adult female, no adult male	7.6	3.0	12.3	151	3,598	27.2	2.30	1.0
Adult male, no adult female	6.3	1.0	11.6	87	1,750	27.1	2.61	0.9
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households in target areas practicing open defecation	33.5	21.9	45.1	996	24,902	47.2	5.70	3.8
Male and female adults	33.0	21.6	44.3	758	19,554	46.3	5.58	3.3
Adult female, no adult male	38.7	22.3	55.1	151	3,598	49.9	8.05	2.0
Adult male, no adult female	28.8	9.6	48.0	87	1,750	50.5	9.44	1.7
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households with soap and water at a handwashing station on premises	17.1	0.0	34.4	102	2,530	37.8	8.28	2.2
Male and female adults	9.6	0.0	21.5	67	2,028	26.4	5.82	1.8
Adult female, no adult male	^	^	^	9	199	^	^	^
Adult male, no adult female	^	^	^	26	304	^	^	^
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	18.7	12.5	24.9	514	13,800	39.0	3.05	1.8
Male	16.7	12.1	21.3	376	10,139	37.3	2.26	1.2
Female	24.1	10.2	38.0	138	3,660	43.1	6.83	1.9
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	19.4	7.7	31.1	140	4,196	39.7	5.71	1.7
Male	17.8	2.5	33.1	107	3,123	37.3	7.50	2.1
Female	23.9	9.5	38.3	33	1,073	39.2	7.07	1.0
Percent of producers who have applied targeted improved management practices or technologies								
Greengrams	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Sorghum	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA	NA
Contract farming	NA	NA	NA	NA	NA	NA	NA	NA
Use of training and extension services	NA	NA	NA	NA	NA	NA	NA	NA
Selling products through community farmer associations	NA	NA	NA	NA	NA	NA	NA	NA
Improved bulking	NA	NA	NA	NA	NA	NA	NA	NA
Sorting and grading	NA	NA	NA	NA	NA	NA	NA	NA
Other improved practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	26.8	14.7	38.9	219	5,515	44.4	5.79	1.9
Sex								
Male	26.9	15.5	38.2	156	4,051	44.5	5.43	1.5
Female	26.6	3.0	50.2	63	1,464	44.5	10.93	1.9
Age								
15-29 years	^	^	^	21	432	^	^	^
30+ years	28.6	15.6	41.7	198	5,083	45.3	6.27	1.9
Use of improved livestock breeds/species	0.2	0.0	0.6	219	5,515	4.4	0.21	0.7
Use of livestock health services and products	8.4	0.0	17.6	219	5,515	27.9	4.38	2.3
Use of improved shelters	0.0	NA	NA	219	5,515	0.0	NA	0.0
Use of improved calving techniques	0.0	NA	NA	219	5,515	0.0	NA	0.0
Use of improved milking techniques	0.0	NA	NA	219	5,515	0.0	NA	0.0
Use of more nutritious pasture varieties	1.0	0.0	3.2	219	5,515	10.2	1.04	1.5
Utilization of set grazing areas	15.7	7.9	23.4	219	5,515	36.4	3.71	1.5
Improved fodder production	1.3	0.0	2.9	219	5,515	11.3	0.79	1.0
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Fencing off pasture plots	0.0	NA	NA	219	5,515	0.0	NA	0.0
Rehabilitation of degraded grazing lands	0.8	0.0	2.6	219	5,515	8.9	0.84	1.4
Use of solarized boreholes for livestock	0.0	NA	NA	219	5,515	0.0	NA	0.0
Use of water pans for livestock	0.6	0.0	1.5	219	5,515	7.7	0.46	0.9
Use of sand dams for livestock	3.2	0.7	5.7	219	5,515	17.6	1.18	1.0
Use of rock catchments for livestock	0.0	NA	NA	219	5,515	0.0	NA	0.0
Goats (improved livestock management practices/technologies)	33.8	18.0	49.5	417	11,015	47.3	7.70	3.3
Sex								
Male	34.6	19.8	49.3	294	7,864	47.6	7.21	2.6
Female	31.7	11.3	52.1	123	3,151	46.7	9.91	2.4
Age								
15-29 years	26.8	11.0	42.5	60	1,584	44.7	7.59	1.3
30+ years	34.9	18.8	51.1	357	9,431	47.7	7.90	3.1
Use of improved livestock breeds/species	0.3	0.0	1.1	417	11,015	5.8	0.35	1.2
Use of livestock health services and products	16.1	0.0	34.3	417	11,015	36.8	8.90	4.9
Use of improved shelters	1.6	0.2	3.1	417	11,015	12.7	0.71	1.1
Use of improved calving techniques	0.0	NA	NA	417	11,015	0.0	NA	0.0
Use of improved milking techniques	0.0	NA	NA	417	11,015	0.0	NA	0.0
Use of more nutritious pasture varieties	1.8	0.0	4.2	417	11,015	13.3	1.17	1.8
Utilization of set grazing areas	12.5	7.5	17.4	417	11,015	33.1	2.43	1.5
Improved fodder production	1.7	0.0	3.5	417	11,015	12.9	0.89	1.4
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	0.7	0.0	1.6	417	11,015	8.6	0.44	1.0
Rehabilitation of degraded grazing lands	0.6	0.0	1.5	417	11,015	7.8	0.45	1.2
Use of solarized boreholes for livestock	0.5	0.0	1.2	417	11,015	6.8	0.36	1.1
Use of water pans for livestock	4.7	0.2	9.3	417	11,015	21.2	2.23	2.1
Use of sand dams for livestock	7.5	3.1	11.9	417	11,015	26.3	2.16	1.7
Use of rock catchments for livestock	0.0	NA	NA	417	11,015	0.0	NA	0.0
Camels (improved livestock management practices/technologies)	16.1	1.0	31.2	59	1,305	37.1	6.67	1.4
Sex								
Male	14.4	4.2	24.6	41	890	35.5	4.43	0.8
Female	^	^	^	18	416	^	^	^
Age								
15-29 years	^	^	^	8	164	^	^	^
30+ years	18.4	1.2	35.7	51	1,141	39.2	7.63	1.4
Use of improved livestock breeds/species	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of livestock health services and products	6.3	0.0	21.7	59	1,305	24.5	6.79	2.1
Use of improved shelters	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of improved calving techniques	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of improved milking techniques	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of more nutritious pasture varieties	0.0	NA	NA	59	1,305	0.0	NA	0.0
Utilization of set grazing areas	14.5	0.0	30.2	59	1,305	35.5	6.91	1.5

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved fodder production	1.6	0.0	4.7	59	1,305	12.6	1.37	0.8
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	0.0	NA	NA	59	1,305	0.0	NA	0.0
Rehabilitation of degraded grazing lands	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of solarized boreholes for livestock	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of water pans for livestock	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of sand dams for livestock	0.0	NA	NA	59	1,305	0.0	NA	0.0
Use of rock catchments for livestock	0.0	NA	NA	59	1,305	0.0	NA	0.0
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	13.9	9.6	18.2	213	5,229	21.4	2.07	1.4
Sex								
Male	14.1	9.7	18.6	152	3,870	21.1	2.14	1.3
Female	13.2	6.9	19.6	61	1,359	22.2	2.94	1.0
Age								
15-29 years	^	^	^	20	407	^	^	^
30+ years	14.0	9.1	18.8	193	4,822	20.9	2.32	1.5
Goats (kilogram of offtake per head of goat per producer)	8.4	7.1	9.7	407	10,364	6.5	0.64	2.0
Sex								
Male	8.0	6.6	9.3	286	7,360	6.4	0.65	1.7
Female	9.3	7.7	11.0	121	3,003	6.7	0.82	1.3
Age								
15-29 years	6.1	4.2	8.1	58	1,447	6.4	0.95	1.1
30+ years	8.7	7.4	10.1	349	8,916	6.5	0.67	1.9
Camels (kilogram of offtake per head of camel per producer)	4.2	0.0	9.7	57	1,226	15.5	2.44	1.2
Sex								
Male	4.3	0.0	12.2	40	843	16.6	3.42	1.3
Female	^	^	^	17	382	^	^	^
Age								
15-29 years	^	^	^	7	139	^	^	^
30+ years	4.8	0.0	11.1	50	1,087	16.4	2.79	1.2
Cow milk (liters per milking cow per day per producer)	^	^	^	20	577	^	^	^
Sex								
Male	^	^	^	18	527	^	^	^
Female	^	^	^	2	50	^	^	^
Age								
15-29 years	^	^	^	2	35	^	^	^
30+ years	^	^	^	18	542	^	^	^

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Camel milk (liters per milking camel per day per producer)	1.6	1.4	1.9	34	685	0.8	0.10	0.7
Sex								
Male	^	^	^	23	492	^	^	^
Female	^	^	^	11	193	^	^	^
Age								
15-29 years	^	^	^	5	96	^	^	^
30+ years	^	^	^	29	589	^	^	^
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	12.4	8.2	16.6	1,035	27,936	32.9	2.06	2.0
<19 years	10.1	5.2	15.0	271	6,930	31.0	2.40	1.3
19+ years	13.1	8.2	18.1	764	21,006	33.5	2.44	2.0
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	70.6	64.8	76.5	520	14,298	45.6	2.89	1.4
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	90.4	85.2	95.5	581	16,027	29.5	2.53	2.1
15-19 years	78.4	62.9	94.0	34	910	41.7	7.38	1.0
20-29 years	89.7	83.0	96.3	238	6,421	30.5	3.27	1.7
30-49 years	92.1	86.9	97.4	309	8,697	26.9	2.58	1.7
Percent of women in union who made decisions about modern family planning methods in the past 12 months	85.2	77.3	93.2	162	4,575	35.6	3.89	1.4
15-19	^	^	^	4	109	^	^	^
Alone	^	^	^	4	109	^	^	^
Jointly	^	^	^	4	109	^	^	^
20-29	84.5	74.6	94.5	77	2,064	36.4	4.86	1.2
Alone	9.6	3.3	15.9	77	2,064	29.7	3.08	0.9
Jointly	74.9	64.6	85.2	77	2,064	43.6	5.04	1.0
30-49	85.1	76.1	94.2	81	2,403	35.8	4.42	1.1
Alone	21.4	5.2	37.6	81	2,403	41.3	7.90	1.7
Jointly	63.7	43.7	83.8	81	2,403	48.4	9.77	1.8
Contraceptive prevalence rate (CPR)	30.3	23.8	36.9	507	13,900	46.0	3.22	1.6
Traditional	2.4	0.4	4.5	507	13,900	15.5	1.01	1.5
Modern	28.1	21.4	34.8	507	13,900	45.0	3.30	1.7
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	57.3	43.5	71.2	85	2,054	49.8	6.75	1.3
Male	52.9	38.1	67.7	46	1,059	52.8	7.25	0.9
Female	62.0	39.7	84.3	39	994	49.3	10.96	1.4
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	6.0	1.6	10.4	222	5,914	23.8	2.15	1.3
Male	6.1	0.8	11.4	108	2,988	23.4	2.60	1.2
Female	5.9	0.0	12.4	114	2,926	23.9	3.19	1.4
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	11.2	4.4	18.0	222	5,914	31.6	3.35	1.6
Male	11.8	5.0	18.7	108	2,988	31.6	3.36	1.1
Female	10.5	0.9	20.2	114	2,926	31.1	4.75	1.6
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	14.7	10.4	18.9	824	21,590	35.4	2.09	1.7

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Male	14.4	9.0	19.9	426	11,231	35.1	2.69	1.6
Female	14.9	9.7	20.0	398	10,360	35.7	2.52	1.4
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	82.2	73.6	90.9	119	3,163	38.4	4.23	1.2
Male	83.9	71.6	96.3	62	1,622	36.7	6.06	1.3
Female	80.4	68.6	92.2	57	1,541	39.3	5.81	1.1
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	12.4	7.9	16.9	704	20,371	33.0	2.20	1.8
15-19 years	0.0	NA	NA	36	1,002	0.0	NA	0.0
20-29 years	6.9	3.0	10.9	241	6,873	25.3	1.93	1.2
30-49 years	19.4	11.7	27.0	320	9,462	38.5	3.75	1.7
≥50 years	7.1	1.8	12.5	107	3,033	25.6	2.63	1.1
Male	42.6	34.9	50.2	698	18,820	49.5	3.75	2.0
15-19 years	^	^	^	2	54	^	^	^
20-29 years	45.9	32.2	59.5	100	2,466	53.0	6.71	1.3
30-49 years	51.8	41.9	61.7	362	9,959	50.0	4.87	1.9
≥50 years	26.5	20.1	32.9	234	6,342	44.8	3.15	1.1
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	85.9	77.1	94.7	74	2,289	35.0	4.22	1.0
15-19 years	NA	NA	NA	NA	NA	NA	NA	NA
20-29 years	^	^	^	15	427	^	^	^
30-49 years	86.3	76.6	95.9	54	1,720	32.2	4.74	1.1
≥50 years	^	^	^	5	143	^	^	^
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	49.4	34.7	64.0	74	2,289	50.3	7.0	1.2
15-19 years	NA	NA	NA	NA	NA	NA	NA	NA
20-29 years	^	^	^	15	427	^	^	^
30-49 years	49.7	34.5	65.0	54	1,720	46.7	7.49	1.2
≥50 years	^	^	^	5	143	^	^	^
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	59.3	51.0	67.6	268	7,623	49.2	4.06	1.3
15-19 years	^	^	^	1	38	^	^	^
20-29 years	61.9	42.1	81.6	40	1,038	50.5	9.73	1.2
30-49 years	57.0	46.3	67.8	170	4,983	48.2	5.28	1.4
≥50 years	66.4	51.2	81.5	57	1,563	47.8	7.45	1.2

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	35.1	28.2	42.0	692	18,201	47.8	3.38	1.9
15-19 years	25.9	11.0	40.7	36	909	44.7	7.3	1.0
20-29 years	39.8	32.0	47.6	237	6,128	49.5	3.82	1.2
30-49 years	36.2	26.2	46.1	315	8,478	47.3	4.89	1.8
≥50 years	23.9	12.3	35.5	104	2,686	43.0	5.71	1.4
Male	34.3	28.4	40.1	680	17,833	47.5	2.87	1.6
15-19 years	^	^	^	2	53	^	^	^
20-29 years	25.4	12.9	38.0	97	2,314	45.8	6.16	1.3
30-49 years	37.9	29.6	46.2	352	9,422	47.9	4.08	1.6
≥50 years	32.1	23.4	40.8	229	6,044	46.6	4.27	1.4
Percent of women/men in a union with access to credit								
Female	34.1	30.0	38.2	692	18,201	47.4	2.02	1.1
15-19 years	21.5	4.1	38.9	36	909	41.9	8.5	1.2
20-29 years	38.1	32.1	44.1	237	6,128	49.1	2.93	0.9
30-49 years	35.0	28.7	41.4	315	8,478	47.0	3.10	1.2
≥50 years	26.0	18.0	34.1	104	2,686	44.3	3.95	0.9
Male	37.1	29.9	44.2	680	17,833	48.3	3.51	1.9
15-19 years	^	^	^	2	53	^	^	^
20-29 years	41.5	32.1	50.9	97	2,314	51.8	4.60	0.9
30-49 years	39.8	28.2	51.4	352	9,422	48.3	5.71	2.2
≥50 years	30.8	25.0	36.7	229	6,044	46.1	2.86	0.9
Percent of women/men in a union who make decisions about credit								
Female	79.5	70.9	88.1	230	6,201	40.4	4.21	1.6
15-19	^	^	^	7	196	^	^	^
Alone	^	^	^	7	196	^	^	^
Jointly	^	^	^	7	196	^	^	^
20-29	79.1	68.5	89.7	90	2,335	40.9	5.21	1.2
Alone	14.0	2.6	25.4	90	2,335	34.9	5.59	1.5
Jointly	65.2	51.9	78.4	90	2,335	47.9	6.51	1.3
30-49	79.3	67.7	90.8	105	2,971	40.7	5.66	1.4
Alone	21.1	11.7	30.6	105	2,971	41.0	4.63	1.2
Jointly	58.2	43.9	72.4	105	2,971	49.6	6.98	1.4
≥50 years	^	^	^	28	700	^	^	^
Alone	^	^	^	28	700	^	^	^
Jointly	^	^	^	28	700	^	^	^
Male	84.9	78.2	91.6	242	6,609	35.9	3.28	1.4
15-19	^	^	^	1	37	^	^	^
Alone	^	^	^	1	37	^	^	^
Jointly	^	^	^	1	37	^	^	^
20-29	77.3	57.3	97.4	40	960	42.4	9.66	1.4

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Alone	35.5	16.3	54.6	40	960	48.4	9.24	1.2
Jointly	41.9	24.2	59.5	40	960	50.0	8.51	1.1
30-49	87.3	81.5	93.0	132	3,748	33.5	2.84	1.0
Alone	31.2	20.9	41.5	132	3,748	46.5	5.07	1.3
Jointly	56.0	46.6	65.4	132	3,748	49.8	4.61	1.1
≥50 years	83.7	74.1	93.3	69	1,864	37.2	4.71	1.1
Alone	20.6	7.1	34.2	69	1,864	40.8	6.63	1.4
Jointly	63.1	48.5	77.6	69	1,864	48.6	7.11	1.2
RESILIENCE-RELATED								
Adaptive Capacity Index	37.6	33.9	41.2	996	24,903	13.5	1.81	4.2
Absorptive Capacity Index	42.9	39.6	46.1	996	24,903	15.1	1.59	3.3
Transformative Capacity Index	50.4	42.0	58.7	996	24,903	21.4	4.10	6.0
Ability to recover from shocks and stresses index	3.4	3.2	3.6	855	21,247	1.2	0.08	2.0
Male and female adults	3.4	3.2	3.5	652	16,588	1.2	0.09	1.9
Adult female, no adult male	3.3	3.0	3.6	120	2,974	1.2	0.15	1.3
Adult male, no adult female	3.7	3.3	4.1	83	1,685	1.4	0.20	1.3
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	5.9	2.0	9.8	996	24,903	23.6	1.93	2.6
Savings	5.6	1.8	9.4	996	24,903	23.0	1.86	2.5
Male and female adults	5.4	1.6	9.1	759	19,571	22.2	1.84	2.3
Adult female, no adult male	7.9	1.2	14.6	151	3,598	27.6	3.30	1.5
Adult male, no adult female	3.6	0.0	10.0	86	1,734	20.7	3.17	1.4
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Credit (including microfinance)	2.1	0.1	4.1	996	24,903	14.4	1.00	2.2
Male and female adults	2.0	0.0	4.0	759	19,571	13.8	0.96	1.9
Adult female, no adult male	2.5	0.0	6.4	151	3,598	16.1	1.91	1.5
Adult male, no adult female	2.4	0.0	6.7	86	1,734	17.0	2.11	1.2
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Index of social capital at the household level								
Overall index	69.7	66.5	72.9	997	24,918	24.0	1.56	2.0
Male and female adults	70.1	66.7	73.6	759	19,571	23.3	1.69	2.0
Adult female, no adult male	67.6	62.7	72.5	151	3,598	25.6	2.41	1.2
Adult male, no adult female	69.3	63.2	75.4	87	1,750	29.1	2.99	1.0
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.4. BHA Kenya Baseline Indicators - ISIOLO

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Bonding sub-index	70.0	67.1	72.9	997	24,918	24.8	1.42	1.8
Male and female adults	70.5	67.4	73.5	759	19,571	24.0	1.50	1.7
Adult female, no adult male	69.3	64.3	74.3	151	3,598	26.0	2.44	1.2
Adult male, no adult female	66.1	59.9	72.3	87	1,750	30.7	3.03	0.9
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Bridging sub-index	69.4	65.8	73.0	997	24,918	25.7	1.79	2.2
Male and female adults	69.8	65.8	73.8	759	19,571	24.9	1.97	2.2
Adult female, no adult male	65.9	60.5	71.2	151	3,598	27.7	2.63	1.2
Adult male, no adult female	72.5	66.0	79.0	87	1,750	30.4	3.20	1.0
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	89.0	85.3	92.6	1,899	122,728	28.8	1.8	2.8
Male and female adults	88.3	84.4	92.3	1,301	84,562	29.4	1.97	2.4
Adult female, no adult male	94.3	91.0	97.6	427	27,357	21.2	1.65	1.6
Adult male, no adult female	79.7	71.9	87.4	164	10,442	37.2	3.89	1.3
Child, no adults	^	^	^	7	367	^	^	^
Level of severity								
Moderate	30.1	28.8	31.4	1,899	122,728	18.5	0.65	1.5
Severe	58.8	55.0	62.7	1,899	122,728	28.1	1.9	3.0
Percentage of households with poor food consumption score (FCS)	37.5	31.9	43.0	1,899	122,728	48.4	2.79	2.5
Male and female adults	36.4	29.6	43.1	1,301	84,562	48.0	3.38	2.5
Adult female, no adult male	44.0	37.5	50.5	427	27,357	49.8	3.26	1.4
Adult male, no adult female	28.4	19.0	37.7	164	10,442	45.4	4.68	1.3
Child, no adults	^	^	^	7	367	^	^	^
Percentage of households with borderline FCS	20.8	18.1	23.4	1,899	122,728	40.6	1.32	1.4
Male and female adults	20.5	17.5	23.6	1,301	84,562	40.3	1.51	1.4
Adult female, no adult male	21.5	17.6	25.4	427	27,357	41.3	1.96	1.0
Adult male, no adult female	20.4	13.2	27.6	164	10,442	40.6	3.61	1.1
Child, no adults	^	^	^	7	367	^	^	^
Percentage of households with adequate FCS	41.8	36.6	47.0	1,899	122,728	49.3	2.60	2.3
Male and female adults	43.1	36.5	49.6	1,301	84,562	49.4	3.28	2.4
Adult female, no adult male	34.5	28.6	40.5	427	27,357	47.7	2.98	1.3
Adult male, no adult female	51.2	41.8	60.7	164	10,442	50.3	4.74	1.2
Child, no adults	^	^	^	7	367	^	^	^
Mean FCS	39.8	36.6	42.9	1,899	122,728	22.6	1.56	3.0
Male and female adults	40.8	36.9	44.7	1,301	84,562	23.2	1.95	3.0
Adult female, no adult male	34.8	32.2	37.4	427	27,357	18.7	1.31	1.4
Adult male, no adult female	44.5	38.9	50.2	164	10,442	24.8	2.82	1.5
Child, no adults	^	^	^	7	367	^	^	^
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	1.3	1.0	1.6	1,900	616,742	2.6	0.1	2.5
Male and female adults	1.3	1.0	1.6	1,304	489,771	2.2	0.16	2.5
Adult female, no adult male	1.0	0.8	1.2	426	106,309	2.0	0.10	1.0
Adult male, no adult female	3.4	2.3	4.4	163	19,413	11.2	0.53	0.6
Child, no adults	^	^	^	7	1,249	^	^	^
Prevalence of Poverty: Percent of people living on less thatn $1.90/day 2011 PPP	80.6	74.8	86.3	1,900	616,742	39.6	2.88	3.2
Male and female adults	80.2	74.1	86.3	1,304	489,771	37.0	3.05	3.0
Adult female, no adult male	87.1	82.5	91.8	426	106,309	38.1	2.33	1.3
Adult male, no adult female	53.4	40.2	66.6	163	19,413	82.3	6.63	1.0
Child, no adults	^	^	^	7	1,249	^	^	^

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	64.0	60.2	67.8	1,393	496,975	24.3	1.89	2.9
Male and female adults	63.6	59.4	67.8	1,004	392,746	22.7	2.10	2.9
Adult female, no adult male	66.6	63.3	70.0	332	92,647	22.8	1.67	1.3
Adult male, no adult female	54.8	43.4	66.2	51	10,369	35.9	5.72	1.1
Child, no adults	^	^	^	6	1,214	^	^	^
WASH INDICATORS								
Percent of households using basic drinking water services	6.8	4.4	9.3	1,891	122,259	25.2	1.2	2.1
On premise	1.9	0.9	2.9	1,891	122,259	13.6	0.5	1.6
≤ 30-minute roundtrip	4.9	2.8	7.1	1,891	122,259	21.6	1.1	2.2
Gendered household type								
Male and female adults	5.7	3.3	8.1	1,302	84,438	23.2	1.2	1.8
Adult female, no adult male	8.1	3.9	12.4	422	27,120	27.4	2.1	1.6
Adult male, no adult female	12.8	5.8	19.8	160	10,334	33.5	3.5	1.3
Child, no adults	^	^	^	7	367	^	^	^
Percent of households in target areas practicing correct use of recommended household water treatment technologies	10.6	8.5	12.7	1,908	123,109	30.8	1.1	1.5
Chlorination	3.1	2.0	4.2	1,908	123,109	17.4	0.55	1.4
Flocculant/Disinfectant	1.7	0.8	2.6	1,908	123,109	12.8	0.46	1.6
Filtration	1.1	0.5	1.6	1,908	123,109	10.2	0.29	1.3
Solar Disinfection	0.4	0.0	0.8	1,908	123,109	5.9	0.23	1.7
Boiling	5.4	3.6	7.1	1,908	123,109	22.5	0.9	1.7
Percentage of households with access to a basic sanitation service	6.6	3.5	9.8	1,908	123,109	24.9	1.57	2.8
Male and female adults	7.4	3.3	11.5	1,308	84,820	26.2	2.06	2.9
Adult female, no adult male	4.2	1.8	6.7	428	27,408	20.2	1.23	1.3
Adult male, no adult female	6.9	0.0	13.9	165	10,515	25.5	3.53	1.8
Child, no adults	^	^	^	7	367	^	^	^
Percent of households in target areas practicing open defecation	65.9	55.7	76.2	1,908	123,109	47.4	5.14	4.7
Male and female adults	67.4	57.2	77.7	1,308	84,820	46.8	5.13	4.0
Adult female, no adult male	70.7	59.5	81.8	428	27,408	45.7	5.59	2.5
Adult male, no adult female	40.4	28.3	52.6	165	10,515	49.4	6.09	1.6
Child, no adults	^	^	^	7	367	^	^	^
Percent of households with soap and water at a handwashing station on premises	49.2	38.7	59.7	223	12,162	50.1	5.19	1.5
Male and female adults	45.5	34.2	56.8	159	8,524	53.4	5.64	1.3
Adult female, no adult male	58.3	39.3	77.4	33	1,898	52.2	9.54	1.0
Adult male, no adult female	57.6	38.0	77.3	31	1,739	53.0	9.84	1.0
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	8.5	5.9	11.2	1,220	82,856	28.0	1.32	1.6
Male	10.0	6.8	13.3	636	43,232	30.0	1.63	1.4
Female	6.9	4.0	9.9	584	39,624	25.4	1.47	1.4
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	12.1	6.2	18.0	290	19,278	32.7	2.95	1.5
Male	10.3	5.0	15.7	159	10,430	30.9	2.67	1.1
Female	14.2	5.9	22.4	131	8,848	35.0	4.15	1.4
Percent of producers who have applied targeted improved management practices or technologies								
Greengrams	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Sorghum	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA	NA
Contract farming	NA	NA	NA	NA	NA	NA	NA	NA
Use of training and extension services	NA	NA	NA	NA	NA	NA	NA	NA
Selling products through community farmer associations	NA	NA	NA	NA	NA	NA	NA	NA
Improved bulking	NA	NA	NA	NA	NA	NA	NA	NA
Sorting and grading	NA	NA	NA	NA	NA	NA	NA	NA
Other improved practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	67.0	58.0	75.9	440	21,017	47.1	4.42	2.0
Sex								
Male	66.8	57.4	76.3	219	10,254	47.2	4.65	1.5
Female	67.2	57.3	77.0	221	10,763	47.1	4.83	1.5
Age								
15-29 years	66.2	53.9	78.4	100	4,545	47.6	5.97	1.3
30+ years	67.2	58.2	76.2	340	16,471	47.0	4.45	1.7
Use of improved livestock breeds/species	4.0	1.5	6.4	440	21,017	19.5	1.21	1.3
Use of livestock health services and products	32.6	25.4	39.8	440	21,017	46.9	3.53	1.6
Use of improved shelters	13.4	6.9	19.9	440	21,017	34.1	3.21	2.0
Use of improved calving techniques	1.2	0.0	2.5	440	21,017	10.7	0.68	1.3
Use of improved milking techniques	0.9	0.0	2.1	440	21,017	9.3	0.60	1.4
Use of more nutritious pasture varieties	2.8	0.9	4.7	440	21,017	16.4	0.93	1.2
Utilization of set grazing areas	14.8	8.4	21.2	440	21,017	35.6	3.16	1.9
Improved fodder production	1.4	0.0	3.3	440	21,017	11.9	0.91	1.6
Reseeding of degraded lands with drought resistant grass species	2.6	0.2	4.9	440	21,017	15.8	1.17	1.5
Fencing off pasture plots	11.9	4.2	19.7	440	21,017	32.5	3.85	2.5

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Rehabilitation of degraded grazing lands	0.9	0.0	2.0	440	21,017	9.5	0.54	1.2
Use of solarized boreholes for livestock	2.1	0.0	4.7	440	21,017	14.3	1.30	1.9
Use of water pans for livestock	10.3	6.4	14.2	440	21,017	30.5	1.94	1.3
Use of sand dams for livestock	5.6	2.7	8.6	440	21,017	23.1	1.46	1.3
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Goats (improved livestock management practices/technologies)	45.5	38.5	52.4	953	66,394	49.8	3.47	2.2
Sex								
Male	44.1	35.9	52.4	500	34,969	49.7	4.11	1.9
Female	47.0	40.0	54.0	453	31,425	50.0	3.51	1.5
Age								
15-29 years	48.4	40.1	56.7	198	12,046	50.1	4.11	1.2
30+ years	44.8	37.3	52.3	755	54,348	49.8	3.74	2.1
Use of improved livestock breeds/species	1.3	0.4	2.2	953	66,394	11.4	0.46	1.3
Use of livestock health services and products	13.5	9.7	17.3	953	66,394	34.2	1.90	1.7
Use of improved shelters	16.7	11.9	21.6	953	66,394	37.3	2.43	2.0
Use of improved calving techniques	0.1	0.0	0.2	953	66,394	2.5	0.06	0.8
Use of improved milking techniques	0.3	0.0	0.8	953	66,394	5.1	0.27	1.6
Use of more nutritious pasture varieties	1.4	0.5	2.3	953	66,394	11.7	0.44	1.2
Utilization of set grazing areas	13.1	10.1	16.1	953	66,394	33.7	1.48	1.4
Improved fodder production	0.2	0.0	0.5	953	66,394	4.5	0.16	1.1
Reseeding of degraded lands with drought resistant grass species	0.9	0.2	1.6	953	66,394	9.4	0.33	1.1
Fencing off pasture plots	3.8	1.3	6.3	953	66,394	19.1	1.25	2.0
Rehabilitation of degraded grazing lands	0.9	0.0	1.7	953	66,394	9.4	0.42	1.4
Use of solarized boreholes for livestock	0.8	0.1	1.5	953	66,394	8.8	0.36	1.3
Use of water pans for livestock	4.7	2.4	7.0	953	66,394	21.2	1.14	1.7
Use of sand dams for livestock	1.7	0.6	2.8	953	66,394	13.1	0.54	1.3
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Camels (improved livestock management practices/technologies)	18.8	8.5	29.1	139	9,622	39.2	5.03	1.5
Sex								
Male	19.7	6.9	32.6	66	4,435	40.1	6.24	1.3
Female	18.0	7.9	28.0	73	5,187	38.7	4.79	1.1
Age								
15-29 years	^	^	^	26	1,266	^	^	^
30+ years	19.8	8.7	30.8	113	8,357	40.0	5.38	1.4
Use of improved livestock breeds/species	NA	NA	NA	NA	NA	NA	NA	NA
Use of livestock health services and products	NA	NA	NA	NA	NA	NA	NA	NA
Use of improved shelters	13.7	4.0	23.3	139	9,622	34.5	4.69	1.6
Use of improved calving techniques	0.0	NA	NA	139	9,622	0.0	NA	0.0
Use of improved milking techniques	0.0	NA	NA	139	9,622	0.0	NA	0.0
Use of more nutritious pasture varieties	0.0	NA	NA	139	9,622	0.0	NA	0.0
Utilization of set grazing areas	NA	NA	NA	NA	NA	NA	NA	NA
Improved fodder production	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	11.0	0.0	23.3	139	9,622	31.5	5.96	2.2
Rehabilitation of degraded grazing lands	1.0	0.0	3.3	139	9,622	10.2	1.09	1.3
Use of solarized boreholes for livestock	0.9	0.0	2.7	139	9,622	9.4	0.90	1.1
Use of water pans for livestock	3.4	0.1	6.8	139	9,622	18.2	1.63	1.1
Use of sand dams for livestock	1.4	0.0	3.1	139	9,622	11.9	0.83	0.8
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	14.5	11.0	18.0	420	18,926	23.0	1.74	1.6
Sex								
Male	16.8	13.0	20.5	207	9,192	23.9	1.84	1.1
Female	12.3	8.4	16.3	213	9,735	21.9	1.94	1.3
Age								
15-29 years	15.1	9.8	20.3	94	4,047	24.1	2.54	1.0
30+ years	14.3	10.7	18.0	326	14,879	22.7	1.78	1.4
Goats (kilogram of offtake per head of goat per producer)	5.0	3.9	6.1	934	58,834	6.8	0.55	2.5
Sex								
Male	5.3	4.3	6.4	489	30,821	6.6	0.51	1.7
Female	4.7	3.5	5.9	445	28,012	7.1	0.62	1.9
Age								
15-29 years	5.8	4.0	7.6	195	10,668	7.3	0.91	1.7
30+ years	4.9	3.8	5.9	739	48,166	6.7	0.51	2.1
Camels (kilogram of offtake per head of camel per producer)	10.1	3.3	16.8	135	8,381	31.3	3.30	1.2
Sex								
Male	8.9	0.0	20.5	64	3,933	30.6	5.66	1.5
Female	11.1	1.1	21.1	71	4,448	32.2	4.77	1.2
Age								
15-29 years	NA	NA	NA	26	1,152	NA	NA	NA
30+ years	11.6	4.3	18.8	109	7,229	33.5	3.51	1.1
Cow milk (liters per milking cow per day per producer)	1.8	1.3	2.4	53	2,214	1.3	0.25	1.4
Sex								
Male	^	^	^	27	1,182	^	^	^
Female	^	^	^	26	1,032	^	^	^
Age								
15-29 years	^	^	^	13	493	^	^	^
30+ years	1.9	1.2	2.5	40	1,722	1.4	0.30	1.3

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Camel milk (liters per milking camel per day per producer)	1.9	1.6	2.1	37	2,264	1.0	0.12	0.7
Sex								
Male	^	^	^	19	1,020	^	^	^
Female	^	^	^	18	1,244	^	^	^
Age								
15-29 years	^	^	^	4	125	^	^	^
30+ years	1.8	1.6	2.1	33	2,138	1.0	0.12	0.7
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	5.5	3.4	7.7	1,667	122,590	22.8	1.08	1.9
<19 years	4.2	1.0	7.5	296	20,433	20.8	1.62	1.3
19+ years	5.8	3.4	8.1	1,371	102,157	23.2	1.17	1.9
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	59.3	53.8	64.9	953	70,232	49.1	2.77	1.7
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	75.0	67.9	82.1	1,052	76,212	43.3	3.55	2.7
15-19 years	60.7	46.1	75.3	71	4,710	49.2	7.18	1.2
20-29 years	78.5	70.2	86.8	492	34,876	41.1	4.15	2.2
30-49 years	73.4	65.7	81.2	489	36,626	44.2	3.88	1.9
Percent of women in union who made decisions about modern family planning methods in the past 12 months	75.5	69.0	82.1	277	18,924	43.1	3.26	1.3
15-19	^	^	^	5	273	^	^	^
Alone	^	^	^	5	273	^	^	^
Jointly	^	^	^	5	273	^	^	^
20-29	71.4	61.7	81.1	147	10,643	45.3	4.81	1.3
Alone	39.6	32.9	46.3	147	10,643	49.1	3.32	0.8
Jointly	31.8	23.4	40.3	147	10,643	46.7	4.19	1.1
30-49	80.2	72.2	88.2	125	8,009	40.0	3.98	1.1
Alone	40.6	29.1	52.1	125	8,009	49.3	5.71	1.3
Jointly	39.5	27.0	52.1	125	8,009	49.1	6.23	1.4
Contraceptive prevalence rate (CPR)	26.4	20.6	32.3	895	64,868	44.1	2.92	2.0
Traditional	1.5	0.4	2.6	895	64,868	12.1	0.54	1.3
Modern	25.4	19.6	31.2	895	64,868	43.6	2.89	2.0
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	56.9	48.5	65.2	197	13,060	49.7	4.17	1.2
Male	55.6	43.7	67.5	85	5,974	48.5	5.98	1.1
Female	57.9	48.8	67.0	112	7,086	50.9	4.55	0.9
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	2.0	0.7	3.2	430	29,708	13.9	0.63	0.9
Male	2.0	0.0	3.9	225	15,772	13.6	0.97	1.1
Female	1.9	0.3	3.5	205	13,936	13.7	0.80	0.8
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	6.7	4.3	9.1	430	29,708	25.1	1.21	1.0
Male	6.7	3.5	10.0	225	15,772	24.6	1.61	1.0
Female	6.7	2.7	10.7	205	13,936	24.9	2.00	1.1
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	24.9	21.3	28.6	1,663	111,569	43.3	1.83	1.7

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Male	26.7	21.5	31.9	838	56,636	44.1	2.60	1.7
Female	23.1	19.4	26.8	825	54,933	42.3	1.87	1.3
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	79.1	74.1	84.2	420	27,792	40.7	2.53	1.3
Male	81.1	75.4	86.8	221	15,102	38.7	2.85	1.1
Female	76.8	69.2	84.3	199	12,690	43.3	3.80	1.2
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	33.0	26.9	39.1	1,251	85,397	47.0	3.04	2.3
15-19 years	17.1	5.8	28.5	74	4,754	39.6	5.69	1.2
20-29 years	30.8	24.4	37.2	511	34,091	47.3	3.20	1.5
30-49 years	39.5	31.9	47.2	504	35,249	49.2	3.85	1.8
≥50 years	26.0	17.1	34.9	162	11,303	44.0	4.47	1.3
Male	48.0	39.4	56.7	1,185	87,418	50.0	4.35	3.0
15-19 years	^	^	^	13	664	^	^	^
20-29 years	60.7	50.2	71.2	219	17,447	46.5	5.27	1.7
30-49 years	53.5	44.6	62.4	611	43,623	49.8	4.45	2.2
≥50 years	31.1	21.2	41.0	342	25,685	45.0	4.96	2.0
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	81.5	75.9	87.1	350	26,595	38.9	2.79	1.3
15-19 years	^	^	^	11	762	^	^	^
20-29 years	82.9	74.9	90.8	131	10,008	36.5	3.98	1.2
30-49 years	80.1	72.9	87.3	172	13,210	38.6	3.62	1.2
≥50 years	81.0	66.4	95.5	36	2,615	38.6	7.29	1.1
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	31.3	24.2	38.4	350	26,595	46.4	3.55	1.4
15-19 years	^	^	^	11	762	^	^	^
20-29 years	36.6	26.2	47.0	131	10,008	46.6	5.21	1.3
30-49 years	29.3	22.2	36.4	172	13,210	44.0	3.57	1.1
≥50 years	19.9	5.6	34.1	36	2,615	39.3	7.12	1.1
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	47.1	40.7	53.5	485	36,230	50.0	3.19	1.4
15-19 years	^	^	^	1	19	^	^	^
20-29 years	53.1	44.9	61.3	116	9,066	47.8	4.11	0.9
30-49 years	45.2	36.1	54.2	292	20,714	49.8	4.53	1.6
≥50 years	45.0	28.9	61.1	76	6,431	45.5	8.06	1.5

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	40.7	33.9	47.4	1,188	79,959	49.1	3.37	2.4
15-19 years	41.7	23.9	59.5	70	4,309	52.2	8.9	1.4
20-29 years	42.5	35.2	49.8	484	32,068	50.2	3.64	1.6
30-49 years	40.4	33.0	47.8	480	33,111	49.1	3.71	1.7
≥50 years	35.4	23.0	47.7	154	10,472	48.0	6.18	1.6
Male	34.5	28.0	41.0	1,057	74,842	47.6	3.24	2.2
15-19 years	^	^	^	10	484	^	^	^
20-29 years	40.7	29.5	51.9	197	14,792	47.3	5.62	1.7
30-49 years	35.2	28.3	42.1	555	38,355	47.7	3.46	1.7
≥50 years	29.6	20.3	39.0	295	21,212	44.8	4.71	1.8
Percent of women/men in a union with access to credit								
Female	28.6	23.5	33.8	1,188	79,959	45.2	2.58	2.0
15-19 years	20.7	10.8	30.6	70	4,309	42.9	5.0	1.0
20-29 years	31.4	24.0	38.8	484	32,068	47.2	3.69	1.7
30-49 years	30.1	24.0	36.1	480	33,111	45.9	3.03	1.4
≥50 years	18.8	11.2	26.4	154	10,472	39.2	3.79	1.2
Male	30.1	25.0	35.3	1,057	74,842	45.9	2.56	1.8
15-19 years	^	^	^	10	484	^	^	^
20-29 years	34.4	27.8	40.9	197	14,792	45.8	3.30	1.0
30-49 years	34.7	29.0	40.4	555	38,355	47.6	2.85	1.4
≥50 years	19.5	14.0	25.1	295	21,212	38.9	2.78	1.2
Percent of women/men in a union who make decisions about credit								
Female	78.6	73.1	84.2	358	22,896	41.1	2.77	1.3
15-19	^	^	^	18	892	^	^	^
Alone	^	^	^	18	892	^	^	^
Jointly	^	^	^	18	892	^	^	^
20-29	78.5	69.9	87.2	153	10,072	41.2	4.30	1.3
Alone	36.4	29.6	43.2	153	10,072	48.3	3.38	0.9
Jointly	42.1	32.9	51.2	153	10,072	49.5	4.55	1.1
30-49	80.0	72.6	87.3	156	9,964	40.2	3.64	1.1
Alone	46.9	37.6	56.1	156	9,964	50.1	4.60	1.1
Jointly	33.1	24.9	41.3	156	9,964	47.2	4.08	1.1
≥50 years	76.7	57.9	95.6	31	1,967	43.0	9.07	1.2
Alone	40.7	14.6	66.8	31	1,967	49.9	12.55	1.4
Jointly	36.0	10.1	61.9	31	1,967	48.8	12.46	1.4
Male	85.8	81.3	90.3	342	22,558	35.0	2.25	1.2
15-19	^	^	^	1	20	^	^	^
Alone	^	^	^	1	20	^	^	^
Jointly	^	^	^	1	20	^	^	^
20-29	86.0	76.5	95.5	71	5,081	34.9	4.70	1.1

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Alone	44.3	27.5	61.2	71	5,081	50.0	8.34	1.4
Jointly	41.7	28.6	54.8	71	5,081	49.7	6.49	1.1
30-49	88.6	83.2	93.9	202	13,311	31.9	2.69	1.2
Alone	48.6	39.2	58.0	202	13,311	50.1	4.69	1.3
Jointly	40.0	31.1	48.9	202	13,311	49.1	4.44	1.3
≥50 years	76.4	64.4	88.3	68	4,146	42.8	5.89	1.1
Alone	37.3	22.1	52.5	68	4,146	48.7	7.49	1.3
Jointly	39.1	23.6	54.6	68	4,146	49.2	7.66	1.3
RESILIENCE-RELATED								
Adaptive Capacity Index	32.8	29.8	35.8	1,902	122,945	16.0	1.50	4.1
Absorptive Capacity Index	32.2	30.1	34.4	1,903	122,996	15.5	1.08	3.0
Transformative Capacity Index	36.6	30.8	42.3	1,906	123,123	21.8	2.87	5.8
Ability to recover from shocks and stresses index	3.8	3.7	3.9	1,693	110,188	1.3	0.06	1.9
Male and female adults	3.8	3.7	3.9	1,168	76,131	1.3	0.06	1.6
Adult female, no adult male	3.8	3.6	4.0	374	24,473	1.1	0.09	1.5
Adult male, no adult female	3.7	3.5	4.0	146	9,304	1.3	0.13	1.2
Child, no adults	^	^	^	5	280	^	^	^
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	6.1	4.1	8.2	1,906	123,123	24.0	1.02	1.9
Savings	4.3	2.6	6.0	1,906	123,123	20.3	0.84	1.8
Male and female adults	4.5	2.9	6.1	1,307	84,842	20.7	0.82	1.4
Adult female, no adult male	2.3	0.8	3.8	428	27,436	15.0	0.74	1.0
Adult male, no adult female	8.0	2.4	13.5	164	10,479	27.2	2.78	1.3
Child, no adults	^	^	^	7	367	^	^	^
Credit (including microfinance)	3.3	2.1	4.5	1,906	123,123	17.9	0.58	1.4
Male and female adults	3.8	2.4	5.3	1,307	84,842	19.2	0.74	1.4
Adult female, no adult male	1.5	0.3	2.7	428	27,436	12.2	0.62	1.1
Adult male, no adult female	3.7	1.0	6.5	164	10,479	19.1	1.37	0.9
Child, no adults	^	^	^	7	367	^	^	^
Index of social capital at the household level								
Overall index	66.2	63.2	69.1	1,906	123,123	25.1	1.49	2.6
Male and female adults	67.3	64.2	70.3	1,307	84,842	24.7	1.50	2.2
Adult female, no adult male	64.7	61.3	68.2	428	27,436	25.5	1.74	1.4
Adult male, no adult female	61.4	56.0	66.7	164	10,479	25.8	2.67	1.3
Child, no adults	^	^	^	7	367	^	^	^

Table A1.5. BHA Kenya Baseline Indicators - MC RFSA AREAS

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Bonding sub-index	66.5	63.4	69.5	1,906	123,123	26.5	1.51	2.5
Male and female adults	67.6	64.4	70.7	1,307	84,842	26.2	1.58	2.2
Adult female, no adult male	64.3	60.2	68.4	428	27,436	27.1	2.06	1.6
Adult male, no adult female	63.3	59.5	67.1	164	10,479	26.0	1.91	0.9
Child, no adults	^	^	^	7	367	^	^	^
Bridging sub-index	65.8	62.6	69.1	1,906	123,123	27.7	1.63	2.6
Male and female adults	66.9	63.7	70.2	1,307	84,842	27.0	1.62	2.2
Adult female, no adult male	65.1	61.8	68.4	428	27,436	27.9	1.65	1.2
Adult male, no adult female	59.4	51.2	67.6	164	10,479	31.4	4.09	1.7
Child, no adults	^	^	^	7	367	^	^	^

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	93.0	87.9	98.2	948	82,003	24.1	2.5	3.2
Male and female adults	92.1	86.5	97.8	663	57,410	25.6	2.78	2.8
Adult female, no adult male	96.5	92.4	100.6	216	18,746	17.4	2.02	1.7
Adult male, no adult female	90.2	84.4	95.9	68	5,737	26.9	2.84	0.9
Child, no adults	^	^	^	1	109	^	^	^
Level of severity								
Moderate	31.4	29.7	33.1	948	82,003	15.6	0.84	1.7
Severe	61.6	56.3	66.9	948	82,003	22.8	2.6	3.5
Percentage of households with poor food consumption score (FCS)	45.2	37.0	53.4	948	82,003	49.8	4.02	2.5
Male and female adults	44.0	34.1	53.8	663	57,410	49.6	4.84	2.5
Adult female, no adult male	50.1	41.8	58.5	216	18,746	49.9	4.11	1.2
Adult male, no adult female	40.4	25.1	55.6	68	5,737	49.7	7.50	1.2
Child, no adults	^	^	^	1	109	^	^	^
Percentage of households with borderline FCS	21.8	18.3	25.3	948	82,003	41.3	1.70	1.3
Male and female adults	20.9	17.0	24.8	663	57,410	40.7	1.91	1.2
Adult female, no adult male	22.7	17.6	27.8	216	18,746	41.9	2.51	0.9
Adult male, no adult female	27.9	18.7	37.0	68	5,737	45.4	4.51	0.8
Child, no adults	^	^	^	1	109	^	^	^
Percentage of households with adequate FCS	33.0	26.0	40.0	948	82,003	47.0	3.46	2.3
Male and female adults	35.1	26.1	44.0	663	57,410	47.7	4.40	2.4
Adult female, no adult male	27.1	20.2	34.1	216	18,746	44.4	3.40	1.1
Adult male, no adult female	31.7	19.1	44.3	68	5,737	47.1	6.20	1.1
Child, no adults	^	^	^	1	109	^	^	^
Mean FCS	35.5	31.2	39.9	948	82,003	21.9	2.15	3.0
Male and female adults	36.9	31.4	42.5	663	57,410	23.0	2.72	3.1
Adult female, no adult male	31.7	28.5	35.0	216	18,746	17.8	1.58	1.3
Adult male, no adult female	34.0	27.6	40.5	68	5,737	21.2	3.16	1.2
Child, no adults	^	^	^	1	109	^	^	^
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	1.0	0.6	1.4	948	423,564	2.0	0.2	2.8
Male and female adults	1.0	0.6	1.4	664	337,138	1.9	0.20	2.7
Adult female, no adult male	0.8	0.6	1.0	216	74,563	1.6	0.10	0.9
Adult male, no adult female	2.0	1.2	2.8	67	11,207	6.7	0.39	0.5
Child, no adults	^	^	^	1	655	^	^	^
Prevalence of Poverty: Percent of people living on less thatn $1.90/day 2011 PPP	86.2	78.7	93.7	948	423,564	34.5	3.67	3.3
Male and female adults	85.5	77.4	93.5	664	337,138	33.1	3.97	3.1
Adult female, no adult male	92.0	87.1	96.9	216	74,563	30.9	2.40	1.1
Adult male, no adult female	68.8	54.7	82.8	67	11,207	75.7	6.91	0.7
Child, no adults	^	^	^	1	655	^	^	^

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	67.2	62.5	71.9	791	365,066	23.8	2.31	2.7
Male and female adults	66.9	61.7	72.2	571	288,114	22.9	2.57	2.7
Adult female, no adult male	69.4	65.7	73.1	187	68,590	21.4	1.84	1.2
Adult male, no adult female	58.3	44.0	72.6	32	7,707	39.6	7.03	1.0
Child, no adults	^	^	^	1	655	^	^	^
WASH INDICATORS								
Percent of households using basic drinking water services	6.0	3.0	8.9	945	81,695	23.7	1.5	1.9
On premise	1.1	0.1	2.1	945	81,695	10.6	0.5	1.4
≤ 30-minute roundtrip	4.8	1.9	7.7	945	81,695	21.4	1.4	2.0
Gendered household type								
Male and female adults	5.2	2.0	8.3	662	57,231	22.2	1.5	1.8
Adult female, no adult male	7.1	3.1	11.0	214	18,618	25.7	1.9	1.1
Adult male, no adult female	10.2	2.9	17.4	68	5,737	30.4	3.5	0.9
Child, no adults	^	^	^	1	109	^	^	^
Percent of households in target areas practicing correct use of recommended household water treatment technologies	7.2	4.8	9.6	949	82,007	25.9	1.2	1.4
Chlorination	1.8	0.6	3.0	949	82,007	13.2	0.60	1.4
Flocculant/Disinfectant	1.5	0.3	2.8	949	82,007	12.3	0.63	1.6
Filtration	0.4	0.0	0.9	949	82,007	6.4	0.26	1.2
Solar Disinfection	0.4	0.0	1.1	949	82,007	6.5	0.34	1.6
Boiling	3.3	1.3	5.2	949	82,007	17.8	0.9	1.6
Percentage of households with access to a basic sanitation service	5.9	1.4	10.3	949	82,007	23.6	2.19	2.9
Male and female adults	7.2	1.2	13.3	664	57,408	25.9	2.96	2.9
Adult female, no adult male	3.0	0.3	5.8	216	18,753	17.1	1.36	1.2
Adult male, no adult female	1.8	0.0	4.5	68	5,737	13.5	1.30	0.8
Child, no adults	^	^	^	1	109	^	^	^
Percent of households in target areas practicing open defecation	74.7	60.9	88.5	949	82,007	43.5	6.78	4.8
Male and female adults	75.1	61.3	88.9	664	57,408	43.2	6.76	4.0
Adult female, no adult male	78.2	63.6	92.8	216	18,753	41.2	7.18	2.6
Adult male, no adult female	58.3	41.1	75.4	68	5,737	49.9	8.43	1.4
Child, no adults	^	^	^	1	109	^	^	^
Percent of households with soap and water at a handwashing station on premises	19.5	0.0	42.5	32	2,662	40.2	10.67	1.5
Male and female adults	^	^	^	26	2,012	^	^	^
Adult female, no adult male	^	^	^	3	300	^	^	^
Adult male, no adult female	^	^	^	3	350	^	^	^
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	3.2	1.2	5.3	537	53,164	17.6	1.01	1.3
Male	3.9	0.7	7.1	296	28,555	19.6	1.55	1.4
Female	2.4	0.0	4.8	241	24,609	15.1	1.16	1.2
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	8.9	0.4	17.4	115	11,513	28.6	4.13	1.5
Male	3.8	0.0	8.5	60	6,074	19.2	2.30	0.9
Female	14.6	1.6	27.6	55	5,439	35.0	6.38	1.4
Percent of producers who have applied targeted improved management practices or technologies								
Greengrams	82.6	63.6	101.6	30	2,636	38.5	7.77	1.1
Sex								
Male	^	^	^	11	1,039	^	^	^
Female	^	^	^	19	1,597	^	^	^
Age								
15-29 years	^	^	^	5	532	^	^	^
30+ years	^	^	^	25	2,104	^	^	^
Management practice/technology type								
Crop genetics practices/technologies	23.5	2.7	44.3	30	2,636	43.1	8.50	1.1
Improved/certified seed	23.5	2.7	44.3	30	2,636	43.1	8.50	1.1
Cultural practices/technologies	28.4	8.6	48.2	30	2,636	45.9	8.09	1.0
Seedling production and transplantation	7.7	0.0	21.1	30	2,636	27.1	5.47	1.1
Crop rotation (rotating grains with nitrogen fixing legumes)	20.7	7.5	33.9	30	2,636	41.2	5.40	0.7
Kitchen gardens using sunken pits	0.0	NA	NA	30	2,636	0.0	NA	0.0
Improved natural resources or ecosystem management practices/technologies	23.0	3.8	42.1	30	2,636	42.8	7.82	1.0
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	0.0	NA	NA	30	2,636	0.0	NA	0.0
Use of natural barriers/cover crops	6.9	0.0	21.3	30	2,636	25.8	5.90	1.3
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	3.3	0.0	9.8	30	2,636	18.2	2.67	0.8
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	3.3	0.0	9.8	30	2,636	18.2	2.67	0.8
Zaï pits (pot-holing)	0.0	NA	NA	30	2,636	0.0	NA	0.0
Use of minimum tillage practices	9.5	0.0	23.0	30	2,636	29.8	5.55	1.0
Planting nitrogen-fixing trees	3.1	0.0	10.6	30	2,636	17.6	3.07	1.0
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	27.2	1.6	52.8	30	2,636	45.3	10.46	1.3
Use of organic manure	24.1	2.7	45.5	30	2,636	43.5	8.74	1.1
Soil testing	0.0	NA	NA	30	2,636	0.0	NA	0.0
Inoculant	3.1	0.0	10.1	30	2,636	17.6	2.85	0.9
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved agriculture water management non-irrigation-based practices/technologies	2.3	0.0	8.7	30	2,636	15.2	2.63	0.9
Use of rainwater harvesting technologies	2.3	0.0	8.7	30	2,636	15.2	2.63	0.9
Use of flood-based farming technologies (Spate irrigation)	0.0	NA	NA	30	2,636	0.0	NA	0.0
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	22.4	0.0	48.7	30	2,636	42.4	10.74	1.4
Production planning and crop rotation in irrigation schemes	6.6	0.0	19.7	30	2,636	25.3	5.34	1.2
Use of drought early warning information/systems	15.8	0.0	36.5	30	2,636	37.1	8.45	1.2
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	3.3	0.0	9.8	30	2,636	18.2	2.67	0.8
Aflatoxin prevention and control	0.0	NA	NA	30	2,636	0.0	NA	0.0
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	0.0	NA	NA	30	2,636	0.0	NA	0.0
Use of well-equipped food storage structures	3.3	0.0	9.8	30	2,636	18.2	2.67	0.8
Temperature and humidity control	0.0	NA	NA	30	2,636	0.0	NA	0.0
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Sorghum	68.8	49.4	88.2	78	6,561	46.6	9.05	1.7
Sex								
Male	68.0	48.8	87.2	38	3,229	47.3	8.95	1.2
Female	69.6	42.2	97.0	40	3,332	46.6	12.31	1.7
Age								
15-29 years	^	^	^	14	1,178	^	^	^
30+ years	70.1	47.9	92.4	64	5,383	46.1	10.20	1.8
Management practice/technology type								
Crop genetics practices/technologies	24.4	10.4	38.3	78	6,561	43.2	6.51	1.3
Improved/certified seed	24.4	10.4	38.3	78	6,561	43.2	6.51	1.3
Cultural practices/technologies	22.6	7.2	38.0	78	6,561	42.1	7.19	1.5
Seedling production and transplantation	4.0	0.0	8.6	78	6,561	19.8	2.14	1.0
Crop rotation (rotating grains with nitrogen fixing legumes)	16.9	1.8	32.0	78	6,561	37.7	7.05	1.7
Kitchen gardens using sunken pits	3.5	0.0	7.0	78	6,561	18.5	1.62	0.8
Improved natural resources or ecosystem management practices/technologies	23.9	10.7	37.1	78	6,561	42.9	6.16	1.3
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	0.0	NA	NA	78	6,561	NA	NA	0.0
Use of natural barriers/cover crops	6.6	0.0	13.9	78	6,561	25.0	3.39	1.2
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	5.1	0.0	11.4	78	6,561	22.1	2.94	1.2
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	2.6	0.0	6.2	78	6,561	16.0	1.68	0.9
Zaï pits (pot-holing)	0.0	NA	NA	78	6,561	0.0	NA	0.0
Use of minimum tillage practices	12.2	3.6	20.7	78	6,561	32.9	3.97	1.1
Planting nitrogen-fixing trees	1.2	0.0	3.9	78	6,561	11.1	1.24	1.0
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	21.3	9.4	33.2	78	6,561	41.2	5.55	1.2

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Use of organic manure	18.2	7.1	29.3	78	6,561	38.8	5.17	1.2
Soil testing	3.1	0.0	6.2	78	6,561	17.5	1.46	0.7
Inoculant	1.2	0.0	3.7	78	6,561	11.2	1.17	0.9
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	2.8	0.0	7.1	78	6,561	16.6	2.01	1.1
Use of rainwater harvesting technologies	1.3	0.0	4.1	78	6,561	11.2	1.32	1.0
Use of flood-based farming technologies (Spate irrigation)	1.5	0.0	4.8	78	6,561	12.4	1.54	1.1
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	12.8	0.0	26.3	78	6,561	33.6	6.27	1.6
Production planning and crop rotation in irrigation schemes	7.4	0.0	15.8	78	6,561	26.3	3.92	1.3
Use of drought early warning information/systems	5.4	0.0	11.2	78	6,561	22.8	2.71	1.0
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	2.5	0.0	6.3	78	6,561	15.7	1.79	1.0
Aflatoxin prevention and control	0.0	NA	NA	78	6,561	0.0	NA	0.0
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	1.2	0.0	3.9	78	6,561	11.1	1.24	1.0
Use of well-equipped food storage structures	1.3	0.0	4.1	78	6,561	11.2	1.32	1.0
Temperature and humidity control	0.0	NA	NA	78	6,561	0.0	NA	0.0
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA	NA
Contract farming	NA	NA	NA	NA	NA	NA	NA	NA
Use of training and extension services	NA	NA	NA	NA	NA	NA	NA	NA
Selling products through community farmer associations	NA	NA	NA	NA	NA	NA	NA	NA
Improved bulking	NA	NA	NA	NA	NA	NA	NA	NA
Sorting and grading	NA	NA	NA	NA	NA	NA	NA	NA
Other improved practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	50.8	26.8	74.8	39	3,981	50.6	11.11	1.4
Sex								
Male	^	^	^	20	1,890	^	^	^
Female	^	^	^	19	2,091	^	^	^
Age								
15-29 years	^	^	^	5	388	^	^	^
30+ years	51.6	26.8	76.4	34	3,593	50.7	11.39	1.3
Use of improved livestock breeds/species	0.0	NA	NA	39	3,981	0.0	NA	0.0
Use of livestock health services and products	8.4	0.0	16.9	39	3,981	28.1	3.92	0.9
Use of improved shelters	31.8	10.5	53.0	39	3,981	47.2	9.85	1.3
Use of improved calving techniques	0.0	NA	NA	39	3,981	0.0	NA	0.0
Use of improved milking techniques	0.0	NA	NA	39	3,981	0.0	NA	0.0
Use of more nutritious pasture varieties	4.2	0.0	11.0	39	3,981	20.4	3.15	1.0
Utilization of set grazing areas	2.2	0.0	7.0	39	3,981	14.8	2.24	0.9
Improved fodder production	4.4	0.0	14.0	39	3,981	20.7	4.47	1.3
Reseeding of degraded lands with drought resistant grass species	0.0	NA	NA	39	3,981	0.0	NA	0.0

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Fencing off pasture plots	23.9	0.0	48.8	39	3,981	43.2	11.53	1.7
Rehabilitation of degraded grazing lands	2.0	0.0	6.7	39	3,981	14.3	2.18	1.0
Use of solarized boreholes for livestock	0.0	NA	NA	39	3,981	0.0	NA	0.0
Use of water pans for livestock	0.0	NA	NA	39	3,981	0.0	NA	0.0
Use of sand dams for livestock	0.0	NA	NA	39	3,981	0.0	NA	0.0
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Goats (improved livestock management practices/technologies)	36.6	27.6	45.6	447	45,374	48.2	4.41	1.9
Sex								
Male	35.3	24.9	45.7	253	24,781	47.9	5.11	1.7
Female	38.2	29.0	47.4	194	20,593	48.7	4.53	1.3
Age								
15-29 years	38.3	27.1	49.6	63	6,351	49.0	5.46	0.9
30+ years	36.3	26.8	45.9	384	39,023	48.2	4.69	1.9
Use of improved livestock breeds/species	0.0	NA	NA	447	45,374	0.0	NA	0.0
Use of livestock health services and products	4.7	1.4	8.0	447	45,374	21.2	1.62	1.6
Use of improved shelters	20.3	13.8	26.8	447	45,374	40.2	3.19	1.7
Use of improved calving techniques	0.0	NA	NA	447	45,374	0.0	NA	0.0
Use of improved milking techniques	0.4	0.0	1.2	447	45,374	6.2	0.39	1.3
Use of more nutritious pasture varieties	1.8	0.5	3.2	447	45,374	13.5	0.66	1.0
Utilization of set grazing areas	9.9	6.8	13.0	447	45,374	29.9	1.52	1.1
Improved fodder production	0.2	0.0	0.6	447	45,374	4.4	0.20	1.0
Reseeding of degraded lands with drought resistant grass species	0.3	0.0	0.8	447	45,374	5.2	0.26	1.1
Fencing off pasture plots	3.1	0.0	6.4	447	45,374	17.3	1.64	2.0
Rehabilitation of degraded grazing lands	0.9	0.0	2.1	447	45,374	9.7	0.57	1.2
Use of solarized boreholes for livestock	0.1	0.0	0.4	447	45,374	3.6	0.13	0.8
Use of water pans for livestock	2.6	0.1	5.2	447	45,374	16.1	1.24	1.6
Use of sand dams for livestock	0.0	NA	NA	447	45,374	0.0	NA	0.0
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Camels (improved livestock management practices/technologies)	23.0	8.5	37.5	55	6,161	42.5	6.73	1.2
Sex								
Male	^	^	^	27	2,857	^	^	^
Female	^	^	^	28	3,305	^	^	^
Age								
15-29 years	^	^	^	3	322	^	^	^
30+ years	22.9	8.1	37.7	52	5,839	42.4	6.84	1.2
Use of improved livestock breeds/species	NA	NA	NA	NA	NA	NA	NA	NA
Use of livestock health services and products	NA	NA	NA	NA	NA	NA	NA	NA
Use of improved shelters	19.3	6.5	32.2	55	6,161	39.8	5.95	1.1
Use of improved calving techniques	0.0	NA	NA	55	6,161	0.0	NA	0.0
Use of improved milking techniques	0.0	NA	NA	55	6,161	0.0	NA	0.0
Use of more nutritious pasture varieties	0.0	NA	NA	55	6,161	0.0	NA	0.0
Utilization of set grazing areas	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved fodder production	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	17.3	0.8	33.7	55	6,161	38.1	7.63	1.5
Rehabilitation of degraded grazing lands	1.6	0.0	5.5	55	6,161	12.8	1.77	1.0
Use of solarized boreholes for livestock	0.0	NA	NA	55	6,161	0.0	NA	0.0
Use of water pans for livestock	1.6	0.0	5.5	55	6,161	12.8	1.77	1.0
Use of sand dams for livestock	0.0	NA	NA	55	6,161	0.0	NA	0.0
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	3.7	0.5	7.0	37	3,486	9.8	1.50	0.9
Sex								
Male	^	^	^	19	1,622	^	^	^
Female	^	^	^	18	1,864	^	^	^
Age								
15-29 years	^	^	^	5	357	^	^	^
30+ years	3.1	1.0	5.2	32	3,129	8.3	0.97	0.7
Goats (kilogram of offtake per head of goat per producer)	2.9	2.2	3.6	437	39,899	4.1	0.33	1.7
Sex								
Male	3.3	2.6	4.1	247	21,662	4.4	0.38	1.4
Female	2.4	1.7	3.0	190	18,236	3.8	0.33	1.2
Age								
15-29 years	2.6	1.3	4.0	61	5,476	4.0	0.65	1.3
30+ years	2.9	2.2	3.7	376	34,423	4.2	0.35	1.7
Camels (kilogram of offtake per head of camel per producer)	15.4	7.4	23.5	53	5,287	38.4	3.73	0.7
Sex								
Male	^	^	^	27	2,561	^	^	^
Female	^	^	^	26	2,727	^	^	^
Age								
15-29 years	^	^	^	3	289	^	^	^
30+ years	16.3	8.1	24.5	50	4,998	39.3	3.79	0.7
Cow milk (liters per milking cow per day per producer)	^	^	^	2	181	^	^	^
Sex								
Male	^	^	^	1	117	^	^	^
Female	^	^	^	1	65	^	^	^
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	^	^	^	2	181	^	^	^

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Camel milk (liters per milking camel per day per producer)	^	^	^	13	1,392	^	^	^
Sex								
Male	^	^	^	5	517	^	^	^
Female	^	^	^	8	875	^	^	^
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	^	^	^	13	1,392	^	^	^
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	3.7	1.2	6.2	810	81,828	18.9	1.23	1.8
<19 years	2.5	0.0	5.3	125	12,345	15.7	1.41	1.0
19+ years	3.9	1.0	6.9	685	69,484	19.4	1.44	1.9
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	61.5	54.7	68.4	491	49,088	48.7	3.36	1.5
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	72.2	62.2	82.2	518	51,367	44.9	4.91	2.5
15-19 years	^	^	^	26	2,588	^	^	^
20-29 years	76.9	64.9	88.9	225	22,471	42.3	5.90	2.1
30-49 years	68.4	57.8	79.1	267	26,307	46.6	5.22	1.8
Percent of women in union who made decisions about modern family planning methods in the past 12 months	70.6	62.3	78.9	100	10,806	45.8	4.02	0.9
15-19	^	^	^	1	134	^	^	^
Alone	^	^	^	1	134	^	^	^
Jointly	^	^	^	1	134	^	^	^
20-29	67.6	53.7	81.4	59	6,611	47.2	6.63	1.1
Alone	45.8	36.3	55.3	59	6,611	50.3	4.55	0.7
Jointly	21.7	12.6	30.9	59	6,611	41.6	4.39	0.8
30-49	74.5	62.1	87.0	40	4,061	44.1	5.93	0.9
Alone	49.6	30.2	69.1	40	4,061	50.6	9.25	1.2
Jointly	24.9	5.1	44.7	40	4,061	43.8	9.42	1.4
Contraceptive prevalence rate (CPR)	22.1	14.1	30.0	437	43,657	41.5	3.91	2.0
Traditional	0.8	0.0	1.8	437	43,657	9.1	0.49	1.1
Modern	21.2	13.3	29.2	437	43,657	40.9	3.92	2.0
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	55.1	44.3	66.0	109	9,333	50.0	5.32	1.1
Male	56.2	41.4	70.9	51	4,529	49.9	7.27	1.0
Female	54.2	43.1	65.2	58	4,805	51.5	5.43	0.8
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	0.6	0.0	1.7	235	21,797	7.6	0.57	1.2
Male	1.0	0.0	3.1	132	12,004	10.1	1.03	1.2
Female	0.0	NA	NA	103	9,793	0.0	NA	0.0
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	4.1	1.6	6.7	235	21,797	20.0	1.25	1.0
Male	5.5	1.7	9.3	132	12,004	22.7	1.86	0.9
Female	2.5	0.0	6.3	103	9,793	15.2	1.86	1.2
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	24.1	19.4	28.8	892	79,716	42.8	2.32	1.6

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Male	27.3	20.5	34.1	461	41,109	44.6	3.33	1.6
Female	20.7	16.1	25.3	431	38,607	40.5	2.27	1.2
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	79.1	72.0	86.1	210	19,196	40.8	3.47	1.2
Male	83.0	75.7	90.4	124	11,211	37.4	3.63	1.1
Female	73.5	62.1	84.9	86	7,984	43.4	5.62	1.2
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	34.1	25.7	42.4	628	58,297	47.4	4.10	2.2
15-19 years	^	^	^	28	2,729	^	^	^
20-29 years	34.0	24.9	43.1	232	21,888	47.9	4.49	1.4
30-49 years	38.9	28.8	49.0	274	25,194	50.0	4.98	1.6
≥50 years	25.1	13.7	36.6	94	8,486	44.9	5.63	1.2
Male	46.8	34.7	58.9	582	59,642	49.9	5.94	2.9
15-19 years	^	^	^	3	230	^	^	^
20-29 years	58.3	44.0	72.5	121	12,827	47.5	7.00	1.6
30-49 years	50.8	38.0	63.6	279	28,011	49.7	6.28	2.1
≥50 years	33.4	20.0	46.8	179	18,573	45.9	6.60	1.9
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	79.1	71.0	87.2	179	18,555	40.8	3.95	1.3
15-19 years	^	^	^	5	448	^	^	^
20-29 years	83.0	72.7	93.2	67	7,128	36.0	5.04	1.1
30-49 years	76.9	66.4	87.3	88	9,170	41.2	5.12	1.2
≥50 years	^	^	^	19	1,808	^	^	^
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	27.3	17.5	37.0	179	18,555	44.7	4.78	1.4
15-19 years	^	^	^	5	448	^	^	^
20-29 years	30.8	16.6	44.9	67	7,128	44.3	6.94	1.3
30-49 years	26.1	16.7	35.5	88	9,170	42.9	4.63	1.0
≥50 years	^	^	^	19	1,808	^	^	^
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	45.6	37.2	54.0	214	23,207	49.9	4.09	1.2
15-19 years	NA	NA	NA	NA	NA	NA	NA	NA
20-29 years	51.4	40.6	62.2	57	6,188	47.5	5.31	0.8
30-49 years	43.3	30.1	56.5	116	12,138	48.3	6.48	1.4
≥50 years	43.9	23.3	64.5	41	4,881	45.0	10.13	1.4

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	36.2	27.2	45.3	594	54,047	48.1	4.46	2.3
15-19 years	^	^	^	26	2,358	^	^	^
20-29 years	39.3	29.3	49.2	219	20,437	48.6	4.90	1.5
30-49 years	34.6	25.2	44.0	261	23,547	48.2	4.63	1.6
≥50 years	30.4	15.0	45.8	88	7,704	47.2	7.58	1.5
Male	31.4	22.6	40.3	523	49,455	46.5	4.35	2.1
15-19 years	^	^	^	2	147	^	^	^
20-29 years	39.5	24.1	54.9	109	10,582	47.7	7.58	1.7
30-49 years	31.9	22.6	41.2	256	23,802	46.8	4.57	1.6
≥50 years	25.2	12.9	37.4	156	14,923	42.8	6.03	1.8
Percent of women/men in a union with access to credit								
Female	21.8	14.7	28.9	594	54,047	41.3	3.49	2.1
15-19 years	^	^	^	26	2,358	^	^	^
20-29 years	26.8	15.8	37.7	219	20,437	44.0	5.40	1.8
30-49 years	20.9	13.2	28.6	261	23,547	41.2	3.77	1.5
≥50 years	15.2	6.1	24.3	88	7,704	36.9	4.48	1.1
Male	22.5	15.2	29.9	523	49,455	41.8	3.62	2.0
15-19 years	^	^	^	2	147	^	^	^
20-29 years	29.6	21.0	38.3	109	10,582	44.6	4.27	1.0
30-49 years	26.0	17.3	34.7	256	23,802	44.0	4.28	1.6
≥50 years	12.1	5.9	18.3	156	14,923	32.2	3.04	1.2
Percent of women/men in a union who make decisions about credit								
Female	75.5	65.4	85.7	114	11,772	43.2	4.95	1.2
15-19	^	^	^	3	208	^	^	^
Alone	^	^	^	3	208	^	^	^
Jointly	^	^	^	3	208	^	^	^
20-29	75.7	60.8	90.6	52	5,471	43.3	7.10	1.2
Alone	36.7	27.1	46.3	52	5,471	48.7	4.56	0.7
Jointly	39.0	25.9	52.2	52	5,471	49.3	6.26	0.9
30-49	78.1	65.4	90.8	47	4,923	41.8	6.05	1.0
Alone	57.1	39.8	74.4	47	4,923	50.0	8.24	1.1
Jointly	21.0	7.4	34.5	47	4,923	41.1	6.46	1.1
≥50 years	^	^	^	12	1,171	^	^	^
Alone	^	^	^	12	1,171	^	^	^
Jointly	^	^	^	12	1,171	^	^	^
Male	85.9	77.7	94.2	108	11,137	34.9	4.04	1.2
15-19	NA	NA	NA	NA	NA	NA	NA	NA
Alone	NA	NA	NA	NA	NA	NA	NA	NA
Jointly	NA	NA	NA	NA	NA	NA	NA	NA
20-29	81.8	66.8	96.7	32	3,137	39.2	7.07	1.0

