Standardized Expanded Nutrition Survey (SENS) 2025 Final Report

Melkadida, Ethiopia refugee camps:

Hilaweyn, Buranimo, Bokolmayo, Kobe and Melkadida camps

Survey dates: 7th October – 23rd October 2025

Prepared By- UNHCR public health & nutrition team in Ethiopia

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ABREVIATIONS AND ACCRONYMS

ANC	Ante Natal Clinic
AAH	Action Against hunger
BSFP	Blanket Supplementary Feeding Program
CCW	Concern Worldwide
CMR	Crude Mortality Rate
CI	Confidence Interval
COA	Community Outreach Agent
CDC	Centre Disease Control
CSB	Corn Soya Blend
CUAMM	Doctors with Africa
ENA	Emergency Nutrition Assessment
DPO	Development for Peace Organization
EOS	Enhanced Outreach Strategy
EPI	Expanded Program on Immunization
Epi Info	Epidemiological information
GAM	Global Acute Malnutrition
GFR	General Food Ration
HAZ	Height-for-Age z-score
Hb	Hemoglobin
HQ	UNHCR Head Quarter
IYCF	Infant and Young Child Feeding
IRS	Indoor Residual Spraying
LLIN	Long-lasting insecticidal net
MAM	Moderate Acute Malnutrition
MSF-H	Médecins Sans Frontières- Holland
MUAC	Middle Upper Arm Circumference
ODK	Open data Kit
OTP	Out-patient Therapeutic Program
SAM	Severe Acute Malnutrition
SC	Stabilization Centre
SD	Standard Deviation
SENS	Standardized Expanded Nutrition Survey
SFP	Supplementary Feeding Program
SMART	Standardized Monitoring & Assessment of Relief & Transitions
TFP	Therapeutic Feeding Program
RHB	Regional Health Bureau
RRS	Refugee and Returnee Services
U5MR	Under-5 Mortality Rate
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WASH	Water Sanitation and Hygiene
WAZ	Weight-for-Age z-score
WHZ	Weight-for-Height z-score
WFP	World Food Program
WHO	World Health Organization
WVI	World Vision International

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Executive Summary

The 2025 nutrition assessment in melkadida refugee camps indicates a **Global Acute Malnutrition (GAM) rate of 18.6%**, representing a **3.7 percentage-point increase** from 2024. The **Severe Acute Malnutrition (SAM) rate remains unchanged at 2.9%**. GAM prevalence varies significantly across locations, ranging from **13.2% to 26%**, with **three out of five camps exceeding the WHO/UNICEF emergency threshold of ≥15%** and **all camps surpassing the UNHCR target of <10%**. According to WHO/UNICEF classification, the current levels fall within the **high to very high** categories.

Enrollment in nutrition treatment programs for children aged 6–59 months remains critically low. **TSFP enrollment stands at 30.3%** and **OTP/SC enrollment at 7.8%**, far below the expected **≥90% coverage for refugee settings**. But because of the sample size and methedology SENS survey will not be good indicator for coverage. But using the available data the coverage is low.

Infant and young child feeding (IYCF) practices remain suboptimal. Initiation of breastfeeding within the first hour after birth is **70%**, below the UNHCR target of ≥85%. **Exclusive breastfeeding (0–6 months)** is **61.4%**, also below the ≥75% target. Consumption of **iron-rich or iron-fortified foods (43.3%)** remains inadequate compared to the ≥60% target.

Child health indicators show generally positive trends, with **low diarrhea prevalence**, **high measles vaccination coverage**, and **low mortality rates**. Coverage for **periodic deworming** and **vitamin A supplementation** has also remained strong over the past year.

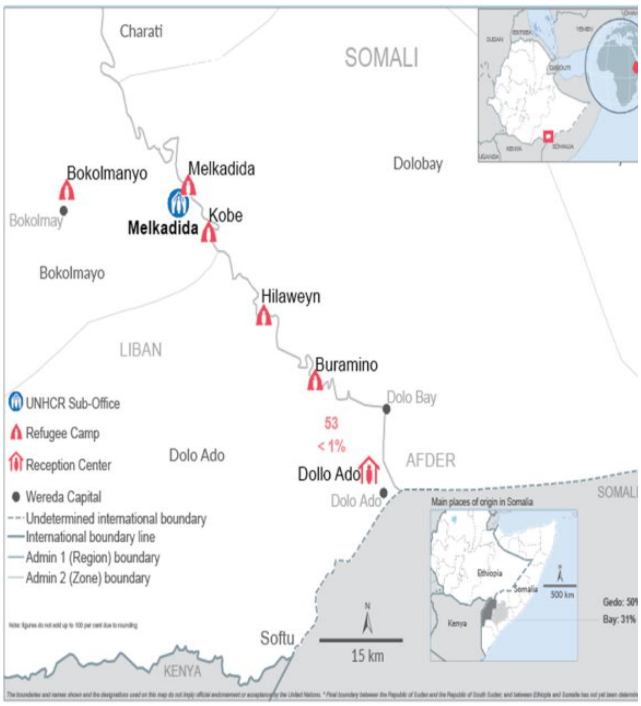
Maternal health outcomes are mixed. While **ANC attendance,** and **iron supplementation during pregnancy** show good performance, **maternal nutrition service enrollment remains poor**.

Overall, the deterioration in nutritional outcomes is strongly associated with:

- **Reduction of food assistance to 40%**
- **Absence of Blanket Supplementary Feeding Programme (BSFP)**
- **Low coverage of nutrition services**, particularly delayed or insufficient **screening and referral**

These factors collectively contribute to the rising levels of acute malnutrition across the camps and require urgent multi-sectoral action.

Background



Somali Region is one amongst the nine regions of Ethiopia which located to the eastern part of the country. The region is home for 220,021 refugees as of 30th April 2025, primarily from Somalia, settled in Liben Zone. There are five refugee camps namely Bokolmayo, Melkadida, Kobe, Hilaweyn, and Buramino. Bokolmanyo, the first camp, was established in October 2009, followed by Melkadida in April 2010. In 2011, a significant influx of refugees occurred due to security issues and food insecurity in Somalia, leading to the opening of Kobe, Hilaweyn, and Buramino camps in June 2011, August 2011, and November 2012, respectively. The largest influx was recorded in 2011, driven by severe drought and ongoing insecurity in Somalia. Currently, International Medical Corps is the nutrition partner covering all CMAM activities, and community based nutiriton programs. And OWDA is the health partner providing primary health care in all the refugee camps.

Introduction

Context and Justification

Ethiopia is one of the countries hosting large number of refugees in the horn of Africa hitting than a Million refugees as of April 2025. Amongst the Ethiopian operations, Melkadida Operations is the second largest refugee hpsting operation in the country which originates mainly from Somalia.

The last UNHCR Standardized Expanded Nutrition Survey has been conducted in 2024 in all the Five camps of Sub Office Melkadida (SoMEL) operation. It has been coordinated and commissioned by UNHCR, RRS and WFP along with support of partners (IMC, and DICAC) implementing in the camps.

SENS 2024 results show that the weighted prevalence of Global Acute Malnutrition (GAM) among children aged 6-59 months is 15.2% in 2024 compared to 16.7% in 2023 which shows slight improvement looking at the cumulative. However it remains above the emergency thresholdfor the over all operations and in most of the camps. The result depicts that it is above 10% in all locations, and above 15% in Hilaweyn (18.3%) and Bokolmanyo (15.7%.) Compared to 2023, wasting (GAM) has decreased in two locations (Buramino and Melkadida), remined similar in two camps (Bokolmanyo & Kobe) and increased in Hilaweyn. The changes in childhood wasting in Melkadida, Hilaweyn, and Buramino are statistically significant. Weighted severe wasting (Severe Acute Malnutrition) is 2.9% showing a slight increase from 2023 (2.8%). It is above the UNHCR target of 2% in Bokolmanyo, Hilawyen and Buramino, and below the threshold in Melkadida and Kobe. There is a statistically significant increase of severe wasting in Hilaweyn (4.9%) and Kobe (1.4% from 3.3%).

Demography

As of 31st August 2025, the total population was 220,350 individuals (20,257 households[1]) according to UNHCR ProGress.

Table 1: Total Population and < 5 Children in Melkadida camps as of 30th August 2025(Source: UNHCR ProGres)

Camp/Site	# Population	# Household	# <5 children	Average HH size	% of <5 children
Bokolmanyo	33497	5304	4,019	6.3	12%
Buramino	49,981	7406	5,156	6.7	10%
Hilawey	53,058	7945	6,683	6.7	13%
Kobe	39,286	5379	5,778	7.3	15%
Melkadida	44,528	6212	5,958	7.2	13%
Total	220,350	32246	26,743	6.8	12%

Modules

Demography, Anthropometry and Health, IYCF and Food Security, WASH, and women modules will be conducted.

Objectives of the survey

The main objective of the nutrition survey is to assess the general health and nutrition status of refugees residing in Melkadida camps and devise workable recommendations for appropriate nutritional and public health interventions.

Primary objectives of the survey

1. To determine the demographic profile of the population.
2. To determine the age dependency ratio.
3. To measure the prevalence of acute malnutrition in children aged 6-59 months.
4. To measure the prevalence of stunting in children aged 6-59 months.
5. To determine the coverage of measles vaccination among children aged 9-59 months.
6. To determine the coverage of vitamin A supplementation in the last six months among children aged 6-59 months.
7. To determine the two-week period prevalence of diarrhoea among children 6-59 months.
8. To investigate IYCF practices among children aged 0-23 months.
9. To determine the coverage of households receiving in-kind food assistance and the duration of the general in-kind food distribution for recipients' households.
10. To determine the extent to which negative coping strategies are used by households.
11. To assess household food consumption (quantity and quality).
12. To determine the population's access to, and use of, water, sanitation, and hygiene facilities.
13. To determine the population's access to soap.
14. To establish recommendations on actions to be taken to address the situation in the refuge population in the three camps.

Secondary objectives of the survey

1. To determine the coverage of deworming with mebendazole in the last six months among children aged 12-59 months;

2. To determine the enrolment into the supplementary (SFP) and therapeutic (OTP/SC) nutrition programmes for children aged 6-59 months;
3. To determine the coverage of the blanket supplementary feeding programme (BSFP) for children aged 6-23 months;
4. To determine the coverage of the blanket supplementary feeding programme (BSFP) in women of reproductive age (15-49 years);
5. To determine the population's access to and use of cooking fuel;
6. To Estimate the crude death rate and the under-five death rate amongst Somali refugee population in Jijiga, Ethiopia

Optional objectives

1. To determine the use of oral rehydration salt (ORS) and/or zinc during diarrhoea episodes in children aged 0-59 months.

Survey implementation timeline

Table 2: Survey Implementation timeline

Survey Timeline

Phase	Activities	Timeline
Preparation	HH listing, recruitment, tools, logistics	1–5 Oct 2025
Training	Supervisors' Training	6 Oct 2025
	Enumerators' Training	7–10 Oct 2025
Pilot	Pilot Test	13 Oct 2025
Data Collection	Bokolmanyo (12 teams)	14–15 Oct 2025
	Melkadida & Kobe (6 teams each, simultaneous)	16, 17 & 20 Oct 2025
	Hilaweyn & Buramino (6 teams each, simultaneous)	21–23 Oct 2025

Methodology

The survey will be conducted using the Standardized Expanded Nutrition Survey (SENS) guidelines and tools[2]. SENS is a standardized tool for conducting nutrition surveys in refugee populations developed by UNHCR in collaboration with expert organizations and individuals in the fields of nutrition, public health, food security, water sanitation and hygiene, and malaria prevention. SENS is based on the internationally recognized SMART Methodology[3] (Standardized Monitoring and Assessment of Relief and Transitions) for survey design and anthropometric assessments and adapted to the specific requirements of refugee settings. The SENS modules include standardized questionnaires, analysis guidance, reporting format and standard analysis procedures.

Study Population

The study population will be refugees living in Melkadida, Bokolmayo, Kobe, Buramino and Hilaweyn refugee camps. Five separate samples will be drawn using total population obtained from physical counts.

Sample Size

In each camp, cross-sectional survey will be employed. The sample size will be calculated using the ENA software (ENA for SMART, Jan 11th, 2020)

The sample size will be based on anthropometry in children – i.e. Global Acute malnutrition (GAM) among children between 6 and 59 months. The expected prevalence of GAM used for the sample size calculations were from the 2023 SENS survey. The sample size will first be calculated in number of children and then converted into number of households automatically using the software. The sample

size was adjusted for non-response. The assumptions for the sample size calculation are given below (Tables 3, 4, 5 and 6).

NB: Assumptions like Population size, Number of Household, Average Household size and Percent of Under five are subject to change once physical head count is done.

Table 1: Sample size calculated based on population figure as of 31st August 2025 (ProGress data) and the above assumptions for the Melkadida.

	Bokolmayo	Buramino	Hilaweyn	Kobe	Melkadida
Estimated prevalence GAM %, used Upper limit CI from SENS 2024)	20.4	17.8	23.6	19.8	18.0
± Desire precision (%)	5	4.5	5	4.5	4.5
Average household size	6.3	6.7	6.7	7.3	7.2
% Children under 5 years	12%	10%	13%	15%	13%
% Non-response households	10%	10%	10%	10%	10%
No. of households	5,304	7,406	7,945	5,379	6,212
Total population	33,497	49,981	53058	39,286	44,528
No. of children U5	4.019	5,156	6,683	5,778	5,958
Households to be included for Anthropometry and Health module	364	498	376	321	348
## of children to be included for Anthropometry and Health module	233	254	265	285	264

The number of households to be completed per day will be determined according to the time the team could spend on the field taking into consideration travelling time, break times and other procedures like finding the location of the selected households.

Special Cases

a. **Absent Household**

If the household is absent, the survey team will ask a neighbor of the residents' whereabouts. If they are expected to return before the survey team leaves the camp, the survey team should return to administer the questionnaire on the same day if possible. The survey team will continue the survey with the next selected household. This household will not be replaced.

A household will be considered as absent when its members slept there last night and went out for the day of the survey.

b. **Refusal**

If a participant or an entire household refuse to participate, then it will be considered a refusal and the individual, or the household will not be replaced with another. The refusal will be recorded in the data collection control sheet.

c. **Households without children U5 and/or without women**

If it is determined that a selected household does not have children between 0-59 months of age and/or women between 15-49 years, the survey team will complete the Demography questionnaire and the Household questionnaire (Food security and WASH) if this household is selected for the Household questionnaire (this questionnaire will be administered every second household). In the data collection control sheet, the team leader will write the household's number and indicate that no children between the ages of 0 and 59 months and/or no women between the ages of 15 and 49 years belonged to the household.

d. **Absent Children/Women**

The team leader will ask the reason of the children's/women's absence. If the child/woman (or children or women) is close to the home, someone should be sent to bring them back. If the child/woman is

expected to return before the survey team leaves the camp, then the survey team should return before the end of the day to take the measurements. If the child/woman cannot be found before the team leaves the camp, the child/woman available information (age, sex, etc.) should be completed in the questionnaire and the child/woman will be recorded as absent in the data collection control sheet.

e. **Disabled Children**

Disabled children are to be included in the survey. If a physical deformity prevents the measurement of child's weight, height or MUAC, the data should be recorded as missing, and the remaining data should be collected. This information will be recorded in the data collection control sheet.

f. **Children in a medical/nutrition centre**

Children in a medical/nutrition centre are to be included in the survey. The team will go to the centre if it is feasible. If it is impossible to visit the centre, the child will be given an ID number, and he/she will be considered as absent and not replaced. If the child is too weak to be measured, the anthropometric data should be recorded as missing, and the remaining data should be collected. This information will be recorded in the data collection control sheet.

Questionnaires

The questionnaire will be divided into four main sections: Demography questionnaire, Household questionnaire (Food Security and WASH), Children questionnaire (anthropometry and health) and Women questionnaire (anthropometry and health) (See Annex 1). The teams will be standardized through pre-test using the standardized questionnaire before the survey during the training and the pilot test. Interviews will be held in English and translated to Somali to record the information on Android smartphone Using Kobo Collect software.

Demography questionnaire (all selected households)

The SENS Demography questionnaire aims to provide information on the following priority indicators at the household level: description of the population demographics, age dependency ratio, average household size, percentage of children under-5 and non-response rate.

Household Questionnaire (half of the selected household)

1. **Food Security**

This will include questions on access and use of the food assistance, negative coping mechanisms used by household members and household food consumption.

2. **Water, sanitation and hygiene**

The SENS WASH questions aim to measure the following indicators at household level: access to a protected/treated drinking water source, use of an adequate quantity of water, use of toilets/latrines and access to soap.

3. **Children Questionnaire (children from 0 to 59 months of age)**

Sex

The child's sex will be recorded as "f" or "m": f = female and m = male.

Age

The date of birth will be taken from any relevant document such as birth certificate, family book or vaccination card, which recorded the name of the child and the date of birth. If the date of birth is unknown, the interviewer will use the calendar of local events, and the recall of the mother or caregiver will be used to estimate the most correct age in months to be recorded on the questionnaire. The birth date will be recorded in the day/month/year (DD/MM/YYYY) of format. Note that the UNHCR Manifest will not be used to determine age of children <5 years because it does not reflect the correct birthdate.

Weight
Children will be weighted using a SECA Uniscale electronic scale with the precision of 100 grams and with a wooden board to stabilise it on the ground. All children will be measured naked following the recommended anthropometric methods. If this is a problem, teams will be instructed to take weight inside of the surveyed tent/house. Smaller children who are not able to stand on the scale will be measured in their caregiver's arms using the mother-to-baby function of the scale.

Clothes
The team leader will record if the measurers measure weight with or without clothes.
Y = yes, with clothes
N = no, without clothes

Height/Length
The children's height/length will be measured with a precision of 0.1cm by using height boards. Children will be measured lightly dressed in no shoes, hairpieces or barrettes on their head that could interfere with a correct height measurements. Children less than 87cm height will be measured laying down while those 87cm standing height or taller will be measured standing.

Measurement
The measurers will record if they measured height or length.
L = length (recumbent length)
H = height (standing height)

Oedema
Only bilateral pedal oedemas are considered as nutritional oedema. Their presence is detected by applying a gentle pressure with the thumbs to top part of both feet during three seconds. If the imprint of the thumbs remains on both feet for a few seconds after releasing the thumbs, the child will be considered to have nutritional oedema. Bilateral oedema will be diagnosed and not graded. The diagnosis will be simply recorded Y for "Yes" or N for "No". All oedema cases reported by the survey teams have to be verified by the supervisors/survey manager and will be referred immediately after.

Mid-Upper Arm Circumference (MUAC)
The MUAC will be measured in centimeters on the left arm, at midpoint between the shoulder's tip and the elbow, on a relaxed arm. MUAC will be taken only for children between 6 and 59 months of age.

Additional Data
Measles vaccination
The interviewer will first try to confirm if the child received measles vaccination by examining an official document (EPI card/clinic card/health card). If there is no document, the interviewer will ask the respondent if the child received measles vaccination. Only children aged 6-59 months will be assessed for measles vaccination.

Vitamin A supplementation in the past six months
The interviewer will first try to confirm if the child received a vitamin A supplementation by examining an official document (EPI card/clinic card/health card). If there is no document, the interviewer will show vitamin A blue and red samples to the respondent and ask him/her if the child received a vitamin A supplementation drops in the mouth in the past six months.

Deworming in the past six months

The deworming status in the past six months should also be confirmed with an official document (EPI card/clinic card/health card). If it is not possible, the interviewer will show the respondent a deworming tablet (mebendazole) and ask if the child received a "worm medicine" in the past six months.

Diarrhoea episode in the last 2 weeks

A question will be asked to caregivers to find out if their children have had an episode of diarrhoea in the two weeks preceding the survey. An episode of diarrhoea is defined by the occurrence of at least three liquid stools during the same 24 hours. The enumerators should ensure that the definition of diarrhoea is understood by the respondent by assessing the number of liquid stools the child has had in 24 hours.

Use of ORS/zinc during a diarrhoea episode

The interviewer will ask the mother/caregiver of the child if he/she received ORS sachets and/or zinc during a diarrhoea episode. An ORS sachet and a zinc pill will be shown when asked to recall.

Enrolment into a nutrition programme (TSFP/OTP/SC)

The team leader will ask the mother/caregiver of the child if he/she is receiving sachets of Plumpy Nut' or CSB++, by showing her both sachets. If the child is receiving the Plumpy Nut' sachets, he/she is enrolled in a therapeutic feeding programme (OTP/SC); if he/she is receiving the CSB++, he/she is enrolled in a supplementary feeding programme (TSFP).

Enrolment into BSFP programme

The team leader will ask the mother/caregiver of the child if he/she is receiving CSB++ (children <24 months), by showing her sachet. If the child is receiving CSB++ sachet, he/she is enrolled in the BSFP programme.

Infant and Young Child Feeding practices (IYCF) (children from 0 to 23 months of age)

Several questions on breastfeeding practices and on complementary feeding practices will be asked to the mothers/caregivers of children from 0 to 23 months of age.

Case definitions and calculations

1. Nutritional Anthropometric Indicators

The following cut-offs will be used to determine the prevalence of acute malnutrition, stunting and underweight (z-scores) using the WHO 2006 growth references.

Table 5: Cut-offs for definition of acute malnutrition, stunting and underweight

Classification	Acute Malnutrition or Wasting (WHZ)	Chronic Malnutrition or Stunting (HAZ)	Underweight (WAZ)
Global	<-2SD &/or bilateral oedema	<-2 SD	<-2 SD
Moderate	≥-3 SD & <-2 SD	≥-3 SD & <-2 SD	≥-3 SD & <-2 SD
Severe	<-3 SD &/or bilateral oedema	<-3 SD	<-3 SD

Table 6: Cut-offs for definition of acute malnutrition based on MUAC .

Target	Classification	MUAC Cut-offs
Children 6-59 months	MAM	<125 mm
	SAM	<115 mm

Vitamin A Supplementation, Deworming, Measles vaccination and Two-week prevalence of Diarrhoea

To estimate vitamin A supplementation, deworming coverage, measles vaccination and the two-week period prevalence of diarrhoea, the following formula presented in table 10 will be used.

Table 7: Vitamin A Supplementation Coverage, Deworming Coverage, Measles vaccination coverage and two-week period prevalence of diarrhoea

Indicator	Numerator	Denominator
Vitamin A Supplementation	Number of children aged 6-59 months who received at least one high-dose vitamin A supplement in the past six months	Total number of children aged 6-59 months x 100
Deworming	Number of children 12-59 months dewormed in the past six months	Total number of children aged 12-59 months x 100
Measles vaccination	Number of children 9-59 months immunized against measles	Total number of children aged 9-59 months x 100
Diarrhoea	Number of children aged 6-59 months who had diarrhoea in the past two weeks	Total number of children aged 6-59 months x 100

Child enrolment in selective feeding programme:

Coverage of TSFP programme (%) =

$$\frac{100 \times \text{No. of surveyed children with MAM according to TSFP criteria who reported being registered in TSFP}}{\text{No. of surveyed children with MAM } \textit{according to SFP admission criteria}}$$

Coverage of OTP/SC programme (%) =

$$\frac{100 \times \text{No. of surveyed children with SAM according to OTP/SC criteria who reported being registered in OTP/SC}}{\text{No. of surveyed children with SAM } \textit{according to OTP/SC admission criteria}}$$

Infant and Young Child Feeding Practices (IYCF)

IYCF indicators and formula that will be used to calculate them are detailed below. These indicators and formula follow the SENS guidelines and the guidelines from WHO "Indicators for assessing IYCF practices".

Children ever breastfed: Proportion of children born in the last 24 months who ever breastfed.

$$\frac{\text{Children born in the last 24 months who were ever breastfed}}{\text{Children born in the last 24 months}}$$

Timely initiation of breastfeeding: Proportion of children born in the last 24 months who were breastfed within one hour of birth.

Children born in the last 24 months who were put to the breast within one hour after birth

Children born in the last 24 months

Exclusive breastfeeding under 6 months: Proportion of infants 0-5 months of age who are fed exclusively with breast milk.

Infants 0-5 months of age who received only breast milk during the previous day
Infants 0-5 months of age

Exclusive breastfeeding means that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines.

Continued breastfeeding at 1 year: Proportion of children 12-15 months of age who are fed breast milk.

Children 12-15 months of age who received breast milk during the previous day
Children 12-15 months of age

Continued breastfeeding at 2 years: Proportion of children 20-23 months of age who are fed breast milk.

Children 20-23 months of age who received breast milk during the previous day
Children 20-23 months of age

Introduction of complementary foods: Proportion of infants 6-8 months of age who receive solid, semi-solid or soft foods.

Infants 6-8 months of age who received solid, semi-solid or soft foods during the previous day
Infants 6-8 months of age

Consumption of iron rich or iron fortified foods in children aged 6-23 months: Proportion of children 6–23 months of age who receive an iron-rich or iron-fortified food that is specially designed for infants and young children, or that is fortified in the home.

Children 6-23 months of age who received an iron-rich food or a food that was specially
Designed for infants and young children and was fortified with iron, or a food that was
Fortified in the home with a product that included iron during the previous day
Children 6-23 months of age

Bottle feeding: Proportion of children 0-23 months of age who are fed with a bottle

Children 0–23 months of age who were fed with a bottle during the previous day
Children 0–23 months of age

2. WASH

The table below provides an overview of the definitions of drinking water and sanitation (toilet) facilities used in the survey.

Table 9: Definitions of drinking water and sanitation (toilet) facilities

	Protected/treated source	Un-protected/un-treated source

Drinking water	Public tap/standpipe Handpumps/Boreholes Water seller/Kiosks Piped connection to house (or neighbour's) Protected spring Bottled water, water sachets Tanker trucks	Unprotected hand-dug well Surface water (lake, pond, dam, river) Unprotected spring Rainwater collection Other
Latrines/toilets	**Considered a toilet**	**Not considered a toilet**
	Household latrine (one HH only) Communal latrine	Open defecation Plastic bag Bucket toilet Other

Classification of public health problems and targets

1. Anthropometric data:

UNHCR's target for the prevalence of Global Acute Malnutrition (GAM) is < 10% and the target for the prevalence of Severe Acute Malnutrition (SAM) is <2% for children 6-59 months.
The table below shows the WHO-UNICEF classification of public health significance of the anthropometric results for children under-5 years of age.

WHO-UNICEF (2018) Classification of public health significance for children under 5 years of age

Classification Prevalence thresholds (%)	Critical situation	Serious situation	Poor situation	Acceptable situation	
	Very High	High	Medium	Low	Very low
Wasting	≥ 15	10 - < 15	5 - < 10	2.5 - < 5	< 2.5
Stunting	≥ 30	20 - < 30	10 - < 20	2.5 - < 10	< 2.5
Overweight	≥ 15	10 - < 15	5 - < 10	2.5 - < 5	< 2.5
Underweight*	≥ 30	20 - < 30	10 - < 20	< 10%	

2. Nutrition programme enrolment:

The table below shows the performance indicators for malnutrition treatment programmes according to SPHERE Standards.

Performance indicators for MAM and SAM (SPHERE)

Coverage		
Rural areas	**Urban areas**	**Camps**
>50%	>70%	>90%

The target for blanket feeding programme coverage should be >70%.

3. Coverage of measles vaccination, vitamin A supplementation and deworming in the last 6 months

UNHCR targets for measles vaccination, vitamin a supplementation and deworming coverage

Indicator	Target coverage	Source
Measles vaccination coverage (9-59 mois)	95%	UNHCR, Sphere Standards
Vitamine A supplementation in the last 6 months coverage (6-59m)	>90%	UNHCR
Deworming in the last 6 months coverage (appropriate age group)	75%	WHO

4. WASH

The following standard applies to UNHCR WASH programmes.

UNHCR WASH programme standard

UNHCR Standard		Indicator target
Average liters per person per day of domestic water collected at household level from protected/treated sources (with protected containers only)	Emergency standard	≥15 liters
	Post emergency standard	≥20 liters
% households with at least 10 L/p drinking water storage capacity	Emergency standard	≥70%
	Post emergency standard	≥80%
% households collecting drinking water from protected/treated sources	Emergency standard	≥70%
	Post emergency standard	≥95%
% households reporting defecating in a toilet/latrine	Emergency standard	≥60%
	Post emergency standard	≥85%
% households with access to soap	Emergency standard	≥70%
	Post emergency standard	≥90%

5. Mortality

An individual-level mortality form was used. Data entry and analysis done in ENA for SMART with the household-level summary data derived from the form by manual data entry

Mortality benchmarks for defining crisis situations (NICS, 2010)

Emergency threshold	
very serious	CDR > 1/10,000 / day
out of control	CDR > 2 /10,000 /day
major catastrophe' (double for U5MR thresholds)	CDR > 5 /10,000 /day

7. Survey team

The survey will be coordinated by UNHCR from the outset of planning to finalization of the survey activities. However, the survey is a joint effort which is organized by WFP and RRS and major partners implementing health and nutrition projects in the camps.

Six Survey teams will be organized composing six enumerators. Each team will be composed of 1 team leader, 1 interviewer, and 2 measurers with guider and translator. The team leader will be responsible for the children and women questionnaires. The interviewer will be responsible for the demography questionnaire and the household questionnaire. The measurers will take the anthropometric measurements. In each team, 2 persons will come from refugee camps.

8. Language

English/Somali language will be used for training, communication, data collection tools and reporting.

9. Survey training

The main training will be organized in Melkadida bringing together the main survey team (Team leaders and Interviewers). In each camp, one day training will be organized for the measurers.

The Survey Training will be conducted by the survey managers. The Survey Training will be held in third week of October and will last for 5 days.

The training will include the following areas:

- An overview of the survey and its objectives
- Interviewing and general communication skills
- Sampling procedure and selection of households
- Identification of individuals to measure or interview
- How to complete the questionnaires
- Correct age in month estimation or validation using the calendar of local events
- How to make correct anthropometric measurements
- How to take correct haemoglobin concentration
- The standardization of anthropometric measures: Each measurer will have to measure 10 children less than five years of age twice (height, weight). The results of the standardization test by interviewer will be produced immediately to determine if further training and standardization is needed.
- The identification of bilateral oedema and how to refer children with acute malnutrition to the health centre
- Data collection using Mobile Data Collection (MDC).
- Pilot Test

Selection of the Team Leaders

Among the participants, only 6 will be retained for data collection as team leaders. All the participants will be assessed during a pre-test at the beginning of the training and during a post-test at the end of the training. The selection of the team leaders will be done based on the results of the two written tests.

Standardization of the Anthropometric Tools

Before testing the participants for accuracy and precision of measurements, all anthropometric tools will be tested to ensure that each tool produce the same measure of a standard object (standard weight, wooden stick and plastic pipe). The scales or height boards that won't produce exact measures will be marked and eliminated before the standardization test and data collection.

Every day, before the start of fieldwork, the measurers will be responsible to review their anthropometric equipment for damage and to measure the standard objects to ensure that the tools are still in good working order. Results will be recorded daily on the standardization of anthropometric tools form.

Standardization of the Enumerators

The standardization test will be organized in one session in each camp (12 measurers). Measurers with good skills of measurement will be assigned as a measurer within a team and the others as an assistant-measurer.

Final Selection of the Enumerators
All participants will be assessed during a pre-test at the beginning of the training and during a post-test at the end of the training. The final selection will be done based on the results of the two written tests and based on the results of the standardization test.

Pilot Test
The survey tools will be piloted in all three camps. Each team will interview a number of households to investigate among households listed in a village not selected for the survey. This process should allow to ensure that the methodology and survey equipment are adapted, but also to complete the training of enumerators.

Data entry, data checks and data analysis

Data entry and data checks

Data will be collected using mobile phones operated by the Android operating system and the ODK application. During supervision in the field and at the end of each day, the survey supervisors will manually check the phone questionnaires for completeness, consistency and accuracy. This check will also be used to provide feedback to the teams to improve data collection as the surveys progressed. Children data will be downloaded and analysed on a daily basis with the ENA software (ENA for SMART, Jan 11th 2020). The SMART plausibility report will be generated daily in order to identify any problems with anthropometric data collection such as flags and digit preference for age, height and weight, to improve the quality of the anthropometric data collected as the survey was on-going.

Quality of data will be ensured through:

- Crosschecking of filled questionnaires on daily basis
- Daily review of performance of the data collection teams in addressing any difficulties encountered
- Progress evaluation will be carried out according to the time schedule and progress reports shared with partners on regular basis
- The measurement tools [electronic weighing scales, measuring board, MUAC and others] will be calibrated every morning before the start of the survey to avoid instrument error
- Data will be checked by ENA for SMART plausibility program before analysis.
- The microcuvette containers of each team will be checked to ensure that enough are left for conducting the Hb tests for the day, to ensure the survey team carries an additional microcuvette container with them
- Visual inspection of the HemoCue machines of each team will be made to ensure that it is clean. If not, cleaning procedures will be applied as indicated during the training. Survey supervisors will closely follow cleaning procedures and check whether the machine is properly working, if not replace with another machine.

Data analysis

All data files will be reviewed before analysis. Anthropometric data for children 6-59 months will be analysed using ENA for SMART software. The nutritional indices will be cleaned using flexible criterion (+/- 3 SD from the observed mean; also known as SMART flags in the ENA for SMART software).
The nutrition results will be presented in the standard format following the report template from the ENA software (ENA for SMART, Jan 11th 2020). This format includes GAM, SAM, Stunting,

Underweight and Overweight with 95% confidence intervals. The report has estimates of malnutrition calculated with the WHO 2006 growth references.

All other data will be analysed in Epi-Info 7. Primary data and secondary information related to health and nutrition will also be gathered through interviews, focus group discussions, observations and various records. In the secondary data review; the UNHCR Health Information System (HIS) data, UNHCR and partners weekly and monthly reports and past nutritional survey reports will be used for the final analysis.

Ethical consideration and community consent

Due to the comprehensive nature of the survey and taking of peripheral blood, there is a need to obtain consent of an individuals and organizations. Community leaders must be consulted to discuss and clarify questions and reservations that they have on the process of surveying their population. Women/caregivers will be asked for their verbal consents before taking blood from the women and children.

- The team will confirm to the HHs that their children will not be at risk of harm while being measured and confidentiality for the information they provide to the team.
- The team will clearly explain to the HHs that there are several benefits of participating in the survey including learning the nutritional status and Hb levels of their children.
- The participants/ HHs can withdraw from the assessment at any time from the very beginning without giving reason.

Discussion will be made with project implementing partners and community leaders to make a balance between the survey and on-going services. Care will be taken for the study population not to miss their regular services, such as OTP, SFP and BSFP programs. For the children identified with malnutrition during the assessment will be provided with referral form to nutrition centre allocated in that camp; for the women and children who will be identified to be anaemic will also be provided with referral to the health facility, the standby ambulance will be organized in case there will be any medical emergency identified during the assessment.

Referrals: Children aged 6-59 months will be referred to health post for treatment when MUAC will be < 12.5 cm, and/or when WHZ is < -2 z-score, and/or when oedema is present, and/or when haemoglobin is < 7.0 g/dl. Women of reproductive age will be referred to the health post for treatment when haemoglobin will be < 8.0 g/dl

Report write-up and dissemination

UNHCR will be responsible for the report write-up (based on the UNHCR standard reporting guidelines) and sharing the draft report among the participants for input and finalization. The final report will be shared with relevant partners and stakeholders for action, as per the survey SMART recommendations.

RESULTS

Table 1 : SUMMARY OF RESULTS

Surveyed Area	Bokolmayo	Buramino	Hilaweyen	Kobe	Melkadida	Classification of public health significance or target (where applicable)
Data collection period	22 – 23 October,2025	13 – 15 October,2025	13 – 15 October,2025	17,20,21 October, 2025	17,20,21 October, 2025	
CHILDREN 6-59 months n/N, % [95% CI]						
Prevalence of combined GAM and SAM based on WHZ and MUAC cut off's (and/or oedema), Acute Malnutrition (WHO 2006 Growth Standards)						
Global Acute Malnutrition (GAM) combined with WHZ & MUAC	(35/265) 13.2 % (9.7 - 17.8)	(89/420) 21.2 % (17.6 - 25.4)	(56/332) 16.9 % (13.2 - 21.3)	(37/268) 13.8 % (10.2 - 18.5)	(72/277) 26.0 % (21.2 - 31.5)	Very high/critical if ≥ 15% (WHO-UNICEF) UNHCR Target of < 10%
Moderate Acute Malnutrition (MAM) combined with WHZ & MUAC	(28/265) 10.6 % (8.4 – 12.4)	(77/420) 18.3% (16 – 20.5)	(43/332) 13 % (10.9 – 14.7)	(33/268) 12.3% (9.6 – 14.7)	(63/277) 22.8 % (19.5 – 25.4)	
Severe Acute Malnutrition (SAM) combined with WHZ & MUAC	(7/265) 2.6 % (1.3 - 5.4)	(12/420) 2.9 % (1.6 - 4.9)	(13/332) 3.9 % (2.3 - 6.6)	(4/268) 1.5 % (0.6 - 3.8)	(9/277) 3.2 % (1.7 - 6.1)	UNHCR Target of < 2%
Oedema	0	0	0		0	
Mid Upper Arm Circumference (MUAC)						
MUAC <125 mm and/or oedema	(11/265) 4.2 % (2.3 - 7.3)	(34/420) 8.1 % (5.9 - 11.1)	(19/332) 5.7 % (3.7 - 8.8)	(19/268) 7.1 % (4.6 - 10.8)	(19/277) 6.9 % (4.4 - 10.5)	
MUAC 115-124 mm	(9/265) 3.4 % (1.8 - 6.3)	(29/420) 6.9 % (4.9 - 9.7)	(16/332) 4.8 % (3.0 - 7.7)	(16/268) 6.0 % (3.7 - 9.5)	(17/277) 6.1 % (3.9 - 9.6)	
MUAC <115 mm and/or oedema	(2/265) 0.8 % (0.2 - 2.7)	(5/420) 1.2 % (0.5 - 2.8)	(3/332) 0.9 % (0.3 - 2.6)	(3/268) 1.1 % (0.4 - 3.2)	(2/277) 0.7 % (0.2 - 2.6)	

	Stunting (WHO 2006 Growth Standards)					
Total Stunting	(61/265) 23.0 % (18.4 - 28.5)	(166/418) 39.7 % (35.1 - 44.5)	(138/329) 41.9 % (36.7 - 47.3)	(94/267) 35.2 % (29.7 - 41.1)	(125/275) 45.5 % (39.7 - 51.4	Very high/critical if ≥ 30% (WHO-UNICEF)
Severe Stunting	(20/265) 7.5 % (4.9 - 11.4)	(62/418) 14.8 % (11.7 - 18.6)	(59/329) 17.9 % (14.2 - 22.4)	(24/267) 9.0 % (6.1 - 13.0)	(52/277) 18.9 % (14.7 - 24.0)	
Prevalence of underweight	(61/265) 23.0 % (18.4 - 28.5	(152/420) 36.2 % (31.7 - 40.9)	(126/331) 38.1 % (33.0 - 43.4)	(65/267) 24.3 % (19.6 - 29.8)	(110/276) 39.9 % (34.3 - 45.7)	
	Programme coverage					
Measles vaccination with card (9-59 months)	213/245 86.94% (82.06% 90.89%)	360/397 90.68% (87.42 - 93.16)	299/318 94.03% (90.86% 96.14)	186/247 75.30% (69.44 - 80.55)	254/257 98.83% (96.63 - 99.76)	Target of ≥ 95%
Measles vaccination with card or recall confirmation from mother (9-59 months)	245/245 100% (98.51% 100%)	389/396 98.23% (96.40% 99.14)	306/318 94.23% (93.52% 97.83)	244/246 99.19% (97.09% 99.90)	257/259 99.23% (97.24% 99.91)	Target of ≥ 95%
Vitamin A supplementation within the past 6 months with card	185/266 69.55% (63.63% 75.02)	285/428 66.59% (61.99 - 70.89)	313/339 92.38% (89.00% 94.71)	152/265 57.36% (51.16 - 63.39)	275/279 98.57% (96.37 - 99.61)	Target of ≥ 90%
Vitamin A supplementation within the past 6 months with card or recall confirmation from mother	257/266 96.62% (93.67% 98.44)	406/427 95.08% (92.60% 96.76)	329/339 97.05% (94.66% 98.39)	258/264 97.73% (95.12% 99.16)	279/281 99.29% (97.45% 99.91)	Target of ≥ 90%
Deworming coverage (24-59 months)	146/175 83.43% (77.08% 88.61)	209/271 77.12% (71.65% 81.99)	196/228 85.96% (80.77% 90.20)	141/160 88.13% (82.08% 92.70)	172/184 93.48% (88.89% 96.59)	
Supplementary feeding programme enrolment Based on all admission criteria (MUAC, WHZ)	10/28 35.7% (11.88 – 71.38)	16/84 19.05 (8.68- 35.57)	13/51 25.49% (6.1- 50.13)	14/37 37.8% (16.7- 69.5)	26/68 38.1% (22.6- 59.5)	

Therapeutic feeding programme enrolment Based on all admission criteria (MUAC, WHZ, oedema)	2/8 25% (3.19% 65.09)	0/14 0% (0 – 8.2)	2/12 16.67% (2.09 - 48.41)	0/4 0% (0.63 - 80.59)	0/10 0% (0.32 - 52.65)	
		Diarrhoea				
Diarrhoea in the last 2 weeks	1/266 0.38% (0.01% 2.08)	7/426 1.64% (0.80% 3.35)	13/341 3.81% (2.24 - 6.41)	0/263	9/279 3.23% (1.49 - 6.04)	
Use of ORS during Diarrhoea episode	0/1 0% (0-0)	5/7 71.43% (29.04% 96.33)	4/13 30.77% (9.09% 61.43)	NA	6/9 66.67% (29.93% 92.51)	

Surveyed Area	Bokolmayo	Buramino	**Hilaweyen**	Kobe	**Melkadida**	**Classification of public health significance or target (where applicable)**
Data collection period						
CHILDREN 0-23 months, n/N, % [95% CI]						
IYCF indicators						
Timely initiation of breastfeeding	60/104 57.69% (47.61% 67.32)	127/171 74.27% (67.04 - 80.64)	89/127 70.08% (61.32% 77.88)	94/121 77.69% (69.22 - 84.75)	68/101 67.33% (57.28 - 76.33)	UNHCR Target of ≥ 85%
Exclusive breastfeeding under 6 months	9/13 69.23% (38.57% 90.91)	5/15 33.33% (11.82 - 61.62)	10/15 66.67% (38.38 - 88.18)	10/16 62.50% (35.43 - 84.80)	4/5 80.00% (28.36 - 99.49)	UNHCR Target of ≥ 75%
Introduction of solid, semi-solid or soft foods (within 6-8 months)	14/21 66.67% (43.03 - 85.41)	11/31 35.48% (19.23 - 54.63)	10/21 47.62% (25.71 - 70.22)	10/18 55.56% (30.76 - 78.47)	7/22 31.82% (13.86 - 54.87)	
Consumption of iron-rich or iron-fortified foods	66/91 72.53% (62.17% 81.37)	45/156 28.85% (21.88 - 36.63)	39/111 35.14% (26.31 - 44.77)	51/105 48.57% (38.70 - 58.53)	41/96 42.71% (32.66 - 53.22)	UNHCR Target of ≥ 60%

Minimum dietary diversity (MDD)	42/91 46.15% (35.64 - 56.92)	49/156 31.41% (24.22 - 39.32)	12/111 10.81% (5.71 - 18.12)	58/105 55.24% (45.22 - 64.95)	14/96 14.58% (8.21 - 23.26)	
Minimum Acceptable Diet (MAD)	15/91 16.48% (9.53 - 25.73)	17/156 10.90% (6.48 - 16.87)	3/111 2.70% (0.56 - 7.70)	22/105 20.95% (13.62 - 29.99)	4/96 4.17% (1.15 - 10.33)	
Bottle feeding	23/104 22.12% (14.57% 31.31)	46/171 26.90% (20.42 - 34.20)	22/127 17.32% (11.19 - 25.04)	32/121 26.45% (18.84 - 35.24)	9/101 8.91% (4.16 - 16.24)	UNHCR Target of < 5%

WOMEN 15-49 years, n/N, % [95% CI]						
Acute malnutrition (pregnant and lactating U6 month)						
Currently enrolled in ANC programme (pregnant, 15 – 49)	22/27 81.48% (61.92%-93.70%)	52/60 86.67% (75.41%-94.06%)	43/47 91.49% (79.62%-97.63%)	17/28 60.71% (40.58%-78.50%)	37/43 86.05% (72.07%-94.70%)	
Currently receiving iron-folic acid pills (pregnant, 15 – 49 years old)	16/27 59.265 (38.80%-77.61%)	53/60 88.33% (77.43%-95.18%)	33/47 70.21% (55.11%-82.66%)	17/28 60.71% (40.58%-78.50%	32/43 74.42% (58.83%-86.48%)	
Targeted Supplementary Feeding (TSFP) coverage (preg and lactating u6 mo)	3/54 5.56% (1.16%-15.39%)	33/112 29.46% (21.23%-38.82%)	13/102 12.75% (6.96%-20.81%)	2/53 3.77% (0.46%-12.98%)	11/88 12.50% (6.41%-21.27%)	
Mid Upper Arm Circumference (MUAC)						
Proxy GAM (MUAC<23cm) pregnant	6/54 11.11% (4.19%-22.63%)	24/103 23.30% (15.54%-32.66%)	32/102 31.37% (22.55%-41.31%)	4/42 9.52% (2.66%-22.62%)	31/88 35.23% (25.34%-46.14%)	

MUAC<23cm) non-pregnant & non-lactating women 15 – 49 years old.	40/291 13.75% (10.01%-18.24%)	52/366 14.21% (11.0%-18.16%	67/284 23.59% (18.78%-28.97%)	31/281 11.03% (7.6%-15.29%)	65/252 25.79% (20.51%-31.66%)	
% of Pregnant	27/399 6.77% (4.69%-9.67%)	60/583 10.29% (8.08%-13.02%)	47/439 10.71% (8.15%-13.95%)	28/454 6.17% (4.30%-8.77%)	43/388 11.08% (8.33%-14.60%).	