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Alone	37.6	13.0	62.3	32	3,137	49.2	11.61	1.3
Jointly	44.1	25.9	62.4	32	3,137	50.4	8.61	1.0
30-49	89.5	78.9	100.0	59	6,194	31.0	5.11	1.3
Alone	57.5	37.6	77.3	59	6,194	49.9	9.61	1.5
Jointly	32.0	13.7	50.3	59	6,194	47.1	8.86	1.4
≥50 years	^	^	^	17	1,806	^	^	^
Alone	^	^	^	17	1,806	^	^	^
Jointly	^	^	^	17	1,806	^	^	^
RESILIENCE-RELATED								
Adaptive Capacity Index	29.2	25.1	33.4	949	82,093	14.2	2.03	4.4
Absorptive Capacity Index	29.2	26.3	32.1	949	82,093	14.0	1.43	3.1
Transformative Capacity Index	33.4	25.7	41.1	950	82,145	20.1	3.77	5.8
Ability to recover from shocks and stresses index	3.8	3.6	3.9	850	74,283	1.1	0.06	1.6
Male and female adults	3.8	3.6	3.9	596	51,839	1.2	0.07	1.4
Adult female, no adult male	3.7	3.5	4.0	193	17,230	1.1	0.11	1.4
Adult male, no adult female	3.6	3.2	4.0	60	5,104	1.1	0.19	1.3
Child, no adults	^	^	^	1	109	^	^	^
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	2.9	1.0	4.7	950	82,145	16.7	0.89	1.7
Savings	1.4	0.3	2.5	950	82,145	11.7	0.53	1.4
Male and female adults	1.9	0.4	3.4	664	57,480	13.5	0.73	1.4
Adult female, no adult male	0.4	0.0	1.2	217	18,818	6.2	0.39	0.9
Adult male, no adult female	0.0			68	5,737	0.0		0.0
Child, no adults	^	^	^	1	109	^	^	^
Credit (including microfinance)	2.2	0.9	3.6	950	82,145	14.8	0.67	1.4
Male and female adults	2.8	1.0	4.6	664	57,480	16.4	0.88	1.4
Adult female, no adult male	1.3	0.0	2.9	217	18,818	11.3	0.80	1.0
Adult male, no adult female	0.0			68	5,737	0.0		0.0
Child, no adults	^	^	^	1	109	^	^	^
Index of social capital at the household level								
Overall index	63.6	59.6	67.6	950	82,145	26.1	1.95	2.3
Male and female adults	64.6	60.7	68.6	664	57,480	25.8	1.93	1.9
Adult female, no adult male	62.9	58.2	67.6	217	18,818	26.1	2.32	1.3
Adult male, no adult female	56.4	49.0	63.9	68	5,737	27.5	3.67	1.1
Child, no adults	^	^	^	1	109	^	^	^

Table A1.6. BHA Kenya Baseline Indicators - TURKANA

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Bonding sub-index	63.7	59.6	67.7	950	82,145	27.4	2.00	2.2
Male and female adults	64.6	60.4	68.8	664	57,480	27.4	2.06	1.9
Adult female, no adult male	62.0	56.3	67.8	217	18,818	27.8	2.82	1.5
Adult male, no adult female	59.8	54.9	64.6	68	5,737	26.9	2.40	0.7
Child, no adults	^	^	^	1	109	^	^	^
Bridging sub-index	63.5	59.2	67.9	950	82,145	29.1	2.15	2.3
Male and female adults	64.6	60.3	68.9	664	57,480	28.3	2.10	1.9
Adult female, no adult male	63.7	59.4	68.1	217	18,818	28.9	2.14	1.1
Adult male, no adult female	53.1	40.5	65.7	68	5,737	35.2	6.18	1.4
Child, no adults	^	^	^	1	109	^	^	^

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	81.2	75.8	86.6	951	40,725	35.4	2.6	2.3
Male and female adults	80.7	75.8	85.7	638	27,152	35.6	2.41	1.7
Adult female, no adult male	89.7	83.4	96.0	211	8,611	27.7	3.10	1.6
Adult male, no adult female	67.2	53.0	81.4	96	4,704	40.7	6.99	1.7
Child, no adults	^	^	^	6	258	^	^	^
Level of severity								
Moderate	37.1	34.8	39.4	951	40,725	24.7	1.13	1.4
Severe	44.1	38.6	49.6	951	40,725	31.8	2.7	2.6
Percentage of households with poor food consumption score (FCS)	21.9	16.3	27.5	951	40,725	41.4	2.74	2.0
Male and female adults	20.3	15.3	25.3	638	27,152	40.4	2.46	1.5
Adult female, no adult male	30.6	20.3	40.8	211	8,611	47.2	5.02	1.5
Adult male, no adult female	13.7	6.1	21.2	96	4,704	32.1	3.71	1.1
Child, no adults	^	^	^	6	258	^	^	^
Percentage of households with borderline FCS	18.6	14.8	22.5	951	40,725	39.0	1.91	1.5
Male and female adults	19.7	14.8	24.6	638	27,152	39.9	2.39	1.5
Adult female, no adult male	18.9	13.0	24.8	211	8,611	40.1	2.90	1.1
Adult male, no adult female	11.3	0.7	22.0	96	4,704	29.6	5.22	1.7
Child, no adults	^	^	^	6	258	^	^	^
Percentage of households with adequate FCS	59.5	52.3	66.6	951	40,725	49.1	3.52	2.2
Male and female adults	60.0	51.9	68.1	638	27,152	49.2	3.99	2.0
Adult female, no adult male	50.5	39.6	61.5	211	8,611	51.3	5.39	1.5
Adult male, no adult female	75.0	66.3	83.7	96	4,704	40.5	4.28	1.0
Child, no adults	^	^	^	6	258	^	^	^
Mean FCS	48.2	44.4	52.1	951	40,725	21.7	1.90	2.7
Male and female adults	49.0	44.9	53.1	638	27,152	21.8	2.02	2.3
Adult female, no adult male	41.5	37.3	45.7	211	8,611	19.0	2.08	1.6
Adult male, no adult female	57.3	52.5	62.2	96	4,704	21.1	2.40	1.1
Child, no adults	^	^	^	6	258	^	^	^
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	2.0	1.5	2.6	952	193,178	3.5	0.3	2.3
Male and female adults	2.0	1.5	2.5	640	152,632	2.8	0.25	2.3
Adult female, no adult male	1.5	1.0	1.9	210	31,746	2.6	0.23	1.2
Adult male, no adult female	5.3	3.5	7.0	96	8,205	13.7	0.86	0.6
Child, no adults	^	^	^	6	594	^	^	^
Prevalence of Poverty: Percent of people living on less thatn $1.90/day 2011 PPP	68.3	58.6	78.0	952	193,178	46.6	4.75	3.1
Male and female adults	68.6	58.8	78.3	640	152,632	42.8	4.80	2.8
Adult female, no adult male	75.8	65.2	86.4	210	31,746	49.6	5.21	1.5
Adult male, no adult female	32.4	14.0	50.9	96	8,205	72.1	9.06	1.2
Child, no adults	^	^	^	6	594	^	^	^

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	55.1	50.1	60.1	602	131,909	23.6	2.47	2.6
Male and female adults	54.5	49.3	59.7	433	104,632	21.1	2.55	2.5
Adult female, no adult male	58.7	52.6	64.9	145	24,056	26.1	3.02	1.4
Adult male, no adult female	^	^	^	19	2,662	^	^	^
Child, no adults	^	^	^	5	558	^	^	^
WASH INDICATORS								
Percent of households using basic drinking water services	8.6	4.3	12.8	946	40,564	28.0	2.1	2.3
On premise	3.4	1.2	5.6	946	40,564	18.2	1.1	1.8
≤ 30-minute roundtrip	5.1	2.1	8.2	946	40,564	22.1	1.5	2.1
Gendered household type								
Male and female adults	6.8	3.4	10.1	640	27,207	25.1	1.6	1.6
Adult female, no adult male	10.5	0.0	21.1	208	8,503	30.8	5.2	2.4
Adult male, no adult female	16.0	3.0	29.0	92	4,596	36.9	6.3	1.6
Child, no adults	^	^	^	6	258	^	^	^
Percent of households in target areas practicing correct use of recommended household water treatment technologies	17.3	13.3	21.3	959	41,102	37.9	2.0	1.6
Chlorination	5.8	3.6	8.1	959	41,102	23.5	1.12	1.5
Flocculant/Disinfectant	2.0	0.8	3.1	959	41,102	13.8	0.58	1.3
Filtration	2.3	0.8	3.8	959	41,102	15.1	0.75	1.5
Solar Disinfection	0.2	0.0	0.5	959	41,102	4.5	0.14	1.0
Boiling	9.5	6.4	12.7	959	41,102	29.4	1.6	1.6
Percentage of households with access to a basic sanitation service	8.2	4.6	11.7	959	41,102	27.4	1.77	2.0
Male and female adults	7.8	4.7	10.9	644	27,412	26.9	1.50	1.4
Adult female, no adult male	6.8	1.7	11.9	212	8,654	25.9	2.50	1.4
Adult male, no adult female	13.0	0.0	27.6	97	4,778	31.4	7.19	2.3
Child, no adults	^	^	^	6	258	^	^	^
Percent of households in target areas practicing open defecation	48.5	33.0	64.1	959	41,102	50.0	7.64	4.7
Male and female adults	51.4	36.2	66.5	644	27,412	50.2	7.43	3.8
Adult female, no adult male	54.3	37.4	71.2	212	8,654	51.1	8.29	2.4
Adult male, no adult female	19.0	6.2	31.8	97	4,778	36.6	6.29	1.7
Child, no adults	^	^	^	6	258	^	^	^
Percent of households with soap and water at a handwashing station on premises	57.6	47.0	68.1	191	9,499	49.6	5.13	1.4
Male and female adults	53.1	41.6	64.5	133	6,512	47.9	5.63	1.4
Adult female, no adult male	63.3	46.1	80.5	30	1,598	43.7	8.44	1.1
Adult male, no adult female	^	^	^	28	1,389	^	^	^
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	18.1	12.9	23.2	683	29,693	38.5	2.54	1.7
Male	21.9	15.9	27.8	340	14,677	41.5	2.93	1.3
Female	14.3	8.4	20.3	343	15,015	34.9	2.92	1.5
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	16.8	9.7	24.0	175	7,765	37.5	3.49	1.2
Male	19.5	9.3	29.7	99	4,355	39.6	5.00	1.3
Female	13.4	5.9	20.9	76	3,409	33.6	3.69	1.0
Percent of producers who have applied targeted improved management practices or technologies								
Greengrams	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Sorghum	NA	NA	NA	NA	NA	NA	NA	NA
Sex								
Male	NA	NA	NA	NA	NA	NA	NA	NA
Female	NA	NA	NA	NA	NA	NA	NA	NA
Age								
15-29 years	NA	NA	NA	NA	NA	NA	NA	NA
30+ years	NA	NA	NA	NA	NA	NA	NA	NA
Management practice/technology type								
Crop genetics practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved/certified seed	NA	NA	NA	NA	NA	NA	NA	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	NA	NA	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	NA	NA	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	NA	NA	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	NA	NA	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	NA	NA	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	NA	NA	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	NA	NA	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	NA	NA	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	NA	NA	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	NA	NA	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Use of organic manure	NA	NA	NA	NA	NA	NA	NA	NA
Soil testing	NA	NA	NA	NA	NA	NA	NA	NA
Inoculant	NA	NA	NA	NA	NA	NA	NA	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	NA	NA	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	NA	NA	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	NA	NA	NA
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	NA	NA	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	NA	NA	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	NA	NA	NA
Temperature and humidity control	NA	NA	NA	NA	NA	NA	NA	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA	NA
Contract farming	NA	NA	NA	NA	NA	NA	NA	NA
Use of training and extension services	NA	NA	NA	NA	NA	NA	NA	NA
Selling products through community farmer associations	NA	NA	NA	NA	NA	NA	NA	NA
Improved bulking	NA	NA	NA	NA	NA	NA	NA	NA
Sorting and grading	NA	NA	NA	NA	NA	NA	NA	NA
Other improved practices/technologies	NA	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	70.8	60.4	81.1	401	17,035	45.5	5.02	2.2
Sex								
Male	71.4	60.4	82.4	199	8,364	45.3	5.35	1.7
Female	70.2	59.5	80.8	202	8,671	45.9	5.14	1.6
Age								
15-29 years	68.3	55.3	81.2	95	4,157	46.8	6.22	1.3
30+ years	71.6	61.4	81.8	306	12,878	45.2	4.93	1.9
Use of improved livestock breeds/species	4.9	1.8	8.0	401	17,035	21.6	1.49	1.4
Use of livestock health services and products	38.3	30.0	46.5	401	17,035	48.7	3.99	1.6
Use of improved shelters	9.1	5.5	12.8	401	17,035	28.8	1.76	1.2
Use of improved calving techniques	1.4	0.0	3.2	401	17,035	11.9	0.84	1.4
Use of improved milking techniques	1.1	0.0	2.6	401	17,035	10.3	0.73	1.4
Use of more nutritious pasture varieties	2.4	0.6	4.3	401	17,035	15.4	0.89	1.2
Utilization of set grazing areas	17.8	10.4	25.2	401	17,035	38.3	3.61	1.9
Improved fodder production	0.7	0.0	1.6	401	17,035	8.5	0.44	1.0
Reseeding of degraded lands with drought resistant grass species	3.2	0.2	6.1	401	17,035	17.5	1.42	1.6

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Fencing off pasture plots	9.1	2.6	15.6	401	17,035	28.8	3.16	2.2
Rehabilitation of degraded grazing lands	0.7	0.0	1.6	401	17,035	8.1	0.45	1.1
Use of solarized boreholes for livestock	2.6	0.0	5.8	401	17,035	15.8	1.59	2.0
Use of water pans for livestock	12.7	8.0	17.4	401	17,035	33.4	2.28	1.4
Use of sand dams for livestock	7.0	3.4	10.6	401	17,035	25.5	1.75	1.4
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Goats (improved livestock management practices/technologies)	64.6	54.0	75.3	506	21,020	47.9	5.18	2.4
Sex								
Male	65.6	53.6	77.6	247	10,188	47.6	5.82	1.9
Female	63.7	53.2	74.2	259	10,832	48.2	5.09	1.7
Age								
15-29 years	59.7	45.7	73.7	135	5,695	49.2	6.77	1.6
30+ years	66.5	55.7	77.2	371	15,325	47.3	5.21	2.1
Use of improved livestock breeds/species	4.1	1.2	7.1	506	21,020	20.0	1.44	1.6
Use of livestock health services and products	32.6	24.9	40.2	506	21,020	46.9	3.72	1.8
Use of improved shelters	9.0	4.0	14.1	506	21,020	28.7	2.45	1.9
Use of improved calving techniques	0.2	0.0	0.6	506	21,020	4.5	0.21	1.0
Use of improved milking techniques	0.0	NA	NA	506	21,020	0.0	NA	0.0
Use of more nutritious pasture varieties	0.4	0.0	1.0	506	21,020	6.3	0.27	1.0
Utilization of set grazing areas	19.9	13.1	26.8	506	21,020	40.0	3.33	1.9
Improved fodder production	0.2	0.0	0.7	506	21,020	4.9	0.24	1.1
Reseeding of degraded lands with drought resistant grass species	2.2	0.4	4.1	506	21,020	14.8	0.88	1.3
Fencing off pasture plots	5.2	1.4	9.1	506	21,020	22.3	1.88	1.9
Rehabilitation of degraded grazing lands	0.8	0.0	1.9	506	21,020	8.8	0.54	1.4
Use of solarized boreholes for livestock	2.2	0.0	4.4	506	21,020	14.7	1.05	1.6
Use of water pans for livestock	9.1	4.8	13.5	506	21,020	28.8	2.11	1.6
Use of sand dams for livestock	5.5	2.4	8.5	506	21,020	22.8	1.48	1.5
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Camels (improved livestock management practices/technologies)	11.3	5.1	17.4	84	3,461	31.8	2.83	0.8
Sex								
Male	12.8	2.1	23.5	39	1,578	33.8	4.97	0.9
Female	10.0	0.0	20.9	45	1,883	30.3	4.96	1.1
Age								
15-29 years	^	^	^	23	943	^	^	^
30+ years	12.5	5.3	19.8	61	2,518	33.4	3.33	0.8
Use of improved livestock breeds/species	NA	NA	NA	NA	NA	NA	NA	NA
Use of livestock health services and products	NA	NA	NA	NA	NA	NA	NA	NA
Use of improved shelters	3.7	0.0	7.4	84	3,461	18.9	1.74	0.8
Use of improved calving techniques	0.0	NA	NA	84	3,461	0.0	NA	0.0
Use of improved milking techniques	0.0	NA	NA	84	3,461	0.0	NA	0.0
Use of more nutritious pasture varieties	0.0	NA	NA	84	3,461	0.0	NA	0.0
Utilization of set grazing areas	NA	NA	NA	NA	NA	NA	NA	NA

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Improved fodder production	NA	NA	NA	NA	NA	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	0.0	NA	NA	84	3,461	0.0	NA	0.0
Rehabilitation of degraded grazing lands	0.0	NA	NA	84	3,461	0.0	NA	0.0
Use of solarized boreholes for livestock	2.5	0.0	7.8	84	3,461	15.6	2.46	1.4
Use of water pans for livestock	6.6	0.6	12.6	84	3,461	25.0	2.77	1.0
Use of sand dams for livestock	3.9	0.0	8.6	84	3,461	19.6	2.14	1.0
Use of rock catchments for livestock	NA	NA	NA	NA	NA	NA	NA	NA
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	16.9	13.1	20.7	383	15,440	24.3	1.85	1.5
Sex								
Male	19.3	14.9	23.7	188	7,569	25.2	2.13	1.2
Female	14.6	10.5	18.7	195	7,871	23.3	1.99	1.2
Age								
15-29 years	15.6	10.1	21.0	89	3,690	24.5	2.62	1.0
30+ years	17.3	13.6	21.1	294	11,750	24.3	1.83	1.3
Goats (kilogram of offtake per head of goat per producer)	9.5	7.6	11.4	497	18,935	8.8	0.94	2.4
Sex								
Male	10.0	8.1	12.0	242	9,159	8.2	0.95	1.8
Female	9.0	6.9	11.2	255	9,776	9.4	1.03	1.8
Age								
15-29 years	9.1	6.9	11.3	134	5,192	8.4	1.08	1.5
30+ years	9.7	7.6	11.7	363	13,743	9.0	1.01	2.1
Camels (kilogram of offtake per head of camel per producer)	0.9	0.0	2.3	82	3,093	6.4	0.64	0.9
Sex								
Male	2.1	0.0	5.1	37	1,372	9.5	1.39	0.9
Female	0.0	NA	NA	45	1,721	0.0	NA	0.0
Age								
15-29 years	^	^	^	23	863	^	^	^
30+ years	1.0	0.0	3.0	59	2,231	7.1	0.91	1.0
Cow milk (liters per milking cow per day per producer)	1.7	1.3	2.2	51	2,033	1.1	0.20	1.3
Sex								
Male	^	^	^	26	1,066	^	^	^
Female	^	^	^	25	967	^	^	^
Age								
15-29 years	^	^	^	13	493	^	^	^
30+ years	1.7	1.2	2.3	38	1,540	1.2	0.25	1.3

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Camel milk (liters per milking camel per day per producer)	^	^	^	24	872	^	^	^
Sex								
Male	^	^	^	14	503	^	^	^
Female	^	^	^	10	370	^	^	^
Age								
15-29 years	^	^	^	4	125	^	^	^
30+ years	^	^	^	20	747	^	^	^
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	9.1	5.0	13.3	857	40,762	28.8	2.03	2.1
<19 years	6.9	0.0	14.0	171	8,088	25.5	3.49	1.8
19+ years	9.7	5.9	13.5	686	32,674	29.6	1.87	1.7
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	54.3	44.4	64.1	462	21,144	49.9	4.83	2.1
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	80.8	72.6	89.0	534	24,846	39.4	4.04	2.4
15-19 years	50.6	30.8	70.5	45	2,122	50.6	9.46	1.3
20-29 years	81.5	71.5	91.4	267	12,405	38.9	4.89	2.1
30-49 years	86.2	80.3	92.1	222	10,319	34.6	2.89	1.2
Percent of women in union who made decisions about modern family planning methods in the past 12 months	82.1	71.3	92.9	177	8,119	38.4	5.27	1.8
15-19	^	^	^	4	138	^	^	^
Alone	^	^	^	4	138	^	^	^
Jointly	^	^	^	4	138	^	^	^
20-29	77.7	64.2	91.2	88	4,032	41.8	6.57	1.5
Alone	29.4	20.0	38.8	88	4,032	45.8	4.58	0.9
Jointly	48.4	31.2	65.5	88	4,032	50.3	8.35	1.6
30-49	86.0	75.1	96.8	85	3,948	35.0	5.30	1.4
Alone	31.4	20.5	42.4	85	3,948	46.7	5.35	1.1
Jointly	54.5	41.3	67.8	85	3,948	50.1	6.46	1.2
Contraceptive prevalence rate (CPR)	35.5	26.9	44.1	458	21,211	47.9	4.24	1.9
Traditional	2.8	0.2	5.5	458	21,211	16.7	1.32	1.7
Modern	34.0	25.8	42.2	458	21,211	47.4	4.04	1.8
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	61.2	48.9	73.4	88	3,727	49.0	5.99	1.1
Male	53.9	34.6	73.2	34	1,446	49.3	9.49	1.1
Female	65.8	49.6	82.0	54	2,281	47.0	7.98	1.2
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	5.7	2.2	9.3	195	7,911	23.3	1.75	1.0
Male	4.9	0.3	9.6	93	3,768	21.9	2.30	1.0
Female	6.5	1.3	11.7	102	4,143	24.8	2.55	1.0
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	13.8	7.6	19.9	195	7,911	34.6	3.02	1.2
Male	10.7	4.0	17.5	93	3,768	31.2	3.32	1.0
Female	16.6	6.6	26.5	102	4,143	37.4	4.88	1.3
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	27.0	21.4	32.5	771	31,853	44.4	2.72	1.7

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Male	25.1	18.2	31.9	377	15,527	43.4	3.37	1.5
Female	28.8	22.5	35.2	394	16,326	45.3	3.13	1.4
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	79.3	73.9	84.7	210	8,596	40.6	2.64	0.9
Male	75.6	68.9	82.4	97	3,891	43.5	3.33	0.8
Female	82.3	74.6	89.9	113	4,706	38.1	3.76	1.0
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	30.6	23.4	37.9	623	27,101	46.1	3.56	1.9
15-19 years	15.5	0.5	30.5	46	2,025	36.5	7.36	1.4
20-29 years	24.9	18.5	31.3	279	12,203	43.7	3.15	1.2
30-49 years	41.2	30.7	51.6	230	10,055	49.4	5.15	1.6
≥50 years	28.6	17.6	39.6	68	2,817	47.1	5.41	0.9
Male	50.7	40.3	61.0	603	27,777	50.0	5.08	2.5
15-19 years	^	^	^	10	433	^	^	^
20-29 years	67.4	55.0	79.8	98	4,620	45.9	6.09	1.3
30-49 years	58.4	47.8	69.0	332	15,612	48.2	5.21	2.0
≥50 years	25.1	16.6	33.6	163	7,111	44.0	4.18	1.2
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	87.0	81.1	93.0	171	8,041	33.7	2.90	1.1
15-19 years	^	^	^	6	314	^	^	^
20-29 years	82.5	70.5	94.6	64	2,880	37.9	5.91	1.2
30-49 years	87.5	81.4	93.5	84	4,041	31.8	2.97	0.9
≥50 years	^	^	^	17	807	^	^	^
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	40.6	30.0	51.2	171	8,041	49.2	5.18	1.4
15-19 years	^	^	^	6	314	^	^	^
20-29 years	51.0	37.1	64.9	64	2,880	49.9	6.83	1.1
30-49 years	36.5	24.7	48.3	84	4,041	46.3	5.79	1.1
≥50 years	^	^	^	17	807	^	^	^
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	49.8	39.5	60.0	271	13,023	50.1	5.02	1.7
15-19 years	^	^	^	1	19	^	^	^
20-29 years	56.7	44.1	69.4	59	2,878	47.7	6.23	1.0
30-49 years	47.8	35.7	59.8	176	8,576	48.0	5.94	1.6
≥50 years	48.4	29.2	67.6	35	1,550	50.5	9.44	1.1

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	49.9	40.8	59.0	594	25,912	50.0	4.46	2.2
15-19 years	37.2	18.4	56.0	44	1,951	49.0	9.2	1.3
20-29 years	48.1	37.7	58.5	265	11,630	50.8	5.12	1.6
30-49 years	54.8	44.7	65.0	219	9,563	50.2	4.97	1.5
≥50 years	49.2	33.5	64.8	66	2,768	52.1	7.68	1.2
Male	40.5	31.7	49.4	534	25,387	49.1	4.36	2.0
15-19 years	^	^	^	8	336	^	^	^
20-29 years	43.8	31.6	56.1	88	4,209	48.7	6.02	1.2
30-49 years	40.6	30.2	51.0	299	14,553	47.7	5.11	1.9
≥50 years	40.3	29.8	50.9	139	6,289	49.3	5.18	1.2
Percent of women/men in a union with access to credit								
Female	42.9	35.7	50.2	594	25,912	49.5	3.56	1.8
15-19 years	35.1	24.1	46.1	44	1,951	48.4	5.4	0.7
20-29 years	39.6	30.7	48.4	265	11,630	49.7	4.37	1.4
30-49 years	52.7	44.4	61.1	219	9,563	50.3	4.11	1.2
≥50 years	28.8	14.5	43.0	66	2,768	47.2	7.00	1.2
Male	45.0	38.2	51.8	534	25,387	49.8	3.35	1.6
15-19 years	^	^	^	8	336	^	^	^
20-29 years	46.2	35.8	56.6	88	4,209	48.9	5.13	1.0
30-49 years	48.9	42.0	55.8	299	14,553	48.6	3.39	1.2
≥50 years	37.2	27.8	46.6	139	6,289	48.6	4.62	1.1
Percent of women/men in a union who make decisions about credit								
Female	81.9	77.5	86.3	244	11,124	38.6	2.17	0.9
15-19	^	^	^	15	685	^	^	^
Alone	^	^	^	15	685	^	^	^
Jointly	^	^	^	15	685	^	^	^
20-29	81.8	73.2	90.5	101	4,602	38.8	4.22	1.1
Alone	36.1	25.8	46.5	101	4,602	48.3	5.06	1.1
Jointly	45.7	31.8	59.7	101	4,602	50.1	6.83	1.4
30-49	81.8	73.7	89.9	109	5,041	38.8	3.98	1.1
Alone	36.9	27.6	46.2	109	5,041	48.5	4.55	1.0
Jointly	44.9	35.4	54.5	109	5,041	50.0	4.66	1.0
≥50 years	^	^	^	19	797	^	^	^
Alone	^	^	^	19	797	^	^	^
Jointly	^	^	^	19	797	^	^	^
Male	85.6	81.5	89.7	234	11,421	35.2	2.02	0.9
15-19	^	^	^	1	20	^	^	^
Alone	^	^	^	1	20	^	^	^
Jointly	^	^	^	1	20	^	^	^
20-29	92.9	84.6	101.2	39	1,945	26.0	4.02	1.0

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Alone	55.1	34.3	76.0	39	1,945	50.4	10.08	1.2
Jointly	37.8	18.2	57.4	39	1,945	49.1	9.47	1.2
30-49	87.8	83.2	92.4	143	7,117	32.9	2.27	0.8
Alone	40.9	33.5	48.3	143	7,117	49.3	3.62	0.9
Jointly	46.9	38.2	55.6	143	7,117	50.1	4.29	1.0
≥50 years	72.7	58.1	87.3	51	2,339	45.0	7.10	1.1
Alone	40.1	23.7	56.5	51	2,339	49.5	7.96	1.1
Jointly	32.6	17.4	47.8	51	2,339	47.3	7.38	1.1
RESILIENCE-RELATED								
Adaptive Capacity Index	40.0	35.9	44.1	953	40,852	16.9	2.01	3.7
Absorptive Capacity Index	38.3	35.2	41.4	954	40,903	16.6	1.53	2.9
Transformative Capacity Index	43.0	34.6	51.5	956	40,979	23.4	4.16	5.5
Ability to recover from shocks and stresses index	3.9	3.6	4.2	843	35,905	1.5	0.13	2.5
Male and female adults	3.9	3.6	4.2	572	24,291	1.5	0.13	2.1
Adult female, no adult male	3.9	3.6	4.2	181	7,242	1.4	0.16	1.5
Adult male, no adult female	3.9	3.6	4.3	86	4,200	1.4	0.17	1.1
Child, no adults	^	^	^	4	171	^	^	^
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	12.7	7.8	17.6	956	40,979	33.3	2.42	2.2
Savings	10.1	5.5	14.7	956	40,979	30.1	2.28	2.3
Male and female adults	10.0	5.8	14.3	643	27,362	30.2	2.10	1.8
Adult female, no adult male	6.4	2.1	10.8	211	8,618	25.1	2.13	1.2
Adult male, no adult female	17.6	6.6	28.6	96	4,741	35.5	5.39	1.5
Child, no adults	^	^	^	6	258	^	^	^
Credit (including microfinance)	5.4	3.2	7.7	956	40,979	22.7	1.10	1.5
Male and female adults	6.1	3.4	8.8	643	27,362	24.0	1.31	1.4
Adult female, no adult male	2.0	0.1	3.8	211	8,618	14.2	0.91	0.9
Adult male, no adult female	8.2	3.2	13.3	96	4,741	25.6	2.48	0.9
Child, no adults	^	^	^	6	258	^	^	^
Index of social capital at the household level								
Overall index	71.2	67.4	75.0	956	40,979	22.1	1.87	2.6
Male and female adults	72.8	68.6	77.0	643	27,362	21.5	2.07	2.4
Adult female, no adult male	68.8	64.3	73.2	211	8,618	23.9	2.18	1.3
Adult male, no adult female	67.3	61.2	73.5	96	4,741	20.7	3.02	1.4
Child, no adults	^	^	^	6	258	^	^	^

Table A1.7. BHA Kenya Baseline Indicators - SAMBURU

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	Indicator Value	Confidence Interval		Number of Records	Weighted Population	Standard Deviation	Standard Error	DEFT
		Lower	Upper					
Bonding sub-index	72.0	68.3	75.8	956	40,979	23.5	1.84	2.4
Male and female adults	73.8	69.6	78.0	643	27,362	22.8	2.05	2.3
Adult female, no adult male	69.3	64.8	73.8	211	8,618	25.2	2.19	1.3
Adult male, no adult female	67.6	62.0	73.2	96	4,741	22.7	2.74	1.2
Child, no adults	^	^	^	6	258	^	^	^
Bridging sub-index	70.4	66.3	74.6	956	40,979	24.1	2.02	2.6
Male and female adults	71.8	67.3	76.3	643	27,362	23.8	2.20	2.3
Adult female, no adult male	68.2	63.3	73.2	211	8,618	25.6	2.44	1.4
Adult male, no adult female	67.0	59.5	74.6	96	4,741	22.6	3.70	1.6
Child, no adults	^	^	^	6	258	^	^	^

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
FOOD SECURITY INDICATORS							
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	88.4	87.0	90.4	83.0	89.0	93.0	81.2
Male and female adults	87.9	86.9	89.7	83.3	88.3	92.1	80.7
Adult female, no adult male	93.5	90.8	95.0	85.5	94.3	96.5	89.7
Adult male, no adult female	79.5	78.3	85.7	74.5	79.7	90.2	67.2
Child, no adults	^	^	^	NA	^	^	^
Level of severity							
Moderate	37.8	51.5	43.6	53.8	30.1	31.4	37.1
Severe	50.6	35.5	46.8	29.2	58.8	61.6	44.1
Percentage of households with poor food consumption score (FCS)	29.8	11.6	18.3	4.5	37.5	45.2	21.9
Male and female adults	28.0	10.9	16.9	4.2	36.4	44.0	20.3
Adult female, no adult male	37.9	16.5	25.5	6.0	44.0	50.1	30.6
Adult male, no adult female	24.6	9.6	17.9	5.6	28.4	40.4	13.7
Child, no adults	^	^	^	NA	^	^	^
Percentage of households with borderline FCS	19.3	15.9	19.6	11.9	20.8	21.8	18.6
Male and female adults	19.0	15.8	19.7	11.4	20.5	20.9	19.7
Adult female, no adult male	20.3	16.0	19.7	11.8	21.5	22.7	18.9
Adult male, no adult female	19.8	17.1	14.2	18.5	20.4	27.9	11.3
Child, no adults	^	^	^	NA	^	^	^
Percentage of households with adequate FCS	50.8	72.5	62.1	83.5	41.8	33.0	59.5
Male and female adults	53.0	73.4	63.3	84.4	43.1	35.1	60.0
Adult female, no adult male	41.8	67.5	54.7	82.2	34.5	27.1	50.5
Adult male, no adult female	55.6	73.3	68.0	75.9	51.2	31.7	75.0
Child, no adults	^	^	^	NA	^	^	^
Mean FCS	43.8	53.5	47.5	60.0	39.8	35.5	48.2
Male and female adults	45.1	53.9	48.2	60.2	40.8	36.9	49.0
Adult female, no adult male	38.2	50.4	43.5	58.3	34.8	31.7	41.5
Adult male, no adult female	46.9	56.7	48.5	60.6	44.5	34.0	57.3
Child, no adults	^	^	^	NA	^	^	^
POVERTY INDICATORS							
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	1.47	1.75	1.62	1.90	1.34	1.01	2.04
Male and female adults	1.5	1.8	1.6	1.9	1.3	1.0	2.0
Adult female, no adult male	1.1	1.6	1.4	1.9	1.0	0.8	1.5
Adult male, no adult female	3.3	2.7	2.1	3.3	3.4	2.0	5.3
Child, no adults	^	^	^	NA	^	^	^
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	78.1	72.6	77.3	67.5	80.6	86.2	68.3
Male and female adults	77.9	73.4	77.7	68.8	80.2	85.5	68.6

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Adult female, no adult male	83.4	70.5	78.3	61.1	87.1	92.0	75.8
Adult male, no adult female	51.3	42.2	47.4	37.6	53.4	68.8	32.4
Child, no adults	^	^	^	NA	^	^	^
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	58.7	45.8	50.7	39.8	64.0	67.2	55.1
Male and female adults	58.2	46.2	51.2	40.1	63.6	66.9	54.5
Adult female, no adult male	62.2	43.4	47.8	36.6	66.6	69.4	58.7
Adult male, no adult female	52.6	40.7	^	^	54.8	58.3	^
Child, no adults	^	^	^	NA	^	^	^
WASH INDICATORS							
Percent of households using basic drinking water services	6.2	4.7	5.0	4.5	6.8	6.0	8.6
On premise	1.8	1.6	0.5	2.9	1.9	1.1	3.4
≤ 30-minute roundtrip	4.4	3.1	4.5	1.6	4.9	4.8	5.1
Gendered household type							
Male and female adults	5.1	4.0	4.3	3.6	5.7	5.2	6.8
Adult female, no adult male	7.6	5.7	5.8	5.6	8.1	7.1	10.5
Adult male, no adult female	13.1	14.3	16.9	13.0	12.8	10.2	16.0
Child, no adults	^	^	^	NA	^	^	^
Percent of households in target areas practicing correct use of recommended household water treatment technologies	10.3	9.5	12.7	6.0	10.6	7.2	17.3
Chlorination	3.6	4.8	6.2	3.4	3.1	1.8	5.8
Flocculant/Disinfectant	1.5	0.9	1.4	0.5	1.7	1.5	2.0
Filtration	1.2	1.5	2.9	0.0	1.1	0.4	2.3
Solar Disinfection	0.3	0.2	0.5	0.0	0.4	0.4	0.2
Boiling	4.7	3.3	4.1	2.5	5.4	3.3	9.5
Percentage of households with access to a basic sanitation service	7.0	7.8	4.3	11.5	6.6	5.9	8.2
Male and female adults	7.8	8.5	4.7	12.7	7.4	7.2	7.8
Adult female, no adult male	4.5	5.3	3.3	7.6	4.2	3.0	6.8
Adult male, no adult female	6.4	4.3	0.0	6.3	6.9	1.8	13.0
Child, no adults	^	^	^	NA	^	^	^
Percent of households in target areas practicing open defecation	63.3	57.1	79.3	33.5	65.9	74.7	48.5
Male and female adults	64.3	57.7	80.1	33.0	67.4	75.1	51.4
Adult female, no adult male	67.9	58.0	74.7	38.7	70.7	78.2	54.3
Adult male, no adult female	41.4	45.5	80.1	28.8	40.4	58.3	19.0
Child, no adults	^	^	^	NA	^	^	^
Percent of households with soap and water at a handwashing station on premises	45.2	33.6	57.4	17.1	49.2	19.5	57.6
Male and female adults	40.8	28.8	59.2	9.6	45.5	^	53.1
Adult female, no adult male	54.3	^	^	^	58.3	^	63.3

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Adult male, no adult female	58.6	^	^	^	57.6	^	^
Child, no adults	NA	NA	NA	NA	NA	NA	NA
AGRICULTURAL INDICATORS							
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	9.0	10.0	6.0	18.7	8.5	3.2	18.1
Male	10.1	10.3	6.6	16.7	10.0	3.9	21.9
Female	7.6	9.5	5.0	24.1	6.9	2.4	14.3
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	15.4	20.1	20.4	19.4	12.1	8.9	16.8
Male	15.1	20.1	21.1	17.8	10.3	3.8	19.5
Female	15.9	20.0	18.5	23.9	14.2	14.6	13.4
Percent of producers who have applied targeted improved management practices or technologies							
Greengrams	NA	NA	NA	NA	NA	82.6	NA
Sex							
Male	NA	NA	NA	NA	NA	^	NA
Female	NA	NA	NA	NA	NA	^	NA
Age							
15-29 years	NA	NA	NA	NA	NA	^	NA
30+ years	NA	NA	NA	NA	NA	^	NA
Management practice/technology type							
Crop genetics practices/technologies	NA	NA	NA	NA	NA	23.5	NA
Improved/certified seed	NA	NA	NA	NA	NA	23.5	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	28.4	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	7.7	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	20.7	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	0.0	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	23.0	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	0.0	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	6.9	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	3.3	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	3.3	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	0.0	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	9.5	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	3.1	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	27.2	NA
Use of organic manure	NA	NA	NA	NA	NA	24.1	NA
Soil testing	NA	NA	NA	NA	NA	0.0	NA
Inoculant	NA	NA	NA	NA	NA	3.1	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	2.3	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	2.3	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	0.0	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	22.4	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	6.6	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	15.8	NA
Improved marketing and distribution practices/technologies	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	3.3	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	0.0	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	0.0	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	3.3	NA
Temperature and humidity control	NA	NA	NA	NA	NA	0.0	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies	NA	NA	NA	NA	NA	NA	NA
Sorghum	NA	NA	NA	NA	NA	68.8	NA
Sex							
Male	NA	NA	NA	NA	NA	68.0	NA
Female	NA	NA	NA	NA	NA	69.6	NA
Age							
15-29 years	NA	NA	NA	NA	NA	^	NA
30+ years	NA	NA	NA	NA	NA	70.1	NA
Management practice/technology type							
Crop genetics practices/technologies	NA	NA	NA	NA	NA	24.4	NA
Improved/certified seed	NA	NA	NA	NA	NA	24.4	NA
Cultural practices/technologies	NA	NA	NA	NA	NA	22.6	NA
Seedling production and transplantation	NA	NA	NA	NA	NA	4.0	NA
Crop rotation (rotating grains with nitrogen fixing legumes)	NA	NA	NA	NA	NA	16.9	NA
Kitchen gardens using sunken pits	NA	NA	NA	NA	NA	3.5	NA
Improved natural resources or ecosystem management practices/technologies	NA	NA	NA	NA	NA	23.9	NA
Reseeding of degraded lands with drought resistant grass species	NA	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	NA	NA	NA	NA	NA	NA	NA
Rehabilitation of degraded grazing lands	NA	NA	NA	NA	NA	NA	NA

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Construction of soil conservation structures (gabions)	NA	NA	NA	NA	NA	0.0	NA
Use of natural barriers/cover crops	NA	NA	NA	NA	NA	6.6	NA
Utilization of organic materials such as grain straw, fresh or old hay and other crop residues	NA	NA	NA	NA	NA	5.1	NA
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)	NA	NA	NA	NA	NA	2.6	NA
Zaï pits (pot-holing)	NA	NA	NA	NA	NA	0.0	NA
Use of minimum tillage practices	NA	NA	NA	NA	NA	12.2	NA
Planting nitrogen-fixing trees	NA	NA	NA	NA	NA	1.2	NA
Improved pest and disease management practices/technologies[1]	NA	NA	NA	NA	NA	NA	NA
Improved soil-related fertility and conservation practices/technologies	NA	NA	NA	NA	NA	21.3	NA
Use of organic manure	NA	NA	NA	NA	NA	18.2	NA
Soil testing	NA	NA	NA	NA	NA	3.1	NA
Inoculant	NA	NA	NA	NA	NA	1.2	NA
Improved irrigation practices/technologies	NA	NA	NA	NA	NA	NA	NA
Use of drip or sprinkler irrigation technologies	NA	NA	NA	NA	NA	NA	NA
Improved agriculture water management non-irrigation-based practices/technologies	NA	NA	NA	NA	NA	2.8	NA
Use of rainwater harvesting technologies	NA	NA	NA	NA	NA	1.3	NA
Use of flood-based farming technologies (Spate irrigation)	NA	NA	NA	NA	NA	1.5	NA
Improved climate mitigation practices/technologies	NA	NA	NA	NA	NA	NA	NA
Improved climate adaptation/climate risk management practices/technologies	NA	NA	NA	NA	NA	12.8	NA
Production planning and crop rotation in irrigation schemes	NA	NA	NA	NA	NA	7.4	NA
Use of drought early warning information/systems	NA	NA	NA	NA	NA	5.4	NA
Improved marketing and distribution practices/technologies[2]	NA	NA	NA	NA	NA	NA	NA
Improved post-harvest handling and storage practices/technologies	NA	NA	NA	NA	NA	2.5	NA
Aflatoxin prevention and control	NA	NA	NA	NA	NA	0.0	NA
Improved storage during transportation (e.g., aluminum cans, crates, other food grade containers)	NA	NA	NA	NA	NA	1.2	NA
Use of well-equipped food storage structures	NA	NA	NA	NA	NA	1.3	NA
Temperature and humidity control	NA	NA	NA	NA	NA	0.0	NA
Solar drying for grains and pulses	NA	NA	NA	NA	NA	NA	NA
Improved value-added processing practices/technologies[3]	NA	NA	NA	NA	NA	NA	NA
Cattle (improved livestock management practices/technologies)	59.3	49.6	61.0	26.8	67.0	50.8	70.8
Sex							
Male	56.3	46.2	58.2	26.9	66.8	^	71.4
Female	63.0	55.7	65.0	26.6	67.2	^	70.2
Age							
15-29 years	63.5	58.5	70.5	^	66.2	^	68.3
30+ years	58.4	48.2	59.0	28.6	67.2	51.6	71.6
Use of improved livestock breeds/species	2.8	1.3	1.9	0.2	4.0	0.0	4.9
Use of livestock health services and products	23.1	11.1	12.4	8.4	32.6	8.4	38.3
Use of improved shelters	9.2	3.9	5.9	0.0	13.4	31.8	9.1

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Use of improved calving techniques	1.7	2.4	3.5	0.0	1.2	0.0	1.4
Use of improved milking techniques	0.7	0.4	0.6	0.0	0.9	0.0	1.1
Use of more nutritious pasture varieties	2.6	2.5	3.2	1.0	2.8	4.2	2.4
Utilization of set grazing areas	22.8	32.8	41.3	15.7	14.8	2.2	17.8
Improved fodder production	1.4	1.3	1.3	1.3	1.4	4.4	0.7
Reseeding of degraded lands with drought resistant grass species	1.7	NA	NA	NA	2.6	0.0	3.2
Fencing off pasture plots	7.2	1.2	1.7	0.0	11.9	23.9	9.1
Rehabilitation of degraded grazing lands	1.3	1.7	2.1	0.8	0.9	2.0	0.7
Use of solarized boreholes for livestock	3.8	6.1	9.1	0.0	2.1	0.0	2.6
Use of water pans for livestock	7.7	4.3	6.2	0.6	10.3	0.0	12.7
Use of sand dams for livestock	4.6	3.2	3.3	3.2	5.6	0.0	7.0
Use of rock catchments for livestock	2.5	3.1	4.7	0.0	NA	NA	NA
Goats (improved livestock management practices/technologies)	48.6	53.8	61.6	33.8	45.5	36.6	64.6
Sex							
Male	47.4	52.1	60.3	34.6	44.1	35.3	65.6
Female	50.1	56.6	63.4	31.7	47.0	38.2	63.7
Age							
15-29 years	52.0	58.6	69.1	26.8	48.4	38.3	59.7
30+ years	47.9	52.9	60.0	34.9	44.8	36.3	66.5
Use of improved livestock breeds/species	1.4	1.5	1.9	0.3	1.3	0.0	4.1
Use of livestock health services and products	12.8	11.5	9.8	16.1	13.5	4.7	32.6
Use of improved shelters	12.4	5.2	6.6	1.6	16.7	20.3	9.0
Use of improved calving techniques	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Use of improved milking techniques	0.3	0.5	0.7	0.0	0.3	0.4	0.0
Use of more nutritious pasture varieties	2.1	3.4	4.0	1.8	1.4	1.8	0.4
Utilization of set grazing areas	19.9	31.5	38.9	12.5	13.1	9.9	19.9
Improved fodder production	0.7	1.6	1.6	1.7	0.2	0.2	0.2
Reseeding of degraded lands with drought resistant grass species	1.1	NA	NA	NA	0.9	0.3	2.2
Fencing off pasture plots	3.2	2.3	2.8	0.7	3.8	3.1	5.2
Rehabilitation of degraded grazing lands	1.3	1.9	2.3	0.6	0.9	0.9	0.8
Use of solarized boreholes for livestock	2.9	6.3	8.6	0.5	0.8	0.1	2.2
Use of water pans for livestock	5.4	6.5	7.1	4.7	4.7	2.6	9.1
Use of sand dams for livestock	3.0	5.1	4.2	7.5	1.7	0.0	5.5
Use of rock catchments for livestock	2.0	2.4	3.3	0.0	NA	NA	NA
Camels (improved livestock management practices/technologies)	43.0	54.0	56.5	16.1	18.8	23.0	11.3
Sex							
Male	43.1	50.8	53.4	14.4	19.7	^	12.8
Female	42.8	59.7	62.0	^	18.0	^	10.0

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Age							
15-29 years	45.7	61.1	64.9	^	^	^	^
30+ years	42.5	53.0	55.3	18.4	19.8	22.9	12.5
Use of improved livestock breeds/species	0.5	0.7	0.7	0.0	NA	NA	NA
Use of livestock health services and products	11.3	8.4	8.5	6.3	NA	NA	NA
Use of improved shelters	7.9	5.2	5.5	0.0	13.7	19.3	3.7
Use of improved calving techniques	0.2	0.2	0.3	0.0	0.0	0.0	0.0
Use of improved milking techniques	0.4	0.6	0.6	0.0	0.0	0.0	0.0
Use of more nutritious pasture varieties	1.9	2.8	3.0	0.0	0.0	0.0	0.0
Utilization of set grazing areas	27.5	35.6	37.0	14.5	NA	NA	NA
Improved fodder production	0.5	0.8	0.7	1.6	NA	NA	NA
Reseeding of degraded lands with drought resistant grass species	0.5	NA	NA	NA	NA	NA	NA
Fencing off pasture plots	4.7	1.8	1.9	0.0	11.0	17.3	0.0
Rehabilitation of degraded grazing lands	1.2	1.2	1.3	0.0	1.0	1.6	0.0
Use of solarized boreholes for livestock	5.8	8.0	8.5	0.0	0.9	0.0	2.5
Use of water pans for livestock	5.5	6.5	6.9	0.0	3.4	1.6	6.6
Use of sand dams for livestock	2.8	3.5	3.7	0.0	1.4	0.0	3.9
Use of rock catchments for livestock	3.0	2.8	2.9	0.0	NA	NA	NA
Yield of targeted agricultural commodities within targeted areas - livestock							
Cattle (kilogram of offtake per head of cattle per producer)	14.6	14.8	15.3	13.9	14.5	3.7	16.9
Sex							
Male	16.2	15.7	16.8	14.1	16.8	^	19.3
Female	12.6	13.2	13.2	13.2	12.3	^	14.6
Age							
15-29 years	14.9	14.6	14.9	^	15.1	^	15.6
30+ years	14.6	14.9	15.4	14.0	14.3	3.1	17.3
Goats (kilogram of offtake per head of goat per producer)	6.1	7.9	7.7	8.4	5.0	2.9	9.5
Sex							
Male	6.5	8.2	8.3	8.0	5.3	3.3	10.0
Female	5.6	7.5	6.9	9.3	4.7	2.4	9.0
Age							
15-29 years	6.3	7.2	7.6	6.1	5.8	2.6	9.1
30+ years	6.1	8.0	7.7	8.7	4.9	2.9	9.7
Camels (kilogram of offtake per head of camel per producer)	13.2	14.6	15.3	4.2	10.1	15.4	0.9
Sex							
Male	12.9	14.3	15.1	4.3	8.9	^	2.1
Female	13.5	15.1	15.8	^	11.1	^	0.0
Age							

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
15-29 years	9.0	12.9	13.7	^	NA	^	^
30+ years	13.8	14.9	15.6	4.8	11.6	16.3	1.0

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Cow milk (liters per milking cow per day per producer)	1.4	1.0	1.0	^	1.8	^	1.7
Sex							
Male	1.3	0.9	1.0	^	^	^	^
Female	1.6	^	^	^	^	^	^
Age							
15-29 years	NA	^	^	^	^	NA	^
30+ years	1.4	0.9	1.0	^	1.9	^	1.7
Camel milk (liters per milking camel per day per producer)	1.4	1.2	1.2	1.6	1.9	^	^
Sex							
Male	1.4	1.2	1.2	^	^	^	^
Female	1.4	1.3	1.2	^	^	^	^
Age							
15-29 years	1.5	1.4	^	^	^	NA	^
30+ years	1.4	1.2	1.2	^	1.8	^	^
WOMEN'S HEALTH AND NUTRITION INDICATORS							
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	6.1	7.4	2.6	12.4	5.5	3.7	9.1
<19 years	5.3	7.0	3.2	10.1	4.2	2.5	6.9
19+ years	6.3	7.6	2.5	13.1	5.8	3.9	9.7
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	60.4	62.8	56.2	70.6	59.3	61.5	54.3
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	75.2	75.8	63.7	90.4	75.0	72.2	80.8
15-19 years	59.8	58.2	46.7	78.4	60.7	^	50.6
20-29 years	77.4	74.7	62.0	89.7	78.5	76.9	81.5
30-49 years	75.3	78.9	67.7	92.1	73.4	68.4	86.2
months	77.6	83.9	80.3	85.2	75.5	70.6	82.1
15-19	^	^	^	^	^	^	^
Alone	^	^	^	^	^	^	^
Jointly	^	^	^	^	^	^	^
20-29	73.7	81.9	75.9	84.5	71.4	67.6	77.7
Alone	33.7	12.4	18.7	9.6	39.6	45.8	29.4
Jointly	40.0	69.6	57.1	74.9	31.8	21.7	48.4
30-49	81.4	84.7	^	85.1	80.2	74.5	86.0
Alone	36.1	24.3	^	21.4	40.6	49.6	31.4
Jointly	45.3	60.3	^	63.7	39.5	24.9	54.5
Contraceptive prevalence rate (CPR)	25.0	21.8	14.7	30.3	26.4	22.1	35.5
Traditional	2.5	4.7	6.5	2.4	1.5	0.8	2.8
Modern	23.0	17.8	9.1	28.1	25.4	21.2	34.0

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
CHILDREN'S HEALTH AND NUTRITION INDICATORS							
Prevalence of exclusive breastfeeding of children under six months	55.7	52.0	46.8	57.3	56.9	55.1	61.2
Male	53.8	48.9	45.3	52.9	55.6	56.2	53.9
Female	57.5	55.7	48.7	62.0	57.9	54.2	65.8
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	2.4	3.5	1.3	6.0	2.0	0.6	5.7
Male	2.4	3.3	1.2	6.1	2.0	1.0	4.9
Female	2.4	3.6	1.5	5.9	1.9	0.0	6.5
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	7.1	7.8	5.0	11.2	6.7	4.1	13.8
Male	7.1	8.1	5.2	11.8	6.7	5.5	10.7
Female	6.9	7.5	4.7	10.5	6.7	2.5	16.6
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	23.5	20.1	24.7	14.7	24.9	24.1	27.0
Male	24.6	19.9	24.6	14.4	26.7	27.3	25.1
Female	22.3	20.2	24.9	14.9	23.1	20.7	28.8
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	80.9	85.9	87.8	82.2	79.1	79.1	79.3
Male	82.5	86.6	87.9	83.9	81.1	83.0	75.6
Female	79.0	85.2	87.7	80.4	76.8	73.5	82.3
GENDER - CASH							
Percent of women and men in union who earned cash in the past 12 months							
Female	25.2	9.5	6.9	12.4	33.0	34.1	30.6
15-19 years	12.3	3.7	6.0	0.0	17.1	^	15.5
20-29 years	23.5	6.5	6.1	6.9	30.8	34.0	24.9
30-49 years	30.3	13.6	8.2	19.4	39.5	38.9	41.2
≥50 years	19.0	6.0	4.9	7.1	26.0	25.1	28.6
Male	42.5	30.7	20.6	42.6	48.0	46.8	50.7
15-19 years	^	^	^	^	^	^	^
20-29 years	56.8	40.3	31.8	45.9	60.7	58.3	67.4
30-49 years	48.2	37.6	26.0	51.8	53.5	50.8	58.4
≥50 years	26.3	17.8	11.2	26.5	31.1	33.4	25.1
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	82.0	85.8	85.6	85.9	81.5	79.1	87.0
15-19 years	^	^	^	NA	^	^	^
20-29 years	82.5	78.9	^	^	82.9	83.0	82.5
30-49 years	81.4	88.4	^	86.3	80.1	76.9	87.5
≥50 years	82.1	^	^	^	81.0	^	^
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	32.9	45.0	37.9	49.4	31.3	27.3	40.6
15-19 years	^	^	^	NA	^	^	^
20-29 years	37.4	46.4	^	^	36.6	30.8	51.0
30-49 years	32.2	48.2	^	49.7	29.3	26.1	36.5

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
≥50 years	20.6	^	^	^	19.9	^	^
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	48.9	54.5	45.5	59.3	47.1	45.6	49.8
15-19 years	^	^	NA	^	^	NA	^
20-29 years	53.8	58.0	^	61.9	53.1	51.4	56.7
30-49 years	47.2	52.7	45.0	57.0	45.2	43.3	47.8
≥50 years	48.8	59.0	45.5	66.4	45.0	43.9	48.4
GENDER - CREDIT AND GROUP PARTICIPATION							
Percent of women/men in a union who are members of a community group							
Female	38.4	33.7	32.5	35.1	40.7	36.2	49.9
15-19 years	36.8	28.0	29.2	25.9	41.7	^	37.2
20-29 years	39.9	33.8	28.5	39.8	42.5	39.3	48.1
30-49 years	38.7	35.3	34.6	36.2	40.4	34.6	54.8
≥50 years	33.8	30.9	37.6	23.9	35.4	30.4	49.2
Male	32.4	28.2	22.8	34.3	34.5	31.4	40.5
15-19 years	^	^	^	^	^	^	^
20-29 years	38.0	27.2	30.1	25.4	40.7	39.5	43.8
30-49 years	32.8	28.2	20.0	37.9	35.2	31.9	40.6
≥50 years	29.3	28.6	25.7	32.1	29.6	25.2	40.3
Percent of women/men in a union with access to credit							
Female	31.2	36.4	38.4	34.1	28.6	21.8	42.9
15-19 years	21.3	22.4	22.9	21.5	20.7	^	35.1
20-29 years	33.5	38.6	39.1	38.1	31.4	26.8	39.6
30-49 years	32.7	37.5	39.8	35.0	30.1	20.9	52.7
≥50 years	23.7	33.2	40.1	26.0	18.8	15.2	28.8
Male	31.9	35.4	33.9	37.1	30.1	22.5	45.0
15-19 years	^	^	^	^	^	^	^
20-29 years	35.0	37.4	30.8	41.5	34.4	29.6	46.2
30-49 years	35.3	36.4	33.5	39.8	34.7	26.0	48.9
≥50 years	25.0	33.6	35.8	30.8	19.5	12.1	37.2
Percent of women/men in a union who make decisions about credit							0.0
Female	77.5	75.6	72.6	79.5	78.6	75.5	81.9
15-19	64.8	^	^	^	^	^	^
Alone	18.5	^	^	^	^	^	^
Jointly	46.3	^	^	^	^	^	^
20-29	78.2	77.6	76.3	79.1	78.5	75.7	81.8
Alone	34.5	30.6	44.6	14.0	36.4	36.7	36.1
Jointly	43.7	47.0	31.6	65.2	42.1	39.0	45.7
30-49	78.3	75.8	73.1	79.3	80.0	78.1	81.8

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Alone	41.8	34.1	44.6	21.1	46.9	57.1	36.9
Jointly	36.5	41.7	28.5	58.2	33.1	21.0	44.9
≥50 years	75.5	74.3	68.3	^	76.7	^	^
Alone	37.6	34.2	49.1	^	40.7	^	^
Jointly	38.0	40.1	19.2	^	36.0	^	^
Male	81.7	74.9	65.3	84.9	85.8	85.9	85.6
15-19	^	^	^	^	^	NA	^
Alone	^	^	^	^	^	NA	^
Jointly	^	^	^	^	^	NA	^
20-29	83.6	74.9	^	77.3	86.0	81.8	92.9
Alone	43.4	40.1	^	35.5	44.3	37.6	55.1
Jointly	40.2	34.8	^	41.9	41.7	44.1	37.8
30-49	85.5	80.1	72.9	87.3	88.6	89.5	87.8
Alone	43.2	33.6	36.0	31.2	48.6	57.5	40.9
Jointly	42.3	46.5	36.9	56.0	40.0	32.0	46.9
≥50 years	71.4	66.8	54.7	83.7	76.4	^	72.7
Alone	29.4	22.1	23.2	20.6	37.3	^	40.1
Jointly	42.0	44.7	31.6	63.1	39.1	^	32.6
RESILIENCE-RELATED							
Adaptive Capacity Index	33.2	34.1	30.8	37.6	32.8	29.2	40.0
Absorptive Capacity Index	33.9	37.8	33.0	42.9	32.2	29.2	38.3
Transformative Capacity Index	37.3	39.0	28.3	50.4	36.6	33.4	43.0
Ability to recover from shocks and stresses index	3.7	3.6	3.8	3.4	3.8	3.8	3.9
Male and female adults	3.7	3.6	3.8	3.4	3.8	3.8	3.9
Adult female, no adult male	3.7	3.6	3.8	3.3	3.8	3.7	3.9
Adult male, no adult female	3.7	3.8	^	3.7	3.7	3.6	3.9
Child, no adults	^	^	^	NA	^	^	^
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	5.6	4.3	2.8	5.9	6.1	2.9	12.7
Savings	3.9	3.0	0.6	5.6	4.3	1.4	10.1
Male and female adults	4.0	2.8	0.5	5.4	4.5	1.9	10.0
Adult female, no adult male	2.7	4.3	1.1	7.9	2.3	0.4	6.4
Adult male, no adult female	6.9	2.4	0.0	3.6	8.0	0.0	17.6
Child, no adults	^	^	^	NA	^	^	^

Table A1.8. BHA Kenya Baseline Indicators - SUMMARY

Indicators, 95% Confidence Intervals and Base Population [Kenya, 2021]

	COMBINED RFSA AREAS	CRS			MC		
		TOTAL	MARSABIT	ISIOLO	TOTAL	TURKANA	SAMBURU
Credit (including microfinance)	3.0	2.2	2.3	2.1	3.3	2.2	5.4
Male and female adults	3.3	2.1	2.3	2.0	3.8	2.8	6.1
Adult female, no adult male	1.7	2.4	2.3	2.5	1.5	1.3	2.0
Adult male, no adult female	3.4	2.3	2.1	2.4	3.7	0.0	8.2
Child, no adults	^	^	^	NA	^	^	^
Index of social capital at the household level							
Overall index	67.0	69.0	68.4	69.7	66.2	63.6	71.2
Male and female adults	67.9	69.1	68.3	70.1	67.3	64.6	72.8
Adult female, no adult male	65.6	68.6	69.6	67.6	64.7	62.9	68.8
Adult male, no adult female	62.7	68.4	66.4	69.3	61.4	56.4	67.3
Child, no adults	^	^	^	NA	^	^	^
Bonding sub-index	67.5	70.1	70.2	70.0	66.5	63.7	72.0
Male and female adults	68.5	70.3	70.2	70.5	67.6	64.6	73.8
Adult female, no adult male	65.6	70.1	70.9	69.3	64.3	62.0	69.3
Adult male, no adult female	64.0	66.6	67.7	66.1	63.3	59.8	67.6
Child, no adults	^	^	^	NA	^	^	^
Bridging sub-index	66.5	68.0	66.7	69.4	65.8	63.5	70.4
Male and female adults	67.3	68.0	66.4	69.8	66.9	64.6	71.8
Adult female, no adult male	65.6	67.1	68.3	65.9	65.1	63.7	68.2
Adult male, no adult female	61.5	70.1	65.2	72.5	59.4	53.1	67.0
Child, no adults	^	^	^	NA	^	^	^

NOTES:

[1] See list of improved post-harvest handling and storage practices promoted by the RFSAs.

[2] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

[3] Included in the calculation of the indicator on the percent of farmers who practiced the promoted value chain interventions.

^ Results not reported when n<30. NA : Not applicable.

Annex E2: Tabular Summary of County Comparisons of Baseline Indicator Estimates

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	90.4	83.0	-7.4	0.018	979	995	26,455	24,866
Male and female adults	89.7	83.3	-6.4	0.051	792	758	21,460	19,534
Adult female, no adult male	95.0	85.5	-9.5	0.005	154	151	4,133	3,598
Adult male, no adult female	85.7	74.5	-11.2	0.385	32	86	843	1,734
Child, no adults	^				1		20	
Level of severity								
Moderate	43.6	53.8	10.1	0.000	979	995	26,455	24,866
Male and female adults	44.3	55.0	10.7	0.000	792	758	21,460	19,534
Adult female, no adult male	40.3	52.7	12.4	0.001	154	151	4,133	3,598
Adult male, no adult female	42.8	42.3	-0.5	0.954	32	86	843	1,734
Child, no adults	^				1		20	
Severe	46.8	29.2	-17.5	0.000	979	995	26,455	24,866
Male and female adults	45.4	28.3	-17.1	0.000	792	758	21,460	19,534
Adult female, no adult male	54.7	32.8	-21.8	0.000	154	151	4,133	3,598
Adult male, no adult female	42.9	32.2	-10.7	0.275	32	86	843	1,734
Child, no adults	^				1		20	
Percentage of households with poor food consumption score (FCS)	18.3	4.5	-13.8	0.000	981	995	26,493	24,866
Male and female adults	16.9	4.2	-12.8	0.000	794	758	21,498	19,534
Adult female, no adult male	25.5	6.0	-19.5	0.007	154	151	4,133	3,598
Adult male, no adult female	17.9	5.6	-12.3	0.135	32	86	843	1,734
Child, no adults	^				1		20	
Percentage of households with borderline FCS	19.6	11.9	-7.7	0.001	981	995	26,493	24,866
Male and female adults	19.7	11.4	-8.3	0.000	794	758	21,498	19,534
Adult female, no adult male	19.7	11.8	-7.9	0.089	154	151	4,133	3,598
Adult male, no adult female	14.2	18.5	4.3	0.621	32	86	843	1,734
Child, no adults	^				1		20	
Percentage of households with adequate FCS	62.1	83.5	21.4	0.000	981	995	26,493	24,866
Male and female adults	63.3	84.4	21.1	0.000	794	758	21,498	19,534
Adult female, no adult male	54.7	82.2	27.5	0.001	154	151	4,133	3,598
Adult male, no adult female	68.0	75.9	8.0	0.502	32	86	843	1,734
Child, no adults	^				1		20	
Mean FCS	47.5	60.0	12.5	0.000	981	995	26,493	24,866
Male and female adults	48.2	60.2	12.0	0.000	794	758	21,498	19,534
Adult female, no adult male	43.5	58.3	14.8	0.000	154	151	4,133	3,598
Adult male, no adult female	48.5	60.6	12.1	0.119	32	86	843	1,734
Child, no adults	^				1		20	
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	$1.62	$1.90	$0.28	0.354	972	987	144,070	135,013
Male and female adults	$1.64	$1.87	$0.23	0.469	788	754	124,893	118,700
Adult female, no adult male	$1.39	$1.86	$0.46	0.046	151	149	16,969	13,903
Adult male, no adult female	$2.11	$3.28	$1.17	0.043	32	84	2,168	2,411
Child, no adults	^				1		40	
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	77.3	67.5	-9.8	0.065	972	987	144,070	135,013
Male and female adults	77.7	68.8	-8.9	0.109	788	754	124,893	118,700

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
Adult female, no adult male	78.3	61.1	-17.2	0.011	151	149	16,969	13,903
Adult male, no adult female	47.4	37.6	-9.8	0.541	32	84	2,168	2,411
Child, no adults	^				1		40	
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	50.7	39.8	-10.9	0.000	716	592	111,411	91,120
Male and female adults	51.2	40.1	-11.1	0.000	591	496	97,060	81,722
Adult female, no adult male	47.8	36.6	-11.2	0.003	112	78	13,283	8,492
Adult male, no adult female	^	^		0.966	12	18	1,028	906
Child, no adults	^				1		40	
WASH INDICATORS								
Percent of households using basic drinking water services	5.0	4.5	-0.5	0.840	981	972	26,500	24,409
On premise	0.5	2.9	2.5	0.004	981	972	26,500	24,409
≤ 30-minute roundtrip	4.5	1.6	-2.9	0.136	981	972	26,500	24,409
Gendered household type								
Male and female adults	4.3	3.6	-0.7	0.738	794	750	21,505	19,314
Adult female, no adult male	5.8	5.6	-0.3	0.944	154	147	4,133	3,492
Adult male, no adult female	16.9	13.0	-3.9	0.680	32	75	843	1,603
Child, no adults	^				1			
Percent of households in target areas practicing correct use of recommended household water treatment technologies	12.7	6.0	-6.7	0.024	983	996	26,534	24,902
Chlorination	6.2	3.4	-2.7	0.207	983	996	26,534	24,902
Flocculant/Disinfectant	1.4	0.5	-1.0	0.106	983	996	26,534	24,902
Filtration	2.9	0.0	-2.9	0.004	983	996	26,534	24,902
Solar Disinfection	0.5	0.0	-0.5	0.235	983	996	26,534	24,902
Boiling	4.1	2.5	-1.6	0.205	983	996	26,534	24,902
Percentage of households with access to a basic sanitation service	4.3	11.5	7.2	0.020	983	996	26,534	24,902
Male and female adults	4.7	12.7	8.0	0.034	796	758	21,538	19,554
Adult female, no adult male	3.3	7.6	4.4	0.143	154	151	4,133	3,598
Adult male, no adult female	0.0	6.3	6.3	0.018	32	87	843	1,750
Child, no adults	^				1		20	
Percent of households in target areas practicing open defecation	79.3	33.5	-45.8	0.000	983	996	26,534	24,902
Male and female adults	80.1	33.0	-47.1	0.000	796	758	21,538	19,554
Adult female, no adult male	74.7	38.7	-36.0	0.003	154	151	4,133	3,598
Adult male, no adult female	80.1	28.8	-51.3	0.000	32	87	843	1,750
Child, no adults	^				1		20	
Percent of households with soap and water at a handwashing station on premises	57.4	17.1	-40.4	0.007	61	102	1,752	2,530
Male and female adults	59.2	9.6	-49.6	0.001	43	67	1,274	2,028
Adult female, no adult male	^	^			15	9	415	199
Adult male, no adult female	^	^			3	26	63	304
Child, no adults								

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	6.0	18.7	12.7	0.000	976	514	30,041	13,800
Male	6.6	16.7	10.1	0.000	608	376	18,052	10,139
Female	5.0	24.1	19.1	0.007	368	138	11,989	3,660
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	20.4	19.4	-1.0	0.893	301	140	9,582	4,196
Male	21.1	17.8	-3.3	0.721	219	107	6,766	3,123
Female	18.5	23.9	5.4	0.551	82	33	2,816	1,073
Cattle (improved livestock management practices/technologies)	61.0	26.8	-34.2	0.000	382	219	11,090	5,515
Sex								
Male	58.2	26.9	-31.3	0.000	235	156	6,520	4,051
Female	65.0	26.6	-38.4	0.003	147	63	4,571	1,464
Age								
15-29 years	70.5	^			63	21	1,922	432
30+ years	59.0	28.6	-30.3	0.000	319	198	9,169	5,083
Use of improved livestock breeds/species	1.9	0.2	-1.7	0.008	382	219	11,090	5,515
Use of livestock health services and products	12.4	8.4	-3.9	0.521	382	219	11,090	5,515
Use of improved shelters	5.9	0.0	-5.9	0.000	382	219	11,090	5,515
Use of improved calving techniques	3.5	0.0	-3.5	0.049	382	219	11,090	5,515
Use of improved milking techniques	0.6	0.0	-0.6	0.169	382	219	11,090	5,515
Use of more nutritious pasture varieties	3.2	1.0	-2.2	0.240	382	219	11,090	5,515
Utilization of set grazing areas	41.3	15.7	-25.6	0.000	382	219	11,090	5,515
Improved fodder production	1.3	1.3	0.0	0.972	382	219	11,090	5,515
Fencing off pasture plots	1.7	0.0	-1.7	0.037	382	219	11,090	5,515
Rehabilitation of degraded grazing lands	2.1	0.8	-1.4	0.334	382	219	11,090	5,515
Use of solarized boreholes for livestock	9.1	0.0	-9.1	0.000	382	219	11,090	5,515
Use of water pans for livestock	6.2	0.6	-5.6	0.003	382	219	11,090	5,515
Use of sand dams for livestock	3.3	3.2	-0.1	0.964	382	219	11,090	5,515
Use of rock catchments for livestock	4.7	0.0	-4.7	0.010	382	219	11,090	5,515
Goats (improved livestock management practices/technologies)	61.6	33.8	-27.8	0.002	915	417	28,429	11,015
Sex								
Male	60.3	34.6	-25.7	0.002	564	294	16,907	7,864
Female	63.4	31.7	-31.7	0.005	351	123	11,522	3,151
Age								
15-29 years	69.1	26.8	-42.3	0.000	154	60	4,816	1,584
30+ years	60.0	34.9	-25.1	0.005	761	357	23,613	9,431
Use of improved livestock breeds/species	1.9	0.3	-1.6	0.071	915	417	28,429	11,015
Use of livestock health services and products	9.8	16.1	6.3	0.509	915	417	28,429	11,015
Use of improved shelters	6.6	1.6	-4.9	0.019	915	417	28,429	11,015
Use of improved calving techniques	0.0	0.0			915	417	28,429	11,015
Use of improved milking techniques	0.7	0.0	-0.7	0.072	915	417	28,429	11,015
Use of more nutritious pasture varieties	4.0	1.8	-2.2	0.150	915	417	28,429	11,015
Utilization of set grazing areas	38.9	12.5	-26.4	0.000	915	417	28,429	11,015
Improved fodder production	1.6	1.7	0.1	0.923	915	417	28,429	11,015
Fencing off pasture plots	2.8	0.7	-2.1	0.049	915	417	28,429	11,015
Rehabilitation of degraded grazing lands	2.3	0.6	-1.7	0.078	915	417	28,429	11,015

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
Use of solarized boreholes for livestock	8.6	0.5	-8.1	0.000	915	417	28,429	11,015
Use of water pans for livestock	7.1	4.7	-2.4	0.424	915	417	28,429	11,015
Use of sand dams for livestock	4.2	7.5	3.3	0.221	915	417	28,429	11,015
Use of rock catchments for livestock	3.3	0.0	-3.3	0.003	915	417	28,429	11,015
Camels (improved livestock management practices/technologies)	56.5	16.1	-40.4	0.000	610	59	19,742	1,305
Sex								
Male	53.4	14.4	-39.0	0.000	400	41	12,537	890
Female	62.0	^			210	18	7,206	416
Age								
15-29 years	64.9	^			80	8	2,596	164
30+ years	55.3	18.4	-36.8	0.000	530	51	17,146	1,141
Use of improved livestock breeds/species	0.7	0.0	-0.7	0.053	610	59	19,742	1,305
Use of livestock health services and products	8.5	6.3	-2.2	0.769	610	59	19,742	1,305
Use of improved shelters	5.5	0.0	-5.5	0.010	610	59	19,742	1,305
Use of improved calving techniques	0.3	0.0	-0.3	0.307	610	59	19,742	1,305
Use of improved milking techniques	0.6	0.0	-0.6	0.067	610	59	19,742	1,305
Use of more nutritious pasture varieties	3.0	0.0	-3.0	0.021	610	59	19,742	1,305
Utilization of set grazing areas	37.0	14.5	-22.5	0.008	610	59	19,742	1,305
Improved fodder production	0.7	1.6	0.8	0.571	610	59	19,742	1,305
Fencing off pasture plots	1.9	0.0	-1.9	0.082	610	59	19,742	1,305
Rehabilitation of degraded grazing lands	1.3	0.0	-1.3	0.064	610	59	19,742	1,305
Use of solarized boreholes for livestock	8.5	0.0	-8.5	0.000	610	59	19,742	1,305
Use of water pans for livestock	6.9	0.0	-6.9	0.006	610	59	19,742	1,305
Use of sand dams for livestock	3.7	0.0	-3.7	0.026	610	59	19,742	1,305
Use of rock catchments for livestock	2.9	0.0	-2.9	0.008	610	59	19,742	1,305
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	15.3	13.9	-1.4	0.635	351	213	9,845	5,229
Sex								
Male	16.8	14.1	-2.7	0.448	215	152	5,754	3,870
Female	13.2	13.2	0.0	0.990	136	61	4,091	1,359
Age								
15-29 years	14.9	^			60	20	1,756	407
30+ years	15.4	14.0	-1.4	0.671	291	193	8,089	4,822
Goats (kilogram of offtake per head of goat per producer)	7.7	8.4	0.6	0.422	897	407	25,115	10,364
Sex								
Male	8.3	8.0	-0.3	0.720	554	286	14,977	7,360
Female	6.9	9.3	2.4	0.029	343	121	10,138	3,003
Age								
15-29 years	7.6	6.1	-1.5	0.191	150	58	4,230	1,447
30+ years	7.7	8.7	1.0	0.239	747	349	20,885	8,916
Camels (kilogram of offtake per head of camel per producer)	15.3	4.2	-11.1	0.000	587	57	17,204	1,226
Sex								
Male	15.1	4.3	-10.8	0.010	383	40	10,834	843
Female	15.8	^			204	17	6,370	382
Age								
15-29 years	13.7	^			78	7	2,297	139

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
30+ years	15.6	4.8	-10.8	0.002	509	50	14,907	1,087
Cow milk (liters per milking cow per day per producer)	1.0	^			48	20	1,335	577
Sex								
Male	1.0	^			31	18	848	527
Female	^	^			17	2	487	50
Age								
15-29 years	^	^			13	2	303	35
30+ years	1.0	^			35	18	1,032	542
Camel milk (liters per milking camel per day per producer)	1.2	1.6	0.4	0.009	216	34	5,955	685
Sex								
Male	1.2	^			149	23	3,947	492
Female	1.2	^			67	11	2,007	193
Age			0.0					
15-29 years	^	^			26	5	679	96
30+ years	1.2	^			190	29	5,276	589
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	2.6	12.4	9.7	0.000	930	1,035	28,612	27,936
<19 years	3.2	10.1	7.0	0.029	197	271	5,548	6,930
19+ years	2.5	13.1	10.6	0.000	733	764	23,065	21,006
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	56.2	70.6	14.4	0.003	553	520	17,095	14,298
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	63.7	90.4	26.7	0.000	628	581	19,368	16,027
15-19 years	46.7	78.4	31.7	0.005	59	34	1,615	910
20-29 years	62.0	89.7	27.7	0.000	245	238	7,562	6,421
30-49 years	67.7	92.1	24.5	0.000	324	309	10,191	8,697
Percent of women in union who made decisions about modern family planning methods in the past 12 months	80.3	85.2	4.9	0.560	61	162	1,698	4,575
15-19	^	^			4	4	105	109
Alone	^	^			4	4	105	109
Jointly	^	^			4	4	105	109
20-29	75.9	84.5	8.7	0.448	34	77	891	2,064
Alone	18.7	9.6	-9.1	0.308	34	77	891	2,064
Jointly	57.1	74.9	17.8	0.176	34	77	891	2,064
30-49	^	85.1			23	81	702	2,403
Alone	^	21.4			23	81	702	2,403
Jointly	^	63.7			23	81	702	2,403
Contraceptive prevalence rate (CPR)	14.7	30.3	15.7	0.001	539	507	16,551	13,900
Traditional	6.5	2.4	-4.1	0.096	539	507	16,551	13,900
Modern	9.1	28.1	19.0	0.000	539	507	16,551	13,900
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	46.8	57.3	10.5	0.300	75	85	2,102	2,054
Male	45.3	52.9	7.6	0.511	42	46	1,206	1,059
Female	48.7	62.0	13.3	0.383	33	39	896	994
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	1.3	6.0	4.7	0.044	255	222	6,970	5,914
Male	1.2	6.1	4.9	0.076	143	108	3,850	2,988
Female	1.5	5.9	4.5	0.209	112	114	3,120	2,926

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	5.0	11.2	6.2	0.090	255	222	6,970	5,914
Male	5.2	11.8	6.6	0.091	143	108	3,850	2,988
Female	4.7	10.5	5.8	0.265	112	114	3,120	2,926
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	24.7	14.7	-10.1	0.020	911	824	25,257	21,590
Male	24.6	14.4	-10.1	0.034	488	426	13,368	11,231
Female	24.9	14.9	-10.0	0.048	423	398	11,890	10,360
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	87.8	82.2	-5.6	0.249	249	119	6,245	3,163
Male	87.9	83.9	-4.0	0.576	130	62	3,283	1,622
Female	87.7	80.4	-7.3	0.276	119	57	2,962	1,541
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	6.9	12.4	5.5	0.051	764	704	22,390	20,371
15-19 years	6.0	0.0	-6.0	0.082	63	36	1,634	1,002
20-29 years	6.1	6.9	0.9	0.754	261	241	7,630	6,873
30-49 years	8.2	19.4	11.1	0.014	332	320	10,026	9,462
≥50 years	4.9	7.1	2.2	0.507	108	107	3,099	3,033
Male	20.6	42.6	21.9	0.000	745	698	22,190	18,820
15-19 years	^	^			8	2	241	54
20-29 years	31.8	45.9	14.1	0.248	62	100	1,614	2,466
30-49 years	26.0	51.8	25.9	0.000	398	362	12,135	9,959
≥50 years	11.2	26.5	15.3	0.000	277	234	8,201	6,342
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	85.6	85.9	0.3	0.967	53	74	1,385	2,289
15-19 years	^				3		98	
20-29 years	^	^			19	15	464	427
30-49 years	^	86.3			26	54	703	1,720
≥50 years	^	^			5	5	119	143
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	37.9	49.4	11.5	0.312	53	74	1,385	2,289
15-19 years	^				3		98	
20-29 years	^	^			19	15	464	427
30-49 years	^	49.7			26	54	703	1,720
≥50 years	^	^			5	5	119	143
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	45.5	59.3	13.8	0.036	144	268	4,099	7,623
15-19 years	^				1		38	
20-29 years	^	61.9			18	40	451	1,038
30-49 years	45.0	57.0	12.1	0.124	95	170	2,789	4,983
≥50 years	45.5	66.4	20.8	0.141	31	57	859	1,563
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	32.5	35.1	2.5	0.599	731	692	20,606	18,201
15-19 years	29.2	25.9	-3.4	0.759	60	36	1,496	909
20-29 years	28.5	39.8	11.3	0.052	249	237	7,048	6,128
30-49 years	34.6	36.2	1.5	0.811	321	315	9,289	8,478
≥50 years	37.6	23.9	-13.7	0.063	101	104	2,773	2,686

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
Male	22.8	34.3	11.5	0.009	653	680	20,064	17,833
15-19 years	^	^			8	2	247	53
20-29 years	30.1	25.4	-4.7	0.680	51	97	1,407	2,314
30-49 years	20.0	37.9	17.9	0.001	355	352	11,121	9,422
≥50 years	25.7	32.1	6.4	0.262	239	229	7,288	6,044
Percent of women/men in a union with access to credit								
Female	38.4	34.1	-4.3	0.370	731	692	20,606	18,201
15-19 years	22.9	21.5	-1.4	0.890	60	36	1,496	909
20-29 years	39.1	38.1	-1.0	0.886	249	237	7,048	6,128
30-49 years	39.8	35.0	-4.8	0.395	321	315	9,289	8,478
≥50 years	40.1	26.0	-14.1	0.042	101	104	2,773	2,686
Male	33.9	37.1	3.1	0.530	653	680	20,064	17,833
15-19 years	^	^			8	2	247	53
20-29 years	30.8	41.5	10.7	0.214	51	97	1,407	2,314
30-49 years	33.5	39.8	6.3	0.364	355	352	11,121	9,422
≥50 years	35.8	30.8	-5.0	0.346	239	229	7,288	6,044
Percent of women/men in a union who make decisions about credit								
Female	72.6	79.5	7.0	0.265	271	230	7,909	6,201
15-19	^	^			14	7	342	196
Alone	^	^			14	7	342	196
Jointly	^	^			14	7	342	196
20-29	76.3	79.1	2.9	0.707	93	90	2,754	2,335
Alone	44.6	14.0	-30.7	0.000	93	90	2,754	2,335
Jointly	31.6	65.2	33.5	0.001	93	90	2,754	2,335
30-49	73.1	79.3	6.2	0.449	125	105	3,699	2,971
Alone	44.6	21.1	-23.5	0.004	125	105	3,699	2,971
Jointly	28.5	58.2	29.7	0.004	125	105	3,699	2,971
≥50 years	68.3	^			39	28	1,113	700
Alone	49.1	^			39	28	1,113	700
Jointly	19.2	^			39	28	1,113	700
Male	65.3	84.9	19.6	0.003	221	242	6,811	6,609
15-19	^	^			1	1	43	37
Alone	^	^			1	1	43	37
Jointly	^	^			1	1	43	37
20-29	^	77.3			17	40	434	960
Alone	^	35.5			17	40	434	960
Jointly	^	41.9			17	40	434	960
30-49	72.9	87.3	14.3	0.020	119	132	3,722	3,748
Alone	36.0	31.2	-4.8	0.499	119	132	3,722	3,748
Jointly	36.9	56.0	19.1	0.032	119	132	3,722	3,748
≥50 years	54.7	83.7	29.0	0.001	84	69	2,612	1,864
Alone	23.2	20.6	-2.5	0.751	84	69	2,612	1,864
Jointly	31.6	63.1	31.5	0.002	84	69	2,612	1,864

Table A2.1. BHA Kenya Baseline Indicator County Estimates and Differences - CRS RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Isiolo - Marsabit)	P-value	Number of records		Weighted population	
	Marsabit	Isiolo			Marsabit	Isiolo	Marsabit	Isiolo
RESILIENCE-RELATED								
Adaptive Capacity Index	30.8	37.6	6.7	0.007	977	996	26,409	24,903
Absorptive Capacity Index	33.0	42.9	9.9	0.000	977	996	26,409	24,903
Transformative Capacity Index	28.3	50.4	22.1	0.000	978	996	26,431	24,903
Ability to recover from shocks and stresses index	3.8	3.4	-0.4	0.003	879	855	23,904	21,247
Male and female adults	3.8	3.4	-0.4	0.003	710	652	19,326	16,588
Adult female, no adult male	3.8	3.3	-0.4	0.040	140	120	3,791	2,974
Adult male, no adult female	^	3.7			28	83	766	1,685
Child, no adults	^				1		20	
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	2.8	5.9	3.1	0.131	978	996	26,431	24,903
Savings	0.6	5.6	5.0	0.010	978	996	26,431	24,903
Male and female adults	0.5	5.4	4.8	0.012	791	759	21,435	19,571
Adult female, no adult male	1.1	7.9	6.8	0.050	154	151	4,133	3,598
Adult male, no adult female	0.0	3.6	3.6	0.262	32	86	843	1,734
Child, no adults	^				1		20	
Credit (including microfinance)	2.3	2.1	-0.2	0.891	978	996	26,431	24,903
Male and female adults	2.3	2.0	-0.3	0.825	791	759	21,435	19,571
Adult female, no adult male	2.3	2.5	0.2	0.937	154	151	4,133	3,598
Adult male, no adult female	2.1	2.4	0.3	0.910	32	86	843	1,734
Child, no adults	^				1		20	
Index of social capital at the household level								
Overall index	68.4	69.7	1.3	0.545	978	997	26,431	24,918
Male and female adults	68.3	70.1	1.8	0.400	791	759	21,435	19,571
Adult female, no adult male	69.6	67.6	-2.0	0.519	154	151	4,133	3,598
Adult male, no adult female	66.4	69.3	2.9	0.560	32	87	843	1,750
Child, no adults	^				1		20	
Bonding sub-index	70.2	70.0	-0.2	0.917	978	997	26,431	24,918
Male and female adults	70.2	70.5	0.3	0.897	791	759	21,435	19,571
Adult female, no adult male	70.9	69.3	-1.6	0.635	154	151	4,133	3,598
Adult male, no adult female	67.7	66.1	-1.6	0.763	32	87	843	1,750
Child, no adults	^				1		20	
Bridging sub-index	66.7	69.4	2.7	0.206	978	997	26,431	24,918
Male and female adults	66.4	69.8	3.4	0.146	791	759	21,435	19,571
Adult female, no adult male	68.3	65.9	-2.4	0.458	154	151	4,133	3,598
Adult male, no adult female	65.2	72.5	7.3	0.218	32	87	843	1,750
Child, no adults	^				1		20	

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
FOOD SECURITY INDICATORS								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 30 day recall	93.0	81.2	-11.8	0.002	948	951	82,003	40,725
Male and female adults	92.1	80.7	-11.4	0.003	663	638	57,410	27,152
Adult female, no adult male	96.5	89.7	-6.8	0.071	216	211	18,746	8,611
Adult male, no adult female	90.2	67.2	-23.0	0.003	68	96	5,737	4,704
Child, no adults	^	^			1	6	109	258
Level of severity								
Moderate	31.4	37.1	5.7	0.000	948	951	82,003	40,725
Male and female adults	31.4	37.6	6.2	0.000	663	638	57,410	27,152
Adult female, no adult male	30.7	36.9	6.2	0.012	216	211	18,746	8,611
Adult male, no adult female	33.5	34.8	1.3	0.797	68	96	5,737	4,704
Child, no adults	^	^			1	6	109	258
Severe	61.6	44.1	-17.5	0.000	948	951	82,003	40,725
Male and female adults	60.7	43.1	-17.6	0.000	663	638	57,410	27,152
Adult female, no adult male	65.8	52.8	-13.0	0.001	216	211	18,746	8,611
Adult male, no adult female	56.7	32.3	-24.3	0.000	68	96	5,737	4,704
Child, no adults	^	^			1	6	109	258
Percentage of households with poor food consumption score (FCS)	45.2	21.9	-23.3	0.000	948	951	82,003	40,725
Male and female adults	44.0	20.3	-23.7	0.000	663	638	57,410	27,152
Adult female, no adult male	50.1	30.6	-19.6	0.004	216	211	18,746	8,611
Adult male, no adult female	40.4	13.7	-26.7	0.002	68	96	5,737	4,704
Child, no adults	^	^			1	6	109	258
Percentage of households with borderline FCS	21.8	18.6	-3.2	0.223	948	951	82,003	40,725
Male and female adults	20.9	19.7	-1.2	0.693	663	638	57,410	27,152
Adult female, no adult male	22.7	18.9	-3.8	0.321	216	211	18,746	8,611
Adult male, no adult female	27.9	11.3	-16.5	0.019	68	96	5,737	4,704
Child, no adults	^	^			1	6	109	258
Percentage of households with adequate FCS	33.0	59.5	26.5	0.000	948	951	82,003	40,725
Male and female adults	35.1	60.0	24.9	0.000	663	638	57,410	27,152
Adult female, no adult male	27.1	50.5	23.4	0.000	216	211	18,746	8,611
Adult male, no adult female	31.7	75.0	43.2	0.000	68	96	5,737	4,704
Child, no adults	^	^			1	6	109	258
Mean FCS	35.5	48.2	12.7	0.000	948	951	82,003	40,725
Male and female adults	36.9	49.0	12.0	0.001	663	638	57,410	27,152
Adult female, no adult male	31.7	41.5	9.8	0.000	216	211	18,746	8,611
Adult male, no adult female	34.0	57.3	23.3	0.000	68	96	5,737	4,704
Child, no adults	^	^			1	6	109	258
POVERTY INDICATORS								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	$1.01	$2.04	$1.03	0.002	948	952	423,564	193,178
Male and female adults	$1.04	$1.99	$0.95	0.004	664	640	337,138	152,632
Adult female, no adult male	$0.76	$1.49	$0.73	0.005	216	210	74,563	31,746
Adult male, no adult female	$2.00	$5.28	$3.28	0.001	67	96	11,207	8,205
Child, no adults	^	^			1	6	655	594

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	86.2	68.3	-17.9	0.004	948	952	423,564	193,178
Male and female adults	85.5	68.6	-16.9	0.008	664	640	337,138	152,632
Adult female, no adult male	92.0	75.8	-16.2	0.006	216	210	74,563	31,746
Adult male, no adult female	68.8	32.4	-36.3	0.002	67	96	11,207	8,205
Child, no adults	^	^			1	6	655	594
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	67.2	55.1	-12.1	0.001	791	602	365,066	131,909
Male and female adults	66.9	54.5	-12.4	0.001	571	433	288,114	104,632
Adult female, no adult male	69.4	58.7	-10.7	0.004	187	145	68,590	24,056
Adult male, no adult female	58.3	44.7	-13.6	0.137	32	19	7,707	2,662
Child, no adults	85.3	65.9	-19.3	0.000	1	5	655	558
WASH INDICATORS								
Percent of households using basic drinking water services	6.0	8.6	2.6	0.309	945	946	81,695	40,564
On premise	1.1	3.4	2.3	0.057	945	946	81,695	40,564
≤ 30-minute roundtrip	4.8	5.1	0.3	0.874	945	946	81,695	40,564
Gendered household type								
Male and female adults	5.2	6.8	1.6	0.485	662	640	57,231	27,207
Adult female, no adult male	7.1	10.5	3.5	0.535	214	208	18,618	8,503
Adult male, no adult female	10.2	16.0	5.9	0.417	68	92	5,737	4,596
Child, no adults								
Percent of households in target areas practicing correct use of recommended household water treatment technologies	7.2	17.3	10.1	0.000	949	959	82,007	41,102
Chlorination	1.8	5.8	4.1	0.002	949	959	82,007	41,102
Flocculant/Disinfectant	1.5	2.0	0.4	0.628	949	959	82,007	41,102
Filtration	0.4	2.3	1.9	0.019	949	959	82,007	41,102
Solar Disinfection	0.4	0.2	-0.2	0.545	949	959	82,007	41,102
Boiling	3.3	9.5	6.3	0.001	949	959	82,007	41,102
Percentage of households with access to a basic sanitation service	5.9	8.2	2.3	0.424	949	959	82,007	41,102
Male and female adults	7.2	7.8	0.6	0.867	664	644	57,408	27,412
Adult female, no adult male	3.0	6.8	3.8	0.187	216	212	18,753	8,654
Adult male, no adult female	1.8	13.0	11.2	0.130	68	97	5,737	4,778
Child, no adults	^	^			1	6	109	258
Percent of households in target areas practicing open defecation	74.7	48.5	-26.1	0.013	949	959	82,007	41,102
Male and female adults	75.1	51.4	-23.7	0.021	664	644	57,408	27,412
Adult female, no adult male	78.2	54.3	-23.9	0.033	216	212	18,753	8,654
Adult male, no adult female	58.3	19.0	-39.3	0.000	68	97	5,737	4,778
Child, no adults	^	^			1	6	109	258
Percent of households with soap and water at a handwashing station on premises	19.5	57.6	38.1	0.003	32	191	2,662	9,499
Male and female adults	^	53.1			26	133	2,012	6,512
Adult female, no adult male	^	63.3			3	30	300	1,598
Adult male, no adult female	^	^			3	28	350	1,389
Child, no adults								

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
AGRICULTURAL INDICATORS								
Percent of farmers who used financial services (savings, agricultural credit and/or agricultural insurance) in the past 12 months	3.2	18.1	14.9	0.000	537	683	53,164	29,693
Male	3.9	21.9	18.0	0.000	296	340	28,555	14,677
Female	2.4	14.3	11.9	0.000	241	343	24,609	15,015
Percent of farmers who practiced the value chain interventions promoted by the activity in the past 12 months	8.9	16.8	7.9	0.150	115	175	11,513	7,765
Male	3.8	19.5	15.7	0.006	60	99	6,074	4,355
Female	14.6	13.4	-1.3	0.865	55	76	5,439	3,409
Cattle (improved livestock management practices/technologies)	50.8	70.8	20.0	0.110	39	401	3,981	17,035
Sex								
Male	^	71.4			20	199	1,890	8,364
Female	^	70.2			19	202	2,091	8,671
Age								
15-29 years	^	68.3			5	95	388	4,157
30+ years	51.6	71.6	20.0	0.116	34	306	3,593	12,878
Use of improved livestock breeds/species	0.0	4.9	4.9	0.002	39	401	3,981	17,035
Use of livestock health services and products	8.4	38.3	29.8	0.000	39	401	3,981	17,035
Use of improved shelters	31.8	9.1	-22.6	0.029	39	401	3,981	17,035
Use of improved calving techniques	0.0	1.4	1.4	0.098	39	401	3,981	17,035
Use of improved milking techniques	0.0	1.1	1.1	0.153	39	401	3,981	17,035
Use of more nutritious pasture varieties	4.2	2.4	-1.8	0.585	39	401	3,981	17,035
Utilization of set grazing areas	2.2	17.8	15.6	0.001	39	401	3,981	17,035
Improved fodder production	4.4	0.7	-3.6	0.423	39	401	3,981	17,035
Reseeding of degraded lands with drought resistant grass species	0.0	3.2	3.2	0.032	39	401	3,981	17,035
Fencing off pasture plots	23.9	9.1	-14.8	0.224	39	401	3,981	17,035
Rehabilitation of degraded grazing lands	2.0	0.7	-1.4	0.539	39	401	3,981	17,035
Use of solarized boreholes for livestock	0.0	2.6	2.6	0.114	39	401	3,981	17,035
Use of water pans for livestock	0.0	12.7	12.7	0.000	39	401	3,981	17,035
Use of sand dams for livestock	0.0	7.0	7.0	0.000	39	401	3,981	17,035
Goats (improved livestock management practices/technologies)	36.6	64.6	28.0	0.000	447	506	45,374	21,020
Sex								
Male	35.3	65.6	30.4	0.000	253	247	24,781	10,188
Female	38.2	63.7	25.5	0.000	194	259	20,593	10,832
Age								
15-29 years	38.3	59.7	21.4	0.018	63	135	6,351	5,695
30+ years	36.3	66.5	30.1	0.000	384	371	39,023	15,325
Use of improved livestock breeds/species	0.0	4.1	4.1	0.006	447	506	45,374	21,020
Use of livestock health services and products	4.7	32.6	27.9	0.000	447	506	45,374	21,020
Use of improved shelters	20.3	9.0	-11.2	0.007	447	506	45,374	21,020
Use of improved calving techniques	0.0	0.2	0.2	0.331	447	506	45,374	21,020
Use of improved milking techniques	0.4	0.0	-0.4	0.334	447	506	45,374	21,020
Use of more nutritious pasture varieties	1.8	0.4	-1.4	0.047	447	506	45,374	21,020
Utilization of set grazing areas	9.9	19.9	10.0	0.008	447	506	45,374	21,020
Improved fodder production	0.2	0.2	0.0	0.884	447	506	45,374	21,020
Reseeding of degraded lands with drought resistant grass species	0.3	2.2	2.0	0.036	447	506	45,374	21,020

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
Fencing off pasture plots	3.1	5.2	2.2	0.391	447	506	45,374	21,020
Rehabilitation of degraded grazing lands	0.9	0.8	-0.2	0.827	447	506	45,374	21,020
Use of solarized boreholes for livestock	0.1	2.2	2.1	0.056	447	506	45,374	21,020
Use of water pans for livestock	2.6	9.1	6.5	0.010	447	506	45,374	21,020
Use of sand dams for livestock	0.0	5.5	5.5	0.000	447	506	45,374	21,020
Camels (improved livestock management practices/technologies)	23.0	11.3	-11.7	0.120	55	84	6,161	3,461
Sex								
Male	^	12.8			27	39	2,857	1,578
Female	^	10.0			28	45	3,305	1,883
Age								
15-29 years	^	^			3	23	322	943
30+ years	22.9	12.5	-10.4	0.185	52	61	5,839	2,518
Use of improved shelters	19.3	3.7	-15.6	0.018	55	84	6,161	3,461
Use of improved calving techniques	0.0	0.0	0.0		55	84	6,161	3,461
Use of improved milking techniques	0.0	0.0	0.0		55	84	6,161	3,461
Use of more nutritious pasture varieties	0.0	0.0	0.0		55	84	6,161	3,461
Fencing off pasture plots	17.3	0.0	-17.3	0.032	55	84	6,161	3,461
Rehabilitation of degraded grazing lands	1.6	0.0	-1.6	0.364	55	84	6,161	3,461
Use of solarized boreholes for livestock	0.0	2.5	2.5	0.328	55	84	6,161	3,461
Use of water pans for livestock	1.6	6.6	5.0	0.143	55	84	6,161	3,461
Use of sand dams for livestock	0.0	3.9	3.9	0.077	55	84	6,161	3,461
Yield of targeted agricultural commodities within targeted areas - livestock								
Cattle (kilogram of offtake per head of cattle per producer)	3.7	16.9	13.2	0.000	37	383	3,486	15,440
Sex								
Male	^	19.3			19	188	1,622	7,569
Female	^	14.6			18	195	1,864	7,871
Age								
15-29 years	^	15.6			5	89	357	3,690
30+ years	3.1	17.3	14.3	0.000	32	294	3,129	11,750
Goats (kilogram of offtake per head of goat per producer)	2.9	9.5	6.6	0.000	437	497	39,899	18,935
Sex								
Male	3.3	10.0	6.7	0.000	247	242	21,662	9,159
Female	2.4	9.0	6.7	0.000	190	255	18,236	9,776
Age								
15-29 years	2.6	9.1	6.5	0.000	61	134	5,476	5,192
30+ years	2.9	9.7	6.7	0.000	376	363	34,423	13,743
Camels (kilogram of offtake per head of camel per producer)	15.4	0.9	-14.5	0.001	53	82	5,287	3,093
Sex								
Male	^	2.1			27	37	2,561	1,372
Female	^	0.0			26	45	2,727	1,721
Age								
15-29 years	^	^			3	23	289	863
30+ years	16.3	1.0	-15.3	0.001	50	59	4,998	2,231
Cow milk (liters per milking cow per day per producer)	^	1.7			2	51	181	2,033
Sex								
Male	^	^			1	26	117	1,066

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
Female	^	^			1	25	65	967
Age								
15-29 years	^				13		493	
30+ years	^	1.7			2	38	181	1,540
Camel milk (liters per milking camel per day per producer)	^	^			13	24	1,392	872
Sex								
Male	^	^			5	14	517	503
Female	^	^			8	10	875	370
Age								
15-29 years	^				4		125	
30+ years	^	^			13	20	1,392	747
WOMEN'S HEALTH AND NUTRITION INDICATORS								
Percent of women of reproductive age consuming a diet of minimum diversity (MDD-W)	3.7	9.1	5.4	0.026	810	857	81,828	40,762
<19 years	2.5	6.9	4.5	0.240	125	171	12,345	8,088
19+ years	3.9	9.7	5.7	0.018	685	686	69,484	32,674
Percent of births receiving at least four antenatal care (ANC) visits during pregnancy	61.5	54.3	-7.3	0.221	491	462	49,088	21,144
Percent of women in union who have knowledge of modern family planning methods that can be used to delay or avoid pregnancy	72.2	80.8	8.6	0.179	518	534	51,367	24,846
15-19 years	^	50.6			26	45	2,588	2,122
20-29 years	76.9	81.5	4.6	0.550	225	267	22,471	12,405
30-49 years	68.4	86.2	17.7	0.004	267	222	26,307	10,319
Percent of women in union who made decisions about modern family planning methods in the past 12 months	70.6	82.1	11.5	0.088	100	177	10,806	8,119
15-19	^	^			1	4	134	138
Alone	^	^			1	4	134	138
Jointly	^	^			1	4	134	138
20-29	67.6	77.7	10.2	0.281	59	88	6,611	4,032
Alone	45.8	29.4	-16.4	0.014	59	88	6,611	4,032
Jointly	21.7	48.4	26.6	0.007	59	88	6,611	4,032
30-49	74.5	86.0	11.4	0.158	40	85	4,061	3,948
Alone	49.6	31.4	-18.2	0.095	40	85	4,061	3,948
Jointly	24.9	54.5	29.6	0.013	40	85	4,061	3,948
Contraceptive prevalence rate (CPR)	22.1	35.5	13.4	0.023	437	458	43,657	21,211
Traditional	0.8	2.8	2.0	0.155	437	458	43,657	21,211
Modern	21.2	34.0	12.8	0.026	437	458	43,657	21,211
CHILDREN'S HEALTH AND NUTRITION INDICATORS								
Prevalence of exclusive breastfeeding of children under six months	55.1	61.2	6.0	0.455	109	88	9,333	3,727
Male	56.2	53.9	-2.3	0.850	51	34	4,529	1,446
Female	54.2	65.8	11.6	0.233	58	54	4,805	2,281
Percent of children 6–23 months receiving a minimum acceptable diet (MAD)	0.6	5.7	5.2	0.007	235	195	21,797	7,911
Male	1.0	4.9	3.9	0.128	132	93	12,004	3,768
Female	0.0	6.5	6.5	0.013	103	102	9,793	4,143
Percent of children 6-23 months consuming a diet of minimum dietary diversity (MDD-C)	4.1	13.8	9.6	0.004	235	195	21,797	7,911
Male	5.5	10.7	5.2	0.174	132	93	12,004	3,768
Female	2.5	16.6	14.1	0.009	103	102	9,793	4,143
Percent of children under five (0-59 months) who had diarrhea in the prior two weeks	24.1	27.0	2.9	0.419	892	771	79,716	31,853
Male	27.3	25.1	-2.2	0.642	461	377	41,109	15,527
Female	20.7	28.8	8.1	0.039	431	394	38,607	16,326
Percent of children under five (0-59 months) with diarrhea treated with Oral Rehydration Therapy (ORT)	79.1	79.3	0.2	0.962	210	210	19,196	8,596
Male	83.0	75.6	-7.4	0.138	124	97	11,211	3,891
Female	73.5	82.3	8.8	0.198	86	113	7,984	4,706

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
GENDER - CASH								
Percent of women and men in union who earned cash in the past 12 months								
Female	34.1	30.6	-3.5	0.527	628	623	58,297	27,101
15-19 years	^	15.5			28	46	2,729	2,025
20-29 years	34.0	24.9	-9.1	0.103	232	279	21,888	12,203
30-49 years	38.9	41.2	2.3	0.752	274	230	25,194	10,055
≥50 years	25.1	28.6	3.5	0.657	94	68	8,486	2,817
Male	46.8	50.7	3.9	0.622	582	603	59,642	27,777
15-19 years	^	^			3	10	230	433
20-29 years	58.3	67.4	9.1	0.330	121	98	12,827	4,620
30-49 years	50.8	58.4	7.6	0.354	279	332	28,011	15,612
≥50 years	33.4	25.1	-8.3	0.292	179	163	18,573	7,111
Percent of women in union and earning cash who report participation in decisions about the use of self-earned cash	79.1	87.0	8.0	0.109	179	171	18,555	8,041
15-19 years	^	^			5	6	448	314
20-29 years	83.0	82.5	-0.4	0.954	67	64	7,128	2,880
30-49 years	76.9	87.5	10.6	0.077	88	84	9,170	4,041
≥50 years	^	^			19	17	1,808	807
Percent of women in union and earning cash who report participation in decisions about the use of spouse/partner's self-earned cash	27.3	40.6	13.3	0.064	179	171	18,555	8,041
15-19 years	^	^			5	6	448	314
20-29 years	30.8	51.0	20.3	0.041	67	64	7,128	2,880
30-49 years	26.1	36.5	10.4	0.167	88	84	9,170	4,041
≥50 years	^	^			19	17	1,808	807
Percent of men in union and earning cash who report spouse/partner participation in decisions about the use of self-earned cash	45.6	49.8	4.2	0.523	214	271	23,207	13,023
15-19 years	^				1		19	
20-29 years	51.4	56.7	5.4	0.514	57	59	6,188	2,878
30-49 years	43.3	47.8	4.4	0.616	116	176	12,138	8,576
≥50 years	43.9	48.4	4.5	0.745	41	35	4,881	1,550
GENDER - CREDIT AND GROUP PARTICIPATION								
Percent of women/men in a union who are members of a community group								
Female	36.2	49.9	13.6	0.034	594	594	54,047	25,912
15-19 years	^	37.2			26	44	2,358	1,951
20-29 years	39.3	48.1	8.8	0.217	219	265	20,437	11,630
30-49 years	34.6	54.8	20.2	0.004	261	219	23,547	9,563
≥50 years	30.4	49.2	18.7	0.087	88	66	7,704	2,768
Male	31.4	40.5	9.1	0.144	523	534	49,455	25,387
15-19 years	^	^			2	8	147	336
20-29 years	39.5	43.8	4.3	0.657	109	88	10,582	4,209
30-49 years	31.9	40.6	8.7	0.210	256	299	23,802	14,553
≥50 years	25.2	40.3	15.2	0.061	156	139	14,923	6,289
Percent of women/men in a union with access to credit								
Female	21.8	42.9	21.2	0.000	594	594	54,047	25,912
15-19 years	^	35.1			26	44	2,358	1,951
20-29 years	26.8	39.6	12.8	0.070	219	265	20,437	11,630
30-49 years	20.9	52.7	31.8	0.000	261	219	23,547	9,563
≥50 years	15.2	28.8	13.6	0.107	88	66	7,704	2,768
Male	22.5	45.0	22.5	0.000	523	534	49,455	25,387
15-19 years	^	^			2	8	147	336
20-29 years	29.6	46.2	16.6	0.016	109	88	10,582	4,209
30-49 years	26.0	48.9	22.9	0.000	256	299	23,802	14,553
≥50 years	12.1	37.2	25.1	0.000	156	139	14,923	6,289
Percent of women/men in a union who make decisions about credit								
Female	75.5	81.9	6.4	0.243	114	244	11,772	11,124
15-19	^	^			3	15	208	685

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
Alone	^	^			3	15	208	685
Jointly	^	^			3	15	208	685
20-29	75.7	81.8	6.1	0.464	52	101	5,471	4,602
Alone	36.7	36.1	-0.6	0.932	52	101	5,471	4,602
Jointly	39.0	45.7	6.7	0.474	52	101	5,471	4,602
30-49	78.1	81.8	3.7	0.609	47	109	4,923	5,041
Alone	57.1	36.9	-20.3	0.037	47	109	4,923	5,041
Jointly	21.0	44.9	24.0	0.004	47	109	4,923	5,041
≥50 years	^	^			12	19	1,171	797
Alone	^	^			12	19	1,171	797
Jointly	^	^			12	19	1,171	797
Male	85.9	85.6	-0.4	0.936	108	234	11,137	11,421
15-19	^				1		20	
Alone	^				1		20	
Jointly	^				1		20	
20-29	81.8	92.9	11.2	0.178	32	39	3,137	1,945
Alone	37.6	55.1	17.5	0.262	32	39	3,137	1,945
Jointly	44.1	37.8	-6.3	0.623	32	39	3,137	1,945
30-49	89.5	87.8	-1.7	0.764	59	143	6,194	7,117
Alone	57.5	40.9	-16.6	0.112	59	143	6,194	7,117
Jointly	32.0	46.9	14.9	0.136	59	143	6,194	7,117
≥50 years	^	72.7			17	51	1,806	2,339
Alone	^	40.1			17	51	1,806	2,339
Jointly	^	32.6			17	51	1,806	2,339
RESILIENCE-RELATED								
Adaptive Capacity Index	29.2	40.0	10.8	0.000	949	953	82,093	40,852
Absorptive Capacity Index	29.2	38.3	9.1	0.000	949	954	82,093	40,903
Transformative Capacity Index	33.4	42.9	9.5	0.096	950	956	82,145	40,979
Ability to recover from shocks and stresses index	3.8	3.9	0.1	0.300	850	843	74,283	35,905
Male and female adults	3.8	3.9	0.1	0.411	596	572	51,839	24,291
Adult female, no adult male	3.7	3.9	0.1	0.461	193	181	17,230	7,242
Adult male, no adult female	3.6	3.9	0.4	0.175	60	86	5,104	4,200
Child, no adults	^	^			1	4	109	171
Percent of households that believe local government will respond effectively to future shocks and stresses	NA	NA	NA	NA	NA	NA	NA	NA
Male and female adults	NA	NA	NA	NA	NA	NA	NA	NA
Adult female, no adult male	NA	NA	NA	NA	NA	NA	NA	NA
Adult male, no adult female	NA	NA	NA	NA	NA	NA	NA	NA
Child, no adults	NA	NA	NA	NA	NA	NA	NA	NA
Percent of households participating in group-based savings, micro-finance or lending programs	2.9	12.7	9.9	0.000	950	956	82,145	40,979
Savings	1.4	10.1	8.7	0.000	950	956	82,145	40,979
Male and female adults	1.9	10.0	8.2	0.000	664	643	57,480	27,362
Adult female, no adult male	0.4	6.4	6.0	0.007	217	211	18,818	8,618
Adult male, no adult female	0.0	17.6	17.6	0.002	68	96	5,737	4,741
Child, no adults	^	^			1	6	109	258
Credit (including microfinance)	2.2	5.4	3.2	0.015	950	956	82,145	40,979
Male and female adults	2.8	6.1	3.3	0.039	664	643	57,480	27,362
Adult female, no adult male	1.3	2.0	0.7	0.590	217	211	18,818	8,618
Adult male, no adult female	0.0	8.2	8.2	0.001	68	96	5,737	4,741
Child, no adults	^	^			1	6	109	258

Table A2.2 BHA Kenya Baseline Indicator County Estimates and Differences - MC RFSA Areas

Indicators, P-value, and Base Population [Kenya, 2021]

	Indicator Value		Difference (Samburu - Turkana)	P-value	Number of records		Weighted population	
	Turkana	Samburu			Turkana	Samburu	Turkana	Samburu
Index of social capital at the household level								
Overall index	63.6	71.2	7.6	0.006	950	956	82,145	40,979
Male and female adults	64.6	72.8	8.2	0.005	664	643	57,480	27,362
Adult female, no adult male	62.9	68.8	5.9	0.069	217	211	18,818	8,618
Adult male, no adult female	56.4	67.3	10.9	0.025	68	96	5,737	4,741
Child, no adults	^	^			1	6	109	258
Bonding sub-index	63.7	72.0	8.4	0.003	950	956	82,145	40,979
Male and female adults	64.6	73.8	9.2	0.002	664	643	57,480	27,362
Adult female, no adult male	62.0	69.3	7.2	0.047	217	211	18,818	8,618
Adult male, no adult female	59.8	67.6	7.8	0.035	68	96	5,737	4,741
Child, no adults	^	^			1	6	109	258
Bridging sub-index	63.5	70.4	6.9	0.023	950	956	82,145	40,979
Male and female adults	64.6	71.8	7.2	0.021	664	643	57,480	27,362
Adult female, no adult male	63.7	68.2	4.5	0.168	217	211	18,818	8,618
Adult male, no adult female	53.1	67.0	14.0	0.057	68	96	5,737	4,741
Child, no adults	^	^			1	6	109	258

Annex E3: County-level Estimates of Select Indicators from the 2018 PREG II Baseline Survey

Table A5c.1 Estimates of Select Indicators from the 2018 PREG II Baseline Survey, by county

	Marsabit		Isiolo		Turkana		Samburu	
	%	N	%	N	%	N	%	N
FOOD SECURITY								
Prevalence of moderate and severe food insecurity in the household, based the Food Insecurity Experience Scale (FIES) - 12-month recall	85.8	211	62.5	177	94.2	361	58.1	351
Level of severity								
Severe	79.6	211	54.5	177	91.2	361	47.3	351
Percentage of households consuming HDDS food groups								
Cereals	82.3	211	78.0	177	90.9	361	85.2	351
Roots and tubers	23.7	211	44.0	177	15.2	361	33.3	351
Vegetables	31.2	211	73.7	177	28.1	361	57.3	351
Fruits	8.2	209	29.8	176	13.2	361	12.3	351
Meat, poultry, offal	11.0	210	27.3	173	35.5	361	26.0	350
Eggs	10.6	210	20.7	177	7.2	360	14.4	348
Fish and seafood	1.3	210	2.9	177	7.7	360	0.6	351
Pulses, legumes, nuts	52.9	209	14.3	177	38.1	361	41.3	351
Milk and milk products	56.7	210	62.2	177	40.9	361	49.0	351
Oil/fats	93.6	210	85.2	177	68.4	361	82.2	348
Sugar/honey	79.2	210	68.4	177	67.5	361	81.5	351
Miscellaneous	33.7	210	59.3	177	26.1	360	54.4	351
POVERTY								
Daily per capita expenditures (as a proxy for income) in USG-assisted areas 2010 USD, PPP 2011	$2.70	216	$3.34	188	$1.74	364	$2.45	354
Prevalence of Poverty: Percent of people living on less than $1.90/day 2011 PPP	58.9	216	39.0	188	77.8	364	54.4	354
Depth of Poverty of the Poor: Mean percentage shortfall of the poor relative to the $1.90/day 2011 PPP poverty line	33.2	216	47.1	188	57.1	364	37.5	354
RESILIENCE								
Adaptive capacity index	42.7	216	39.8	188	26.0	364	38.0	354
Absorptive capacity index	49.0	216	32.2	188	24.1	364	37.0	354
Transformative capacity index	42.5	216	39.6	188	28.7	364	26.9	354

Table A5c.1 Estimates of Select Indicators from the 2018 PREG II Baseline Survey, by county

	Marsabit		Isiolo		Turkana		Samburu	
	%	N	%	N	%	N	%	N
WOMEN'S HEALTH AND NUTRITION								
Percentage of women 15-49 achieving minimum dietary diversity (MDD-W)	9.3	153	15.7	122	14.4	266	20.1	259
Percentage of women 15-49 consuming MDD food groups								
Grains, roots, & tubers	91.1	153	89.4	122	85.3	266	92.3	259
Pulses	67.1	153	25.6	122	48.9	266	51.7	259
Nuts and seeds	0.0	153	0.0	122	2.4	266	0.8	259
Dairy	60.3	153	62.9	122	32.3	266	69.5	259
Meat, poultry, fish	18.9	153	21.7	122	49.6	266	29.7	259
Eggs	13.4	153	21.4	122	8.9	266	13.1	259
Dark leafy greens	11.1	153	35.8	122	23.8	266	39.8	259
Vitamin A rich fruits and vegetables	4.0	153	4.3	122	9.9	266	10.4	259
Other vegetables	0.9	153	4.5	122	3.3	266	10.4	259
Other fruits	5.3	153	5.7	122	15.5	266	6.6	259

NOTES: Includes sampling weights to account for multi-stage clustered design and household non-response.

ANNEX F: DESCRIPTIVE ANALYSIS TABLES

CONTENTS

RESILIENCE

COVID-19 AWARENESS, MITIGATION PROTOCOLS, IMPACTS, AND COPING STRATEGIES

Table A6.1. Estimated population in the RFSA areas
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Total population	897,267	281,264	144,980	136,284	616,003	423,316	192,687
Male	444,830	141,321	72,257	69,064	303,509	208,365	95,144
Female	452,437	139,943	72,723	67,220	312,494	214,951	97,544
Population 15 years or older	443,751	143,541	72,115	71,426	300,211	202,782	97,429
Male	218,048	72,835	36,227	36,608	145,212	96,581	48,632
Female	225,704	70,705	35,888	34,817	154,998	106,201	48,798
Cash earners (15 years or older)	112,015	21,566	7,590	13,976	90,448	59,363	31,086
Male	61,502	15,142	5,118	10,024	46,361	29,200	17,161
Female	50,512	6,424	2,472	3,952	44,088	30,163	13,925
Farmers (15 years or older)	126,697	43,841	30,041	13,800	82,856	53,164	29,693
Male	71,424	28,191	18,052	10,139	43,232	28,555	14,677
Female	55,273	15,649	11,989	3,660	39,624	24,609	15,015
Women of reproductive age (15-49 years)	179,138	56,548	28,612	27,936	122,590	81,828	40,762
Women 15-49 years who are married or in a union	111,607	35,395	19,368	16,027	76,212	51,367	24,846
Women 15-49 years with a live birth within the past five years	101,625	31,393	17,095	14,298	70,232	49,088	21,144
Youth (15-24 years)	179,273	57,390	26,620	30,770	121,883	80,408	41,475
Male	92,515	30,007	13,735	16,272	62,508	41,809	20,699
Female	86,758	27,382	12,885	14,497	59,376	38,599	20,776
Children under 5 years of age	158,417	46,848	25,257	21,590	111,569	79,716	31,853
Male	81,234	24,598	13,368	11,231	56,636	41,109	15,527
Female	77,182	22,249	11,890	10,360	54,933	38,607	16,326
Children 6-23 months of age	42,592	12,884	6,970	5,914	29,708	21,797	7,911
Male	22,610	6,838	3,850	2,988	15,772	12,004	3,768
Female	19,982	6,046	3,120	2,926	13,936	9,793	4,143

Source: BHA 2021 Kenya baseline survey weighted population estimates.
NOTES: As stipulated by USAID's Feed the Future (FTF) guideline, adults for gendered household type are defined as individuals 18 years of age or older. However, individuals 15 years or older are considered competent members of the household and are included in all other analyses.

Table A6.2. FIES Raw Score and Percent Households Responding "Yes" to eight questions on FIES scale
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
FIES Raw Score (range: 0-8, mean)	6.7	6.2	6.7	5.7	6.9	7.3	6.2
FIES questions (% Households responding "yes")							
Worried not enough food to eat	88.6	88.0	89.5	86.3	88.8	92.1	82.3
Unable to eat healthy and nutritious foods	90.1	89.6	90.5	88.5	90.3	93.3	84.3
Ate only a few kinds of foods	90.3	90.9	92.7	89.0	90.0	93.4	83.4
Skipped a meal	84.7	79.2	85.3	72.7	87.0	92.4	76.3
Ate less than you thought you should	88.5	87.5	91.7	83.0	88.9	92.7	81.1
Household ran out of food	83.2	76.4	82.5	69.9	86.0	91.5	74.9
Were hungry but did not eat	80.4	70.4	79.4	60.9	84.5	90.2	73.0
Went a whole day without eating	67.7	43.0	61.2	23.6	78.1	87.0	60.0
Number of Responding Households	3,873	1,974	979	995	1,899	948	951

NOTES: FIES is a measurement scale used to estimate the probability that each household belongs to a specific category of food insecurity. FIES comprises eight questions that explore a household's difficulty accessing food due to a lack of money or other resources, and reflect the food-related behaviors and experiences of the household. Households are assigned to categories of severity (moderate or severe) based on pre-established thresholds. For more details refer to Supplement to Part 1 - BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities.

Table A6.3a. Percent of households consuming FCS food groups and average frequency of consumption in days, Combined RFSA areas [Baseline Study, Kenya 2021]

	Combined RFSA areas			
	Total	Poor FCS	Borderline FCS	Acceptable FCS
Percentage of HHs by FCS group				
Staples[1]				
Percent of HHs consuming food item	97.9	94.9	97.8	99.7
Sorghum, millet, rice, etc.…	97.6	94.7	97.2	99.4
Potatoes, yam, cassava, sweet potato, miritchi, garin rogo, other roots or tubers	40.8	12.7	33.8	59.9
Frequency of consumption in days (mean)	5.63	4.45	5.56	6.36
Sorghum, millet, rice, etc.…	5.19	4.28	5.13	5.74
Potatoes, yam, cassava, sweet potato, miritchi, garin rogo, other roots or tubers	1.36	0.29	0.92	2.16
Pulses				
Percent of HHs consuming food item	60	35	64	74
Frequency of consumption in days (mean)	2	1	2	3
Vegetables				
Percent of HHs consuming food item	60.5	31.3	58.8	78.4
Frequency of consumption in days (mean)	2.88	1.01	2.45	4.14
Fruit				
Percent of HHs consuming food item	24.2	13.3	20.1	32.2
Frequency of consumption in days (mean)	0.77	0.46	0.62	1.01
Meat and Fish[2]				
Percent of HHs consuming food item	25.8	13.1	25.2	37.1
Beef, pork, lamb, goat, rabbit, chicken, organ meats, etc…	33.7	11.9	26.7	49.2
Eggs	13.3	3.0	5.0	22.6
Fresh or dried fish or shellfish	13.2	4.5	16.5	17.0
Frequency of consumption in days (mean)	1.38	0.28	0.99	2.18
Beef, pork, lamb, goat, rabbit, chicken, organ meats, etc…	0.77	0.17	0.45	1.24
Eggs	0.36	0.03	0.08	0.66
Fresh or dried fish or shellfish	0.42	0.08	0.47	0.61

Table A6.3a. Percent of households consuming FCS food groups and average frequency of consumption in days, Combined RFSA areas [Baseline Study, Kenya 2021]

	Combined RFSA areas			
	Total	Poor FCS	Borderline FCS	Acceptable FCS
Milk and Dairy				
Percent of HHs consuming food item	60.9	16.0	47.9	92.2
Frequency of consumption in days (mean)	3.30	0.34	1.83	5.60
Sugar				
Percent of HHs consuming food item	60.8	39.7	59.7	73.6
Frequency of consumption in days (mean)	3.45	1.64	3.12	4.63
Oil				
Percent of HHs consuming food item	82.5	64.9	84.9	91.9
Frequency of consumption in days (mean)	4.75	2.77	4.84	5.88
Condiments[3]				
Percent of HHs consuming food item	45.1	25.2	43.9	57.2
Frequency of consumption in days (mean)	2.6	1.1	2.4	3.6
Number of responding households	3,875	882	711	2,282

NOTES: FCS is a composite score based on dietary diversity, food frequency and relative nutritional value of the different food groups. Values are then weighted and summed to obtain the FCS. Households are categorized into consumption groups based on pre-established thresholds. A modified threshold was used to account for the local diet which consists of daily oil and sugar consumption: Poor (0 - 28); borderline (28.5 - 42); and acceptable (>42). For more details refer to Supplement to Part 1 - BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities.

[1] Staples include cereals and roots and tubers.

[2] Meat and fish include meat, fish, and eggs.

[3] Condiments are not included in the calculation of FCS.

Table A6.3b. Percent of households consuming FCS food groups and average frequency of consumption in days, CRS RFSA areas, in total and by county
[Baseline Study, Kenya 2021]

	Total				Marsabit				Isiolo			
	Total	Poor FCS	Borderline FCS	Acceptable FCS	Total	Poor FCS	Borderline FCS	Acceptable FCS	Total	Poor FCS	Borderline FCS	Acceptable FCS
Percentage of HHs by FCS group												
Staples[1]												
Percent of HHs consuming food item	99.3	96.4	99.1	99.8	99.1	96.7	98.6	100.0	99.5	95.3	100.0	99.6
Sorghum, millet, rice, etc.…	99.1	96.4	99.1	99.5	99.0	96.7	98.6	99.8	99.3	95.3	100.0	99.4
Potatoes, yam, cassava, sweet potato, miritchi, garin rogo, other roots or tubers	56.2	26.3	42.2	64.0	30.3	14.2	18.0	38.9	83.8	78.3	84.3	84.0
Frequency of consumption in days (mean)	6.28	4.85	5.92	6.59	5.89	4.62	5.51	6.38	6.70	5.83	6.64	6.76
Sorghum, millet, rice, etc.…	5.73	4.48	5.33	6.01	5.56	4.44	5.25	5.98	5.91	4.63	5.47	6.04
Potatoes, yam, cassava, sweet potato, miritchi, garin rogo, other roots or tubers	2.20	0.78	1.45	2.59	0.97	0.41	0.50	1.29	3.50	2.34	3.11	3.62
Pulses												
Percent of HHs consuming food item	66	27	59	74	61	26	56	73	70.9	28.7	64.5	74.1
Frequency of consumption in days (mean)	2	1	2	3	2	1	2	3	2.50	0.55	1.71	2.72
Vegetables												
Percent of HHs consuming food item	65.5	26.8	51.6	74.7	39.2	16.6	26.3	49.9	93.4	70.3	95.6	94.4
Frequency of consumption in days (mean)	3.33	0.91	2.32	3.94	1.51	0.36	0.78	2.08	5.27	3.22	5.01	5.41
Fruit												
Percent of HHs consuming food item	20.3	6.3	11.4	24.5	10.7	7.4	8.3	12.4	30.5	1.7	16.8	34.1
Frequency of consumption in days (mean)	0.53	0.17	0.28	0.64	0.23	0.19	0.20	0.25	0.85	0.07	0.41	0.96
Meat and Fish[2]												
Percent of HHs consuming food item	25.6	15.0	20.2	29.4	23.2	12.3	16.3	29.6	28.6	25.0	27.0	29.2
Beef, pork, lamb, goat, rabbit, chicken, organ meats, etc…	38.1	15.4	25.5	44.6	33.1	13.2	20.6	43.0	43.5	25.0	33.9	45.8
Eggs	14.4	3.1	3.9	18.5	9.1	3.9	3.5	12.4	20.0	0.0	4.6	23.3
Fresh or dried fish or shellfish	3.8	5.7	5.9	3.0	5.1	7.0	9.3	3.2	2.3	0.0	0.0	2.8
Frequency of consumption in days (mean)	1.31	0.38	0.70	1.59	1.05	0.41	0.74	1.33	1.59	0.25	0.64	1.80
Beef, pork, lamb, goat, rabbit, chicken, organ meats, etc…	0.84	0.22	0.45	1.02	0.67	0.21	0.37	0.90	1.02	0.25	0.58	1.12
Eggs	0.40	0.04	0.06	0.53	0.24	0.05	0.06	0.35	0.57	0.00	0.05	0.68
Fresh or dried fish or shellfish	0.13	0.13	0.20	0.12	0.16	0.15	0.32	0.11	0.10	0.00	0.00	0.12
Milk and Dairy												
Percent of HHs consuming food item	81.7	24.2	56.4	96.4	79.0	28.7	67.0	97.5	84.5	5.3	37.8	95.5
Frequency of consumption in days (mean)	4.87	0.57	2.19	6.14	4.46	0.69	2.74	6.11	5.30	0.06	1.21	6.17
Sugar												
Percent of HHs consuming food item	69.1	43.5	61.2	74.9	66.2	45.2	64.4	72.9	72.2	36.3	55.7	76.5
Frequency of consumption in days (mean)	4.39	1.97	3.57	4.95	4.05	1.99	3.63	4.79	4.74	1.90	3.46	5.08
Oil												
Percent of HHs consuming food item	88.1	52.9	85.0	94.5	85.7	53.3	85.4	95.3	90.7	51.5	84.3	93.8
Frequency of consumption in days (mean)	5.63	2.71	5.09	6.22	5.31	2.66	5.05	6.16	5.98	2.90	5.15	6.26
Condiments[3]												
Percent of HHs consuming food item	60.3	38.0	52.0	65.8	54.8	34.9	51.7	61.7	66.2	51.5	52.5	69.0
Frequency of consumption in days (mean)	4.01	2.13	3.23	4.48	3.60	1.86	3.27	4.21	4.44	3.25	3.16	4.69
Number of responding households	1,976	232	319	1,425	981	185	195	601	995	47	124	824

NOTES: FCS is a composite score based on dietary diversity, food frequency and relative nutritional value of the different food groups. Values are then weighted and summed to obtain the FCS. Households are categorized into consumption groups based on pre-established thresholds. A modified threshold was used to account for the local diet which consists of daily oil and sugar consumption: Poor (0 - 28); borderline (28.5 - 42); and acceptable (>42). For more details refer to Supplement to Part 1 - BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities.

[1] Staples include cereals and roots and tubers.

[2] Meat and fish include meat, fish, and eggs.

[3] Condiments are not included in the calculation of FCS.

Table A6.3c. Percent of households consuming FCS food groups and average frequency of consumption in days, MC RFSA areas, in total and by county
[Baseline Study, Kenya 2021]

	Total				Turkana				Samburu			
	Total	Poor FCS	Borderline FCS	Acceptable FCS	Total	Poor FCS	Borderline FCS	Acceptable FCS	Total	Poor FCS	Borderline FCS	Acceptable FCS
Percentage of HHs by FCS group												
Staples[1]												
Percent of HHs consuming food item	97.3	94.7	97.3	99.6	97.3	95.1	98.6	99.4	97.3	93.2	94.3	99.8
Sorghum, millet, rice, etc.…	97.0	94.5	96.6	99.4	97.1	95.1	97.7	99.4	96.7	92.2	93.8	99.3
Potatoes, yam, cassava, sweet potato, miritchi, garin rogo, other roots or tubers	34.3	11.0	31.1	56.9	23.0	6.8	27.0	42.5	57.2	28.4	40.7	72.9
Frequency of consumption in days (mean)	5.36	4.40	5.44	6.19	5.05	4.24	5.36	5.96	5.99	5.06	5.63	6.45
Sorghum, millet, rice, etc.…	4.96	4.26	5.06	5.53	4.80	4.16	5.03	5.52	5.28	4.68	5.14	5.55
Potatoes, yam, cassava, sweet potato, miritchi, garin rogo, other roots or tubers	1.01	0.23	0.74	1.85	0.64	0.13	0.63	1.34	1.77	0.66	1.01	2.42
Pulses												
Percent of HHs consuming food item	57.9	36.3	65.3	73.5	55.0	36.9	66.1	72.4	63.7	33.6	63.6	74.7
Frequency of consumption in days (mean)	1.84	0.94	2.05	2.54	1.84	1.00	2.16	2.78	1.85	0.69	1.81	2.28
Vegetables												
Percent of HHs consuming food item	58.5	31.9	61.1	81.0	53.1	29.6	63.0	78.7	69.3	41.4	56.6	83.6
Frequency of consumption in days (mean)	2.69	1.02	2.49	4.28	2.32	0.91	2.54	4.10	3.42	1.47	2.35	4.48
Fruit												
Percent of HHs consuming food item	25.9	14.2	22.9	37.9	24.2	15.9	25.2	34.8	29.4	7.2	17.6	41.3
Frequency of consumption in days (mean)	0.87	0.49	0.73	1.27	0.84	0.57	0.85	1.21	0.91	0.17	0.43	1.33
Meat and Fish[2]												
Percent of HHs consuming food item	25.9	12.9	26.9	43.3	25.4	13.5	31.0	47.4	26.8	10.4	18.8	39.4
Beef, pork, lamb, goat, rabbit, chicken, organ meats, etc…	31.9	11.5	27.0	52.6	29.0	11.7	29.9	52.0	37.8	10.5	20.4	53.4
Eggs	12.9	3.0	5.3	25.5	8.9	3.5	3.7	19.7	20.9	0.9	9.3	32.0
Fresh or dried fish or shellfish	17.1	4.4	19.9	27.3	21.2	5.3	27.1	38.9	9.1	0.4	2.9	14.2
Frequency of consumption in days (mean)	1.41	0.27	1.08	2.61	1.39	0.31	1.32	2.93	1.46	0.13	0.50	2.25
Beef, pork, lamb, goat, rabbit, chicken, organ meats, etc…	0.74	0.17	0.45	1.40	0.65	0.18	0.52	1.38	0.93	0.12	0.29	1.43
Eggs	0.34	0.03	0.09	0.75	0.22	0.04	0.06	0.58	0.59	0.01	0.15	0.94
Fresh or dried fish or shellfish	0.55	0.07	0.56	0.96	0.67	0.09	0.77	1.41	0.29	0.00	0.06	0.47
Milk and Dairy												
Percent of HHs consuming food item	52.2	14.9	45.2	89.1	42.2	13.8	38.1	83.9	72.3	19.8	61.9	94.9
Frequency of consumption in days (mean)	2.64	0.30	1.71	5.20	1.99	0.28	1.42	4.72	3.95	0.41	2.41	5.74
Sugar												
Percent of HHs consuming food item	57.3	39.2	59.2	72.6	49.1	33.1	54.8	67.4	73.7	64.4	69.7	78.4
Frequency of consumption in days (mean)	3.06	1.60	2.97	4.40	2.47	1.22	2.66	4.05	4.24	3.19	3.71	4.79
Oil												
Percent of HHs consuming food item	80.1	66.5	84.8	90.1	77.8	65.3	84.6	90.4	84.9	71.6	85.3	89.6
Frequency of consumption in days (mean)	4.38	2.78	4.76	5.63	3.96	2.50	4.61	5.55	5.22	3.95	5.12	5.72
Condiments[3]												
Percent of HHs consuming food item	38.7	23.6	41.4	51.0	36.6	22.2	42.3	52.5	43.1	29.2	39.1	49.4
Frequency of consumption in days (mean)	2.06	0.96	2.09	3.02	1.91	0.87	2.15	3.19	2.35	1.36	1.95	2.84
Number of responding households	1,899	650	392	857	948	437	203	308	951	213	189	549

NOTES: FCS is a composite score based on dietary diversity, food frequency and relative nutritional value of the different food groups. Values are then weighted and summed to obtain the FCS. Households are categorized into consumption groups based on pre-established thresholds. A modified threshold was used to account for the local diet which consists of daily oil and sugar consumption: Poor (0 - 28); borderline (28.5 - 42); and acceptable (>42). For more details refer to Supplement to Part 1 - BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities.

[1] Staples include cereals and roots and tubers.

[2] Meat and fish include meat, fish, and eggs.

[3] Condiments are not included in the calculation of FCS.

Table A6.4a. Percentage of cattle producers by age, in total and by farmers' sex
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Combined RFSA Areas- Total			
	Total	Male	Female	N
Age				
15-19	2.2	0.7	4.0	19
20-24	5.0	2.0	8.7	52
25-29	11.1	8.3	14.7	113
30-34	13.9	16.1	11.3	154
35-39	14.0	13.5	14.5	139
40-44	9.1	11.3	6.3	98
45-49	10.2	11.1	9.0	110
50-54	8.0	9.0	6.8	82
55-59	5.4	6.1	4.5	60
60+	21.2	21.9	20.2	214
Total	100.0	100.0	100.0	1,041
Number of responding cattle producers	1,041	610	431	

CRS RFSA Areas

	CRS RFSA areas - Total				Marsabit				Isiolo			
	Total	Male	Female	N	Total	Male	Female	N	Total	Male	Female	N
Age												
15-19	1.6	1.4	1.8	8	2.4	2.3	2.4	8	0.0	0.0	0.0	0
20-24	4.7	2.1	9.3	28	6.0	2.8	10.6	22	2.0	0.9	5.1	6
25-29	7.9	5.7	11.8	48	9.0	5.0	14.6	33	5.8	6.9	2.8	15
30-34	15.8	18.2	11.6	97	16.7	20.9	10.7	67	14.0	13.8	14.5	30
35-39	15.7	14.3	18.1	86	16.0	12.3	21.2	55	15.1	17.5	8.5	31
40-44	7.9	10.0	4.2	53	8.4	11.5	4.0	35	6.8	7.6	4.8	18
45-49	8.8	8.0	10.2	58	7.0	5.8	8.6	28	12.4	11.5	15.1	30
50-54	8.5	8.8	8.0	47	8.2	9.9	5.9	30	9.0	7.0	14.8	17
55-59	7.2	8.1	5.6	42	5.4	6.3	4.2	24	10.7	10.9	10.1	18
60+	22.0	23.4	19.4	134	20.9	23.1	17.9	80	24.0	24.0	24.2	54
Total	100.0	100.0	100.0	601	100.0	100.0	100.0	382	100.0	100.0	100.0	219
Number of responding cattle producers	601	391	210		382	235	147		219	156	63	

Table A6.4a. Percentage of cattle producers by age, in total and by farmers' sex
[Baseline Study, Kenya 2021]

MC RFSA Areas	MC RFSA areas - Total				Turkana				Samburu			
	Total	Male	Female	N	Total	Male	Female	N	Total	Male	Female	N
Age												
15-19	2.7	0.0	5.3	11	0.0	0.0	0.0	0	3.3	0.0	6.5	11
20-24	5.3	2.0	8.4	24	2.2	0.0	4.2	1	6.0	2.5	9.5	23
25-29	13.6	10.9	16.3	65	7.6	11.6	3.9	4	15.1	10.7	19.2	61
30-34	12.4	13.8	11.1	57	8.4	7.2	9.4	4	13.3	15.3	11.5	53
35-39	12.6	12.8	12.4	53	21.9	18.0	25.5	8	10.4	11.6	9.3	45
40-44	10.0	12.6	7.5	45	10.4	11.9	9.0	5	9.9	12.7	7.2	40
45-49	11.2	14.3	8.3	52	8.9	18.8	0.0	4	11.8	13.3	10.3	48
50-54	7.6	9.2	6.1	35	5.4	11.3	0.0	2	8.2	8.7	7.6	33
55-59	3.9	4.0	3.9	18	2.8	0.0	5.3	1	4.2	4.9	3.5	17
60+	20.5	20.4	20.7	80	32.5	21.1	42.7	10	17.7	20.2	15.3	70
Total	100.0	100.0	100.0	440	100.0	100.0	100.0	39	100.0	100.0	100.0	401
Number of responding cattle producers	440	219	221		39	20	19		401	199	202	

[1]Differences in the age distribution by sex are statistically significant for the combined RFSA areas ($p<0.001$), CRS RFSA areas ($p<0.001$), Marsabit ($p<0.001$), MC RFSA areas ($p<0.05$) and Samburu ($p<0.05$). Results are not statistically reliable where $n<30$; they are included for illustrative purposes only.

Table A6.4b. Percentage of goat producers by age, in total and by farmers' sex
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Combined RFSA Areas- Total			
	Total	Male	Female	N
Age				
15-19	2.4	2.2	2.7	57
20-24	5.2	4.4	6.3	120
25-29	9.8	8.2	12.0	235
30-34	13.1	13.7	12.4	329
35-39	12.6	14.4	10.2	298
40-44	9.3	11.0	7.1	228
45-49	10.4	11.2	9.3	222
50-54	8.4	8.9	7.7	177
55-59	5.8	5.7	5.8	128
60+	23.1	20.5	26.4	491
Total	100.0	100.0	100.0	2,285
Number of responding goat producers	2,285	1,358	927	

CRS RFSA Areas

	CRS RFSA areas - Total				Marsabit				Isiolo			
	Total	Male	Female	N	Total	Male	Female	N	Total	Male	Female	N
Age												
15-19	2.7	3.2	2.0	33	2.9	3.3	2.2	26	2.3	2.8	1.0	7
20-24	5.1	3.8	7.3	68	5.6	3.8	8.4	52	3.8	4.0	3.2	16
25-29	8.4	6.4	11.8	113	8.4	5.2	13.1	76	8.3	8.9	6.9	37
30-34	15.8	16.1	15.4	211	17.5	18.5	16.0	163	11.5	10.8	13.2	48
35-39	15.5	14.7	16.8	195	16.0	14.7	17.9	137	14.1	14.7	12.6	58
40-44	9.4	11.4	6.1	136	9.9	13.1	5.3	94	8.2	7.9	8.9	42
45-49	8.6	9.0	8.0	115	6.8	7.3	6.0	65	13.3	12.5	15.3	50
50-54	7.7	8.8	5.9	103	7.5	8.7	5.8	73	8.2	8.9	6.5	30
55-59	6.1	6.1	6.0	78	5.3	5.5	5.1	50	8.0	7.4	9.4	28
60+	20.7	20.6	20.8	280	20.0	19.9	20.2	179	22.3	22.1	23.0	101
Total	100.0	100.0	100.0	1,332	100.0	100.0	100.0	915	100.0	100.0	100.0	417
Number of responding goat producers	1,332	858	474		915	564	351		417	294	123	

Table A6.4b. Percentage of goat producers by age, in total and by farmers' sex
[Baseline Study, Kenya 2021]

MC RFSA Areas	MC RFSA areas - Total				Turkana				Samburu			
	Total	Male	Female	N	Total	Male	Female	N	Total	Male	Female	N
Age												
15-19	2.2	1.5	3.0	24	1.3	1.9	0.7	6	4.1	0.4	7.6	18
20-24	5.3	4.8	5.9	52	4.8	5.6	3.8	20	6.4	2.7	9.9	32
25-29	10.6	9.4	12.0	122	7.9	8.4	7.3	37	16.6	11.8	21.1	85
30-34	11.5	12.0	11.0	118	10.0	10.0	10.0	44	14.8	16.9	12.9	74
35-39	10.8	14.2	7.1	103	11.2	15.3	6.2	49	10.1	11.4	8.8	54
40-44	9.2	10.7	7.6	92	9.2	9.7	8.6	45	9.2	13.0	5.7	47
45-49	11.4	12.7	10.0	107	11.8	12.3	11.2	53	10.7	13.8	7.7	54
50-54	8.7	9.0	8.5	74	9.8	9.3	10.4	41	6.5	8.1	5.0	33
55-59	5.6	5.4	5.8	50	6.5	5.8	7.5	31	3.5	4.5	2.6	19
60+	24.5	20.4	29.1	211	27.5	21.7	34.4	121	18.1	17.3	18.9	90
Total	100.0	100.0	100.0	953	100.0	100.0	100.0	447	100.0	100.0	100.0	506
Number of responding goat producers	953	500	453		447	253	194		506	247	259	

[1]Differences in the age distribution by sex are statistically significant for the combined RFSA areas ($p<0.01$), CRS RFSA areas ($p<0.01$), Marsabit ($p<0.001$), MC RFSA areas ($p<0.05$) and Samburu ($p<0.001$). Results are not statistically reliable where $n<30$; they are included for illustrative purposes only.

Table A6.4c. Percentage of camel producers by age, in total and by farmers' sex
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Combined RFSA Areas- Total			
	Total	Male	Female	N
Age				
15-19	1.7	1.6	1.8	15
20-24	3.9	3.0	5.1	35
25-29	7.5	4.3	12.1	64
30-34	13.6	13.6	13.7	122
35-39	15.4	13.6	17.8	117
40-44	10.8	13.0	7.8	83
45-49	10.1	11.1	8.7	81
50-54	10.6	11.5	9.4	76
55-59	5.1	6.4	3.4	42
60+	21.2	21.9	20.1	173
Total	100.0	100.0	100.0	808
Number of responding camel producers	808	507	301	

CRS RFSA Areas

	CRS RFSA areas - Total				Marsabit				Isiolo			
	Total	Male	Female	N	Total	Male	Female	N	Total	Male	Female	N
Age												
15-19	2.0	2.1	1.8	13	2.1	2.2	2.0	13	0.0	0.0	0.0	0
20-24	4.4	3.1	6.8	29	4.4	3.3	6.4	26	4.2	0.0	13.3	3
25-29	6.7	5.0	9.8	46	6.6	4.8	9.8	41	8.3	7.6	10.0	5
30-34	16.7	16.6	16.8	111	17.2	17.2	17.4	106	7.6	8.3	6.1	5
35-39	16.8	14.3	21.1	101	16.7	14.4	20.7	93	18.3	13.7	28.1	8
40-44	10.0	12.6	5.3	66	10.2	13.2	5.2	62	5.7	4.7	7.8	4
45-49	8.5	8.7	8.1	62	7.9	7.8	8.1	51	17.4	21.6	8.3	11
50-54	8.5	9.3	7.1	60	8.7	9.7	7.0	56	6.2	4.4	10.1	4
55-59	4.7	5.7	2.9	34	4.8	5.7	3.0	32	3.6	5.3	0.0	2
60+	21.8	22.7	20.3	147	21.4	21.8	20.6	130	28.7	34.6	16.2	17
Total	100.0	100.0	100.0	669	100.0	100.0	100.0	610	100.0	100.0	100.0	59
Number of responding camel producers	669	441	228		610	400	210		59	41	18	

Table A6.4c. Percentage of camel producers by age, in total and by farmers' sex
[Baseline Study, Kenya 2021]

MC RFSA Areas	MC RFSA areas - Total				Turkana				Samburu			
	Total	Male	Female	N	Total	Male	Female	N	Total	Male	Female	N
Age												
15-19	1.0	0.0	1.8	2	0.0	0.0	0.0	0	2.7	0.0	5.0	2
20-24	2.8	2.9	2.8	6	0.0	0.0	0.0	0	7.9	8.2	7.6	6
25-29	9.3	2.3	15.4	18	5.2	0.0	9.8	3	16.7	6.3	25.3	15
30-34	7.0	4.6	9.1	11	5.2	2.9	7.2	3	10.4	7.9	12.5	8
35-39	12.4	11.6	13.1	16	14.2	13.4	14.8	7	9.2	8.3	10.0	9
40-44	12.7	14.1	11.5	17	14.0	10.7	16.8	9	10.4	20.2	2.3	8
45-49	13.7	18.7	9.5	19	13.7	20.3	8.0	8	13.8	15.6	12.3	11
50-54	15.2	18.0	12.8	16	19.8	22.1	17.8	10	6.9	10.6	3.9	6
55-59	6.1	8.3	4.3	8	7.3	8.0	6.7	4	4.0	8.8	0.0	4
60+	19.7	19.5	19.8	26	20.6	22.6	18.9	11	18.0	14.0	21.3	15
Total	100.0	100.0	100.0	139	100.0	100.0	100.0	55	100.0	100.0	100.0	84
Number of responding camel producers	139	66	73		55	27	28		84	39	45	

[1]Differences in the age distribution by sex are statistically significant for the combined RFSA areas ($p<0.05$), CRS RFSA areas ($p<0.05$), and Marsabit ($p<0.05$). Results are not statistically reliable where $n<30$; they are included for illustrative purposes only.

Table A6.5. Percentage of farmers by land tenure type and farm size, in total and by farmers' sex
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Total	Sex			Age		
		Male	Female	Sig.[a]	15-29	≥ 30	Sig.[a]
Land tenure[b]							
Owned							
With written documentation	11.1	13.8	8.0	**	10.5	11.2	ns
Without written documentation	50.4	51.2	49.5	ns	45.2	51.5	ns
Rented							
With written documentation	0.2	0.3	0.2	ns	0.4	0.2	ns
Without written documentation	0.6	0.8	0.4	ns	0.6	0.6	ns
Share-cropped							
With written documentation	0.3	0.2	0.4	ns	0.8	0.2	ns
Without written documentation	1.3	1.8	0.8	*	0.4	1.5	ns
State/communal land							
With written documentation	0.7	0.9	0.5	ns	0.8	0.7	ns
Without written documentation	28.0	24.4	31.9	*	35.3	26.4	*
Occupied/squatted without permission	6.4	5.3	7.6	ns	5.0	6.7	ns
None	3.2	4.0	2.4	ns	3.0	3.3	ns
Number of responding farmers	1,057	599	458		1,057	206	851
Farm size (Ha)[c]							
<0.5	54.1	53.4	54.9	*	60.0	52.8	ns
≥0.5-<1.0	11.7	9.8	13.8		6.1	13.0	
≥1.0-<2.5	26.3	28.4	24.0		29.2	25.7	
≥2.5-<5.0	2.7	2.9	2.4		1.2	3.0	
≥5.0-<7.5	1.0	1.7	0.2		0.6	1.1	
≥7.5-<10.0	0.2	0.3	0.0		0.5	0.1	
≥10.0	4.1	3.5	4.7		2.5	4.4	
Total	100.0	100.0	100.0		100.0	100.0	
Number of responding farmers	977	546	431		193	784	

Table A6.5. Percentage of farmers by land tenure type and farm size, in total and by farmers' sex
[Baseline Study, Kenya 2021]

CRS RFSA Areas

	CRS RFSA Areas							Marsabit							Isiolo						
	Total	Sex			Age			Total	Sex			Age			Total	Sex			Age		
		Male	Female	Sig.[a]	15-29	≥ 30	Sig.[a]		Male	Female	Sig.[a]	15-29	≥ 30	Sig.[a]		Male	Female	Sig.[a]	15-29	≥ 30	Sig.[a]
Land tenure[b]																					
Owned																					
With written documentation	4.8	6.7	1.3	*	1.1	5.5	ns	2.9	4.5	0.6	ns	0.0	4	ns	11.1	12.4	6.0	ns	6.0	12	ns
Without written documentation	42.9	42.4	43.8	ns	38.6	43.7	ns	34.7	32.0	38.6	ns	32.2	35	ns	70.9	69.1	77.5	ns	66.1	72	ns
Rented																					
With written documentation	0.4	0.0	1.2	ns	0.0	0.5	ns	0.5	0.0	1.4	ns	0.0	1	ns							
Without written documentation	0.6	0.9	0.0	ns	0.0	0.7	ns	0.2	0.4	0.0	ns	0.0	0	ns	1.7	2.2	0.0	ns	0.0	2	ns
Share-cropped																					
With written documentation																					
Without written documentation	1.1	1.8	0.0	ns	0.0	1.4	ns	1.5	2.5	0.0	ns	0.0	2	ns							
State/communal land																					
With written documentation	1.0	0.0	2.8	*	2.0	0.8	ns	1.3	0.0	3.2	*	2.5	1	ns							
Without written documentation	43.8	39.5	51.8	ns	52.1	42.3	ns	55.0	52.9	58.0	ns	61.2	54	ns	6.0	4.8	10.5	ns	12.5	5	ns
Occupied/squatted without permission	2.6	2.5	2.9	ns	4.3	2.3	ns	3.4	3.4	3.4	ns	5.3	3	ns							
None	7.1	9.1	3.3	ns	5.1	7.5	ns	5.2	6.8	2.9	ns	2.7	6	ns	13.3	15.2	6.0	ns	15.4	13	ns
Number of responding farmers	351	244	107					264	174	90		47	217		87	70	17		12	75	
Farm size (Ha)[c]																					
<0.5	54.7	50.5	61.9	ns	50.3	55.6	ns	58.4	55.8	62.3	ns	54.6	59.2	ns	40.6	35.0	59.8	ns	28.4	42	ns
≥0.5-<1.0	12.9	11.3	15.7		11.4	13.2		11.5	8.1	16.5		6.9	12.5		18.2	20.5	10.3		33.5	16	
≥1.0-<2.5	22.6	26.5	16.0		23.3	22.5		20.1	23.9	14.6		22.3	19.6		32.2	34.0	26.0		28.2	33	
≥2.5-<5.0	2.4	3.7	0.0		1.1	2.6		2.2	3.8	0.0		1.3	2.4		2.8	3.6	0.0		0.0	3	
≥5.0-<7.5	0.7	0.7	0.6		1.4	0.5		0.8	0.9	0.7		1.7	0.6								
≥7.5-<10.0																					
≥10.0	6.8	7.4	5.7		12.6	5.6		6.9	7.5	6.0		13.2	5.6		6.2	6.9	3.9		9.9	6	
Total	100.0	100.0	100.0		100.0	100.0		100.0	100.0	100.0		100.0	100.0		100.0	100.0	100.0		100.0	100	
Number of responding farmers	307	211	96		54	253		240	159	81		45	195		67	52	15		9	58	

Table A6.5. Percentage of farmers by land tenure type and farm size, in total and by farmers' sex
[Baseline Study, Kenya 2021]

MC RFSA Areas

	MC RFSA Areas							Turkana							Samburu						
	Total	Sex			Age			Total	Sex			Age			Total	Sex			Age		
		Male	Female	Sig.[a]	15-29	≥ 30	Sig.[a]		Male	Female	Sig.[a]	15-29	≥ 30	Sig.[a]		Male	Female	Sig.[a]	15-29	≥ 30	Sig.[a]
Land tenure[b]																					
Owned																					
With written documentation	12.4	15.8	9.1	**	12.3	12.5	ns	7.3	10.2	4.4	*	10.1	6.8	ns	19.9	23.8	16.0	*	14.1	21.8	ns
Without written documentation	52.0	53.7	50.4	ns	46.4	53.3	ns	57.9	59.7	56.1	ns	49.1	59.3	ns	43.5	45.1	41.9	ns	44.2	43.2	ns
Rented																					
With written documentation	0.2	0.4	0.0	ns	0.4	0.1	ns	0.2	0.4	0.0	ns	0.0	0.2	ns	0.2	0.4	0.0	ns	0.8	0.0	ns
Without written documentation	0.6	0.8	0.5	ns	0.7	0.6	ns	0.2	0.4	0.0	ns	1.6	0.0	*	1.2	1.3	1.1	ns	0.0	1.6	ns
Share-cropped																					
With written documentation	0.3	0.2	0.5	ns	1.0	0.2	ns								0.9	0.5	1.2	ns	1.8	0.5	ns
Without written documentation	1.4	1.9	0.9	*	0.5	1.6	ns	1.8	2.8	0.9	**	0.0	2.1	ns	0.7	0.4	0.9	ns	0.9	0.6	ns
State/communal land																					
With written documentation	0.7	1.1	0.2	*	0.6	0.7	ns	0.2	0.4	0.0	ns	0.0	0.2	ns	1.4	2.2	0.5	ns	1.0	1.5	ns
Without written documentation	24.6	20.3	28.9	**	32.2	22.9	*	22.1	17.5	26.6	ns	28.4	21.0	ns	28.2	24.2	32.4	*	35.3	25.9	*
Occupied/squatted without permission	7.2	6.1	8.4	ns	5.1	7.7	ns	11.3	9.5	13.0	ns	10.9	11.3	ns	1.3	1.2	1.5	ns	0.4	1.6	ns
None	2.4	2.6	2.2	ns	2.6	2.4	ns	0.2	0.0	0.4	ns	0.0	0.2	ns	5.7	6.4	5.0	ns	4.7	6.0	ns
Number of responding farmers	706	355	351		147	559		285	142	143		40	245		421	213	208		107	314	
Farm size (Ha)[c]																					
<0.5	54.0	54.1	53.9	**	61.8	52.3	*	58.4	60.6	56.2	ns	71.4	56.3	ns	47.2	44.1	50.3	**	53.4	45.1	ns
≥0.5-<1.0	11.5	9.5	13.5		5.1	12.9		13.1	10.8	15.4		5.0	14.4		9.0	7.4	10.5		5.2	10.2	
≥1.0-<2.5	27.0	28.9	25.2		30.3	26.3		24.9	25.6	24.3		23.6	25.1		30.3	34.0	26.7		36.1	28.4	
≥2.5-<5.0	2.7	2.7	2.7		1.2	3.1		2.2	1.5	2.8		0.0	2.5		3.6	4.5	2.7		2.2	4.0	
≥5.0-<7.5	1.0	2.0	0.1		0.5	1.2		0.7	1.5	0.0		0.0	0.8		1.5	2.9	0.2		0.9	1.8	
≥7.5-<10.0	0.2	0.4	0.0		0.6	0.1									0.5	1.0	0.0		1.1	0.3	
≥10.0	3.5	2.4	4.6		0.6	4.2		0.7	0.0	1.3		0.0	0.8		7.9	6.2	9.6		1.1	10.2	
Total	100.0	100.0	100.0		100.0	100.0		100.0	100.0	100.0		100.0	100.0		100.0	100.0	100.0		100.0	100.0	
Number of responding farmers	670	335	335		139	531		283	141	142		40	243		387	194	193		99	288	

NOTES:
[a] Significance tests were performed to determine whether an association exists between the outcome indicator (land tenure type and farmland size) and the disaggregate variable (sex and age). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.
[b] Multiple responses allowed. Totals may add up to more than 100 percent.
[c] Farm size includes the largest total area of farmland that is owned, rented, share-cropped, state/communal land, or occupied without permission.