Surveyed Area **Data collection period**	Bokolmayo	Buramino	**Hilaweyen**	Kobe	**Melkadida**	**Classification of public health significance or target (where applicable)**
DEMOGRAPHY, n/N, % [95% CI]						
Household size and Composition						
Average household size (Mean, (SD)	5.75 (2.78)	6.55(3.21)	6.11(3.29)	6.49(3.13)	5.79(3.35)	
Percent of children U2	5.16	4.57	4.54	4.57	5.9	
Percent of children U5	15.3	15	15.6	14	16.8	
Percent of pregnant women	1.33	2.15	1.66	1.13	2.02	
Household Head Profile						
Female headed households age 15 - 64	279/326 85.58% (81.35 - 88.98)	384/460 83.48% (79.81 - 86.59)	330/374 88.24% (84.57 - 91.12)	277/313 88.50% (84.49 - 91.58)	287/333 86.19% (82.07 - 89.48)	

Male headed households age 15 - 64	42/326 12.88% (9.67 - 16.96)	58/460 12.61% (9.88 - 15.96)	38/374 10.16% (7.49 - 13.64)	30/313 9.58% (6.80 - 13.35)	37/333 11.11% (8.17 - 14.94)	

Children headed households <15 yrs	2/326 0.61% (0.17% 2.21)	2/460 0.43% (0.12% 1.57)	1/374 0.27% (0.05% 1.50)	0/313 0	0/333 0	
Elderly headed households >=65 yrs	3/326 0.92% (0.31% 2.67)	16/460 3.48% (2.15% 5.57)	5/374 1.34% (0.57% 3.09)	6/313 1.92% (0.88% 4.12)	9/333 2.7% (1.43% 5.06)	
Age dependency ratio						
Average age dependency ratio (mean, range)	1.2 (0-6)	1.27 (0-inf)	1.3 (0-inf)	1.11 (0-inf)	1.27 (0-9)	
Mortality						
Crude Death Rate (CDR) deaths/10,000/day	0.18 (0.06-0.52)	0.53 (0.32-0.89)	0.52 (0.29-0.92)	0.35 (0.16-0.75)	0.34 (0.16-0.75)	UNHCR target <1
Under 5 Death Rate (U5DR) deaths/10,000/day	0.00 (0.00-1.52)	1.95 (0.95-3.97)	0.94 (0.32-2.72)	0.00 (0.00-1.76)	0.70 (0.19-2.51)	UNHCR target <2
Percentage of **joined** in the last 3 months (90 days) recall period	6.86	14.97	0.52	20.33	5.48	
Percentage of **left** in the last 3 months (90 days) recall period	0.12	1.02	0.8	0.46	0.17	
FOOD SECURITY, n/N, % [95% CI]						
In-kind food distribution						
	Bokolmayo	Buramino	Hilaweyen	Kobe	Melkadida	
Proportion of households receiving food assistance (in-kind and/or cash grants and/or food vouchers)	158/158 100% (97.69- 100.00)	230/230 100% (98.41% 100.00)	199/199 100% (98.09% 100.00)	152/152 100% (98.12% 100.00)	159/159 100% (98.12% 100.00)	
Average number of days general food ration lasts out of 30 days. (mean, SD/range)	19.4 1-30	22 1-35??	19 5-30	22.2 10-35	19.36 0-30	

Negative household coping strategies						
Proportion of households reporting using one or more negative coping strategies over the past 4 weeks	158/158 100% (97.69- 100.00)	230/230 100% (98.41% 100.00)	194/194 100% (98.12% 100.00)	152/152 100% (98.12% 100.00)	159/159 100% (98.12% 100.00)	

Proportion of households reporting using the following coping strategies over the past 4 weeks:						
stop a child from attending school	21/158 13.29% (8.42% 19.60)	23/230 10% (6.45% 14.63)	14/191 7.33% (4.07% 11.99)	30/152 19.74% (13.73% 26.96)	12/159 7.55% (3.96% 12.81)	
sold any assets that would not have normally sold in order to buy food or basic goods	11/158 6.96% (3.53% 12.12)	30/230 13% (8.98% 18.09)	19/191 9.95% (6.10% 15.10)	29/152 19% (13.17% 26.24)	10/159 6.29% (3.06% 11.26)	
ask for money from strangers (begging)	11/157 7.01% (3.55% 12.19)	28/229 12.23% (8.28% 17.18)	37/191 19.37% (14.02% 25.70)	30/152 19.74% (13.73% 26.96)	15/159 9.49% (5.41% 15.17)	
move to a poorer quality shelter	0/158 0%	0/230 0%	0/191 0%	0/152 0%	0/159 0	
send household members under the age of 16 to work	4/158 2.53% (0.69% 6.35)	10/230- 4.35% (2.10% 7.85)	11/191 5.76% (2.91% 10.07)	27/152 17.76% (12.04% 24.78)	5/159 3.14% (1.03% 7.19)	
send a member of the household to work far away	10/157 6.37% (3.10% 11.40)	13/230 5.65% (3.04% 9.47)	10/191 5.24% (2.54% 9.42)	26/152 17.11% (11.49% 24.05)	12/159 7.55% (3.96% 12.81)	
Engaged in works that puts you or other members of your household at risk of harm	7/158 4.43% (1.80% 8.92)	21/230 9.13% (5.74% 13.62)	3/191 1.57% (0.33% 4.52)	28/152 18.42% (12.60% 25.51)	20/159 12.58% (7.86% 18.76)	
skip paying rent / debt repayments to meet other needs	30/158 18.99% (13.19% 25.98)	56/230 24.35% (18.95% 30.42)	58/191 30.53% (24.07% 37.61)	33/152 21.71% (15.44% 29.12)	39/158 24.68% (18.18% 32.16)	

take-out new loans or borrowed money	60/158 37.97% (30.38% 46.03)	123/230 53.48% (46.81% 60.06)	84/191 43.98% (36.82% 51.33)	100/149 67.11% (58.95% 74.58)	50/158 31.65% (24.49% 39.51)	
Reduce the number of meals eaten in a day	29/158 18.35% (12.65% 25.28)	74/230 32.17% (26.18% 38.63)	66/191 34.55% (27.84% 41.76)	65/152 42.76% (34.78% 51.03)	24/159 15% (9.92% 21.62)	
Average reduced coping strategy index; rCSI (mean, range)	8.2 0-9	12.19 0-29	11.9 0-34	7.8 0-9	9.11 0-9	

Food Consumption Score (FCS)

	Bokol Mayo	Buramino	Hilaweeyn	Kobe	Melkadida	
Average FCS (mean, SD)	28.29 1-45	36.38 10-92	27.2 0-41	34.68 1-48.5	17.46 0-97	
Acceptable (>35)	52/158 32.91% (25.65% 40.82)	122/230 53.04% (46.37% 59.63)	45/191 23.56% (17.73% 30.23)	81/152 53.29% (45.03% 61.42)	12/159 7.55% (3.96% 12.81)	
Borderline (21.5-35)	38/158 24% (17.62% 31.48)	63/230 27.39% (21.74% 33.64)	79/191 41.36% (34.30% 48.70)	36/152 23.68% (17.17% 31.25)	36/159 22.64% (16.39% 29.94)	
Poor (0-21)	68/158 43% (35.20% 51.14)	45/230 19.57% (14.64% 25.29)	67/191 35% (28.33% 42.30)	35/152 23% (16.59% 30.54)	111/159 69.81% (62.04% 76.83)	

Water, Hygiene and Sanitation (WASH)

	Bokol Mayo	Buramino	Hilaweeyn	Kobe	Melkadida	
Proportion of households collecting drinking water from protected/treated sources	155/155 100% (97.65% 100.00)	230/230 100% (98.41% 100.00)	191/191 100% (98.09% 100.00)	152/152 100% (98.09% 100.00)	160/160 100% (98.09% 100.00)	

Proportion of households with at least 10 litres/person drinking water storage capacity	85/155 54.84% (46.65% 62.83)	148/230 64.35% (57.79% 70.53)	83/191 43.46% (36.31% 50.80)	106/152 69.74% (61.77% 76.92)	69/160 43.13% (35.33% 51.18)	
Average # L/p/d of domestic water collected at household level, from protected/treated sources with containers of any type	16.19	25	16.79	21.57	17.46	
Average # L/p/d of domestic water collected at household level, from protected/treated sources with protected containers only	15.42	24.37	16.66	21.39	15.96	
Proportion of households that use domestic water collected from protected/treated sources with protected containers only:						
≥ 20 lpppd	45/155 29% (22.03% 36.86)	127/230 55.22% (48.54% 61.76)	62/191 32.46% (25.88% 39.60)	69/152 45.39% (37.31% 53.66)	54/160 33.75% (26.48% 41.64)	
15-<20 lpppd	22/155 14.19% (9.11% 20.70)	42/230 18.26% (13.49% 23.87)	16/191 8.38% (4.86% 13.25)	20/152 13.16% (8.23% 19.59)	8/160 5% (2.18% 9.61)	
<15 lpppd	88/155 56.77% (48.59% 64.70)	61/230 26.52% (20.94% 32.72)	113/191 59.16% (51.83% 66.20)	63/152 41.45% (33.52% 49.71)	98/160 61.25% (53.24% 68.84)	
Proportion of households with access to soap	85/155 54.84% (46.65% 62.83)	83/230 36% (29.88% 42.66)	118/191 61.78% (54.49% 68.70)	80/152 52.63% (44.38% 60.78)	82/160 51.25% (43.23% 59.22)	
Proportion of households reporting defecating in a toilet	153/155 98.71% (95.42% 99.84)	229/230 99.57% (97.60% 99.99)	189/191 98.95% (96.27% 99.87)	146/152 96% (91.61% 98.54)	160/160 100% (97.72% 100.00)	

Anthropometric results (based on WHO Growth Standards 2006)

WHO-UNICEF (2018) classification of public health significance for children under 5 years of age

Classification Prevalence thresholds (%)	Critical situation	Serious situation	Poor situation	Acceptable situation	
	Very High	High	Medium	Low	Very low
Wasting	≥ 15	10 - < 15	5 - < 10	2 5 - < 5	< 2 5
Stunting	≥ 30	20 - < 30	10 - < 20	2 5 - < 10	< 2 5
Overweight	≥ 15	10 - < 15	5 - < 10	2 5 - < 5	< 2 5
Underweight*	≥ 30	20 - < 30	10 - < 20	< 10%	

*Source: WHO (1995). Physical status: the use and interpretation of anthropometry. Report of a WHO Expert Committee. Technical Report Series No 854. Geneva, World Health Organization, 1995

Bokolmayo Anthropometric result

Table 3.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:girl**
6-17	34	57.6	25	42.4	59	22.3	1.4
18-29	39	54.9	32	45.1	71	26.8	1.2
30-41	33	50.8	32	49.2	65	24.5	1.0
42-53	20	41.7	28	58.3	48	18.1	0.7
54-59	10	45.5	12	54.5	22	8.3	0.8
Total	136	51.3	129	48.7	265	100.0	1.1

Table 3.2: Prevalence of acute malnutrition based on weight-for-height z-scores (and/or oedema) and by sex

	All n = 265	**Boys** n = 136	**Girls** n = 129
Prevalence of global malnutrition (<-2 z-score and/or oedema)	(28) 10.6 % (7.4 - 14.8 95% C.I.)	(15) 11.0 % (6.8 - 17.4 95% C.I.)	(13) 10.1 % (6.0 - 16.5 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score, no oedema)	(22) 8.3 % (5.5 - 12.2 95% C.I.)	(11) 8.1 % (4.6 - 13.9 95% C.I.)	(11) 8.5 % (4.8 - 14.6 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(6) 2.3 % (1.0 - 4.9 95% C.I.)	(4) 2.9 % (1.1 - 7.3 95% C.I.)	(2) 1.6 % (0.4 - 5.5 95% C.I.)

The prevalence of oedema is 0.0 %

Table 3.3: Prevalence of acute malnutrition by age, based on weight-for-height z-scores and/or oedema

		Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	59	2	3.4	5	8.5	52	88.1	0	0.0
18-29	71	0	0.0	9	12.7	62	87.3	0	0.0
30-41	65	2	3.1	2	3.1	61	93.8	0	0.0
42-53	48	0	0.0	3	6.3	45	93.8	0	0.0
54-59	22	2	9.1	3	13.6	17	77.3	0	0.0
Total	265	6	2.3	22	8.3	237	89.4	0	0.0

Table 3.4: Distribution of acute malnutrition and oedema based on weight-for-height z-scores

	<-3 z-score	**>=-3 z-score**
Oedema present	Marasmic kwashiorkor. 0 (0.0 %)	Kwashiorkor. 0 (0.0 %)
Oedema absent	Marasmic No. 6 (2.3 %)	Not severely malnourished. 259 (97.7 %)

Table 3.5: Prevalence of acute malnutrition based on MUAC cut off's (and/or oedema) and by sex

	All n = 265	**Boys** n = 136	**Girls** n = 129
Prevalence of global malnutrition (< 125 mm and/or oedema)	(11) 4.2 % (2.3 - 7.3 95% C.I.)	(6) 4.4 % (2.0 - 9.3 95% C.I.)	(5) 3.9 % (1.7 - 8.8 95% C.I.)
Prevalence of moderate malnutrition (< 125 mm and >= 115 mm, no oedema)	(9) 3.4 % (1.8 - 6.3 95% C.I.)	(4) 2.9 % (1.1 - 7.3 95% C.I.)	(5) 3.9 % (1.7 - 8.8 95% C.I.)
Prevalence of severe malnutrition (< 115 mm and/or oedema)	(2) 0.8 % (0.2 - 2.7 95% C.I.)	(2) 1.5 % (0.4 - 5.2 95% C.I.)	(0) 0.0 % (0.0 - 2.9 95% C.I.)

Table 3.6: Prevalence of acute malnutrition by age, based on MUAC cut off's and/or oedema

		Severe wasting (< 115 mm)		Moderate wasting (>= 115 mm and < 125 mm)		Normal (> = 125 mm)		Oedema	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	59	1	1.7	4	6.8	54	91.5	0	0.0

18-29	71	0	0.0	3	4.2	68	95.8	0	0.0
30-41	65	0	0.0	0	0.0	65	100.0	0	0.0
42-53	48	1	2.1	2	4.2	45	93.8	0	0.0
54-59	22	0	0.0	0	0.0	22	100.0	0	0.0
Total	265	2	0.8	9	3.4	254	95.8	0	0.0

Table 3.7: Prevalence of combined GAM and SAM based on WHZ and MUAC cut off's (and/or oedema) and by sex*

	All n = 265	**Boys** n = 136	**Girls** n = 129
Prevalence of combined GAM (WHZ <-2 and/or MUAC < 125 mm and/or oedema)	(35) 13.2 % (9.7 - 17.8 95% C.I.)	(19) 14.0 % (9.1 - 20.8 95% C.I.)	(16) 12.4 % (7.8 - 19.2 95% C.I.)
Prevalence of combined SAM (WHZ < -3 and/or MUAC < 115 mm and/or oedema	(7) 2.6 % (1.3 - 5.4 95% C.I.)	(5) 3.7 % (1.6 - 8.3 95% C.I.)	(2) 1.6 % (0.4 - 5.5 95% C.I.)

*With SMART or WHO flags a missing MUAC/WHZ or not plausible WHZ value is considered as normal when the other value is available

Table 3.8: Detailed numbers for combined GAM and SAM

	GAM		**SAM**	
	no.	**%**	**no.**	**%**
MUAC	7	2.6	1	0.4
WHZ	24	9.1	5	1.9
Both	4	1.5	1	0.4
Edema	0	0.0	0	0.0
Total	35	13.2	7	2.6

Total population: 265

Table 3.9: Prevalence of underweight based on weight-for-age z-scores by sex

	All n = 265	**Boys** n = 136	**Girls** n = 129
Prevalence of underweight (<-2 z-score)	(61) 23.0 % (18.4 - 28.5 95% C.I.)	(41) 30.1 % (23.1 - 38.3 95% C.I.)	(20) 15.5 % (10.3 - 22.7 95% C.I.)
Prevalence of moderate underweight (<-2 z-score and >=-3 z-score)	(50) 18.9 % (14.6 - 24.0 95% C.I.)	(31) 22.8 % (16.5 - 30.5 95% C.I.)	(19) 14.7 % (9.6 - 21.9 95% C.I.)
Prevalence of severe underweight (<-3 z-score)	(11) 4.2 % (2.3 - 7.3 95% C.I.)	(10) 7.4 % (4.0 - 13.0 95% C.I.)	(1) 0.8 % (0.1 - 4.3 95% C.I.)

Table 3.10: Prevalence of underweight by age, based on weight-for-age z-scores

		Severe underweight (<-3 z-score)		Moderate underweight (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	59	3	5.1	8	13.6	48	81.4	0	0.0
18-29	71	4	5.6	14	19.7	53	74.6	0	0.0
30-41	65	3	4.6	13	20.0	49	75.4	0	0.0
42-53	48	0	0.0	8	16.7	40	83.3	0	0.0
54-59	22	1	4.5	7	31.8	14	63.6	0	0.0
Total	265	11	4.2	50	18.9	204	77.0	0	0.0

Table 3.11: Prevalence of stunting based on height-for-age z-scores and by sex

	All n = 265	**Boys** n = 136	**Girls** n = 129
Prevalence of stunting (<-2 z-score)	(61) 23.0 % (18.4 - 28.5 95% C.I.)	(40) 29.4 % (22.4 - 37.6 95% C.I.)	(21) 16.3 % (10.9 - 23.6 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(41) 15.5 % (11.6 - 20.3 95% C.I.)	(23) 16.9 % (11.5 - 24.1 95% C.I.)	(18) 14.0 % (9.0 - 21.0 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(20) 7.5 % (4.9 - 11.4 95% C.I.)	(17) 12.5 % (8.0 - 19.1 95% C.I.)	(3) 2.3 % (0.8 - 6.6 95% C.I.)

Table 3.12: Prevalence of stunting by age based on height-for-age z-scores

		Severe stunting (<-3 z-score)		Moderate stunting (>= -3 and <-2 z-score)		Normal (> = -2 z score)	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	59	4	6.8	7	11.9	48	81.4
18-29	71	7	9.9	12	16.9	52	73.2
30-41	65	6	9.2	12	18.5	47	72.3
42-53	48	0	0.0	7	14.6	41	85.4
54-59	22	3	13.6	3	13.6	16	72.7
Total	265	20	7.5	41	15.5	204	77.0

Table 3.13: Prevalence of overweight based on weight for height cut off's and by sex (no oedema)

	All n = 265	**Boys** n = 136	**Girls** n = 129
Prevalence of overweight (WHZ > 2)	(3) 1.1 % (0.4 - 3.3 95% C.I.)	(2) 1.5 % (0.4 - 5.2 95% C.I.)	(1) 0.8 % (0.1 - 4.3 95% C.I.)
Prevalence of severe overweight (WHZ > 3)	(0) 0.0 % (0.0 - 1.4 95% C.I.)	(0) 0.0 % (0.0 - 2.7 95% C.I.)	(0) 0.0 % (0.0 - 2.9 95% C.I.)

Table 3.14: Prevalence of overweight by age, based on weight for height (no oedema)

		Overweight (WHZ > 2)		**Severe Overweight (WHZ > 3)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**
6-17	59	2	3.4	0	0.0
18-29	71	1	1.4	0	0.0
30-41	65	0	0.0	0	0.0
42-53	48	0	0.0	0	0.0
54-59	22	0	0.0	0	0.0
Total	265	3	1.1	0	0.0

Buramino Anthropometric Result

Table 3.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	no.	%	no.	%	no.	%	Boy:girl
6-17	56	52.8	50	47.2	106	25.3	1.1
18-29	53	53.0	47	47.0	100	23.9	1.1
30-41	56	53.3	49	46.7	105	25.1	1.1
42-53	40	51.3	38	48.7	78	18.6	1.1
54-59	14	46.7	16	53.3	30	7.2	0.9
Total	219	52.3	200	47.7	419	100.0	1.1

Table 3.2: Prevalence of acute malnutrition based on weight-for-height z-scores (and/or oedema) and by sex

	All n = 419	Boys n = 218	Girls n = 201
Prevalence of global malnutrition (<-2 z-score and/or oedema)	(72) 17.2 % (13.9 - 21.1 95% C.I.)	(42) 19.3 % (14.6 - 25.0 95% C.I.)	(30) 14.9 % (10.7 - 20.5 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score, no oedema)	(62) 14.8 % (11.7 - 18.5 95% C.I.)	(37) 17.0 % (12.6 - 22.5 95% C.I.)	(25) 12.4 % (8.6 - 17.7 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(10) 2.4 % (1.3 - 4.3 95% C.I.)	(5) 2.3 % (1.0 - 5.3 95% C.I.)	(5) 2.5 % (1.1 - 5.7 95% C.I.)

The prevalence of oedema is 0.0 %

Table 3.3: Prevalence of acute malnutrition by age, based on weight-for-height z-scores and/or oedema

		Severe wasting (<-3 z-score)	Moderate wasting (>= -3 and <-2 z-score)	Normal (> = -2 z score)	Oedema

Age (mo)	Total no.		No.	%	No.	%	No.	%	No.	%
6-17	105		4	3.8	13	12.4	88	83.8	0	0.0
18-29	100		3	3.0	21	21.0	76	76.0	0	0.0
30-41	105		0	0.0	15	14.3	90	85.7	0	0.0
42-53	78		1	1.3	11	14.1	66	84.6	0	0.0
54-59	30		2	6.7	2	6.7	26	86.7	0	0.0
Total	418		10	2.4	62	14.8	346	82.8	0	0.0

Table 3.4: Distribution of acute malnutrition and oedema based on weight-for-height z-scores

	<-3 z-score	>=-3 z-score
Oedema present	Marasmic kwashiorkor. 0 (0.0 %)	Kwashiorkor. 0 (0.0 %)
Oedema absent	Marasmic No. 10 (2.4 %)	Not severely malnourished. 409 (97.6 %)

Table 3.5: Prevalence of acute malnutrition based on MUAC cut off's (and/or oedema) and by sex

	All n = 420	Boys n = 219	Girls n = 201
Prevalence of global malnutrition (< 125 mm and/or oedema)	(34) 8.1 % (5.9 - 11.1 95% C.I.)	(15) 6.8 % (4.2 - 11.0 95% C.I.)	(19) 9.5 % (6.1 - 14.3 95% C.I.)
Prevalence of moderate malnutrition (< 125 mm and >= 115 mm, no oedema)	(29) 6.9 % (4.9 - 9.7 95% C.I.)	(13) 5.9 % (3.5 - 9.9 95% C.I.)	(16) 8.0 % (5.0 - 12.5 95% C.I.)
Prevalence of severe malnutrition (< 115 mm and/or oedema)	(5) 1.2 % (0.5 - 2.8 95% C.I.)	(2) 0.9 % (0.3 - 3.3 95% C.I.)	(3) 1.5 % (0.5 - 4.3 95% C.I.)

Table 3.6: Prevalence of acute malnutrition by age, based on MUAC cut off's and/or oedema

		Severe wasting (< 115 mm)		Moderate wasting (>= 115 mm and < 125 mm)		Normal (> = 125 mm)		Oedema	
Age (mo)	Total no.	No.	%	No.	%	No.	%	No.	%
6-17	106	3	2.8	14	13.2	89	84.0	0	0.0
18-29	100	2	2.0	9	9.0	89	89.0	0	0.0
30-41	105	0	0.0	5	4.8	100	95.2	0	0.0
42-53	78	0	0.0	1	1.3	77	98.7	0	0.0
54-59	30	0	0.0	0	0.0	30	100.0	0	0.0
Total	419	5	1.2	29	6.9	385	91.9	0	0.0

Table 3.7: Prevalence of combined GAM and SAM based on WHZ and MUAC cut off's (and/or oedema) and by sex*

	All n = 420	Boys n = 219	Girls n = 201
Prevalence of combined GAM (WHZ <-2 and/or MUAC < 125 mm and/or oedema)	(89) 21.2 % (17.6 - 25.4 95% C.I.)	(49) 22.4 % (17.4 - 28.3 95% C.I.)	(40) 19.9 % (15.0 - 26.0 95% C.I.)
Prevalence of combined SAM (WHZ < -3 and/or MUAC < 115 mm and/or oedema	(12) 2.9 % (1.6 - 4.9 95% C.I.)	(5) 2.3 % (1.0 - 5.2 95% C.I.)	(7) 3.5 % (1.7 - 7.0 95% C.I.)

*With SMART or WHO flags a missing MUAC/WHZ or not plausible WHZ value is considered as normal when the other value is available

Table 3.8: Detailed numbers for combined GAM and SAM

	GAM		SAM	
	no.	%	no.	%
MUAC	17	4.0	2	0.5
WHZ	55	13.1	7	1.7
Both	17	4.0	3	0.7
Edema	0	0.0	0	0.0
Total	89	21.2	12	2.9

Total population: 420

Table 3.9: Prevalence of underweight based on weight-for-age z-scores by sex

	All n = 420	Boys n = 219	Girls n = 201
Prevalence of underweight (<-2 z-score)	(152) 36.2 % (31.7 - 40.9 95% C.I.)	(87) 39.7 % (33.5 - 46.3 95% C.I.)	(65) 32.3 % (26.3 - 39.1 95% C.I.)
Prevalence of moderate underweight (<-2 z-score and >=-3 z-score)	(103) 24.5 % (20.7 - 28.9 95% C.I.)	(62) 28.3 % (22.8 - 34.6 95% C.I.)	(41) 20.4 % (15.4 - 26.5 95% C.I.)
Prevalence of severe underweight (<-3 z-score)	(49) 11.7 % (8.9 - 15.1 95% C.I.)	(25) 11.4 % (7.9 - 16.3 95% C.I.)	(24) 11.9 % (8.2 - 17.2 95% C.I.)

Table 3.10: Prevalence of underweight by age, based on weight-for-age z-scores

		Severe underweight (<-3 z-score)		Moderate underweight (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
Age (mo)	Total no.	No.	%	No.	%	No.	%	No.	%
6-17	106	7	6.6	20	18.9	79	74.5	0	0.0
18-29	100	17	17.0	24	24.0	59	59.0	0	0.0
30-41	105	12	11.4	29	27.6	64	61.0	0	0.0
42-53	78	6	7.7	25	32.1	47	60.3	0	0.0
54-59	30	7	23.3	5	16.7	18	60.0	0	0.0
Total	419	49	11.7	103	24.6	267	63.7	0	0.0

Table 3.11: Prevalence of stunting based on height-for-age z-scores and by sex

	All n = 418	Boys n = 218	Girls n = 200
Prevalence of stunting (<-2 z-score)	(166) 39.7 % (35.1 - 44.5 95% C.I.)	(95) 43.6 % (37.2 - 50.2 95% C.I.)	(71) 35.5 % (29.2 - 42.3 95% C.I.)

Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(104) 24.9 % (21.0 - 29.2 95% C.I.)	(61) 28.0 % (22.4 - 34.3 95% C.I.)	(43) 21.5 % (16.4 - 27.7 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(62) 14.8 % (11.7 - 18.6 95% C.I.)	(34) 15.6 % (11.4 - 21.0 95% C.I.)	(28) 14.0 % (9.9 - 19.5 95% C.I.)

Table 3.12: Prevalence of stunting by age based on height-for-age z-scores

		Severe stunting (<-3 z-score)		Moderate stunting (>= -3 and <-2 z-score)		Normal (> = -2 z score)	
Age (mo)	Total no.	No.	%	No.	%	No.	%
6-17	105	4	3.8	24	22.9	77	73.3
18-29	100	23	23.0	27	27.0	50	50.0
30-41	105	21	20.0	27	25.7	57	54.3
42-53	77	5	6.5	22	28.6	50	64.9
54-59	30	9	30.0	4	13.3	17	56.7
Total	417	62	14.9	104	24.9	251	60.2

Table 3.13: Prevalence of overweight based on weight for height cut off's and by sex (no oedema)

	All n = 419	Boys n = 218	Girls n = 201
Prevalence of overweight (WHZ > 2)	(4) 1.0 % (0.4 - 2.4 95% C.I.)	(2) 0.9 % (0.3 - 3.3 95% C.I.)	(2) 1.0 % (0.3 - 3.6 95% C.I.)
Prevalence of severe overweight (WHZ > 3)	(1) 0.2 % (0.0 - 1.3 95% C.I.)	(1) 0.5 % (0.1 - 2.6 95% C.I.)	(0) 0.0 % (0.0 - 1.9 95% C.I.)

Table 3.14: Prevalence of overweight by age, based on weight for height (no oedema)

		Overweight (WHZ > 2)		Severe Overweight (WHZ > 3)	
Age (mo)	Total no.	No.	%	No.	%
6-17	105	0	0.0	0	0.0

18-29	100	3	3.0	0	0.0
30-41	105	1	1.0	1	1.0
42-53	78	0	0.0	0	0.0
54-59	30	0	0.0	0	0.0
Total	418	4	1.0	1	0.2

Hilaweyn Anthropometric Result

Table 3.1: Distribution of age and sex of sample

	Boys		**Girls**		**Total**		**Ratio**
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:girl**
6-17	36	52.2	33	47.8	69	20.8	1.1
18-29	46	48.4	49	51.6	95	28.7	0.9
30-41	35	50.0	35	50.0	70	21.1	1.0
42-53	32	50.8	31	49.2	63	19.0	1.0
54-59	19	55.9	15	44.1	34	10.3	1.3
Total	168	50.8	163	49.2	331	100.0	1.0

Table 3.2: Prevalence of acute malnutrition based on weight-for-height z-scores (and/or oedema) and by sex

	All n = 330	**Boys** n = 166	**Girls** n = 164
Prevalence of global malnutrition **(<-2 z-score and/or oedema)**	(49) 14.8 % (11.4 - 19.1 95% C.I.)	(29) 17.5 % (12.4 - 24.0 95% C.I.)	(20) 12.2 % (8.0 - 18.1 95% C.I.)
Prevalence of moderate malnutrition **(<-2 z-score and >=-3 z-score, no oedema)**	(38) 11.5 % (8.5 - 15.4 95% C.I.)	(22) 13.3 % (8.9 - 19.3 95% C.I.)	(16) 9.8 % (6.1 - 15.3 95% C.I.)
Prevalence of severe malnutrition **(<-3 z-score and/or oedema)**	(11) 3.3 % (1.9 - 5.9 95% C.I.)	(7) 4.2 % (2.1 - 8.4 95% C.I.)	(4) 2.4 % (1.0 - 6.1 95% C.I.)

The prevalence of oedema is 0.0 %

Table 3.3: Prevalence of acute malnutrition by age, based on weight-for-height z-scores and/or oedema

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**		**Oedema**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	69	3	4.3	10	14.5	56	81.2	0	0.0
18-29	95	4	4.2	15	15.8	76	80.0	0	0.0
30-41	69	1	1.4	2	2.9	66	95.7	0	0.0
42-53	62	2	3.2	5	8.1	55	88.7	0	0.0
54-59	34	1	2.9	6	17.6	27	79.4	0	0.0
Total	329	11	3.3	38	11.6	280	85.1	0	0.0

Table 3.4: Distribution of acute malnutrition and oedema based on weight-for-height z-scores

	<-3 z-score	**>=-3 z-score**
Oedema present	Marasmic kwashiorkor. 0 (0.0 %)	Kwashiorkor. 0 (0.0 %)
Oedema absent	Marasmic No. 11 (3.3 %)	Not severely malnourished. 319 (96.7 %)

Table 3.5: Prevalence of acute malnutrition based on MUAC cut off's (and/or oedema) and by sex

	All n = 332	**Boys** n = 168	**Girls** n = 164
Prevalence of global malnutrition **(< 125 mm and/or oedema)**	(19) 5.7 % (3.7 - 8.8 95% C.I.)	(9) 5.4 % (2.8 - 9.9 95% C.I.)	(10) 6.1 % (3.3 - 10.9 95% C.I.)
Prevalence of moderate malnutrition **(< 125 mm and >= 115 mm, no oedema)**	(16) 4.8 % (3.0 - 7.7 95% C.I.)	(8) 4.8 % (2.4 - 9.1 95% C.I.)	(8) 4.9 % (2.5 - 9.3 95% C.I.)
Prevalence of severe malnutrition **(< 115 mm and/or oedema)**	(3) 0.9 % (0.3 - 2.6 95% C.I.)	(1) 0.6 % (0.1 - 3.3 95% C.I.)	(2) 1.2 % (0.3 - 4.3 95% C.I.)

Table 3.6: Prevalence of acute malnutrition by age, based on MUAC cut off's and/or oedema

		Severe wasting (< 115 mm)		**Moderate wasting (>= 115 mm and < 125 mm)**		**Normal (> = 125 mm)**		**Oedema**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	69	3	4.3	9	13.0	57	82.6	0	0.0
18-29	95	0	0.0	4	4.2	91	95.8	0	0.0
30-41	70	0	0.0	2	2.9	68	97.1	0	0.0
42-53	63	0	0.0	0	0.0	63	100.0	0	0.0
54-59	34	0	0.0	1	2.9	33	97.1	0	0.0
Total	331	3	0.9	16	4.8	312	94.3	0	0.0

Table 3.7: Prevalence of combined GAM and SAM based on WHZ and MUAC cut off's (and/or oedema) and by sex*

	All n = 332	**Boys** n = 168	**Girls** n = 164
Prevalence of combined GAM **(WHZ <-2 and/or MUAC < 125 mm and/or oedema)**	(56) 16.9 % (13.2 - 21.3 95% C.I.)	(33) 19.6 % (14.3 - 26.3 95% C.I.)	(23) 14.0 % (9.5 - 20.2 95% C.I.)
Prevalence of combined SAM **(WHZ < -3 and/or MUAC < 115 mm and/or oedema**	(13) 3.9 % (2.3 - 6.6 95% C.I.)	(7) 4.2 % (2.0 - 8.3 95% C.I.)	(6) 3.7 % (1.7 - 7.8 95% C.I.)

*With SMART or WHO flags a missing MUAC/WHZ or not plausible WHZ value is considered as normal when the other value is available

Table 3.8: Detailed numbers for combined GAM and SAM

	GAM		**SAM**	
	no.	**%**	**no.**	**%**
MUAC	7	2.1	2	0.6
WHZ	37	11.1	10	3.0
Both	12	3.6	1	0.3
Edema	0	0.0	0	0.0
Total	56	16.9	13	3.9

Total population: 332

Table 3.9: Prevalence of underweight based on weight-for-age z-scores by sex

	All n = 331	**Boys** n = 168	**Girls** n = 163
Prevalence of underweight **(<-2 z-score)**	(126) 38.1 % (33.0 - 43.4 95% C.I.)	(69) 41.1 % (33.9 - 48.6 95% C.I.)	(57) 35.0 % (28.1 - 42.6 95% C.I.)
Prevalence of moderate underweight **(<-2 z-score and >=-3 z-score)**	(83) 25.1 % (20.7 - 30.0 95% C.I.)	(42) 25.0 % (19.1 - 32.1 95% C.I.)	(41) 25.2 % (19.1 - 32.3 95% C.I.)
Prevalence of severe underweight **(<-3 z-score)**	(43) 13.0 % (9.8 - 17.0 95% C.I.)	(27) 16.1 % (11.3 - 22.4 95% C.I.)	(16) 9.8 % (6.1 - 15.3 95% C.I.)

Table 3.10: Prevalence of underweight by age, based on weight-for-age z-scores

		Severe underweight **(<-3 z-score)**		**Moderate underweight** **(>= -3 and <-2 z-score)**		**Normal** **(> = -2 z score)**		**Oedema**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	69	10	14.5	11	15.9	48	69.6	0	0.0
18-29	95	15	15.8	29	30.5	51	53.7	0	0.0
30-41	70	6	8.6	18	25.7	46	65.7	0	0.0
42-53	63	7	11.1	13	20.6	43	68.3	0	0.0
54-59	34	5	14.7	12	35.3	17	50.0	0	0.0
Total	331	43	13.0	83	25.1	205	61.9	0	0.0

Table 3.11: Prevalence of stunting based on height-for-age z-scores and by sex

	All n = 329	**Boys** n = 166	**Girls** n = 163
Prevalence of stunting **(<-2 z-score)**	(138) 41.9 % (36.7 - 47.3 95% C.I.)	(76) 45.8 % (38.4 - 53.4 95% C.I.)	(62) 38.0 % (30.9 - 45.7 95% C.I.)

Prevalence of moderate stunting **(<-2 z-score and >=-3 z-score)**	(79) 24.0 % (19.7 - 28.9 95% C.I.)	(45) 27.1 % (20.9 - 34.3 95% C.I.)	(34) 20.9 % (15.3 - 27.7 95% C.I.)
Prevalence of severe stunting **(<-3 z-score)**	(59) 17.9 % (14.2 - 22.4 95% C.I.)	(31) 18.7 % (13.5 - 25.3 95% C.I.)	(28) 17.2 % (12.2 - 23.7 95% C.I.)

Table 3.12: Prevalence of stunting by age based on height-for-age z-scores

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	69	9	13.0	15	21.7	45	65.2
18-29	95	25	26.3	28	29.5	42	44.2
30-41	69	12	17.4	15	21.7	42	60.9
42-53	62	7	11.3	13	21.0	42	67.7
54-59	34	6	17.6	8	23.5	20	58.8
Total	329	59	17.9	79	24.0	191	58.1

Table 3.13: Prevalence of overweight based on weight for height cut off's and by sex (no oedema)

	All n = 330	**Boys** n = 166	**Girls** n = 164
Prevalence of overweight (WHZ > 2)	(0) 0.0 % (0.0 - 1.2 95% C.I.)	(0) 0.0 % (0.0 - 2.3 95% C.I.)	(0) 0.0 % (0.0 - 2.3 95% C.I.)
Prevalence of severe overweight (WHZ > 3)	(0) 0.0 % (0.0 - 1.2 95% C.I.)	(0) 0.0 % (0.0 - 2.3 95% C.I.)	(0) 0.0 % (0.0 - 2.3 95% C.I.)

Table 3.14: Prevalence of overweight by age, based on weight for height (no oedema)

		Overweight (WHZ > 2)		**Severe Overweight (WHZ > 3)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**
6-17	69	0	0.0	0	0.0

18-29	95	0	0.0	0	0.0
30-41	69	0	0.0	0	0.0
42-53	62	0	0.0	0	0.0
54-59	34	0	0.0	0	0.0
Total	329	0	0.0	0	0.0

Kobe Anthropometric result

Table 3.1: Distribution of age and sex of sample

	Boys		**Girls**		**Total**		**Ratio**
AGE (mo)	**no.**	**%**	**no.**	**%**	**no.**	**%**	**Boy:girl**
6-17	34	50.0	34	50.0	68	25.9	1.0
18-29	35	48.6	37	51.4	72	27.4	0.9
30-41	37	55.2	30	44.8	67	25.5	1.2
42-53	26	54.2	22	45.8	48	18.3	1.2
54-59	4	50.0	4	50.0	8	3.0	1.0
Total	136	51.7	127	48.3	263	100.0	1.1

Table 3.2: Prevalence of acute malnutrition based on weight-for-height z-scores (and/or oedema) and by sex

	All n = 268	**Boys** n = 140	**Girls** n = 128
Prevalence of global malnutrition (<-2 z-score and/or oedema)	(26) 9.7 % (6.7 - 13.8 95% C.I.)	(14) 10.0 % (6.1 - 16.1 95% C.I.)	(12) 9.4 % (5.4 - 15.7 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score, no oedema)	(25) 9.3 % (6.4 - 13.4 95% C.I.)	(14) 10.0 % (6.1 - 16.1 95% C.I.)	(11) 8.6 % (4.9 - 14.7 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(1) 0.4 % (0.1 - 2.1 95% C.I.)	(0) 0.0 % (0.0 - 2.7 95% C.I.)	(1) 0.8 % (0.1 - 4.3 95% C.I.)

The prevalence of oedema is 0.0 %

Table 3.3: Prevalence of acute malnutrition by age, based on weight-for-height z-scores and/or oedema

		Severe wasting (<-3 z-score)		**Moderate wasting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**		**Oedema**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	68	0	0.0	8	11.8	60	88.2	0	0.0

18-29	72	0	0.0	6	8.3	66	91.7	0	0.0
30-41	67	0	0.0	4	6.0	63	94.0	0	0.0
42-53	48	1	2.1	5	10.4	42	87.5	0	0.0
54-59	8	0	0.0	1	12.5	7	87.5	0	0.0
Total	263	1	0.4	24	9.1	238	90.5	0	0.0

Table 3.4: Distribution of acute malnutrition and oedema based on weight-for-height z-scores

	<-3 z-score	**>=-3 z-score**
Oedema present	Marasmic kwashiorkor. 0 (0.0 %)	Kwashiorkor. 0 (0.0 %)
Oedema absent	Marasmic No. 1 (0.4 %)	Not severely malnourished. 267 (99.6 %)

Table 3.5: Prevalence of acute malnutrition based on MUAC cut off's (and/or oedema) and by sex

	All n = 268	**Boys** n = 140	**Girls** n = 128
Prevalence of global malnutrition (< 125 mm and/or oedema)	(19) 7.1 % (4.6 - 10.8 95% C.I.)	(9) 6.4 % (3.4 - 11.8 95% C.I.)	(10) 7.8 % (4.3 - 13.8 95% C.I.)
Prevalence of moderate malnutrition (< 125 mm and >= 115 mm, no oedema)	(16) 6.0 % (3.7 - 9.5 95% C.I.)	(9) 6.4 % (3.4 - 11.8 95% C.I.)	(7) 5.5 % (2.7 - 10.9 95% C.I.)
Prevalence of severe malnutrition (< 115 mm and/or oedema)	(3) 1.1 % (0.4 - 3.2 95% C.I.)	(0) 0.0 % (0.0 - 2.7 95% C.I.)	(3) 2.3 % (0.8 - 6.7 95% C.I.)

Table 3.6: Prevalence of acute malnutrition by age, based on MUAC cut off's and/or oedema

		Severe wasting (< 115 mm)		**Moderate wasting (>= 115 mm and < 125 mm)**		**Normal (> = 125 mm)**		**Oedema**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	68	3	4.4	9	13.2	56	82.4	0	0.0
18-29	72	0	0.0	3	4.2	69	95.8	0	0.0
30-41	67	0	0.0	1	1.5	66	98.5	0	0.0
42-53	48	0	0.0	1	2.1	47	97.9	0	0.0
54-59	8	0	0.0	0	0.0	8	100.0	0	0.0
Total	263	3	1.1	14	5.3	246	93.5	0	0.0

Table 3.7: Prevalence of combined GAM and SAM based on WHZ and MUAC cut off's (and/or oedema) and by sex

	All n = 268	**Boys** n = 140	**Girls** n = 128
Prevalence of combined GAM (WHZ <-2 and/or MUAC < 125 mm and/or oedema)	(37) 13.8 % (10.2 - 18.5 95% C.I.)	(21) 15.0 % (10.0 - 21.8 95% C.I.)	(16) 12.5 % (7.8 - 19.3 95% C.I.)
Prevalence of combined SAM (WHZ < -3 and/or MUAC < 115 mm and/or oedema	(4) 1.5 % (0.6 - 3.8 95% C.I.)	(0) 0.0 % (0.0 - 2.7 95% C.I.)	(4) 3.1 % (1.2 - 7.8 95% C.I.)

*With SMART or WHO flags a missing MUAC/WHZ or not plausible WHZ value is considered as normal when the other value is available

Table 3.8: Detailed numbers for combined GAM and SAM

	GAM		**SAM**	
	no.	**%**	**no.**	**%**
MUAC	11	4.1	3	1.1
WHZ	18	6.7	1	0.4
Both	8	3.0	0	0.0
Edema	0	0.0	0	0.0
Total	37	13.8	4	1.5

Total population: 268

Table 3.9: Prevalence of underweight based on weight-for-age z-scores by sex

	All n = 267	**Boys** n = 139	**Girls** n = 128
Prevalence of underweight (<-2 z-score)	(65) 24.3 % (19.6 - 29.8 95% C.I.)	(38) 27.3 % (20.6 - 35.3 95% C.I.)	(27) 21.1 % (14.9 - 29.0 95% C.I.)
Prevalence of moderate underweight (<-2 z-score and >=-3 z-score)	(54) 20.2 % (15.8 - 25.4 95% C.I.)	(32) 23.0 % (16.8 - 30.7 95% C.I.)	(22) 17.2 % (11.6 - 24.7 95% C.I.)
Prevalence of severe underweight (<-3 z-score)	(11) 4.1 % (2.3 - 7.2 95% C.I.)	(6) 4.3 % (2.0 - 9.1 95% C.I.)	(5) 3.9 % (1.7 - 8.8 95% C.I.)

Table 3.10: Prevalence of underweight by age, based on weight-for-age z-scores

		Severe underweight (<-3 z-score)		**Moderate underweight (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**		**Oedema**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**

6-17	68	3	4.4	14	20.6	51	75.0	0	0.0
18-29	72	2	2.8	13	18.1	57	79.2	0	0.0
30-41	67	1	1.5	12	17.9	54	80.6	0	0.0
42-53	48	4	8.3	11	22.9	33	68.8	0	0.0
54-59	8	0	0.0	3	37.5	5	62.5	0	0.0
Total	263	10	3.8	53	20.2	200	76.0	0	0.0

Table 3.11: Prevalence of stunting based on height-for-age z-scores and by sex

	All n = 267	**Boys** n = 139	**Girls** n = 128
Prevalence of stunting (<-2 z-score)	(94) 35.2 % (29.7 - 41.1 95% C.I.)	(55) 39.6 % (31.8 - 47.9 95% C.I.)	(39) 30.5 % (23.2 - 38.9 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(70) 26.2 % (21.3 - 31.8 95% C.I.)	(40) 28.8 % (21.9 - 36.8 95% C.I.)	(30) 23.4 % (16.9 - 31.5 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(24) 9.0 % (6.1 - 13.0 95% C.I.)	(15) 10.8 % (6.6 - 17.0 95% C.I.)	(9) 7.0 % (3.7 - 12.8 95% C.I.)

Table 3.12: Prevalence of stunting by age based on height-for-age z-scores

		Severe stunting (<-3 z-score)		**Moderate stunting (>= -3 and <-2 z-score)**		**Normal (> = -2 z score)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**	**No.**	**%**
6-17	68	3	4.4	20	29.4	45	66.2
18-29	72	12	16.7	16	22.2	44	61.1
30-41	67	6	9.0	13	19.4	48	71.6
42-53	48	1	2.1	16	33.3	31	64.6
54-59	8	0	0.0	4	50.0	4	50.0
Total	263	22	8.4	69	26.2	172	65.4

Table 3.13: Prevalence of overweight based on weight for height cut off's and by sex (no oedema)

	All n = 268	**Boys** n = 140	**Girls** n = 128
Prevalence of overweight (WHZ > 2)	(5) 1.9 % (0.8 - 4.3 95% C.I.)	(3) 2.1 % (0.7 - 6.1 95% C.I.)	(2) 1.6 % (0.4 - 5.5 95% C.I.)

Prevalence of severe overweight (WHZ > 3)	(0) 0.0 % (0.0 - 1.4 95% C.I.)	(0) 0.0 % (0.0 - 2.7 95% C.I.)	(0) 0.0 % (0.0 - 2.9 95% C.I.)

Table 3.14: Prevalence of overweight by age, based on weight for height (no oedema)

		Overweight (WHZ > 2)		**Severe Overweight (WHZ > 3)**	
Age (mo)	**Total no.**	**No.**	**%**	**No.**	**%**
6-17	68	0	0.0	0	0.0
18-29	72	4	5.6	0	0.0
30-41	67	1	1.5	0	0.0
42-53	48	0	0.0	0	0.0
54-59	8	0	0.0	0	0.0
Total	263	5	1.9	0	0.0

Melkadida Anthropometric result

Table 3.1: Distribution of age and sex of sample

	Boys		Girls		Total		Ratio
AGE (mo)	no.	%	no.	%	no.	%	Boy:girl
6-17	33	50.0	33	50.0	66	23.8	1.0
18-29	32	52.5	29	47.5	61	22.0	1.1
30-41	37	53.6	32	46.4	69	24.9	1.2
42-53	32	61.5	20	38.5	52	18.8	1.6
54-59	14	48.3	15	51.7	29	10.5	0.9
Total	148	53.4	129	46.6	277	100.0	1.1

Table 3.2: Prevalence of acute malnutrition based on weight-for-height z-scores (and/or oedema) and by sex

	All n = 275	Boys n = 148	Girls n = 127
Prevalence of global malnutrition (<-2 z-score and/or oedema)	(63) 22.9 % (18.3 - 28.2 95% C.I.)	(39) 26.4 % (19.9 - 34.0 95% C.I.)	(24) 18.9 % (13.0 - 26.6 95% C.I.)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score, no oedema)	(55) 20.0 % (15.7 - 25.1 95% C.I.)	(35) 23.6 % (17.5 - 31.1 95% C.I.)	(20) 15.7 % (10.4 - 23.1 95% C.I.)
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(8) 2.9 % (1.5 - 5.6 95% C.I.)	(4) 2.7 % (1.1 - 6.7 95% C.I.)	(4) 3.1 % (1.2 - 7.8 95% C.I.)

The prevalence of oedema is 0.0 %

Table 3.3: Prevalence of acute malnutrition by age, based on weight-for-height z-scores and/or oedema

		Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
Age (mo)	Total no.	No.	%	No.	%	No.	%	No.	%
6-17	66	2	3.0	10	15.2	54	81.8	0	0.0
18-29	61	0	0.0	12	19.7	49	80.3	0	0.0
30-41	67	2	3.0	16	23.9	49	73.1	0	0.0
42-53	52	3	5.8	10	19.2	39	75.0	0	0.0
54-59	29	1	3.4	7	24.1	21	72.4	0	0.0
Total	275	8	2.9	55	20.0	212	77.1	0	0.0

Table 3.4: Distribution of acute malnutrition and oedema based on weight-for-height z-scores

	<-3 z-score	>=-3 z-score
Oedema present	Marasmic kwashiorkor. 0 (0.0 %)	Kwashiorkor. 0 (0.0 %)

Oedema absent	Marasmic No. 8 (2.9 %)	Not severely malnourished. 267 (97.1 %)

Table 3.5: Prevalence of acute malnutrition based on MUAC cut off's (and/or oedema) and by sex

	All n = 277	Boys n = 148	Girls n = 129
Prevalence of global malnutrition (< 125 mm and/or oedema)	(19) 6.9 % (4.4 - 10.5 95% C.I.)	(5) 3.4 % (1.5 - 7.7 95% C.I.)	(14) 10.9 % (6.6 - 17.4 95% C.I.)
Prevalence of moderate malnutrition (< 125 mm and >= 115 mm, no oedema)	(17) 6.1 % (3.9 - 9.6 95% C.I.)	(4) 2.7 % (1.1 - 6.7 95% C.I.)	(13) 10.1 % (6.0 - 16.5 95% C.I.)
Prevalence of severe malnutrition (< 115 mm and/or oedema)	(2) 0.7 % (0.2 - 2.6 95% C.I.)	(1) 0.7 % (0.1 - 3.7 95% C.I.)	(1) 0.8 % (0.1 - 4.3 95% C.I.)