Table A6.6. Percentage of farmers using financial services by type of financial service, in total and by farmers' sex
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Combined RFSA Areas- Total			
	Total	Male	Female	Sig.[a]
Using agriculture-related financial services	9.0	10.1	7.6	ns
Savings	8.2	9.0	7.2	ns
Credit	1.6	2.0	1.0	*
Insurance	0.5	0.4	0.5	ns
Number of responding farmers	2,710	1,620	1,090	

CRS RFSA Areas

	CRS RFSA areas - Total				Marsabit				Isiolo			
	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]
Using agriculture-related financial services	10.0	10.3	9.5	ns	6.0	6.6	5.0	ns	18.7	16.7	24.1	ns
Savings	8.5	8.4	8.8	ns	4.2	4.2	4.1	ns	18.0	15.8	24.1	ns
Credit	1.6	2.1	0.8	*	1.7	2.5	0.6	*	1.4	1.4	1.3	ns
Insurance	0.3	0.3	0.3	ns	0.3	0.3	0.4	ns	0.3	0.5	0.0	ns
Number of responding farmers	1,490	984	506		976	608	368		514	376	138	

MC RFSA Areas

	MC RFSA areas - Total				Turkana				Samburu			
	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]
Using agriculture-related financial services	8.5	10.0	6.9	ns	3.2	3.9	2.4	ns	18.1	21.9	14.3	*
Savings	8.1	9.4	6.6	ns	2.9	3.6	2.1	ns	17.3	20.6	14.1	*
Credit	1.5	1.9	1.1	ns	0.2	0.3	0.0	ns	4.0	5.1	3.0	ns
Insurance	0.5	0.4	0.6	ns	0.2	0.0	0.3	ns	1.2	1.3	1.1	ns
Number of responding farmers	1,220	636	584		537	296	241		683	340	343	

[1] Significance tests were performed to determine whether an association exists between the outcome indicator (use of financial services) and the disaggregate variable (sex). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A6.7. Percentage of farmers practicing value chain interventions by type, in total and by farmers' sex
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Combined RFSA Areas- Total			
	Total	Male	Female	Sig.[a]
Practicing at least one of the value chain interventions promoted by the RFSA[b]	15.4	15.1	15.9	ns
Number of responding farmers	731	485	246	
Any value chain commodity				
Contract farming	1.5	1.5	1.6	ns
Selling products via farmer associations	3.5	1.7	6.3	**
Sorting and grading	4.0	3.8	4.3	ns
Bulking	5.2	5.5	4.7	ns
Improved record keeping, budgeting and financial mgmt	1.9	2.5	1.0	ns
Use of training and extension services	1.0	1.7	0.0	ns
Number of responding farmers	727	484	243	
Fodder production value chain				
Use of improved pasture inputs (e.g., quality seeds)	27.7	17.1	41.0	ns
Use of mechanized pasture harvesting and baling technologies	7.2	0.0	16.4	ns
Construction/use of hay stores by farmer organizations	11.9	21.4	0.0	ns
Use of fodder seeds	16.2	16.1	16.4	ns
Use of harvesting/drying/packaging/storage/marketing technologies	10.3	0.0	23.4	ns
Number of responding farmers	27	16	11	

CRS RFSA Areas

	CRS RFSA areas - Total				Marsabit				Isiolo			
	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]
Practicing at least one of the value chain interventions promoted by the RFSA[b]	20.1	20.1	20.0	ns	20.4	21.1	18.5	ns	19.4	17.8	23.9	ns
Number of responding farmers	441	326	115		301	219	82		140	107	33	
Any value chain commodity												
Contract farming	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Selling products via farmer associations	1.8	1.2	3.0	*	0.7	0.6	0.9	ns	4.3	2.7	8.7	*
Sorting and grading	7.6	7.0	9.0	ns	4.8	4.2	6.4	ns	13.8	13.1	16.1	ns
Bulking	10.9	11.0	10.6	ns	13.3	13.7	12.3	ns	5.4	5.1	6.2	ns
Improved record keeping, budgeting and financial mgmt	1.4	1.8	0.4	ns	1.7	2.2	0.6	ns	0.7	0.9	0.0	ns
Use of training and extension services	1.1	1.5	0.0	ns	1.4	1.9	0.0	ns	0.3	0.5	0.0	ns
Number of responding farmers	441	326	115		301	219	82		140	107	33	
Fodder production value chain												
Use of improved pasture inputs (e.g., quality seeds)	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Use of mechanized pasture harvesting and baling technologies	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Construction/use of hay stores by farmer organizations	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Use of fodder seeds	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Use of harvesting/drying/packaging/storage/marketing technologies	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Number of responding farmers	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	

Table A6.7. Percentage of farmers practicing value chain interventions by type, in total and by farmers' sex
[Baseline Study, Kenya 2021]

MC RFSA Areas	MC RFSA areas - Total				Turkana				Samburu			
	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]
Practicing at least one of the value chain interventions promoted by the RFSA[b]	12.1	10.3	14.2	ns	8.9	3.8	14.6	***	16.8	19.5	13.4	ns
Number of responding farmers	290	159	131		115	60	55		175	99	76	
Any value chain commodity												
Contract farming	2.6	2.9	2.3	ns	1.3	0.0	2.7	ns	4.7	6.9	1.7	ns
Selling products via farmer associations	4.7	2.2	7.7	ns	4.6	2.3	7.1	ns	4.9	2.0	8.6	ns
Sorting and grading	1.4	0.7	2.1	ns	1.3	0.0	2.7	ns	1.5	1.8	1.1	ns
Bulking	1.1	0.3	2.1	ns	0.7	0.0	1.6	ns	1.7	0.7	2.9	ns
Improved record keeping, budgeting and financial mgmt	n/a	n/a	n/a		n/a	n/a	n/a		n/a	n/a	n/a	
Use of training and extension services	1.0	1.9	0.0	ns					2.6	4.6	0.0	ns
Number of responding farmers	286	158	128		114	60	54		172	98	74	
Fodder production value chain												
Use of improved pasture inputs (e.g., quality seeds)	37.5	24.5	51.9	ns	23.8	0.0	40.1	ns	46.4	35.3	63.3	ns
Use of mechanized pasture harvesting and baling technologies	9.8	0.0	20.7	ns	0.0	0.0	0.0		16.2	0.0	40.9	ns
Construction/use of hay stores by farmer organizations	16.2	30.7	0.0	ns	23.8	58.6	0.0	ns	11.2	18.5	0.0	ns
Use of fodder seeds	22.0	23.1	20.7	ns	0.0	0.0	0.0		36.2	33.2	40.9	ns
Use of harvesting/drying/packaging/storage/marketing technologies	14.0	0.0	29.6	ns	35.6	0.0	59.9	ns				
Number of responding farmers	15	8	7		4	2	2		11	6	5	

NOTES: n/a = not applicable (i.e., the intervention is not promoted by the RFSA).

[a] Significance tests were performed to determine whether an association exists between the outcome indicator (use of financial services) and the disaggregate variable (sex). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

[b] Includes both interventions related to any value chain commodity and for the MC RFSA areas, those pertaining to fodder production.

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Table A6.8. Condition of cattle based on farmers' perceptions, by livestock category and county
[Baseline Study, Kenya 2021]

	Marsabit	Isiolo	Turkana	Samburu	Number of responding farmers
	%	%	%	%	
Adult male					
Emaciated - bones visible	61.5	42.5	0.0	31.4	229
Thin - fore ribs visible	30.5	40.1	0.0	24.8	158
Borderline - fore ribs not visible, 12th & 13th ribs visible	3.7	12.1	5.4	9.1	42
Moderate - neither fat nor thin	4.4	4.7	90.9	31.4	105
Good - smooth appearance	0.0	0.7	3.7	3.3	8
Total	100.0	100.0	100.0	100.0	542
Adult female					
Emaciated - bones visible	66.1	40.3	6.6	39.0	443
Thin - fore ribs visible	24.1	45.3	2.5	22.7	247
Borderline - fore ribs not visible, 12th & 13th ribs visible	3.7	10.4	6.1	7.1	60
Moderate - neither fat nor thin	5.8	3.4	79.7	29.0	150
Good - smooth appearance	0.3	0.6	5.1	2.2	12
Total	100.0	100.0	100.0	100.0	912
Young male stock					
Emaciated - bones visible	58.6	27.7	15.3	26.2	169
Thin - fore ribs visible	29.5	52.3	0.0	22.8	131
Borderline - fore ribs not visible, 12th & 13th ribs visible	4.2	17.9	14.0	8.8	36
Moderate - neither fat nor thin	7.7	2.2	64.8	40.3	96
Good - smooth appearance	0.0	0.0	5.9	2.0	4
Total	100.0	100.0	100.0	100.0	436
Young female stock					
Emaciated - bones visible	55.9	32.3	0.0	25.0	142
Thin - fore ribs visible	31.6	45.7	6.4	20.0	120
Borderline - fore ribs not visible, 12th & 13th ribs visible	4.4	14.7	9.2	8.7	33
Moderate - neither fat nor thin	7.7	7.3	78.1	43.4	95
Good - smooth appearance	0.3	0.0	6.4	3.0	6
Total	100.0	100.0	100.0	100.0	396
Male calves					
Emaciated - bones visible	54.4	38.5	0.0	27.6	117
Thin - fore ribs visible	28.1	44.1	0.0	22.1	92
Borderline - fore ribs not visible, 12th & 13th ribs visible	4.2	8.3	40.2	0.9	13
Moderate - neither fat nor thin	12.9	9.0	59.8	42.2	71
Good - smooth appearance	0.5	0.0	0.0	7.2	8
Total	100.0	100.0	100.0	100.0	301
Female calves					
Emaciated - bones visible	46.1	30.9	0.0	25.3	93
Thin - fore ribs visible	34.6	54.2	10.2	21.2	96
Borderline - fore ribs not visible, 12th & 13th ribs visible	4.2	8.5	15.9	5.3	14
Moderate - neither fat nor thin	13.9	6.4	63.1	44.3	65
Good - smooth appearance	1.3	0.0	10.9	3.9	6
Total	100.0	100.0	100.0	100.0	274

Marsabit and isoolo - majority cosidered cattle thin to emaciated
Turkana - majority rated cattle as moderate to good in appearance
Samburu - about halfemaciated/thin and

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Table A6.8. Condition of goats based on farmers' perceptions, by livestock category and county
[Baseline Study, Kenya 2021]

	Marsabit	Isiolo	Turkana	Samburu	Number of responding farmers
	%	%	%	%	
Adult male					
Emaciated - bones visible	51.5	21.5	0.4	18.6	516
Thin - fore ribs visible	35.3	41.8	6.0	18.0	478
Borderline - fore ribs not visible, 12th & 13th ribs visible	3.6	15.2	5.6	12.9	143
Moderate - neither fat nor thin	9.3	20.8	74.5	44.6	616
Good - smooth appearance	0.3	0.6	13.5	5.8	80
Total	100.0	100.0	100.0	100.0	1,833
Adult female					
Emaciated - bones visible	55.5	22.1	0.7	19.2	681
Thin - fore ribs visible	32.9	38.3	5.2	19.1	557
Borderline - fore ribs not visible, 12th & 13th ribs visible	4.0	15.9	6.6	12.0	170
Moderate - neither fat nor thin	7.4	23.0	75.1	46.0	717
Good - smooth appearance	0.2	0.7	12.5	3.7	72
Total	100.0	100.0	100.0	100.0	2,197
Young male					
Emaciated - bones visible	45.1	17.2	0.7	15.0	447
Thin - fore ribs visible	39.1	40.9	4.7	15.0	475
Borderline - fore ribs not visible, 12th & 13th ribs visible	5.2	15.9	4.7	10.7	134
Moderate - neither fat nor thin	10.2	25.2	77.9	53.1	589
Good - smooth appearance	0.4	0.8	11.9	6.3	59
Total	100.0	100.0	100.0	100.0	1,704
Young female					
Emaciated - bones visible	47.0	18.1	0.9	12.1	443
Thin - fore ribs visible	36.7	36.3	4.3	15.1	451
Borderline - fore ribs not visible, 12th & 13th ribs visible	5.9	19.5	4.9	7.6	134
Moderate - neither fat nor thin	9.9	25.4	75.8	59.8	583
Good - smooth appearance	0.5	0.7	14.1	5.3	60
Total	100.0	100.0	100.0	100.0	1,671

Marsabit and Isiolo - majority considered goats appearance to range rom thin to emaciated
Turkana - majority rated condition of goats as moderate to good
Samburu - about half or more considered gaots to be of moderate to good condition

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Table A6.8. Condition of camel based on farmers' perceptions, by livestock category and county
[Baseline Study, Kenya 2021]

	Marsabit	Isiolo	Turkana	Samburu	Number of responding farmers
	%	%	%	%	
Mature male					
Emaciated - bones visible	53.9	13.5	0.0	30.6	196
Thin - fore ribs visible	22.8	45.3	6.4	24.9	97
Borderline - fore ribs not visible, 12th & 13th ribs visible	10.1	24.0	11.6	25.2	51
Moderate - neither fat nor thin	13.0	17.2	68.5	16.8	82
Good - smooth appearance	0.2	0.0	13.5	2.5	6
Total	100.0	100.0	100.0	100.0	432
Mature female					
Emaciated - bones visible	54.8	20.5	2.0	35.4	339
Thin - fore ribs visible	24.4	36.6	2.7	26.0	178
Borderline - fore ribs not visible, 12th & 13th ribs visible	10.2	16.7	7.1	5.2	77
Moderate - neither fat nor thin	10.7	24.2	78.9	33.3	139
Good - smooth appearance	0.0	1.9	9.3	0.0	6
Total	100.0	100.0	100.0	100.0	739
Young male					
Emaciated - bones visible	54.4	31.7	5.1	26.6	230
Thin - fore ribs visible	26.7	44.4	5.1	24.7	120
Borderline - fore ribs not visible, 12th & 13th ribs visible	10.4	8.5	6.4	7.9	47
Moderate - neither fat nor thin	8.6	15.4	76.9	24.5	60
Good - smooth appearance	0.0	0.0	6.4	16.2	4
Total	100.0	100.0	100.0	100.0	461
Young female					
Emaciated - bones visible	49.8	20.1	0.0	41.0	197
Thin - fore ribs visible	27.3	38.1	0.0	14.0	110
Borderline - fore ribs not visible, 12th & 13th ribs visible	12.4	17.4	6.0	0.0	56
Moderate - neither fat nor thin	10.3	24.4	81.9	40.2	74
Good - smooth appearance	0.2	0.0	12.1	4.8	4
Total	100.0	100.0	100.0	100.0	441

Marsabit - majority considered camels emaciated to thin
Isiolo - more than half rated camels as thin to emaciated
Turkana - majority consider camel in moderate condition
Samburu - about 50% considered camel appeaance to range from emaciated to thin and the other half considered camels to ranged from borderline to good

Table A6.11. Household sanitation and water
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Household sanitation facility							
Improved, not shared sanitation facility	7.0	7.8	4.3	11.5	6.6	5.9	8.2
Flush to piped sewer system	0.3	0.1	0.0	0.2	0.4	0.3	0.6
Flush to septic tank	0.6	0.1	0.0	0.2	0.7	0.5	1.3
Flush to pit latrine	0.1	0.1	0.0	0.2	0.1	0.1	0.2
Ventilated improved pit latrine	1.6	1.9	1.3	2.5	1.4	1.5	1.2
Pit latrine with slab	4.5	5.6	3.0	8.3	4.0	3.5	4.9
Composting toilet	...	...	...	...	...	...	...
Improved, shared sanitation facility	22.3	26.1	13.2	39.8	20.7	15.7	30.8
Flush to piped sewer system	0.1	0.2	0.0	0.5	0.0	0.0	0.1
Flush to septic tank	0.3	0.5	0.0	1.0	0.2	0.0	0.6
Flush to pit latrine	0.8	0.4	0.1	0.6	1.0	0.9	1.1
Ventilated improved pit latrine	6.5	6.3	3.6	9.1	6.5	6.6	6.5
Pit latrine with slab	14.5	18.7	9.5	28.6	12.8	7.9	22.5
Composting toilet	0.2	0.0	0.0	0.0	0.2	0.4	0.0
Non-improved sanitation facility	70.1	65.3	81.9	47.6	72.1	77.9	60.6
Flush to somewhere else	0.5	1.1	0.0	2.2	0.2	0.2	0.1
Flush to don't know where	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Latrine without slab/open pit	6.2	7.0	2.5	11.8	5.9	3.0	11.9
Bucket toilet	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Hanging toilet/latrine	0.0	0.1	0.1	0.0	0.0	0.0	0.0
No Facility/Bush/Field	63.3	57.1	79.3	33.5	65.9	74.7	48.5
Number of responding households	3,887	1,979	983	996	1,908	949	959

Table A6.11. Household sanitation and water
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Household water source							
Improved source of drinking water	62.8	70.5	60.3	81.3	59.6	60.9	57.1
Piped water into dwelling	2.3	1.0	0.8	1.3	2.8	2.7	2.9
Piped water into yard/plot	14.2	19.7	1.1	39.6	11.9	11.9	11.8
Piped to neighbor	8.0	7.5	2.3	13.1	8.3	10.3	4.2
Public tap/Standpipe	13.1	13.6	17.4	9.5	13.0	16.0	6.8
Tube well or borehole	13.6	11.4	19.1	3.2	14.5	11.8	19.8
Protected well	5.4	5.1	9.6	0.2	5.5	6.1	4.3
Protected spring	0.5	0.7	1.3	0.1	0.4	0.5	0.3
Rainwater	1.2	0.1	0.2	0.0	1.6	0.0	4.9
Tanker truck	4.1	11	8.5	13.7	1.2	1.5	0.5
Cart with small tank	0.2	0.2	0.1	0.3	0.2	0	0.7
Bottled water	0.2	0.2	0	0.4	0.3	0	0.8
Non-improved source of drinking water	37.2	29.5	39.7	18.7	40.4	39.1	42.9
Unprotected well	20.4	20.4	29.3	10.9	20.4	21.2	18.7
Unprotected spring	1.4	1.1	2.1	0.1	1.5	1.6	1.1
Surface water (river/dam/ lake/ponds/stream/canal/irrigation channel)	14.7	6.0	4.9	7.2	18.3	15.9	23.1
Other	0.8	2.0	3.4	0.6	0.2	0.4	0.0
Number of responding households	3,887	1,979	983	996	1,908	949	959
Distance/time from water source							
On premises	20.8	24.5	5.1	45.2	19.2	17.1	23.4
≤ 30-minute roundtrip	43.9	29.6	35.2	23.5	49.9	55.0	39.5
31+ minute roundtrip	35.3	45.9	59.7	31.3	30.9	27.8	37.0
Number of responding households	3,881	1,976	983	993	1,905	948	957
Water production							
Produces at least 20 liters per person per day	25.8	23.6	21.7	25.7	26.8	25.2	29.8
Number of responding households	3,848	1,956	981	975	1,892	945	947
Water availability							
Water available from the source all year round	51.7	52.1	59.2	44.4	51.5	52.0	50.6
Water unavailable for a day or longer in the past two weeks	37.8	51.4	39.4	64.2	32.2	34.5	27.5
Number of responding households	3,887	1,979	983	996	1,908	949	959

Table A6.11. Household sanitation and water
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Water treatment							
Chlorination	3.6	4.8	6.2	3.4	3.1	1.8	5.8
Flocculent/disinfectant	1.5	0.9	1.4	0.5	1.7	1.5	2.0
Filtration	1.2	1.5	2.9	0.0	1.1	0.4	2.3
Solar disinfection	0.3	0.2	0.5	0.0	0.4	0.4	0.2
Boiling	4.7	3.3	4.1	2.5	5.4	3.3	9.5
Let it stand and settle	2.1	4.0	6.3	1.5	1.3	1.0	1.9
Other	1.8	0.1	0.2	0.0	2.6	3.6	0.4
Number of responding households	3,887	1,979	983	996	1,908	949	959
Handwashing station							
Water observed at handwashing station	62.8	69.1	60.1	75.4	60.6	54.2	62.4
Cleaning agent observed at handwashing station							
Soap or detergent	65.7	44.8	81.2	19.5	73.1	31.7	84.8
Ash	0.1	0.4	1.0	0.0	0.0	0.0	0.0
Mud or sand	3.8	14.7	5.3	21.3	0.0	0.0	0.0
Other cleaning agent	1.3	0.0	0.0	0.0	1.8	2.7	1.5
No cleaning agent	29.0	40.1	12.5	59.2	25.1	65.6	13.8
Handwashing station is fixed	30.9	15.9	16.5	15.4	36.2	58.2	30.1
Number of responding households	386	163	61	102	223	32	191

Table A6.12. Percentage of women 15-49 years of age by food groups consumed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Grains, roots, & tubers	96.1	97.1	95.1	99.2	95.6	94.8	97.2
Pulses	32.3	40.2	44.5	35.8	28.6	31.3	23.3
Nuts and seeds	0.2	0.1	0.1	0.1	0.3	0.2	0.3
Dairy	48.2	69.4	69.0	69.9	38.4	23.1	69.2
Meat, poultry, fish	19.7	21.4	17.6	25.4	18.9	19.6	17.5
Eggs	5.6	5.9	3.8	8.2	5.5	3.6	9.4
Dark leafy greens	31.2	20.0	6.4	33.9	36.3	31.7	45.6
Vitamin A rich fruits and vegetables	9.8	13.3	2.5	24.4	8.1	7.6	9.1
Other vegetables	1.2	1.2	0.8	1.6	1.2	0.6	2.3
Other fruits	8.5	2.0	2.0	2.0	11.6	15.3	4.0
Number of responding women 15-49 years	3,632	1,965	930	1,035	1,667	810	857

NOTES: A woman of reproductive age is considered to consume a minimum dietary diversity if she consumed at least five of 10 specific food groups during the previous day and night.

Table A6.13. Use of antenatal care services (ANC)

[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Percent of births receiving at least four ANC visits during pregnancy[1]	60.4	62.8	56.2	70.6	59.3	61.5	54.3
Percent of births receiving at least one ANC visits during pregnancy[2]	90.9	91.5	85.4	98.9	90.6	91.6	88.4
Number of live births in the five years prior to the survey	2,026	1,073	553	520	953	491	462
ANC provider[3,4]							
Doctor	20.7	36.9	39.8	33.8	13.5	15.3	9.1
Nurse	79.9	65.7	66.6	64.6	86.2	86.3	86.0
Midwife	9.0	15.4	3.2	27.9	6.1	5.1	8.5
Health officer	5.3	2.4	3.5	1.3	6.6	4.2	12.5
Health extension worker	0.5	0.0	0.0	0.0	0.7	0.7	0.7
Traditional birth attendant	1.7	2.3	0.8	3.9	1.4	1.6	1.0
Other	0.0	0.1	0.2	0.0	0.0	0.0	0.0
Number of most recent live births in the five years prior to the survey that received ANC care	1,842	982	468	514	860	454	406
Timing of first ANC visit[4]							
During first three months of pregnancy	30.5	30.8	30.8	30.9	30.4	29.3	33.1
After first three months of pregnancy	69.5	69.2	69.2	69.1	69.6	70.7	66.9
Number of most recent live births in the five years prior to the survey that received ANC care	1,842	982	468	514	860	454	406

NOTES: Use of antenatal care (ANC) refers to the last (most recent) live birth that occurred in the five years prior to the survey.

[1] Refers to women who attended at least four ANC visits with a skilled health professional during the most recent pregnancy that resulted in a live birth in the five years preceding the survey. Skilled health personnels include doctors, nurses, midwives, health officers and health extension workers.

[2] Refers to women who attended at least one ANC visit with a skilled health professional during the most recent pregnancy that resulted in a live birth in the five years preceding the survey.

[3] Multiple responses allowed. Total may add up to more than 100 percent.

[4] Includes all most recent live births that received any ANC care regardless of the provider.

Table A6.14. Percentage of non-pregnant women 15-49 years who are married or in a union and using a contraceptive method by type of method
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Modern methods	23.0	17.8	9.1	28.1	25.4	21.2	34.0
Female sterilization	0.2	0.0	0.0	0.0	0.4	0.3	0.4
Male sterilization	...	…	…	…	…	…	…
Inter-uterine device	0.2	0.0	0.0	0.0	0.2	0.0	0.8
Injectables	10.2	9.8	2.7	18.2	10.4	9.3	12.6
Implants	6.7	4.4	1.6	7.9	7.7	5.3	12.7
Pill	1.0	0.9	0.4	1.5	1.0	0.9	1.4
Condom	1.5	1.9	3.3	0.2	1.4	0.9	2.3
Female condom	...	…	…	…	…	…	…
Emergency contraception	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Standard days method	1.6	0.4	0.2	0.6	2.2	2.6	1.3
Lactational amen. method	1.9	0.3	0.4	0.3	2.7	2.1	3.7
Other modern methods	0.2	0.5	0.9	0.0	0.0	0.0	0.0
Traditional methods	2.5	4.7	6.5	2.4	1.5	0.8	2.8
Rhythm	0.2	0.0	0.0	0.1	0.3	0.2	0.7
Withdrawal	1.2	1.2	0.2	2.4	1.2	0.4	2.8
Other traditional methods	1.3	3.6	6.5	0.0	0.2	0.3	0.0
Does not use any form of contraception	75.1	78.2	85.3	69.7	73.7	77.9	64.9
Number of responding non-pregnant women 15-49 years married or in a union	1,941	1,046	539	507	895	437	458

NOTES: Multiple responses for type of contraceptive method used was allowed. Totals may add up to more than 100 percent.

Table A6.15. Breastfeeding status for children 0-23 months by age in months by type of method
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Not breastfeeding							
<2	8.2	4.2	0.0	7.7	9.3	11.8	3.1
2-3	0.7	0.0	0.0	0.0	1.0	0.0	4.0
4-5	2.0	0.0	0.0	0.0	2.7	4.0	0.0
6-8	3.4	1.0	2.0	0.0	4.4	4.9	3.3
9-11	3.1	1.0	1.8	0.0	4.3	0.0	12.6
12-17	10.0	5.6	4.9	6.4	12.0	10.0	17.0
18-23	42.0	21.2	18.8	23.5	49.4	50.0	46.9
Exclusively breastfed							
<2	76.1	74.6	71.3	77.4	76.5	75.8	78.1
2-3	61.1	59.1	54.1	63.9	61.7	58.6	71.3
4-5	26.7	24.6	23.0	26.6	27.5	24.4	34.2
6-8	8.4	6.5	3.7	9.6	9.2	6.5	15.7
9-11	2.1	0.0	0.0	0.0	3.3	4.1	1.9
12-17	0.6	0.0	0.0	0.0	0.9	0.7	1.2
18-23	0.9	0.0	0.0	0.0	1.2	1.5	0.0
Breastfed and plain water only							
<2	4.7	7.2	12.9	2.4	4.0	2.7	7.2
2-3	23.6	24.7	32.3	17.6	23.3	25.7	15.9
4-5	29.0	40.6	45.0	34.6	24.7	25.4	23.2
6-8	17.8	7.3	14.1	0.0	22.2	28.5	7.0
9-11	9.4	5.0	8.6	0.0	11.8	13.5	8.5
12-17	5.8	1.2	0.9	1.7	7.9	11.2	0.0
18-23	1.2	1.0	0.0	2.0	1.2	1.5	0.0
Breastfed and non-milk liquids							
<2	5.3	4.0	6.4	1.9	5.7	4.7	8.2
2-3	1.8	0.0	0.0	0.0	2.3	1.7	4.2
4-5	4.1	3.4	2.7	4.3	4.3	6.3	0.0
6-8	8.7	2.3	4.4	0.0	11.4	11.9	10.2

Table A6.15. Breastfeeding status for children 0-23 months by age in months by type of method
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
9-11	4.6	3.1	5.3	0.0	5.4	8.2	0.0
12-17	2.7	0.7	0.0	1.7	3.7	5.2	0.0
18-23	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Breastfed and other milk							
<2	3.4	7.2	7.5	7.0	2.4	3.3	0.0
2-3	5.6	8.9	4.2	13.3	4.5	4.5	4.6
4-5	23.8	23.3	26.9	18.6	24.0	21.7	29.0
6-8	16.7	18.6	20.9	16.1	15.9	14.3	19.6
9-11	7.4	9.2	11.3	6.3	6.4	9.7	0.0
12-17	3.8	2.6	1.3	4.2	4.3	4.4	4.1
18-23	1.9	5.5	5.6	5.4	0.7	0.6	0.9
Breastfed and complementary foods							
<2	2.3	2.8	1.9	3.5	2.2	1.7	3.4
2-3	7.2	7.3	9.5	5.2	7.2	9.5	0.0
4-5	14.4	8.2	2.4	15.9	16.7	18.2	13.6
6-8	45.0	64.3	54.9	74.3	37.0	33.9	44.3
9-11	73.4	81.7	73.0	93.7	68.8	64.5	77.1
12-17	77.1	89.9	92.9	86.0	71.2	68.5	77.6
18-23	54.0	72.3	75.6	69.1	47.5	46.4	52.2
Number of children 0-23 months							
<2	138	61	27	34	77	42	35
2-3	101	43	20	23	58	36	22
4-5	118	56	28	28	62	31	31
6-8	160	82	42	40	78	40	38
9-11	154	87	53	34	67	31	36
12-17	331	177	97	80	154	80	74
18-23	262	131	63	68	131	84	47

Table A6.15. Breastfeeding status for children 0-23 months by age in months by type of method
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu

NOTES: The results for these subgroup analyses are based on small sample sizes and may be unreliable.
Breastfeeding status refers to a 24 hour period (yesterday during the day or night). Children who are categorized as breastfeeding and consuming water only consumed no liquid or solid supplements. The categories are mutually exclusive and their percentages sum to 100 percent of children 0-23 months. Children who received breastmilk and non-milk liquids but did not receive other milk or complimentary food are categorized in the non-milk category, though they may have received plain water. Non-milk liquids include juice, juice drinks, porridge, and other liquids such as glucose water or sugar water.

Table A6.16. Components of MAD indicator for children 6-23 months by breastfeeding status

[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Breastfed children 6-8 months							
Percentage with minimum meal frequency (2 or more)	22.4	37.0	21.7	53.1	16.1	12.4	24.8
Percentage with minimum dietary diversity (4 or more)	2.1	3.2	1.6	4.9	1.6	0.0	5.5
Percentage consuming the following food groups:							
Grains, roots, and tubers	43.7	57.2	52.3	62.2	37.9	35.4	43.7
Legumes and nuts	11.9	11.9	15.8	7.9	11.8	13.6	7.7
Dairy products (milk, yogurt, cheese)	41.8	56.6	51.5	61.9	35.4	28.6	51.5
Flesh foods (meat, fish, poultry, and liver/organ meats)	2.8	3.5	6.9	0.0	2.5	3.5	0.0
Eggs	2.6	7.8	4.3	11.4	0.4	0.0	1.2
Vitamin A-rich fruits and vegetables	10.1	11.5	2.0	21.4	9.4	8.2	12.3
Other fruits and vegetables	4.5	0.8	1.6	0.0	6.2	6.4	5.6
Number of children	157	81	41	40	76	39	37
Breastfed children 9-23 months							
Percentage with minimum meal frequency (3 or more)	17.7	23.0	16.2	31.4	14.9	10.9	26.1
Percentage with minimum dietary diversity (4 or more)	9.5	9.5	6.1	13.6	9.6	6.8	17.5
Percentage consuming the following food groups:							
Grains, roots, and tubers	80.7	84.3	86.2	82.0	78.8	75.1	89.2
Legumes and nuts	25.6	34.7	36.9	32.0	20.8	23.4	13.5
Dairy products (milk, yogurt, cheese)	51.7	63.8	57.0	72.2	45.3	39.2	62.4
Flesh foods (meat, fish, poultry, and liver/organ meats)	11.7	10.5	10.7	10.3	12.3	13.3	9.5
Eggs	4.1	5.7	4.3	7.6	3.2	1.0	9.5
Vitamin A-rich fruits and vegetables	21.2	13.9	4.4	25.8	25.0	19.3	41.0
Other fruits and vegetables	6.7	4.8	2.6	7.5	7.7	7.2	9.0
Number of children	620	354	195	159	266	146	120

Table A6.16. Components of MAD indicator for children 6-23 months by breastfeeding status

[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Non-breastfed children 6-23 months							
Percentage with minimum meal frequency (4 or more + 2 milk)	21.9	32.1	23.2	40.3	20.2	13.7	40.0
Percent with minimum dietary diversity (4 or more)	6.2	2.4	0.0	4.5	6.8	5.6	10.4
Percentage consuming the following food groups:							
Grains, roots, and tubers	94.1	97.8	100.0	95.8	93.5	93.8	92.4
Legumes and nuts	22.4	42.5	59.6	26.9	19.1	18.7	20.5
Dairy products (milk, yogurt, cheese)	43.4	53.8	52.9	54.6	41.8	37.0	56.2
Flesh foods (meat, fish, poultry, and liver/organ meats)	15.2	8.2	4.0	11.9	16.3	14.8	21.0
Eggs	5.1	5.6	6.7	4.5	5.0	4.2	7.2
Vitamin A-rich fruits and vegetables	31.6	26.0	2.5	47.6	32.5	29.0	42.7
Other fruits and vegetables	6.8	1.5	0.0	2.9	7.7	5.9	12.9
Number of children	130	42	19	23	88	50	38

NOTES: The results for these subgroup analyses are based on small sample sizes (n<30) and may be unreliable.
The MAD indicator is a composite indicator measuring both minimum feeding frequency and minimum dietary diversity, as appropriate for a child's age and breastfeeding status. Minimum dietary diversity for breastfed children 6-23 months is defined as consuming four or more food groups out of seven food groups. Minimum dietary diversity for non-breastfed children 6-23 months is defined as consuming four or more food groups out of six food groups in addition to two or more milk feeds. Minimum meal frequency for breastfed children 6-23 months is defined as two or more feedings of solid, semi-solid or soft food for children 6-8 months and three or more feedings of solid, semi-solid or soft food for children 9-23 months. Minimum meal frequency for non-breastfed children 6-23 months is defined as four or more feedings of solid, semi-solid or softy foods and two or more milk feeds.

Table A6.17. Percentage of children 6-23 months by food groups consumed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Breast milk	82.1	91.8	92.8	90.7	78.0	77.4	79.4
Grains, roots, and tubers	76.9	80.9	81.8	79.8	75.2	72.9	81.3
Legumes and nuts	22.7	31.5	35.2	27.2	18.9	20.7	13.9
Dairy products (milk, yogurt, cheese)	48.6	61.8	55.8	68.7	42.9	37.0	59.1
Flesh foods & other misc. small animal protein	10.8	9.2	9.6	8.6	11.5	12.0	10.1
Eggs	4.0	6.1	4.5	8.0	3.1	1.6	7.5
Vitamin A-rich fruits and vegetables	21.2	14.5	3.9	27.1	24.1	19.7	36.0
Other fruits and vegetables	6.3	3.9	2.3	5.7	7.4	6.8	9.2
Number of children 6-23 months	907	477	255	222	430	235	195

NOTES: A child 6-23 months is considered to consume a minimum dietary diversity if s/he consumed at least five of the eight food groups during the previous day and night.

Table A6.18. Percentage of women and men in a union who work by type of work, in total and by sex
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Combined RFSA Areas- Total			
	Total	Male	Female	Sig.*
Farming/crop production and sales	4.8	4.9	4.7	ns
Livestock production/fattening and sales	11.2	15.1	5.0	***
Agricultural wage labor	3.1	3.7	2.1	ns
Non-agricultural wage labor	27.0	32.2	18.7	***
Salaried work	22.1	28.4	12.0	***
Sale of wild/bush product	23.0	11.5	41.2	***
Petty trade - selling other products	6.0	2.8	11.1	***
Petty trade - selling own products	2.2	0.2	5.4	***
Self-employment /own business - agricultural	2.6	2.8	2.2	ns
Self-employment /own business - nonagricultural	11.2	12.1	9.8	ns
Rental of land, house, and rooms	0.9	1.1	0.4	ns
Number of responding farmers	1,374	897	477	

CRS RFSA Areas

	CRS RFSA areas - Total				Marsabit				Isiolo			
	Total	Male	Female	Sig.*	Total	Male	Female	Sig.*	Total	Male	Female	Sig.*
Farming/crop production and sales	1.9	2.1	1.4	ns	0.7	0.4	1.6	ns	2.6	3.0	1.4	ns
Livestock production/fattening and sales	19.8	21.7	13.8	ns	31.0	37.9	10.7	***	13.6	13.0	15.8	ns
Agricultural wage labor	3.2	4.2	0.0	ns	2.1	2.8	0.0	ns	3.8	4.9	0.0	ns
Non-agricultural wage labor	29.5	31.3	23.7	ns	33.9	33.9	33.9	ns	27.1	30.0	17.6	*
Salaried work	27.4	29.9	19.6	**	24.1	28.6	10.6	**	29.3	30.6	25.0	ns
Sale of wild/bush product	3.6	2.6	7.0	*	3.8	0.5	13.7	***	3.5	3.7	3.0	ns
Petty trade - selling other products	6.9	3.3	18.5	***	4.4	0.6	15.6	***	8.3	4.7	20.2	***
Petty trade - selling own products	1.0	0.2	3.6	***	2.3	0.6	7.2	***	0.3	0.0	1.4	*
Self-employment /own business - agricultural	1.5	1.1	2.8	ns	2.3	1.7	4.0	ns	1.0	0.7	2.1	ns
Self-employment /own business - nonagricultural	15.8	15.2	17.7	ns	12.0	10.0	17.9	ns	17.9	18.0	17.6	ns
Rental of land, house, and rooms	0.4	0.4	0.5	ns	0.3	0.5	0.0	ns	0.5	0.4	0.8	ns
Number of responding farmers	539	412	127		197	144	53		342	268	74	

Table A6.18. Percentage of women and men in a union who work by type of work, in total and by sex
[Baseline Study, Kenya 2021]

MC RFSA Areas	MC RFSA areas - Total				Turkana				Samburu			
	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]
Farming/crop production and sales	5.5	5.8	5.1	ns	4.2	5.0	3.1	ns	8.3	7.3	9.8	ns
Livestock production/fattening and sales	9.1	13.0	3.8	***	8.9	13.7	3.0	***	9.4	11.7	5.7	ns
Agricultural wage labor	3.0	3.6	2.3	ns	2.2	3.1	1.0	*	4.8	4.4	5.4	ns
Non-agricultural wage labor	26.4	32.5	18.0	***	20.5	29.6	9.2	***	37.9	37.6	38.3	ns
Salaried work	20.7	27.9	11.0	***	17.0	24.1	8.1	***	28.3	34.7	17.8	***
Sale of wild/bush product	27.8	14.4	46.0	***	36.7	19.5	58.2	***	10.0	5.4	17.6	***
Petty trade - selling other products	5.8	2.7	10.1	***	6.2	2.1	11.3	**	5.1	3.8	7.3	ns
Petty trade - selling own products	2.5	0.2	5.7	***	2.6	0.0	5.8	**	2.5	0.7	5.5	***
Self-employment /own business - agricultural	2.9	3.4	2.2	ns	2.2	3.2	1.1	ns	4.1	3.7	4.7	ns
Self-employment /own business - nonagricultural	10.1	11.1	8.7	ns	9.5	11.7	6.8	ns	11.1	9.8	13.1	ns
Rental of land, house, and rooms	1.0	1.4	0.4	ns	0.7	1.3	0.0	ns	1.5	1.5	1.5	ns
Number of responding farmers	835	485	350		393	214	179		442	271	171	

[a] Significance tests were performed to determine whether an association exists between the outcome indicator (type of work) and the disaggregate variable (sex). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A6.19. Percentage of women and men in a union participating in community groups, by type of group
[Baseline Study, Kenya 2021]

Combined RFSA Areas

	Combined RFSA Areas- Total			
	Total	Male	Female	Sig.*
Agricultural/livestock/fisheries producer's group	15.3	16.9	13.5	ns
N	496	239	257	
Water users' group	14.4	17.1	11.8	***
N	1,783	861	922	
Forest users' group	11.5	12.5	10.5	ns
N	635	313	322	
Credit or microfinance group	27.9	22.4	33.2	***
N	1,536	727	809	
Mutual help or insurance group	24.1	24.7	23.7	ns
N	236	108	128	
Trade and business association	14.5	13.1	16.1	ns
N	438	218	220	
Civic group	18.7	21.6	15.7	ns
N	515	244	271	
Local government	4.5	5.6	3.5	**
N	3,379	1,615	1,764	
Religious group	42.9	36.3	49.2	***
N	3,036	1,457	1,579	
Other group	25.6	24.3	27	ns
N	145	66	79	
Other formal or informal organization	22.6	13.5	30.2	*
N	97	43	54	

Table A6.19. Percentage of women and men in a union participating in community groups, by type of group
[Baseline Study, Kenya 2021]

CRS RFSA Areas

	CRS RFSA areas - Total				Marsabit				Isiolo			
	Total	Male	Female	Sig.ª	Total	Male	Female	Sig.ª	Total	Male	Female	Sig.ª
Agricultural/livestock/fisheries producer's group	10	9.2	10.7	ns	16.3	18.4	14.5	ns	5.8	3.6	8	ns
N	335	159	176		141	63	78		194	96	98	
Water users' group	9.7	11.2	8.1	*	13.3	15	11.7	ns	7.6	9.2	6.1	*
N	1,189	574	615		444	207	237		745	367	378	
Forest users' group	12.4	14.9	9.8	ns	13	15.7	10.3	ns	7.2	9.1	4.5	ns
N	354	173	181		317	153	164		37	20	17	
Credit or microfinance group	20.6	12.6	27.8	***	20.2	10	28.4	***	20.9	13.8	27.5	***
N	1,054	490	564		346	151	195		708	339	369	
Mutual help or insurance group	24.4	27.1	22.1	ns	42.1	40	44.2	ns	17.2	21.2	14.1	ns
N	189	88	101		45	20	25		144	68	76	
Trade and business association	14.2	10.5	17.7	ns	15.1	4.9	23.6	**	13.1	16.5	9.5	ns
N	211	100	111		121	53	68		90	47	43	
Civic group	14.9	16.1	13.8	ns	29	29.9	28.3	ns	10	11.9	8	ns
N	406	191	215		115	47	68		291	144	147	
Local government	4.1	4.8	3.5	ns	5.9	7.2	4.7	ns	2.9	3.3	2.6	ns
N	1,907	911	996		741	340	401		1,166	571	595	
Religious group	32.4	29.5	35.3	*	33.9	26.1	41.5	***	31.3	32.1	30.5	ns
N	1,574	768	806		672	318	354		902	450	452	
Other group	25.1	18.8	30.5	ns	21.8	13.7	27.9	ns	37.2	32.5	44.7	ns
N	114	51	63		87	35	52		27	16	11	
Other formal or informal organization	12.4	5.8	17.2	ns	16.4	0	27.8	ns	8.3	11.4	5.8	ns
N	45	19	26		19	8	11		26	11	15	

Table A6.19. Percentage of women and men in a union participating in community groups, by type of group
[Baseline Study, Kenya 2021]

MC RFSA Areas	MC RFSA areas - Total				Turkana				Samburu			
	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]	Total	Male	Female	Sig.[a]
Agricultural/livestock/fisheries producer's group	19.8	23	16.1	ns	20.2	21.9	18.2	ns	18.9	25.6	11.1	ns
N	161	80	81		92	45	47		69	35	34	
Water users' group	18.5	22.1	15	**	19.4	23.7	15.2	**	16.9	18.8	14.8	ns
N	594	287	307		315	150	165		279	137	142	
Forest users' group	11	11.1	10.9	ns	4.2	2.6	5.8	ns	13.5	14.1	12.9	ns
N	281	140	141		51	24	27		230	116	114	
Credit or microfinance group	34.2	30.3	38.3	*	26.8	22.6	31.1	ns	42.8	39	46.9	ns
N	482	237	245		187	91	96		295	146	149	
Mutual help or insurance group	23.7	19.9	26.1	ns	12.6	0	18	ns	36.9	34.8	38.8	ns
N	47	20	27		19	7	12		28	13	15	
Trade and business association	14.7	13.9	15.5	ns	10.1	7.5	13	ns	23.4	25.2	21	ns
N	227	118	109		109	54	55		118	64	54	
Civic group	24.4	29.6	18.9	ns	26.9	31.7	21.7	ns	19	24.8	13.2	ns
N	109	53	56		56	28	28		53	25	28	
Local government	4.7	6	3.5	*	4.2	5.5	3	ns	5.7	6.9	4.5	ns
N	1,472	704	768		715	336	379		757	368	389	
Religious group	47.7	39.5	55.5	***	44.2	37.2	50.6	***	53.9	43.5	64	***
N	1,462	689	773		670	315	355		792	374	418	
Other group	26.5	31.6	19.9	ns	38.3	46.1	23.1	ns	13.9	9.8	17.6	ns
N	31	15	16		11	6	5		20	9	11	
Other formal or informal organization	26.3	16	35.3	*	28.6	16.2	39.2	*	14.9	14.8	14.9	ns
N	52	24	28		39	18	21		13	6	7	

NOTE: The number of respondents (N) includes women and men who indicated that the group exists in their community.

[a] Significance tests were performed to determine whether an association exists between the outcome indicator (group participation) and the disaggregate variable (sex). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A6.20. Distribution of households by types and number of livelihood activities in the year preceding the survey
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Types of Livelihood Activities							
Farming/crop production and sales	10.6	3.3	2.9	3.8	13.6	12.6	15.6
Livestock production/fattening and sales	33.0	61.2	81.3	40.0	21.3	17.4	29.0
Agricultural wage labor	2.7	1.7	0.4	3.2	3.1	2.0	5.2
Non-agricultural wage labor	22.6	14.3	11.1	17.8	26.0	22.1	33.8
Salaried work	11.2	10.4	6.4	14.7	11.6	8.9	17.0
Sale of wild/bush products (including charcoal and firewood)	24.2	3.0	2.8	3.2	33.0	43.5	12.1
Honey production and sales	0.2	0.1	0.1	0.1	0.3	0.2	0.6
Petty trade (selling other products, e.g., grain, veggies, oil, sugar, etc.)	8.4	6.2	4.7	7.7	9.4	8.6	10.9
Petty trade (selling own products, e.g., local beer, sex work)	2.6	1.0	1.4	0.6	3.3	2.8	4.2
Other self-employment/own business (agricultural, e.g., buying/reselling chat)	3.1	2.6	1.7	3.6	3.2	2.7	4.3
Other self-employment/own business (non-agricultural, e.g., stone cutting, hair	5.9	6.0	1.8	10.6	5.9	5.5	6.7
Rental of land, house, rooms	1.8	1.2	0.3	2.0	2.1	1.8	2.6
Remittances	5.3	13.0	6.5	19.9	2.1	1.4	3.4
Gifts/inheritance	21.8	18.5	26.5	10.0	23.2	24.8	20.0
Safety net food/cash assistance	17.5	16.1	19.4	12.6	18.0	22.7	8.7
Artisanal mining/quarrying	0.8	0.1	0.3	0.0	1.1	0.7	1.8
Other	2.1	1.8	2.1	1.4	2.2	1.7	3.2

Table A6.20. Distribution of households by types and number of livelihood activities in the year preceding the survey
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Distribution of Number of Livelihood Activities							
1 livelihood activity	51.4	57.5	52.7	62.5	48.9	47.7	51.4
2 livelihood activities	30.4	28.8	31.1	26.3	31.1	32.8	27.8
3 livelihood activities	12.9	10.3	11.4	9.0	14.0	13.9	14.3
4 or more livelihood activities	5.2	3.5	4.8	2.2	6.0	5.7	6.5
Number of Responding Households	3,880	1,974	978	996	1,906	950	956

NOTE: Table reports percentage of households engaged in the respective livelihood activity in the past 12 months and the percentage of households engaged in one, two, three, or four or more livelihood activities in the past 12 months.

Table A6.21. Shock exposure index (mean) and average shock severity (mean)
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Shock Exposure Index (range: 0-224)	15.6	18.3	20.9	15.5	14.4	13.8	15.7
Number of Responding Households	3,600	1,854	935	919	1,746	868	878
Average Shock Severity (range: 2-8)	4.9	5.3	5.4	5.1	4.8	5.0	4.5
Number of Responding Households	3,464	1,813	925	888	1,651	803	848

NOTE: The denominator for average shock severity is households experiencing at least one shock.

Table A6.22. Shocks experienced by households in the past 12 months
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Climatic shocks							
Excessive rains	17.2	3.7	4.2	3.1	22.9	27.1	14.6
Flooding	8.7	2.2	1.2	3.4	11.4	15.7	2.7
Too little rain/drought	74.9	88.4	86.1	91.0	69.2	63.9	79.9
Variable rain (early/late)	25.0	32.7	37.9	26.8	21.7	10.6	44.2
Hail/frost	1.3	0.1	0.0	0.2	1.8	0.0	5.5
Landslides/erosion	0.7	0.9	1.5	0.1	0.6	0.2	1.4
Biological shocks							
Crop disease (rust on wheat, sorghum)	2.7	0.2	0.2	0.3	3.7	4.0	3.1
Crop pests (locusts, army worms, or animals eating crops)	14.9	18.0	19.9	16.0	13.5	12.9	14.8
Weeds (e.g., associated with striga)	1.8	0.2	0.0	0.3	2.4	1.8	3.8
Livestock disease	24.9	30.1	48.9	9.3	22.7	22.5	22.9
Human disease outbreaks (from contaminated water)	3.9	3.5	4.7	2.1	4.0	3.0	6.1
Soil degradation/loss of soil fertility/ or salination	1.1	2.4	4.5	0.2	0.6	0.3	1.2
Conflict shocks							
Theft or destruction of assets	3.8	3.2	1.1	5.5	4.0	3.7	4.7
Theft of livestock (raids/cattle rustling)	6.0	3.4	4.0	2.8	7.1	8.3	4.7
Land conflict	1.8	1.8	1.6	2.1	1.8	1.5	2.5

Table A6.22. Shocks experienced by households in the past 12 months
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Water conflict	2.5	4.8	7.0	2.3	1.5	1.2	2.2
Gender Based Violence	1.8	1.5	2.2	0.7	1.9	1.6	2.7
Displacement (e.g., due to oil/gas extraction etc.)	1.4	0.4	0.3	0.5	1.9	1.1	3.4
Insecurity/violence (e.g., elections-related, tribal, extremism, etc.)	6.4	11.5	9.0	14.2	4.2	1.4	9.9
Economic shocks							
Interruptions or delays in safety net or humanitarian assistance	8.3	8.4	12.3	4.2	8.2	10.9	2.7
Increasing food prices	69.8	81.1	83.1	78.8	65.0	64.9	65.4
Increased prices of agricultural or livestock inputs	8.8	15.5	19.6	10.9	6.0	1.9	14.5
Decreased prices for agricultural or livestock products	5.2	11.2	17.4	4.4	2.7	0.9	6.5
Loss of land/rental property	0.5	0.3	0.1	0.7	0.6	0.5	0.7
Unemployment	10.6	11.1	7.1	15.6	10.3	6.3	18.5
Illness or death of breadwinners, or exceptional health expenses of household	4.6	2.4	2.2	2.5	5.6	5.5	5.8
Non-function of borehole	4.9	10.2	16.6	3.1	2.7	1.4	5.1
Political strife	0.1	0.2	0.2	0.1	0.1	0.0	0.4
Number of Responding Households	3,600	1,854	935	919	1,746	868	878

Table A6.23. Coping strategies adopted to recover from any shock
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Livestock and land holdings coping strategies							
Send livestock in search of pasture	22.6	36.9	39.1	34.5	16.3	10.6	27.8
Sell livestock	29.0	45.4	58.1	30.9	21.8	16.7	32.0
Slaughter livestock	8.9	10.5	15.5	4.7	8.3	5.9	13.0
Lease out land	0.6	0.2	0.4	0.1	0.7	1.0	0.2
Migration coping strategies							
HH member migrated	9.0	6.8	7.8	5.6	10.1	9.1	11.9
Migrate (the whole family)	6.2	5.0	6.6	3.1	6.8	7.4	5.6
Send children or an adult to stay with relatives	3.9	3.7	3.9	3.4	4.0	5.3	1.4
Coping strategies to reduce current expenditure							
Take children out of school (to work, or can't pay school fees)	1.1	0.9	0.1	1.7	1.2	1.0	1.5
Move to less expensive housing	3.1	3.3	0.8	6.1	3.1	2.0	5.2
Reduce food consumption (quantity/meal; # of meals/day)	51.2	57.1	49.7	65.3	48.7	48.6	48.8
Reduced non-essential HH expenses	37.6	39.7	30.6	49.8	36.6	34.3	41.3
Got food on credit from a local merchant	37.9	51.1	43.2	59.9	32.1	29.7	37.0
Coping strategies to get more food or money							
Take up new/additional work (casual labor, wage labor)	6.0	6.2	5.7	6.9	5.9	4.7	8.3
Sell household items (e.g., radio, bed)	1.0	1.3	0.2	2.7	0.8	0.5	1.4
Sell productive assets (e.g., plough, water pump)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Take out a loan (with interest) from a (formal) bank	0.5	0.6	0.5	0.7	0.5	0.3	0.8
Take out a loan (with interest) from an MFI or village savings group	0.7	0.5	0.2	0.9	0.8	0.7	0.9
Take out a loan (with interest) from a moneylender	0.5	0.4	0.4	0.4	0.5	0.4	0.7
Take out a loan (no interest) from friends or relatives within the community	2.7	5.6	3.0	8.5	1.4	1.2	1.8
Take out a loan (no interest) from friends or relatives outside of the community	0.8	0.8	0.6	1.0	0.7	0.5	1.1
Gift of money (not remittances) or food from family, friends, etc. (bonding)[1]	6.1	6.7	5.8	7.7	5.9	7.9	1.9
Gift of money (not remittances) or food from family, friends, etc. (bridging)[1]	3.6	3.3	3.3	3.3	3.7	4.8	1.6

Table A6.23. Coping strategies adopted to recover from any shock
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Send children to work for money (e.g., domestic service)	0.7	0.6	0.4	0.9	0.8	1.1	0.1
Receive emergency food aid from the government or NGO	5.3	4.6	6.2	2.9	5.6	7.3	2.1
Receive emergency cash transfer from the government or NGO	2.5	2.7	3.2	2.2	2.4	2.3	2.4
Participate in government or NGO food-for-work or cash-for-work activities	0.2	0.3	0.4	0.2	0.2	0.2	0.3
Use money from savings	47.6	33.8	39.1	27.7	53.6	56.0	49.0
Remittances from a relative that migrated	7.5	15.5	22.3	7.9	4.0	3.5	5.1
Engaged in spiritual efforts (e.g., prayed, sacrifices, etc.)	6.2	7.4	10.3	4.2	5.7	4.4	8.3
Other (specify)	5.8	8.2	2.9	14.2	4.7	3.1	8.0
Number of Responding Households	3,464	1,813	925	888	1,651	803	848

NOTE: The denominator used is households reporting experiencing at least one shock in the last 12 months. This table presents adoption of the respective coping strategy if the household reports adopting the strategy for *any shock* experienced in the past 12 months. Households experiencing multiple shocks in the past 12 months have more opportunity to report adoption of a coping strategy than households experiencing only one shock in the same time period.

[1] Bonding refers to social capital within a group or community. Bridging refers to social capital between different communities or groups.

Table A6.24a. Coping strategies adopted to recover from: Too little rain/drought
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Livestock and land holdings coping strategies							
Send livestock in search of pasture	22.9	33.5	32.7	34.2	17.3	10.1	28.7
Sell livestock	21.8	33.0	39.4	26.7	15.9	11.0	23.7
Slaughter livestock	5.2	3.2	5.2	1.3	6.3	3.2	11.2
Lease out land	0.3	0.0	0.0	0.0	0.4	0.5	0.1
Migration coping strategies							
HH member migrated	5.3	2.8	4.4	1.3	6.6	4.5	10.0
Migrate (the whole family)	2.0	0.8	1.4	0.3	2.6	2.5	2.8
Send children or an adult to stay with relatives	1.2	1.9	1.9	1.8	0.9	1.0	0.8
Coping strategies to reduce current expenditure							
Take children out of school (to work, or can't pay school fees)	0.5	0.3	0.0	0.5	0.6	0.2	1.2
Move to less expensive housing	1.6	1.9	0.3	3.5	1.4	1.0	2.2
Reduce food consumption (quantity/meal; # of meals/day)	31.5	35.6	25.9	45.1	29.3	29.5	29.0
Reduced non-essential HH expenses	22.4	24.6	14.6	34.4	21.3	19.8	23.5
Got food on credit from a local merchant	24.5	34.4	26.3	42.4	19.2	17.4	22.0
Coping strategies to get more food or money							
Take up new/additional work (casual labor, wage labor)	4.0	3.5	3.0	4.0	4.2	3.7	5.1
Sell household items (e.g., radio, bed)	0.5	0.6	0.0	1.1	0.5	0.2	0.9
Sell productive assets (e.g., plough, water pump)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Take out a loan (with interest) from a (formal) bank	0.2	0.2	0.3	0.2	0.2	0.2	0.2
Take out a loan (with interest) from an MFI or village savings group	0.1	0.2	0.0	0.5	0.0	0.0	0.0
Take out a loan (with interest) from a moneylender	0.1	0.1	0.1	0.0	0.2	0.2	0.1
Take out a loan (no interest) from friends or relatives within the community	1.6	4.1	2.1	6.2	0.3	0.3	0.3
Take out a loan (no interest) from friends or relatives outside of the community	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Gift of money (not remittances) or food from family, friends, etc. (bonding)[1]	3.3	4.0	3.0	4.9	2.9	4.0	1.3
Gift of money (not remittances) or food from family, friends, etc. (bridging)[1]	1.7	1.9	1.7	2.1	1.6	2.2	0.6
Send children to work for money (e.g., domestic service)	0.2	0.4	0.4	0.5	0.0	0.0	0.1
Receive emergency food aid from the government or NGO	3.3	2.6	2.9	2.2	3.7	4.9	1.8
Receive emergency cash transfer from the government or NGO	1.3	1.5	1.7	1.3	1.2	1.2	1.1

Table A6.24a. Coping strategies adopted to recover from: Too little rain/drought
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Participate in government or NGO food-for-work or cash-for-work activities	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Use money from savings	23.5	10.0	9.0	11.0	30.6	37.2	20.2
Remittances from a relative that migrated	4.8	9.9	15.0	4.9	2.1	1.6	2.9
Engaged in spiritual efforts (e.g., prayed, sacrifices, etc.)	1.2	1.4	2.3	0.5	1.1	1.1	1.1
Did nothing	1.1	2.8	0.4	5.1	0.2	0.1	0.3
Other (specify)	3.3	5.6	1.0	10.1	2.0	1.0	3.7
Number of Responding Households	3,157	1,744	841	903	1,413	607	806

NOTE: The denominator used is households reporting experiencing drought in the last 12 months. This table presents adoption of the respective coping strategy if the household reports adopting the strategy *specifically in response to drought* experienced in the past 12 months.

[1] Bonding refers to social capital within a group or community. Bridging refers to social capital between different communities or groups.

Table A6.24b. Coping strategies adopted to recover from: Increasing food prices
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Livestock and land holdings coping strategies							
Send livestock in search of pasture	2.4	5.0	4.5	5.7	1.0	0.1	2.8
Sell livestock	18.0	27.8	34.2	20.9	12.8	6.5	25.0
Slaughter livestock	3.5	4.8	7.6	1.8	2.8	1.3	5.8
Lease out land	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Migration coping strategies							
HH member migrated	0.7	0.7	0.9	0.5	0.7	0.4	1.2
Migrate (the whole family)	0.5	0.3	0.2	0.3	0.6	0.9	0.0
Send children or an adult to stay with relatives	1.8	1.8	2.5	1.1	1.8	2.5	0.5
Coping strategies to reduce current expenditure							
Take children out of school (to work, or can't pay school fees)	0.5	0.3	0.0	0.6	0.6	0.4	0.9
Move to less expensive housing	1.7	2.0	0.7	3.3	1.6	1.3	2.2
Reduce food consumption (quantity/meal; # of meals/day)	52.8	53.9	48.1	60.2	52.3	53.7	49.5
Reduced non-essential HH expenses	38.2	35.5	28.2	43.5	39.6	39.9	38.9
Got food on credit from a local merchant	34.5	45.2	35.2	56.1	28.8	28.0	30.3
Coping strategies to get more food or money							
Take up new/additional work (casual labor, wage labor)	2.9	2.6	2.5	2.7	3.1	1.5	6.3
Sell household items (e.g., radio, bed)	0.4	0.3	0.0	0.7	0.4	0.3	0.5
Sell productive assets (e.g., plough, water pump)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Take out a loan (with interest) from a (formal) bank	0.2	0.3	0.0	0.7	0.2	0.2	0.2
Take out a loan (with interest) from an MFI or village savings group	0.5	0.5	0.2	0.7	0.6	0.6	0.5
Take out a loan (with interest) from a moneylender	0.3	0.1	0.1	0.0	0.5	0.7	0.2
Take out a loan (no interest) from friends or relatives within the community	2.0	4.7	2.3	7.3	0.5	0.7	0.1
Take out a loan (no interest) from friends or relatives outside of the community	0.2	0.3	0.2	0.4	0.2	0.0	0.5
Gift of money (not remittances) or food from family, friends, etc. (bonding)[1]	4.5	5.1	4.2	6.1	4.2	6.3	0.0
Gift of money (not remittances) or food from family, friends, etc. (bridging)[1]	1.9	1.8	2.2	1.4	1.9	2.7	0.2
Send children to work for money (e.g., domestic service)	0.3	0.2	0.1	0.3	0.3	0.4	0.1
Receive emergency food aid from the government or NGO	2.3	1.5	1.5	1.4	2.8	3.7	1.0
Receive emergency cash transfer from the government or NGO	1.4	1.3	1.6	0.9	1.6	1.8	1.0
Participate in government or NGO food-for-work or cash-for-work activities	0.0	0.1	0.2	0.0	0.0	0.0	0.0

Table A6.24b. Coping strategies adopted to recover from: Increasing food prices
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS			MC		
		Total	Marsabit	Isiolo	Total	Turkana	Samburu
Use money from savings	14.7	6.4	6.3	6.4	19.2	21.4	14.8
Remittances from a relative that migrated	2.4	5.0	7.8	2.0	1.0	1.0	1.2
Engaged in spiritual efforts (e.g., prayed, sacrifices, etc.)	1.0	0.8	1.0	0.5	1.1	1.1	0.9
Did nothing	1.1	2.5	0.8	4.4	0.3	0.2	0.5
Other (specify)	3.3	6.0	1.2	11.3	1.8	0.6	4.2
Number of Responding Households	2,786	1,576	800	776	1,210	587	623

NOTE: The denominator used is households reporting experiencing increased food prices in the last 12 months. This table presents adoption of the respective coping strategy if the household reports adopting the strategy *specifically in response to increasing food prices* experienced in the past 12 months.

[1] Bonding refers to social capital within a group or community. Bridging refers to social capital between different communities or groups.