Table 3.6: Prevalence of acute malnutrition by age, based on MUAC cut off's and/or oedema

		Severe wasting (< 115 mm)		Moderate wasting (>= 115 mm and < 125 mm)		Normal (> = 125 mm)		Oedema	
Age (mo)	Total no.	No.	%	No.	%	No.	%	No.	%
6-17	66	1	1.5	14	21.2	51	77.3	0	0.0
18-29	61	1	1.6	1	1.6	59	96.7	0	0.0
30-41	69	0	0.0	2	2.9	67	97.1	0	0.0
42-53	52	0	0.0	0	0.0	52	100.0	0	0.0
54-59	29	0	0.0	0	0.0	29	100.0	0	0.0
Total	277	2	0.7	17	6.1	258	93.1	0	0.0

Table 3.7: Prevalence of combined GAM and SAM based on WHZ and MUAC cut off's (and/or oedema) and by sex*

	All n = 277	Boys n = 148	Girls n = 129
Prevalence of combined GAM (WHZ <-2 and/or MUAC < 125 mm and/or oedema)	(72) 26.0 % (21.2 - 31.5 95% C.I.)	(42) 28.4 % (21.7 - 36.1 95% C.I.)	(30) 23.3 % (16.8 - 31.3 95% C.I.)

Prevalence of combined SAM (WHZ < -3 and/or MUAC < 115 mm and/or oedema	(9) 3.2 % (1.7 - 6.1 95% C.I.)	(5) 3.4 % (1.5 - 7.7 95% C.I.)	(4) 3.1 % (1.2 - 7.7 95% C.I.)

*With SMART or WHO flags a missing MUAC/WHZ or not plausible WHZ value is considered as normal when the other value is available

3.8: Detailed numbers for combined GAM and SAM

	GAM		SAM	
	no.	%	no.	%
MUAC	9	3.2	1	0.4
WHZ	53	19.1	7	2.5
Both	10	3.6	1	0.4
Edema	0	0.0	0	0.0
Total	72	26.0	9	3.2

Total population: 277

Table 3.9: Prevalence of underweight based on weight-for-age z-scores by sex

	All n = 276	Boys n = 148	Girls n = 128
Prevalence of underweight (<-2 z-score)	(110) 39.9 % (34.3 - 45.7 95% C.I.)	(57) 38.5 % (31.1 - 46.5 95% C.I.)	(53) 41.4 % (33.2 - 50.1 95% C.I.)
Prevalence of moderate underweight (<-2 z-score and >=-3 z-score)	(68) 24.6 % (19.9 - 30.0 95% C.I.)	(34) 23.0 % (16.9 - 30.4 95% C.I.)	(34) 26.6 % (19.7 - 34.8 95% C.I.)
Prevalence of severe underweight (<-3 z-score)	(42) 15.2 % (11.5 - 19.9 95% C.I.)	(23) 15.5 % (10.6 - 22.2 95% C.I.)	(19) 14.8 % (9.7 - 22.0 95% C.I.)

Table 3.10: Prevalence of underweight by age, based on weight-for-age z-scores

		Severe underweight (<-3 z-score)		Moderate underweight (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
Age (mo)	Total no.	No.	%	No.	%	No.	%	No.	%
6-17	66	8	12.1	14	21.2	44	66.7	0	0.0
18-29	61	11	18.0	15	24.6	35	57.4	0	0.0
30-41	68	11	16.2	18	26.5	39	57.4	0	0.0
42-53	52	9	17.3	11	21.2	32	61.5	0	0.0

54-59	29	3	10.3	10	34.5	16	55.2	0	0.0
Total	276	42	15.2	68	24.6	166	60.1	0	0.0

Table 3.11: Prevalence of stunting based on height-for-age z-scores and by sex

	All n = 275	Boys n = 148	Girls n = 127
Prevalence of stunting (<-2 z-score)	(125) 45.5 % (39.7 - 51.4 95% C.I.)	(71) 48.0 % (40.1 - 56.0 95% C.I.)	(54) 42.5 % (34.3 - 51.2 95% C.I.)
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(73) 26.5 % (21.7 - 32.1 95% C.I.)	(41) 27.7 % (21.1 - 35.4 95% C.I.)	(32) 25.2 % (18.5 - 33.4 95% C.I.)
Prevalence of severe stunting (<-3 z-score)	(52) 18.9 % (14.7 - 24.0 95% C.I.)	(30) 20.3 % (14.6 - 27.5 95% C.I.)	(22) 17.3 % (11.7 - 24.8 95% C.I.)

Table 3.12: Prevalence of stunting by age based on height-for-age z-scores

		Severe stunting (<-3 z-score)		Moderate stunting (>= -3 and <-2 z-score)		Normal (> = -2 z score)	
Age (mo)	Total no.	No.	%	No.	%	No.	%
6-17	66	4	6.1	22	33.3	40	60.6
18-29	61	20	32.8	12	19.7	29	47.5
30-41	67	18	26.9	18	26.9	31	46.3
42-53	52	9	17.3	10	19.2	33	63.5
54-59	29	1	3.4	11	37.9	17	58.6
Total	275	52	18.9	73	26.5	150	54.5

Table 3.13: Prevalence of overweight based on weight for height cut off's and by sex (no oedema)

	All n = 275	Boys n = 148	Girls n = 127
Prevalence of overweight (WHZ > 2)	(0) 0.0 % (0.0 - 1.4 95% C.I.)	(0) 0.0 % (0.0 - 2.5 95% C.I.)	(0) 0.0 % (0.0 - 2.9 95% C.I.)
Prevalence of severe overweight (WHZ > 3)	(0) 0.0 % (0.0 - 1.4 95% C.I.)	(0) 0.0 % (0.0 - 2.5 95% C.I.)	(0) 0.0 % (0.0 - 2.9 95% C.I.)

Table 3.14: Prevalence of overweight by age, based on weight for height (no oedema)

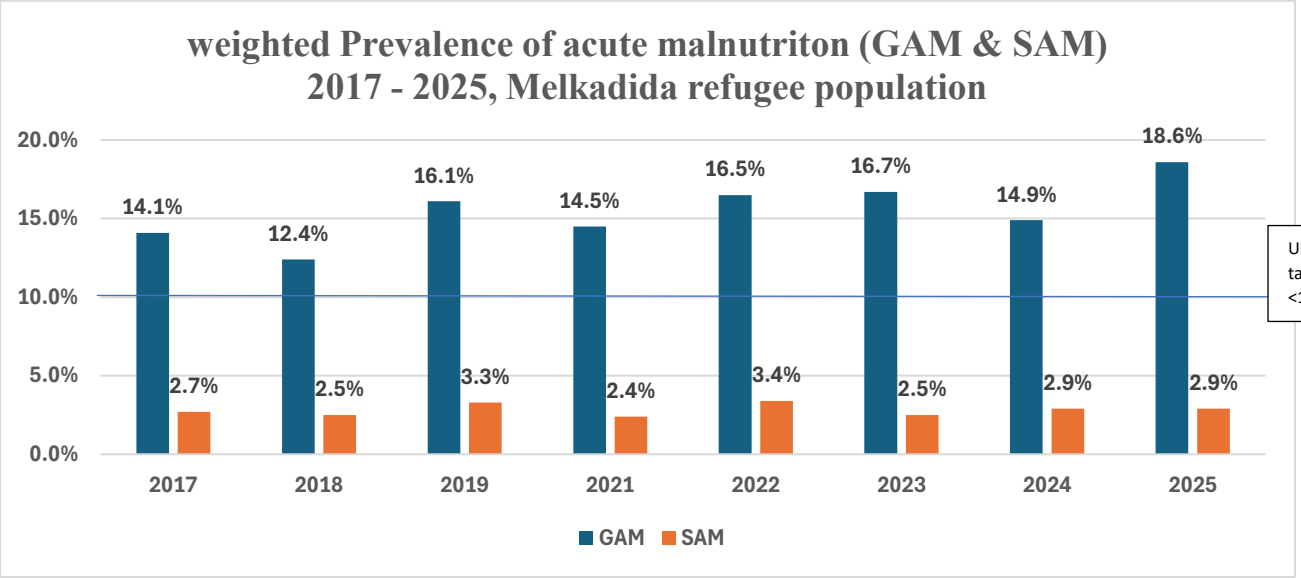
		Overweight (WHZ > 2)		Severe Overweight (WHZ > 3)	
Age (mo)	Total no.	No.	%	No.	%
6-17	66	0	0.0	0	0.0
18-29	61	0	0.0	0	0.0
30-41	67	0	0.0	0	0.0
42-53	52	0	0.0	0	0.0
54-59	29	0	0.0	0	0.0
Total	275	0	0.0	0	0.0

1.1. Summary of results

- The weighted prevalence of Global Acute Malnutrition (GAM) among children aged 6-59 months is 18.6% in 2025 compared to 14.9% in 2024 and 16.7% in 2023. It is above 10% of UNHCR target in all locations, and above 15% of WHO/UNICEF emergency threshold in melkadida 26%, Hilaweyn (16.9%) and Buramino (21.2%.)
- Compared to 2024, wasting (GAM) has increased in two locations (Buramino and Melkadida), decreased in two camps (Bokolmayo & Hilaweyn) and remain similar in Kobe. The changes in childhood wasting in Melkadida and Buramino are statistically significant.
- Weighted severe wasting (Severe Acute Malnutrition) is 2.9% which is similar with 2024 (2.9%). It is above the UNHCR target of 2% in all locations except kobe (1.5%). There is a statistically significant increase of severe wasting in Hilaweyn (3.9%) and Melkadida (3.2% from 1.4%).

Weighted Prevalence of acute malnutrition (GAM & SAM) 2017 - 2025, Melkadida refugee population

weighted Prevalence of acute malnutrition (GAM & SAM) 2017 - 2025, Melkadida refugee population



Health and nutrition services

- Nutrition treatment program enrollment reaches only 30.3% of children 6-59 months for targeted supplementary (TSF) and 7.8% of children in therapeutic (OTP/SC) treatment programs. This shows clear service gap interms

of screening and enrollment to the right program. This is a significant reduction from 2024 (88%) and in 2023 which was (65%).

- Measles vaccination remained high (weighted 97.9%), though still below the target of >95% in Hilaweyn camp.
- Vitamin A supplementation (6-59 months) is 97.1% the UNHCR target of ≥ 90% in all camps.
- Deworming (24-59 months) is 85.5%.
- Low prevalence of childhood diarrhea over two weeks observed in all camps. Weighted diarrhea prevalence is 2.0%.
- Enrollment of pregnant mothers into antenatal care across the camps varies between 60.74% to 91.49% across different camps. Of these 59.2% to 88.3% receive iron folate supplementation while pregnant. About 23.3% of pregnant and breast-feeding women are wasted.

Infant and Young Child feeding

- In general, initiation of breastfeeding is 70% which is lower than UNHCR target of ≥ 85%, exclusive breastfeeding is 61.4% the same lower than UNHCR target of ≥ 75%. Complementary feeding practices are very low, i.e. timely introduction of semi-solid, soft, or solid foods is 46%. Bottle feeding is practiced by 20.2% of parents with children under two years, ranging between 8.9% to 26.5% across locations.
- The mean dietary diversity is 29.5% (10- 46). Only a quarter of the children meet the minimum dietary diversity and meal frequency. Subsequently, only 10.2% children 6 to 23.9 meet the minimum acceptable diet (measuring the nutrient quality and adequacy of complementary feed).
- There is a need to strengthen the IYCF program to address the identified problems.

Food Security

- The average duration of the General Food Ration last is 20.4 (19- 22.2) days, identical to the result of last year (20%). One-third of the day's households get their food from the market or other source of mechanisms or maybe no food at all.
- 100% of the households reported using one or more negative coping strategies over the past 4 weeks (1 month) which has increased by 17.0% from last year.
- In the current assessment, the mean food consumption score (FCS) in the five camps varies between 17.5 and 36.4 out of the maximum 112. The overall mean consumption score is 28.8%, a decrease of 5 from 2024.
- Result indicates that 33.7% households have acceptable consumption score (>35) which decreased from the result of 2024 which was (46%).
- The mean seven-day reduced coping strategies index (rCSI) for 2025 stands at 10.1 (95% Ci, 9.9 – 10.9) of the maximum 56. Compared to 2024 (10.5) there is no improvement in all locations.
- Use of negative livelihood coping strategies to maintain household food security is in general very high. Over four weeks preceding the survey, half of the households used these strategies.

Water, Hygiene, Sanitation (WASH)

- **Access to latrine –** 98.7% households in in average in all camps use toilet to pass stool.
- **Water** - all surveyed households reported fetching their water from protected source (100%) The average per capita daily water use is 19.6 litters ranging from 16.2 in Bokolmayo to 25 in Buramino.
- **Soap** – Access and utilisation of soap is low. Only 51.1 percent of the households used soap on the date of assessment (36% - 62%), with some variation between locations, 36% in Buramino to 62% in Hilaweyn.

1.2. Demography

1.2.1. Mortality

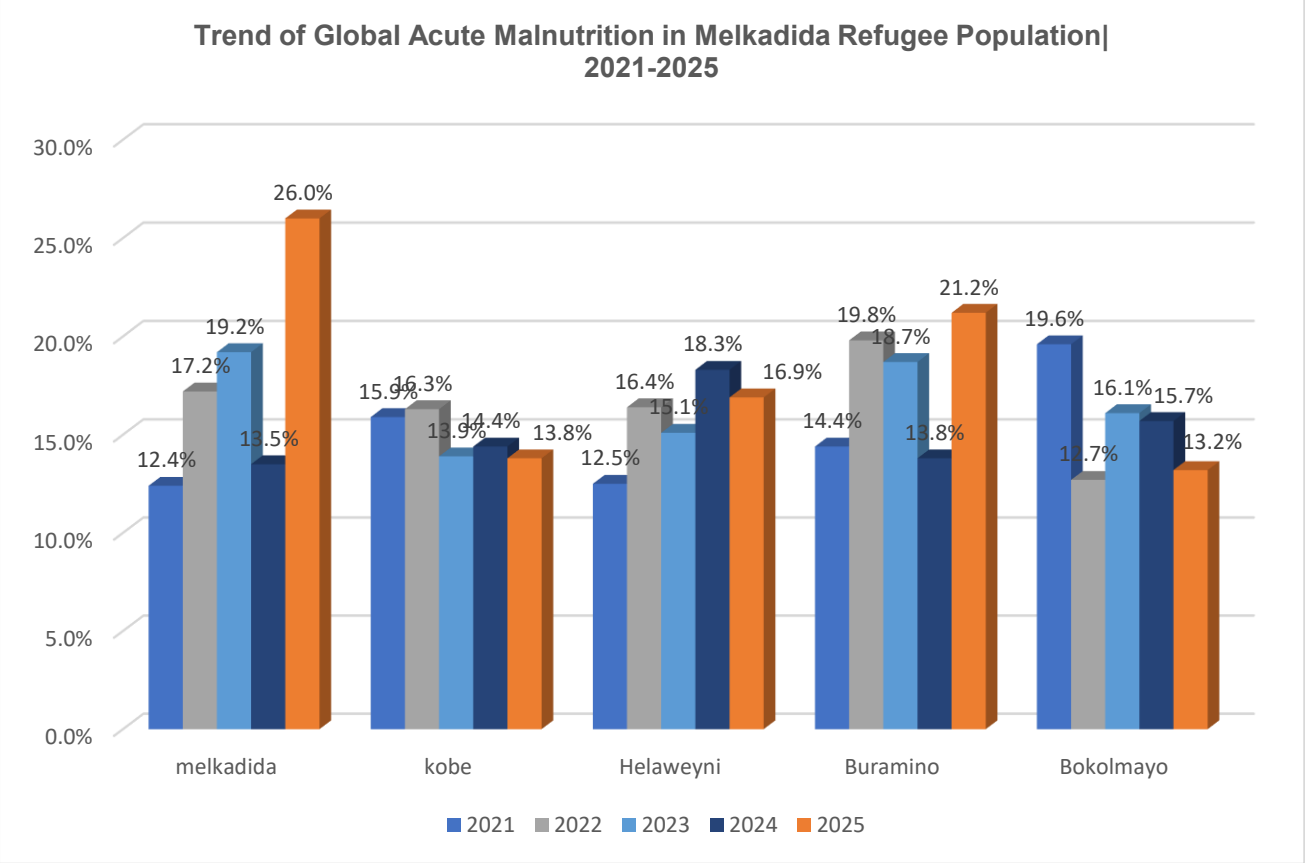
Crude Death Rate is defined as the number of deaths per day per 10,000 persons. Crude Death Rate (CDR) obtained weighted for all locations for the year 2025 is 0.4 per 10,000/day. The CDR shows variation by location showing much low value in Bokolmayo and Melkadida. The U5 year mortality rate weighed is 0.8 per 10,000 per day. Lowest at Bokolmayo and kobe (0) while highest at Buramino (2) per 10,00/day.

1.3. Nutrition Status

a. Global Acute Malnutrition

Global acute malnutrition (GAM), defined as the percentage of the children falling below -2 standard deviation from the mean of the children from same population, is a measure of the nutritional status of the population and, in combination with other food, health, WASH and childcare indicators, are important determinants in humanitarian programing. The world health organization and UNICEF classified that 15 percent and above of global acute malnutrition is taken as very high, while UNHCR targets to maintain GAM to below 10 percent. In the current assessment 1,562 randomly selected children 6 to 59 months old, 265 – 420 per location, were evaluated to determine the nutritional status in the five camps and the findings are summarized below.

Trends of Global acute malnutrition (GAM) across different camps from 2021-2025



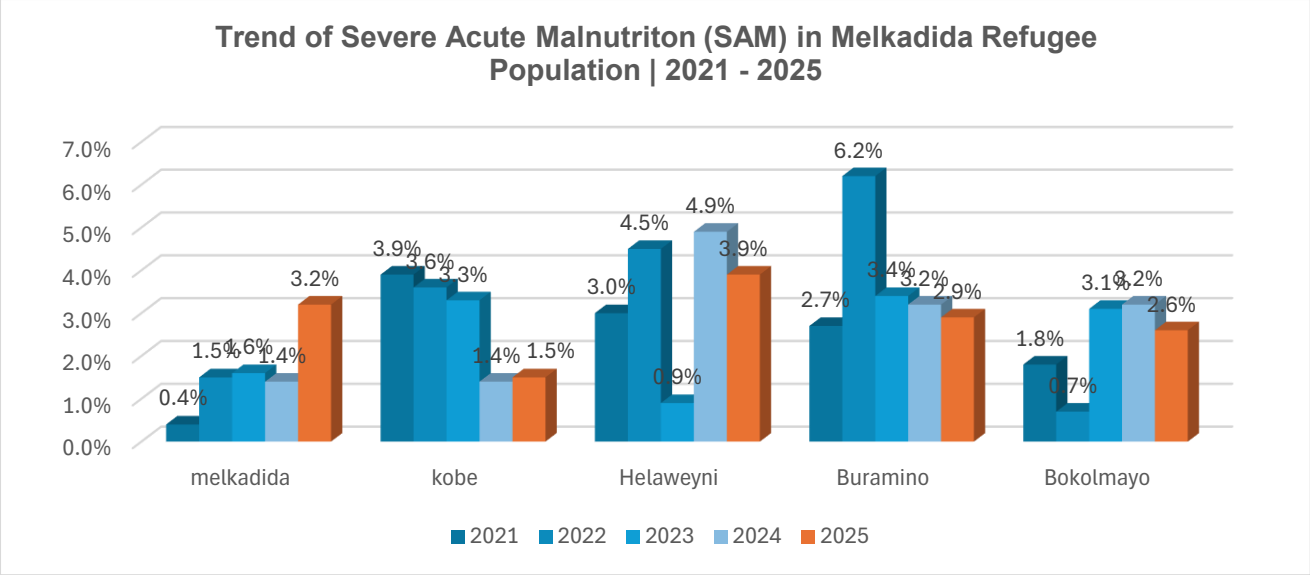
In three of the five camps, acute malnutrition level is above 15% classified as very high and in the remaining two camps above 10%, classified as high. In all camps wasting (GAM) is above the UNHCR target of below 10 percent. Compared to 2024, in Buramino and Melkadida, the malnutrition level has increased significantly, in Hilaweyn, Bokolmayo and Kobe it has some decreasement. Diarrhea in the last two weeks of the assessment was not common among malnourished children (Weighted diarrhea prevalence is 2.0%).

b. Severe Acute Malnutriton

The overall SAM for 2025 is 2.9%, showing no change from 2024 (2.9%). Kobe increased to 1.5% from 1.4%, while Hilaweyn decreased to 3.9% from 4.9% 2024 and melkadida significantly increased from 1.4% in 2024 to 3.2% in 2025 indicating a very serious deterioration of the situation in this location. On the other hand, it remains without significant change in Bokolmayo, Buramino. Overall, the extent of severe acute malnutrition among children is above the target of 2.0 percent. Like global wasting, severe wasting is associated with food insecurity,

lack of BSFP and weak nutrition programs and malnourished children are less likely to be fed with complementary food which precipitates the vicious cycle of poor feeding and malnutrition. Childhood severe wasting is more common among households with lower GFD duration (19 days vs 22 days), with low consumption score (mean FCS score: 17.5 to 36.4), lower enrollment to nutrition treatment programmes (reported TSFP 30.3% and TFP 7.8%). Below is SAM trend across different camps from 2021-2025.

Trends of Severe acute malnutrition (SAM) across different camps from 2021-2025



1.4. Nutrition program enrollment

Enrollment into the two nutrition services - therapeutic feeding (out and in patient), and selective feeding children 6 – 59.9 months are assessed.

The SPHER target for coverage is above 90% for therapeutic and selective feeding, and an overall 90% coverage for all programs. However, due to methodological limitations, the SENS does not generate adequate sample to accurately estimate the coverage / enrollment of the selective feeding programs, while total coverage can be estimated.

In 2025 results, Targeted Supplementary Feeding for treatment of moderately malnourished cases and Therapeutic feeding programmes in TFP enrollment is very low compared to identified MAM and SAM cases. This shows gaps on timely screening, referral and admission which are very critical for the nutrition program.

69.7% of moderate Malnourished children are not enrolled into treatment program.

92.2% of severe Malnourished children are not enrolled into treatment program.

1.5. Food Security

The World Food Summit of 1996 defined food security as existing "*when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life*". Food security has four pillars: food availability, access to food, utilization, and sustainability.

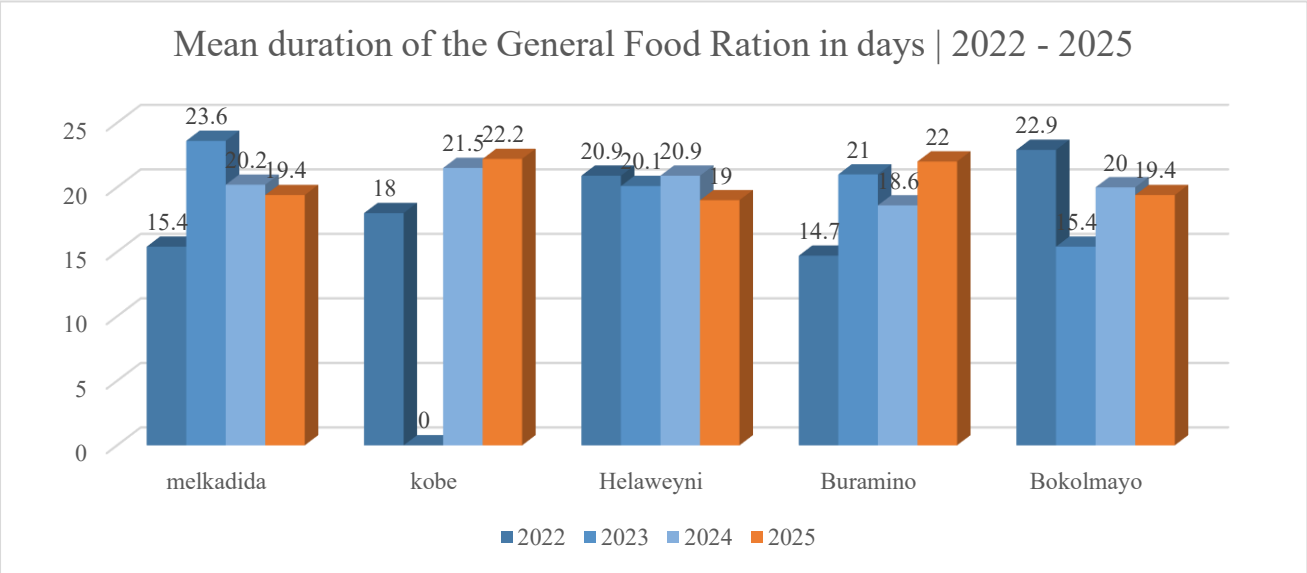
Melkadida refugee population is dependent on in-kind food assistance from WFP provided on monthly basis. Although there are additional livelihood schemes, access to the food, in this survey is measured through the

receipt of general food ration the last time it was distributed, which in this case is September 2025. Accordingly, all except one household (100%) have reported receiving September 2025 GF ration.

1.5.1. Duration of the general food ration

The average number of days the last general food ration (September 2025) lasted out of 30 days is 20.4 days (95% CI: 19.8, 20.6). It ranges from 19.0 days in Hilaweyn to 22.2 days in Kobe. The mean duration is like same month in 2024.

GFR covers 20.4 of the intended 30 days



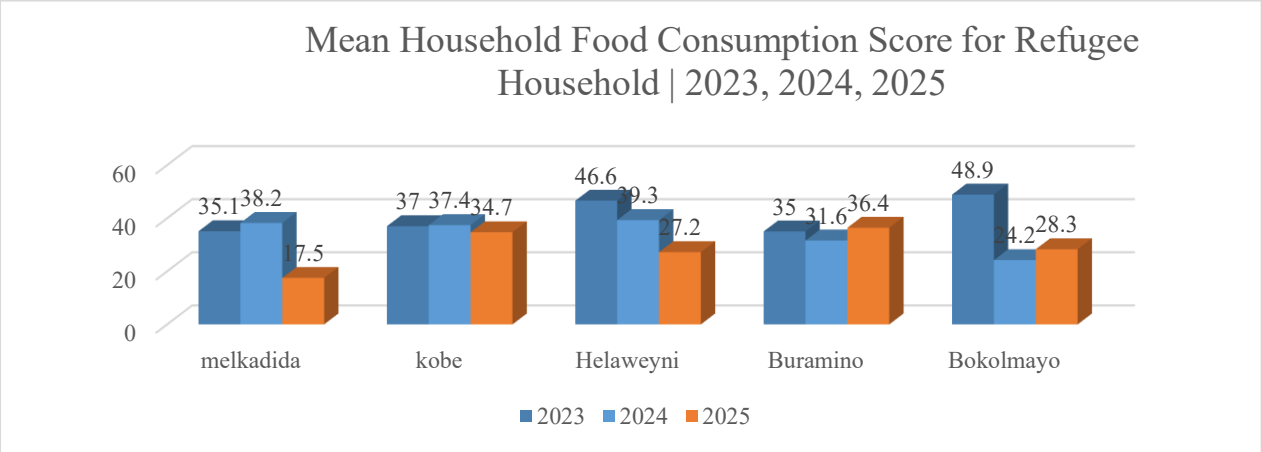
Note: GFR was 60% in 2025, 60% in 2024, 84% during SENS 2023, 50% during SENS 2022

1.5.2. Household Food Consumption

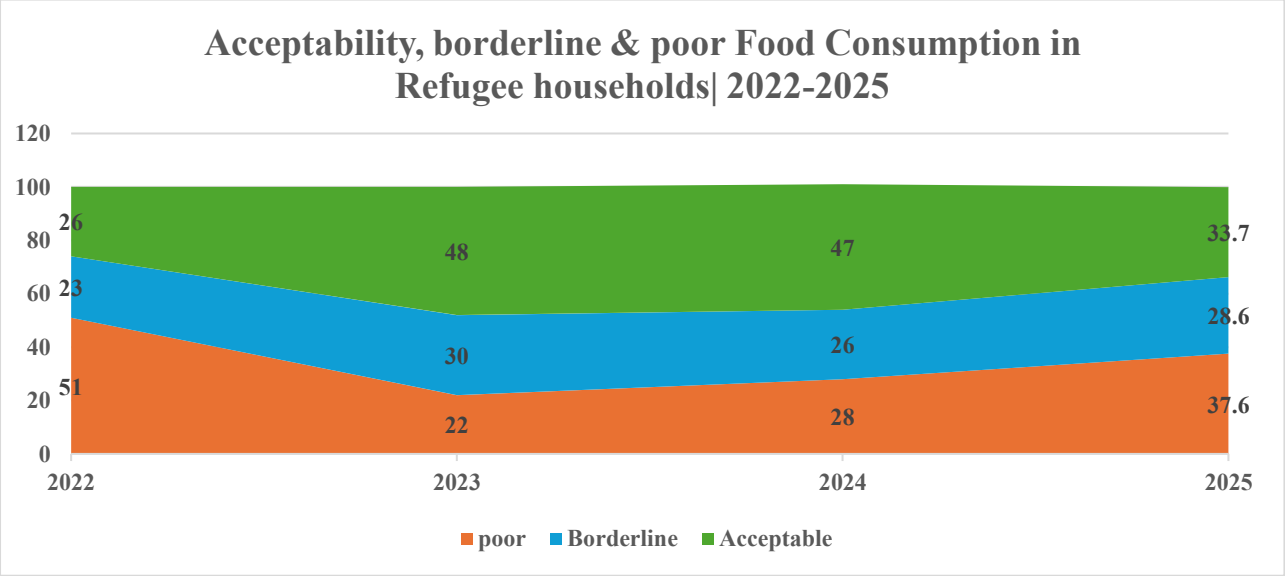
Food Consumption Score (FCS) is a Composite score of households' dietary diversity, food frequency, and relative nutritional importance of different food groups over seven days period. It is a proxy measure of household food access and utilization with maximum value of 112 in one week. A higher value is an indication of a better consumption / food security. Animal source foods are given higher weight considering a better nutritional quality followed by legumes, nuts, and pulses[1]. The FCS is reported to be highly correlated with other food security proxy indicators, including the Household Dietary Diversity Score, reduced Coping Strategies Index, and Vitamin A, Protein-rich and Hem Iron intake. The FCS is one of the food security outcome indicators used in the Integrated Food Security Phase Classification (IPC).

In the current assessment, the mean FCS, calculated using the eight food groups, in the five camps is 28.8 in Bokolmanyo, 28.3 in Buramino, 36.4 in Hilaweyn, 27.2 in Kobe, 34.7 and 17.5 in Melkadida with an overall mean score of 28.8 (95% CI. 27 – 34.9). Compared to 2024, the mean overall food consumption score has decreased (28.8 vs 33.6). The overall reduction of FCS reduction is most likely the ration size reduction to 60% in 2025.

Only 1/3 of the ideal plan households consume average food consumption in 2025.



To estimate the acceptability of the consumption, generally, an FCS score greater than 35 is considered acceptable, a score between 21.5 and 35 is considered borderline, and a score of 21 or less is considered poor. Using this scoring system, 43 percent of the households in Bokolmayo, 19.5% in Buramino, 35% in Hilaweyn, 23% in Kobe, and 69.81% in Melkadida have poor consumption. Overall, the combined result of the five locations indicates that 37.6% of the population have poor, 28.6% borderline and 33.7% acceptable consumption score. Compared to last year's same period, the consumption scores got worse in all locations. Acceptable consumption score reduced from 47% in 2024 to 33.7% in 2025.



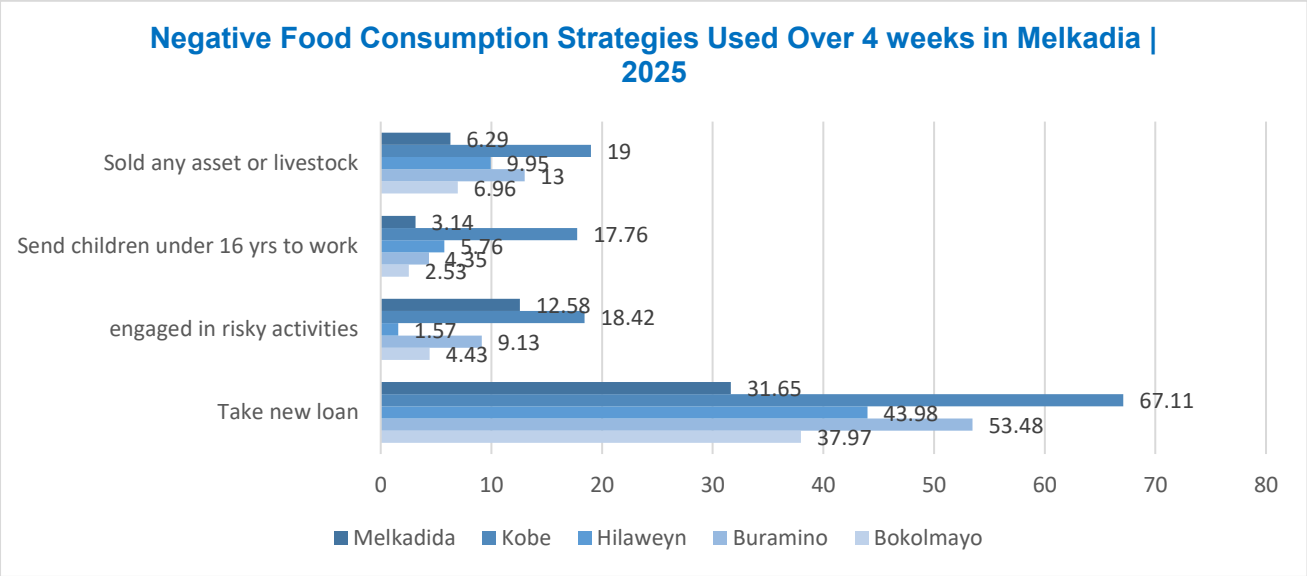
1.5.3. Household Copying Strategies for food security.

Households use various food and nonfood coping strategies to overcome the shortage. Some of these are positive like increasing income, employment, while are negative like reducing the meal size, frequency, reducing nutrient rich foods, or taking more loans, or selling household asset. In this assessment we have assessed the use of negative coping strategies over time periods – seven days negative consumption focused strategies, and 4 weeks negative livelihood coping strategies to address food security.

1.5.4. Reduced food consumption

To overcome short-term food shortage, during 4 weeks prior to the data of assessment, 11.1% interviewed sold any assets or livestock's, 6.6% children under the age of 16 years are forced to child labor for food reason, 8.9% engaged in risky activities, 46.6% take new loans.

Overall, 100% households used one or more of those strategies to address the food gap. Compared to same month in 2024, the seven-days food-based coping strategies increased by 17 percentage points (100% vs 83%) indicating deterioration in the situation.

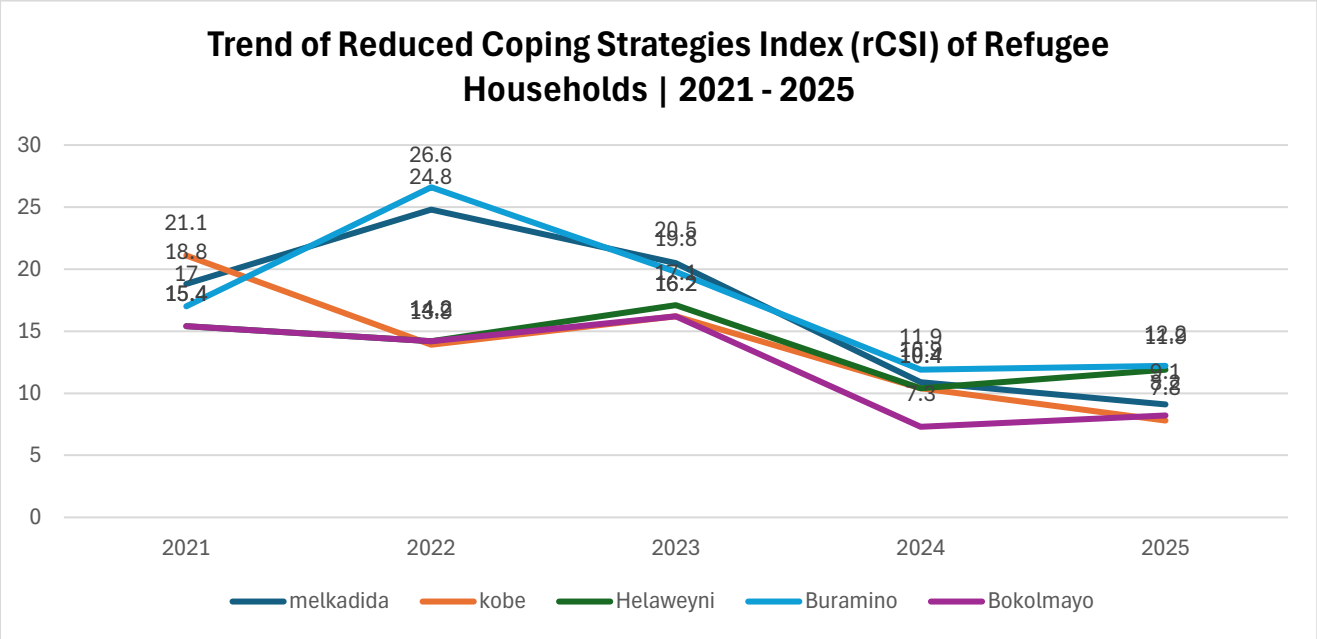


1.5.5. Reduced food consumption strategies index (rCSI)

Reduced Coping Strategies Index (rCSI) is a proxy indicator of household food insecurity and takes into consideration the frequency and relative severity of the five consumption-based strategies shown above. The maximum score for rCSI is 56, when a household used all five strategies every day for the last 7 days. Increasing rCSI trend indicate deterioration of the food security[1].

The mean weighted rCSI for the five camps is 10.1. Compared to last year (2024) the overall rCSI improved significantly (10.1 vs 10.4) indicating improvement of the household food security. This change is observed across the five camps whereby in 2025 it is 8.2 for Bokolmanyo, 12.2 for Buramino, 11.9 for Hilaweyn, 7.8 for Kobe, and 9.1 for Melkadida compared to last year in all camps it is improved except Buramino which shows increasement.

[1] SENS Guideline V3.



1.6. Infant and Young Child Nutrition

Infant and young childcare practice remained low. Initiation of breastfeeding within one hour of giving (70%), exclusive breastfeeding until 6 months of age (61.4%), and introduction of soft, semi-solid food at 6-8 months (46%) are all below the target. There is a wide variation by location.

What is more worrying is the initiation and continuation of complementary feeding for children 6 to 23 months of age. Neither timely initiation, the meal frequency or the content of the complementary food meet the recommendation. Only 46 percent of children receive some additional food by the time they reach 6 to 8 months old. This indicator shoes some improvement from 2024 which was 36% only. The mean dietary diversity is 29.5%, only a quarter of the children receive the minimum dietary diversity and meal frequency, as a result, only 10.2% children 6 to 23.9 meet the minimum acceptable diet (measuring the nutrient quality and adequacy of complementary feed). There is wide variation between locations, ranging between 2.7% (Hilaweyn) and 21% (Kobe).

Despite years of promotion activities, IYCF practices continue to be poor indicating to underlying factors like high fertility, overburdened mothers, sociocultural norms, limited male engagement in household and childcare chores, patriarchal norms, high level of adult illiteracy play crucial important role. On the other hand, there are also methodological challenges. While the population is almost completely dependent on food aid, and nutrition supplementary products are among the top frequently consumed food groups in the community, these were not included in the analysis of dietary diversity due to their complex composition and computational challenge. Thus, understandably the quality of the diets children are getting is most likely better than indicated in the table.

Compared to July 20204, there is some decreasement in early initiation of breastfeeding after birth, exclusive breastfeeding. Timely introduction of additional food and bottle feeding have deteriorated.

Table 1: Prevalence of Key IYCF practices | 2025

	Bokolmayo	Buramino	Hilaweyen	Kobe	Melkadida	
Timely initiation of breastfeeding	57.69%	74.27%	70.08%	77.69%	67.33%	UNHCR Target of ≥ 85%
	69.23%	33.33%	66.67%	62.50%	80.00%	UNHCR Target of ≥ 75%

Exclusive breastfeeding under 6 months						
Introduction of solid, semi-solid or soft foods (within 6-8 months)	66.67%	35.48%	47.62%	55.56%	31.82%	
Consumption of iron-rich or iron-fortified foods	72.53%	28.85%	35.14%	48.57%	42.71%	UNHCR Target of ≥ 60%
Minimum dietary diversity (MDD)	46.15%	31.41%	10.81%	55.24%	14.58%	
Minimum Acceptable Diet (MAD)	16.48%	10.90%	2.70%	20.95%	4.17%	
Bottle feeding	22.12%	26.90%	17.32%	26.45%	8.91%	UNHCR Target of < 5%

In 2025, IYCF centers were closed and the staff laid off contributing to declining the promotion activities.

1.7. Public health program

Measles vaccination coverage for children aged 9-59 months range from 98.2% in Buramino, to 99.2% in Melkadida, with combined performance of 97.9% for the five camps, an increasement from 87% in 2024. all camps except Hilaweyn achieved above 95% coverage (Sphere standard). Two-week prevalence Diarrhea is 2 percent. Vitamin A 97.1% and deworming 85.5%.

1.8. Women reproductive health and nutrition status

Data from the survey indicates that one five of pregnant women are not enrolled in antenatal care and 30 percent of pregnant women are not taking Iron folate supplement during the current pregnancy.

Table 2: Women 15 to 49 years reproductive and nutrition status, 2025

	Bokolmayo	Buramino	Hilaweyen	Kobe	Melkadida
Currently enrolled in ANC programme (pregnant, 15 – 49)	81.48%	86.67%	91.49%	60.71%	86.05%
Currently receiving iron-folic acid pills (pregnant, 15 – 49 years old)	59.265	0.8833	0.7021	0.6071	0.7442
Targeted Supplementary Feeding (TSFP) coverage (preg and lactating u6 mo)	5.56%	29.46%	12.75%	3.77%	12.50%

Proxy GAM (MUAC<23cm) pregnant	11.11%	23.30%	31.37%	9.52%	35.23%
MUAC<23cm) non-pregnant & non-lactating women 15 – 49 years old.	13.75%	14.21%	23.59%	11.03%	25.79%

The result indicates that ANC attendance as well as enrollment into the nutrition program have declined over the year.

Using MUAC as proxy indicator, nutrition status of pregnant women is much better than non-pregnant women 15 to 49 years of age (MUAC<23cm). Nutrition supplement during pregnancy and lactation might have possibly contributed to this observation. Enrollment of malnourished PLW in TSFP program is also low.

1.9. Water, Sanitation and Hygiene

Poor water, sanitation and hygiene have serious consequences for the health and nutrition status of population. Thus, WASH module is included in the SENS survey with the aim to measure the households' access to a protected/treated drinking water source; use of an adequate quantity of water; use of toilets/latrines; and access to soap. To this end, the following water sources are taken to be of a suitable quality (protected/treated): tap stands, handpumps/boreholes, water seller/kiosks, piped connection to house, protected spring, bottled water, water sachets, tanker trucks. While water from an unprotected hand-dug well, surface water (lake, pond, dam, river), unprotected spring, and rainwater are grouped as unprotected / untreated. Household latrine is defined as latrine used by one household only, and communal latrine as latrine used by multiple households. Access to soap is measured by requesting the head of the household / respondent to show the soap the household is using. If he / she presented the soap within one-minute it is considered as accessible. For interpretation of results, the standards for post emergency period are used as reference, since Melkadida refugee camps are in existence for a protected period and no indication of emergency.

Figure 1: Standards for Water, Hygiene and Sanitation during emergency and post-emergency phases.

UNHCR Standard		Indicator target
Average liters per person per day of domestic water collected at household level from protected/treated sources (with protected containers only)	Emergency standard	≥15 liters
	Post emergency standard	≥20 liters
% households with at least 10 L/p drinking water storage capacity	Emergency standard	≥70%
	Post emergency standard	≥80%
% households collecting drinking water from protected/ treated sources	Emergency standard	≥70%
	Post emergency standard	≥95%
% households reporting defecating in a toilet/latrine	Emergency standard	≥60%
	Post emergency standard	≥85%
% households with access to soap	Emergency standard	≥70%
	Post emergency standard	≥90%

All households in the five camps use water from improved / protected water sources (100%). The average number of litters of water collected per person per day (L/p/d) range from 25 litters in Buramino to 16.8 liters in Hilaweyn. On average all households in the five camps collected 19.6 liter of water per person per day. and Melkadida (33% and 36%).

Table 3: Households' access to and utilisation of clean water for domestic purpose in Melkadida refugee operation, 2025

Indicator	Bokolmayo	Buramino	Hilaweyn	Kobe	Melkadida
Proportion of households collecting drinking water from protected/treated sources	100%	100%	100%	100%	100%
Proportion of households with at least 10 litres/person drinking water storage capacity	54.84%	64.35%	43.46%	69.74%	43.13%
Average # L/p/d of domestic water collected at household level, from protected/treated sources with containers of any type	16.19	25	16.79	21.57	17.46
Average # L/p/d of domestic water collected at household level, from protected/treated sources with protected containers only	15.42	24.37	16.66	21.39	15.96
≥ 20 lpppd	29%	55%	32%	45%	34%
15-<20 lpppd	14.19%	18.26%	8.38%	13.16%	5.00%
<15 lpppd	56.77%	26.52%	59.16%	41.45%	61.25%
Proportion of households with access to soap	54.84%	36.00%	61.78%	52.63%	51.25%
Proportion of households reporting defecating in a toilet	98.71%	99.57%	98.95%	96.00%	100.00%

Almost all (98.7%) households reported using toilet for passing stool, i.e. family, shared, or communal latrines. Over two thirds of the toilets are communal. On the other hand, household soap utilization is low. Bokolmayo, Kobe, melkadida and Hilaweyn have comparatively better status with 54.8%, 52.6%, 51.3% and 61.8% of households using soap on the date of the assessment respectively. In Buramino soap utilization is low 36%. Overall, one in two households use soap (51.1%).

2. Conclusion

The nutrition and food security situation across the refugee camps remains concerning, with several indicators showing deterioration compared to 2024. The overall Global Acute Malnutrition (GAM) rate stands at 18.6%, reflecting an increase of 3.7 percentage points from the previous year, while the Severe Acute Malnutrition (SAM) rate remains unchanged at 2.9%. GAM rates vary significantly across camps (13.2%–26%), with three of five camps exceeding the WHO/UNICEF emergency threshold of 15%, and all camps surpassing the UNHCR target of <10%. These findings place the situation within the high to very high classification for acute malnutrition.

Enrollment in nutrition treatment programs is critically low. Only 30.3% of eligible children aged 6–59 months are enrolled in TSFP, and 7.8% in OTP/SC far below the expected coverage of ≥90% for refugee settings. Infant and young child feeding practices also fall short of UNHCR standards, with 70% timely breastfeeding initiation (vs. target ≥85%), 61.4% exclusive breastfeeding (vs. ≥75%), and 43.3% adequate consumption of iron-rich foods (vs. ≥60%).

Child health indicators show relative stability, including low diarrhea prevalence, strong measles vaccination coverage, and low mortality, supported by good coverage of deworming and vitamin A supplementation over the last

year. Maternal health indicators remain mixed, with strong ANC attendance and iron supplementation offset by limited maternal nutrition program uptake.