Table A6.25a. Resilience capacity indexes and indicators - absorptive
[Baseline Study, Kenya 2021]

	Factor loading	Combined RFSA areas	CRS				MC			
			Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Absorptive Capacity Index (0-100)		33.9	37.8	33.0	42.9	***	32.2	29.2	38.3	***
Availability of informal safety nets (0-6)	0.70	1.4	1.7	1.2	2.1	***	1.3	1.1	1.6	ns
Bonding social capital index (0-6)	0.34	3.0	3.1	3.1	3.2	ns	3.0	2.8	3.3	**
Access to savings (0-1)	0.63	0.19	0.25	0.19	0.31	*	0.16	0.10	0.30	***
Access to remittances (0-1)	0.13	0.05	0.13	0.07	0.20	***	0.02	0.01	0.03	ns
Index of asset ownership (0-71)	0.65	6.0	6.4	5.8	7.0	*	5.9	5.1	7.3	***
Shock preparedness and mitigation (0-4)	0.40	1.0	1.0	1.0	1.0	ns	1.0	0.9	1.0	ns
Access to insurance (0-1)	0.01	0.02	0.02	0.02	0.02	ns	0.01	0.01	0.02	ns
Access to humanitarian assistance (0-1)	0.28	0.24	0.32	0.25	0.39	*	0.20	0.24	0.12	*
Number of Responding Households		3,876	1,973	977	996		1,903	949	954	
Adaptive Capacity Index (0-100)		33.2	34.1	30.8	37.6	**	32.8	29.2	40.0	***
Index of asset ownership (0-71)	0.66	6.0	6.4	5.8	7.0	*	5.9	5.1	7.3	***
Index for education and training (0-2)	0.64	0.6	0.6	0.4	0.7	***	0.6	0.5	0.7	*
Index for exposure to information (0-19)	0.62	3.1	3.9	4.2	3.5		2.8	2.1	4.4	***
Index of social network (0-3)	0.60	0.7	1.0	0.7	1.3	***	0.6	0.5	0.7	*
Access to financial resources (0-2)	0.59	0.6	0.5	0.2	0.8	**	0.6	0.5	0.9	ns
Index of aspirations/confidence to adapt (0-16)	0.51	10.2	9.5	9.3	9.8	ns	10.5	10.3	10.9	ns
Linking social capital index (0-4)	0.40	0.2	0.2	0.2	0.2	ns	0.2	0.2	0.4	**
Livelihood Diversification (0-17)	0.33	1.7	1.6	1.7	1.5	*	1.8	1.8	1.8	ns
Bridging social capital index (0-6)	0.22	2.9	3.0	2.9	3.1	ns	2.9	2.8	3.1	*
Adoption of improved practices (0-1)	0.14	0.08	0.08	0.13	0.03	***	0.08	0.07	0.11	ns
Number of Responding Households		3,875	1,973	977	996		1,902	949	953	

Table A6.25a. Resilience capacity indexes and indicators - absorptive
[Baseline Study, Kenya 2021]

	Factor loading	Combined RFSA areas	CRS				MC			
			Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Transformative Capacity Index (0-100)		37.3	39.0	28.3	50.4	***	36.6	33.4	42.9	ns
Access to infrastructure (0-4)	0.83	2.3	2.4	2.0	2.8	***	2.3	2.2	2.4	ns
Access to livestock services (0-2)	0.75	0.4	0.5	0.3	0.7	ns	0.3	0.3	0.4	ns
Access to basic services (0-5)	0.75	2.0	2.1	1.6	2.5	*	2.0	1.7	2.5	*
Access to markets (0-3)	0.67	1.6	1.2	0.6	1.8	***	1.7	1.5	2.0	ns
Access to extension (0-2)	0.64	0.2	0.2	0.0	0.4	**	0.2	0.2	0.2	ns
Participation in local decision making (0-1)	0.20	0.02	0.02	0.02	0.02	ns	0.02	0.02	0.03	ns
Access to communal natural resources (0-4)	0.15	0.2	0.4	0.3	0.5	ns	0.1	0.1	0.1	ns
Linking social capital index (0-4)	0.09	0.2	0.2	0.2	0.2	ns	0.2	0.2	0.4	**
Gender index (0-7)	0.06	1.2	1.5	1.2	1.7	*	1.1	1.0	1.4	***
Bridging social capital index (0-6)	0.05	2.9	3.0	2.9	3.1	ns	2.9	2.8	3.1	*
Formal safety nets (0-6)	N/A	0.8	0.9	0.7	1.2	ns	0.7	0.8	0.5	ns
Collective action (0-10)	N/A	0.1	0.1	0.1	0.0	**	0.1	0.1	0.1	ns
Number of Responding Households		3,880	1,974	978	996		1,906	950	956	

NOTE: Factor loadings represent correlation of the sub-indicator with the respective index. Indicator labels describe the theoretical range of the respective indicator. Resilience capacity sub-indicators are reported in their original units (i.e., not indexed 0-100)

[a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.25b. Resilience capacity indexes and indicators - absorptive, indexed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Absorptive Capacity Index (0-100)	33.9	37.8	33.0	42.9	***	32.2	29.2	38.3	***
Availability of informal safety nets (0-100)	23.2	27.7	20.1	35.7	***	21.4	19.0	26.1	ns
Index of asset ownership (0-100)	8.5	9.0	8.2	9.8	*	8.2	7.2	10.3	***
Access to savings (0-100)	18.9	24.8	19.2	30.8	*	16.4	9.8	29.7	***
Shock preparedness and mitigation (0-100)	24.0	24.4	23.8	25.0	ns	23.9	23.5	24.6	ns
Bonding social capital index (0-100)	50.2	52.2	51.4	53.1	ns	49.3	46.9	54.2	**
Access to humanitarian assistance (0-100)	23.6	31.7	24.6	39.2	*	20.2	24.1	12.5	*
Access to remittances (0-100)	5.3	13.0	6.5	19.9	***	2.1	1.4	3.4	ns
Access to insurance (0-100)	1.6	1.8	1.5	2.2	ns	1.4	1.1	2.1	ns
Number of Responding Households	3,876	1,973	977	996		1,903	949	954	
Adaptive Capacity Index (0-100)	33.2	34.1	30.8	37.6	**	32.8	29.2	40.0	***
Index of asset ownership (0-100)	8.5	9.0	8.2	9.8	ns	8.2	7.2	10.3	*
Index for education and training (0-100)	28.1	27.9	21.8	34.3	ns	28.1	24.2	36.2	**
Index for exposure to information (0-100)	16.5	20.3	22.3	18.2	***	14.9	10.9	22.9	*
Index of social network (0-100)	23.3	33.5	24.3	43.2	***	19.0	16.2	24.7	*
Access to financial resources (0-100)	30.1	26.4	11.3	42.4	*	31.7	24.3	46.6	ns
Index of aspirations/confidence to adapt (0-100)	63.9	59.6	58.4	61.0	***	65.7	64.4	68.4	ns
Linking social capital index (0-100)	5.6	5.3	6.2	4.2	ns	5.8	4.2	9.1	***
Livelihood Diversification (0-100)	10.2	9.4	10.0	8.9	*	10.6	10.6	10.6	***
Bridging social capital index (0-100)	49.1	50.7	49.2	52.4	**	48.4	46.7	51.9	ns
Adoption of improved practices (0-100)	8.2	8.4	13.1	3.3	ns	8.2	6.7	11.3	**
Number of Responding Households	3,875	1,973	977	996		1,902	949	953	

Table A6.25b. Resilience capacity indexes and indicators - absorptive, indexed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Transformative Capacity Index (0-100)	37.3	39.0	28.3	50.4	***	36.6	33.4	42.9	ns
Access to infrastructure (0-100)	57.3	59.5	48.9	70.7	ns	56.5	54.7	59.9	ns
Access to livestock services (0-100)	19.4	26.0	16.2	36.5	***	16.6	14.3	21.2	ns
Access to basic services (0-100)	39.6	41.0	32.6	50.0	ns	39.0	34.0	49.1	ns
Access to markets (0-100)	51.8	40.5	21.4	60.8	*	56.6	50.8	68.1	*
Access to extension (0-100)	9.8	11.9	2.2	22.2	***	8.9	7.6	11.6	ns
Participation in local decision making (0-100)	2.0	2.1	1.9	2.3	**	2.0	1.5	2.8	ns
Access to communal natural resources (0-100)	4.8	9.5	7.3	11.8	ns	2.8	3.1	2.4	ns
Linking social capital index (0-100)	5.6	5.3	6.2	4.2	ns	5.8	4.2	9.1	*
Gender index (0-100)	17.2	20.8	17.7	24.0	ns	15.7	13.6	19.7	**
Bridging social capital index (0-100)	49.1	50.7	49.1	52.4	**	48.4	46.7	51.9	ns
Formal safety nets (0-100)	12.5	15.3	11.3	19.5	ns	11.4	12.9	8.3	ns
Collective action (0-10)	0.7	0.9	1.4	0.4	*	0.6	0.6	0.8	***
Number of Responding Households	3,880	1,974	978	996		1,906	950	956	

NOTE:
[a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.26a. Resilience capacity indexes and indicators - adaptive
[Baseline Study, Kenya 2021]

	Factor loading	Combined RFSA areas	CRS				MC			
			Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Absorptive Capacity Index (0-100)		33.9	37.8	33.0	42.9	***	32.2	29.2	38.3	***
Access to humanitarian assistance (0-1)	0.28	0.24	0.32	0.25	0.39	***	0.20	0.24	0.12	ns
Access to insurance (0-1)	0.01	0.02	0.02	0.02	0.02	ns	0.01	0.01	0.02	**
Shock preparedness and mitigation (0-4)	0.40	1.0	1.0	1.0	1.0	*	1.0	0.9	1.0	***
Index of asset ownership (0-71)	0.65	6.0	6.4	5.8	7.0	***	5.9	5.1	7.3	ns
Access to remittances (0-1)	0.13	0.05	0.13	0.07	0.20	*	0.02	0.01	0.03	***
Access to savings (0-1)	0.63	0.19	0.25	0.19	0.31	ns	0.16	0.10	0.30	ns
Bonding social capital index (0-6)	0.34	3.0	3.1	3.1	3.2	ns	3.0	2.8	3.3	ns
Availability of informal safety nets (0-6)	0.70	1.4	1.7	1.2	2.1	*	1.3	1.1	1.6	*
Number of Responding Households		3,876	1,973	977	996		1,903	949	954	
Adaptive Capacity Index (0-100)		33.2	34.1	30.8	37.6	**	32.8	29.2	40.0	***
Bridging social capital index (0-6)	0.22	2.9	3.0	2.9	3.1	ns	2.9	2.8	3.1	*
Linking social capital index (0-4)	0.40	0.2	0.2	0.2	0.2	ns	0.2	0.2	0.4	**
Index of social network (0-3)	0.60	0.7	1.0	0.7	1.3	***	0.6	0.5	0.7	*
Index for education and training (0-2)	0.64	0.6	0.6	0.4	0.7	***	0.6	0.5	0.7	*
Livelihood Diversification (0-17)	0.33	1.7	1.6	1.7	1.5	*	1.8	1.8	1.8	ns
Adoption of improved practices (0-1)	0.14	0.08	0.08	0.13	0.03	***	0.08	0.07	0.11	ns
Index for exposure to information (0-19)	0.62	3.1	3.9	4.2	3.5	ns	2.8	2.1	4.4	***
Index of asset ownership (0-71)	0.66	6.0	6.4	5.8	7.0	*	5.9	5.1	7.3	***
Access to financial resources (0-2)	0.59	0.6	0.5	0.2	0.8	**	0.6	0.5	0.9	ns
Index of aspirations/confidence to adapt (0-16)	0.51	10.2	9.5	9.3	9.8	ns	10.5	10.3	10.9	**
Number of Responding Households		3,875	1,973	977	996		1,902	949	953	

Table A6.26a. Resilience capacity indexes and indicators - adaptive
[Baseline Study, Kenya 2021]

	Factor loading	Combined RFSA areas	CRS				MC			
			Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Transformative Capacity Index (0-100)		37.3	39.0	28.3	50.4	***	36.6	33.4	42.9	ns
Formal safety nets (0-6)	N/A	0.8	0.9	0.7	1.2	ns	0.7	0.8	0.5	ns
Access to markets (0-3)	0.67	1.6	1.2	0.6	1.8	***	1.7	1.5	2.0	ns
Access to communal natural resources (0-4)	0.15	0.2	0.4	0.3	0.5	ns	0.1	0.1	0.1	ns
Access to basic services (0-5)	0.75	2.0	2.1	1.6	2.5	*	2.0	1.7	2.5	*
Access to infrastructure (0-4)	0.83	2.3	2.4	2.0	2.8	***	2.3	2.2	2.4	ns
Access to extension (0-2)	0.64	0.2	0.2	0.0	0.4	**	0.2	0.2	0.2	ns
Access to livestock services (0-2)	0.75	0.4	0.5	0.3	0.7	ns	0.3	0.3	0.4	ns
Bridging social capital index (0-6)	0.05	2.9	3.0	2.9	3.1	ns	2.9	2.8	3.1	*
Linking social capital index (0-4)	0.09	0.2	0.2	0.2	0.2	ns	0.2	0.2	0.4	**
Collective action (0-10)	N/A	0.1	0.1	0.1	0.0	**	0.1	0.1	0.1	ns
Participation in local decision making (0-1)	0.20	0.02	0.02	0.02	0.02	ns	0.02	0.02	0.03	ns
Gender index (0-7)	0.06	1.2	1.5	1.2	1.7	*	1.1	1.0	1.4	***
Number of Responding Households		3,880	1,974	978	996		1,906	950	956	

NOTE: Factor loadings represent correlation of the sub-indicator with the respective index. Indicator labels describe the theoretical min-max range of the respective indicator. Resilience capacity sub-indicators are reported in their original units (i.e., not indexed 0-100)

[a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.26b. Resilience capacity indexes and indicators - adaptive, indexed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Absorptive Capacity Index (0-100)	33.9	37.8	33.0	42.9	***	32.2	29.2	38.3	***
Access to insurance (0-100)	1.6	1.8	1.5	2.2	ns	1.4	1.1	2.1	ns
Access to remittances (0-100)	5.3	13.0	6.5	19.9	***	2.1	1.4	3.4	ns
Access to humanitarian assistance (0-100)	23.6	31.7	24.6	39.2	*	20.2	24.1	12.5	*
Bonding social capital index (0-100)	50.2	52.2	51.4	53.1	ns	49.3	46.9	54.2	**
Shock preparedness and mitigation (0-100)	24.0	24.4	23.8	25.0	ns	23.9	23.5	24.6	ns
Access to savings (0-100)	18.9	24.8	19.2	30.8	*	16.4	9.8	29.7	***
Index of asset ownership (0-100)	8.5	9.0	8.2	9.8	*	8.2	7.2	10.3	***
Availability of informal safety nets (0-100)	23.2	27.7	20.1	35.7	***	21.4	19.0	26.1	ns
Number of Responding Households	3,876	1,973	977	996		1,903	949	954	
Adaptive Capacity Index (0-100)	33.2	34.1	30.8	37.6	**	32.8	29.2	40.0	***
Bridging social capital index (0-100)	49.1	50.7	49.2	52.4	ns	48.4	46.7	51.9	*
Linking social capital index (0-100)	5.6	5.3	6.2	4.2	ns	5.8	4.2	9.1	**
Index of social network (0-100)	23.3	33.5	24.3	43.2	***	19.0	16.2	24.7	*
Index for education and training (0-100)	28.1	27.9	21.8	34.3	***	28.1	24.2	36.2	*
Livelihood Diversification (0-100)	10.2	9.4	10.0	8.9	*	10.6	10.6	10.6	ns
Adoption of improved practices (0-100)	8.2	8.4	13.1	3.3	***	8.2	6.7	11.3	ns
Index for exposure to information (0-100)	16.5	20.3	22.3	18.2	ns	14.9	10.9	22.9	***
Index of asset ownership (0-100)	8.5	9.0	8.2	9.8	*	8.2	7.2	10.3	***
Access to financial resources (0-100)	30.1	26.4	11.3	42.4	**	31.7	24.3	46.6	ns
Index of aspirations/confidence to adapt (0-100)	63.9	59.6	58.4	61.0	ns	65.7	64.4	68.4	**
Number of Responding Households	3,875	1,973	977	996		1,902	949	953	

Table A6.26b. Resilience capacity indexes and indicators - adaptive, indexed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Transformative Capacity Index (0-100)	37.3	39.0	28.3	50.4	***	36.6	33.4	42.9	ns
Formal safety nets (0-100)	12.5	15.3	11.3	19.5	ns	11.4	12.9	8.3	ns
Access to markets (0-100)	51.8	40.5	21.4	60.8	*	56.6	50.8	68.1	*
Access to communal natural resources (0-100)	4.8	9.5	7.3	11.8	ns	2.8	3.1	2.4	ns
Access to basic services (0-100)	39.6	41.0	32.6	50.0	ns	39.0	34.0	49.1	ns
Access to infrastructure (0-100)	57.3	59.5	48.9	70.7	ns	56.5	54.7	59.9	ns
Access to extension (0-100)	9.8	11.9	2.2	22.2	***	8.9	7.6	11.6	ns
Access to livestock services (0-100)	19.4	26.0	16.2	36.5	***	16.6	14.3	21.2	ns
Bridging social capital index (0-100)	49.1	50.7	49.1	52.4	**	48.4	46.7	51.9	ns
Linking social capital index (0-100)	5.6	5.3	6.2	4.2	ns	5.8	4.2	9.1	*
Collective action (0-10)	0.7	0.9	1.4	0.4	*	0.6	0.6	0.8	***
Participation in local decision making (0-100)	2.0	2.1	1.9	2.3	**	2.0	1.5	2.8	ns
Gender index (0-100)	17.2	20.8	17.7	24.0	ns	15.7	13.6	19.7	**
Number of Responding Households	3,880	1,974	978	996		1,906	950	956	

NOTE:
[a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.27a. Resilience capacity indexes and indicators - transformative
[Baseline Study, Kenya 2021]

	Factor loading	Combined RFSA areas	CRS				MC			
			Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Absorptive Capacity Index (0-100)		33.9	37.8	33.0	42.9	***	32.2	29.2	38.3	***
Access to humanitarian assistance (0-1)	0.28	0.24	0.32	0.25	0.39	***	0.20	0.24	0.12	ns
Access to insurance (0-1)	0.01	0.02	0.02	0.02	0.02	ns	0.01	0.01	0.02	**
Shock preparedness and mitigation (0-4)	0.40	1.0	1.0	1.0	1.0	*	1.0	0.9	1.0	***
Index of asset ownership (0-71)	0.65	6.0	6.4	5.8	7.0	***	5.9	5.1	7.3	ns
Access to remittances (0-1)	0.13	0.05	0.13	0.07	0.20	*	0.02	0.01	0.03	***
Access to savings (0-1)	0.63	0.19	0.25	0.19	0.31	ns	0.16	0.10	0.30	ns
Bonding social capital index (0-6)	0.34	3.0	3.1	3.1	3.2	ns	3.0	2.8	3.3	ns
Availability of informal safety nets (0-6)	0.70	1.4	1.7	1.2	2.1	*	1.3	1.1	1.6	*
Number of Responding Households		3,876	1,973	977	996		1,903	949	954	
Adaptive Capacity Index (0-100)		33.2	34.1	30.8	37.6	ns	32.8	29.2	40.0	***
Adoption of improved practices (0-1)	0.14	0.08	0.08	0.13	0.03	***	0.08	0.07	0.11	ns
Bridging social capital index (0-6)	0.22	2.9	3.0	2.9	3.1	ns	2.9	2.8	3.1	*
Livelihood Diversification (0-17)	0.33	1.7	1.6	1.7	1.5	*	1.8	1.8	1.8	ns
Linking social capital index (0-4)	0.40	0.2	0.2	0.2	0.2	ns	0.2	0.2	0.4	**
Index of aspirations/confidence to adapt (0-16)	0.51	10.2	9.5	9.3	9.8	ns	10.5	10.3	10.9	**
Access to financial resources (0-2)	0.59	0.6	0.5	0.2	0.8	**	0.6	0.5	0.9	ns
Index of social network (0-3)	0.60	0.7	1.0	0.7	1.3	***	0.6	0.5	0.7	*
Index for exposure to information (0-19)	0.62	3.1	3.9	4.2	3.5	ns	2.8	2.1	4.4	***
Index for education and training (0-2)	0.64	0.6	0.6	0.4	0.7	***	0.6	0.5	0.7	*
Index of asset ownership (0-71)	0.66	6.0	6.4	5.8	7.0	*	5.9	5.1	7.3	***
Number of Responding Households		3,875	1,973	977	996		1,902	949	953	

Table A6.27a. Resilience capacity indexes and indicators - transformative
[Baseline Study, Kenya 2021]

	Factor loading	Combined RFSA areas	CRS				MC			
			Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Transformative Capacity Index (0-100)		37.3	39.0	28.3	50.4	***	36.6	33.4	42.9	ns
Formal safety nets (0-6)	N/A	0.8	0.9	0.7	1.2	ns	0.7	0.8	0.5	ns
Collective action (0-10)	N/A	0.1	0.1	0.1	0.0	**	0.1	0.1	0.1	ns
Bridging social capital index (0-6)	0.05	2.9	3.0	2.9	3.1	ns	2.9	2.8	3.1	*
Gender index (0-7)	0.06	1.2	1.5	1.2	1.7	*	1.1	1.0	1.4	***
Linking social capital index (0-4)	0.09	0.2	0.2	0.2	0.2	ns	0.2	0.2	0.4	**
Access to communal natural resources (0-4)	0.15	0.2	0.4	0.3	0.5	ns	0.1	0.1	0.1	ns
Participation in local decision making (0-1)	0.20	0.02	0.02	0.02	0.02	ns	0.02	0.02	0.03	ns
Access to extension (0-2)	0.64	0.2	0.2	0.0	0.4	**	0.2	0.2	0.2	ns
Access to markets (0-3)	0.67	1.6	1.2	0.6	1.8	***	1.7	1.5	2.0	ns
Access to basic services (0-5)	0.75	2.0	2.1	1.6	2.5	*	2.0	1.7	2.5	*
Access to livestock services (0-2)	0.75	0.4	0.5	0.3	0.7	ns	0.3	0.3	0.4	ns
Access to infrastructure (0-4)	0.83	2.3	2.4	2.0	2.8	***	2.3	2.2	2.4	ns
Number of Responding Households		3,880	1,974	978	996		1,906	950	956	

NOTE: Factor loadings represent correlation of the sub-indicator with the respective index. Indicator labels describe the theoretical min-max range of the respective indicator. Resilience capacity sub-indicators are reported in their original units (i.e., not indexed 0-100)

[a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.27b. Resilience capacity indexes and indicators - transformative, indexed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Absorptive Capacity Index (0-100)	33.9	37.8	33.0	42.9	***	32.2	29.2	38.3	***
Access to insurance (0-100)	1.6	1.8	1.5	2.2	ns	1.4	1.1	2.1	ns
Access to remittances (0-100)	5.3	13.0	6.5	19.9	***	2.1	1.4	3.4	ns
Access to humanitarian assistance (0-100)	23.6	31.7	24.6	39.2	*	20.2	24.1	12.5	**
Bonding social capital index (0-100)	50.2	52.2	51.4	53.1	ns	49.3	46.9	54.2	**
Shock preparedness and mitigation (0-100)	24.0	24.4	23.8	25.0	ns	23.9	23.5	24.6	ns
Access to savings (0-100)	18.9	24.8	19.2	30.8	*	16.4	9.8	29.7	***
Index of asset ownership (0-100)	8.5	9.0	8.2	9.8	*	8.2	7.2	10.3	***
Availability of informal safety nets (0-100)	23.2	27.7	20.1	35.7	***	21.4	19.0	26.1	ns
Number of Responding Households	3,876	1,973	977	996		1,903	949	954	
Adaptive Capacity Index (0-100)	33.2	34.1	30.8	37.6	**	32.8	29.2	40.0	***
Adoption of improved practices (0-100)	8.2	8.4	13.1	3.3	***	8.2	6.7	11.3	ns
Bridging social capital index (0-100)	49.1	50.7	49.2	52.4	ns	48.4	46.7	51.9	*
Livelihood Diversification (0-100)	10.2	9.4	10.0	8.9	*	10.6	10.6	10.6	ns
Linking social capital index (0-100)	5.6	5.3	6.2	4.2	ns	5.8	4.2	9.1	**
Index of aspirations/confidence to adapt (0-100)	63.9	59.6	58.4	61.0	ns	65.7	64.4	68.4	**
Access to financial resources (0-100)	30.1	26.4	11.3	42.4	**	31.7	24.3	46.6	ns
Index of social network (0-100)	23.3	33.5	24.3	43.2	***	19.0	16.2	24.7	*
Index for exposure to information (0-100)	16.5	20.3	22.3	18.2	ns	14.9	10.9	22.9	***
Index for education and training (0-100)	28.1	27.9	21.8	34.3	***	28.1	24.2	36.2	*
Index of asset ownership (0-100)	8.5	9.0	8.2	9.8	*	8.2	7.2	10.3	***
Number of Responding Households	3,875	1,973	977	996		1,902	949	953	

Table A6.27b. Resilience capacity indexes and indicators - transformative, indexed
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Transformative Capacity Index (0-100)	37.3	39.0	28.3	50.4	***	36.6	33.4	42.9	ns
Formal safety nets (0-100)	12.5	15.3	11.3	19.5	ns	11.4	12.9	8.3	ns
Collective action (0-10)	0.7	0.9	1.4	0.4	*	0.6	0.6	0.8	ns
Bridging social capital index (0-100)	49.1	50.7	49.1	52.4	**	48.4	46.7	51.9	*
Gender index (0-100)	17.2	20.8	17.7	24.0	ns	15.7	13.6	19.7	***
Linking social capital index (0-100)	5.6	5.3	6.2	4.2	ns	5.8	4.2	9.1	**
Access to communal natural resources (0-100)	4.8	9.5	7.3	11.8	ns	2.8	3.1	2.4	ns
Participation in local decision making (0-100)	2.0	2.1	1.9	2.3	**	2.0	1.5	2.8	ns
Access to extension (0-100)	9.8	11.9	2.2	22.2	***	8.9	7.6	11.6	ns
Access to markets (0-100)	51.8	40.5	21.4	60.8	*	56.6	50.8	68.1	ns
Access to basic services (0-100)	39.6	41.0	32.6	50.0	ns	39.0	34.0	49.1	*
Access to livestock services (0-100)	19.4	26.0	16.2	36.5	***	16.6	14.3	21.2	ns
Access to infrastructure (0-100)	57.3	59.5	48.9	70.7	ns	56.5	54.7	59.9	ns
Number of Responding Households	3,880	1,974	978	996		1,906	950	956	

NOTE:
[a] Significance tests were performed to determine whether whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.28. COVID-19 awareness and adoption of COVID-19 mitigation protocols
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
% Households aware of COVID-19	97.5	97.5	96.0	99.1		97.5	98.4	95.7	
Number of Responding Households	3878	1972	977	995		1906	950	956	
Adoption of COVID-19 mitigation protocols									
Quarantine	3.5	3.4	4.9	2.0	ns	3.6	4.5	1.8	*
Separation from sick person	3.8	7.1	1.8	11.8	**	2.3	3.0	1.1	ns
No contact with sick person	5.7	10.2	3.4	16.2	**	3.7	2.9	5.2	ns
Washed hands soap & water	18.4	20.5	17.9	22.7	ns	17.5	16.8	18.9	ns
Wash hands more often	10.5	9.6	4.3	14.2	**	10.9	10.3	12.1	ns
Help from medical clinic	2.7	3.2	0.7	5.4	**	2.4	1.6	4.1	ns
Number of Responding Households	2390	1254	552	702		1136	548	588	
COVID-19 vaccination	1.4	3.3	0.8	5.2	*	0.5	0.3	1.0	ns
Number of Responding Households	1906	993	405	588		913	445	468	

NOTE: [a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.29. Percentage of households who experienced COVID-19 impact on livelihoods, by type of impact
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig[a]	Total	Turkana	Samburu	Sig[a]
% Households with livelihood impacted by COVID-19	49.4	49.9	41.4	58.9		49.2	49.1	49.5	
Number of Responding Households	3879	1973	977	996		1906	950	956	
Type of impact to livelihood									
Increase in price of food and other items	48.6	49.4	44.4	53.2	ns	48.3	55.7	33.7	**
Increase in price of products sold	28.7	28.1	27.8	28.4	ns	29.0	27.6	31.8	ns
Inability to access livestock market to sell products or buy inputs (movement restrictions)	28.7	37.7	49.2	29.2	**	24.9	15.8	43.2	***
Inability to access markets for food and other necessities (movement restrictions)	25.2	26.2	34.8	19.8	*	24.8	19.6	35.0	***
Reduction in income	24.4	24.8	12.5	34.0	***	24.2	28.1	16.6	*
Increase in transportation costs	21.7	20.3	18.8	21.4	ns	22.2	22.3	22.0	ns
Lost employment	11.2	8.8	3.8	12.6	**	12.2	9.3	18.0	*
Inability to access agricultural commodity market to sell products or buy inputs	12.8	17.3	20.7	14.8	ns	10.9	7.8	16.9	*
Inability to access health care	6.3	9.3	13.4	6.2	**	5.0	6.1	3.0	*
Unwilling/afraid to access health care because of the perceived risks of contact	6.9	12.1	14.6	10.3	ns	4.7	4.7	4.8	ns
Increase in price of livestock inputs	6.1	10.1	15.3	6.3	*	4.5	1.2	10.9	**
Decrease in demand for products	3.2	1.8	1.9	1.7	ns	3.8	3.5	4.5	ns
Increase in price of crop inputs	3.4	3.1	4.4	2.1	ns	3.5	2.7	5.3	ns
Decrease in price of products sold	3.2	2.9	4.0	2.1	ns	3.3	2.0	5.9	**
Constrained access to water	3.4	5.1	2.4	7.2	*	2.6	3.2	1.6	ns
Looting/theft	2.2	1.4	0.3	2.2	ns	2.5	3.2	1.3	ns
Difficulty accessing financial services and credit	2.2	2.7	1.7	3.4	ns	2.0	2.2	1.5	ns
Illness	2.7	4.5	0.8	7.3	*	2.0	2.0	1.9	ns
Inability to repay loans	1.8	1.5	1.6	1.5	ns	1.9	1.9	1.8	ns
Increase in storage costs	1.8	1.6	0.7	2.2	ns	1.8	1.9	1.7	ns

Table A6.29. Percentage of households who experienced COVID-19 impact on livelihoods, by type of impact [Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig[a]	Total	Turkana	Samburu	Sig[a]
Labor shortages (lack of labor to help with farming and processing)	1.6	1.2	0.2	1.9	*	1.7	0.8	3.6	*
Death	1.5	1.5	1.7	1.4	ns	1.5	1.7	1.1	ns
Inability to farm and/or care for livestock due to sickness of HH member	1.6	2.1	2.8	1.5	ns	1.4	1.1	2.1	ns
Constrained access to pasture	2.7	6.0	3.0	8.2	*	1.3	1.0	1.9	ns
Delay or interruption of cash assistance	1.7	2.7	2.4	2.9	ns	1.2	1.3	1.1	ns
Unable to engage with other community members in asset-building activities (road building, etc.)	1.2	1.1	0.0	2.0	**	1.2	1.5	0.5	ns
Other	0.8	0.5	0.0	0.8	*	1.0	0.7	1.6	ns
Shortage of livestock inputs (feed and veterinary services)	0.7	1.1	1.6	0.7	ns	0.5	0.7	0.1	ns
Don't Know	0.3	0.0	0.0	0.0	.	0.5	0.5	0.4	ns
Shortage of crop inputs (seeds, fertilizer, pesticides)	0.4	0.3	0.3	0.4	ns	0.4	0.3	0.7	ns
Constrained access to land	0.6	1.3	0.1	2.1	ns	0.3	0.4	0.2	ns
Refused	0.0	0.0	0.0	0.0	.	0.0	0.0	0.0	.
Number of Responding Households	1906	993	405	588		913	445	468	

NOTE: [a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.30. Coping strategies for COVID-19 impacts on livelihoods
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Strategies adopted to cope with impact of COVID-19 on livelihood									
Reduced food consumption	49.0	46.8	42.8	49.7	ns	50.0	54.9	40.2	*
Reduced non-essential expenses	42.6	37.1	27.5	44.3	**	45.0	47.2	40.4	ns
Food on credit local merchant	30.8	40.0	24.8	51.2	***	27.0	25.8	29.2	ns
Washed hands soap & water	15.8	19.8	18.1	21.0	ns	14.1	12.4	17.7	ns
Sold livestock	14.4	20.6	20.2	21.0	ns	11.8	6.9	21.4	**
Did nothing	8.0	5.8	5.0	6.3	ns	8.9	8.7	9.3	ns
Savings to buy food	6.7	10.7	2.5	16.9	***	5.0	3.7	7.7	ns
Less expensive housing	4.4	3.7	0.4	6.1	**	4.7	3.7	6.5	ns
Emergency food aid govt/NGO	3.8	2.9	4.0	2.0	ns	4.3	5.7	1.4	*
Wash hands more often	4.8	6.4	2.7	9.2	*	4.1	3.7	5.0	ns
Slaughter livestock	4.2	4.8	7.7	2.6	*	4.0	2.2	7.5	*
Take up more work	3.9	3.9	3.1	4.5	ns	3.9	2.7	6.3	ns
Livestock to pasture	6.6	14.2	11.8	16.0	ns	3.4	1.7	6.6	*
No contact with sick person	5.3	10.9	3.7	16.2	*	3.0	2.4	4.3	ns
Sent children elsewhere	2.8	2.8	4.1	1.8	ns	2.8	4.0	0.3	*
Money/food from local group	3.4	5.3	4.0	6.2	ns	2.6	3.9	0.0	**
HH member migrated	2.1	1.3	2.3	0.5	*	2.5	2.0	3.6	ns
Quarantine	2.6	2.9	4.4	1.7	ns	2.4	3.0	1.4	ns
Help from medical clinic	2.1	2.4	0.2	4.1	**	2.0	1.0	3.9	*
Money/food from outside	2.0	2.4	3.3	1.6	ns	1.8	2.5	0.4	*
Migrate (family)	1.6	1.5	2.5	0.7	ns	1.7	2.1	1.0	ns
Physical separation from sick person	3.2	6.9	1.7	10.8	**	1.6	1.9	1.1	ns
Other	1.2	0.5	0.6	0.4	ns	1.5	1.9	0.8	ns
Children out of school	1.5	1.9	2.3	1.5	ns	1.3	1.5	1.0	ns
Savings for education	1.7	2.6	0.6	4.1	**	1.3	1.2	1.4	ns
Savings for other expenses	1.9	3.5	0.9	5.5	**	1.2	0.9	1.8	ns
Loan from bank	0.9	0.2	0.0	0.4	ns	1.2	1.6	0.2	ns
Emergency cash transfer govt/NGO	1.2	1.2	1.7	0.9	ns	1.1	0.9	1.5	ns
Spiritual practices	4.5	12.6	18.7	8.1	**	1.1	1.4	0.6	ns
Loan within the community	2.2	5.3	0.9	8.6	**	0.9	0.8	1.1	ns
Loan from moneylender	0.6	0.1	0.0	0.2	ns	0.8	1.1	0.3	ns
Loan from MFI/VSLA	0.6	0.3	0.0	0.6	ns	0.7	0.5	1.1	ns

Table A6.30. Coping strategies for COVID-19 impacts on livelihoods
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Strategies adopted to cope with impact of COVID-19 on livelihood									
COVID 19 vaccination	1.4	3.3	0.8	5.2	*	0.5	0.3	1.0	ns
Permanent food support govt/NGO	0.4	0.3	0.5	0.2	ns	0.5	0.4	0.6	ns
Lease out land	0.2	0.0	0.0	0.0	.	0.3	0.5	0.0	ns
Savings to pay health care	0.8	2.1	0.1	3.5	*	0.3	0.2	0.4	ns
Remittances	0.6	1.4	0.0	2.5	*	0.2	0.1	0.4	ns
Sell household items	0.2	0.4	0.0	0.6	ns	0.2	0.1	0.3	ns
Savings dwelling repair	0.2	0.4	0.0	0.8	*	0.1	0.1	0.0	ns
Loan outside of the community	0.3	0.9	0.6	1.1	ns	0.1	0.1	0.0	ns
Savings to buy productive assets	0.2	0.5	0.5	0.5	ns	0.1	0.0	0.2	ns
Permanent cash transfer govt/NGO	0.1	0.1	0.0	0.1	ns	0.1	0.0	0.2	ns
Sell productive assets	0.0	0.1	0.0	0.2	ns	0.0	0.0	0.0	.
Savings to buy livestock	0.0	0.1	0.2	0.0	ns	0.0	0.0	0.0	.
Sent children to work	0.0	0.0	0.1	0.0	ns	0.0	0.0	0.0	.
FFW/CFW	0.0	0.0	0.0	0.0	.	0.0	0.0	0.0	.
Number of Responding Households	1906	993	405	588		913	445	468	

NOTE: [a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.31. Percentage of households who experienced COVID-19 impact on food security, by type of impact
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Households with food security impacted by COVID-19	56.0	58.6	52.3	65.2	*	54.9	54.8	54.9	ns
Number of Responding Households	3880	1975	978	997		1905	950	955	
Type of impact to food security									
Price of foods increased	88.0	90.9	90.4	91.3	ns	86.7	89.9	80.3	*
Unable to market (movement restrictions or market closed)	41.1	39.7	44.7	35.3	ns	41.8	33.9	57.5	***
Products not available in the market	34.6	39.4	27.3	49.8	***	32.4	26.2	44.9	***
Traders are absent from the markets	26.3	28.8	28.8	28.9	ns	25.2	18.3	39.0	***
Delay of food aid	21.2	17.7	22.5	13.6	ns	22.8	29.1	10.1	*
Other	0.3	0.3	0.0	0.6	ns	0.3	0.0	0.9	ns
Number of Responding Households	2180	1161	508	653		1019	500	519	

NOTE: [a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

Table A6.32. Coping strategies for COVID-19 impacts on food security
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Strategies adopted to cope with impact of COVID-19 on food security									
Reduced food consumption	47.3	48.2	42.6	53.0	ns	46.9	49.7	41.4	ns
Reduced non-essential expenses	39.7	35.6	26.3	43.6	**	41.6	41.9	40.9	ns
Food on credit from local merchant	32.6	40.8	24.3	54.9	***	28.9	29.5	27.8	ns
Sold livestock	17.5	22.7	24.2	21.4	ns	15.2	9.3	27.1	**
Washed hands with soap & water	10.5	9.6	8.6	10.4	ns	10.9	9.4	13.9	ns
Wash hands more often	8.8	6.6	2.6	10.1	**	9.8	8.8	11.9	ns
Did nothing	9.1	10.3	11.5	9.3	ns	8.6	9.3	7.1	ns
Emergency food aid govt/NGO	4.1	2.5	2.1	2.9	ns	4.8	6.7	1.0	*
Savings to buy food	5.9	8.6	2.3	13.9	***	4.8	4.3	5.6	ns
Slaughter livestock	4.3	4.2	7.7	1.2	**	4.4	1.7	9.9	n**
Less expensive housing	3.2	3.1	0.3	5.4	**	3.3	1.7	6.4	**
Livestock to pasture	4.1	6.9	6.0	7.7	ns	2.8	1.1	6.3	*
Take up more work	2.5	2.4	1.1	3.5	*	2.6	1.9	4.0	ns
Sent children elsewhere	2.2	2.3	2.8	1.8	ns	2.2	2.8	1.0	ns
Quarantine	2.2	2.1	3.3	1.1	ns	2.2	2.7	1.3	ns
Money/food from local group	2.8	4.2	3.0	5.2	ns	2.2	3.1	0.3	**
Emergency cash transfer govt/NGO	1.8	1.1	1.7	0.7	ns	2.1	2.4	1.5	ns
HH member migrated	1.8	1.3	2.1	0.6	ns	2.0	2.1	1.7	ns
Help from medical clinic	1.7	2.1	0.6	3.4	*	1.5	0.9	2.8	ns
No contact with sick person	2.2	3.7	1.9	5.3	*	1.5	1.1	2.3	ns
Separation from sick person	1.8	3.1	0.6	5.2	**	1.3	1.7	0.3	ns
Money/food from outside	1.5	2.0	2.7	1.3	ns	1.3	1.6	0.6	ns
Loan from bank	0.9	0.3	0.2	0.3	ns	1.2	1.6	0.5	ns
Loan from moneylender	0.8	0.2	0.0	0.3	ns	1.1	1.3	0.8	ns
Loan within the community	2.3	4.8	0.7	8.3	***	1.1	1.0	1.3	ns
Children out of school	1.1	1.2	1.1	1.4	ns	1.1	1.0	1.2	ns
Savings for other expenses	1.2	1.5	0.5	2.4	ns	1.1	1.1	1.0	ns
Other (specify)	0.9	0.5	0.4	0.5	ns	1.0	1.2	0.7	ns
Spiriitual practices	3.5	9.1	11.8	6.8	ns	1.0	1.0	1.1	ns
Permanent food support govt/NGO	0.7	0.0	0.0	0.0	.	0.9	1.1	0.6	ns
Loan from MFI/VSLA	0.7	0.3	0.0	0.5	ns	0.8	0.5	1.6	ns
Savings for education	1.0	1.4	0.0	2.6	**	0.8	0.3	1.9	*
Loan outside of the community	0.7	1.1	0.4	1.8	ns	0.5	0.7	0.3	ns

Table A6.32. Coping strategies for COVID-19 impacts on food security
[Baseline Study, Kenya 2021]

	Combined RFSA areas	CRS				MC			
		Total	Marsabit	Isiolo	Sig.[a]	Total	Turkana	Samburu	Sig.[a]
Strategies adopted to cope with impact of COVID-19 on food security									
Savings to pay health care	0.9	1.8	0.0	3.3	**	0.5	0.4	0.6	ns
Migrate (family)	0.6	0.8	0.7	0.8	ns	0.5	0.6	0.2	ns
Sell productive assets	0.2	0.2	0.0	0.3	ns	0.3	0.3	0.2	ns
Sell household items	0.4	0.8	0.0	1.6	*	0.2	0.0	0.6	ns
Remittances	0.4	1.0	0.0	1.8	ns	0.2	0.3	0.0	ns
Permanent cash transfer govt/NGO	0.2	0.4	0.0	0.6	ns	0.1	0.0	0.4	ns
Savings to buy livestock	0.1	0.1	0.0	0.1	ns	0.1	0.1	0.0	ns
Savings to buy productive assets	0.2	0.5	0.2	0.7	ns	0.1	0.0	0.2	ns
Lease out land	0.1	0.1	0.2	0.0	ns	0.1	0.0	0.2	ns
Savings dwelling repair	0.0	0.2	0.1	0.2	ns	0.0	0.0	0.0	.
Sent children to work	0.0	0.1	0.0	0.1	ns	0.0	0.0	0.0	.
FFW/CFW	0.0	0.0	0.0	0.0	.	0.0	0.0	0.0	.
Number of households responding	2180	1161	508	653		1019	500	519	

NOTE: [a] Significance tests were performed to determine whether estimates differ by county. Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant.

ANNEX G: BIVARIATE AND MULTIVARIATE ANALYSIS TABLES

CONTENTS

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Percentage of households by FIES groups	**11.5**	**88.5**		**3,873**
Socio-economic characteristics				
Number of children under 5 years				
0	46.4	40.0	*	
1	35.7	32.7		
2	15.0	22.1		
3 or more	2.9	5.2		
Total	100.0	100.0		
Number of children 5-17 years				
0	36.5	21.4	***	
1	21.3	20.4		
2	15.8	20.3		
3	12.3	15.8		
4 or more	14.0	22.1		
Total	100.0	100.0		
Number of adult females (18+)				
0	13.3	7.0	***	
1	66.3	76.9		
2 or more	20.5	16.2		
Total	100.0	100.0		
Number of adult males (18+)				
0	10.9	21.6	***	
1	70.8	61.5		
2 or more	18.2	16.9		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Male head of household				
No	29.0	43.7	***	
Yes	71.0	56.3		
Total	100.0	100.0		
Age of head of household				
15-24 years old	12.2	7.6	**	
25-34 years old	33.2	26.2		
35-44 years old	20.1	21.7		
45-54 years old	18.4	15.5		
55-64 years old	8.7	12.6		
65+ years old	7.4	16.4		
Total	100.0	100.0		
Household head education level				
Preprimary	0.1	1.7	***	
Primary	17.9	15.6		
Post primary/Vocation	0.3	0.1		
Secondary 'A'	21.6	7.9		
College (Middle level)	18.0	2.5		
University	13.8	1.2		
No Schooling	28.3	70.9		
Total	100.0	100.0		
Gendered household type				
Both	75.8	71.7	***	
Female Only	10.9	21.4		
Male Only	13.3	6.7		
Child Only	0.0	0.3		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Number of Responding Households	496	3,377		
Livestock holdings				
Raises at least one type of livestock				
No	8.2	4.5	ns	
Yes	91.8	95.5		
Total	100.0	100.0		
Household raises cattle				
No	53.7	68.0	**	
Yes	46.3	32.0		
Total	100.0	100.0		
Household raises goats				
No	15.9	7.8	**	
Yes	84.1	92.2		
Total	100.0	100.0		
Household raises camels				
No	72.1	73.5	ns	
Yes	27.9	26.5		
Total	100.0	100.0		
Number of Responding Households	218	1,995		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Use of agricultural-related financial services				
Accessed at least one ag-related financial service				
No	69.3	92.4	***	
Yes	30.7	7.6		
Total	100.0	100.0		
Took out a loan (ag credit, in cash or in-kind)				
No	93.1	98.9	***	
Yes	6.9	1.1		
Total	100.0	100.0		
Participated in ag-related savings scheme				
No	69.7	93.2	***	
Yes	30.3	6.8		
Total	100.0	100.0		
Insured ag production against loss (insurance)				
No	98.2	99.6	**	
Yes	1.8	0.4		
Total	100.0	100.0		
Number of Responding Households	241	2,123		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Access to community-based savings or credit groups				
HH participates in group-based savings,microfinance or lending programs				
No	86.4	95.4	***	
Yes	13.6	4.6		
Total	100.0	100.0		
HH participates in group-based savings programs				
No	88.4	97.1	***	
Yes	11.6	2.9		
Total	100.0	100.0		
HH participates in group-based credit programs				
No	94.1	97.4	*	
Yes	5.9	2.6		
Total	100.0	100.0		
Number of Responding Households	493	3,371		
Adoption of targeted value chain practices				
Practiced at least one of the promoted VC activities				
No	78.2	84.6	ns	
Yes	21.8	15.4		
Total	100.0	100.0		
n	82	574		
Contract farming				
No	97.0	98.4	ns	
Yes	3.0	1.6		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Selling products via farmer associations				
No	93.6	96.4	ns	
Yes	6.4	3.6		
Total	100.0	100.0		
Sorting and grading				
No	96.3	95.9	ns	
Yes	3.7	4.1		
Total	100.0	100.0		
Bulking				
No	95.5	94.4	ns	
Yes	4.5	5.6		
Total	100.0	100.0		
Improved record keeping, budgeting and financial mgmt				
No	100.0	97.6	ns	
Yes	0.0	2.4		
Total	100.0	100.0		
Use of training and extension services				
No	96.3	99.1	ns	
Yes	3.7	0.9		
Total	100.0	100.0		
n	82	570		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Targeted Fodder Practices				
Use of improved pasture inputs (e.g., quality seeds)				
No	12.4	82.4	**	
Yes	87.6	17.6		
Total	100.0	100.0		
Use of mechanized pasture harvesting and baling tech				
No	66.4	94.9	ns	
Yes	33.6	5.1		
Total	100.0	100.0		
Construction/use of hay stores by farmer org				
No	100.0	92.1	ns	
Yes	0.0	7.9		
Total	100.0	100.0		
Use of fodder seeds				
No	66.4	84.4	ns	
Yes	33.6	15.6		
Total	100.0	100.0		
Use of harvesting/drying/packaging/storage/marketing tech				
No	100.0	88.2	ns	
Yes	0.0	11.8		
Total	100.0	100.0		
Number of Responding Households	3	23		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted improved crop management/NRM practices - cowpea				
Used at least one improved crop and/or NRM practice				
No	0.0	33.6	ns	
Yes	100.0	66.4		
Total	100.0	100.0		
Improved/certified seed				
No	43.9	77.2	*	
Yes	56.1	22.8		
Total	100.0	100.0		
Seedling production and transplantation				
No	88.7	98.7	***	
Yes	11.3	1.3		
Total	100.0	100.0		
Crop rotation				
No	60.8	94.9	***	
Yes	39.2	5.1		
Total	100.0	100.0		
Kitchen gardens using sunken pits				
No	84.1	95.6	ns	
Yes	15.9	4.4		
Total	100.0	100.0		
Organic manure				
No	66.2	77.7	ns	
Yes	33.8	22.3		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Soil testing				
No	100.0	99.6	ns	
Yes	0.0	0.4		
Total	100.0	100.0		
Application of inoculant				
No	100.0	98.8	ns	
Yes	0.0	1.2		
Total	100.0	100.0		
Drip or sprinkler irrigation tech				
No	100.0	95.1	ns	
Yes	0.0	4.9		
Total	100.0	100.0		
Rainwater harvesting technologies				
No	100.0	94.1	ns	
Yes	0.0	5.9		
Total	100.0	100.0		
Flood-based farming technologies				
No	88.7	99.1	**	
Yes	11.3	0.9		
Total	100.0	100.0		
Production planning and crop rotation in irrigation schemes				
No	100.0	92.6	ns	
Yes	0.0	7.4		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Drought early warning systems or information				
No	100.0	95.1	ns	
Yes	0.0	4.9		
Total	100.0	100.0		
Number of Responding Households	10	96		
Adoption of targeted improved crop management/NRM practices - greengram				
Used at least one improved crop and/or NRM practice				
No	100.0	19.6	ns	
Yes	0.0	80.4		
Total	100.0	100.0		
Improved/certified seed				
No	100.0	71.5	ns	
Yes	0.0	28.5		
Total	100.0	100.0		
Seedling production and transplantation				
No	100.0	93.0	ns	
Yes	0.0	7.0		
Total	100.0	100.0		
Crop rotation				
No	100.0	81.1	ns	
Yes	0.0	18.9		
Total	100.0	100.0		
Kitchen gardens using sunken pits				
No	100.0	98.9	ns	
Yes	0.0	1.1		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Organic manure				
No	100.0	73.8	ns	
Yes	0.0	26.2		
Total	100.0	100.0		
Soil testing				
No	100.0	100.0	n/a	
Yes	0.0	0.0		
Total	100.0	100.0		
Application of inoculant				
No	100.0	97.2	ns	
Yes	0.0	2.8		
Total	100.0	100.0		
Drip or sprinkler irrigation tech				
No	100.0	98.1	ns	
Yes	0.0	1.9		
Total	100.0	100.0		
Rainwater harvesting technologies				
No	100.0	97.9	ns	
Yes	0.0	2.1		
Total	100.0	100.0		
Flood-based farming technologies				
No	100.0	100.0	n/a	
Yes	0.0	0.0		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Production planning and crop rotation in irrigation schemes				
No	100.0	94.0	ns	
Yes	0.0	6.0		
Total	100.0	100.0		
Drought early warning systems or information				
No	100.0	85.6	ns	
Yes	0.0	14.4		
Total	100.0	100.0		
Number of Responding Households	1	38		
Adoption of targeted improved crop management/NRM practices - sorghum				
Used at least one improved crop and/or NRM practice				
No	57.4	32.5	ns	
Yes	42.6	67.5		
Total	100.0	100.0		
Improved/certified seed				
No	100.0	75.5	ns	
Yes	0.0	24.5		
Total	100.0	100.0		
Seedling production and transplantation				
No	100.0	95.6	ns	
Yes	0.0	4.4		
Total	100.0	100.0		
Crop rotation				
No	57.4	82.3	ns	
Yes	42.6	17.7		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Kitchen gardens using sunken pits				
No	100.0	96.1	ns	
Yes	0.0	3.9		
Total	100.0	100.0		
Organic manure				
No	57.4	82.3	ns	
Yes	42.6	17.7		
Total	100.0	100.0		
Soil testing				
No	100.0	96.6	ns	
Yes	0.0	3.4		
Total	100.0	100.0		
Application of inoculant				
No	100.0	98.6	ns	
Yes	0.0	1.4		
Total	100.0	100.0		
Drip or sprinkler irrigation tech				
No	100.0	100.0	n/a	
Yes	0.0	0.0		
Total	100.0	100.0		
Rainwater harvesting technologies				
No	100.0	98.6	ns	
Yes	0.0	1.4		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Flood-based farming technologies				
No	100.0	98.3	ns	
Yes	0.0	1.7		
Total	100.0	100.0		
Production planning and crop rotation in irrigation schemes				
No	100.0	91.8	ns	
Yes	0.0	8.2		
Total	100.0	100.0		
Drought early warning systems or information				
No	100.0	94.0	ns	
Yes	0.0	6.0		
Total	100.0	100.0		
Number of Responding Households	2	70		
Adoption of targeted improved PHH/storage practices - sorghum				
Aflatoxin prevention and control				
No	100.0	100.0	n/a	
Yes	0.0	0.0		
Total	100.0	100.0		
Aluminum cans, crates, other food grade containers during transport				
No	100.0	96.8	ns	
Yes	0.0	3.2		
Total	100.0	100.0		
Well-equipped food storage structures				
No	100.0	96.7	ns	
Yes	0.0	3.3		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Temperature and humidity control				
No	100.0	100.0	n/a	
Yes	0.0	0.0		
Total	100.0	100.0		
Solar drying for grains and pulses				
No	0.0	50.0	ns	
Yes	100.0	50.0		
Total	100.0	100.0		
Used at least one improved storage practices				
No	0.0	43.6	ns	
Yes	100.0	56.4		
Total	100.0	100.0		
Number of Responding Households	1	30		
Adoption of targeted livestock management practices - cattle				
Improved livestock breeds/species				
No	91.2	98.2	**	
Yes	8.8	1.8		
Total	100.0	100.0		
Livestock health services and products				
No	77.6	76.7	ns	
Yes	22.4	23.3		
Total	100.0	100.0		
Improved shelters				
No	91.5	91.6	ns	
Yes	8.5	8.4		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Improved calving techniques				
No	92.4	99.0	***	
Yes	7.6	1.0		
Total	100.0	100.0		
Improved milking techniques				
No	98.5	99.3	ns	
Yes	1.5	0.7		
Total	100.0	100.0		
Nutritious pasture varieties				
No	90.2	98.2	***	
Yes	9.8	1.8		
Total	100.0	100.0		
Utilization of set grazing areas				
No	72.9	78.6	ns	
Yes	27.1	21.4		
Total	100.0	100.0		
Improved fodder production				
No	94.2	99.0	**	
Yes	5.8	1.0		
Total	100.0	100.0		
Solarized boreholes for livestock				
No	95.3	95.9	ns	
Yes	4.7	4.1		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Water pans for livestock				
No	85.7	93.1	*	
Yes	14.3	6.9		
Total	100.0	100.0		
Sand dams for livestock				
No	91.7	95.5	ns	
Yes	8.3	4.5		
Total	100.0	100.0		
Rock catchments for livestock				
No	96.1	97.7	ns	
Yes	3.9	2.3		
Total	100.0	100.0		
Used at least one improved livestock practice				
No	28.8	45.1	**	
Yes	71.2	54.9		
Total	100.0	100.0		
Number of Responding Households	104	830		
Adoption of targeted livestock management practices - goats				
Improved livestock breeds/species				
No	97.1	98.7	ns	
Yes	2.9	1.3		
Total	100.0	100.0		
Livestock health services and products				
No	82.0	87.6	ns	
Yes	18.0	12.4		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Improved shelters				
No	88.7	88.6	ns	
Yes	11.3	11.4		
Total	100.0	100.0		
Improved calving techniques				
No	100.0	100.0	ns	
Yes	0.0	0.0		
Total	100.0	100.0		
Improved milking techniques				
No	100.0	99.6	ns	
Yes	0.0	0.4		
Total	100.0	100.0		
Nutritious pasture varieties				
No	95.7	97.9	ns	
Yes	4.3	2.1		
Total	100.0	100.0		
Utilization of set grazing areas				
No	75.7	80.7	ns	
Yes	24.3	19.3		
Total	100.0	100.0		
Improved fodder production				
No	98.8	99.2	ns	
Yes	1.2	0.8		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Solarized boreholes for livestock				
No	95.7	97.0	ns	
Yes	4.3	3.0		
Total	100.0	100.0		
Water pans for livestock				
No	88.1	95.1	**	
Yes	11.9	4.9		
Total	100.0	100.0		
Sand dams for livestock				
No	93.1	97.1	*	
Yes	6.9	2.9		
Total	100.0	100.0		
Rock catchments for livestock				
No	96.6	98.2	ns	
Yes	3.4	1.8		
Total	100.0	100.0		
Used at least one improved livestock practice				
No	40.7	54.0	**	
Yes	59.3	46.0		
Total	100.0	100.0		
Number of Responding Households	186	1,820		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted livestock management practices - camels				
Improved livestock breeds/species				
No	100.0	99.4	ns	
Yes	0.0	0.6		
Total	100.0	100.0		
Livestock health services and products				
No	93.3	88.3	ns	
Yes	6.7	11.7		
Total	100.0	100.0		
Improved shelters				
No	96.0	92.6	ns	
Yes	4.0	7.4		
Total	100.0	100.0		
Improved calving techniques				
No	100.0	99.8	ns	
Yes	0.0	0.2		
Total	100.0	100.0		
Improved milking techniques				
No	98.5	99.7	ns	
Yes	1.5	0.3		
Total	100.0	100.0		
Nutritious pasture varieties				
No	100.0	97.8	ns	
Yes	0.0	2.2		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Utilization of set grazing areas				
No	64.8	74.1	ns	
Yes	35.2	25.9		
Total	100.0	100.0		
Improved fodder production				
No	100.0	99.3	ns	
Yes	0.0	0.7		
Total	100.0	100.0		
Solarized boreholes for livestock				
No	98.2	94.3	ns	
Yes	1.8	5.7		
Total	100.0	100.0		
Water pans for livestock				
No	85.6	95.0	*	
Yes	14.4	5.0		
Total	100.0	100.0		
Sand dams for livestock				
No	95.5	97.0	ns	
Yes	4.5	3.0		
Total	100.0	100.0		
Rock catchments for livestock				
No	94.8	97.0	ns	
Yes	5.2	3.0		
Total	100.0	100.0		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Used at least one improved livestock practice				
No	50.0	51.3	ns	
Yes	50.0	48.7		
Total	100.0	100.0		
Number of Responding Households	76	647		
Resilience				
Absorptive capacity index				
0-25th percentile	8.4	34.1	***	
26-50th percentile	15.4	25.7		
51-75th percentile	26.5	22.1		
76-100th percentile	49.7	18.0		
Total	100.0	100.0		
n	493	3,369		
Adaptive capacity index				
0-25th percentile	7.6	31.9	***	
26-50th percentile	10.9	25.5		
51-75th percentile	21.6	22.8		
76-100th percentile	59.9	19.8		
Total	100.0	100.0		
n	493	3,368		

Table A7.1a. Percentage of households by FIES groups, by household characteristics and practices - Combined RFSA Areas [Baseline Study, Kenya 2021]

	Combined RFSA Areas			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Transformative capacity index				
0-25th percentile	5.9	28.4	***	
26-50th percentile	13.7	24.4		
51-75th percentile	33.9	26.9		
76-100th percentile	46.5	20.3		
Total	100.0	100.0		
Number of Responding Households	493	3,371		
Impact of COVID-19 on household livelihood/food security				
HH livelihood impacted by COVID-19				
No	49.5	49.3	ns	
Yes	50.5	50.7		
Total	100.0	100.0		
HH food security impacted by COVID-19				
No	51.1	41.5	**	
Yes	48.9	58.5		
Total	100.0	100.0		
Number of Responding Households	474	3,287		

NOTES: Results not reported when total sample size across FIES groups < 30. FIES food security categories based on discrete assignment of the FIES Raw Score (0-3 = Food Secure, 4-6 = Moderately Food Insecure, 7-8= Severely Food Insecure).

[a] Significance tests were performed to determine whether an association exists between the outcome indicator (FIES groups) and the disaggregate variables (household characteristics and practices). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant, n/a=unable to test/no difference between groups.

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Percentage of households by FIES groups	**12.4**	**87.6**		**1,974**	**9.4**	**90.7**		**979**	**15.7**	**84.3**		**995**
Socio-economic characteristics												
Number of children under 5 years												
0	41.5	38.8	ns		33.6	36.0	ns		46.5	41.9	ns	
1	38.5	34.6			48.9	36.7			31.9	32.3		
2	17.5	22.4			15.6	23.2			18.6	21.4		
3 or more	2.5	4.2			1.9	4.1			2.9	4.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of children 5-17 years												
0	29.4	19.8	ns		27.9	16.2	ns		30.4	24.0	ns	
1	18.0	18.7			20.9	21.1			16.1	15.9		
2	17.8	20.6			14.6	22.7			19.8	18.2		
3	16.1	16.4			16.6	17.6			15.7	15.0		
4 or more	18.8	24.5			20.0	22.4			18.1	26.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of adult females (18+)												
0	8.7	4.5	ns		4.1	3.2	ns		11.6	6.1	ns	
1	72.3	76.6			76.9	80.3			69.4	72.4		
2 or more	19.0	18.8			19.0	16.6			19.0	21.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of adult males (18+)												
0	10.2	15.8	*		6.3	16.7	*		12.6	14.8	ns	
1	71.2	61.9			76.5	62.1			67.9	61.7		
2 or more	18.6	22.3			17.2	21.3			19.5	23.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Male head of household												
No	20.1	36.1	***		19.8	38.1	**		20.2	33.8	**	
Yes	79.9	63.9			80.2	61.9			79.8	66.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Age of head of household												
15-24 years old	7.9	4.1	ns		9.1	3.3	ns		7.1	5.0	ns	
25-34 years old	26.1	23.3			26.5	22.5			25.9	24.2		
35-44 years old	27.2	25.8			29.0	26.7			26.0	24.7		
45-54 years old	12.5	15.5			11.5	15.2			13.1	15.8		
55-64 years old	14.2	15.1			13.0	14.3			14.9	16.0		
65+ years old	12.2	16.2			10.9	17.9			13.1	14.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Household head education level												
Preprimary	0.4	0.9	***		0.9	1.0	***		0.0	0.8	***	
Primary	21.8	16.0			15.2	6.5			26.0	26.9		
Post primary/Vocation	0.2	0.1			0.0	0.1			0.3	0.1		
Secondary 'A'	16.5	5.9			7.1	3.7			22.4	8.5		
College (Middle level)	9.5	1.4			6.2	1.0			11.6	1.9		
University	6.8	0.6			5.8	0.2			7.5	1.0		
No Schooling	44.9	75.1			64.7	87.5			32.3	61.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Gendered household type												
Both	81.1	79.7	ns		89.6	80.2	ns		75.8	79.1	ns	
Female Only	10.2	15.8			6.3	16.6			12.6	14.8		
Male Only	8.7	4.5			4.1	3.1			11.6	6.1		
Child Only	0.0	0.0			0.0	0.1			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	274	1,700			96	883			178	817		
Livestock holdings												
Raises at least one type of livestock												
No	5.8	4.0	ns		0.9	1.7	ns		12.1	8.5	ns	
Yes	94.2	96.0			99.1	98.3			87.9	91.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Household raises cattle												
No	55.3	59.6	ns		51.6	61.0	ns		60.1	57.0	ns	
Yes	44.7	40.4			48.4	39.0			39.9	43.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Household raises goats												
No	10.7	8.0	ns		4.4	3.6	ns		18.9	16.5	ns	
Yes	89.3	92.0			95.6	96.4			81.1	83.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Household raises camels												
No	53.4	49.9	ns		29.4	28.9	ns		84.7	90.3	ns	
Yes	46.6	50.1			70.6	71.1			15.3	9.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	153	1,123			82	721			71	402		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Use of agricultural-related financial services												
Accessed at least one ag-related financial service												
No	84.6	89.7	ns		90.0	93.6	ns		77.9	82.3	ns	
Yes	15.4	10.3			10.0	6.4			22.1	17.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Took out a loan (ag credit, in cash or in-kind)												
No	96.6	98.3	ns		97.6	98.0	ns		95.4	99.0	*	
Yes	3.4	1.7			2.4	2.0			4.6	1.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Participated in ag-related savings scheme												
No	85.6	91.3	ns		91.2	95.6	ns		78.7	83.1	ns	
Yes	14.4	8.7			8.8	4.4			21.3	16.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Insured ag production against loss (insurance)												
No	100.0	99.6	ns		100.0	99.5	ns		100.0	99.6	ns	
Yes	0.0	0.4			0.0	0.5			0.0	0.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	158	1,147			82	734			76	413		
Access to community-based savings or credit groups												
HH participates in group-based savings,microfinance or lending programs												
No	94.7	95.8	ns		96.6	97.2	ns		93.5	94.2	ns	
Yes	5.3	4.2			3.4	2.8			6.5	5.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
HH participates in group-based savings programs												
No	96.3	97.0	ns		99.3	99.4	ns		94.4	94.4	ns	
Yes	3.7	3.0			0.7	0.6			5.6	5.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
HH participates in group-based credit programs												
No	96.3	98.0	ns		96.6	97.8	ns		96.1	98.2	ns	
Yes	3.7	2.0			3.4	2.2			3.9	1.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	272	1,697			94	880			178	817		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted value chain practices												
Practiced at least one of the promoted VC activities												
No	82.1	80.2	ns		85.3	77.9	ns		75.3	84.7	ns	
Yes	17.9	19.8			14.7	22.1			24.7	15.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	49	358			31	241			18	117		
Contract farming												
No	100.0	100.0	n/a		100.0	100.0	n/a		100.0	100.0	n/a	
Yes	0.0	0.0			0.0	0.0			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Selling products via farmer associations												
No	95.0	98.5	ns		100.0	99.2	ns		84.4	97.3	**	
Yes	5.0	1.5			0.0	0.8			15.6	2.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Sorting and grading												
No	97.1	92.2	ns		100.0	93.9	ns		90.9	89.0	ns	
Yes	2.9	7.8			0.0	6.1			9.1	11.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Bulking												
No	90.0	89.1	ns		85.3	87.0	ns		100.0	93.4	ns	
Yes	10.0	10.9			14.7	13.0			0.0	6.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved record keeping, budgeting and financial mgmt												
No	100.0	98.2	ns		100.0	97.8	ns		100.0	99.2	ns	
Yes	0.0	1.8			0.0	2.2			0.0	0.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Use of training and extension services												
No	100.0	98.7	ns		100.0	98.3	ns		100.0	99.6	ns	
Yes	0.0	1.3			0.0	1.7			0.0	0.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	49	358			31	241			18	117		
Number of Responding Households	1	11			0	9			1	2		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted livestock management practices - cattle												
Improved livestock breeds/species												
No	97.5	98.7	ns		97.0	98.0	ns		98.4	100.0	*	
Yes	2.5	1.3			3.0	2.0			1.6	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Livestock health services and products												
No	84.7	88.9	ns		85.9	86.9	ns		82.8	92.3	ns	
Yes	15.3	11.1			14.1	13.1			17.2	7.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved shelters												
No	95.4	96.0	ns		92.5	93.7	ns		100.0	100.0	n/a	
Yes	4.6	4.0			7.5	6.3			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved calving techniques												
No	95.0	97.8	*		91.8	96.6	*		100.0	100.0	n/a	
Yes	5.0	2.2			8.2	3.4			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved milking techniques												
No	100.0	99.5	ns		100.0	99.2	ns		100.0	100.0	n/a	
Yes	0.0	0.5			0.0	0.8			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Nutritious pasture varieties												
No	95.5	97.8	ns		95.4	96.5	ns		95.7	100.0	*	
Yes	4.5	2.2			4.6	3.5			4.3	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Utilization of set grazing areas												
No	69.1	68.6	ns		61.4	59.6	ns		81.3	84.4	ns	
Yes	30.9	31.4			38.6	40.4			18.7	15.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved fodder production												
No	92.5	99.4	***		93.2	99.2	*		91.4	99.7	***	
Yes	7.5	0.6			6.8	0.8			8.6	0.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Solarized boreholes for livestock												
No	92.6	93.9	ns		87.9	90.4	ns		100.0	100.0	n/a	
Yes	7.4	6.1			12.1	9.6			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Water pans for livestock												
No	93.0	95.7	ns		90.1	93.4	ns		97.5	99.7	ns	
Yes	7.0	4.3			9.9	6.6			2.5	0.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Sand dams for livestock												
No	97.0	96.3	ns		95.2	96.5	ns		100.0	96.2	ns	
Yes	3.0	3.7			4.8	3.5			0.0	3.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Rock catchments for livestock												
No	97.1	97.2	ns		95.3	95.5	ns		100.0	100.0	n/a	
Yes	2.9	2.8			4.7	4.5			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Used at least one improved livestock practice												
No	42.5	52.9	ns		31.4	39.9	ns		60.0	75.6	ns	
Yes	57.5	47.1			68.6	60.1			40.0	24.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	65	484			38	300			27	184		
Adoption of targeted livestock management practices - goats												
Improved livestock breeds/species												
No	97.4	98.5	ns		97.5	97.9	ns		97.2	100.0	*	
Yes	2.6	1.5			2.5	2.1			2.8	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Livestock health services and products												
No	86.7	88.9	ns		86.9	90.3	ns		86.5	86.0	ns	
Yes	13.3	11.1			13.1	9.7			13.5	14.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved shelters												
No	97.4	93.8	ns		97.5	91.7	ns		97.2	98.4	ns	
Yes	2.6	6.2			2.5	8.3			2.8	1.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved calving techniques												
No	100.0	100.0	n/a		100.0	100.0	n/a		100.0	100.0	n/a	
Yes	0.0	0.0			0.0	0.0			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved milking techniques												
No	100.0	99.5	ns		100.0	99.3	ns		100.0	100.0	n/a	
Yes	0.0	0.5			0.0	0.7			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Nutritious pasture varieties												
No	93.4	96.9	ns		96.4	95.7	ns		88.8	99.5	***	
Yes	6.6	3.1			3.6	4.3			11.2	0.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Utilization of set grazing areas												
No	72.1	69.8	ns		61.6	61.4	ns		88.3	88.4	ns	
Yes	27.9	30.2			38.4	38.6			11.7	11.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved fodder production												
No	97.8	98.2	ns		100.0	98.0	ns		94.4	98.8	ns	
Yes	2.2	1.8			0.0	2.0			5.6	1.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Solarized boreholes for livestock												
No	92.2	93.2	ns		87.1	90.5	ns		100.0	99.4	ns	
Yes	7.8	6.8			12.9	9.5			0.0	0.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Water pans for livestock												
No	89.3	93.7	ns		83.2	92.8	ns		98.7	95.6	ns	
Yes	10.7	6.3			16.8	7.2			1.3	4.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Sand dams for livestock												
No	91.4	94.7	ns		92.1	95.3	ns		90.3	93.1	ns	
Yes	8.6	5.3			7.9	4.7			9.7	6.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Rock catchments for livestock												
No	97.2	97.8	ns		95.3	96.9	ns		100.0	100.0	n/a	
Yes	2.8	2.2			4.7	3.1			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Used at least one improved livestock practice												
No	43.1	48.5	ns		35.1	38.5	ns		55.4	70.7	ns	
Yes	56.9	51.5			64.9	61.5			44.6	29.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	137	1,030			78	690			59	340		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted livestock management practices - camels												
Improved livestock breeds/species												
No	100.0	99.2	ns		100.0	99.1	ns		100.0	100.0	n/a	
Yes	0.0	0.8			0.0	0.9			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Livestock health services and products												
No	92.2	91.6	ns		90.9	91.6	ns		100.0	92.0	ns	
Yes	7.8	8.4			9.1	8.4			0.0	8.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved shelters												
No	97.8	93.9	ns		97.4	93.5	ns		100.0	100.0	n/a	
Yes	2.2	6.1			2.6	6.5			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved calving techniques												
No	100.0	99.7	ns		100.0	99.7	ns		100.0	100.0	n/a	
Yes	0.0	0.3			0.0	0.3			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved milking techniques												
No	98.2	99.5	ns		97.9	99.5	ns		100.0	100.0	n/a	
Yes	1.8	0.5			2.1	0.5			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Nutritious pasture varieties												
No	100.0	96.7	ns		100.0	96.5	ns		100.0	100.0	n/a	
Yes	0.0	3.3			0.0	3.5			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Utilization of set grazing areas												
No	63.3	66.2	ns		58.0	65.1	ns		95.2	82.7	ns	
Yes	36.7	33.8			42.0	34.9			4.8	17.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved fodder production												
No	100.0	99.0	ns		100.0	99.1	ns		100.0	98.0	ns	
Yes	0.0	1.0			0.0	0.9			0.0	2.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Solarized boreholes for livestock												
No	97.9	92.0	ns		97.5	91.5	ns		100.0	100.0	n/a	
Yes	2.1	8.0			2.5	8.5			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Water pans for livestock												
No	85.2	94.1	ns		82.7	93.7	*		100.0	100.0	n/a	
Yes	14.8	5.9			17.3	6.3			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Sand dams for livestock												
No	94.8	96.4	ns		93.9	96.2	ns		100.0	100.0	n/a	
Yes	5.2	3.6			6.1	3.8			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Rock catchments for livestock												
No	96.2	97.0	ns		95.5	96.8	ns		100.0	100.0	n/a	
Yes	3.8	3.0			4.5	3.2			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Used at least one improved livestock practice												
No	48.6	48.1	ns		40.8	45.8	ns		95.2	80.7	ns	
Yes	51.4	51.9			59.2	54.2			4.8	19.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	69	533			57	487			12	46		
Resilience												
Absorptive capacity index												
0-25th percentile	10.0	20.5	***		17.3	29.6	***		5.5	10.1	ns	
26-50th percentile	16.0	24.2			16.6	27.7			15.6	20.2		
51-75th percentile	28.2	29.7			29.7	27.4			27.3	32.4		
76-100th percentile	45.8	25.6			36.5	15.3			51.6	37.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	272	1,697			94	880			178	817		
Adaptive capacity index												
0-25th percentile	12.7	21.6	***		26.8	29.6	ns		3.9	12.4	*	
26-50th percentile	19.1	29.7			20.7	32.1			18.2	27.0		
51-75th percentile	28.6	27.3			23.3	21.5			31.8	34.0		
76-100th percentile	39.6	21.4			29.2	16.7			46.1	26.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	272	1,697			94	880			178	817		

Table A7.1b. Percentage of households by FIES groups, by household characteristics and practices - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS - Total				Marsabit				Isiolo			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Transformative capacity index												
0-25th percentile	12.5	26.9	**		29.9	45.6	*		1.6	5.6	ns	
26-50th percentile	15.2	24.9			18.7	23.7			13.0	26.2		
51-75th percentile	29.7	22.3			38.5	20.1			24.2	24.7		
76-100th percentile	42.7	25.9			12.9	10.6			61.2	43.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	272	1,697			94	880			178	817		
Impact of COVID-19 on household livelihood/food security												
HH livelihood impacted by COVID-19												
No	47.6	48.9	ns		55.8	56.9	ns		42.5	40.1	ns	
Yes	52.4	51.1			44.2	43.1			57.5	59.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
HH food security impacted by COVID-19												
No	49.4	38.5	*		57.3	44.2	ns		44.3	32.2	*	
Yes	50.6	61.5			42.7	55.8			55.7	67.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	265	1,649			92	838			173	811		

NOTES: Results not reported when total sample size across FIES groups < 30. FIES food security categories based on discrete assignment of the FIES Raw Score (0-3 = Food Secure, 4-6 = Moderately Food Insecure, 7-8= Severely Food Insecure).

[a] Significance tests were performed to determine whether an association exists between the outcome indicator (FIES groups) and the disaggregate variables (household characteristics and practices). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant, n/a=unable to test/no difference between groups.