Food security conditions show marginal improvement compared to the previous year. The General Food Distribution (GFD) lasts an average of 20.4 days, slightly higher than the 20.2 days recorded in 2024, while 33.7% of households have acceptable food consumption. Despite some improvement in the Coping Strategies Index, more households are resorting to negative coping mechanisms, underscoring deepening vulnerability.

WASH indicators show modest progress, with average per capita water consumption at 19.6 liters, over 51% of households having soap at the time of assessment, and nearly universal use of toilets, predominantly shared or communal latrines.

Looking ahead, several emerging risks are likely to further worsen the situation. These include the discontinuation of blanket supplementary feeding, ongoing and deepening funding constraints, changes in exchange policies, anticipated changes in nutrition partners and service delivery, high staff turnover, and reduced UNHCR capacity for monitoring and technical support. Limited livelihood opportunities and the planned reduction of GFD to 40% are expected to exacerbate both nutritional and food security challenges among refugee households.

Overall, the convergence of deteriorating nutrition indicators, constrained service delivery capacity, and weakening household resilience signals a high-risk outlook requiring urgent attention, sustained funding, and strengthened multi-sectoral interventions.

3. Recommendation

3.1. Requiring Immediate Action

- **Strengthen monthly MUAC & WHZ screening** to address current coverage gaps and ensure early referral and treatment of malnutrition cases.
- **Improve staffing capacity** at nutrition facilities through targeted training to enhance service quality.
- **Reinforce quarterly joint monitoring** by UNHCR, RRS, WFP, UNICEF, and partners to identify programmatic gaps and address them in a timely manner.
- **Conduct a discouraging campaign on bottle feeding**, given that current practices show *1 in 5 mothers* using bottle feeding significantly above the UNHCR standard of *1 in 20 or <5%.*
- **Advocate for the resumption of Blanket Supplementary Feeding Program (BSFP)**, as rising malnutrition rates require urgent reinstatement of this preventive service.
- **Deploy dedicated IYCF focal persons in each camp** to strengthen IYCF activities at community level and within Baby-Friendly Spaces (BFS).

3.2. Short to Intermediate time Action

- **Improve nutrition program coverage**, particularly for Targeted Supplementary Feeding Program (TSFP) and therapeutic feeding services for children aged 6–59 months.
- **Strengthen outreach activities**, including active case identification and follow-up of malnourished children.
- **Introduce combined cash and in-kind assistance** in the General Food Ration (GFR) to enhance household flexibility and dietary diversity.
- **Expand small-scale domestic food production** initiatives such as vegetable gardening, poultry rearing, and shoat farming.

- **Reassess staffing levels for nutrition programs**, aligning human resources with program needs identified, particularly those related to IYCF service gaps.
- **Improve coordination with agriculture and livelihood actors** to include nutritional vulnerability as a targeting criterion and increase access of vulnerable households to livelihood opportunities.
- **Diversify funding sources** for nutrition programs to ensure sustainability and resilience against funding gaps.
- **Enhance program monitoring and performance tracking** to identify low or suboptimal performance early and enable corrective actions.
- **Advocate and mobilize resources** to increase GFR assistance from the current 40% toward the recommended 100%.
- **Strengthen WASH awareness campaigns**, particularly the promotion of handwashing with soap to reduce disease-related malnutrition.

3.3. Long term

- **Collaborate with regional government authorities** to provide refugees with access to land for food production, supporting long-term self-sufficiency.
- **Work with local authorities to integrate refugees into national nutrition programs**, ensuring continuity of services during periods of resource constraints and supporting cost-effective, sustainable approaches.

4. Annex

Appendix 1: Questionnaires

UNHCR Standardised Expanded Nutrition Survey (SENS) Questionnaire

Greeting and reading of rights:

THIS STATEMENT IS TO BE READ TO THE HEAD OF THE HOUSEHOLD OR, IF THEY ARE ABSENT, ANOTHER ADULT MEMBER OF THE HOUSE BEFORE THE INTERVIEW. DEFINE HEAD OF HOUSEHOLD AS MEMBER OF THE FAMILY WHO MANAGES THE FAMILY RESOURCES AND IS THE FINAL DECISION MAKER IN THE HOUSE.

- Hello, my name is _____ and I work with *[organisation/institution]*. We would like to invite your household to participate in a survey that is looking at the nutrition and health status of people living in this [*camp / survey area*].
- UNHCR is sponsoring this nutrition survey.
- Taking part in this survey is totally your choice. You can decide to not participate, or if you do participate you can stop taking part in this survey at any time for any reason. If you stop being in this survey, it will not have any negative effects on how you or your household is treated or what assistance you receive.
- If you agree to participate, we will ask you some questions about your family and we will also measure all the children in the household who are older than 6 months and younger than 5 years *[and/or women]*. In addition to these assessments, we will test a small amount of blood from the finger of the children and women to see if they have anaemia.
- Before we start to ask you any questions or take any measurements, we will ask you to give us your verbal consent. Be assured that any information that you will provide will be kept strictly confidential.
- You can ask me any question that you have about this survey before you decide to participate or not.
- If you do not understand the information or if your questions were not answered to your satisfaction, do not declare your consent on this form. Thank you.

1. Demography questionnaire

1 questionnaire per household

This questionnaire is to be administered to the head of the household or, if THEY ARE absent, another adult member of the household.

No	QUESTION	ANSWER CODES	
SECTION IDENTIFICATION THIS SECTION IS TO BE COMPLETED IN ALL SELECTED HOUSEHOLDS. THIS MODULE IS MANDATORY TO COMPLETE.			
ID1	Name **NAME**	|_____|	
ID3	Zone Code / Number **ZONE**		|___|___|
ID4	Village Code / Number **VILLAGE**		|___|___|
ID5	Date of interview (dd/mm/yyyy) **SURVDAT**	Day/Month/Year….|___|___| /|___|___|	
ID6	Cluster Number **CLUSTER**		|___|___|
ID7	Team Number **TEAM**		|___|
ID8	Household Number **HH**		|___|___|

No	QUESTION	ANSWER CODES	
SECTION DM1: Household Head Information			
Note	THESE QUESTIONS NEED TO BE ASKED TO THE HEAD OF THE HOUSEHOLD or, if THEY ARE absent, another adult member of the household.		
DM1	Was consent given for conducting the interview using Mobile Data Collection (use of smartphone)? ENSURE THAT YOU HAVE INTRODUCED THE TEAM AND INFORMED THEM ABOUT THE INTERVIEW. **MDCCONST**	Yes 1 No 2 Absent 3	|___| **IF ANSWER IS 2 or 3 STOP HERE**
DM2	What is the sex of the household head? THE HOUSEHOLD HEAD IS THE PERSON RESPONSIBLE FOR MAKING THE DECISIONS FOR THE HOUSEHOLD AS A WHOLE. use the term agreed upon during the training. **HHHSEX**	Male m Female f	|___|
DM3	What is the age of the household head (years)? YOU DO NOT NEED TO SEE PROOF OF AGE. **Lower limit=6**	RECORD THE NUMBER IN YEARS IF KNOWN. RECORD 97 IF 97 YEARS OR OLDER. RECORD 98 IF UNKNOWN.	|___|___| years

	Upper limit=98 **HHHAGE**		
SECTION DM2: Survey of Household Members			
DM4	What is the total number of household members? **Lower limit=1** **Upper limit=30** **DMHHSIZE**	RECORD THE NUMBER.	|___|___| people
Note	ASK INTERVIEWEE IF THOSE ARE ALL THE MEMBERS IN THE HOUSEHOLD AND THAT NO ONE IS MISSING. THESE QUESTIONS NEED TO BE COMPLETED FOR EACH HH MEMBER WHO LIVES IN THE HOUSEHOLD.		
DM5	Name of household member ONLY WRITE FIRST NAME. **NAME**	|_____|	
DM6	What is the sex of the household member? **HHMSEX**	Male m Female f	|___|
DM7	What is the age of the household member (years)? YOU DO NOT NEED TO SEE PROOF OF AGE. **Lower limit=0** **Upper limit=98** **HHMAGE**	RECORD THE NUMBER IN YEARS IF KNOWN. IF AGE IS LESS THAN 1 YEAR, RECORD 0. RECORD 97 IF 97 YEARS OR OLDER. RECORD 98 IF UNKNOWN.	|___|___| years
DM8	Is the household member currently pregnant? **HHMPREG**	Yes 1 No 2 Don't know 8	|___|
DM9	Was consent given for taking the GPS coordinates of the household? **GPSCONST**	Yes 1 No 2	|___|
Note	Summary messages WRITE DOWN THE SUMMARY DATA PROVIDED BELOW ON THE PARTICIPANTS AND MEASURES CONTROL SHEET.		
DM10	**Total number of children under 5 (0-4 years) |___|___| children under-5** **TOTU5**		
DM11	**Total number of women aged 15-49 years |___|___| women** **TOTWM**		
DM12	**Total number of pregnant women aged 15-49 years |___|___| pregnant women** **TOTPREG**		
	Interviewer: I confirm that questionnaire is complete: yes/no		
	Supervisor: I confirm that questionnaire is complete.: yes/no MESSAGE TO INTERVIEWER: DO NOT ANSWER THIS QUESTION.		

UNHCR
United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

FOOD SECURITY
1 questionnaire per household

This questionnaire is to be administered to the Main Caretaker WHO IS RESPONSIBLE FOR COOKING THE MEALS.

No	QUESTION	ANSWER CODES	
SECTION IDENTIFICATION THIS SECTION IS TO BE COMPLETED IN ALL SELECTED HOUSEHOLDS. THIS MODULE IS MANDATORY TO COMPLETE.			
ID1	Camp Name **CAMPNAME**	|_____|	
ID2	Section Code / Number **SECTION/ZONE**		|___|___|___|
ID4	Block Code / Number **BLOCK**		|___|___|___|
ID5	Date of interview (dd/mm/yyyy) **SURVDAT**	Day/Month/Year…..|___|___| /|___|___| / |___|___||___|___|	
ID7	Team Number **TEAM**		|___|___|
ID8	Household Number **HH**		|___|___|___|

No	QUESTION	ANSWER CODES	
SECTION FS1: Food assistance and cooking fuel (if applicable)			
Note	ThiS questionnaire NEED to be ASKED To the Main Caretaker WHO IS RESPONSIBLE FOR COOKING THE MEALS.		
FS1	Was consent given for conducting the interview? ENSURE THAT YOU HAVE INTRODUCED THE TEAM AND INFORMED THEM ABOUT THE INTERVIEW. **FSCONST**	Yes 1 No 2 Absent 3	|___| **IF ANSWER IS 2 or 3 STOP HERE**
FS2	What is your household's assistance category? (IF APPLICABLE) **HHASSIST**	Category A 1 Category B 2 Category C 3 Category D 4 Other 6 Don't know 8	|___|
FS3	Does your household receive food assistance (general in-kind food distribution and/or cash grants and/or food vouchers) [INSERT LOCAL NAMES OF FOOD ASSISTANCE PROGRAMMES]? **FOODASS**	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 1 OR 8 GO TO FS5**
FS4	Why do you not have access to the food assistance programmes [INSERT LOCAL NAMES OF FOOD ASSISTANCE PROGRAMMES]? **YNOFOODA**	Ration card and/or cash grants and/or food voucher not given even if eligible 1 Not registered 2	|___| **GO TO FS10**

		Registered but determined not eligible 3 Other 6 Don't know 8	
FS5	How many days did the food from the general in-kind food distribution from the [INSERT] cycle of [INSERT LAST CYCLE MONTH] last? (IF APPLICABLE) **Lower limit=1** **Upper limit=98** **GFDLAST**	RECORD THE NUMBER OF DAYS IF KNOWN. RECORD 98 IF UNKNOWN.	|___|___|
FS6	Does your household receive cash grants to meet basic needs [INSERT LOCAL NAME FOR CASH GRANTS]? (IF APPLICABLE) **CASH**	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 2 OR 8 GO TO FS8**
FS7	How did you spend the cash grants you received in [INSERT LAST CYCLE MONTH OR DISTRIBUTION]? (IF APPLICABLE) SELECT ALL THAT APPLY. **CASHSPNT: FOOD / WATER / HYGIENE / HEALTH / HOUSE / FUELA / LIVELI / DEBTS / SAVING / EDUCA / OTHER / DKN**	Food 01 Water 02 Hygiene items, clothes, shoes 03 Health costs (including medicines) 04 Rent, shelter repair, household items (e.g. mattress, blanket, jerrycan), utilities and bills (e.g. electricity, water bills, phone calling credit) 05 Firewood/fuel for cooking or heating 06 Assets for a livelihood activity (e.g. seeds, tools, farming, fishing, petty trade, etc.) 07 Debt repayment 08 Save some money or gave to other family members, relatives, friends 09 Education (e.g. school fees, uniform, books) 10 Other 96 Don't know 98	|___|___|
FS8	Does your household receive a food voucher [INSERT LOCAL NAME OF FOOD VOUCHER] for general food needs? (IF APPLICABLE)	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 2 OR 8**

	VOUCHER		**GO TO FS10**
FS9	Did you sell any of the vouchers or products accessed with food vouchers received in [INSERT LAST CYCLE MONTH OR DISTRIBUTION] to access other goods and/or services? (IF APPLICABLE) **SELLVOU**	Yes 1 No 2 Don't know 8	|___|
FS10	Which of your household's basic needs can you not meet? DO NOT READ THE ANSWERS. SELECT ALL THAT APPLY. **NEEDSNOT: FOODB / WATERB / HYGIENEB / HEALTHB / HOUSEB / FUELB / LIVELIB / DEBTSB / SAVINGB / EDUCAB / NEEDSMET / OTHERB / DKNB**	Food 01 Water 02 Hygiene items, clothes, shoes 03 Health costs (including medicines) 04 Rent, shelter repair, household items (e.g. mattress, blanket, jerrycan), utilities and bills (e.g. electricity, water bills, phone calling credit) 05 Firewood/fuel for cooking or heating 06 Assets for a livelihood activity (e.g. seeds, tools, farming, fishing, petty trade, etc.) 07 Debt repayment 08 Save some money or support other family members, relatives, friends 09 Education (e.g. school fees, uniform, books) 10 All basic needs are met 11 Other 96 Don't know 98	|___|___|
FS11	What cooking fuel does your household usually use? (IF APPLICABLE) **HHFUEL**	Wood 01 Charcoal 02 Kerosene 03 Biogas 04 Liquid petroleum gas (LPG) 05 Ethanol 06 Briquettes 07 Other 96 Don't know 98	|___|___|
FS12	Does your household receive cooking fuel assistance? (IF APPLICABLE)	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 2 or 8**

	FUEL		**GO TO FS14**
FS13	How many days did the fuel from the [INSERT] cycle of [INSERT LAST CYCLE MONTH] last? (IF APPLICABLE) **Lower limit=1** **Upper limit=98** **FUELLAST**	RECORD THE NUMBER OF DAYS IF KNOWN (RECORD 98 IF UNKNOWN)	|___|___|
SECTION FS2: Coping Strategies and Reduced Coping Strategy Index (rCSI)			
Note	EXPLAIN TO THE RESPONDENT THAT THE QUESTIONS APPLY TO ALL HOUSEHOLD MEMBERS AND NOT ONLY TO HIM/HER.		
FS14	In the past 4 weeks, have you or anyone in your household needed to stop a child from attending school? (OPTIONAL) **SCHOOL**	Yes 1 No 2 Don't know 8	|___|
FS15	In the past 4 weeks, have you or anyone in your household needed to sold any assets that would not have normally sold in order to buy food or basic goods (e.g. sold items such as a car, motorbike, plough, sewing machine, tools, seed stock, livestock, productive land)? (OPTIONAL) **SELLLIV**	Yes 1 No 2 Don't know 8	|___|
FS16	In the past 4 weeks, have you or anyone in your household needed to ask for money from strangers (begging)? (OPTIONAL) **BEG**	Yes 1 No 2 Don't know 8	|___|
FS17	In the past 4 weeks, have you or anyone in your household needed to move to a poorer quality shelter? (OPTIONAL) **SHELTER**	Yes 1 No 2 Don't know 8	|___|
FS18	In the past 4 weeks, have you or anyone in your household needed to send household members under the age of 16 to work? (OPTIONAL) **CHILDLAB**	Yes 1 No 2 Don't know 8	|___|
FS19	In the past 4 weeks, have you or anyone in your household needed to send a member of the household to work far away? (OPTIONAL) **WORKAWAY**	Yes 1 No 2 Don't know 8	|___|
FS20	In the past 4 weeks, have you or anyone in your household needed to engage in activities for money or items that you feel puts you or other members of your household at risk of harm (e.g. illegal activities like hunting, fishing, survival sex, drug dealing, early marriage, joining armed groups, etc.)? (OPTIONAL) **RISKYACT**	Yes 1 No 2 Don't know 8	|___|
FS21	In the past 4 weeks, have you or anyone in your household needed to skip paying rent / debt repayments to meet other needs? (OPTIONAL) **RENTDEBT**	Yes 1 No 2 Don't know 8	|___|
FS22	In the past 4 weeks, have you or anyone in your household needed to take out new loans or borrowed money? (OPTIONAL)	Yes 1 No 2 Don't know 8	|___|

	LOANBRW		
FS23	In the past 4 weeks, have you or anyone in your household needed to reduce expenditure on hygiene items, water, baby items, health or education in order to meet household food needs? (OPTIONAL) **REDUCE**	Yes 1 No 2 Don't know 8	|___|
Note	EXPLAIN TO THE RESPONDENT THAT THE QUESTIONS APPLY TO ALL HOUSEHOLD MEMBERS AND NOT ONLY TO HIM/HER.		
FS24	In the past 7 days, how many days did your household rely on less preferred and/or less expensive food due to lack of food or money to buy food? **Lower limit=0** **Upper limit=7** **LESSEXP**	RECORD THE NUMBER OF DAYS, FROM 0-7.	|___|
FS25	In the past 7 days, how many days did your household borrow food or rely on help from a friend or relative due to lack of food or money to buy food? **Lower limit=0** **Upper limit=7** **BRW**	RECORD THE NUMBER OF DAYS, FROM 0-7.	|___|
FS26	In the past 7 days, how many days did your household reduce the number of meals eaten in a day due to lack of food or money to buy food? **Lower limit=0** **Upper limit=7** **LESSMEAL**	RECORD THE NUMBER OF DAYS, FROM 0-7.	|___|
FS27	In the past 7 days, how many days did your household limit portion sizes at mealtime due to lack of food or money to buy food? **Lower limit=0** **Upper limit=7** **REDMEAL**	RECORD THE NUMBER OF DAYS, FROM 0-7.	|___|
FS28	In the past 7 days, how many days did your household reduce consumption by adults so children could eat, due to lack of food or money to buy food? IN HOUSEHOLDS WIHTOUT CHILDREN UNDER 5 YEARS OF AGE, THE ANSWER SHOULD BE '0'. **Lower limit=0** **Upper limit=7** **REDADULT**	RECORD THE NUMBER OF DAYS, FROM 0-7.	|___|
SECTION FS3 : FCS and FCS-N			
FS29	How many days over the last 7 days, did members of your household eat the following food items, prepared and/or consumed at home?		

	READ THE LIST OF FOODS AND DO NOT PROBE. ONLY RECORD THE CONSUMPTION OF SIGNIFICANT QUANTITIES OF FOOD BY THE HOUSEHOLD. WRITE '0' IF NOT CONSUMED IN THE LAST 7 DAYS.	
		Number of days eaten in past 7 days
	1. In the past 7 days, how many days did your household eat any [INSERT CEREALS LOCALLY AVAILABLE] (*e.g. wheat, corn/maize, barley, buckwheat, millet, oats, rice, rye, sorghum, teff*) or any foods made from these such as [INSERT LOCAL FOODS] (*e.g. bread, porridge, noodles, ugali, nshima, pasta*). Or any [INSERT WHITE ROOTS AND TUBERS LOCALLY AVAILABLE] *(e.g. green bananas, lotus root, parsnip, taro, plantains, white potatoes, white yam, white cassava, white sweet potato)* or any foods made from roots such as [INSERT LOCAL FOODS]. Or any [INSERT OTHER STARCHY FOODS LOCALLY AVAILABLE] *(e.g. green bananas, plantains)* **CRLROTU**	|___| **Lower limit=0** **Upper limit=7**
	2. In the past 7 days, how many days did your household eat any [INSERT LEGUMES, NUTS AND SEEDS LOCALLY AVAILABLE] *(e.g. dried beans, chickpeas, lentils, nuts, seeds)* or any foods made from these such as [INSERT LOCAL FOODS] *(e.g. hummus, peanut butter)* **PULSE**	|___| **Lower limit=0** **Upper limit=7**
	3. In the past 7 days, how many days did your household eat any [INSERT MILK AND MILK PRODUCTS LOCALLY AVAILABLE] *(e.g. fresh milk, sour milk, infant formula, cheese, kefir, yogurt)* **MILK**	|___| **Lower limit=0** **Upper limit=7**
	4. In the past 7 days, how many days did your household eat any meat, fish and eggs *(e.g. goat, beef, chicken, pork, blood, fish including canned tuna, snails, and/or other seafood, eggs)* **PROT**	|___| **IF ANSWER IS 0 GO TO QUESTION 5** **Lower limit=0** **Upper limit=7**
	4.1. In the past 7 days, how many days did your household eat any [INSERT FLESH MEAT LOCALLY AVAILABLE] *(e.g. beef, goat, lamb, mutton, pork, rabbit, chicken, duck, cane rat, guinea pig, rat, agouti frogs, snakes, insects)* **FLSHMT**	|___| **Lower limit=0** **Upper limit=7**
	4.2. In the past 7 days, how many days did your household eat any [INSERT ORGAN MEAT or blood-based foods Locally available] *(e.g. liver, kidney, heart)* **ORGMT**	|___| **Lower limit=0** **Upper limit=7**
	4.3. In the past 7 days, how many days did your household eat any [INSERT FRESH, DRIED OR CANNED FISH OR SHELLFISH LOCALLY AVAILABLE] *(e.g. anchovies, tuna, sardines, shark, whale, roe/fish eggs, clam, crab, lobster, crayfish, mussels, shrimp, octopus, squid, sea snails)*	|___| **Lower limit=0** **Upper limit=7**

	FISHSF	
	4.4. In the past 7 days, how many days did your household eat any eggs from [INSERT EGGS LOCALLY AVAILABLE] *(e.g. eggs from chicken, duck, guinea fowl)* **EGGS**	|___| **Lower limit=0** **Upper limit=7**
	5. In the past 7 days, how many days did your household eat any [INSERT ANY VEGETABLES and leaves locally available] *(e.g. spinach, cassava leaves, onion, carrot, lettuce, bamboo shoots, cabbage, pepper, tomato, eggplant, zucchini, etc.)* **VEGL**	|___| **IF ANSWER IS 0 GO TO QUESTION 6** **Lower limit=0** **Upper limit=7**
	5.1. In the past 7 days, how many days did your household eat any [INSERT vitamin A rich vegetables and tubers locally available] *(e.g. carrot, pumpkin, squash, or sweet potato that are orange inside, red sweet pepper)* **VITAV**	|___| **Lower limit=0** **Upper limit=7**
	5.2. In the past 7 days, how many days did your household eat any [INSERT DARK GREEN LEAFY VEGETABLES locally available INLCUDING WILD FORMS AND VITAMIN A RICH LEAVES] (*e.g. amaranth, arugula (rocket), cassava leaves, kale, broccoli, spinach*) **GREENV**	|___| **Lower limit=0** **Upper limit=7**
	6. In the past 7 days, how many days did your household eat any [INSERT ANY FRUITS locally available INCLUDING WILD FRUITS], and 100% fruit juice made from these *(e.g. mango, apricot, peach, apple, avocados, banana, coconut flesh, lemon, orange, etc.)* **FRT**	|___| **IF ANSWER IS 0 GO TO QUESTION 7** **Lower limit=0** **Upper limit=7**
	6.1. In the past 7 days, how many days did your household eat any [INSERT VITAMIN A RICH FRUITS locally available], and 100% fruit juice made from these *(e.g. mango (ripe, fresh and dried), cantaloupe melon (ripe), apricot (fresh or dried), ripe papaya, passion fruit (ripe), dried peach)* **VITAFRT**	|___| **Lower limit=0** **Upper limit=7**
	7. In the past 7 days, how many days did your household eat any [INSERT OILS AND FATS LOCALLY AVAILABLE] added to food or used for cooking *(e.g. vegetable / nut oil made from almond, avocado, canola, coconut, cottonseed, groundnut, maize, olive, rapeseed, safflower, sesame, soybean, sunflower/walnut, ghee, butter, margarine, mayonnaise, palm oil -**not** red palm oil, shortenings, sour cream)* **FATS**	|___| **Lower limit=0** **Upper limit=7**
	8. In the past 7 days, how many days did your household eat any [INSERT SWEETS, SWEETENED SODA OR JUICE DRINKS AND SUGARY FOODS LOCALLY AVAILABLE] *(e.g. sugar, honey, syrup, soda drinks, chocolates, candies, cookies, sweet biscuits and cakes)* **SWTS**	|___| **Lower limit=0** **Upper limit=7**
	9. In the past 7 days, how many days did your household eat any [INSERT SPICES, CONDIMENTS AND BEVERAGES LOCALLY AVAILABLE] *(e.g. black pepper, salt, chilies, soy sauce, hot sauce, fish powder, fish sauce, ginger, herbs, magi cubes, ketchup, mustard, coffee, tea, milk/cream in small quantities)*	|___| **Lower limit=0** **Upper limit=7**

	SPICE		
	10. In the past 7 days, how many days did your household eat any [INSERT specialized nutritious foods available] *(e.g. CSB, Super Cereals)* (IF APPLICABLE) **SPENUTF**	|___| **Lower limit=0** **Upper limit=7**	
FS30	How was this food acquired? **FOODSOU**	Purchase (using cash grants and/or with their own cash) 01 Own production (crops, livestock, fishing/hunting, gathering) 02 Traded goods/services, barter 03 Borrowed (loan/credit from traders) 04 Receive as gift (from family relatives or friend/neighbor 05 In-kind or voucher based food assistance 06 Other 96 Don't know 98	|___|___|
ID9	Please take a GPS reading (OPTIONAL) AVOID TAKING IT INSIDE THE HOUSE OR UNDER TREES (TO MAKE IT FASTER). **GPS**	|_____|	
	Interviewer: I confirm that questionnaire is complete: yes/no		
	Supervisor: I confirm that questionnaire is complete.: yes/no MESSAGE TO INTERVIEWER: DO NOT ANSWER THIS QUESTION.		