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Percentage of households by FIES groups	**11.1**	**88.9**		**1,899**	**6.9**	**93.1**		**948**	**19.6**	**80.4**		**951**
Socio-economic characteristics												
Number of children under 5 years												
0	48.7	40.5	ns		39.8	38.6	ns		55.0	45.1	*	
1	34.4	31.9			39.4	31.9			30.9	31.9		
2	13.9	22.0			17.0	22.9			11.7	19.9		
3 or more	3.0	5.6			3.8	6.6			2.4	3.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of children 5-17 years												
0	39.9	22.1	***		38.0	21.8	ns		41.2	22.6	**	
1	22.9	21.1			25.2	20.3			21.2	22.9		
2	14.9	20.2			12.0	21.8			16.9	16.5		
3	10.6	15.6			12.3	14.7			9.4	17.7		
4 or more	11.8	21.1			12.5	21.4			11.3	20.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of adult females (18+)												
0	15.4	8.0	**		9.5	7.0	*		19.5	10.4	*	
1	63.5	77.0			63.2	77.1			63.7	76.7		
2 or more	21.1	15.0			27.3	16.0			16.8	12.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of adult males (18+)												
0	11.3	24.0	**		11.5	23.8	ns		11.1	24.4	**	
1	70.7	61.4			67.2	61.4			73.2	61.4		
2 or more	18.0	14.6			21.4	14.8			15.7	14.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Male head of household												
No	33.1	46.8	**		42.3	47.5	ns		26.6	45.4	***	
Yes	66.9	53.2			57.7	52.5			73.4	54.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Age of head of household												
15-24 years old	14.3	9.0	**		21.4	8.5	*		9.2	10.3	ns	
25-34 years old	36.6	27.4			38.5	25.7			35.2	31.6		
35-44 years old	16.7	20.1			7.2	19.7			23.5	20.8		
45-54 years old	21.1	15.6			24.7	15.4			18.6	15.9		
55-64 years old	6.2	11.5			3.4	13.0			8.2	8.0		
65+ years old	5.1	16.4			4.9	17.7			5.3	13.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Household head education level												
Preprimary	0.0	2.0	***		0.0	2.5	***		0.0	0.7	***	
Primary	16.1	15.5			14.2	12.6			17.4	22.3		
Post primary/Vocation	0.4	0.1			0.9	0.1			0.0	0.2		
Secondary 'A'	24.0	8.8			24.8	7.1			23.4	12.7		
College (Middle level)	22.0	3.0			23.8	2.3			20.7	4.6		
University	17.1	1.5			17.3	1.4			16.9	1.7		
No Schooling	20.5	69.2			19.1	74.1			21.5	57.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Gendered household type												
Both	73.3	68.3	***		79.0	69.3	ns		69.3	66.0	**	
Female Only	11.3	23.7			11.5	23.7			11.1	23.6		
Male Only	15.4	7.6			9.5	6.8			19.5	9.6		
Child Only	0.0	0.3			0.0	0.1			0.0	0.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	222	1,677			48	900			174	777		
Livestock holdings												
Raises at least one type of livestock												
No	10.8	4.8	ns		4.9	4.0	ns		13.6	6.4	ns	
Yes	89.2	95.2			95.1	96.0			86.4	93.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Household raises cattle												
No	52.0	72.6	*		100.0	91.5	ns		29.6	31.3	ns	
Yes	48.0	27.4			0.0	8.5			70.4	68.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Household raises goats												
No	21.3	7.8	**		4.9	4.8	ns		29.0	14.3	*	
Yes	78.7	92.2			95.1	95.2			71.0	85.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Household raises camels												
No	92.0	86.7	ns		100.0	87.2	ns		88.3	85.7	ns	
Yes	8.0	13.3			0.0	12.8			11.7	14.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	65	872			9	420			56	452		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Use of agricultural-related financial services												
Accessed at least one ag-related financial service												
No	56.3	93.7	***		76.5	97.1	**		47.2	86.6	***	
Yes	43.7	6.3			23.5	2.9			52.8	13.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Took out a loan (ag credit, in cash or in-kind)												
No	90.1	99.2	***		100.0	99.8	ns		85.6	97.8	***	
Yes	9.9	0.8			0.0	0.2			14.4	2.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Participated in ag-related savings scheme												
No	56.3	94.2	***		76.5	97.5	**		47.2	87.2	***	
Yes	43.7	5.8			23.5	2.5			52.8	12.8		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Insured ag production against loss (insurance)												
No	96.7	99.7	***		100.0	99.8	ns		95.3	99.4	**	
Yes	3.3	0.3			0.0	0.2			4.7	0.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	83	976			12	473			71	503		
Access to community-based savings or credit groups												
HH participates in group-based savings,microfinance or lending programs												
No	82.6	95.2	***		96.9	97.2	ns		72.4	90.8	***	
Yes	17.4	4.8			3.1	2.8			27.6	9.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
HH participates in group-based savings programs												
No	84.7	97.1	***		97.8	98.7	ns		75.5	93.3	***	
Yes	15.3	2.9			2.2	1.3			24.5	6.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
HH participates in group-based credit programs												
No	93.0	97.1	*		99.1	97.7	ns		88.7	95.9	**	
Yes	7.0	2.9			0.9	2.3			11.3	4.1		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	221	1,674			48	899			173	775		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted value chain practices												
Practiced at least one of the promoted VC activities												
No	75.0	88.0	ns		100.0	89.9	ns		70.6	84.5	ns	
Yes	25.0	12.0			0.0	10.1			29.4	15.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	33	216			2	96			31	120		
Contract farming												
No	94.5	97.2	ns		100.0	98.5	ns		93.5	94.9	ns	
Yes	5.5	2.8			0.0	1.5			6.5	5.1		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Selling products via farmer associations												
No	92.4	94.7	ns		100.0	94.5	ns		91.1	95.3	ns	
Yes	7.6	5.3			0.0	5.6			8.9	4.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Sorting and grading												
No	95.7	98.7	ns		100.0	98.5	ns		94.9	99.3	ns	
Yes	4.3	1.3			0.0	1.5			5.1	0.7		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Bulking												
No	100.0	98.5	ns		100.0	99.1	ns		100.0	97.5	ns	
Yes	0.0	1.5			0.0	0.9			0.0	2.5		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved record keeping, budgeting and financial mgmt												
No	100.0	97.0	ns		100.0	98.6	ns		100.0	94.1	ns	
Yes	0.0	3.0			0.0	1.4			0.0	5.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Use of training and extension services												
No	93.3	99.4	*		100.0	100.0	n/a		92.1	98.4	ns	
Yes	6.7	0.6			0.0	0.0			7.9	1.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	33	212			2	95			31	117		
Number of Responding Households	2	12			0	4			2	8		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted improved crop management/NRM practices - cowpea												
Used at least one improved crop and/or NRM practice												
No	0.0	33.0	ns		0.0	35.8	ns		^	^		
Yes	100.0	67.0			100.0	64.2			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Improved/certified seed												
No	43.2	76.7	ns		100.0	77.7	ns		^	^		
Yes	56.8	23.3			0.0	22.3			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Seedling production and transplantation												
No	88.0	98.6	***		100.0	100.0	n/a		^	^		
Yes	12.0	1.4			0.0	0.0			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Crop rotation												
No	61.7	94.9	***		54.4	94.3	ns		^	^		
Yes	38.3	5.1			45.6	5.7			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Kitchen gardens using sunken pits												
No	83.0	95.5	ns		45.6	95.9	**		^	^		
Yes	17.0	4.5			54.4	4.1			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Organic manure												
No	64.0	77.5	ns		100.0	80.5	ns		^	^		
Yes	36.0	22.5			0.0	19.5			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Soil testing												
No	100.0	100.0	n/a		100.0	100.0	n/a		^	^		
Yes	0.0	0.0			0.0	0.0			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Application of inoculant												
No	100.0	98.8	ns		100.0	98.6	ns		^	^		
Yes	0.0	1.2			0.0	1.4			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Drip or sprinkler irrigation tech												
No	100.0	95.3	ns		100.0	95.6	ns		^	^		
Yes	0.0	4.7			0.0	4.4			^	^		
Total	100.0	100.0			100.0	100.0			^	^		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Rainwater harvesting technologies												
No	100.0	93.8	ns		100.0	93.1	ns		^	^		
Yes	0.0	6.2			0.0	6.9			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Flood-based farming technologies												
No	88.0	99.0	**		100.0	98.9	ns		^	^		
Yes	12.0	1.0			0.0	1.1			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Production planning and crop rotation in irrigation schemes												
No	100.0	92.3	ns		100.0	91.4	ns		^	^		
Yes	0.0	7.7			0.0	8.6			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Drought early warning systems or information												
No	100.0	94.9	ns		100.0	94.4	ns		^	^		
Yes	0.0	5.1			0.0	5.6			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Number of Responding Households	8	86			2	71			6	15		
Adoption of targeted improved crop management/NRM practices - greengram												
Used at least one improved crop and/or NRM practice												
No	100.0	16.8	ns		^	^			^	^		
Yes	0.0	83.2			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Improved/certified seed												
No	100.0	71.0	ns		^	^			^	^		
Yes	0.0	29.0			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Seedling production and transplantation							ns					
No	100.0	92.5	ns		^	^			^	^		
Yes	0.0	7.5			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Crop rotation												
No	100.0	80.0	ns		^	^			^	^		
Yes	0.0	20.0			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Kitchen gardens using sunken pits												
No	100.0	100.0	n/a		^	^			^	^		
Yes	0.0	0.0			^	^			^	^		
Total	100.0	100.0			^	^			^	^		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Organic manure							ns					
No	100.0	73.4	ns		^	^			^	^		
Yes	0.0	26.6			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Soil testing												
No	100.0	100.0	n/a		^	^			^	^		
Yes	0.0	0.0			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Application of inoculant												
No	100.0	97.0	ns		^	^			^	^		
Yes	0.0	3.0			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Drip or sprinkler irrigation tech												
No	100.0	100.0	n/a		^	^			^	^		
Yes	0.0	0.0			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Rainwater harvesting technologies												
No	100.0	97.8	ns		^	^			^	^		
Yes	0.0	2.2			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Flood-based farming technologies												
No	100.0	100.0	n/a		^	^			^	^		
Yes	0.0	0.0			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Production planning and crop rotation in irrigation schemes												
No	100.0	93.6	ns		^	^			^	^		
Yes	0.0	6.4			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Drought early warning systems or information												
No	100.0	84.7	ns		^	^			^	^		
Yes	0.0	15.3			^	^			^	^		
Total	100.0	100.0			^	^			^	^		
Number of Responding Households	1	31			0	29			1	2		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted improved crop management/NRM practices - sorghum												
Used at least one improved crop and/or NRM practice												
No	57.4	31.9	ns		57.4	32.5	ns		^	^		
Yes	42.6	68.1			42.6	67.5			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Improved/certified seed												
No	100.0	75.5	ns		100.0	75.5	ns		^	^		
Yes	0.0	24.5			0.0	24.5			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Seedling production and transplantation												
No	100.0	95.6	ns		100.0	95.6	ns		^	^		
Yes	0.0	4.4			0.0	4.4			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Crop rotation												
No	57.4	82.3	ns		57.4	82.3	ns		^	^		
Yes	42.6	17.7			42.6	17.7			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Kitchen gardens using sunken pits												
No	100.0	96.1	ns		100.0	96.1	ns		^	^		
Yes	0.0	3.9			0.0	3.9			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Organic manure												
No	57.4	82.3	ns		57.4	82.3	ns		^	^		
Yes	42.6	17.7			42.6	17.7			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Soil testing												
No	100.0	96.6	ns		100.0	96.6	ns		^	^		
Yes	0.0	3.4			0.0	3.4			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Application of inoculant												
No	100.0	98.6	ns		100.0	98.6	ns		^	^		
Yes	0.0	1.4			0.0	1.4			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Drip or sprinkler irrigation tech												
No	100.0	100.0	n/a		100.0	100.0	n/a		^	^		
Yes	0.0	0.0			0.0	0.0			^	^		
Total	100.0	100.0			100.0	100.0			^	^		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Rainwater harvesting technologies												
No	100.0	98.6	ns		100.0	98.6	ns		^	^		
Yes	0.0	1.4			0.0	1.4			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Flood-based farming technologies												
No	100.0	98.3	ns		100.0	98.3	ns		^	^		
Yes	0.0	1.7			0.0	1.7			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Production planning and crop rotation in irrigation schemes												
No	100.0	91.8	ns		100.0	91.8	ns		^	^		
Yes	0.0	8.2			0.0	8.2			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Drought early warning systems or information												
No	100.0	94.0	ns		100.0	94.0	ns		^	^		
Yes	0.0	6.0			0.0	6.0			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Number of Responding Households	2	70			2	70			0	0		
Adoption of targeted improved PHH/storage practices - sorghum												
Aflatoxin prevention and control												
No	100.0	100.0	n/a		100.0	100.0	n/a		^	^		
Yes	0.0	0.0			0.0	0.0			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Aluminum cans, crates, other food grade containers during transport												
No	100.0	96.8	ns		100.0	96.8	ns		^	^		
Yes	0.0	3.2			0.0	3.2			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Well-equipped food storage structures												
No	100.0	96.7	ns		100.0	96.7	ns		^	^		
Yes	0.0	3.3			0.0	3.3			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Temperature and humidity control												
No	100.0	100.0	n/a		100.0	100.0	n/a		^	^		
Yes	0.0	0.0			0.0	0.0			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Solar drying for grains and pulses												
No	0.0	50.0	ns		0.0	50.0	ns		^	^		
Yes	100.0	50.0			100.0	50.0			^	^		
Total	100.0	100.0			100.0	100.0			^	^		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Used at least one improved storage practices												
No	57.4	32.5	ns		0.0	43.6	ns		^	^		
Yes	42.6	67.5			100.0	56.4			^	^		
Total	100.0	100.0			100.0	100.0			^	^		
Number of Responding Households	1	30			1	30			0	0		
Adoption of targeted livestock management practices - cattle												
Improved livestock breeds/species												
No	84.9	97.7	**		^	100.0			84.9	97.1	**	
Yes	15.1	2.3			^	0.0			15.1	2.9		
Total	100.0	100.0			^	100.0			100.0	100.0		
Livestock health services and products												
No	70.5	66.8	ns		^	90.5			70.5	60.4	ns	
Yes	29.5	33.2			^	9.5			29.5	39.6		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved shelters												
No	87.6	88.0	ns		^	77.2			87.6	90.8	ns	
Yes	12.4	12.0			^	22.8			12.4	9.2		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved calving techniques												
No	89.8	100.0	***		^	100.0			89.8	100.0	***	
Yes	10.2	0.0			^	0.0			10.2	0.0		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved milking techniques												
No	97.0	99.2	ns		^	100.0			97.0	99.0	ns	
Yes	3.0	0.8			^	0.0			3.0	1.0		
Total	100.0	100.0			^	100.0			100.0	100.0		
Nutritious pasture varieties												
No	84.9	98.5	***		^	95.2			84.9	99.4	***	
Yes	15.1	1.5			^	4.8			15.1	0.6		
Total	100.0	100.0			^	100.0			100.0	100.0		
Utilization of set grazing areas												
No	76.6	86.9	*		^	97.5			76.6	84.1	ns	
Yes	23.4	13.1			^	2.5			23.4	15.9		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved fodder production												
No	95.9	98.6	ns		^	95.1			95.9	99.6	*	
Yes	4.1	1.4			^	5.0			4.1	0.4		
Total	100.0	100.0			^	100.0			100.0	100.0		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Solarized boreholes for livestock												
No	98.0	97.5	ns		^	100.0			98.0	96.9	ns	
Yes	2.0	2.5			^	0.0			2.0	3.1		
Total	100.0	100.0			^	100.0			100.0	100.0		
Water pans for livestock												
No	78.5	90.9	**		^	100.0			78.5	88.5	*	
Yes	21.5	9.1			^	0.0			21.5	11.5		
Total	100.0	100.0			^	100.0			100.0	100.0		
Sand dams for livestock												
No	86.5	94.8	*		^	100.0			86.5	93.4	ns	
Yes	13.5	5.2			^	0.0			13.5	6.6		
Total	100.0	100.0			^	100.0			100.0	100.0		
Rock catchments for livestock												
No	95.1	98.2	ns		^	100.0			95.1	97.7	ns	
Yes	4.9	1.8			^	0.0			4.9	2.3		
Total	100.0	100.0			^	100.0			100.0	100.0		
Used at least one improved livestock practice												
No	15.4	38.7	***		^	58.0			15.4	33.5	**	
Yes	84.6	61.3			^	42.1			84.6	66.5		
Total	100.0	100.0			^	100.0			100.0	100.0		
Number of Responding Households	39	346			0	35			39	311		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Adoption of targeted livestock management practices - goats												
Improved livestock breeds/species												
No	96.7	98.8	ns		100.0	100.0	n/a		94.7	95.9	ns	
Yes	3.3	1.2			0.0	0.0			5.3	4.1		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Livestock health services and products												
No	76.3	86.8	*		80.7	95.2	ns		73.5	66.4	ns	
Yes	23.7	13.2			19.3	4.8			26.5	33.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved shelters												
No	78.2	85.6	ns		64.2	83.1	ns		86.9	91.8	ns	
Yes	21.8	14.4			35.8	16.9			13.1	8.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved calving techniques												
No	100.0	99.9	ns		100.0	100.0	n/a		100.0	99.7	ns	
Yes	0.0	0.1			0.0	0.0			0.0	0.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved milking techniques												
No	100.0	99.7	ns		100.0	99.6	ns		100.0	100.0	n/a	
Yes	0.0	0.3			0.0	0.4			0.0	0.0		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Nutritious pasture varieties												
No	98.4	98.4	ns		100.0	97.9	ns		97.4	99.8	*	
Yes	1.6	1.6			0.0	2.1			2.6	0.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Utilization of set grazing areas												
No	80.0	86.7	ns		90.6	89.1	ns		73.4	81.1	ns	
Yes	20.0	13.3			9.4	10.9			26.6	18.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Improved fodder production												
No	100.0	99.8	ns		100.0	99.8	ns		100.0	99.7	ns	
Yes	0.0	0.2			0.0	0.2			0.0	0.3		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Solarized boreholes for livestock												
No	100.0	99.1	ns		100.0	99.9	ns		100.0	97.1	ns	
Yes	0.0	0.9			0.0	0.1			0.0	2.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Water pans for livestock												
No	86.6	95.9	**		100.0	97.1	ns		78.3	92.8	**	
Yes	13.4	4.1			0.0	2.9			21.7	7.2		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Sand dams for livestock												
No	95.2	98.4	ns		100.0	100.0	n/a		92.2	94.6	ns	
Yes	4.8	1.6			0.0	0.0			7.8	5.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Rock catchments for livestock												
No	96.0	98.3	ns		100.0	98.7	ns		93.5	97.6	*	
Yes	4.0	1.7			0.0	1.3			6.5	2.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Used at least one improved livestock practice												
No	37.8	57.0	*		54.8	65.3	ns		27.2	36.9	ns	
Yes	62.2	43.0			45.2	34.7			72.8	63.1		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	49	790			8	396			41	394		
Adoption of targeted livestock management practices - camels												
Improved livestock breeds/species												
No	100.0	100.0	n/a		^	100.0			100.0	100.0	n/a	
Yes	0.0	0.0			^	0.0			0.0	0.0		
Total	100.0	100.0			^	100.0			100.0	100.0		
Livestock health services and products												
No	100.0	81.3	ns		^	90.4			100.0	63.4	*	
Yes	0.0	18.7			^	9.6			0.0	36.6		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved shelters												
No	84.9	89.7	ns		^	86.0			84.9	97.0	ns	
Yes	15.1	10.3			^	14.0			15.1	3.0		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved calving techniques												
No	100.0	100.0	n/a		^	100.0			100.0	100.0	n/a	
Yes	0.0	0.0			^	0.0			0.0	0.0		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved milking techniques												
No	100.0	100.0	n/a		^	100.0			100.0	100.0	n/a	
Yes	0.0	0.0			^	0.0			0.0	0.0		
Total	100.0	100.0			^	100.0			100.0	100.0		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Nutritious pasture varieties												
No	100.0	100.0	n/a		^	100.0			100.0	100.0	n/a	
Yes	0.0	0.0			^	0.0			0.0	0.0		
Total	100.0	100.0			^	100.0			100.0	100.0		
Utilization of set grazing areas												
No	74.3	90.4	ns		^	95.5			74.3	80.5	ns	
Yes	25.7	9.6			^	4.5			25.7	19.5		
Total	100.0	100.0			^	100.0			100.0	100.0		
Improved fodder production												
No	100.0	100.0	n/a		^	100.0			100.0	100.0	n/a	
Yes	0.0	0.0			^	0.0			0.0	0.0		
Total	100.0	100.0			^	100.0			100.0	100.0		
Solarized boreholes for livestock												
No	100.0	98.9	ns		^	100.0			100.0	96.8	ns	
Yes	0.0	1.1			^	0.0			0.0	3.2		
Total	100.0	100.0			^	100.0			100.0	100.0		
Water pans for livestock												
No	88.1	96.9	ns		^	98.1			88.1	94.6	ns	
Yes	11.9	3.1			^	1.9			11.9	5.4		
Total	100.0	100.0			^	100.0			100.0	100.0		
Sand dams for livestock												
No	100.0	98.3	ns		^	100.0			100.0	94.9	ns	
Yes	0.0	1.7			^	0.0			0.0	5.1		
Total	100.0	100.0			^	100.0			100.0	100.0		
Rock catchments for livestock												
No	86.2	96.8	ns		^	97.4			86.2	95.7	*	
Yes	13.8	3.2			^	2.6			13.8	4.3		
Total	100.0	100.0			^	100.0			100.0	100.0		
Used at least one improved livestock practice												
No	59.2	58.0	ns		^	67.5			59.2	39.4	ns	
Yes	40.8	42.0			^	32.5			40.8	60.6		
Total	100.0	100.0			^	100.0			100.0	100.0		
Number of Responding Households	7	114			0	48			7	66		

Table A7.1c. Percentage of households by FIES groups, by household characteristics and practices - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC - Total				Turkana				Samburu			
	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n	Food Secure	Moderate or Severe Insecurity	Sig.[a]	n
Resilience												
Absorptive capacity index												
0-25th percentile	7.7	39.7	***		5.4	45.6	***		9.3	25.8	***	
26-50th percentile	15.2	26.4			16.7	25.9			14.1	27.6		
51-75th percentile	25.7	19.0			36.0	17.5			18.4	22.6		
76-100th percentile	51.4	14.9			41.9	11.0			58.2	24.1		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	221	1,672			48	898			173	774		
Adaptive capacity index												
0-25th percentile	5.2	36.2	***		3.7	43.2	***		6.2	19.8	***	
26-50th percentile	7.0	23.7			7.2	24.9			6.9	20.9		
51-75th percentile	18.4	20.9			21.6	18.7			16.1	26.0		
76-100th percentile	69.4	19.2			67.5	13.2			70.8	33.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
n	221	1,671			48	898			173	773		
Transformative capacity index												
0-25th percentile	2.8	29.0	***		1.8	33.6	**		3.5	18.3	***	
26-50th percentile	12.9	24.2			10.6	23.0			14.6	27.0		
51-75th percentile	35.9	28.9			52.8	30.6			23.9	24.8		
76-100th percentile	48.3	17.9			34.8	12.8			58.0	29.9		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	221	1,674			48	899			173	775		
Impact of COVID-19 on household livelihood/food security												
HH livelihood impacted by COVID-19												
No	50.4	49.4	ns		48.4	50.2	ns		51.9	47.6	ns	
Yes	49.6	50.6			51.6	49.8			48.1	52.4		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
HH food security impacted by COVID-19												
No	51.9	42.8	*		50.1	43.8	ns		53.2	40.4	*	
Yes	48.1	57.2			49.9	56.2			46.8	59.6		
Total	100.0	100.0			100.0	100.0			100.0	100.0		
Number of Responding Households	209	1,638			48	884			161	754		

NOTES: Results not reported when total sample size across FIES groups < 30. FIES food security categories based on discrete assignment of the FIES Raw Score (0-3 = Food Secure, 4-6 = Moderately Food Insecure, 7-8= Severely Food Insecure).

[a] Significance tests were performed to determine whether an association exists between the outcome indicator (FIES groups) and the disaggregate variables (household characteristics and practices). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant, n/a=unable to test/no difference between groups.

Table A7.2a. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS-Total						Marsabit						Isiolo					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Household background characteristics																		
Residence																		
Rural	11.8	15.7	72.6	100.0	1,014	*	15.4	18.4	66.2	100.0	691	**	2.4	8.4	89.1	100.0	323	ns
Urban	1.8	14.6	83.6	100.0	99		3.9	30.0	66.1	100.0	29		1.1	9.7	89.2	100.0	70	
Gendered household type																		
Both	9.8	15.8	74.4	100.0	949	ns	13.7	19.4	66.9	100.0	610	ns	2.1	8.7	89.1	100.0	339	ns
Female Only	18.0	13.2	68.8	100.0	124		23.9	15.7	60.4	100.0	87		0.0	5.4	94.6	100.0	37	
Male Only	9.6	16.2	74.2	100.0	40		11.8	16.1	72.1	100.0	23		5.9	16.4	77.7	100.0	17	
Child only																		
Household head sex																		
Male	8.9	15.9	75.2	100.0	771	ns	12.2	20.1	67.7	100.0	485	ns	2.6	7.6	89.8	100.0	286	ns
Female	14.7	14.8	70.5	100.0	342		20.6	16.1	63.2	100.0	235		0.9	11.6	87.5	100.0	107	
Household head educational level																		
Never attended school	12.3	16.8	71.0	100.0	893	*	16.4	19.0	64.6	100.0	625	ns	1.4	10.9	87.7	100.0	268	ns
Pre-primary or primary	4.2	13.6	82.2	100.0	131		4.0	24.6	71.4	100.0	55		4.3	5.3	90.4	100.0	76	
Post-primary/vocational or secondary	5.4	2.1	92.5	100.0	58		7.0	2.3	90.7	100.0	28		3.9	1.9	94.3	100.0	30	
College or University	0.0	10.5	89.5	100.0	31		0.0	20.9	79.1	100.0	12		0.0	3.2	96.8	100.0	19	
Household food security																		
Household is moderately or severely food insecure																		
No	3.1	7.3	89.6	100.0	140	***	3.6	10.6	85.8	100.0	75	**	2.5	3.2	94.3	100.0	65	ns
Yes	11.7	16.6	71.7	100.0	973		16.1	19.7	64.2	100.0	645		2.0	9.8	88.2	100.0	328	
Household poverty status																		
Household living below the $1.90 2011 PPP poverty line																		
No	6.6	9.5	83.9	100.0	316	*	9.9	12.4	77.8	100.0	193	ns	1.8	5.2	93.0	100.0	123	ns
Yes	12.3	17.9	69.8	100.0	797		16.6	21.0	62.4	100.0	527		2.3	10.7	87.1	100.0	270	
Agricultural assets																		
Raises any of the targeted livestock commodities (cattle, goats, camels)																		
No	2.6	19.2	78.2	100.0	64	ns	13.1	11.8	75.1	100.0	17	ns	0.0	21.0	79.0	100.0	47	ns
Yes	11.2	15.3	73.5	100.0	1,049		14.9	19.0	66.1	100.0	703		2.5	6.7	90.8	100.0	346	
Household raises cattle																		
No	12.0	16.6	71.4	100.0	660	ns	16.6	20.0	63.4	100.0	428	ns	2.8	9.6	87.7	100.0	232	ns
Yes	8.6	13.9	77.5	100.0	453		12.3	17.0	70.7	100.0	292		1.1	7.4	91.5	100.0	161	
Household raises goats																		
No	2.2	18.6	79.2	100.0	104	ns	7.0	14.1	78.9	100.0	29	ns	0.7	20.0	79.3	100.0	75	*
Yes	11.5	15.2	73.2	100.0	1,009		15.2	19.0	65.8	100.0	691		2.5	5.8	91.8	100.0	318	
Household raises camels																		
No	9.5	12.9	77.6	100.0	571	ns	21.6	19.6	58.9	100.0	219	*	2.2	8.9	88.9	100.0	352	ns
Yes	11.8	18.0	70.2	100.0	542		12.4	18.6	69.0	100.0	501		1.4	7.3	91.2	100.0	41	
Agricultural financial services																		
Accessed agri-related financial services																		
No	11.3	16.5	72.2	100.0	977	*	15.2	19.1	65.7	100.0	662	ns	1.8	10.2	88.0	100.0	315	ns
Yes	6.3	8.2	85.4	100.0	136		10.8	15.6	73.6	100.0	58		3.2	3.1	93.7	100.0	78	
Accessed agri-related loan																		
No	10.8	15.7	73.5	100.0	1,088	ns	15.0	19.2	65.8	100.0	703	ns	2.1	8.7	89.2	100.0	385	ns
Yes	7.7	6.0	86.3	100.0	25		10.6	3.6	85.8	100.0	17		0.0	12.5	87.5	100.0	8	
Participated in agri-savings scheme																		
No	11.2	16.5	72.3	100.0	997	*	15.0	19.0	65.9	100.0	677	ns	1.8	10.4	87.8	100.0	320	ns
Yes	6.5	6.9	86.7	100.0	116		12.3	15.8	71.9	100.0	43		3.4	2.2	94.4	100.0	73	
Value chain interventions																		
Household adopted at least one value chain intervention																		
No	10.5	15.0	74.5	100.0	1,043	ns	14.8	18.3	66.9	100.0	662	ns	2.0	8.5	89.5	100.0	381	ns
Yes	13.8	23.4	62.8	100.0	70		15.8	25.7	58.5	100.0	58		5.8	14.1	80.2	100.0	12	
Any crop or livestock value chain																		
Contract farming																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Selling products through community farmer associations																		
No	10.8	15.6	73.6	100.0	1,107	ns	14.9	18.9	66.2	100.0	719	ns	2.1	8.9	89.0	100.0	388	ns
Yes	0.0	0.0	100.0	100.0	6		0.0	0.0	100.0	100.0	1		0.0	0.0	100.0	100.0	5	
Sorting and grading																		
No	10.9	15.3	73.8	100.0	1,094	ns	15.2	18.6	66.2	100.0	705	ns	2.1	8.6	89.2	100.0	389	ns
Yes	0.0	27.7	72.3	100.0	19		0.0	32.6	67.4	100.0	15		0.0	15.2	84.8	100.0	4	
Bulking																		
No	10.3	15.2	74.5	100.0	1,075	*	14.5	18.6	66.9	100.0	687	ns	1.9	8.6	89.5	100.0	388	*
Yes	23.2	24.6	52.2	100.0	38		23.6	24.4	52.0	100.0	33		20.0	25.8	54.2	100.0	5	
Use of improved record keeping, budgeting and financial management																		
No	10.8	15.3	73.9	100.0	1,107	ns	15.0	18.7	66.3	100.0	715	ns	2.1	8.5	89.4	100.0	392	*
Yes	0.0	51.0	49.0	100.0	6		0.0	41.8	58.2	100.0	5		0.0	100.0	0.0	100.0	1	

Table A7.2a. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS-Total						Marsabit						Isiolo					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Use of training and extension services																		
No	10.7	15.6	73.7	100.0	1,106	ns	14.9	19.0	66.1	100.0	713	ns	2.1	8.8	89.1	100.0	393	
Yes	14.9	0.0	85.1	100.0	7		14.9	0.0	85.1	100.0	7							
Fodder production value chain																		
Use of improved pasture inputs (e.g., quality seeds)																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Use of mechanized pasture harvesting and baling technologies																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Construction and use of hay stores by farmer organizations																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Use of fodder seeds																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Use of harvesting, drying, packaging, storage, and marketing technologies																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Improved livestock management practices																		
Used improved livestock breeds/species																		
No	10.6	15.3	74.1	100.0	1,084	ns	14.9	18.6	66.5	100.0	693	ns	2.1	8.8	89.1	100.0	391	ns
Yes	15.0	23.6	61.3	100.0	29		16.2	25.4	58.4	100.0	27		0.0	0.0	100.0	100.0	2	
Used livestock health services and products																		
No	10.8	15.7	73.4	100.0	998	ns	15.0	19.2	65.8	100.0	630	ns	2.4	8.7	88.9	100.0	368	ns
Yes	9.7	14.2	76.1	100.0	115		14.0	16.4	69.6	100.0	90		0.0	9.0	91.0	100.0	25	
Used improved livestock shelters																		
No	9.6	15.7	74.7	100.0	1,049	**	13.6	19.3	67.1	100.0	660	*	2.1	8.8	89.0	100.0	389	ns
Yes	28.3	12.6	59.0	100.0	64		30.0	13.4	56.6	100.0	60		0.0	0.0	100.0	100.0	4	
Used improved calving techniques																		
No	10.8	15.3	73.9	100.0	1,102	**	15.1	18.6	66.4	100.0	709	*	2.1	8.8	89.1	100.0	393	
Yes	4.1	37.4	58.5	100.0	11		4.1	37.4	58.5	100.0	11							
Used improved milking techniques																		
No	10.8	15.5	73.8	100.0	1,107	ns	15.0	18.8	66.2	100.0	714	ns	2.1	8.8	89.1	100.0	393	
Yes	0.0	28.2	71.8	100.0	6		0.0	28.2	71.8	100.0	6							
Used nutritious pasture varieties																		
No	9.3	15.7	75.0	100.0	1,058	***	13.0	19.2	67.8	100.0	671	***	2.1	8.9	89.0	100.0	387	ns
Yes	36.4	12.5	51.1	100.0	55		40.7	13.9	45.4	100.0	49		0.0	0.0	100.0	100.0	6	
Used set grazing areas																		
No	8.3	14.6	77.0	100.0	768	**	13.4	19.4	67.2	100.0	416	ns	1.6	8.4	90.0	100.0	352	ns
Yes	15.8	17.5	66.8	100.0	345		16.9	18.2	64.9	100.0	304		6.3	11.7	82.0	100.0	41	
Used improved fodder production																		
No	10.4	15.7	74.0	100.0	1,088	ns	14.4	19.0	66.6	100.0	702	ns	2.2	8.9	88.9	100.0	386	ns
Yes	24.8	10.3	64.9	100.0	25		35.0	14.5	50.5	100.0	18		0.0	0.0	100.0	100.0	7	
Used solarized boreholes for livestock																		
No	10.7	15.6	73.7	100.0	1,027	ns	15.5	19.3	65.2	100.0	636	ns	2.1	8.8	89.1	100.0	391	ns
Yes	10.6	15.3	74.1	100.0	86		10.8	15.6	73.6	100.0	84		0.0	0.0	100.0	100.0	2	
Used water pans for livestock																		
No	10.1	16.1	73.9	100.0	1,036	ns	14.2	19.7	66.1	100.0	653	ns	2.2	8.9	88.9	100.0	383	ns
Yes	19.0	8.6	72.3	100.0	77		22.8	9.5	67.7	100.0	67		0.0	4.4	95.6	100.0	10	
Used sand dams for livestock																		
No	11.0	16.3	72.7	100.0	1,046	**	15.2	19.7	65.2	100.0	677	*	2.3	9.3	88.5	100.0	369	ns
Yes	6.0	3.2	90.9	100.0	67		10.1	3.7	86.2	100.0	43		0.0	2.3	97.7	100.0	24	
Used rock catchments for livestock																		
No	10.5	15.6	73.9	100.0	1,068	ns	14.9	19.2	66.0	100.0	675	ns	2.1	8.8	89.1	100.0	393	
Yes	15.7	13.5	70.9	100.0	45		15.7	13.5	70.9	100.0	45							

Table A7.2a. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS-Total						Marsabit						Isiolo					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Improved post harvest handling and storage practices																		
Used aflatoxin prevention and control																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Used aluminum cans, crates, other food grade containers during transportation																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Used well-equipped food storage structures (rodent proof; proper air circulation)																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Applied temperature and humidity control (shed nets, air condition, fans)																		
No	10.7	15.6	73.7	100.0	1,112	ns	14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	392	ns
Yes	0.0	0.0	100.0	100.0	1								0.0	0.0	100.0	100.0	1	
Used solar drying for grains and pulses																		
No	10.7	15.5	73.8	100.0	1,110	ns	14.9	18.9	66.2	100.0	720		2.1	8.7	89.2	100.0	390	ns
Yes	0.0	32.0	68.0	100.0	3								0.0	32.0	68.0	100.0	3	
Improved crop management practices																		
Improved/certified seed																		
No	10.7	15.6	73.7	100.0	1,111	ns	14.9	18.9	66.2	100.0	719	ns	2.1	8.8	89.1	100.0	392	ns
Yes	0.0	0.0	100.0	100.0	2		0.0	0.0	100.0	100.0	1		0.0	0.0	100.0	100.0	1	
Seedling production and transplantation																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Crop rotation (rotating grains with nitrogen fixing legumes)																		
No	10.7	15.5	73.8	100.0	1,110	ns	14.9	18.9	66.2	100.0	720		2.0	8.7	89.4	100.0	390	***
Yes	38.3	29.0	32.7	100.0	3								38.3	29.0	32.7	100.0	3	
Kitchen gardens using sunken pits																		
No	10.7	15.6	73.7	100.0	1,112	ns	14.9	18.9	66.2	100.0	719	ns	2.1	8.8	89.1	100.0	393	
Yes	0.0	0.0	100.0	100.0	1		0.0	0.0	100.0	100.0	1							
Use of organic manure																		
No	10.7	15.6	73.7	100.0	1,110	ns	14.9	18.9	66.2	100.0	719	ns	2.0	8.8	89.2	100.0	391	ns
Yes	18.0	0.0	82.0	100.0	3		0.0	0.0	100.0	100.0	1		27.0	0.0	73.0	100.0	2	
Soil testing																		
No	10.7	15.5	73.7	100.0	1,112	ns	14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	392	ns
Yes	0.0	0.0	100.0	100.0	1								0.0	0.0	100.0	100.0	1	
Application of inoculant																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Use of drip or sprinkler irrigation technologies																		
No	10.7	15.6	73.7	100.0	1,111	ns	14.9	18.9	66.2	100.0	719	ns	2.1	8.8	89.1	100.0	392	ns
Yes	0.0	0.0	100.0	100.0	2		0.0	0.0	100.0	100.0	1		0.0	0.0	100.0	100.0	1	
Use of rainwater harvesting technologies (water pans, rock/roof catchment)																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Use of flood-based farming technologies (spate irrigation)																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Production planning and crop rotation in irrigation schemes																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Use of drought early warning systems or information																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		

Table A7.2a. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS-Total						Marsabit						Isiolo					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Improved NRM practices																		
Reseeding degraded lands with drought resistant grass species																		
No	10.7	15.8	73.6	100.0	1,103	ns	14.7	18.9	66.4	100.0	718	*	2.2	9.1	88.7	100.0	385	ns
Yes	13.6	0.0	86.4	100.0	10		79.9	0.0	20.1	100.0	2		0.0	0.0	100.0	100.0	8	
Fencing off pasture plots to conserve pasture																		
No	9.6	15.4	75.0	100.0	1,083	***	13.3	18.8	67.9	100.0	695	***	2.0	8.8	89.1	100.0	388	ns
Yes	52.2	18.9	28.8	100.0	30		57.5	21.4	21.2	100.0	25		12.0	0.0	88.0	100.0	5	
Rehabilitation of degraded grazing lands (soil/water conservation)																		
No	10.1	15.4	74.5	100.0	1,085	*	14.2	18.7	67.1	100.0	694	ns	2.1	8.8	89.1	100.0	391	ns
Yes	33.0	21.7	45.4	100.0	28		36.5	24.0	39.4	100.0	26		0.0	0.0	100.0	100.0	2	
Construction of soil conservation structures (gabions)																		
No	10.5	15.4	74.1	100.0	1,100	**	14.7	18.7	66.6	100.0	707	*	2.1	8.8	89.1	100.0	393	
Yes	34.2	31.1	34.6	100.0	13		34.2	31.1	34.6	100.0	13							
Use of natural barriers/cover crops (grass strips/crop covers)																		
No	10.5	15.5	74.0	100.0	1,108	***	14.6	18.9	66.5	100.0	715	***	2.1	8.8	89.1	100.0	393	
Yes	66.9	17.8	15.3	100.0	5		66.9	17.8	15.3	100.0	5							
Utilization of organic materials such as grain straw, fresh or old hay or other crop residues																		
No	10.5	15.6	73.9	100.0	1,110	*	14.6	18.9	66.5	100.0	718	*	2.1	8.8	89.1	100.0	392	ns
Yes	62.5	0.0	37.5	100.0	3		100.0	0.0	0.0	100.0	2		0.0	0.0	100.0	100.0	1	
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)																		
No	10.7	15.6	73.7	100.0	1,111	ns	14.9	18.9	66.2	100.0	718	ns	2.1	8.8	89.1	100.0	393	
Yes	0.0	0.0	100.0	100.0	2		0.0	0.0	100.0	100.0	2							
Zaï pits (pot-holing)																		
No	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	
Yes																		
Use of minimum tillage practices (leave crop residue on soil surface)																		
No	10.7	15.6	73.7	100.0	1,109	ns	14.8	18.9	66.3	100.0	718	ns	2.1	8.8	89.1	100.0	391	ns
Yes	19.7	0.0	80.3	100.0	4		53.6	0.0	46.4	100.0	2		0.0	0.0	100.0	100.0	2	
Planting nitrogen-fixing trees (acacia)																		
No	10.7	15.6	73.7	100.0	1,111	ns	14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	391	ns
Yes	0.0	0.0	100.0	100.0	2								0.0	0.0	100.0	100.0	2	
Household access to group-based credit and/or savings																		
Household participated in group-based savings programs																		
No	10.9	15.8	73.3	100.0	1,069	ns	14.8	19.0	66.2	100.0	715	ns	2.1	8.8	89.0	100.0	354	ns
Yes	5.2	6.8	88.0	100.0	44		27.1	0.0	72.9	100.0	5		2.0	7.8	90.2	100.0	39	
Household participated in group-based credit programs																		
No	10.9	15.9	73.2	100.0	1,080	**	15.3	19.2	65.5	100.0	701	*	2.0	9.0	89.0	100.0	379	ns
Yes	2.2	2.4	95.5	100.0	33		0.0	3.7	96.3	100.0	19		6.0	0.0	94.0	100.0	14	
Household participated in group-based savings, microfinance or lending programs																		
No	11.1	16.0	72.9	100.0	1,049	*	15.2	19.3	65.5	100.0	696	*	2.1	8.8	89.0	100.0	353	ns
Yes	3.4	5.7	90.9	100.0	64		5.3	3.0	91.7	100.0	24		2.0	7.7	90.3	100.0	40	

Table A7.2a. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - CRS RFSA Areas
[Baseline Study, Kenya 2021]

	CRS-Total						Marsabit						Isiolo					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Household exposure to COVID-19 impacts																		
Household income/livelihood impacted by COVID-19																		
No	11.3	14.3	74.4	100.0	623	ns	14.2	17.9	67.8	100.0	434	ns	3.3	4.3	92.4	100.0	189	*
Yes	10.0	17.0	73.0	100.0	490		15.9	20.2	63.8	100.0	286		1.2	12.3	86.5	100.0	204	
Household access to food impacted by COVID-19																		
No	12.5	16.8	70.7	100.0	482	ns	16.1	20.8	63.0	100.0	340	ns	2.9	6.1	91.0	100.0	142	ns
Yes	9.4	14.6	76.0	100.0	631		13.9	17.1	69.0	100.0	380		1.7	10.2	88.1	100.0	251	
Household member contracted COVID-19 virus in 90 days prior to survey																		
No	10.7	15.5	73.9	100.0	1,101	ns	14.8	18.7	66.5	100.0	712	ns	2.1	8.8	89.0	100.0	389	ns
Yes	13.8	25.0	61.1	100.0	12		21.4	38.8	39.8	100.0	8		0.0	0.0	100.0	100.0	4	
Total	10.7	15.5	73.8	100.0	1,113		14.9	18.9	66.2	100.0	720		2.1	8.8	89.1	100.0	393	

NOTES: FCS is a composite score based on dietary diversity, food frequency and relative nutritional value of the different food groups. Values are then weighted and summed to obtain the FCS. Households are categorized into consumption groups based on pre-established thresholds. A modified threshold was used to account for the local diet which consists of daily oil and sugar consumption: Poor (0 - 28); borderline (28.5 - 42); and acceptable (>42). For more details refer to Supplement to Part 1 - BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities.

[a] Significance tests (chi square) were performed to determine whether an association exists between the outcome indicator (FCS group) and the disaggregate variable (e.g, sex, household poverty status, etc.). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.2b. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC-Total						Turkana						Samburu					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Household background characteristics																		
Residence																		
Rural	45.2	20.9	33.8	100.0	827	**	53.5	19.3	27.2	100.0	403	**	27.1	24.6	48.3	100.0	424	***
Urban	23.0	24.2	52.8	100.0	114		27.2	35.4	37.4	100.0	47		16.4	6.4	77.2	100.0	67	
Gendered household type																		
Both	41.6	20.8	37.6	100.0	718	ns	50.8	20.1	29.1	100.0	350	ns	22.4	22.2	55.4	100.0	368	ns
Female Only	43.2	24.1	32.6	100.0	182		46.3	24.6	29.1	100.0	87		35.7	23.1	41.2	100.0	95	
Male Only	39.7	19.5	40.8	100.0	39		51.5	40.1	8.4	100.0	12		30.2	2.9	67.0	100.0	27	
Child only	70.4	29.6	0.0	100.0	2		100.0	0.0	0.0	100.0	1		0.0	100.0	0.0	100.0	1	
Household head sex																		
Male	40.7	20.9	38.4	100.0	533	ns	50.8	20.9	28.3	100.0	243	ns	21.9	21.0	57.1	100.0	290	ns
Female	43.4	22.0	34.6	100.0	408		49.1	22.0	28.9	100.0	207		29.9	21.9	48.2	100.0	201	
Household head educational level																		
Never attended school	47.6	22.2	30.2	100.0	735	***	54.0	20.7	25.3	100.0	389	***	30.7	26.2	43.1	100.0	346	***
Pre-primary or primary	25.7	19.8	54.5	100.0	120		33.5	30.2	36.4	100.0	35		19.3	11.2	69.5	100.0	85	
Post-primary/vocational or secondary	13.0	18.9	68.1	100.0	43		20.8	25.6	53.6	100.0	15		5.6	12.5	81.9	100.0	28	
College or University	4.6	12.9	82.5	100.0	43		5.2	17.7	77.1	100.0	11		4.0	8.4	87.6	100.0	32	
Household food security																		
Household is moderately or severely food insecure																		
No	6.4	19.4	74.2	100.0	68	***	5.9	30.8	63.3	100.0	11	**	6.7	13.5	79.7	100.0	57	***
Yes	44.3	21.6	34.1	100.0	873		51.4	21.1	27.5	100.0	439		27.9	22.5	49.6	100.0	434	
Household poverty status																		
Household living below the $1.90 2011 PPP poverty line																		
No	12.7	8.6	78.7	100.0	136	***	23.1	8.5	68.4	100.0	36	***	4.1	8.7	87.2	100.0	100	***
Yes	46.5	23.4	30.1	100.0	805		52.6	22.7	24.6	100.0	414		31.4	25.1	43.5	100.0	391	
Agricultural assets																		
Raises any of the targeted livestock commodities (cattle, goats, camels)																		
No	36.1	16.7	47.1	100.0	158	ns	51.2	21.1	27.6	100.0	72	ns	15.7	10.8	73.4	100.0	86	***
Yes	43.1	22.3	34.6	100.0	783		49.8	21.5	28.7	100.0	378		27.7	24.2	48.1	100.0	405	
Household raises cattle																		
No	46.6	20.5	32.9	100.0	613	***	51.3	20.6	28.1	100.0	417	ns	24.8	19.8	55.4	100.0	196	ns
Yes	27.3	24.4	48.3	100.0	328		34.0	31.4	34.6	100.0	33		25.5	22.5	52.0	100.0	295	
Household raises goats																		
No	35.2	17.5	47.4	100.0	191	ns	50.0	23.7	26.3	100.0	74	ns	19.2	10.7	70.0	100.0	117	***
Yes	43.5	22.3	34.2	100.0	750		50.0	21.1	28.9	100.0	376		27.5	25.5	47.1	100.0	374	
Household raises camels																		
No	43.2	20.1	36.7	100.0	834	**	51.3	20.1	28.6	100.0	405	ns	26.2	20.1	53.6	100.0	429	ns
Yes	32.2	31.5	36.3	100.0	107		39.8	32.0	28.1	100.0	45		17.4	30.5	52.1	100.0	62	
Agricultural financial services																		
Accessed agri-related financial services																		
No	44.7	22.5	32.8	100.0	846	***	51.0	22.3	26.7	100.0	434	**	29.5	22.9	47.6	100.0	412	***
Yes	10.8	9.6	79.7	100.0	95		23.9	0.0	76.1	100.0	16		4.7	14.0	81.3	100.0	79	
Accessed agri-related loan																		
No	42.4	21.5	36.1	100.0	927	**	50.1	21.5	28.4	100.0	449	ns	26.0	21.6	52.5	100.0	478	ns
Yes	0.0	13.7	86.3	100.0	14		0.0	0.0	100.0	100.0	1		0.0	15.4	84.6	100.0	13	
Participated in agri-savings scheme																		
No	44.5	22.4	33.0	100.0	851	***	50.9	22.2	26.9	100.0	436	*	29.3	23.0	47.7	100.0	415	***
Yes	11.4	9.2	79.5	100.0	90		26.4	0.0	73.6	100.0	14		4.9	13.1	82.0	100.0	76	
Value chain interventions																		
Household adopted at least one value chain intervention																		
No	42.1	21.5	36.4	100.0	933	ns	50.0	21.6	28.4	100.0	447	ns	25.5	21.3	53.2	100.0	486	ns
Yes	23.1	11.4	65.5	100.0	8		42.7	0.0	57.3	100.0	3		0.0	24.8	75.2	100.0	5	
Any crop or livestock value chain																		
Contract farming																		
No	42.0	21.5	36.5	100.0	934	ns	50.0	21.4	28.7	100.0	448	ns	25.2	21.7	53.1	100.0	486	ns
Yes	34.5	13.1	52.4	100.0	7		56.9	43.1	0.0	100.0	2		24.7	0.0	75.3	100.0	5	
Selling products through community farmer associations																		
No	42.0	21.4	36.6	100.0	930	ns	50.0	21.3	28.7	100.0	443	ns	25.4	21.6	53.0	100.0	487	ns
Yes	36.0	25.4	38.6	100.0	11		48.9	34.4	16.7	100.0	7		0.0	0.0	100.0	100.0	4	
Sorting and grading																		
No	42.0	21.5	36.5	100.0	937	ns	50.0	21.5	28.5	100.0	448	ns	25.3	21.5	53.2	100.0	489	ns
Yes	31.8	0.0	68.2	100.0	4		57.4	0.0	42.6	100.0	2		0.0	0.0	100.0	100.0	2	
Bulking																		
No	41.9	21.5	36.6	100.0	938	ns	49.9	21.5	28.6	100.0	449	ns	25.3	21.5	53.3	100.0	489	ns
Yes	50.3	0.0	49.7	100.0	3		100.0	0.0	0.0	100.0	1		0.0	0.0	100.0	100.0	2	
Use of improved record keeping, budgeting and financial management																		
No	42.1	21.5	36.5	100.0	935	ns	50.1	21.5	28.4	100.0	449	ns	25.1	21.4	53.5	100.0	486	ns
Yes	20.8	10.4	68.7	100.0	6		0.0	0.0	100.0	100.0	1		33.3	16.7	50.0	100.0	5	

Table A7.2b. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC-Total						Turkana						Samburu					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Use of training and extension services																		
No	42.1	21.5	36.4	100.0	938	ns	50.0	21.4	28.6	100.0	450		25.4	21.6	53.0	100.0	488	ns
Yes	0.0	0.0	100.0	100.0	3								0.0	0.0	100.0	100.0	3	
Fodder production value chain																		
Use of improved pasture inputs (e.g., quality seeds)																		
No	42.1	21.5	36.4	100.0	937	ns	50.1	21.5	28.4	100.0	449	ns	25.4	21.5	53.1	100.0	488	ns
Yes	0.0	0.0	100.0	100.0	4		0.0	0.0	100.0	100.0	1		0.0	0.0	100.0	100.0	3	
Use of mechanized pasture harvesting and baling technologies																		
No	42.0	21.4	36.5	100.0	939	ns	50.0	21.4	28.6	100.0	450		25.3	21.5	53.2	100.0	489	ns
Yes	0.0	0.0	100.0	100.0	2								0.0	0.0	100.0	100.0	2	
Construction and use of hay stores by farmer organizations																		
No	42.0	21.4	36.6	100.0	940	ns	50.1	21.5	28.4	100.0	449	ns	25.2	21.4	53.4	100.0	491	
Yes	0.0	0.0	100.0	100.0	1		0.0	0.0	100.0	100.0	1							
Use of fodder seeds																		
No	42.1	21.4	36.5	100.0	937	ns	50.0	21.4	28.6	100.0	450		25.4	21.3	53.3	100.0	487	ns
Yes	0.0	30.9	69.1	100.0	4								0.0	30.9	69.1	100.0	4	
Use of harvesting, drying, packaging, storage, and marketing technologies																		
No	41.8	21.5	36.7	100.0	940	ns	49.9	21.5	28.7	100.0	449	ns	25.2	21.4	53.4	100.0	491	
Yes	100.0	0.0	0.0	100.0	1		100.0	0.0	0.0	100.0	1							
Improved livestock management practices																		
Used improved livestock breeds/species																		
No	42.4	21.5	36.1	100.0	925	***	50.0	21.4	28.6	100.0	450		25.9	21.6	52.5	100.0	475	ns
Yes	4.8	16.2	79.0	100.0	16								4.8	16.2	79.0	100.0	16	
Used livestock health services and products																		
No	45.6	21.2	33.2	100.0	781	***	52.5	20.6	26.9	100.0	431	**	26.7	22.7	50.6	100.0	350	ns
Yes	16.4	23.0	60.5	100.0	160		3.6	36.2	60.2	100.0	19		21.3	18.0	60.6	100.0	141	
Used improved livestock shelters																		
No	39.6	22.2	38.3	100.0	847	ns	46.9	23.2	29.8	100.0	384	ns	25.8	20.2	54.0	100.0	463	ns
Yes	58.3	16.2	25.5	100.0	94		66.2	11.8	22.0	100.0	66		15.1	40.3	44.6	100.0	28	
Used improved calving techniques																		
No	42.1	21.5	36.5	100.0	938	ns	50.0	21.4	28.6	100.0	450		25.4	21.6	53.0	100.0	488	ns
Yes	0.0	0.0	100.0	100.0	3								0.0	0.0	100.0	100.0	3	
Used improved milking techniques																		
No	42.1	21.4	36.5	100.0	937	ns	50.2	21.5	28.3	100.0	448	ns	25.1	21.3	53.6	100.0	489	ns
Yes	14.7	14.7	70.7	100.0	4		0.0	0.0	100.0	100.0	2		50.0	50.0	0.0	100.0	2	
Used nutritious pasture varieties																		
No	42.3	21.4	36.3	100.0	925	ns	50.3	21.3	28.4	100.0	441	ns	25.6	21.5	52.9	100.0	484	ns
Yes	25.3	21.6	53.1	100.0	16		35.0	25.7	39.3	100.0	9		0.0	10.8	89.2	100.0	7	
Used set grazing areas																		
No	44.5	21.0	34.5	100.0	815	***	52.4	21.2	26.4	100.0	411	**	26.9	20.4	52.7	100.0	404	ns
Yes	21.9	24.7	53.5	100.0	126		26.4	23.3	50.3	100.0	39		16.6	26.2	57.2	100.0	87	
Used improved fodder production																		
No	42.1	21.5	36.3	100.0	936	ns	50.2	21.5	28.3	100.0	448	ns	25.3	21.5	53.2	100.0	488	ns
Yes	0.0	0.0	100.0	100.0	5		0.0	0.0	100.0	100.0	2		0.0	0.0	100.0	100.0	3	
Used solarized boreholes for livestock																		
No	42.3	21.4	36.4	100.0	927	ns	50.1	21.3	28.6	100.0	449	ns	25.5	21.4	53.0	100.0	478	ns
Yes	12.5	26.3	61.2	100.0	14		0.0	100.0	0.0	100.0	1		13.7	19.6	66.7	100.0	13	
Used water pans for livestock																		
No	42.2	20.9	36.8	100.0	890	ns	50.0	21.1	28.8	100.0	442	ns	24.7	20.5	54.8	100.0	448	ns
Yes	34.9	33.5	31.6	100.0	51		47.9	40.5	11.6	100.0	8		29.8	30.8	39.3	100.0	43	
Used sand dams for livestock																		
No	42.0	21.2	36.8	100.0	918	ns	50.0	21.4	28.6	100.0	450		24.7	20.6	54.7	100.0	468	*
Yes	35.8	36.9	27.3	100.0	23								35.8	36.9	27.3	100.0	23	
Used rock catchments for livestock																		
No	42.0	21.5	36.6	100.0	922	ns	50.0	21.5	28.6	100.0	445	ns	25.0	21.4	53.6	100.0	477	ns
Yes	41.9	19.1	39.0	100.0	19		53.7	17.2	29.1	100.0	5		32.3	20.5	47.2	100.0	14	

Table A7.2b. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC-Total						Turkana						Samburu					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Improved post harvest handling and storage practices																		
Used aflatoxin prevention and control																		
No	42.0	21.4	36.6	100.0	940	ns	50.0	21.4	28.6	100.0	450		25.3	21.4	53.3	100.0	490	ns
Yes	0.0	0.0	100.0	100.0	1								0.0	0.0	100.0	100.0	1	
Used aluminum cans, crates, other food grade containers during transportation																		
No	41.9	21.5	36.6	100.0	939	ns	49.9	21.5	28.6	100.0	449	ns	25.3	21.5	53.2	100.0	490	ns
Yes	47.3	0.0	52.7	100.0	2		100.0	0.0	0.0	100.0	1		0.0	0.0	100.0	100.0	1	
Used well-equipped food storage structures (rodent proof; proper air circulation)																		
No	42.0	21.5	36.5	100.0	939	ns	50.1	21.5	28.4	100.0	449	ns	25.2	21.4	53.4	100.0	490	ns
Yes	0.0	0.0	100.0	100.0	2		0.0	0.0	100.0	100.0	1		0.0	0.0	100.0	100.0	1	
Applied temperature and humidity control (shed nets, air condition, fans)																		
No	41.9	21.4	36.6	100.0	941		50.0	21.4	28.6	100.0	450		25.2	21.4	53.4	100.0	491	
Yes																		
Used solar drying for grains and pulses																		
No	42.4	21.4	36.1	100.0	923	ns	50.9	21.4	27.7	100.0	433	ns	25.3	21.5	53.3	100.0	490	ns
Yes	22.3	21.0	56.7	100.0	18		23.6	22.1	54.3	100.0	17		0.0	0.0	100.0	100.0	1	
Improved crop management practices																		
Improved/certified seed																		
No	41.6	22.2	36.2	100.0	901	ns	49.4	22.4	28.2	100.0	419	ns	25.8	21.9	52.3	100.0	482	ns
Yes	49.3	4.6	46.0	100.0	40		59.2	5.6	35.3	100.0	31		0.0	0.0	100.0	100.0	9	
Seedling production and transplantation																		
No	42.2	21.4	36.4	100.0	934	ns	50.3	21.3	28.4	100.0	446	ns	25.4	21.5	53.1	100.0	488	ns
Yes	12.4	24.9	62.7	100.0	7		17.5	35.2	47.3	100.0	4		0.0	0.0	100.0	100.0	3	
Crop rotation (rotating grains with nitrogen fixing legumes)																		
No	42.4	21.1	36.4	100.0	925	**	50.9	21.0	28.1	100.0	435	**	25.3	21.4	53.3	100.0	490	ns
Yes	20.0	34.0	45.9	100.0	16		20.8	35.3	44.0	100.0	15		0.0	0.0	100.0	100.0	1	
Kitchen gardens using sunken pits																		
No	41.9	21.3	36.8	100.0	935	ns	50.0	21.3	28.7	100.0	444	ns	25.2	21.4	53.4	100.0	491	
Yes	47.3	37.3	15.5	100.0	6		47.3	37.3	15.5	100.0	6							
Use of organic manure																		
No	42.4	21.5	36.0	100.0	908	ns	50.5	21.3	28.1	100.0	427	ns	25.9	22.0	52.1	100.0	481	ns
Yes	29.7	18.0	52.3	100.0	33		38.5	23.4	38.1	100.0	23		0.0	0.0	100.0	100.0	10	
Soil testing																		
No	42.0	21.5	36.5	100.0	938	ns	50.1	21.5	28.4	100.0	447	ns	25.2	21.4	53.4	100.0	491	
Yes	30.2	0.0	69.8	100.0	3		30.2	0.0	69.8	100.0	3							
Application of inoculant																		
No	42.1	21.5	36.5	100.0	939	ns	50.2	21.5	28.3	100.0	448	ns	25.2	21.4	53.4	100.0	491	
Yes	0.0	0.0	100.0	100.0	2		0.0	0.0	100.0	100.0	2							
Use of drip or sprinkler irrigation technologies																		
No	42.1	21.3	36.6	100.0	938	ns	50.3	21.3	28.4	100.0	448	ns	25.0	21.4	53.6	100.0	490	ns
Yes	16.2	38.8	45.0	100.0	3		0.0	46.3	53.7	100.0	2		100.0	0.0	0.0	100.0	1	
Use of rainwater harvesting technologies (water pans, rock/roof catchment)																		
No	41.8	21.3	36.9	100.0	935	ns	49.9	21.3	28.9	100.0	444	ns	25.2	21.4	53.4	100.0	491	
Yes	63.1	36.9	0.0	100.0	6		63.1	36.9	0.0	100.0	6							
Use of flood-based farming technologies (spate irrigation)																		
No	42.1	21.5	36.5	100.0	939	ns	50.2	21.5	28.3	100.0	448	ns	25.2	21.4	53.4	100.0	491	
Yes	0.0	0.0	100.0	100.0	2		0.0	0.0	100.0	100.0	2							
Production planning and crop rotation in irrigation schemes																		
No	42.4	21.3	36.3	100.0	931	ns	50.8	21.3	28.0	100.0	440	*	25.2	21.4	53.4	100.0	491	
Yes	10.5	30.0	59.5	100.0	10		10.5	30.0	59.5	100.0	10							
Use of drought early warning systems or information																		
No	42.1	21.5	36.4	100.0	935	ns	50.4	21.5	28.1	100.0	444	*	25.2	21.4	53.4	100.0	491	
Yes	16.8	15.6	67.5	100.0	6		16.8	15.6	67.5	100.0	6							

Table A7.2b. Percentage of households with poor, borderline, and acceptable food consumption score (FCS) by household background characteristics - MC RFSA Areas
[Baseline Study, Kenya 2021]

	MC-Total						Turkana						Samburu					
	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]	Poor (0-28)	Borderline (28.5-42)	Acceptable (42.5-112)	Total	N	Sig.[a]
Improved NRM practices																		
Reseeding degraded lands with drought resistant grass species																		
No	42.4	21.4	36.2	100.0	928	ns	50.1	21.2	28.6	100.0	449	ns	25.9	21.7	52.4	100.0	479	ns
Yes	0.0	24.8	75.2	100.0	13		0.0	100.0	0.0	100.0	1		0.0	9.0	91.0	100.0	12	
Fencing off pasture plots to conserve pasture																		
No	42.0	21.7	36.3	100.0	897	ns	49.3	21.6	29.1	100.0	438	ns	26.0	22.0	52.0	100.0	459	ns
Yes	41.1	14.6	44.3	100.0	44		74.9	15.5	9.6	100.0	12		14.8	14.0	71.2	100.0	32	
Rehabilitation of degraded grazing lands (soil/water conservation)																		
No	42.2	21.3	36.5	100.0	932	ns	50.2	21.4	28.4	100.0	446	ns	25.5	21.1	53.5	100.0	486	ns
Yes	14.3	37.1	48.5	100.0	9		24.0	29.2	46.9	100.0	4		0.0	49.0	51.0	100.0	5	
Construction of soil conservation structures (gabions)																		
No	42.4	21.2	36.5	100.0	929	ns	50.2	21.2	28.6	100.0	447	ns	25.7	21.2	53.0	100.0	482	ns
Yes	9.0	40.2	50.8	100.0	12		20.4	55.1	24.6	100.0	3		0.0	28.3	71.7	100.0	9	
Use of natural barriers/cover crops (grass strips/crop covers)																		
No	42.2	21.7	36.1	100.0	917	ns	50.2	21.6	28.2	100.0	437	ns	25.4	22.0	52.6	100.0	480	ns
Yes	33.6	9.0	57.4	100.0	24		42.2	13.7	44.1	100.0	13		17.2	0.0	82.8	100.0	11	
Utilization of organic materials such as grain straw, fresh or old hay or other crop residues																		
No	41.8	21.7	36.5	100.0	928	ns	49.7	21.7	28.6	100.0	443	ns	25.4	21.7	52.9	100.0	485	ns
Yes	53.6	0.0	46.4	100.0	13		77.6	0.0	22.4	100.0	7		10.6	0.0	89.4	100.0	6	
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)																		
No	42.0	21.6	36.4	100.0	933	ns	49.9	21.5	28.6	100.0	447	ns	25.5	21.6	52.9	100.0	486	ns
Yes	34.6	0.0	65.4	100.0	8		73.8	0.0	26.2	100.0	3		0.0	0.0	100.0	100.0	5	
Zaï pits (pot-holing)																		
No	41.9	21.4	36.7	100.0	940	ns	49.9	21.5	28.6	100.0	449	ns	25.2	21.4	53.4	100.0	491	
Yes	100.0	0.0	0.0	100.0	1		100.0	0.0	0.0	100.0	1							
Use of minimum tillage practices (leave crop residue on soil surface)																		
No	41.8	21.7	36.5	100.0	924	ns	49.7	21.7	28.6	100.0	438	ns	25.5	21.7	52.8	100.0	486	ns
Yes	48.5	6.9	44.6	100.0	17		64.5	9.2	26.2	100.0	12		0.0	0.0	100.0	100.0	5	
Planting nitrogen-fixing trees (acacia)																		
No	42.0	21.3	36.6	100.0	939	ns	50.1	21.3	28.6	100.0	449	ns	25.3	21.4	53.3	100.0	490	ns
Yes	0.0	61.4	38.6	100.0	2		0.0	100.0	0.0	100.0	1		0.0	0.0	100.0	100.0	1	
Household access to group-based credit and/or savings																		
Household participated in group-based savings programs																		
No	43.0	21.9	35.1	100.0	904	***	50.2	21.5	28.4	100.0	446	ns	26.9	22.9	50.2	100.0	458	***
Yes	7.7	5.4	86.9	100.0	37		26.7	18.3	55.0	100.0	4		4.2	3.0	92.9	100.0	33	
Household participated in group-based credit programs																		
No	42.9	21.6	35.5	100.0	905	***	50.4	21.3	28.3	100.0	442	ns	26.4	22.3	51.3	100.0	463	**
Yes	12.2	14.0	73.8	100.0	36		25.2	27.0	47.9	100.0	8		5.7	7.5	86.8	100.0	28	
Household participated in group-based savings, microfinance or lending programs																		
No	43.6	21.9	34.6	100.0	884	***	50.5	21.3	28.2	100.0	440	ns	27.6	23.2	49.2	100.0	444	***
Yes	9.3	12.2	78.5	100.0	57		20.7	29.2	50.1	100.0	10		5.5	6.3	88.2	100.0	47	
Household exposure to COVID-19 impacts																		
Household income/livelihood impacted by COVID-19																		
No	45.7	22.4	31.9	100.0	481	*	54.5	21.0	24.5	100.0	240	ns	26.0	25.5	48.4	100.0	241	ns
Yes	38.3	20.4	41.3	100.0	460		45.4	21.8	32.8	100.0	210		24.4	17.6	57.9	100.0	250	
Household access to food impacted by COVID-19																		
No	45.1	22.9	32.0	100.0	423	ns	54.1	22.9	23.0	100.0	206	ns	25.8	22.9	51.3	100.0	217	ns
Yes	39.5	20.3	40.2	100.0	518		46.8	20.3	33.0	100.0	244		24.7	20.3	55.0	100.0	274	
Household member contracted COVID-19 virus in 90 days prior to survey																		
No	42.1	21.4	36.5	100.0	928	ns	50.2	21.5	28.3	100.0	444	ns	25.3	21.3	53.5	100.0	484	ns
Yes	31.9	20.5	47.5	100.0	13		37.0	17.1	45.9	100.0	6		21.7	27.3	50.9	100.0	7	
Total	41.9	21.4	36.6	100.0	941		50.0	21.4	28.6	100.0	450		25.2	21.4	53.4	100.0	491	

NOTES: FCS is a composite score based on dietary diversity, food frequency and relative nutritional value of the different food groups. Values are then weighted and summed to obtain the FCS. Households are categorized into consumption groups based on pre-established thresholds. A modified threshold was used to account for the local diet which consists of daily oil and sugar consumption: Poor (0 - 28); borderline (28.5 - 42); and acceptable (>42). For more details refer to Supplement to Part 1 - BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities.

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (FCS group) and the disaggregate variable (e.g, sex, household poverty status, etc.). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.2c. Average (mean values) of household background characteristics by category of FCS groups (poor, borderline, acceptable food consumption score) by RFSA area and county
[Baseline Study, Kenya 2021]

	CRS-Total							Marsabit							Isiolo						
	Poor (0-28)	Borderline (28.5-42)	Sig.[a]	Acceptable (42.5-112)	Sig.[a]	Total	N	Poor (0-28)	Borderline (28.5-42)	Sig.[a]	Acceptable (42.5-112)	Sig.[a]	Total	N	Poor (0-28)	Borderline (28.5-42)	Sig.[a]	Acceptable (42.5-112)	Sig.[a]	Total	N
Average age of household head	47.2	47.8	ns	46.1	ns	46.5	1,113	47.7	48.5	ns	45.8	ns	46.6	720	40.6	44.8	ns	46.6	ns	46.3	393
Average number of adult females in household	1.3	1.1	ns	1.2	ns	1.2	1,113	1.3	1.1	ns	1.2	ns	1.2	720	0.9	1.2	*	1.2	***	1.2	393
Average number of adult males in household	1.1	1.2	*	1.3	**	1.3	1,113	1.1	1.2	ns	1.3	*	1.2	720	1.4	1.3	ns	1.3	ns	1.3	393
Average number of children under five in household	1.0	1.1	ns	1.0	ns	1.0	1,113	1.0	1.1	ns	1.0	ns	1.0	720	0.9	1.1	ns	1.0	ns	1.0	393
Average number of children 5-17	2.1	2.4	ns	2.3	ns	2.3	1,113	2.2	2.2	ns	2.2	ns	2.2	720	1.7	3.0	ns	2.4	ns	2.5	393
Average daily per capita consumption expenditures (constant 2010 USD)	$1.06	$1.10	ns	$2.02	***	1.8	1,113	$1.04	$1.02	ns	$1.85	**	1.6	720	$1.39	$1.46	ns	$2.28	*	2.2	393
Average score - Ability to recover from shocks and stresses index	3.7	3.3	ns	3.7	ns	3.6	1,113	3.7	3.4	ns	3.9	ns	3.8	720	3.7	2.8	*	3.3	ns	3.2	393
Average score - social bonding index	72.7	67.9	ns	70.4	ns	70.2	1,113	73.1	67.8	ns	69.3	ns	69.6	720	67.1	68.3	ns	71.9	ns	71.5	393
Average score - social bridging index	67.9	64.8	ns	68.1	ns	67.5	1,113	68.4	63.4	ns	66.7	ns	66.3	720	60.4	71.0	ns	70.1	ns	70.0	393
Average score - overall social capital index	70.3	66.3	ns	69.2	ns	68.9	1,113	70.8	65.6	ns	68.0	ns	68.0	720	63.8	69.6	ns	71.0	ns	70.7	393
Average score - absorptive capacity index	31.2	31.3	ns	38.7	***	36.8	1,113	30.4	29.7	ns	34.8	*	33.2	720	43.7	38.2	ns	44.6	ns	44.1	393
Average score - adaptive capacity index	28.4	30.2	ns	35.1	***	33.6	1,113	28.0	29.2	ns	33.1	*	31.6	720	34.4	34.6	ns	38.1	ns	37.7	393
Average score - transformative capacity index	27.9	28.9	ns	34.3	ns	32.8	1,113	27.0	25.6	ns	27.5	ns	27.1	720	40.1	43.6	ns	44.6	ns	44.4	393

	MC-Total							Turkana							Samburu						
	Poor (0-28)	Borderline (28.5-42)	Sig.[a]	Acceptable (42.5-112)	Sig.[a]	Total	N	Poor (0-28)	Borderline (28.5-42)	Sig.[a]	Acceptable (42.5-112)	Sig.[a]	Total	N	Poor (0-28)	Borderline (28.5-42)	Sig.[a]	Acceptable (42.5-112)	Sig.[a]	Total	N
Average age of household head	49.4	48.7	ns	43.7	***	47.2	941	50.2	50.2	ns	45.3	**	48.8	450	45.8	45.6	ns	41.9	ns	43.7	491
Average number of adult females in household	1.1	1.2	ns	1.1	ns	1.2	941	1.2	1.2	ns	1.2	ns	1.2	450	1.1	1.2	ns	1.1	ns	1.1	491
Average number of adult males in household	1.0	0.9	ns	1.1	ns	1.0	941	1.0	0.9	ns	1.1	ns	1.0	450	1.0	1.1	ns	1.1	ns	1.1	491
Average number of children under five in household	1.0	1.1	ns	1.1	ns	1.0	941	1.0	1.1	ns	1.2	ns	1.0	450	0.9	1.1	ns	0.9	ns	1.0	491
Average number of children 5-17	2.2	2.4	ns	2.6	*	2.4	941	2.1	2.4	ns	2.8	**	2.4	450	2.4	2.3	ns	2.3	ns	2.3	491
Average daily per capita consumption expenditures (constant 2010 USD)	$0.53	$0.78	**	$1.90	***	1.1	941	$0.46	$0.72	ns	$1.41	*	0.8	450	$0.77	$0.92	ns	$2.45	***	1.7	491
Average score - Ability to recover from shocks and stresses index	3.5	3.7	ns	3.8	*	3.7	941	3.6	3.7	ns	3.8	ns	3.7	450	3.1	3.6	**	3.8	***	3.6	491
Average score - social bonding index	68.7	70.1	ns	73.1	ns	70.6	941	66.5	69.2	ns	68.6	ns	67.7	450	77.6	72.0	*	78.0	ns	76.6	491
Average score - social bridging index	66.7	70.8	ns	71.8	ns	69.4	941	64.8	69.2	ns	69.9	ns	67.2	450	74.6	74.0	ns	73.9	ns	74.1	491
Average score - overall social capital index	67.7	70.4	ns	72.4	ns	70.0	941	65.7	69.2	ns	69.3	ns	67.5	450	76.1	73.0	ns	75.9	ns	75.4	491
Average score - absorptive capacity index	24.3	29.4	***	39.6	***	31.0	941	23.0	28.5	***	35.2	***	27.7	450	29.8	31.1	ns	44.5	***	37.9	491
Average score - adaptive capacity index	22.6	29.3	***	39.1	***	30.1	941	21.2	28.4	***	34.6	***	26.6	450	28.5	31.2	ns	44.2	***	37.4	491
Average score - transformative capacity index	25.0	27.0	ns	33.1	**	28.39	941	24.6	26.9	ns	28.3	ns	26.16	450	26.63	27.03	ns	38.47	**	33.04	491

NOTES: FCS is a composite score based on dietary diversity, food frequency and relative nutritional value of the different food groups. Values are then weighted and summed to obtain the FCS. Households are categorized into consumption groups based on pre-established thresholds. A modified threshold was used to account for the local diet which consists of daily oil and sugar consumption: Poor (0 - 28); borderline (28.5 - 42); and acceptable (>42). For more details refer to Supplement to Part 1 - BHA Baseline/Endline Questionnaire and Indicator Tabulations for Resilience Food Security Activities.

[a] Significance tests (t-tests) were performed to determine whether an association exists between the outcome indicator (FCS group) and the disaggregate variable (e.g, average daily per capita consumption expenditures). The comparison category is "poor FCS." Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.3a. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - CRS RFSA Areas

	CRS-Total			Marsabit			Isiolo		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Household background characteristics									
Residence									
Rural	77.7	1,014	**	79.1	691	*	74.0	323	ns
Urban	53.8	99		40.5	29		57.9	70	
Gendered household type									
Both	74.9	949	ns	77.5	610	ns	70.1	339	ns
Female Only	76.8	124		80.2	87		65.1	37	
Male Only	55.3	40		54.7	23		56.9	17	
Child only									
Household head sex									
Male	75.1	771	ns	78.6	485	ns	68.8	286	ns
Female	73.9	342		74.6	235		72.4	107	
Household head educational level									
Never attended school	78.2	893	***	80.9	625	***	71.8	268	ns
Pre-primary or primary	67.8	131		59.8	55		73.4	76	
Post-primary/vocational or secondary	54.0	58		46.9	28		61.6	30	
College or University	26.1	31		29.2	12		24.2	19	
Household food security									
Household is moderately or severely food insecure									
No	44.3	140	***	47.6	75	***	40.0	65	**
Yes	78.1	973		80.3	645		73.9	328	
Agricultural assets									
Raises any of the targeted livestock commodities (cattle, goats, camels)									
No	69.8	64	ns	73.0	17	ns	69.2	47	ns
Yes	75.1	1,049		77.5	703		69.7	346	
Household raises cattle									
No	75.3	660	ns	78.1	428	ns	69.9	232	ns
Yes	73.8	453		76.3	292		69.3	161	
Household raises goats									
No	66.1	104	ns	68.9	29	ns	65.3	75	ns
Yes	75.7	1,009		77.7	691		70.8	318	
Household raises camels									
No	71.3	571	ns	75.7	219	ns	68.9	352	ns
Yes	78.0	542		78.1	501		76.7	41	
Agricultural financial services									
Accessed agri-related financial services									
No	76.8	977	*	78.7	662	*	72.4	315	ns
Yes	59.6	136		60.8	58		58.7	78	
Accessed agri-related loan									
No	74.9	1,088	ns	77.5	703	ns	70.0	385	ns
Yes	66.8	25		74.8	17		46.3	8	
Participated in agri-savings scheme									
No	76.7	997	*	78.7	677	*	72.3	320	ns
Yes	56.8	116		54.3	43		58.1	73	

Table A7.3a. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - CRS RFSA Areas

	CRS-Total			Marsabit			Isiolo		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Value chain interventions									
Household adopted at least one value chain intervention									
No	74.4	1,043	ns	76.1	662	**	71.3	381	*
Yes	79.9	70		93.5	58		30.6	12	
Any crop or livestock value chain									
Contract farming									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Selling products through community farmer associations									
No	74.9	1,107	ns	77.4	719	ns	70.0	388	ns
Yes	40.2	6		100.0	1		34.6	5	
Sorting and grading									
No	74.8	1,094	ns	76.9	705	ns	71.0	389	***
Yes	72.0	19		100.0	15		7.5	4	
Bulking									
No	74.2	1,075	*	76.8	687	ns	69.4	388	ns
Yes	92.0	38		91.8	33		93.0	5	
Use of improved record keeping, budgeting and financial management									
No	74.6	1,107	ns	77.3	715	ns	69.5	392	ns
Yes	94.5	6		92.6	5		100.0	1	
Use of training and extension services									
No	74.7	1,106	ns	77.4	713	ns	69.6	393	
Yes	86.5	7		86.5	7				
Fodder production value chain									
Use of improved pasture inputs (e.g., quality seeds)									
No									
Yes	74.8	1,113		77.4	720		69.6	393	
Use of mechanized pasture harvesting and baling technologies									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Construction and use of hay stores by farmer organizations									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Use of fodder seeds									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Use of harvesting, drying, packaging, storage, and marketing technologies									
No	74.8	1,113		77.4	720		69.6	393	
Yes									

Table A7.3a. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - CRS RFSA Areas

	CRS-Total			Marsabit			Isiolo		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Improved livestock management practices									
Used improved livestock breeds/species									
No	74.9	1,084	ns	77.8	693	ns	69.5	391	*
Yes	69.2	29		67.4	27		96.1	2	
Used livestock health services and products									
No	74.9	998	ns	76.9	630	ns	71.0	368	ns
Yes	73.9	115		81.5	90		60.2	25	
Used improved livestock shelters									
No	74.4	1,049	ns	76.9	660	ns	70.0	389	ns
Yes	81.2	64		84.2	60		39.5	4	
Used improved calving techniques									
No	74.6	1,102	*	77.2	709	*	69.6	393	
Yes	96.6	11		96.6	11				
Used improved milking techniques									
No	74.7	1,107	ns	77.4	714	ns	69.6	393	
Yes	79.2	6		79.2	6				
Used nutritious pasture varieties									
No	74.5	1,058	ns	76.8	671	ns	70.3	387	ns
Yes	79.8	55		85.5	49		29.0	6	
Used set grazing areas									
No	72.7	768	ns	73.4	416	*	71.8	352	ns
Yes	79.2	345		82.8	304		52.8	41	
Used improved fodder production									
No	75.6	1,088	***	78.3	702	**	70.4	386	**
Yes	40.4	25		43.4	18		33.4	7	
Used solarized boreholes for livestock									
No	74.5	1,027	ns	77.4	636	ns	69.6	391	ns
Yes	78.0	86		78.0	84		71.4	2	
Used water pans for livestock									
No	75.1	1,036	ns	78.7	653	ns	68.8	383	***
Yes	69.4	77		64.2	67		98.1	10	
Used sand dams for livestock									
No	74.9	1,046	ns	78.2	677	ns	68.5	369	ns
Yes	72.1	67		62.5	43		83.8	24	
Used rock catchments for livestock									
No	74.6	1,068	ns	77.3	675	ns	69.6	393	
Yes	80.5	45		80.5	45				

Table A7.3a. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - CRS RFSA Areas

	CRS-Total			Marsabit			Isiolo		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Improved post harvest handling and storage practices									
Used aflatoxin prevention and control									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Used aluminum cans, crates, other food grade containers during transportation									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Used well-equipped food storage structures (rodent proof; proper air circulation)									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Applied temperature and humidity control (shed nets, air condition, fans)									
No	74.7	1,112	ns	77.4	720		69.5	392	ns
Yes	100.0	1					100.0	1	
Used solar drying for grains and pulses									
No	74.8	1,110	ns	77.4	720		69.6	390	ns
Yes	81.6	3					81.6	3	
Improved crop management practices									
Improved/certified seed									
No	74.9	1,111	*	77.6	719	*	69.6	392	ns
Yes	20.4	2		0.0	1		100.0	1	
Seedling production and transplantation									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Crop rotation (rotating grains with nitrogen fixing legumes)									
No	74.8	1,110	ns	77.4	720		69.6	390	ns
Yes	83.3	3					83.3	3	
Kitchen gardens using sunken pits									
No	74.9	1,112	ns	77.6	719	*	69.6	393	
Yes	0.0	1		0.0	1				
Use of organic manure									
No	74.8	1,110	ns	77.6	719	*	69.4	391	ns
Yes	60.5	3		0.0	1		100.0	2	
Soil testing									
No	74.7	1,112	ns	77.4	720		69.5	392	ns
Yes	100.0	1					100.0	1	
Application of inoculant									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Use of drip or sprinkler irrigation technologies									
No	74.8	1,111	ns	77.6	719	*	69.5	392	ns
Yes	45.2	2		0.0	1		100.0	1	
Use of rainwater harvesting technologies (water pans, rock/roof catchment)									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Use of flood-based farming technologies (spate irrigation)									
No	74.8	1,113		77.4	720		69.6	393	
Yes									

Table A7.3a. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - CRS RFSA Areas

	CRS-Total			Marsabit			Isiolo		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Production planning and crop rotation in irrigation schemes									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Use of drought early warning systems or information									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Improved NRM practices									
Reseeding degraded lands with drought resistant grass species									
No	74.6	1,103	ns	77.7	718	ns	68.4	385	**
Yes	86.3	10		31.6	2		97.8	8	
Fencing off pasture plots to conserve pasture									
No	74.7	1,083	ns	77.5	695	ns	69.3	388	ns
Yes	78.7	30		75.0	25		100.0	5	
Rehabilitation of degraded grazing lands (soil/water conservation)									
No	74.3	1,085	***	76.9	694	**	69.6	391	ns
Yes	94.6	28		95.8	26		82.2	2	
Construction of soil conservation structures (gabions)									
No	74.6	1,100	**	77.2	707	*	69.6	393	
Yes	93.6	13		93.6	13				
Use of natural barriers/cover crops (grass strips/crop covers)									
No	74.7	1,108	ns	77.3	715	ns	69.6	393	
Yes	100.0	5		100.0	5				
Utilization of organic materials such as grain straw, fresh or old hay or other crop residues									
No	74.8	1,110	ns	77.4	718	ns	70.0	392	ns
Yes	55.7	3		100.0	2		0.0	1	
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)									
No	74.8	1,111	ns	77.5	718	ns	69.6	393	ns
Yes	58.3	2		58.3	2				
Zaï pits (pot-holing)									
No	74.8	1,113		77.4	720		69.6	393	
Yes									
Use of minimum tillage practices (leave crop residue on soil surface)									
No	74.8	1,109	ns	77.4	718	ns	69.9	391	ns
Yes	60.9	4		100.0	2		0.0	2	
Planting nitrogen-fixing trees (acacia)									
No	74.8	1,111	***	77.4	720	ns	69.7	391	ns
Yes	61.1	2					61.1	2	
Household access to group-based credit and/or savings									
Household participated in group-based savings programs									
No	74.9	1,069	ns	77.5	715	ns	69.4	354	ns
Yes	71.1	44		60.7	5		72.3	39	
Household participated in group-based credit programs									
No	74.9	1,080	ns	77.5	701	ns	70.0	379	ns
Yes	69.9	33		76.9	19		59.1	14	
Household participated in group-based savings, microfinance or lending programs									
No	74.8	1,049	ns	77.5	696	ns	69.3	353	ns
Yes	73.4	64		74.1	24		72.8	40	

Table A7.3a. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - CRS RFSA Areas

	CRS-Total			Marsabit			Isiolo		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Household exposure to COVID-19 impacts									
Household income/livelihood impacted by COVID-19									
No	74.0	623	ns	75.4	434	ns	70.3	189	ns
Yes	75.6	490		80.3	286		69.1	204	
Household access to food impacted by COVID-19									
No	74.2	482	ns	77.1	340	ns	67.2	142	ns
Yes	75.2	631		77.7	380		70.9	251	
Household member contracted COVID-19 virus in 90 days prior to survey									
No	75.0	1,101	ns	77.6	712	ns	69.9	389	ns
Yes	49.9	12		55.9	8		40.1	4	
Total	74.8	1,113		77.4	720		69.6	393	

NOTES:

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (poverty) and the disaggregate variable (e.g, urban/rural residence). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.3b. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - MC RFSA Areas

	MC-Total			Turkana			Samburu		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Household background characteristics									
Residence									
Rural	90.9	827	**	94.6	403	*	82.6	424	*
Urban	66.9	114		71.6	47		58.9	67	
Gendered household type									
Both	86.2	718	*	90.6	350	ns	77.0	368	**
Female Only	94.5	182		96.0	87		90.7	95	
Male Only	79.0	39		92.7	12		62.9	27	
Child only	100.0	2		100.0	1		100.0	1	
Household head sex									
Male	85.7	533	ns	91.1	243	ns	74.7	290	ns
Female	89.8	408		92.1	207		84.5	201	
Household head educational level									
Never attended school	93.6	735	***	95.1	389	***	89.6	346	***
Pre-primary or primary	78.9	120		90.8	35		69.9	85	
Post-primary/vocational or secondary	52.3	43		63.3	15		38.8	28	
College or University	30.0	43		38.7	11		17.8	32	
Household food security									
Household is moderately or severely food insecure									
No	42.8	68	***	44.9	11	***	41.4	57	***
Yes	90.5	873		93.4	439		83.9	434	
Agricultural assets									
Raises any of the targeted livestock commodities (cattle, goats, camels)									
No	76.2	158	**	92.3	72	ns	55.8	86	***
Yes	89.4	783		91.4	378		84.6	405	
Household raises cattle									
No	88.5	613	ns	91.6	417	ns	73.2	196	ns
Yes	83.8	328		89.9	33		82.2	295	
Household raises goats									
No	75.6	191	**	92.6	74	ns	59.0	117	***
Yes	89.9	750		91.3	376		86.2	374	
Household raises camels									
No	86.5	834	ns	90.8	405	ns	77.2	429	ns
Yes	94.2	107		96.6	45		89.1	62	
Agricultural financial services									
Accessed agri-related financial services									
No	91.6	846	***	94.3	434	***	84.8	412	***
Yes	44.1	95		34.3	16		49.6	79	
Accessed agri-related loan									
No	87.7	927	*	91.5	449	ns	79.5	478	ns
Yes	61.3	14		100.0	1		52.2	13	
Participated in agri-savings scheme									
No	91.6	851	***	94.4	436	***	84.9	415	***
Yes	39.5	90		24.2	14		47.4	76	

Table A7.3b. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - MC RFSA Areas

	MC-Total			Turkana			Samburu		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Value chain interventions									
No	87.9	933	***	91.7	447	*	79.8	486	***
Yes	14.6	8		42.7	3		0.0	5	
Any crop or livestock value chain									
Contract farming									
No	87.7	934	**	91.5	448	ns	79.5	486	*
Yes	44.9	7		100.0	2		27.8	5	
Selling products through community farmer associations									
No	87.5	930	ns	91.7	443	*	78.6	487	ns
Yes	74.3	11		74.3	7		74.3	4	
Sorting and grading									
No	87.4	937	ns	91.5	448	ns	78.6	489	ns
Yes	92.8	4		100.0	2		70.6	2	
Bulking									
No	87.4	938	ns	91.5	449	ns	78.8	489	*
Yes	60.7	3		100.0	1		19.5	2	
Use of improved record keeping, budgeting and financial management									
No	87.5	935	ns	91.6	449	**	78.6	486	ns
Yes	59.0	6		0.0	1		75.5	5	
Use of training and extension services									
No	87.5	938	***	91.5	450		78.9	488	**
Yes	0.0	3					0.0	3	
Fodder production value chain									
Use of improved pasture inputs (e.g., quality seeds)									
No	87.7	937	***	91.7	449	**	79.3	488	***
Yes	0.0	4		0.0	1		0.0	3	
Use of mechanized pasture harvesting and baling technologies									
No	87.5	939	***	91.5	450		79.1	489	**
Yes	0.0	2					0.0	2	
Construction and use of hay stores by farmer organizations									
No	87.4	940	*	91.5	449	**	78.6	491	
Yes	0.0	1		0.0	1				
Use of fodder seeds									
No	87.7	937	***	91.5	450		79.6	487	***
Yes	0.0	4					0.0	4	
Use of harvesting, drying, packaging, storage, and marketing technologies									
No	87.4	940	ns	91.5	449	ns	78.6	491	
Yes	100.0	1		100.0	1				

Table A7.3b. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - MC RFSA Areas

	MC-Total			Turkana			Samburu		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Improved livestock management practices									
Used improved livestock breeds/species									
No	87.7	925	***	91.5	450		79.4	475	*
Yes	55.8	16					55.8	16	
Used livestock health services and products									
No	88.6	781	ns	92.5	431	ns	77.6	350	ns
Yes	79.2	160		74.6	19		81.0	141	
Used improved livestock shelters									
No	88.3	847	ns	92.8	384	ns	79.6	463	ns
Yes	81.0	94		84.4	66		63.4	28	
Used improved calving techniques									
No	87.4	938	ns	91.5	450		78.5	488	ns
Yes	92.2	3					92.2	3	
Used improved milking techniques									
No	87.5	937	ns	91.8	448	**	78.5	489	ns
Yes	40.9	4		0.0	2		100.0	2	
Used nutritious pasture varieties									
No	87.7	925	*	91.9	441	*	78.9	484	ns
Yes	67.7	16		70.5	9		60.3	7	
Used set grazing areas									
No	86.7	815	ns	90.6	411	ns	77.9	404	ns
Yes	92.2	126		100.0	39		82.4	87	
Used improved fodder production									
No	87.7	936	***	91.8	448	**	79.0	488	**
Yes	0.0	5		0.0	2		0.0	3	
Used solarized boreholes for livestock									
No	87.3	927	ns	91.5	449	ns	78.1	478	ns
Yes	100.0	14		100.0	1		100.0	13	
Used water pans for livestock									
No	87.5	890	ns	91.5	442	ns	78.3	448	ns
Yes	84.4	51		92.1	8		81.4	43	
Used sand dams for livestock									
No	87.3	918	ns	91.5	450		77.8	468	**
Yes	93.6	23					93.6	23	
Used rock catchments for livestock									
No	87.4	922	ns	91.4	445	ns	78.7	477	ns
Yes	86.1	19		100.0	5		76.2	14	

Table A7.3b. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - MC RFSA Areas

	MC-Total			Turkana			Samburu		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Improved post harvest handling and storage practices									
Used aflatoxin prevention and control									
No	87.4	940	ns	91.5	450	ns	78.6	490	ns
Yes	100.0	1					100.0	1	
Used aluminum cans, crates, other food grade containers during transportation									
No	87.5	939	*	91.5	449	ns	79.0	490	ns
Yes	31.0	2		100.0	1		0.0	1	
Used well-equipped food storage structures (rodent proof; proper air circulation)									
No	87.5	939	***	91.5	449	**	78.9	490	*
Yes	0.0	2		0.0	1		0.0	1	
Applied temperature and humidity control (shed nets, air condition, fans)									
No	87.4	941		91.5	450		78.6	491	
Yes									
Used solar drying for grains and pulses									
No	87.3	923	ns	91.5	433	ns	78.7	490	ns
Yes	88.5	18		90.7	17		0.0	1	
Improved crop management practices									
Improved/certified seed									
No	88.2	901	*	91.9	419	ns	80.5	482	***
Yes	69.2	40		84.7	31		0.0	9	
Seedling production and transplantation									
No	87.4	934	ns	91.4	446	ns	78.9	488	*
Yes	80.3	7		100.0	4		0.0	3	
Crop rotation (rotating grains with nitrogen fixing legumes)									
No	87.2	925	ns	91.3	435	ns	78.8	490	*
Yes	93.1	16		96.8	15		0.0	1	
Kitchen gardens using sunken pits									
No	87.3	935	ns	91.4	444	ns	78.6	491	
Yes	100.0	6		100.0	6				
Use of organic manure									
No	87.8	908	ns	91.8	427	ns	79.6	481	***
Yes	77.0	33		86.2	23		31.0	10	
Soil testing									
No	87.3	938	ns	91.5	447	ns	78.6	491	
Yes	100.0	3		100.0	3				
Application of inoculant									
No	87.3	939	ns	91.5	448	ns	78.6	491	
Yes	100.0	2		100.0	2				
Use of drip or sprinkler irrigation technologies									
No	87.7	938	*	92.0	448	**	78.6	490	ns
Yes	41.6	3		37.6	2		100.0	1	
Use of rainwater harvesting technologies (water pans, rock/roof catchment)									
No	87.4	935	ns	91.7	444	ns	78.6	491	
Yes	77.6	6		77.6	6				

Table A7.3b. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - MC RFSA Areas

	MC-Total			Turkana			Samburu		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Use of flood-based farming technologies (spate irrigation)									
No	87.3	939	ns	91.5	448	ns	78.6	491	
Yes	100.0	2		100.0	2				
Production planning and crop rotation in irrigation schemes									
No	87.2	931	ns	91.3	440	ns	78.6	491	
Yes	100.0	10		100.0	10				
Use of drought early warning systems or information									
No	87.2	935	ns	91.4	444	ns	78.6	491	ns
Yes	100.0	6		100.0	6				
Improved NRM practices									
Reseeding degraded lands with drought resistant grass species									
No	87.4	928	ns	91.5	449	ns	78.6	479	ns
Yes	85.6	13		100.0	1		79.5	12	
Fencing off pasture plots to conserve pasture									
No	87.9	897	*	91.4	438	ns	80.1	459	*
Yes	74.9	44		95.2	12		61.6	32	
Rehabilitation of degraded grazing lands (soil/water conservation)									
No	87.3	932	ns	91.4	446	ns	78.6	486	ns
Yes	93.2	9		100.0	4		76.7	5	
Construction of soil conservation structures (gabions)									
No	87.7	929	*	91.4	447	ns	79.5	482	**
Yes	60.4	12		100.0	3		28.7	9	
Use of natural barriers/cover crops (grass strips/crop covers)									
No	87.5	917	ns	91.3	437	ns	79.4	480	*
Yes	84.1	24		100.0	13		45.9	11	
Utilization of organic materials such as grain straw, fresh or old hay or other crop residues									
No	87.6	928	ns	91.5	443	ns	79.2	485	**
Yes	69.2	13		89.4	7		24.8	6	
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw)									
No	87.5	933	ns	91.5	447	ns	79.2	486	*
Yes	61.9	8		100.0	3		26.5	5	
Zaï pits (pot-holing)									
No	87.4	940	ns	91.5	449	ns	78.6	491	ns
Yes	100.0	1		100.0	1				
Use of minimum tillage practices (leave crop residue on soil surface)									
No	87.5	924	ns	91.6	438	ns	78.7	486	ns
Yes	80.4	17		84.9	12		70.9	5	
Planting nitrogen-fixing trees (acacia)									
No	87.4	939	ns	91.5	449	ns	78.8	490	*
Yes	65.0	2		100.0	1		0.0	1	

Table A7.3b. Percentage of households living below the $1.90 2011 PPP poverty line by household background characteristics - MC RFSA Areas

	MC-Total			Turkana			Samburu		
	%	N	Sig[a]	%	N	Sig[a]	%	N	Sig[a]
Household access to group-based credit and/or savings									
Household participated in group-based savings programs									
No	88.9	904	***	92.1	446	***	81.7	458	***
Yes	35.4	37		39.8	4		33.9	33	
Household participated in group-based credit programs									
No	88.3	905	***	91.8	442	ns	80.5	463	**
Yes	61.8	36		76.6	8		53.6	28	
Household participated in group-based savings, microfinance or lending programs									
No	89.2	884	***	92.1	440	**	82.3	444	***
Yes	53.2	57		66.8	10		46.5	47	
Household exposure to COVID-19 impacts									
Household income/livelihood impacted by COVID-19									
No	89.2	481	ns	92.8	240	ns	81.0	241	ns
Yes	85.6	460		90.2	210		76.4	250	
Household access to food impacted by COVID-19									
No	87.4	423	ns	92.1	206	ns	77.2	217	ns
Yes	87.3	518		91.1	244		79.6	274	
Household member contracted COVID-19 virus in 90 days prior to survey									
No	87.5	928	ns	91.7	444	ns	78.5	484	ns
Yes	81.1	13		77.8	6		86.9	7	
Total	87.4	941		91.5	450		78.6	491	

NOTES:

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (poverty) and the disaggregate variable (e.g, urban/rural residence). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.3c. Averages (mean values) of household background characteristics by household poverty status ($1.90 poverty line), by RFSA area and county
[Baseline Study, Kenya 2021]

	CRS-Total					Marsabit					Isiolo				
	At or Above Poverty Line	Below Poverty Line	Sig.[a]	Total	N	At or Above Poverty Line	Below Poverty Line	Sig.[a]	Total	N	At or Above Poverty Line	Below Poverty Line	Sig.[a]	Total	N
Average age of household head	48.9	47.0	ns	47.5	1,113	47.5	47.7	ns	47.6	720	50.9	45.5	*	47.1	393
Average number of adult females in household	1.4	1.3	*	1.3	1,113	1.4	1.2	ns	1.3	720	1.4	1.3	*	1.3	393
Average number of adult males in household	1.6	1.3	*	1.4	1,113	1.7	1.3	*	1.4	720	1.5	1.4	ns	1.4	393
Average number of children under five in household	0.8	1.2	***	1.1	1,113	0.8	1.2	***	1.1	720	0.9	1.2	*	1.1	393
Average number of children 5-17	2.5	2.9	**	2.8	1,113	2.3	2.7	**	2.6	720	2.7	3.3	ns	3.1	393
Average score - Ability to recover from shocks and stresses index	3.7	3.5	ns	3.6	1,113	4.0	3.7	ns	3.8	720	3.3	3.1	ns	3.2	393
Average score - social bonding index	68.8	70.5	ns	70.1	1,113	66.0	70.2	ns	69.3	720	72.9	71.1	ns	71.6	393
Average score - social bridging index	67.0	67.3	ns	67.2	1,113	63.9	66.4	ns	65.9	720	71.4	69.1	ns	69.8	393
Average score - overall social capital index	67.9	68.9	ns	68.6	1,113	64.9	68.3	ns	67.6	720	72.1	70.1	ns	70.7	393
Average score - absorptive capacity index	42.9	35.5	*	37.3	1,113	38.6	32.2	ns	33.7	720	49.0	42.4	ns	44.4	393
Average score - adaptive capacity index	41.3	32.4	**	34.6	1,113	38.4	31.0	ns	32.7	720	45.5	35.3	**	38.4	393
Average score - transformative capacity index	41.2	31.0	**	33.5	1,113	33.0	26.0	ns	27.6	720	52.9	41.5	***	45.0	393

	MC-Total					Turkana					Samburu				
	At or Above Poverty Line	Below Poverty Line	Sig.[a]	Total	N	At or Above Poverty Line	Below Poverty Line	Sig.[a]	Total	N	At or Above Poverty Line	Below Poverty Line	Sig.[a]	Total	N
Average age of household head	44.6	47.8	*	47.4	941	44.3	49.2	*	48.8	450	44.9	44.3	*	44.4	491
Average number of adult females in household	1.4	1.2	ns	1.2	941	1.5	1.2	ns	1.2	450	1.4	1.2	ns	1.2	491
Average number of adult males in household	1.6	1.1	*	1.2	941	1.6	1.1	ns	1.1	450	1.6	1.1	ns	1.2	491
Average number of children under five in household	1.1	1.2	ns	1.2	941	1.2	1.2	ns	1.2	450	1.0	1.1	ns	1.1	491
Average number of children 5-17	3.0	3.0	ns	3.0	941	3.4	2.9	ns	3.0	450	2.7	3.0	ns	2.9	491
Average score - Ability to recover from shocks and stresses index	3.8	3.6	ns	3.7	941	3.8	3.7	ns	3.7	450	3.8	3.5	ns	3.6	491
Average score - social bonding index	71.5	71.3	ns	71.3	941	61.7	69.0	*	68.4	450	79.7	76.8	ns	77.4	491
Average score - social bridging index	70.3	70.0	ns	70.0	941	62.6	68.5	ns	68.0	450	76.7	73.8	ns	74.4	491
Average score - overall social capital index	70.9	70.6	ns	70.7	941	62.2	68.8	ns	68.2	450	78.2	75.3	ns	75.9	491
Average score - absorptive capacity index	55.0	28.6	***	31.9	941	51.9	26.5	***	28.6	450	57.7	33.7	***	38.9	491
Average score - adaptive capacity index	54.8	28.1	***	31.5	941	51.8	25.8	***	28.0	450	57.3	33.9	***	38.9	491
Average score - transformative capacity index	44.0	26.6	***	28.8	941	42.7	25.0	**	26.5	450	45.0	30.7	***	33.8	491

NOTES:
[a] Significance tests (t-tests) were performed to determine whether an association exists between the outcome indicator (poverty) and the disaggregate variables (e.g, absorptive capacity index). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.4a. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- CRS RFSA Areas, Total [Baseline Study, Kenya 2021]

CRS - Total

	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Cattle												
Improved livestock breeds/species	1.3	1.8	1.3	ns	1.2	2.3	1.3	ns	1.3	3.4	1.3	ns
Livestock health services and products	11.5	7.3	11.1	ns	11.2	9.3	11.1	ns	11.1	9.2	11.1	ns
Improved shelters	4.2	1.7	3.9	ns	4.1	2.1	3.9	ns	4.0	0.0	3.9	ns
Improved calving techniques	2.6	0.0	2.4	ns	2.6	0.0	2.4	ns	2.4	0.0	2.4	ns
Improved milking techniques	0.2	2.2	0.4	ns	0.2	2.8	0.4	*	0.4	0.0	0.4	ns
Nutritious pasture varieties	2.7	1.0	2.5	ns	2.7	0.0	2.5	ns	2.4	5.4	2.5	ns
Utilization of set grazing areas	32.2	37.7	32.8	ns	32.7	33.6	32.8	ns	32.2	60.2	32.8	*
Improved fodder production	1.1	3.4	1.3	ns	1.0	4.4	1.3	*	1.2	9.2	1.3	*
Solarized boreholes for livestock	6.3	4.3	6.1	ns	6.5	1.7	6.1	ns	5.9	15.9	6.1	ns
Water pans for livestock	4.3	4.4	4.3	ns	4.4	4.0	4.3	ns	4.3	6.7	4.3	ns
Sand dams for livestock	2.9	6.0	3.2	ns	3.2	4.2	3.2	ns	3.0	14.6	3.2	*
Rock catchments for livestock	3.1	3.1	3.1	ns	3.2	2.6	3.1	ns	3.1	5.4	3.1	ns
Number of responding cattle producers	533	68	601		545	56	601		588	13	601	
Goats												
Improved livestock breeds/species	1.4	2.5	1.5	ns	1.4	2.4	1.5	ns	1.4	2.9	1.5	ns
Livestock health services and products	10.4	22.1	11.5	ns	10.2	26.3	11.5	*	11.7	0.0	11.5	ns
Improved shelters	5.2	5.0	5.2	ns	5.2	5.4	5.2	ns	5.2	2.9	5.2	ns
Improved milking techniques	0.3	1.9	0.5	ns	0.3	2.3	0.5	ns	0.5	0.0	0.5	ns
Nutritious pasture varieties	3.4	3.2	3.4	ns	3.4	2.7	3.4	ns	3.3	6.2	3.4	ns
Utilization of set grazing areas	32.2	25.3	31.5	ns	32.3	22.9	31.5	ns	31.4	40.7	31.5	ns
Improved fodder production	1.5	2.6	1.6	ns	1.5	3.0	1.6	ns	1.6	0.0	1.6	ns
Solarized boreholes for livestock	6.5	4.7	6.3	ns	6.6	3.1	6.3	ns	6.2	16.6	6.3	*
Water pans for livestock	6.7	3.9	6.5	ns	6.7	3.2	6.5	ns	6.4	10.7	6.5	ns
Sand dams for livestock	3.6	18.7	5.1	***	3.8	19.5	5.1	***	4.9	17.6	5.1	**
Rock catchments for livestock	2.3	3.3	2.4	ns	2.4	1.8	2.4	ns	2.2	11.5	2.4	ns
Number of responding goat producers	1,197	135	1,332		1,219	113	1,332		1,309	23	1,332	

Table A7.4a. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- CRS RFSA Areas, Total [Baseline Study, Kenya 2021]

CRS - Total

	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Camels												
Improved livestock breeds/species	0.6	1.7	0.7	ns	0.6	2.5	0.7	ns	0.7	0.0	0.7	ns
Livestock health services and products	8.3	10.0	8.4	ns	8.2	14.7	8.4	ns	8.5	0.0	8.4	ns
Improved shelters	5.2	4.5	5.2	ns	5.1	6.6	5.2	ns	5.3	0.0	5.2	ns
Improved calving techniques	0.3	0.0	0.2	ns	0.3	0.0	0.2	ns	0.3	0.0	0.2	ns
Improved milking techniques	0.4	3.3	0.6	*	0.4	4.8	0.6	**	0.6	0.0	0.6	ns
Nutritious pasture varieties	3.0	0.0	2.8	ns	2.9	0.0	2.8	ns	2.8	0.0	2.8	ns
Utilization of set grazing areas	36.2	25.6	35.6	ns	36.2	21.2	35.6	ns	35.8	26.4	35.6	ns
Improved fodder production	0.7	1.8	0.8	ns	0.7	2.7	0.8	ns	0.8	0.0	0.8	ns
Solarized boreholes for livestock	8.1	6.6	8.0	ns	8.2	3.2	8.0	ns	7.9	17.8	8.0	ns
Water pans for livestock	6.8	1.8	6.5	ns	6.7	0.0	6.5	ns	6.5	7.5	6.5	ns
Sand dams for livestock	3.1	9.6	3.5	*	3.3	8.1	3.5	ns	3.3	16.9	3.5	**
Rock catchments for livestock	2.6	5.9	2.8	ns	2.9	0.0	2.8	ns	2.5	23.9	2.8	*
Number of responding camel producers	629	40	669		639	30	669		660	9	669	

NOTES: Excludes practices that are not adopted by any farmers.

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (application of targeted improved management practice; e.g., improved shelters) and the disaggregate variable (access to agricultural financial service, e.g., credit). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A7.4b. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- CRS RFSA Areas, Marsabit
[Baseline Study, Kenya 2021]

Marsabit

	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Cattle												
Improved livestock breeds/species	1.9	1.9	1.9	ns	1.8	2.7	1.9	ns	1.9	0.0	1.9	ns
Livestock health services and products	12.7	9.4	12.4	ns	12.3	13.2	12.4	ns	12.6	0.0	12.4	ns
Improved shelters	6.2	2.8	5.9	ns	6.0	4.0	5.9	ns	6.0	0.0	5.9	ns
Improved calving techniques	3.9	0.0	3.5	ns	3.8	0.0	3.5	ns	3.6	0.0	3.5	ns
Improved milking techniques	0.3	3.7	0.6	*	0.3	5.2	0.6	*	0.6	0.0	0.6	ns
Nutritious pasture varieties	3.4	1.7	3.2	ns	3.4	0.0	3.2	ns	3.1	8.1	3.2	ns
Utilization of set grazing areas	41.3	40.9	41.3	ns	41.8	34.2	41.3	ns	40.8	66.2	41.3	ns
Improved fodder production	1.4	0.0	1.3	ns	1.4	0.0	1.3	ns	1.3	0.0	1.3	ns
Solarized boreholes for livestock	9.3	7.3	9.1	ns	9.5	3.2	9.1	ns	8.8	23.8	9.1	ns
Water pans for livestock	6.2	5.8	6.2	ns	6.3	5.2	6.2	ns	6.1	10.0	6.2	ns
Sand dams for livestock	3.0	6.3	3.3	ns	3.3	2.4	3.3	ns	2.9	21.8	3.3	**
Rock catchments for livestock	4.6	5.2	4.7	ns	4.7	4.9	4.7	ns	4.6	8.1	4.7	ns
Number of responding cattle producers	344	38	382		353	29	382		374	8	382	
Goats												
Improved livestock breeds/species	1.7	5.6	1.9	*	1.7	6.6	1.9	*	1.9	3.4	1.9	ns
Livestock health services and products	9.7	11.4	9.8	ns	9.5	16.3	9.8	ns	9.9	0.0	9.8	ns
Improved shelters	6.4	9.5	6.6	ns	6.3	12.2	6.6	ns	6.6	3.4	6.6	ns
Improved milking techniques	0.4	4.3	0.7	*	0.4	6.2	0.7	**	0.7	0.0	0.7	ns
Nutritious pasture varieties	3.9	5.5	4.0	ns	3.9	4.9	4.0	ns	3.9	7.4	4.0	ns
Utilization of set grazing areas	38.7	41.5	38.9	ns	38.7	41.7	38.9	ns	38.8	44.2	38.9	ns
Improved fodder production	1.6	1.0	1.6	ns	1.6	1.4	1.6	ns	1.6	0.0	1.6	ns
Solarized boreholes for livestock	8.5	10.6	8.6	ns	8.6	8.5	8.6	ns	8.4	19.8	8.6	*
Water pans for livestock	7.2	5.9	7.1	ns	7.2	4.6	7.1	ns	7.0	12.8	7.1	ns
Sand dams for livestock	3.7	11.1	4.2	*	3.9	9.9	4.2	ns	3.9	18.1	4.2	**
Rock catchments for livestock	3.0	7.4	3.3	ns	3.2	5.0	3.3	ns	3.1	13.7	3.3	ns
Number of responding goat producers	851	64	915		868	47	915		897	18	915	

Table A7.4b. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- CRS RFSA Areas, Marsabit [Baseline Study, Kenya 2021]

Marsabit	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Camels												
Improved livestock breeds/species	0.7	2.0	0.7	ns	0.6	3.1	0.7	ns	0.7	0.0	0.7	ns
Livestock health services and products	8.4	12.0	8.5	ns	8.2	18.8	8.5	ns	8.6	0.0	8.5	ns
Improved shelters	5.5	5.4	5.5	ns	5.5	8.4	5.5	ns	5.6	0.0	5.5	ns
Improved calving techniques	0.3	0.0	0.3	ns	0.3	0.0	0.3	ns	0.3	0.0	0.3	ns
Improved milking techniques	0.4	3.9	0.6	*	0.4	6.1	0.6	**	0.6	0.0	0.6	ns
Nutritious pasture varieties	3.1	0.0	3.0	ns	3.1	0.0	3.0	ns	3.0	0.0	3.0	ns
Utilization of set grazing areas	37.6	25.7	37.0	ns	37.5	22.7	37.0	ns	37.2	22.3	37.0	ns
Improved fodder production	0.8	0.0	0.7	ns	0.8	0.0	0.7	ns	0.8	0.0	0.7	ns
Solarized boreholes for livestock	8.6	7.9	8.5	ns	8.7	4.1	8.5	ns	8.4	21.0	8.5	ns
Water pans for livestock	7.2	2.2	6.9	ns	7.1	0.0	6.9	ns	6.9	8.8	6.9	ns
Sand dams for livestock	3.3	11.6	3.7	*	3.5	10.3	3.7	ns	3.5	19.8	3.7	**
Rock catchments for livestock	2.7	7.1	2.9	ns	3.0	0.0	2.9	ns	2.6	28.1	2.9	**
Number of responding camel producers	578	32	610		587	23	610		603	7	610	

NOTES: Excludes practices that are not adopted by any farmers.

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (application of targeted improved management practice; e.g., improved shelters) and the disaggregate variable (access to agricultural financial service, e.g., credit). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A7.4c. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- CRS RFSA Areas, Isiolo [Baseline Study, Kenya 2021]

Isiolo	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Cattle												
Improved livestock breeds/species	0.0	1.6	0.2	*	0.0	1.8	0.2	*	0.0	10.4	0.2	***
Livestock health services and products	9.0	4.3	8.4	ns	8.9	4.7	8.4	ns	8.1	27.9	8.4	ns
Nutritious pasture varieties	1.2	0.0	1.0	ns	1.2	0.0	1.0	ns	1.1	0.0	1.0	ns
Utilization of set grazing areas	13.3	32.9	15.7	*	13.5	32.9	15.7	*	15.1	48.1	15.7	**
Improved fodder production	0.3	8.5	1.3	***	0.3	9.4	1.3	***	0.8	27.9	1.3	***
Water pans for livestock	0.3	2.3	0.6	ns	0.3	2.6	0.6	ns	0.6	0.0	0.6	ns
Sand dams for livestock	2.9	5.6	3.2	ns	2.8	6.2	3.2	ns	3.3	0.0	3.2	ns
Number of responding cattle producers	189	30	219		192	27	219		214	5	219	
Goats												
Improved livestock breeds/species	0.4	0.0	0.3	ns	0.4	0.0	0.3	ns	0.3	0.0	0.3	ns
Livestock health services and products	12.6	30.7	16.1	**	12.5	32.1	16.1	**	16.2	0.0	16.1	ns
Improved shelters	1.7	1.3	1.6	ns	1.7	1.4	1.6	ns	1.7	0.0	1.6	ns
Nutritious pasture varieties	1.9	1.3	1.8	ns	1.9	1.4	1.8	ns	1.8	0.0	1.8	ns
Utilization of set grazing areas	12.5	12.4	12.5	ns	12.6	12.0	12.5	ns	12.4	22.3	12.5	ns
Improved fodder production	1.2	3.8	1.7	ns	1.2	4.0	1.7	ns	1.7	0.0	1.7	ns
Solarized boreholes for livestock	0.6	0.0	0.5	ns	0.6	0.0	0.5	ns	0.5	0.0	0.5	ns
Water pans for livestock	5.3	2.3	4.7	ns	5.3	2.4	4.7	ns	4.8	0.0	4.7	ns
Sand dams for livestock	3.3	24.7	7.5	***	3.4	25.2	7.5	***	7.4	15.1	7.5	ns
Number of responding goat producers	346	71	417		351	66	417		412	5	417	
Camels												
Livestock health services and products	7.3	0.0	6.3	ns	7.2	0.0	6.3	ns	6.5	0.0	6.3	ns
Utilization of set grazing areas	12.8	24.9	14.5	ns	14.4	15.4	14.5	ns	13.4	50.0	14.5	**
Improved fodder production	0.0	11.1	1.6	**	0.0	12.5	1.6	**	1.6	0.0	1.6	ns
Number of responding camel producers	51	8	59		52	7	59		57	2	59	

NOTES: Excludes practices that are not adopted by any farmers.

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (application of targeted improved management practice; e.g., improved shelters) and the disaggregate variable (access to agricultural financial service, e.g., credit). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A7.4d. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- MC RFSAs Areas, Total [Baseline Study, Kenya 2021]

MC - Total	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Cattle												
Improved livestock breeds/species	2.3	13.7	4.0	***	2.5	12.8	4.0	***	3.0	32.5	4.0	***
Livestock health services and products	30.0	47.6	32.6	*	30.1	47.8	32.6	*	32.1	48.5	32.6	ns
Improved shelters	13.1	15.0	13.4	ns	13.3	14.2	13.4	ns	13.2	20.8	13.4	ns
Improved calving techniques	0.3	6.0	1.2	**	0.3	6.4	1.2	***	0.7	16.1	1.2	***
Improved milking techniques	0.2	4.7	0.9	***	0.2	5.0	0.9	***	0.3	16.1	0.9	***
Nutritious pasture varieties	1.7	8.7	2.8	*	1.7	9.3	2.8	**	2.5	9.2	2.8	ns
Utilization of set grazing areas	13.9	20.4	14.8	ns	14.0	19.9	14.8	ns	14.1	36.2	14.8	ns
Improved fodder production	0.5	6.8	1.4	***	0.5	7.2	1.4	***	1.5	0.0	1.4	ns
Solarized boreholes for livestock	1.9	3.2	2.1	ns	1.9	3.4	2.1	ns	2.2	0.0	2.1	ns
Water pans for livestock	8.8	19.3	10.3	ns	9.2	17.1	10.3	ns	9.4	38.3	10.3	*
Sand dams for livestock	5.4	7.2	5.6	ns	5.6	6.0	5.6	ns	5.6	7.3	5.6	ns
Rock catchments for livestock	2.3	0.0	2.0	ns	2.3	0.0	2.0	ns	2.1	0.0	2.0	ns
Number of responding cattle producers	372	68	440		376	64	440		426	14	440	
Goats												
Improved livestock breeds/species	0.9	6.3	1.3	***	1.0	5.7	1.3	**	1.1	23.3	1.3	***
Livestock health services and products	12.0	33.9	13.5	***	12.0	36.1	13.5	***	13.5	12.6	13.5	ns
Improved shelters	16.3	21.6	16.7	ns	16.4	21.2	16.7	ns	16.5	37.0	16.7	ns
Improved calving techniques	0.0	0.9	0.1	***	0.1	0.0	0.1	ns	0.0	6.5	0.1	***
Improved milking techniques	0.1	1.9	0.3	***	0.1	2.1	0.3	***	0.3	0.0	0.3	ns
Nutritious pasture varieties	1.3	3.2	1.4	ns	1.2	3.5	1.4	ns	1.4	0.0	1.4	ns
Utilization of set grazing areas	13.0	14.1	13.1	ns	13.0	14.3	13.1	ns	12.9	28.3	13.1	ns
Improved fodder production	0.1	1.1	0.2	ns	0.1	1.2	0.2	ns	0.2	0.0	0.2	ns
Solarized boreholes for livestock	0.8	0.0	0.8	ns	0.8	0.0	0.8	ns	0.8	0.0	0.8	ns
Water pans for livestock	4.3	10.3	4.7	ns	4.3	10.0	4.7	ns	4.5	24.9	4.7	***
Sand dams for livestock	1.6	3.1	1.7	ns	1.6	3.4	1.7	ns	1.7	0.0	1.7	ns
Rock catchments for livestock	1.8	0.8	1.7	ns	1.8	0.8	1.7	ns	1.7	0.0	1.7	ns
Number of responding goat producers	868	85	953		875	78	953		940	13	953	
Camels												
Livestock health services and products	16.3	65.6	17.5	**	16.3	65.6	17.5	**	17.5	…	17.5	
Improved shelters	13.6	18.8	13.7	ns	13.6	18.8	13.7	ns	13.7	…	13.7	
Utilization of set grazing areas	9.8	0.0	9.5	ns	9.8	0.0	9.5	ns	9.5	…	9.5	
Solarized boreholes for livestock	0.9	0.0	0.9	ns	0.9	0.0	0.9	ns	0.9	…	0.9	
Water pans for livestock	3.5	0.0	3.4	ns	3.5	0.0	3.4	ns	3.4	…	3.4	
Sand dams for livestock	1.5	0.0	1.4	ns	1.5	0.0	1.4	ns	1.4	…	1.4	
Rock catchments for livestock	3.5	0.0	3.4	ns	3.5	0.0	3.4	ns	3.4	…	3.4	
Number of responding camel producers	133	6	139		133	6	139		139	….	139	

NOTES: Excludes practices that are not adopted by any farmers.

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (application of targeted improved management practice; e.g., improved shelters) and the disaggregate variable (access to agricultural financial service, e.g., credit). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A7.4e. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- MC RFSA Areas, Turkana [Baseline Study, Kenya 2021]

Turkana	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Cattle												
Livestock health services and products	8.6	0.0	8.4	ns	8.6	0.0	8.4	ns	8.4	…	8.4	
Improved shelters	32.5	0.0	31.8	ns	32.5	0.0	31.8	ns	31.8	…	31.8	
Nutritious pasture varieties	4.3	0.0	4.2	ns	4.3	0.0	4.2	ns	4.2	…	4.2	
Utilization of set grazing areas	2.2	0.0	2.2	ns	2.2	0.0	2.2	ns	2.2	…	2.2	
Improved fodder production	2.2	100.0	4.4	***	2.2	100.0	4.4	***	4.4	…	4.4	
Number of responding cattle producers	38	1	39		38	1	39		39		39	
Goats												
Livestock health services and products	4.2	20.2	4.7	ns	4.2	22.8	4.7	*	4.7	0.0	4.7	ns
Improved shelters	19.7	38.9	20.3	ns	19.6	43.9	20.3	ns	20.3	0.0	20.3	ns
Improved milking techniques	0.2	6.1	0.4	***	0.2	6.9	0.4	***	0.4	0.0	0.4	ns
Nutritious pasture varieties	1.6	10.1	1.8	*	1.6	11.4	1.8	*	1.8	0.0	1.8	ns
Utilization of set grazing areas	10.2	0.0	9.9	ns	10.2	0.0	9.9	ns	9.9	0.0	9.9	ns
Improved fodder production	0.2	0.0	0.2	ns	0.2	0.0	0.2	ns	0.2	0.0	0.2	ns
Solarized boreholes for livestock	0.1	0.0	0.1	ns	0.1	0.0	0.1	ns	0.1	0.0	0.1	ns
Water pans for livestock	2.5	5.8	2.6	ns	2.5	6.5	2.6	ns	2.7	0.0	2.6	ns
Rock catchments for livestock	1.4	0.0	1.3	ns	1.4	0.0	1.3	ns	1.3	0.0	1.3	ns
Number of responding goat producers	433	14	447		435	12	447		446	1	447	
Camels												
Livestock health services and products	8.3	…	8.3		8.3	…	8.3		8.3	…	8.3	
Improved shelters	19.3	…	19.3		19.3	…	19.3		19.3	…	19.3	
Utilization of set grazing areas	3.9	…	3.9		3.9	…	3.9		3.9	…	3.9	
Water pans for livestock	1.6	…	1.6		1.6	…	1.6		1.6	…	1.6	
Rock catchments for livestock	2.2	…	2.2		2.2	…	2.2		2.2	…	2.2	
Number of responding camel producers	55	…	55		55	…	55		55	…	55	

NOTES: Excludes practices that are not adopted by any farmers.
a Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (application of targeted improved management practice; e.g., improved shelters) and the disaggregate variable (access to agricultural financial service, e.g., credit). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A7.4f. Percentage of livestock producers applying targeted improved management practices by access to agricultural financial services and livestock type- MC RFSA Areas, Samburu [Baseline Study, Kenya 2021]

Samburu

	Used any agricultural financial services in the past 12 months				Used agricultural saving scheme in the past 12 months				Obtained agricultural credit in the past 12 months			
	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]	No	Yes	Total	Sig.[a]
Cattle												
Improved livestock breeds/species	2.9	14.1	4.9	***	3.2	13.2	4.9	**	3.7	32.5	4.9	***
Livestock health services and products	35.9	49.0	38.3	ns	36.0	49.2	38.3	ns	37.8	48.5	38.3	ns
Improved shelters	7.8	15.4	9.1	ns	8.0	14.6	9.1	ns	8.6	20.8	9.1	ns
Improved calving techniques	0.4	6.2	1.4	**	0.4	6.6	1.4	**	0.8	16.1	1.4	**
Improved milking techniques	0.3	4.8	1.1	***	0.2	5.1	1.1	***	0.4	16.1	1.1	***
Nutritious pasture varieties	1.0	9.0	2.4	**	1.0	9.6	2.4	**	2.1	9.2	2.4	ns
Utilization of set grazing areas	17.1	21.0	17.8	ns	17.2	20.5	17.8	ns	17.0	36.2	17.8	ns
Improved fodder production	0.0	4.1	0.7	***	0.0	4.4	0.7	***	0.8	0.0	0.7	ns
Solarized boreholes for livestock	2.4	3.3	2.6	ns	2.4	3.5	2.6	ns	2.7	0.0	2.6	ns
Water pans for livestock	11.2	19.9	12.7	ns	11.8	17.6	12.7	ns	11.7	38.3	12.7	ns
Sand dams for livestock	6.9	7.5	7.0	ns	7.1	6.2	7.0	ns	7.0	7.3	7.0	ns
Rock catchments for livestock	3.0	0.0	2.5	ns	3.0	0.0	2.5	ns	2.6	0.0	2.5	ns
Number of responding cattle producers	334	67	401		338	63	401		387	14	401	
Goats												
Improved livestock breeds/species	3.3	9.2	4.1	ns	3.5	8.2	4.1	ns	3.5	26.6	4.1	**
Livestock health services and products	31.3	40.2	32.6	ns	31.1	42.0	32.6	ns	33.1	14.4	32.6	ns
Improved shelters	8.2	13.7	9.0	ns	8.7	11.3	9.0	ns	8.1	42.3	9.0	**
Improved calving techniques	0.0	1.4	0.2	*	0.2	0.0	0.2	ns	0.0	7.4	0.2	***
Nutritious pasture varieties	0.5	0.0	0.4	ns	0.5	0.0	0.4	ns	0.4	0.0	0.4	ns
Utilization of set grazing areas	19.8	20.6	19.9	ns	19.8	20.5	19.9	ns	19.6	32.3	19.9	ns
Improved fodder production	0.0	1.6	0.2	*	0.0	1.7	0.2	*	0.2	0.0	0.2	ns
Solarized boreholes for livestock	2.6	0.0	2.2	ns	2.5	0.0	2.2	ns	2.3	0.0	2.2	ns
Water pans for livestock	8.6	12.3	9.1	ns	8.7	11.6	9.1	ns	8.6	28.4	9.1	*
Sand dams for livestock	5.6	4.5	5.5	ns	5.6	4.8	5.5	ns	5.6	0.0	5.5	ns
farmers.	2.8	1.1	2.6	ns	2.8	1.2	2.6	ns	2.6	0.0	2.6	ns
Number of responding goat producers	435	71	506		440	66	506		494	12	506	
Camels												
Livestock health services and products	31.6	65.6	34.0	ns	31.6	65.6	34.0	ns	34.0	…	34.0	
Improved shelters	2.5	18.8	3.7	ns	2.5	18.8	3.7	ns	3.7	…	3.7	
Utilization of set grazing areas	21.1	0.0	19.6	ns	21.1	0.0	19.6	ns	19.6	…	19.6	
Solarized boreholes for livestock	2.6	0.0	2.5	ns	2.6	0.0	2.5	ns	2.5	…	2.5	
Water pans for livestock	7.1	0.0	6.6	ns	7.1	0.0	6.6	ns	6.6	…	6.6	
Sand dams for livestock	4.3	0.0	3.9	ns	4.3	0.0	3.9	ns	3.9	…	3.9	
Rock catchments for livestock	5.9	0.0	5.5	ns	5.9	0.0	5.5	ns	5.5	…	5.5	
Number of responding camel producers	78	6	84		78	6	84		84		84	

NOTES: Excludes practices that are not adopted by any farmers.
a Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (application of targeted improved management practice; e.g., improved shelters) and the disaggregate variable (access to agricultural financial service, e.g., credit). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30; they are included for illustrative purposes only.

Table A7.5a. Percentage of women 15-49 years with minimum dietary diversity (MDD-W) by women's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Women's background characteristics																		
Women's age groups																		
15 -19 years	7.3	255	ns	2.9	142	ns	13.1	113	ns	3.1	162	ns	3.2	67	ns	3.0	95	ns
20 - 29 years	4.2	364		2.8	235		7.4	129		2.5	310		0.0	127		6.6	183	
30 - 49 years	7.0	501		2.8	326		16.2	175		4.7	372		3.8	190		6.9	182	
Women's highest level of education																		
Never attended school	3.2	736	**	1.7	526	ns	8.1	210	ns	1.7	592	***	1.4	303	ns	2.4	289	***
Pre-primary or primary	11.5	286		7.3	132		15.3	154		6.3	163		6.0	63		6.6	100	
Post-primary/vocational or secondary	13.4	82		4.1	36		21.8	46		11.9	66		10.0	15		12.9	51	
College or University	8.1	16		0.0	9		18.9	7		20.2	23		0.0	3		26.8	20	
Pregnancy status																		
Currently pregnant	8.6	116	ns	1.5	80	ns	26.5	36	ns	2.7	96	ns	3.2	46	ns	1.7	50	ns
Ever pregnant but not currently	5.6	715		3.3	463		10.7	252		3.5	577		2.5	258		5.3	319	
Never pregnant	6.4	289		2.0	160		12.5	129		4.8	171		1.9	80		10.0	91	
Participation in income-generating activities																		
Cash or combination of cash & in-kind	20.0	85	***	5.5	50	ns	40.0	35	**	4.7	219	ns	3.0	110	ns	8.6	109	ns
In-kind or unpaid	10.1	11		10.6	10		0.0	1		7.4	22		8.3	17		0.0	5	
Does not work	4.9	1,024		2.4	643		9.7	381		3.0	603		1.7	257		5.1	346	
Participation in income generating activities																		
Does not participate in cash earning activities	4.9	1,035	**	2.6	653	ns	9.7	382	**	3.2	625	ns	2.2	274	ns	5.0	351	ns
Participates in cash earning activities	20.0	85		5.5	50		40.0	35		4.7	219		3.0	110		8.6	109	
Household background characteristics																		
Residence																		
Rural	5.0	1,010	*	2.9	671	ns	10.4	339	ns	3.5	735	ns	2.8	349	ns	5.1	386	ns
Urban	14.1	110		0.0	32		18.6	78		4.4	109		0.0	35		9.4	74	
Gendered household type																		
Both	6.4	997	ns	2.8	616	ns	13.0	381	ns	4.0	720	ns	2.5	334	ns	7.0	386	ns
Female Only	5.3	100		3.9	66		9.2	34		1.5	113		2.2	47		0.0	66	
Male Only	0.0	23		0.0	21		0.0	2		0.0	9		0.0	2		0.0	7	
Child only										0.0	2		0.0	1		0.0	1	
Household head sex																		
Male	6.5	807	ns	3.3	487	ns	12.4	320	ns	4.4	536	ns	3.0	238	ns	6.9	298	ns
Female	5.1	313		1.6	216		13.8	97		2.4	308		1.6	146		4.3	162	
Household head educational level																		
Never attended school	4.3	882	***	1.7	600	***	11.0	282	ns	1.2	630	***	0.9	325	***	2.0	305	**
Pre-primary or primary	10.8	143		5.8	58		14.2	85		10.8	119		16.2	30		7.3	89	
Post-primary/vocational or secondary	15.5	59		10.8	33		22.5	26		17.2	44		14.6	16		20.0	28	
College or University	20.4	36		24.8	12		17.7	24		10.8	51		0.0	13		21.1	38	
Household food security																		
Household food consumption score group																		
Poor food consumption (0-28)	1.6	103	ns	1.2	95	ns	11.0	8	ns	0.0	292	***	0.0	173	*	0.0	119	**
Borderline food consumption (28.5-42)	4.6	149		2.9	111		10.6	38		2.4	180		2.4	80		2.3	100	
Acceptable food consumption (42.5-112)	7.0	868		3.1	497		12.9	371		7.8	372		5.8	131		10.2	241	
Household is moderately or severely food insecure																		
No	9.1	147	ns	3.7	82	ns	16.7	65	ns	13.5	77	***	0.0	13	ns	22.6	64	***
Yes	5.7	973		2.7	621		12.0	352		2.8	767		2.6	371		3.2	396	
Household poverty status																		
Household living below the $1.90 2011 PPP poverty line																		
No	10.9	323	**	4.0	209	ns	23.0	114	*	17.5	135	***	11.1	34	**	22.5	101	***
Yes	4.2	797		2.3	494		8.1	303		1.2	709		1.5	350		0.6	359	

Table A7.5a. Percentage of women 15-49 years with minimum dietary diversity (MDD-W) by women's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Agricultural assets																		
Raises any of the targeted livestock commodities (cattle, goats, camels)																		
No	17.0	65	*	0.0	17	ns	21.6	48	ns	5.8	150	ns	1.6	65	ns	10.5	85	ns
Yes	5.5	1,055		2.8	686		11.3	369		3.2	694		2.6	319		4.6	375	
Household raises cattle																		
No	7.3	675	ns	2.9	434	ns	16.7	241	ns	3.6	534	ns	2.7	351	ns	7.4	183	ns
Yes	4.1	445		2.6	269		6.8	176		3.8	310		0.0	33		4.9	277	
Household raises goats																		
No	15.2	100	*	5.8	26	ns	18.0	74	ns	6.6	182	ns	1.6	66	ns	10.9	116	*
Yes	5.3	1,020		2.7	677		11.5	343		2.9	662		2.6	318		3.8	344	
Household raises camels																		
No	10.3	558	***	3.0	196	ns	14.3	362	ns	4.0	755	ns	2.7	347	ns	6.4	408	ns
Yes	2.5	562		2.7	507		0.0	55		0.8	89		0.0	37		2.2	52	
Agricultural financial services																		
Accessed agri-related financial services																		
No	4.9	977	***	2.7	644	ns	10.0	333	**	2.4	740	***	1.8	366	**	3.7	374	**
Yes	15.4	143		3.9	59		23.6	84		14.9	104		14.9	18		14.9	86	
Accessed agri-related loan																		
No	6.2	1,093	ns	2.9	682	ns	12.6	411	ns	3.2	830	***	2.0	382	***	5.6	448	ns
Yes	4.0	27		0.0	21		22.6	6		36.6	14		100.0	2		18.5	12	
Participated in agri-savings scheme																		
No	4.8	1,001	***	2.6	664	ns	9.9	337	**	2.7	745	***	2.2	369	ns	3.7	376	**
Yes	18.6	119		6.2	39		24.4	80		12.8	99		7.3	15		15.2	84	
Value chain interventions																		
Household adopted at least one value chain intervention																		
No	5.5	1,056	*	2.9	654	ns	10.6	402	***	3.3	834	***	2.4	382	ns	5.0	452	***
Yes	15.7	64		1.3	49		62.0	15		35.1	10		0.0	2		56.6	8	
Any crop or livestock value chain																		
Contract farming																		
No	6.1	1,120		2.8	703		12.7	417		3.5	833	ns	2.4	381	ns	5.6	452	ns
Yes										13.2	11		0.0	3		18.0	8	
Selling products through community farmer associations																		
No	5.8	1,112	***	2.8	702	ns	11.7	410	***	3.6	834	ns	2.5	378	ns	5.7	456	ns
Yes	63.9	8		0.0	1		68.6	7		9.3	10		0.0	6		30.4	4	
Sorting and grading																		
No	5.8	1,102	*	2.8	689	ns	11.5	413	***	3.7	840	ns	2.4	381	ns	6.0	459	ns
Yes	24.0	18		0.0	14		88.6	4		0.0	4		0.0	3		0.0	1	
Bulking																		
No	6.3	1,082	ns	2.8	671	ns	12.9	411	ns	3.6	841	*	2.4	383	ns	5.7	458	***
Yes	1.7	38		1.9	32		0.0	6		30.5	3		0.0	1		62.3	2	
Use of improved record keeping, budgeting and financial management																		
No	6.2	1,116	ns	2.8	702	ns	12.8	414	ns	3.7	839	ns	2.4	383	ns	6.0	456	ns
Yes	0.0	4		0.0	1		0.0	3		0.0	5		0.0	1		0.0	4	
Use of training and extension services																		
No	6.1	1,116	ns	2.8	699	ns	12.7	417		3.6	842	*	2.4	384		5.8	458	ns
Yes	0.0	4		0.0	4					34.7	2					34.7	2	
Fodder production value chain																		
Use of improved pasture inputs (e.g., quality seeds)																		
No	6.1	1,120		2.8	703		12.7	417		3.4	837	***	2.4	383	ns	5.3	454	***
Yes										42.0	7		0.0	1		57.0	6	

Table A7.5a. Percentage of women 15-49 years with minimum dietary diversity (MDD-W) by women's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Use of mechanized pasture harvesting and baling technologies																		
No	6.1	1,120		2.8	703		12.7	417		3.5	839	***	2.4	384		5.6	455	***
Yes										46.1	5					46.1	5	
Construction and use of hay stores by farmer organizations																		
No	6.1	1,120		2.8	703		12.7	417		3.6	844		2.4	384		6.0	460	
Yes																		
Use of fodder seeds																		
No	6.1	1,120		2.8	703		12.7	417		3.4	837	***	2.4	384		5.3	453	***
Yes										49.6	7					49.6	7	
Use of harvesting, drying, packaging, storage, and marketing technologies																		
No	6.1	1,120		2.8	703		12.7	417		3.7	843	ns	2.4	383	ns	6.0	460	
Yes										0.0	1		0.0	1				
Improved livestock management practices																		
Used improved livestock breeds/species																		
No	5.9	1,096	ns	2.4	680	**	12.8	416	ns	3.6	832	ns	2.4	384		5.8	448	ns
Yes	14.5	24		15.4	23		0.0	1		11.9	12					11.9	12	
Used livestock health services and products																		
No	5.4	1,004	ns	2.9	624	ns	10.6	380	**	3.3	691	ns	2.6	364	ns	5.1	327	ns
Yes	11.4	116		2.2	79		27.2	37		5.6	153		0.0	20		8.2	133	
Used improved livestock shelters																		
No	6.5	1,058	ns	3.0	643	ns	12.8	415	ns	3.3	764	ns	2.1	333	ns	5.4	431	ns
Yes	0.0	62		0.0	60		0.0	2		6.3	80		4.4	51		14.2	29	
Used improved calving techniques																		
No	6.2	1,111	ns	2.8	694	ns	12.7	417		3.7	841	ns	2.4	384		6.0	457	ns
Yes	0.0	9		0.0	9					0.0	3					0.0	3	
Used improved milking techniques																		
No	6.2	1,113	ns	2.8	696	ns	12.7	417		3.7	840	ns	2.4	382	ns	6.0	458	ns
Yes	0.0	7		0.0	7					0.0	4		0.0	2		0.0	2	
Used nutritious pasture varieties																		
No	6.0	1,072	ns	2.4	661	**	12.7	411	ns	3.6	829	ns	2.5	375	ns	5.6	454	*
Yes	9.5	48		8.6	42		15.9	6		7.9	15		0.0	9		31.4	6	
Used set grazing areas																		
No	6.8	796	ns	2.1	418	ns	13.0	378	ns	3.8	727	ns	2.5	347	ns	6.5	380	ns
Yes	4.5	324		3.9	285		9.9	39		2.6	117		2.2	37		3.2	80	
Used improved fodder production																		
No	6.0	1,092	ns	2.6	680	*	12.6	412	ns	3.6	837	ns	2.4	382	ns	5.8	455	*
Yes	11.4	28		9.6	23		19.9	5		9.6	7		0.0	2		18.5	5	
Used solarized boreholes for livestock																		
No	6.6	1,028	*	3.1	612	ns	12.7	416	ns	3.7	834	ns	2.4	383	ns	6.1	451	ns
Yes	1.1	92		1.1	91		0.0	1		0.0	10		0.0	1		0.0	9	
Used water pans for livestock																		
No	5.9	1,042	ns	2.7	636	ns	11.9	406	*	3.7	799	ns	2.5	378	ns	6.1	421	ns
Yes	8.7	78		3.5	67		36.4	11		3.4	45		0.0	6		4.6	39	
Used sand dams for livestock																		
No	6.0	1,048	ns	3.0	656	ns	12.1	392	ns	3.6	823	ns	2.4	384		6.1	439	ns
Yes	8.2	72		0.0	47		21.5	25		3.9	21					3.9	21	
Used rock catchments for livestock																		
No	6.4	1,077	ns	2.9	660	ns	12.7	417		3.7	823	ns	2.5	380	ns	6.0	443	ns
Yes	0.0	43		0.0	43					3.4	21		0.0	4		5.3	17	

Table A7.5a. Percentage of women 15-49 years with minimum dietary diversity (MDD-W) by women's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Improved post harvest handling and storage practices																		
Used aflatoxin prevention and control																		
No	6.1	1,120		2.8	703		12.7	417		3.7	843	ns	2.4	384		6.0	459	ns
Yes										0.0	1					0.0	1	
Used aluminum cans, crates, other food grade containers during transportation																		
No	6.1	1,120		2.8	703		12.7	417		3.7	843	ns	2.4	384		6.0	459	ns
Yes										0.0	1					0.0	1	
Used well-equipped food storage structures (rodent proof; proper air circulation)																		
No	6.1	1,120		2.8	703		12.7	417		3.5	842	***	2.4	384		5.6	458	***
Yes										100.0	2					100.0	2	
Applied temperature and humidity control (shed nets, air condition, fans)																		
No	6.1	1,119	ns	2.8	703		12.8	416	ns	3.6	844		2.4	384		6.0	460	
Yes	0.0	1					0.0	1										
Used solar drying for grains and pulses																		
No	6.1	1,117	ns	2.8	703		12.6	414	ns	3.6	828	ns	2.3	369	ns	6.0	459	ns
Yes	36.0	3					36.0	3		5.1	16		5.4	15		0.0	1	
Improved crop management practices																		
Improved/certified seed																		
No	6.1	1,119	ns	2.8	703		12.7	416	ns	3.4	806	ns	2.3	356	ns	5.5	450	*
Yes	0.0	1					0.0	1		7.9	38		4.0	28		22.4	10	
Seedling production and transplantation																		
No	6.1	1,120		2.8	703		12.7	417		3.5	839	**	2.2	381	***	6.0	458	ns
Yes										25.3	5		36.5	3		0.0	2	
Crop rotation (rotating grains with nitrogen fixing legumes)																		
No	6.1	1,118	*	2.8	703		12.6	415	ns	3.5	831	*	2.1	372	*	6.0	459	ns
Yes	46.0	2					46.0	2		13.2	13		13.9	12		0.0	1	
Kitchen gardens using sunken pits																		
No	6.1	1,120		2.8	703		12.7	417		3.7	839	ns	2.5	379	ns	6.0	460	
Yes										0.0	5		0.0	5				
Use of organic manure																		
No	6.1	1,118	ns	2.8	703		12.8	415	ns	3.5	812	ns	2.2	361	ns	5.9	451	ns
Yes	0.0	2					0.0	2		8.0	32		7.6	23		9.5	9	
Soil testing																		
No	6.1	1,118	***	2.8	703		12.5	415	***	3.5	841	**	2.2	381	***	6.0	460	
Yes	50.0	2					50.0	2		40.3	3		40.3	3				
Application of inoculant																		
No	6.1	1,120		2.8	703		12.7	417		3.5	842	***	2.2	382	***	6.0	460	
Yes										50.0	2		50.0	2				
Use of drip or sprinkler irrigation technologies																		
No	6.1	1,118	ns	2.8	703		12.8	415	ns	3.7	843	ns	2.4	383	ns	6.0	460	
Yes	0.0	2					0.0	2		0.0	1		0.0	1				
Use of rainwater harvesting technologies (water pans, rock/roof catchment)																		
No	6.1	1,120		2.8	703		12.7	417		3.7	837	ns	2.5	377	ns	6.0	460	
Yes										0.0	7		0.0	7				
Use of flood-based farming technologies (spate irrigation)																		
No	6.1	1,120		2.8	703		12.7	417		3.7	842	ns	2.4	382	ns	6.0	460	
Yes										0.0	2		0.0	2				

Table A7.5a. Percentage of women 15-49 years with minimum dietary diversity (MDD-W) by women's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Production planning and crop rotation in irrigation schemes																		
No	6.1	1,120		2.8	703		12.7	417		3.4	834	***	2.1	374	***	6.0	460	
Yes										17.3	10		17.3	10				
Use of drought early warning systems or information																		
No	6.1	1,120		2.8	703		12.7	417		3.5	840	**	2.2	380	**	6.0	460	
Yes										23.2	4		23.2	4				
Improved NRM practices																		
Reseeding degraded lands with drought resistant grass species																		
No	5.7	1,112	***	2.8	702	ns	11.6	410	***	3.6	831	ns	2.4	383	ns	5.9	448	ns
Yes	37.6	8		0.0	1		44.3	7		8.0	13		0.0	1		9.8	12	
Fencing off pasture plots to conserve pasture																		
No	6.2	1,095	ns	2.8	685	ns	12.9	410	ns	3.4	796	ns	2.2	372	ns	5.9	424	ns
Yes	2.8	25		3.5	18		0.0	7		8.1	48		10.0	12		6.9	36	
Rehabilitation of degraded grazing lands (soil/water conservation)																		
No	5.9	1,099	ns	2.6	683	ns	12.4	416	*	3.7	835	ns	2.5	380	ns	6.0	455	ns
Yes	16.7	21		10.1	20		100.0	1		0.0	9		0.0	4		0.0	5	
Construction of soil conservation structures (gabions)																		
No	6.2	1,108	ns	2.8	691	ns	12.7	417		3.6	835	ns	2.5	382	ns	5.8	453	ns
Yes	0.0	12		0.0	12					8.8	9		0.0	2		16.3	7	
Use of natural barriers/cover crops (grass strips/crop covers)																		
No	6.1	1,117	ns	2.8	700	ns	12.7	417		3.8	818	ns	2.5	369	ns	6.1	449	ns
Yes	0.0	3		0.0	3					0.0	26		0.0	15		0.0	11	
Utilization of organic materials such as grain straw, fresh or old hay or other crop residues																		
No	6.0	1,117	*	2.8	701	ns	12.4	416	**	3.4	832	**	2.1	378	**	5.8	454	ns
Yes	36.0	3		0.0	2		100.0	1		23.9	12		28.4	6		17.8	6	
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw).																		
No	6.1	1,118	ns	2.8	701	ns	12.7	417		3.5	836	**	2.4	382	ns	5.6	454	**
Yes	0.0	2		0.0	2					21.3	8		0.0	2		34.0	6	
Zaï pits (pot-holing)																		
No	6.1	1,120		2.8	703		12.7	417		3.6	844		2.4	384		6.0	460	
Yes																		
Use of minimum tillage practices (leave crop residue on soil surface)	6.1	1,118	ns	2.8	702	ns	12.8	416	ns	3.4	829	***	2.1	374	**	5.8	455	ns
No	0.0	2		0.0	1		0.0	1		20.3	15		19.9	10		21.3	5	
Yes																		
Planting nitrogen-fixing trees (acacia)	6.1	1,118	***	2.8	703		12.5	415	***	3.5	842	***	2.2	383	***	6.0	459	ns
No	50.0	2					50.0	2		62.2	2		100.0	1		0.0	1	
Yes																		
Household access to credit and/or savings																		
Household participated in group-based savings programs																		
No	6.1	1,065	ns	2.8	698	ns	13.3	367	ns	3.4	808	*	2.5	381	ns	5.5	427	ns
Yes	6.5	55		0.0	5		7.4	50		9.7	36		0.0	3		11.3	33	
Household participated in group-based credit programs																		
No	6.2	1,075	ns	2.9	679	ns	12.8	396	ns	3.6	804	ns	2.5	375	ns	5.9	429	ns
Yes	4.4	45		0.0	24		10.8	21		4.4	40		0.0	9		6.7	31	
Household participated in group-based savings, microfinance or lending programs																		
No	6.3	1,040	ns	2.9	674	ns	13.3	366	ns	3.5	788	ns	2.5	374	ns	5.7	414	ns
Yes	4.2	80		0.0	29		7.3	51		6.0	56		0.0	10		8.3	46	

Table A7.5a. Percentage of women 15-49 years with minimum dietary diversity (MDD-W) by women's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Household exposure to COVID-19 impacts																		
Household income/livelihood impacted by COVID-19																		
No	4.3	635	ns	3.1	436	ns	7.5	199	ns	3.8	408	ns	3.1	202	ns	5.2	206	ns
Yes	8.5	485		2.3	267		16.8	218		3.5	436		1.8	182		6.6	254	
Household access to food impacted by COVID-19																		
No	4.2	484	ns	2.3	333	ns	9.2	151	ns	3.9	357	ns	2.3	173	ns	7.3	184	ns
Yes	7.5	636		3.2	370		14.7	266		3.5	487		2.6	211		5.1	276	
Household member contracted COVID-19 virus in 90 days prior to survey																		
No	6.1	1109	ns	2.8	695	ns	12.4	414	ns	3.7	834	ns	2.5	382	ns	6.1	452	ns
Yes	14.6	11		0.0	8		49.3	3		0.0	10		0.0	2		0.0	8	
Total	6.1	1,120		2.8	703		12.7	417		3.6	844		2.4	384		6.0	460	

NOTES:

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (percentage of women achieving MDD) and the disaggregate variable (e.g, sex). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.5b. Average (mean) values of household background characteristics by women with a minimim dietary diet (MDD) and women without MDD, by RFSA area and county
[Baseline Study, Kenya 2021]

	CRS - Total					Marsabit					Isiolo				
	Women without MDD	Women with MDD	All women 15-49 years	N	Sig.[a]	Women without MDD	Women with MDD	All women 15-49 years	N	Sig.[a]	Women without MDD	Women with MDD	All women 15-49 years	N	Sig.[a]
Average women's age	28.6	29.8	28.7	1,120	ns	29.1	30.7	29.1	703	ns	27.6	29.4	27.8	417	ns
Average age of household head	44.7	48.1	44.9	1,120	ns	44.4	51.0	44.5	703	ns	45.5	46.9	45.7	417	ns
Average number of adult females in household other than the respondent	0.5	0.6	0.5	1,120	ns	0.5	0.5	0.5	703	ns	0.6	0.7	0.6	417	ns
Average number of adult males in household	1.2	1.6	1.3	1,120	ns	1.2	1.7	1.3	703	ns	1.3	1.6	1.3	417	ns
Average number of children under five (0-4)	1.1	0.9	1.1	1,120	ns	1.1	0.9	1.1	703	ns	1.1	0.9	1.1	417	ns
Number of older children (5-17)	2.6	3.0	2.6	1,120	ns	2.4	2.2	2.4	703	ns	3.0	3.3	3.0	417	ns
Average FCS	53.6	68.8	54.6	1,120	***	50.2	70.4	50.8	703	*	61.1	68.1	62.0	417	**
Average daily per capita consumption expenditures (constant 2010 USD)	$1.55	$5.28	$1.78	1,120	*	$1.54	$7.77	$1.71	703	ns	$1.57	$4.21	$1.90	417	ns
Average score - Ability to recover from shocks and stresses index	3.6	3.4	3.6	1,120	ns	3.8	3.9	3.8	703	ns	3.2	3.2	3.2	417	ns
Average score - social bonding index	70.3	63.0	69.8	1,120	*	68.9	63.7	68.7	703	ns	73.3	62.7	72.0	417	**
Average score - social bridging index	67.9	62.1	67.6	1,120	*	66.4	58.2	66.1	703	ns	71.4	63.8	70.4	417	ns
Average score - overall social capital index	69.1	62.6	68.7	1,120	*	67.6	60.9	67.4	703	ns	72.4	63.3	71.2	417	*
Average score - absorptive capacity index	37.0	44.3	37.4	1,120	*	33.5	42.9	33.8	703	ns	44.4	44.8	44.5	417	ns
Average score - adaptive capacity index	34.3	42.9	34.8	1,120	*	32.2	42.9	32.5	703	ns	38.8	42.9	39.3	417	ns
Average score - transformative capacity index	32.2	52.9	33.5	1,120	***	27.0	45.6	27.5	703	**	43.6	56.1	45.2	417	**

	MC - Total					Turkana					Samburu				
	Women without MDD	Women with MDD	All women 15-49 years	N	Sig.[a]	Women without MDD	Women with MDD	All women 15-49 years	N	Sig.[a]	Women without MDD	Women with MDD	All women 15-49 years	N	Sig.[a]
Average women's age	29.2	32.8	29.3	844	ns	29.9	35.3	30.0	384	ns	27.9	30.8	28.1	460	*
Average age of household head	43.1	42.8	43.1	844	ns	44.4	43.2	44.4	384	ns	40.4	42.5	40.6	460	ns
Average number of adult females in household other than the respondent	0.4	0.6	0.5	844	ns	0.4	0.2	0.4	384	ns	0.4	0.8	0.5	460	ns
Average number of adult males in household	1.1	1.3	1.2	844	ns	1.1	1.1	1.1	384	ns	1.1	1.5	1.2	460	ns
Average number of children under five (0-4)	1.2	1.0	1.2	844	ns	1.3	1.0	1.3	384	ns	1.1	1.0	1.1	460	ns
Number of older children (5-17)	2.6	3.2	2.7	844	ns	2.7	3.3	2.7	384	ns	2.6	3.1	2.6	460	ns
Average FCS	37.0	67.5	38.1	844	***	34.0	61.7	34.7	384	***	43.1	72.0	44.8	460	***
Average daily per capita consumption expenditures (constant 2010 USD)	$1.03	$4.28	$1.15	844	**	$0.74	$1.64	$0.76	384	*	$1.59	$6.34	$1.88	460	**
Average score - Ability to recover from shocks and stresses index	3.7	4.1	3.7	844	ns	3.8	3.6	3.8	384	ns	3.4	4.4	3.5	460	**
Average score - social bonding index	71.9	78.4	72.1	844	ns	69.1	74.9	69.2	384	ns	77.4	81.2	77.6	460	ns
Average score - social bridging index	70.5	77.2	70.7	844	ns	68.7	77.1	68.9	384	ns	73.9	77.2	74.1	460	ns
Average score - overall social capital index	71.2	77.8	71.4	844	ns	68.9	76.0	69.1	384	ns	75.7	79.2	75.9	460	ns
Average score - absorptive capacity index	32.7	53.2	33.5	844	***	29.3	39.9	29.6	384	***	39.4	63.6	40.8	460	***
Average score - adaptive capacity index	31.8	57.8	32.8	844	***	28.2	49.1	28.7	384	***	39.1	64.5	40.6	460	***
Average score - transformative capacity index	28.4	42.6	28.9	844	**	25.8	29.7	25.9	384	ns	33.5	52.6	34.6	460	**

NOTES:

[a] Significance tests (t-test) were performed to determine whether an association exists between the outcome indicator (percentage of women achieving MDD) and the disaggregate variable (e.g., average daily per capita consumption expenditures). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.6a. Percentage of children 6-23 months with a minimum acceptable diet (MAD) by child and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Child background characteristics																		
Sex																		
Male	4.0	159	ns	1.5	107	ns	9.6	52	ns	2.4	120	ns	2.2	65	ns	3.1	55	ns
Female	1.8	137		1.9	86		1.7	51		1.6	114		0.0	52		5.3	62	
Age group in months																		
6-8	0.8	53	*	0.0	33	ns	2.0	20	ns	1.1	48	ns	0.0	23	ns	3.6	25	ns
9-11	1.2	52		0.0	40		4.7	12		0.0	33		0.0	14		0.0	19	
12-17	6.1	112		4.4	72		9.8	40		2.2	86		0.0	43		7.4	43	
18-23	1.2	79		0.0	48		3.7	31		3.4	67		3.6	37		2.8	30	
Household background characteristics																		
Residence																		
Rural	2.7	270	ns	0.9	182	***	7.7	88	ns	2.3	214	ns	1.3	109	ns	4.8	105	ns
Urban	4.7	26		15.5	11		0.0	15		0.0	20		0.0	8		0.0	12	
Gendered household type																		
Both	2.8	271	ns	1.8	176	ns	4.9	95	ns	2.3	209	ns	1.3	103	ns	4.6	106	ns
Female Only	6.0	19		0.0	12		19.7	7		0.0	22		0.0	14		0.0	8	
Male Only	0.0	6		0.0	5		0.0	1		0.0	3					0.0	3	
Household head sex																		
Male	2.9	243	ns	1.6	158	ns	5.7	85	ns	2.6	170	ns	1.7	79	ns	4.4	91	ns
Female	3.2	53		1.9	35		5.7	18		0.7	64		0.0	38		3.4	26	
Household head educational level																		
Never attended school	2.0	230	ns	0.9	162	**	5.1	68	ns	1.5	189	ns	1.3	105	ns	2.1	84	ns
Pre-primary or primary	5.6	41		0.0	17		9.4	24		2.4	26		0.0	8		5.2	18	
Post-primary/vocational or secondary	5.5	18		10.6	9		0.0	9		13.7	7		0.0	1		21.1	6	
College or University	16.3	7		22.5	5		0.0	2		4.9	12		0.0	3		10.0	9	
Household food security																		
Household food consumption score group																		
Poor food consumption (0-28)	2.0	30	ns	0.0	27	ns	29.7	3	ns	0.0	80	ns	0.0	57	ns	0.0	23	ns
Borderline food consumption (28.5-42)	0.0	44		0.0	37		0.0	7		1.2	49		0.0	18		2.9	31	
Acceptable food consumption (42.5-112)	3.8	222		2.5	129		5.6	93		4.4	105		3.2	42		6.2	63	
Household is moderately or severely food insecure																		
No	12.4	33	**	12.6	15	**	12.3	18	ns	4.4	15	ns	0.0	3	ns	7.5	12	ns
Yes	1.9	263		0.9	178		4.4	85		1.9	219		1.2	114		3.7	105	
Household poverty status																		
Household living below the $1.90 2011 PPP poverty line																		
No	6.8	48	ns	6.2	33	**	7.9	15	ns	8.2	33	*	0.0	8	ns	15.3	25	**
Yes	2.2	248		0.9	160		5.1	88		1.2	201		1.3	109		1.0	92	
Agricultural assets																		
Household raises any of the targeted livestock commodities (cattle, goats, camels)																		
No	9.9	17	ns	0.0	3	ns	11.1	14	ns	3.8	35	ns	0.0	16	ns	9.3	19	ns
Yes	2.5	279		1.7	190		4.5	89		1.8	199		1.3	101		3.0	98	
Household raises cattle																		
No	3.5	179	ns	2.0	125	ns	7.3	54	ns	1.7	150	ns	1.3	107	ns	4.5	43	ns
Yes	2.0	117		1.0	68		3.6	49		3.0	84		0.0	10		4.0	74	
Household raises goats																		
No	6.7	27	ns	0.0	6	ns	8.0	21	ns	4.8	41	ns	0.0	16	ns	10.4	25	ns
Yes	2.6	269		1.7	187		4.9	82		1.5	193		1.3	101		2.2	92	
Household raises camels																		
No	5.8	151	**	5.9	64	*	5.7	87	ns	2.2	214	ns	1.2	110	ns	4.7	104	ns
Yes	0.4	145		0.0	129		5.6	16		0.0	20		0.0	7		0.0	13	

Table A7.6a. Percentage of children 6-23 months with a minimum acceptable diet (MAD) by child and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Agricultural financial services																		
Accessed agri-related financial services																		
No	3.2	273	ns	1.8	180	ns	6.4	93	ns	1.9	211	ns	1.2	112	ns	3.9	99	ns
Yes	0.0	23		0.0	13		0.0	10		3.2	23		0.0	5		5.6	18	
Accessed agri-related loan																		
No	3.0	291	ns	1.7	188	ns	5.7	103		2.0	232	ns	1.2	117		4.3	115	ns
Yes	0.0	5		0.0	5					0.0	2					0.0	2	
Participated in agri-savings scheme																		
No	3.2	277	ns	1.7	184	ns	6.4	93	ns	1.9	212	ns	1.2	113	ns	3.9	99	ns
Yes	0.0	19		0.0	9		0.0	10		3.4	22		0.0	4		5.6	18	
Value chain interventions																		
Household adopted at least one value chain intervention																		
No	3.0	268	ns	1.4	168	ns	6.0	100	ns	2.0	233	ns	1.2	116	ns	4.2	117	
Yes	2.6	28		3.2	25		0.0	3		0.0	1		0.0	1				
Any crop or livestock value chain																		
Contract farming																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Selling products through community farmer associations																		
No	3.0	295	ns	1.7	193		5.7	102	ns	2.0	233	ns	1.2	116	ns	4.2	117	
Yes	0.0	1					0.0	1		0.0	1		0.0	1				
Sorting and grading																		
No	3.1	286	ns	1.8	185	ns	5.9	101	ns	2.0	234		1.2	117		4.2	117	
Yes	0.0	10		0.0	8		0.0	2										
Bulking																		
No	2.8	280	ns	1.4	177	ns	5.7	103		2.0	234		1.2	117		4.2	117	
Yes	5.4	16		5.4	16													
Use of improved record keeping, budgeting and financial management																		
No	3.0	296		1.7	193		5.7	103		2.0	233	ns	1.2	116	ns	4.2	117	
Yes										0.0	1		0.0	1				
Use of training and extension services																		
No	3.0	293	ns	1.7	190	ns	5.7	103		2.0	233	ns	1.2	117		4.2	116	ns
Yes	0.0	3		0.0	3					0.0	1					0.0	1	
Fodder production value chain																		
Use of improved pasture inputs (e.g., quality seeds)																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Use of mechanized pasture harvesting and baling technologies																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Construction and use of hay stores by farmer organizations																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Use of fodder seeds																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		

Table A7.6a. Percentage of children 6-23 months with a minimum acceptable diet (MAD) by child and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Use of harvesting, drying, packaging, storage, and marketing technologies																		
No	3.0	296		1.7	193		5.7	103		2.0	233	ns	1.2	116	ns	4.2	117	
Yes										0.0	1		0.0	1				
Improved livestock management practices																		
Used improved livestock breeds/species																		
No	3.1	286	ns	1.8	183	ns	5.7	103		1.8	229	*	1.2	117		3.5	112	ns
Yes	0.0	10		0.0	10					20.4	5					20.4	5	
Used livestock health services and products																		
No	3.4	265	ns	1.9	168	ns	6.5	97	ns	1.7	193	ns	1.2	114	ns	3.6	79	ns
Yes	0.0	31		0.0	25		0.0	6		4.5	41		0.0	3		5.6	38	
Used improved livestock shelters																		
No	2.9	279	ns	1.4	176	ns	5.7	103		2.2	218	ns	1.3	107	ns	4.4	111	ns
Yes	4.3	17		4.3	17					0.0	16		0.0	10		0.0	6	
Used improved calving techniques																		
No	3.0	291	ns	1.7	188	ns	5.7	103		2.0	234		1.2	117		4.2	117	
Yes	0.0	5		0.0	5													
Used improved milking techniques																		
No	3.0	295	ns	1.7	192	ns	5.7	103		2.0	233	ns	1.2	116	ns	4.2	117	
Yes	0.0	1		0.0	1					0.0	1		0.0	1				
Used nutritious pasture varieties																		
No	3.1	280	ns	1.8	177	ns	5.7	103		2.1	230	ns	1.2	115	ns	4.3	115	ns
Yes	0.0	16		0.0	16					0.0	4		0.0	2		0.0	2	
Used set grazing areas																		
No	3.0	189	ns	1.5	98	ns	4.9	91	ns	1.1	197	*	0.0	106	***	4.2	91	ns
Yes	2.9	107		1.9	95		11.3	12		8.2	37		11.6	11		4.0	26	
Used improved fodder production																		
No	2.7	293	**	1.3	190	***	5.7	103		2.0	233	ns	1.2	116	ns	4.2	117	
Yes	25.6	3		25.6	3					0.0	1		0.0	1				
Used solarized boreholes for livestock																		
No	2.9	275	ns	1.3	173	ns	5.7	102	ns	2.1	230	ns	1.2	117		4.4	113	ns
Yes	4.0	21		4.1	20		0.0	1		0.0	4					0.0	4	
Used water pans for livestock																		
No	3.2	272	ns	1.9	172	ns	5.9	100	ns	2.1	222	ns	1.2	116	ns	4.6	106	ns
Yes	0.0	24		0.0	21		0.0	3		0.0	12		0.0	1		0.0	11	
Used sand dams for livestock																		
No	3.2	278	ns	1.8	181	ns	6.1	97	ns	2.1	228	ns	1.2	117		4.5	111	ns
Yes	0.0	18		0.0	12		0.0	6		0.0	6					0.0	6	
Used rock catchments for livestock																		
No	3.1	283	ns	1.8	180	ns	5.7	103		2.1	228	ns	1.2	116	ns	4.4	112	ns
Yes	0.0	13		0.0	13					0.0	6		0.0	1		0.0	5	

Table A7.6a. Percentage of children 6-23 months with a minimum acceptable diet (MAD) by child and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Improved post-harvest handling and storage																		
Used aflatoxin prevention and control																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Used aluminum cans, crates, other food grade containers during transportation																		
No	3.0	296		1.7	193		5.7	103		2.0	233	ns	1.2	117		4.3	116	ns
Yes										0.0	1					0.0	1	
Used well-equipped food storage structures (rodent proof; proper air circulation)																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Applied temperature and humidity control (shed nets, air condition, fans)																		
No	3.0	295	ns	1.7	193		5.8	102	ns	2.0	234		1.2	117		4.2	117	
Yes	0.0	1					0.0	1										
Used solar drying for grains and pulses																		
No	3.0	296		1.7	193		5.7	103		2.1	230	ns	1.2	113	ns	4.2	117	
Yes										0.0	4		0.0	4				
Improved crop management practices																		
Improved/certified seed																		
No	3.0	296		1.7	193		5.7	103		2.1	225	ns	1.2	109	ns	4.3	116	ns
Yes										0.0	9		0.0	8		0.0	1	
Seedling production and transplantation																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Crop rotation (rotating grains with nitrogen fixing legumes)																		
No	3.0	296		1.7	193		5.7	103		2.1	232	ns	1.2	115	ns	4.2	117	
Yes										0.0	2		0.0	2				
Kitchen gardens using sunken pits																		
No	3.0	296		1.7	193		5.7	103		2.1	232	ns	1.2	115	ns	4.2	117	
Yes										0.0	2		0.0	2				
Use of organic manure																		
No	3.0	295	ns	1.7	193		5.8	102	ns	2.1	228	ns	1.2	113	ns	4.3	115	ns
Yes	0.0	1					0.0	1		0.0	6		0.0	4		0.0	2	
Soil testing																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Application of inoculant																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Use of drip or sprinkler irrigation technologies																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Use of rainwater harvesting technologies (water pans, rock/roof catchment)																		
No	3.0	296		1.7	193		5.7	103		2.0	233	ns	1.2	116	ns	4.2	117	
Yes										0.0	1		0.0	1				
Use of flood-based farming technologies (spate irrigation)																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		

Table A7.6a. Percentage of children 6-23 months with a minimum acceptable diet (MAD) by child and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Production planning and crop rotation in irrigation schemes																		
No	3.0	296		1.7	193		5.7	103		2.1	229	ns	1.2	112	ns	4.2	117	
Yes										0.0	5		0.0	5				
Use of drought early warning systems or information																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Improved NRM practices																		
Reseeding degraded lands with drought resistant grass species																		
No	3.0	295	ns	1.7	193		5.8	102	ns	2.1	231	ns	1.2	117		4.3	114	ns
Yes	0.0	1					0.0	1		0.0	3					0.0	3	
Fencing off pasture plots to conserve pasture																		
No	3.1	287	ns	1.7	184	ns	5.7	103		2.1	224	ns	1.2	117		4.6	107	ns
Yes	0.0	9		0.0	9					0.0	10					0.0	10	
Rehabilitation of degraded grazing lands (soil/water conservation)																		
No	2.8	286	ns	1.3	183	**	5.7	103		2.0	232	ns	1.2	117		4.3	115	ns
Yes	11.1	10		11.1	10					0.0	2					0.0	2	
Construction of soil conservation structures (gabions)																		
No	3.0	290	ns	1.7	187	ns	5.7	103		2.1	231	ns	1.2	117		4.3	114	ns
Yes	0.0	6		0.0	6					0.0	3					0.0	3	
Use of natural barriers/cover crops (grass strips/crop covers)																		
No	3.0	295	ns	1.7	192	ns	5.7	103		2.1	227	ns	1.2	112	ns	4.3	115	ns
Yes	0.0	1		0.0	1					0.0	7		0.0	5		0.0	2	
Utilization of organic materials such as grain straw, fresh or old hay or other crop residues																		
No	3.0	295	ns	1.7	193		5.7	102	ns	2.0	232	ns	1.2	116	ns	4.2	116	ns
Yes	0.0	1					0.0	1		0.0	2		0.0	1		0.0	1	
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw).																		
No	3.0	296		1.7	193		5.7	103		2.0	233	ns	1.2	117		4.2	116	ns
Yes										0.0	1					0.0	1	
Zaï pits (pot-holing)																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		
Use of minimum tillage practices (leave crop residue on soil surface)																		
No	3.0	295	ns	1.7	192	ns	5.7	103		2.0	233	ns	1.2	117		4.2	116	ns
Yes	0.0	1		0.0	1					0.0	1					0.0	1	
Planting nitrogen-fixing trees (acacia)																		
No	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	
Yes																		

Table A7.6a. Percentage of children 6-23 months with a minimum acceptable diet (MAD) by child and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Household access to credit and/or savings																		
Household participated in group-based savings programs																		
No	3.1	284	ns	1.7	192	ns	6.2	92	ns	1.8	223	ns	1.2	115	ns	3.6	108	ns
Yes	0.0	12		0.0	1		0.0	11		7.4	11		0.0	2		10.5	9	
Household participated in group-based credit programs																		
No	3.0	291	ns	1.7	190	ns	5.7	101	ns	1.8	223	ns	1.2	115	ns	3.5	108	ns
Yes	0.0	5		0.0	3		0.0	2		8.5	11		0.0	2		12.6	9	
Household participated in group-based savings, microfinance or lending programs																		
No	3.1	281	ns	1.7	189	ns	6.2	92	ns	1.9	218	ns	1.2	114	ns	3.7	104	ns
Yes	0.0	15		0.0	4		0.0	11		5.3	16		0.0	3		7.6	13	
Household exposure to COVID-19 impacts																		
Household income/livelihood impacted by COVID-19																		
No	4.2	177	ns	2.0	117	ns	9.6	60	ns	3.2	116	ns	2.4	60	ns	5.3	56	ns
Yes	1.2	119		1.1	76		1.3	43		0.9	118		0.0	57		3.2	61	
Household access to food impacted by COVID-19																		
No	2.7	144	ns	0.8	99	ns	7.3	45	ns	1.6	99	ns	0.0	54	ns	6.0	45	ns
Yes	3.3	152		2.6	94		4.3	58		2.3	135		2.0	63		3.0	72	
Household member contracted COVID-19 virus in 90 days prior to survey																		
No	3.0	292	ns	1.7	191	ns	5.8	101	ns	2.1	230	ns	1.2	116	ns	4.3	114	ns
Yes	0.0	4		0.0	2		0.0	2		0.0	4		0.0	1		0.0	3	
Total	3.0	296		1.7	193		5.7	103		2.0	234		1.2	117		4.2	117	

NOTES:

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (percentage of children achieving MAD) and the disaggregate variable (e.g.,sex). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.6b. Average (mean) values of household background characteristics by children with a minimim acceptable diet (MAD) and children without MAD, by RFSA area and county
[Baseline Study, Kenya 2021]

	CRS - Total					Marsabit					Isiolo				
	Children without MAD	Children with MAD	All children 6-23 months	N	Sig.[a]	Children without MAD	Children with MAD	All children 6-23 months	N	Sig.[a]	Children without MAD	Children with MAD	All children 6-23 months	N	Sig.[a]
Average age of household head	39.1	34.2	39.0	296	ns	39.7	39.0	39.7	193	ns	37.9	31.2	37.5	103	*
Average number of adult females in household	1.1	1.0	1.1	296	***	1.2	1.0	1.1	193	**	1.1	1.0	1.1	103	**
Average number of adult males in household	1.1	1.1	1.1	296	ns	1.1	1.6	1.1	193	*	1.1	0.8	1.1	103	ns
Average number of children under five other than the child	0.8	0.7	0.8	296	ns	0.8	0.5	0.8	193	ns	0.8	0.9	0.8	103	ns
Number of older children (5-17)	2.1	2.1	2.1	296	ns	2.1	2.4	2.1	193	ns	2.3	1.8	2.2	103	ns
Average FCS	53.2	68.1	53.7	296	*	50.4	65.5	50.6	193	***	59.4	69.7	60.0	103	ns
Average daily per capita consumption expenditures (constant 2010 USD)	$1.43	$1.55	$1.43	296	ns	$1.18	$1.69	$1.19	193	ns	$1.96	$1.47	$1.93	103	ns
Average score - Ability to recover from shocks and stresses index	3.5	3.8	3.5	296	ns	3.6	4.3	3.6	193	**	3.3	3.5	3.3	103	ns
Average score - social bonding index	71.0	64.8	70.9	296	ns	70.7	77.8	70.8	193	ns	71.8	56.9	71.0	103	*
Average score - social bridging index	66.5	60.6	66.3	296	ns	64.7	77.8	64.9	193	ns	70.3	50.0	69.2	103	***
Average score - overall social capital index	68.8	62.7	68.6	296	ns	67.7	77.8	67.9	193	ns	71.1	53.4	70.1	103	***
Average score - absorptive capacity index	37.2	48.2	37.5	296	**	34.1	63.3	34.6	193	***	43.9	38.9	43.6	103	ns
Average score - adaptive capacity index	33.9	43.1	34.2	296	ns	32.2	58.3	32.6	193	***	37.6	33.7	37.3	103	ns
Average score - transformative capacity index	32.4	47.6	32.8	296	**	27.9	55.0	28.3	193	***	42.1	43.0	42.1	103	ns

	MC - Total					Turkana					Samburu				
	Children without MAD	Children with MAD	All children 6-23 months	N	Sig.[a]	Children without MAD	Children with MAD	All children 6-23 months	N	Sig.[a]	Children without MAD	Children with MAD	All children 6-23 months	N	Sig.[a]
Average age of household head	39.0	48.8	39.2	234	ns	39.8	45.0	39.8	117	*	37.0	51.4	37.6	117	**
Average number of adult females in household	1.2	1.2	1.2	234	ns	1.2	1.0	1.2	117	**	1.1	1.4	1.1	117	ns
Average number of adult males in household	1.0	1.7	1.0	234	ns	1.0	1.0	1.0	117	ns	1.0	2.1	1.1	117	ns
Average number of children under five other than the child	0.9	0.4	0.9	234	ns	0.9	0.0	0.9	117	***	0.8	0.7	0.8	117	ns
Number of older children (5-17)	2.1	3.9	2.1	234	**	2.0	5.0	2.1	117	***	2.2	3.2	2.2	117	ns
Average FCS	37.5	58.8	38.0	234	**	34.3	59.5	34.6	117	***	45.7	58.4	46.3	117	ns
Average daily per capita consumption expenditures (constant 2010 USD)	$0.82	$2.30	$0.85	234	ns	$0.68	$0.28	$0.67	117	***	$1.18	$3.67	$1.28	117	*
Average score - Ability to recover from shocks and stresses index	3.7	3.9	3.7	234	ns	3.7	3.2	3.7	117	**	3.6	4.4	3.6	117	ns
Average score - social bonding index	73.4	77.0	73.5	234	ns	72.9	75.0	73.0	117	ns	74.6	78.3	74.8	117	ns
Average score - social bridging index	71.7	74.9	71.8	234	ns	71.3	75.0	71.3	117	ns	72.9	74.8	73.0	117	ns
Average score - overall social capital index	72.6	75.9	72.6	234	ns	72.1	75.0	72.1	117	ns	73.8	76.5	73.9	117	ns
Average score - absorptive capacity index	31.2	39.7	31.4	234	ns	28.8	20.9	28.7	117	***	37.4	52.4	38.0	117	*
Average score - adaptive capacity index	28.9	38.0	29.1	234	ns	26.1	15.1	25.9	117	***	36.2	53.5	36.9	117	**
Average score - transformative capacity index	27.6	29.3	27.7	234	ns	26.2	13.1	26.1	117	**	31.1	40.2	31.5	117	ns

NOTES:

[a] Significance tests (t-test) were performed to determine whether an association exists between the outcome indicator (percentage of children achieving a MAD) and the disaggregate variable (e.g, average daily per capita consumption expenditures). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.7a. Percentage of children 6-23 months with minimum dietary diversity (MDD-C) by children's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Child background characteristics																		
Sex																		
Male	8.0	159	ns	5.9	107	ns	12.6	52	ns	5.8	120	ns	4.9	65	ns	8.3	55	ns
Female	5.2	137		5.0	86		5.6	51		3.4	114		1.3	52		8.1	62	
Age group in months																		
6-8	2.0	53	*	2.0	33	**	2.0	20	ns	1.1	48	ns	0.0	23	ns	3.6	25	ns
9-11	5.5	52		3.7	40		10.8	12		1.9	33		0.0	14		5.6	19	
12-17	12.1	112		11.7	72		12.8	40		6.0	86		2.7	43		13.5	43	
18-23	3.1	79		0.0	48		9.5	31		6.9	67		7.1	37		6.3	30	
Household background characteristics																		
Residence	5.5	270	ns	4.3	182	***	8.8	88	ns	5.2	214	ns	3.5	109	ns	9.4	105	ns
Rural	14.8	26		26.2	11		9.9	15		0.0	20		0.0	8		0.0	12	
Urban																		
Gendered household type	6.1	271	ns	4.9	176	ns	8.6	95	ns	5.2	209	ns	3.6	103	ns	9.0	106	ns
Both	18.4	19		17.9	12		19.7	7		0.0	22		0.0	14		0.0	8	
Female Only	0.0	6		0.0	5		0.0	1		0.0	3					0.0	3	
Male Only																		
Household head sex																		
Male	6.4	243	ns	4.7	158	ns	9.9	85	ns	5.4	170	ns	3.9	79	ns	8.4	91	ns
Female	8.1	53		9.4	35		5.7	18		3.0	64		1.8	38		7.4	26	
Household head educational level																		
Never attended school	4.9	230	ns	4.0	162	**	7.4	68	ns	2.8	189	*	2.6	105	ns	3.3	84	*
Pre-primary or primary	11.7	41		3.1	17		17.4	24		12.6	26		0.0	8		27.2	18	
Post-primary/vocational or secondary	13.0	18		25.0	9		0.0	9		13.7	7		0.0	1		21.1	6	
College or University	26.8	7		37.0	5		0.0	2		17.6	12		24.7	3		10.0	9	
Household food security																		
Household food consumption score group																		
Poor food consumption (0-28)	2.0	30	ns	0.0	27	ns	29.7	3	ns	1.2	80	*	1.1	57	ns	2.3	23	ns
Borderline food consumption (28.5-42)	0.0	44		0.0	37		0.0	7		2.5	49		0.0	18		6.2	31	
Acceptable food consumption (42.5-112)	8.8	222		8.4	129		9.4	93		8.9	105		7.5	42		11.1	63	
Household is moderately or severely food insecure																		
No	21.2	33	***	12.6	15	ns	28.3	18	**	24.7	15	**	28.1	3	*	22.4	12	ns
Yes	5.1	263		5.0	178		5.4	85		3.4	219		2.4	114		6.3	105	
Household poverty status																		
Household living below the $1.90 2011 PPP poverty line																		
No	14.3	48	*	13.4	33	ns	16.0	15	ns	11.3	33	*	0.0	8	ns	21.1	25	**
Yes	5.2	248		4.1	160		7.5	88		3.7	201		3.5	109		4.5	92	
Agricultural assets																		
Household raises any of the targeted livestock commodities (cattle, goats, camels)																		
No	17.6	17	ns	0.0	3	ns	19.8	14	ns	11.4	35	*	4.5	16	ns	21.6	19	*
Yes	5.9	279		5.6	190		6.9	89		3.6	199		3.1	101		5.0	98	
Household raises cattle																		
No	7.0	179	ns	5.9	125	ns	9.9	54	ns	4.5	150	ns	3.5	107	ns	10.4	43	ns
Yes	6.0	117		4.8	68		8.0	49		5.1	84		0.0	10		6.7	74	
Household raises goats																		
No	14.9	27	ns	0.0	6	ns	17.7	21	ns	11.7	41	*	4.5	16	ns	20.0	25	*
Yes	5.8	269		5.6	187		6.4	82		3.4	193		3.1	101		4.4	92	
Household raises camels																		
No	10.9	151	**	12.8	64	*	9.6	87	ns	5.1	214	ns	3.4	110	ns	9.2	104	ns
Yes	2.9	145		2.6	129		5.6	16		0.0	20		0.0	7		0.0	13	

Table A7.7a. Percentage of children 6-23 months with minimum dietary diversity (MDD-C) by children's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Agricultural financial services																		
Accessed agri-related financial services																		
No	6.5	273	ns	5.5	180	ns	8.6	93	ns	4.5	211	ns	3.4	112	ns	7.6	99	ns
Yes	9.1	23		5.4	13		13.2	10		6.3	23		0.0	5		11.2	18	
Accessed agri-related loan																		
No	6.8	291	ns	5.7	188	ns	9.1	103		4.7	232	ns	3.2	117		8.3	115	ns
Yes	0.0	5		0.0	5					0.0	2					0.0	2	
Participated in agri-savings scheme																		
No	6.4	277	ns	5.4	184	ns	8.6	93	ns	4.5	212	ns	3.4	113	ns	7.6	99	ns
Yes	11.4	19		8.8	9		13.2	10		6.8	22		0.0	4		11.2	18	
Value chain interventions																		
Household adopted at least one value chain intervention																		
No	6.4	268	ns	5.5	168	ns	8.1	100	ns	4.7	233	ns	3.3	116	ns	8.2	117	
Yes	9.2	28		5.7	25		24.6	3		0.0	1		0.0	1				
Any crop or livestock value chain																		
Contract farming																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Selling products through community farmer associations																		
No	6.7	295	ns	5.5	193		9.3	102	ns	4.7	233	ns	3.2	116	ns	8.2	117	
Yes	0.0	1					0.0	1		0.0	1		0.0	1				
Sorting and grading																		
No	6.5	286	ns	5.8	185	ns	8.0	101	ns	4.7	234		3.2	117		8.2	117	
Yes	9.2	10		0.0	8		32.6	2										
Bulking																		
No	6.5	280	ns	5.2	177	ns	9.1	103		4.7	234		3.2	117		8.2	117	
Yes	9.5	16		9.5	16													
Use of improved record keeping, budgeting and financial management																		
No	6.7	296		5.5	193		9.1	103		4.7	233	ns	3.3	116	ns	8.2	117	
Yes										0.0	1		0.0	1				
Use of training and extension services																		
No	6.7	293	ns	5.6	190	ns	9.1	103		4.4	233	***	3.2	117		7.4	116	***
Yes	0.0	3		0.0	3					100.0	1					100.0	1	
Fodder production value chain																		
Use of improved pasture inputs (e.g., quality seeds)																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Use of mechanized pasture harvesting and baling technologies																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Construction and use of hay stores by farmer organizations																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Use of fodder seeds																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		

Table A7.7a. Percentage of children 6-23 months with minimum dietary diversity (MDD-C) by children's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Use of harvesting, drying, packaging, storage, and marketing technologies																		
No	6.7	296		5.5	193		9.1	103		4.7	233	ns	3.3	116	ns	8.2	117	
Yes										0.0	1		0.0	1				
Improved livestock management practices																		
Used improved livestock breeds/species																		
No	6.9	286	ns	5.8	183	ns	9.1	103		4.2	229	***	3.2	117		6.8	112	*
Yes	0.0	10		0.0	10					43.8	5					43.8	5	
Used livestock health services and products																		
No	7.2	265	ns	5.7	168	ns	10.5	97	ns	4.1	193	ns	3.3	114	ns	6.9	79	ns
Yes	2.9	31		4.3	25		0.0	6		9.0	41		0.0	3		11.1	38	
Used improved livestock shelters																		
No	6.8	279	ns	5.6	176	ns	9.1	103		4.8	218	ns	3.5	107	ns	7.7	111	ns
Yes	4.3	17		4.3	17					3.1	16		0.0	10		15.7	6	
Used improved calving techniques																		
No	6.8	291	ns	5.6	188	ns	9.1	103		4.7	234		3.2	117		8.2	117	
Yes	0.0	5		0.0	5													
Used improved milking techniques																		
No	6.7	295	ns	5.5	192	ns	9.1	103		4.7	233	ns	3.2	116	ns	8.2	117	
Yes	0.0	1		0.0	1					0.0	1		0.0	1				
Used nutritious pasture varieties																		
No	6.6	280	ns	5.2	177	ns	9.1	103		4.7	230	ns	3.3	115	ns	8.3	115	ns
Yes	8.9	16		8.9	16					0.0	4		0.0	2		0.0	2	
Used set grazing areas																		
No	7.0	189	ns	5.5	98	ns	8.8	91	ns	2.8	197	***	1.3	106	***	7.1	91	ns
Yes	6.1	107		5.5	95		11.3	12		17.3	37		20.9	11		12.7	26	
Used improved fodder production																		
No	6.5	293	ns	5.2	190	ns	9.1	103		4.7	233	ns	3.2	116	ns	8.2	117	
Yes	25.6	3		25.6	3					0.0	1		0.0	1				
Used solarized boreholes for livestock																		
No	6.9	275	ns	5.7	173	ns	9.2	102	ns	4.7	230	ns	3.2	117		8.5	113	ns
Yes	4.0	21		4.1	20		0.0	1		0.0	4					0.0	4	
Used water pans for livestock																		
No	6.9	272	ns	5.5	172	ns	9.6	100	ns	4.8	222	ns	3.2	116	ns	9.0	106	ns
Yes	4.7	24		5.7	21		0.0	3		0.0	12		0.0	1		0.0	11	
Used sand dams for livestock																		
No	6.7	278	ns	5.2	181	ns	9.8	97	ns	4.7	228	ns	3.2	117		8.7	111	ns
Yes	6.5	18		10.4	12		0.0	6		0.0	6					0.0	6	
Used rock catchments for livestock																		
No	7.0	283	ns	5.9	180	ns	9.1	103		4.7	228	ns	3.2	116	ns	8.5	112	ns
Yes	0.0	13		0.0	13					0.0	6		0.0	1		0.0	5	
Improved post-harvest handling and storage																		
Used aflatoxin prevention and control																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Used aluminum cans, crates, other food grade containers during transportation																		
No	6.7	296		5.5	193		9.1	103		4.7	233	ns	3.2	117		8.3	116	ns
Yes										0.0	1					0.0	1	

Table A7.7a. Percentage of children 6-23 months with minimum dietary diversity (MDD-C) by children's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Used well-equipped food storage structures (rodent proof; proper air circulation)																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Applied temperature and humidity control (shed nets, air condition, fans)																		
No	6.7	295	ns	5.5	193		9.3	102	ns	4.7	234		3.2	117		8.2	117	
Yes	0.0	1					0.0	1										
Used solar drying for grains and pulses																		
No	6.7	296		5.5	193		9.1	103		4.8	230	ns	3.3	113	ns	8.2	117	
Yes										0.0	4		0.0	4				
Improved crop management practices																		
Improved/certified seed																		
No	6.7	296		5.5	193		9.1	103		4.5	225	ns	2.9	109	ns	8.3	116	ns
Yes										8.4	9		9.5	8		0.0	1	
Seedling production and transplantation																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Crop rotation (rotating grains with nitrogen fixing legumes)																		
No	6.7	296		5.5	193		9.1	103		4.7	232	ns	3.3	115	ns	8.2	117	
Yes										0.0	2		0.0	2				
Kitchen gardens using sunken pits																		
No	6.7	296		5.5	193		9.1	103		4.3	232	*	2.7	115	**	8.2	117	
Yes										41.4	2		41.4	2				
Use of organic manure																		
No	6.7	295	ns	5.5	193		9.3	102	ns	4.5	228	ns	3.3	113	ns	7.4	115	ns
Yes	0.0	1					0.0	1		11.2	6		0.0	4		36.3	2	
Soil testing																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Application of inoculant																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Use of drip or sprinkler irrigation technologies																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Use of rainwater harvesting technologies (water pans, rock/roof catchment)																		
No	6.7	296		5.5	193		9.1	103		4.7	233	ns	3.2	116	ns	8.2	117	
Yes										0.0	1		0.0	1				
Use of flood-based farming technologies (spate irrigation)																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Production planning and crop rotation in irrigation schemes																		
No	6.7	296		5.5	193		9.1	103		4.8	229	ns	3.3	112	ns	8.2	117	
Yes										0.0	5		0.0	5				
Use of drought early warning systems or information																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		

Table A7.7a. Percentage of children 6-23 months with minimum dietary diversity (MDD-C) by children's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Improved NRM practices																		
Reseeding degraded lands with drought resistant grass species																		
No	6.7	295	ns	5.5	193		9.4	102	ns	4.7	231	ns	3.2	117		8.5	114	ns
Yes	0.0	1					0.0	1		0.0	3					0.0	3	
Fencing off pasture plots to conserve pasture																		
No	6.4	287	ns	5.1	184	ns	9.1	103		4.5	224	ns	3.2	117		7.9	107	ns
Yes	15.5	9		15.5	9					11.1	10					11.1	10	
Rehabilitation of degraded grazing lands (soil/water conservation)																		
No	6.1	286	*	4.6	183	**	9.1	103		4.7	232	ns	3.2	117		8.4	115	ns
Yes	28.3	10		28.3	10					0.0	2					0.0	2	
Construction of soil conservation structures (gabions)																		
No	6.8	290	ns	5.6	187	ns	9.1	103		4.7	231	ns	3.2	117		8.5	114	ns
Yes	0.0	6		0.0	6					0.0	3					0.0	3	
Use of natural barriers/cover crops (grass strips/crop covers)																		
No	6.7	295	ns	5.5	192	ns	9.1	103		4.8	227	ns	3.3	112	ns	8.4	115	ns
Yes	0.0	1		0.0	1					0.0	7		0.0	5		0.0	2	
Utilization of organic materials such as grain straw, fresh or old hay or other crop residues																		
No	6.2	295	***	5.5	193		7.7	102	**	4.7	232	ns	3.2	116	ns	8.2	116	ns
Yes	100.0	1					100.0	1		0.0	2		0.0	1		0.0	1	
Planting agroforestry trees and fruits (e.g., grevillea, pawpaw).																		
No	6.7	296		5.5	193		9.1	103		4.7	233	ns	3.2	117		8.3	116	ns
Yes										0.0	1					0.0	1	
Zaï pits (pot-holing)																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Use of minimum tillage practices (leave crop residue on soil surface)																		
No	6.7	295	ns	5.5	192	ns	9.1	103		4.7	233	ns	3.2	117		8.3	116	ns
Yes	0.0	1		0.0	1					0.0	1					0.0	1	
Planting nitrogen-fixing trees (acacia)																		
No	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	
Yes																		
Household access to credit and/or savings																		
Household participated in group-based savings programs																		
No	6.9	284	ns	5.5	192	ns	10.0	92	ns	4.6	223	ns	3.3	115	ns	8.0	108	ns
Yes	0.0	12		0.0	1		0.0	11		7.4	11		0.0	2		10.5	9	
Household participated in group-based credit programs																		
No	6.4	291	ns	5.0	190	ns	9.2	101	ns	4.5	223	ns	3.3	115	ns	7.9	108	ns
Yes	23.9	5		33.1	3		0.0	2		8.5	11		0.0	2		12.6	9	
Household participated in group-based savings, microfinance or lending programs																		
No	6.6	281	ns	5.0	189	ns	10.0	92	ns	4.6	218	ns	3.3	114	ns	8.3	104	ns
Yes	9.0	15		26.8	4		0.0	11		5.3	16		0.0	3		7.6	13	

Table A7.7a. Percentage of children 6-23 months with minimum dietary diversity (MDD-C) by children's and household background characteristics
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]	%	N	Sig.[a]
Household exposure to COVID-19 impacts																		
Household income/livelihood impacted by COVID-19																		
No	6.2	177	ns	4.9	117	ns	9.6	60	ns	4.6	116	ns	3.6	60	ns	7.2	56	ns
Yes	7.3	119		6.6	76		8.6	43		4.7	118		2.8	57		9.1	61	
Household access to food impacted by COVID-19																		
No	5.8	144	ns	3.8	99	ns	10.8	45	ns	3.5	99	ns	2.6	54	ns	6.0	45	ns
Yes	7.6	152		7.5	94		7.8	58		5.5	135		3.7	63		9.7	72	
Household member contracted COVID-19 virus in 90 days prior to survey																		
No	6.3	292	ns	5.6	191	ns	7.8	101	*	4.7	230	ns	3.2	116	ns	8.5	114	ns
Yes	33.3	4		0.0	2		58.1	2		0.0	4		0.0	1		0.0	3	
Total	6.7	296		5.5	193		9.1	103		4.7	234		3.2	117		8.2	117	

NOTES:

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (percentage of children achieving MDD) and the disaggregate variable (e.g, sex). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.7b.Average (mean) values of household background characteristics by children with a minimim dietary diet (MDD) and children without MDD, by RFSA area and county [Baseline Study, Kenya 2021

	CRS - Total					Marsabit					Isiolo				
	Children without MDD	Children with MDD	All children 6-23 months	N	Sig.[a]	Children without MDD	Children with MDD	All children 6-23 months	N	Sig.[a]	Children without MDD	Children with MDD	All children 6-23 months	N	Sig.[a]
Average age of household head	39.1	37.3	39.0	296	ns	39.9	35.8	39.7	193	ns	37.4	39.1	37.5	103	ns
Average number of adult females in household	1.1	1.1	1.1	296	ns	1.2	1.0	1.1	193	**	1.1	1.1	1.1	103	ns
Average number of adult males in household	1.1	1.1	1.1	296	ns	1.1	1.0	1.1	193	ns	1.1	1.2	1.1	103	ns
Average number of children under five other than the child	0.8	0.7	0.8	296	ns	0.8	0.8	0.8	193	ns	0.8	0.6	0.8	103	ns
Number of older children (5-17)	2.1	1.9	2.1	296	ns	2.1	1.9	2.1	193	ns	2.3	2.0	2.2	103	ns
Average FCS	52.4	71.2	53.7	296	***	49.5	69.1	50.6	193	***	58.6	74.0	60.0	103	*
Average daily per capita consumption expenditures (constant 2010 USD)	$1.19	$4.77	$1.43	296	ns	$1.16	$1.77	$1.19	193	ns	$1.27	$8.54	$1.93	103	ns
Average score - Ability to recover from shocks and stresses index	3.5	3.6	3.5	296	ns	3.7	3.5	3.6	193	ns	3.3	3.7	3.3	103	ns
Average score - social bonding index	71.4	63.9	70.9	296	ns	71.0	68.0	70.8	193	ns	72.2	58.8	71.0	103	*
Average score - social bridging index	66.9	58.8	66.3	296	ns	65.1	62.2	64.9	193	ns	70.7	54.6	69.2	103	**
Average score - overall social capital index	69.1	61.4	68.6	296	ns	68.0	65.1	67.9	193	ns	71.4	56.7	70.1	103	**
Average score - absorptive capacity index	36.6	50.2	37.5	296	***	33.6	52.7	34.6	193	***	43.3	47.0	43.6	103	ns
Average score - adaptive capacity index	33.2	47.7	34.2	296	**	31.6	50.2	32.6	193	***	36.6	44.6	37.3	103	ns
Average score - transformative capacity index	31.5	50.4	32.8	296	***	27.3	45.7	28.3	193	**	40.7	56.3	42.1	103	ns

	MC - Total					Turkana					Samburu				
	Children without MDD	Children with MDD	All children 6-23 months	N	Sig.[a]	Children without MDD	Children with MDD	All children 6-23 months	N	Sig.[a]	Children without MDD	Children with MDD	All children 6-23 months	N	Sig.[a]
Average age of household head	39.1	41.1	39.2	234	ns	39.9	36.9	39.8	117	ns	36.9	45.2	37.6	117	**
Average number of adult females in household	1.2	1.1	1.2	234	ns	1.2	1.0	1.2	117	**	1.1	1.2	1.1	117	ns
Average number of adult males in household	1.0	1.3	1.0	234	ns	1.0	1.0	1.0	117	ns	1.0	1.6	1.1	117	ns
Average number of children under five other than the child	0.9	0.6	0.9	234	ns	0.9	0.6	0.9	117	ns	0.8	0.6	0.8	117	ns
Number of older children (5-17)	2.0	3.2	2.1	234	*	2.0	4.2	2.1	117	***	2.2	2.2	2.2	117	ns
Average FCS	37.1	54.9	38.0	234	**	34.0	53.2	34.6	117	*	45.3	56.4	46.3	117	ns
Average daily per capita consumption expenditures (constant 2010 USD)	$0.81	$1.59	$0.85	234	ns	$0.68	$0.53	$0.67	117	ns	$1.16	$2.61	$1.28	117	ns
Average score - Ability to recover from shocks and stresses index	3.7	3.5	3.7	234	ns	3.7	3.2	3.7	117	ns	3.6	3.7	3.6	117	ns
Average score - social bonding index	73.1	82.2	73.5	234	ns	72.6	83.0	73.0	117	ns	74.2	81.5	74.8	117	ns
Average score - social bridging index	71.5	77.1	71.8	234	ns	71.2	75.7	71.3	117	ns	72.5	78.4	73.0	117	ns
Average score - overall social capital index	72.3	79.7	72.6	234	ns	71.9	79.3	72.1	117	ns	73.3	80.0	73.9	117	ns
Average score - absorptive capacity index	31.1	37.8	31.4	234	ns	28.8	24.9	28.7	117	ns	36.9	50.1	38.0	117	*
Average score - adaptive capacity index	28.5	41.5	29.1	234	*	25.9	27.0	25.9	117	ns	35.3	55.4	36.9	117	***
Average score - transformative capacity index	27.5	31.5	27.7	234	ns	26.4	17.7	26.1	117	ns	30.3	44.7	31.5	117	*

NOTES:

[a] Significance tests (t-test) were performed to determine whether an association exists between the outcome indicator (percentage of children achieving MDD) and the disaggregate variable (e.g, average daily per capita consumption expenditures). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30. Analytical sample includes a subsample of cases for which there are no missing values on any of the variables.

Table A7.8. Prevalence of diarrhea among children under five by sex, age, and household water, sanitation and hygiene (WASH) facilities and practices, by RFSA area and county
[Baseline Study, Kenya 2021]

	CRS-Total			Marsabit			Isiolo			MC-Total			Turkana			Samburu		
	%	N	Sig[a].	%	N	Sig[a].	%	N	Sig[a].	%	N	Sig[a].	%	N	Sig[a].	%	N	Sig[a].
Child background characteristics																		
Sex																		
Male	19.9	914	ns	24.6	488	ns	14.4	426	ns	26.7	838	ns	27.3	461	ns	25.1	377	ns
Female	20.2	821		24.9	423		14.9	398		23.1	825		20.7	431		28.8	394	
Total	20.1	1,735		24.7	911		14.7	824		24.9	1,663		24.1	892		27	771	
Age groups in months																		
<6	8.3	160	ns	5.8	75	*	10.9	85	ns	19.9	197	***	20	109	**	19.6	88	ns
6-11	22.4	169		24.1	95		20.4	74		34.2	145		33.4	71		36	74	
12-17	24.7	177		35.2	97		10.9	80		40.3	154		43.1	80		33.7	74	
18-23	17.2	131		25.4	63		9.3	68		31.6	131		31.4	84		32.5	47	
24-29	17.8	204		22.7	95		13.4	109		29.1	211		26.1	125		38.8	86	
30-35	24.8	162		27.4	88		21.4	74		25.1	151		24.3	79		27.1	72	
36-41	21.1	228		33.2	123		6.4	105		17.7	199		16.1	101		21.2	98	
42-47	22.8	148		25.3	86		19	62		23.8	122		24.5	66		21.9	56	
48-53	18.1	201		17.4	104		18.9	97		15.9	195		12.5	94		22.6	101	
54-59	22.7	155		25.4	85		18.9	70		15.7	158		13.2	83		21.2	75	
Total	20.1	1,735		24.7	911		14.7	824		24.9	1,663		24.1	892		27	771	
Household water, sanitation, and hygiene facilities and practices																		
Household has basic water source																		
No	20.2	1,666	ns	24.7	881	ns	14.8	785	ns	25.1	1,582	ns	24.4	835	ns	26.8	747	ns
Yes	21.5	54		26.2	28		14.1	26		20.7	75		16	55		37.1	20	
Total	20.2	1,720		24.8	909		14.8	811		24.9	1,657		24	890		27.2	767	
Households using at least one evidence-based household water treatment																		
No	19.8	1,565	ns	23.7	800	ns	15.4	765	**	24.7	1,464	ns	23.5	811	ns	28	653	ns
Yes	23	168		33.1	111		3.9	57		26.5	199		29.7	81		21.6	118	
Total	20.1	1,733		24.7	911		14.7	822		24.9	1,663		24.1	892		27	771	
Household has access to a basic sanitation facility																		
No	20.7	1,603	*	24.8	878	ns	15.5	725	*	25.1	1,575	ns	24	847	ns	27.8	728	ns
Yes	12.2	130		22.6	33		7.8	97		22.4	88		26	45		14.2	43	
Total	20.1	1,733		24.7	911		14.7	822		24.9	1,663		24.1	892		27	771	
Households with soap and water at a handwashing station commonly used by family members[1]																		
No	16.8	75	ns	30.8	21	ns	12.4	54	ns	36.9	75	ns	22.4	22	ns	48	53	*
Yes	24.7	28		27	25		0	3		21	88		0	9		24.4	79	
Total	19	103		28.5	46		11.9	57		29.3	163		17.4	31		34.3	132	

NOTES:

[a] Significance tests (chi-square) were performed to determine whether an association exists between the outcome indicator (prevalence of diarrhea) and the disaggregate variable (e.g, age, sex, household WASH status). Associations found to be statistically significant are indicated by level: * p<0.05, ** p<0.01, *** p<0.001; ns=not significant. Results are not statistically reliable where n<30.

[1] Includes only households that enumerators could observe a handwashing station.

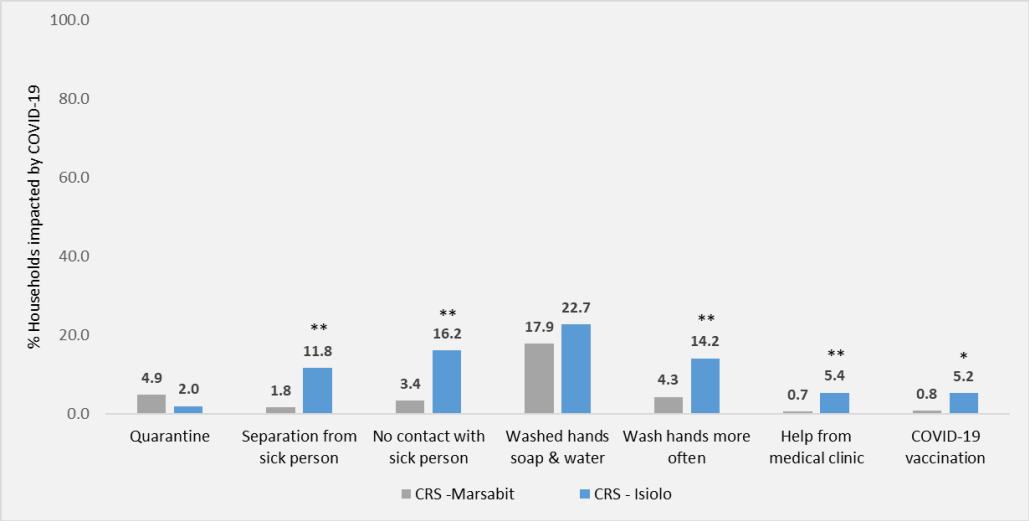
ANNEX H: COVID-19 KNOWLEDGE, PRACTICES, IMPACTS AND COPING STRATEGIES

Knowledge of COVID-19 and adoption of mitigation practices

Awareness of the COVID-19 pandemic is widespread across the CRS RFSA areas (CRS area, 97.5 percent; Marsabit, 96.0 percent; Isiolo, 99.1 percent). A minority of households in the CRS area take measures to mitigate the spread of COVID-19; however, adoption of several measures is higher for households in Isiolo county. Figure A8.1 illustrates the extent of adoption of COVID-19 mitigation protocols for households that report being impacted by COVID-19, in the CRS RFSA area.

Washing hands with soap and water was the most prevalent strategy, utilized by one-in-five households in the CRS area (Marsabit, 17.9 percent; Isiolo, 22.7 percent) (Figure A8.1). Households in Isiolo (14.2 percent) were more likely to report washing their hands more often than households in Marsabit (17.9 percent). Of households impacted by COVID-19, those in Isiolo more frequently reported avoiding contact with a sick person (Marsabit, 3.4 percent; Isiolo, 16.2 percent) or to separate from sick persons (Marsabit, 1.8 percent; Isiolo, 11.8 percent). While infrequent, households in Isiolo were also more likely to seek help from a medical clinic (Marsabit, 0.7 percent; Isiolo, 5.4 percent) and to receive vaccination to protect against COVID-19 (Marsabit, 0.8 percent; Isiolo, 3.3 percent;). Less than 5 percent of all households in the CRS area reported quarantining.

Figure A8.1: Adoption of COVID-19 mitigation protocols, Nawiri (CRS) RFSA area

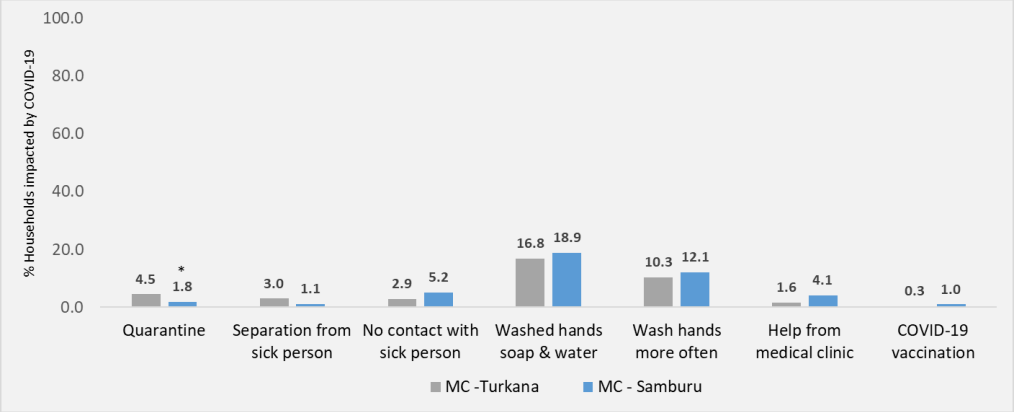


* p<0.05, ** p<0.01, *** p<0.001

Note: Denominator is households reporting impact to livelihood or food security from COVID-19.

As shown in Figure A8.2, other than hand washing with soap and water (Turkana, 16.8 percent; Samburu, 18.9 percent), utilization of COVID-19 prevention measures was rare. Fewer than 5 percent of all households in the Mercy Corps area reported separating or having no contact with sick people, quarantining, seeking help from a medical clinic, or receiving a COVID-19 vaccine.

Figure A8.2: Adoption of COVID-19 mitigation protocols, Nawiri (Mercy Corps) RFSA area



* p<0.05, ** p<0.01, *** p<0.001
Note: Denominator is households reporting impact to livelihood or food security from COVID-19.

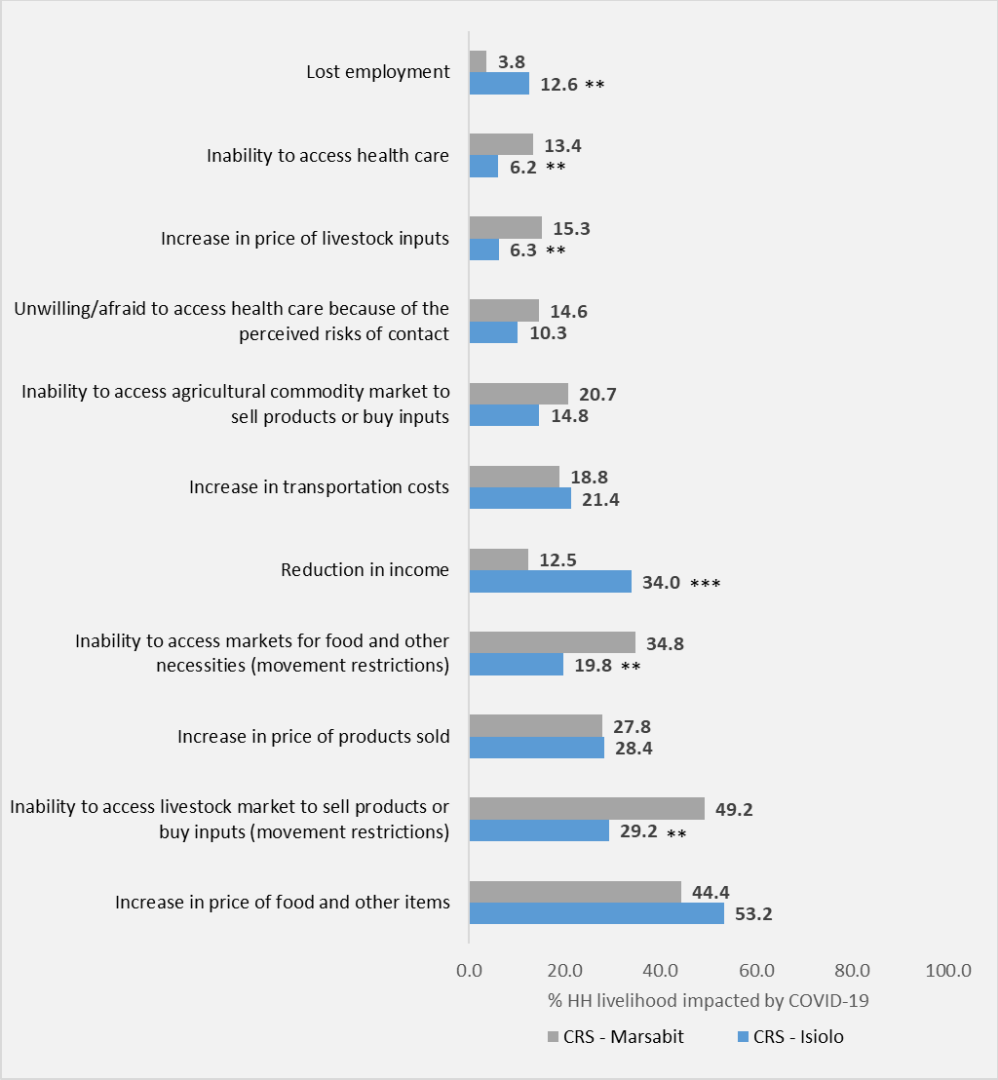
Impact of COVID-19 on livelihoods and coping strategies

Roughly half of households in the CRS area reported impact on livelihood (CRS area, 49.9 percent) due to COVID-19 (see Annex 6, Table AR6.29). Reported impact on households' livelihoods was more prevalent in Isiolo county (58.9 percent) compared to Marsabit (41.4 percent).

Inability to access markets and increased prices were the most common impacts of COVID-19 for households in the CRS area (Figure A8.3). Half of households (Marsabit, 44.4 percent; Isiolo, 53.2 percent) reported higher prices for food and other purchased items. One-third to one-half of households in the CRS area reported the inability to access livestock markets to sell product or buy inputs with those in Marsabit relatively more affected (49.2 percent) compared to households in Isiolo (29.2 percent). Households in Marsabit more frequently reported not being able to access markets for food and other necessities (34.8 percent) than households in Isiolo (19.8 percent). Nearly one-in-five households (Marsabit, 20.7 percent; Isiolo, 14.8 percent) in the CRS area reported the inability to access commodity markets to sell products or buy inputs. More households in Marsabit reported being affected by higher prices for livestock inputs (15.3 percent) compared to households in Isiolo (6.3 percent). For those that could access markets, over one-quarter of households in the CRS area reported higher prices for products sold (Marsabit, 27.8 percent; Isiolo 28.4 percent).

COVID-19 more frequently led to reported reductions of income (Marsabit, 12.5 percent; Isiolo, 34.0 percent) and lost employment (Marsabit, 3.8 percent; Isiolo, 12.6 percent) in Isiolo county (see Figure A8.3). This differential impact on income and employment in may partially explain the perceived higher overall impact of COVID-19 on livelihoods for households in Isiolo relative to households in Marsabit. Other reported impacts on livelihoods caused by COVID-19 in the CRS area include an increase in transportation costs (Marsabit, 18.8 percent; Isiolo, 21.4 percent), unwillingness or fear to access health care due to perceived risks of contact (Marsabit, 14.6 percent; Isiolo, 10.3 percent), and households in Marsabit more frequently reported the inability to access health care (13.4 percent) compared to households in Isiolo (6.2 percent).

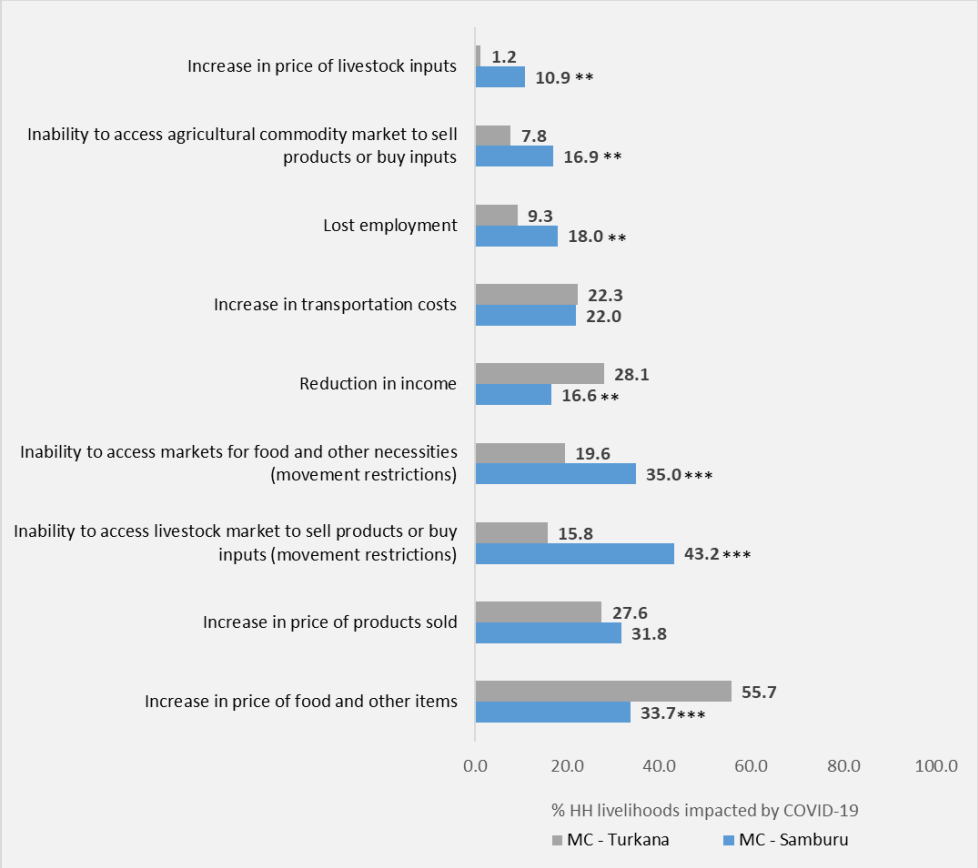
Figure A8.3: COVID-19 related impacts on households' livelihoods, Nawiri (CRS) RFSA area



* p<0.05, ** p<0.01, *** p<0.001
Note: all impacts reported by > 10% of households shown.

Roughly half of all households in the MC area (MC area, 49.2 percent) reported having households livelihood impacted by COVID-19 (see Annex 6, Table AR6.29). Lack of market access and higher prices were also the most prevalent impacts in the MC area (Figure A8.4). More households in Turkana (55.7 percent) reported higher prices for food/other items relative to households in Samburu (33.7 percent), while one-quarter to one-third of households (Turkana, 27.6 percent; Samburu, 31.8 percent) observed an increase in price of products sold. Although higher food prices disproportionally impacted households in Turkana compared to Samburu, households in Samburu were more likely to report lack of access to all types of markets - food/other necessity markets (Turkana, 19.6 percent; Samburu, 35.0 percent), livestock markets to sell products or buy inputs (Turkana, 15.8 percent; Samburu, 43.2 percent), and agricultural commodity markets to sell crops or buy inputs (Turkana, 7.8 percent; Samburu, 16.9 percent).

Figure A8.4: COVID-19 related impacts on households' livelihoods, Nawiri (Mercy Corps) RFSA area

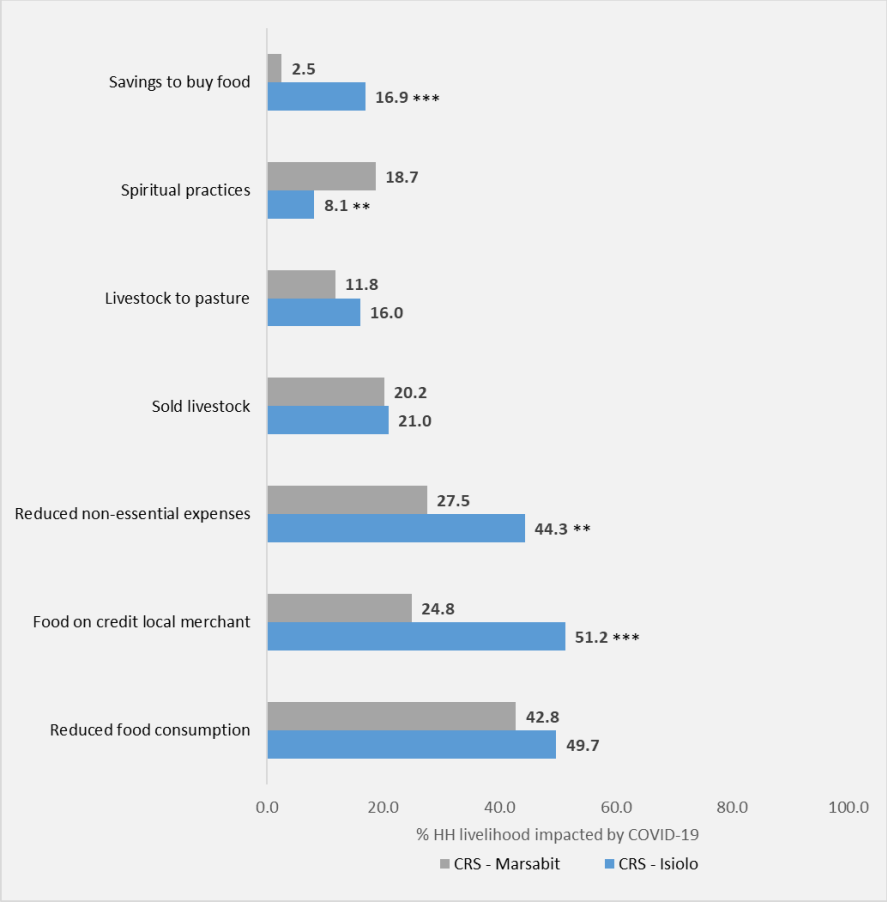


* p<0.05, ** p<0.01, *** p<0.001
Note: all impacts reported by > 10% of households shown.

Other disproportionate impacts of COVID-19 on Samburu households include employment loss (Turkana, 9.3 percent; Samburu, 18.0 percent) and higher livestock input prices (Turkana, 1.2 percent; Samburu, 10.9 percent), while households in Turkana more frequently suffered income loss (Turkana, 28.1 percent; Samburu, 16.6 percent) (Figure A8.4). One-in-five households in the Mercy Corps area reported an increase in transportation costs (Turkana, 22.3 percent; Samburu, 22.0 percent).

As shown in Figure A8.5, food-based coping strategies were the most frequently reported by CRS area households used to address livelihood impacts of COVID-19. The most frequent strategy reported by CRS households to cope with loss of livelihoods due to COVID-19 was reducing household food consumption (Marsabit, 42.8 percent; Isiolo, 49.7 percent), and households in Isiolo reported sourcing food on credit (51.2 percent) more frequently than households in Marsabit (24.8 percent).

Figure A8.5: Coping strategies for addressing livelihood impacts of COVID-19, Nawiri (CRS) RFSA area

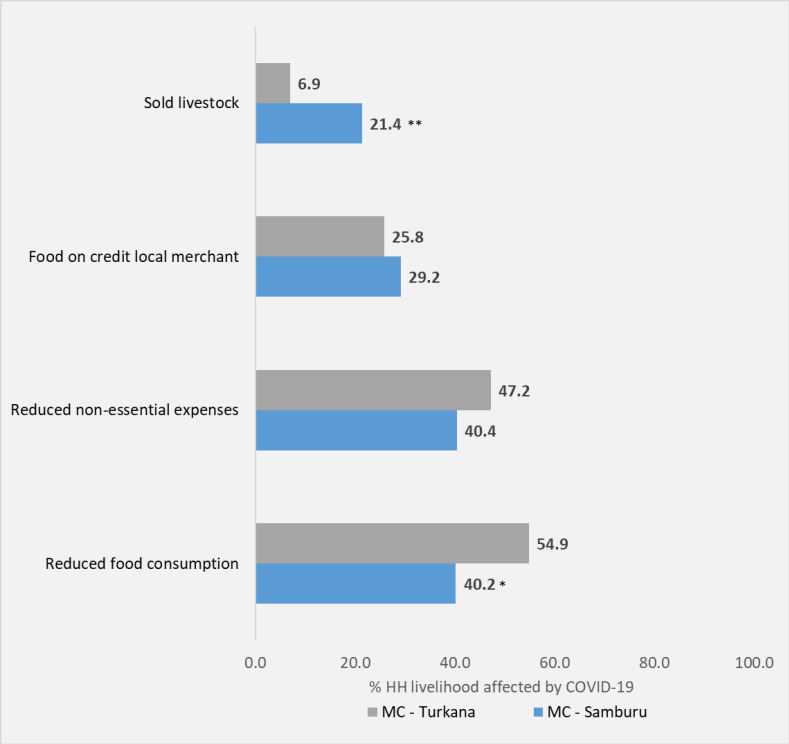


* p<0.05, ** p<0.01, *** p<0.001
Note: all coping strategies reported by > 10% of households shown.

Another common coping strategies utilized to deal with livelihood loss due to COVID-19 was reducing non-essential expenses, a strategy more prevalent in Isiolo (44.3 percent) compared to Marsabit (27.5 percent) (Figure A8.5). One-in-five households (Marsabit, 20.2 percent; Turkana 21.0 percent) reported selling livestock and fewer households coped by taking livestock to search for pasture (Marsabit, 11.8 percent; Isiolo, 16.0 percent). Notably, more households in Isiolo resorted to using savings to buy food (16.9 percent) compared to Marsabit households (3.7 percent).

A narrower range of coping strategies were used by households in the MC area to deal with impacts on household livelihood (Figure A8.6). However, similar to the CRS area, reducing food consumption was the most frequent strategy employed, with Turkana households resorting more frequently to this strategy (Turkana, 54.9 percent; Samburu, 40.2 percent). MC households also reduced non-essential expenses (Turkana, 47.2 percent; Samburu, 40.4 percent) and purchased food on credit (Turkana, 25.8 percent; Samburu, 29.2 percent) in response to COVID-19 impact on livelihood. Households in Samburu more frequently sold livestock to offset COVID-19 impacts (Turkana, 6.9 percent; Samburu, 21.4 percent).

Figure A8.6: Coping strategies for addressing livelihood impacts of COVID-19, Nawiri (Mercy Corps) RFSA area

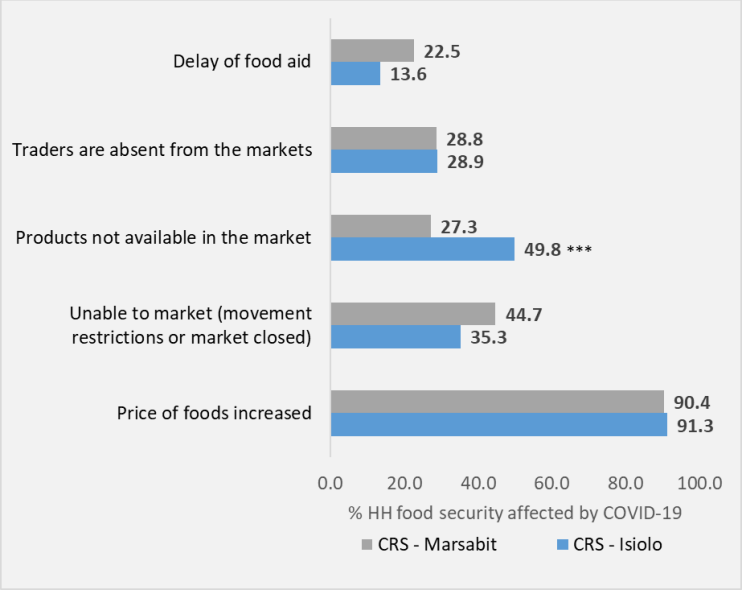


* p<0.05, ** p<0.01, *** p<0.001
Note: all coping strategies reported by > 10% of households shown.

Impact of COVID-19 on food security and coping strategies

Figure A8.7 illustrates impacts of COVID-19 on household food security in the CRS area. By far the most frequent impact of COVID-19 on food security for CRS households was higher food prices (Marsabit, 90.4 percent; Turkana, 91.3 percent). The inability to access markets was reported by more than one-third of CRS households (Marsabit, 44.7 percent; Isiolo, 35.3 percent) and just over one-quarter (Marsabit, 28.8 percent; Isiolo, 28.9 percent) responded that traders were absent from the market. Households in Isiolo were more likely to report food security affected via COVID-19 by lack of products in the market (Marsabit, 27.3 percent; Isiolo, 49.8 percent). Roughly one-in-five households were impacted by delays in food aid (Marsabit, 22.5 percent; Isiolo, 13.6 percent).

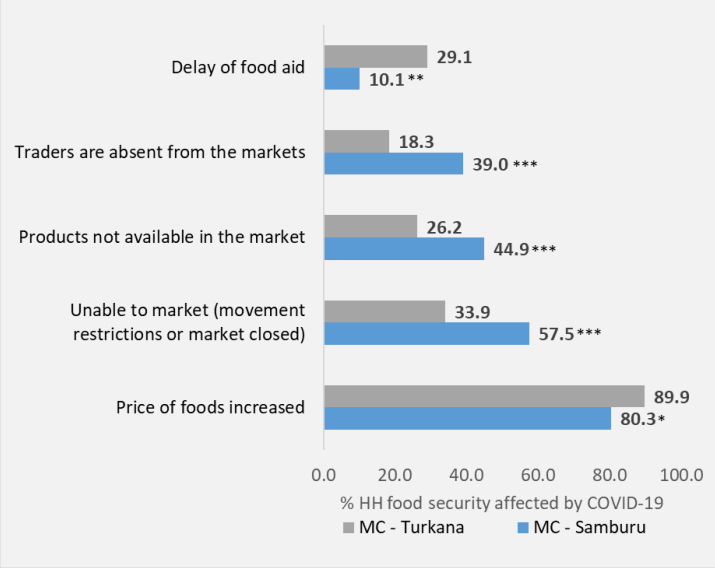
Figure A8.7: COVID-19 related impacts on households' food security, Nawiri (CRS) RFSA area



* p<0.05, ** p<0.01, *** p<0.001
Note: all impacts reported by > 10% of households shown.

Similar to the CRS area, the most acute impact of COVID-19 on household food security in the MC area was realized through higher food prices, with households in Turkana slightly more impacted (Turkana, 89.9 percent; Samburu, 80.3 percent) (Figure A8.8). Households in Samburu more frequently reported their food security impacted by market-related impacts, including, lack of market access (Turkana, 33.9 percent; Samburu, 57.5 percent), lack of product availability in markets (Turkana, 26.2 percent; Samburu, 44.9 percent), and lack of traders in markets (Turkana, 18.3 percent; Samburu, 39.0 percent). Food security of Marsabit households (29.1 percent) was more affected by delays in food aid relative to Isiolo households (10.1 percent).

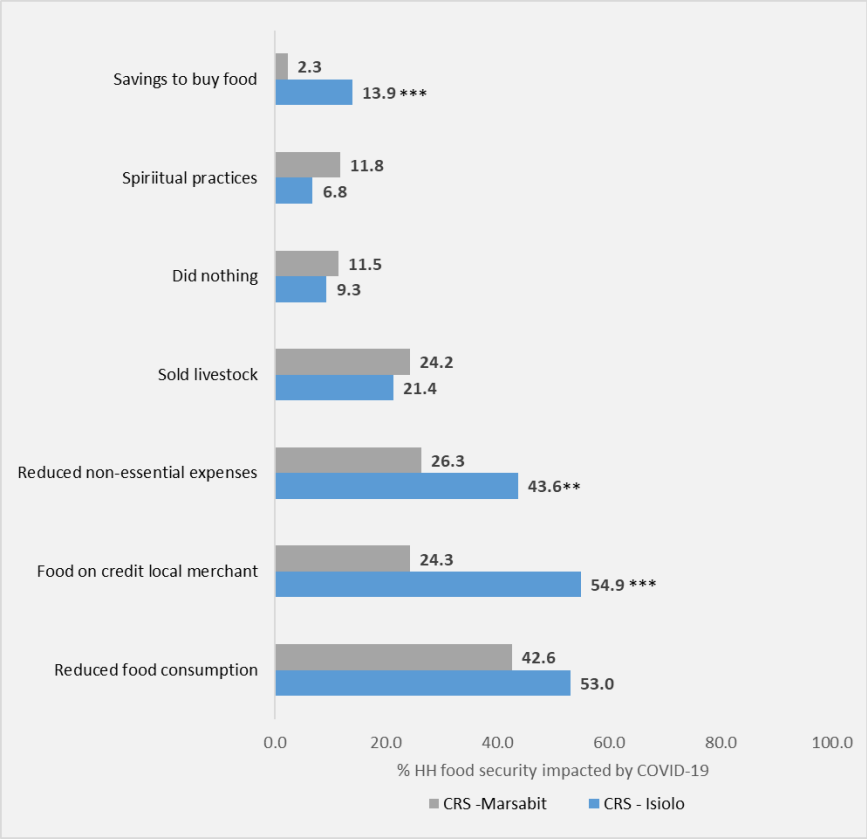
Figure A8.8: COVID-19 related impacts on households' food security, Nawiri (Mercy Corps) RFSA area



* p<0.05, ** p<0.01, *** p<0.001
Note: all impacts reported by > 10% of households shown.

In the CRS area, reducing food consumption (Marsabit, 42.6 percent; Isiolo, 53.0 percent), procuring food on credit (Marsabit, 24.3 percent; Isiolo, 54.9 percent), and reducing non-food/essential household expenses (Marsabit, 26.3 percent; Isiolo, 43.6 percent) were the most frequent strategies used to deal with COVID-19 impact on food security, with households in Isiolo significantly more often resorting to the latter two tactics (Figure A8.9). Over one-in-five households in the CRS area (Marsabit, 24.2 percent; Isiolo, 21.4 percent) sold livestock to support food security due to COVID-19 related impacts. Households in Isiolo more frequently used savings to buy food as a result of impacts of COVID-19 on food security (Marsabit, 2.3 percent; Isiolo, 13.9 percent). Roughly ten percent of households in the CRS area (Marsabit, 11.5 percent, Isiolo, 9.3 percent) reported not using any coping strategies despite their food security being impacted by COVID-19.

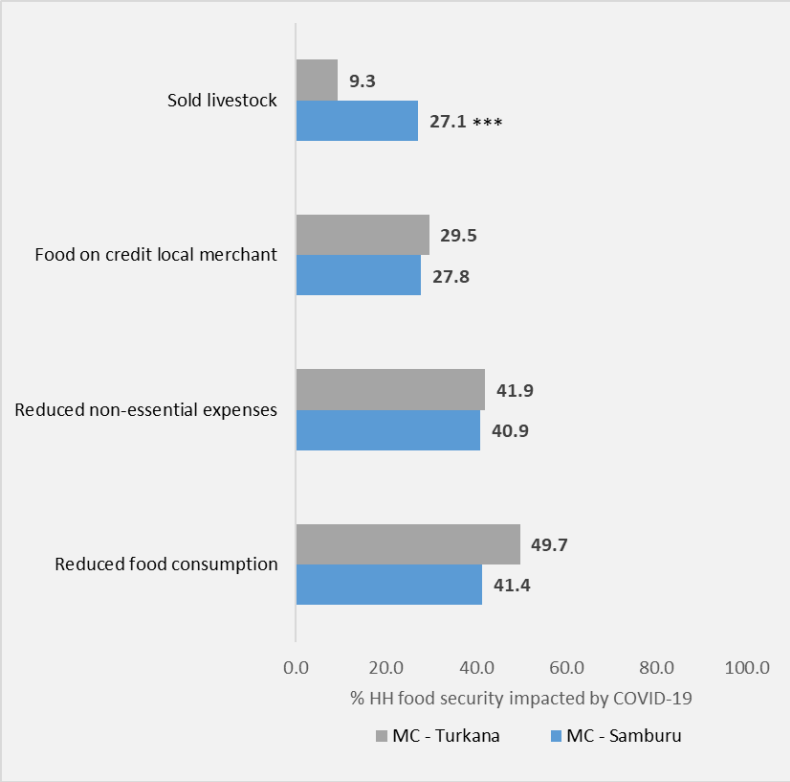
Figure A8.9: Coping strategies addressing food security impacts of COVID-19, Nawiri (CRS) RFSA area



* p<0.05, ** p<0.01, *** p<0.001
Note: all coping strategies reported by > 10% of households shown.

Households in the MC area also most often reported coping with food security impacts of COVID-19 by reducing food consumption (Turkana, 49.7 percent; Samburu, 41.4 percent), reducing non-essential expenses (Turkana, 41.9 percent; Samburu, 40.9 percent), and purchasing food on credit (Turkana, 29.5 percent; Samburu, 27.8 percent) (Figure A8.10). Following COVID-19 impact on food security, households in Samburu were three times more likely to sell livestock to support food security (Turkana, 9.3 percent; Samburu, 27.1 percent).

Figure A8.10: Coping strategies addressing food security impacts of COVID-19, Nawiri (Mercy Corps) RFSA area



* p<0.05, ** p<0.01, *** p<0.001
Note: all coping strategies reported by > 10% of households shown.