UNHCR
United Nations High Commissioner for Refugees
Haut Commissariat des Nations Unies pour les réfugiés

Children 0-59 anthropometry, health, IYCF & anaemia

1 questionnaire per child 0-59 months

This questionnaire is to be administered to ALL CHILDREN BETWEEN 0-59 MONTHS IF THE IYCF MODULE IS INCLUDED

No	QUESTION	ANSWER CODES	
SECTION IDENTIFICATION THIS SECTION IS TO BE COMPLETED IN ALL SELECTED HOUSEHOLDS. THIS MODULE IS MANDATORY TO COMPLETE.			
ID1	Name **NAME**	|_____|	
ID3	Zone Code / Number **ZONE**		|___|___|
ID4	Village Code / Number **VILLAGE**		|___|___|
ID5	Date of interview (dd/mm/yyyy) **SURVDAT**	Day/Month/Year…..|___|___| /|___|___|	
ID6	Cluster Number **CLUSTER**		|___|___|
ID7	Team Number **TEAM**		|___|
ID8	Household Number **HH**		|___|___|
No	**QUESTION**	**ANSWER CODES**	
SECTION CHILD1: Details of the Child 0-59 months THIS SECTION IS TO BE ADMINISTERED TO ALL CHILDREN IN THE SELECTED HOUSEHOLDS BETWEEN 0-59 MONTHS.			
Note	These questions need to be asked to the MOTHER OR THE Main CareGIVER.		
CH1	ID Number **ID**		|___|___|
CH2	Was consent given for conducting the interview and the measurements? ENSURE THAT YOU HAVE INTRODUCED THE TEAM AND INFORMED THEM ABOUT THE INTERVIEW AND THE MEASUREMENTS. **CHCONST**	Yes 1 No 2	|___| **IF ANSWER IS 2 STOP HERE**
CH3	Name of the child ONLY WRITE FIRST NAME. **CHNAME**	|_____|	
CH4	Sex of [NAME OF CHILD]? **SEX**	Male m Female f	|___|
CH5	Do you have an official age documentation for [NAME OF CHILD]? **XDOBK**	Yes 1 No 2	|___| **IF ANSWER IS 2 GO TO CH7**
CH6	[NAME OF CHILD]'s date of birth THE EXACT BIRTH DATE SHOULD ONLY BE TAKEN	Day/Month/Year…..|___|___| /|___|___| / ___|___||___|___|	

	FROM AN AGE DOCUMENTATION SHOWING DAY, MONTH AND YEAR OF BIRTH. **BIRTHDAT**		
CH7	Age of [NAME OF CHILD] in months **Lower limit=0 months** **Upper limit=59.99 months** **MONTHS**	SINCE NO AGE DOCUMENTATION IS AVAILABLE, ESTIMATE AGE USING A LOCAL EVENTS CALENDAR.	|___|___|months
Note	Verify that the child is ${MONTHS} months old. Remember, if they are older than 59 months; they are not eligible for inclusion, and you should stop here.		
SECTION CHILD2: Nutrition, Health and Anaemia Status of the Child 6-59 months THIS SECTION IS TO BE ADMINISTERED TO ALL CHILDREN BETWEEN 6 AND 59 MONTHS OF AGE.			
CH8	Is [NAME OF CHILD] currently present in the household? **CHPRES**	Yes 1 No 2	|___| **IF ANSWER IS 2 GO TO CH15**
CH9	[NAME OF CHILD]'s weight in kilograms (±0.1kg) DON'T FORGET THE DECIMAL. **Lower limit=3.0kg** **Upper limit=31.0kg** **WEIGHT**		|___|___|. |___| kg
CH10	Was the [NAME OF CHILD] dressed in clothes for the weight measurement? **CLOTHES**	Yes y No n	|___|
CH11	[NAME OF CHILD]'s length/height in cm (±0.1cm) DON'T FORGET THE DECIMAL. **Lower limit=54.0cm** **Upper limit=124.0cm** **HEIGHT**		|___|___|___|. |___| cm
CH12	Was [NAME OF CHILD] measured lying down or standing up? **MEASURE**	Child lying down l Child standing up h	|___|
CH13	Clinical examination: Does the [NAME OF CHILD] present bilateral pitting oedema? **EDEMA**	Yes y No n	|___|
CH14	[NAME OF CHILD]'s middle upper arm circumference (MUAC) in cm (±0.1cm) MEASURE LEFT ARM. DON'T FORGET THE DECIMAL. **Lower limit=7.0cm** **Upper limit=23.5cm** **MUAC**		|___|___|. |___| cm

CH15	Is [NAME OF CHILD] currently being treated in the SFP or the OTP/SC for malnutrition? SHOW CSB++ SACHET AND PLUMPY NUT **ENROL**	Yes, SFP 1 Yes, TFP (OTP/SC) 2 No 3 Don't know 8	|___|
CH16	Is [NAME OF CHILD] currently enrolled in the BSFP? SHOW CSB++ SACHET **BSFPCSB**	Yes 1 No 2 Don't know 8	|___|
CH17	Is [NAME OF CHILD] currently receiving MNPs sachets? SHOW MNPs SACHET **BSFPMNP**	Yes 1 No 2 Don't know 8	
CH19	Has [NAME OF CHILD] been vaccinated against measles? CHECK VACCINATION CARD (ONLY FOR CHILDREN OLDER THAN 9 MONTHS). **MEASLES**	Yes, card 1 Yes, recall 2 No or don't know 3	|___|
CH19	Has [NAME OF CHILD] received a vitamin A capsule in the past six months? CHECK VACCINATION/HEALTH CARD AND SHOW CAPSULE. **VITA**	Yes, card 1 Yes, recall 2 No or don't know 3	|___|
CH20	Was [NAME OF CHILD] given any drug for intestinal worms in the last six months? SHOW TABLET OF MEBENDAZOLE. **DEWORM**	Yes 1 No 2 Don't know 8	|___|
CH21	Has [NAME OF CHILD] had diarrhea in the past 2 weeks? CASE DEFINITION: THREE OR MORE LOOSE OR LIQUID STOOLS DURING 24 HOURS. **DIAR**	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 2 OR 8 GO TO CH24**
CH22	Did you give ORS sachets to [NAME OF CHILD] when s/he had diarrhea?	Yes 1 No 2 Don't know 8	|___|

	SHOW ORS SACHET. **DIARORS**		
CH23	Did you give zinc tablets or syrup to [NAME OF CHILD] when s/he had diarrhea? SHOW ZINC TABLET OR SYRUP. **DIARZINC**	Yes 1 No 2 Don't know 8	|___|
CH26	**Automatic referral for child with signs of acute malnutrition who is not already enrolled in a nutrition programme:** • Child needs to be referred for moderate acute malnutrition (if MUAC<12.5 cm and MUAC≥11.5 cm and/or WHZ<-2 and WHZ≥-3 and if ENROL equals to 3 or 8). • Child needs to be referred for severe acute malnutrition (if MUAC<11.5 cm and/or WHZ<-3 and/or bilateral pitting oedema is yes and if ENROL equals to 3 or 8). FILL OUT A REFERRAL FORM: ONE SLIP IS FOR THE MOTHER/CAREGIVER AND THE OTHER IS FOR THE HEALTH FACILITY. **REFMAM/REFSAM**		
SECTION IYCF1: Breastfeeding Status of the Child 0-23 months (part 1) This SECTION is to be administered to the MOTHER OR THE Main CareGIVER WHO IS RESPONSIBLE FOR FEEDING THE CHILD AND THE CHILD SHOULD BE BETWEEN 0 AND 23 MONTHS OF AGE.			
Note	These questions need to be asked to the MOTHER OR THE Main CareGIVER WHO IS RESPONSIBLE FOR FEEDING THE CHILD.		
IF1	Has [NAME OF CHILD] ever been breastfed? **EVERBF**	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 2 or 8 GO TO IF4**
IF2	How long after birth did you first put [NAME OF CHILD] to the breast? **INITBF**	Less than one hour 1 Between 1 and 23 hours 2 More than 24 hours 3 Don't know 8	|___|
IF3	Was [NAME OF CHILD] breastfed yesterday during the day or at night? **YESTBF**	Yes 1 No 2 Don't know 8	|___|
SECTION IYCF2: Breastfeeding Status of the Child 0-23 months (part 2) This SECTION is to be administered to the MOTHER OR THE Main CareGIVER WHO IS RESPONSIBLE FOR FEEDING THE CHILD AND THE CHILD SHOULD BE BETWEEN 0 AND 23 MONTHS OF AGE.			
IF4	Now I would like to ask you about liquids that [NAME OF CHILD] may have had yesterday during the day and at night. I am interested in whether your child had the item even if it was combined with other foods. Yesterday, during the day or at night, did [NAME] receive any of the following? ASK ABOUT EVERY LIQUID. EVERY QUESTION MUST HAVE AN ANSWER. IF ITEM WAS GIVEN, SELECT 'YES'. IF ITEM WAS NOT GIVEN, SELECT 'NO'. IF CAREGIVER DOES NOT KNOW, SELECT 'DON'T KNOW'. Yes No DK		

	4A. Plain water **WATER**	4A……1 2 8	
	4B. Infant formula, for example **Lactogen, NAN** **INFORM**	4B……1 2 8	
	4C. Milk such as tinned, powdered, or fresh animal milk, for example **Nido, Cowbell, Tanga Fresh, Al-mudhish, first choice** **MILK**	4C……1 2 8	
	4D. Juice or juice drinks, for example **Ceres, Azam, Mo juice**, **Jambo juice, etc.** **JUICE**	4D……1 2 8	
	4E. Clear broth **BROTH**	4E……1 2 8	
	4F. Sour milk or yogurt, for example **Asas, Tanga Fresh, Serengeti, Dar Fresh, Mara Milk** **YOGURT**	4F……1 2 8	
	4G. Thin porridge, for example made with maize, sorghum, millet, cassava or finger millet, CSB+/CSB++ **THINPOR**	4G……1 2 8	
	4H. Tea or coffee with milk **WHTEACOF**	4H……1 2 8	
	4I. Any other water-based liquids, for example sodas **Azam Cola, Pepsi, Twist, Coca cola**, other sweet drinks, herbal infusion, gripe water, **clear tea with no milk, black coffee**, ritual fluids (**togwa**) **WATLQD**	4I……...1 2 8	
IF5	Yesterday, during the day or at night, did [NAME] eat solid or semi-solid (soft, mushy) food? **FOOD**	Yes…….……...1 No…….…... 2 Don't know…….…... 8	|___|
SECTION IYCF3: Bottle Feeding for the Child 0-23 months			
IF6	Did [NAME OF CHILD] drink anything from a bottle with a nipple yesterday during the day or at night? **BOTTLE**	Yes…….……...1 No…….…... 2 Don't know…….…... 8	|___|
SECTION IYCF4: Iron-fortified or Iron-rich Foods for the Child 6-23 months			

IF7	Now I would like to ask you about some particular foods [NAME OF CHILD] may eat. I am interested in whether your child had the item even if it was combined with other foods. Yesterday, during the day or at night, did [NAME] consume any of the following? ASK ABOUT EVERY ITEM. EVERY QUESTION MUST HAVE AN ANSWER. IF ITEM WAS GIVEN, SELECT 'YES'. IF ITEM WAS NOT GIVEN, SELECT 'NO'. IF CAREGIVER DOES NOT KNOW, SELECT 'DON'T KNOW'.	Yes No DK	
	7A. Any meat such as beef, pork, lamb, goat, chicken, liver, kidney, heart or other organ meats, fresh or dried fish, sardines, seafood, insects, etc. **FLESHFD**	7A……..1 2 8	
	7B. CSB+ **FBF**	7B……..……1 2 8	
	7C. CSB++ SHOW CSB++ SACHET **FBFSUPER**	7C……..……1 2 8	
	7D. Plumpy'Nut® SHOW SACHET. **RUTF**	7D……..…1 2 8	
	7E. Iron fortified infant formula, for example **Lactogen, NAN** **INFORMFE**	7E……...…….....1 2 8	
	7F. Iron fortified solid, semi-solid or soft foods designed specifically for infants and young children, for example **Cerelac, Weetabix** **FOODFE**	7F……....1 2 8	
IF8	Yesterday, during the day or at night, did [NAME] consume any food to which you added a MNPs sachet like this? SHOW MICRONUTRIENT POWDER SACHET. **MNP**	Yes…….……....1 No…….…..... 2 Don't know…….…..... 8	|___|
ID9	Please take a GPS reading AVOID TAKING IT INSIDE THE HOUSE OR UNDER TREES (TO MAKE IT FASTER). **GPS**	|_____|	
	Interviewer: I confirm that questionnaire is complete: yes/no		
	Supervisor: I confirm that questionnaire is complete.: yes/no		

	MESSAGE TO INTERVIEWER: DO NOT ANSWER THIS QUESTION.

WASH

1 questionnaire per household

This questionnaire is to be administered to the head of the household or, if they are absent, another adult member of the household.

No	QUESTION	ANSWER CODES	
SECTION IDENTIFICATION THIS SECTION IS TO BE COMPLETED IN HALF OF THE SELECTED HOUSEHOLDS.			
ID1	Camp Name **SURVEY MANAGER INSTRUCTIONS:** FOR OUT-OF CAMP SURVEYS, THIS WILL BE THE VILLAGE OR TOWN NAME. if several SENS surveys are carried out in different settings, specify iN THE MDC CODING If it is in a camp or an out-of-camp setting (e.g. host community SENS or urban SENS). This is needed to adapt the questionnaire and automatic skip patterns (e.g section DM2 to do in out-of-camp settings only). **CAMPNAME**	|_____|	
ID2	Section Code / Number **SURVEY MANAGER INSTRUCTIONS:** SPECIFY IF NUMERICAL OR ALPHABETICAL. **SECTION**		|___|___|___|
ID3	Zone Code / Number **SURVEY MANAGER INSTRUCTIONS:** SPECIFY IF NUMERICAL OR ALPHABETICAL. **ZONE**		|___|___|___|
ID4	Block Code / Number **SURVEY MANAGER INSTRUCTIONS:** SPECIFY IF NUMERICAL OR ALPHABETICAL. **BLOCK**		|___|___|___|
ID5	Date of interview (dd/mm/yyyy) **SURVDAT**	Day/Month/Year…..|___|___| /|___|___| / |___|___||___|___|	
ID6	Cluster Number **SURVEY MANAGER INSTRUCTIONS:** FOR SURVEYS USING A CLUSTER SAMPLING ONLY. IN SURVEYS USING A SYSTEMATIC OR SIMPLE RANDOM		|___|___|

	SAMPLING, OR IN EXHAUSTIVE SURVEY, THE CLUSTER NUMBER WILL BE AUTOMATICALLY "1" IN THE FINAL DATABASE. **CLUSTER**		
ID7	Team Number **TEAM**		|___|___|
ID8	Household Number **SURVEY MANAGER INSTRUCTIONS:** They are several options on how to assign numbers to households. The assignment of numbers depends on the survey design, household listing process and survey manager PREFERENCES. REFER TO SENS PRE-MODULE TOOL: [**TOOL 8-** DATA COLLECTION CONTROL SHEET]. FOR A MODEL TOOL ON WHERE HOUSEHOLD NUMBERS CAN BE WRITTEN FOR THE TEAMS TO TRACK AND FOLLOW. **HH**		|___|___|___|

No	QUESTION	ANSWER CODES	
SECTION WS1: WASH interview questions			
Note	THESE QUESTIONS NEED TO BE ASKED TO THE HEAD OF THE HOUSEHOLD or, if they are absent, another adult member of the household.		
WS1	Was consent given for conducting the interview? ENSURE THAT YOU HAVE INTRODUCED THE TEAM AND INFORMED THEM ABOUT THE INTERVIEW. **SURVEY MANAGER INSTRUCTIONS:** If a HOUSEHOLD is absent, the team leader should record this information and determine another time to return on the same day AND/or before to leave the survey Area. The team should revisit an absent HOUSEHOLD up to two times, if it is logistically feasible, on the same survey day. If they are unsuccessful after this, the HOUSEHOLD should be recorded as an absence and they should <u>not</u> be replaced with another household. REFER TO SENS PRE-MODULE TOOL: [**TOOL 8-** DATA COLLECTION CONTROL SHEET] FOR A MODEL TOOL TO HELP TRACK THE ABSENT HOUSEHOLDS. **WSCONST**	Yes 1 No 2 Absent 3	|___| **IF ANSWER IS 2 or 3 STOP HERE**
WS2	What is the total number of household numbers? RECORD NUMBER. **SURVEY MANAGER INSTRUCTIONS:**		|___|___|

	REFER TO DEMOGRAPHY LISTING TO AVOID ASKING THE SAME QUESTION TWICE. **HHSIZE**		
WS3	What is the principal source of drinking water for members of your household? SELECT ONE BUT DO NOT PROMPT WITH RESPONSES. CONSIDER DRINKING WATER ONLY. **SURVEY MANAGER INSTRUCTIONS:** MODIFY RESPONSES FOR YOUR CONTEXT. E.G. IF THAT TYPE OF SOURCE DOES NOT EXIST, DO NOT KEEP IT. IF IT IS RARE, CONSIDER OMITTING IT AS IT WILL BE CAPTURED UNDER OTHER. DELETE OPTIONS AS NEEDED. A VISUAL AID SHOWING DIFFERENT TYPES OF WATER SOURCES MAY BE USEFUL FOR TRAINING PURPOSES. WHEN DELETING OPTIONS, KEEP THE ORIGINAL ANSWER CODES AND DO NOT CHANGE. **SOURCE**	Public tap/standpipe 01 Handpumps/boreholes 02 Water seller/kiosks 03 Piped connection to house (or neighbour's house) 04 Protected spring 05 Bottled water, water sachets 06 Tanker trucks 07 Unprotected hand-dug well 08 Surface water (lake, pond, dam, river) 09 Unprotected spring 10 Rain water collection 11 Other 96 Don't know 98	|___|___|
WS4	Where do you and your household members (excluding children under 5) usually go to defecate? SELECT ONE BUT DO NOT PROMPT WITH RESPONSES. **SURVEY MANAGER INSTRUCTIONS:** A household latrine is a latrine used by one household only. A communal latrine is a latrine used by multiple households. **TOILET**	Household latrine 1 Communal latrine 2 Open defecation 3 Plastic bag 4 Bucket toilet 5 Other 6 Don't know 8	|___|
SECTION WS2: WASH observation questions			
	SURVEY MANAGER INSTRUCTIONS: These observations are done after the initial questions to ensure the flow of the interview is not broken.		
Note	EXPLAIN TO THE RESPONDENT THAT THESE QUESTIONS RELATE TO WATER USED FOR DOMESTIC PURPOSES. THIS INCLUDES: DRINKING, COOKING/FOOD PREPARATION, BATHING, AND PERSONAL HYGIENE PLUS LAUNDRY AND OTHER HOUSEHOLD CLEANING. EXCLUDED FROM THIS ARE ANIMAL USE, BRICKMAKING OR OTHER INDUSTRY, OR AGRICULTURE/GARDENING (NON DOMESTIC).		
WS5	Please show me the soap you have in the household. **SURVEY MANAGER INSTRUCTIONS:** SOAP INCLUDES BAR SOAP, LIQUID SOAP, POWDER DETERGENT, AND SOAPY WATER	Presented within one minute 1 Not presented within one minute/no soap 2	|___|

	BUT DOES NOT INCLUDE ASH, SOIL, SAND OR OTHER HANDWASHING AGENTS. **SOAP**		
WS6	How many containers do you have to collect or store water for domestic purposes for your house? Please show me all of them one by one RECORD ONE BY ONE. CHECK FOR ALL OF THE CONTAINERS. DO NOT INCLUDE BROKEN, LEAKING, OR NON-FUNCTIONAL CONTAINERS. **Lower limit=0** **Upper limit=25** **CONTAINER**		|___|___|
WS7	What is the type of container? **TYPE**	Jerrycan 01 Bucket 02 Basin 03 Bottle 04 Saucepan 05 Drums 06 Other 96	|___|___|
WS8	What is the volume of container? ENTER THE AMOUNT OF LITRES THIS CONTAINER CAN HOLD TO THE NEAREST 0.5L **Lower limit=0.5L** **Upper limit=300.0L** **LITER**		|___|___|___| .|___| litres
WS9	Is the container covered? **SURVEY MANAGER INSTRUCTIONS:** A CONTAINER THAT IS COVERED IS CONSIDERED TO BE PROTECTED. **PROTECT**	Yes 1 No 2 Don't know 8	|___|
WS10	Number of journeys made with container for the collection of water for domestic purposes yesterday? This includes all water collected morning, afternoon and evening. PLEASE ENTER '0' IF HOUSEHOLD DID NOT FILL IT YESTERDAY. **Lower limit=0** **Upper limit=10** **NUMTRIPS**		|___|___| journeys
ID9	Please take a GPS reading (OPTIONAL)		

	AVOID TAKING IT INSIDE THE HOUSE OR UNDER TREES (TO MAKE IT FASTER). **SURVEY MANAGER INSTRUCTIONS:** Only if the consent was given in the Demography questionnaire. AN ADDITIONAL APPLICATION can be install to CALIBRATE THE GPS (GPS TEST+) in case of LONG WAITING TIME. **GPS**	|_____|
	Interviewer: I confirm that questionnaire is complete: yes/no **SURVEY MANAGER INSTRUCTIONS:** THE INTERVIEWER SHOULD ENSURE THAT THERE ARE NO MISSING VALUES WITHIN THE QUESTIONNAIRE **BEFORE LEAVING THE HOUSEHOLD**.	
	Supervisor: I confirm that questionnaire is complete.: yes/no MESSAGE TO INTERVIEWER: DO NOT ANSWER THIS QUESTION. **SURVEY MANAGER INSTRUCTIONS:** REFER TO THE SENS PRE-MODULE: [**TOOL 15**- SOP FOR SENS DATA MANAGEMENT] SECTION 1, FOR GUIDANCE ON HOW TO COMPLETE THIS STEP.	

WOMEN ANTHROPOMETRY, HEALTH & ANAEMIA
1 questionnaire per woman 15-49 years

This questionnaire is to BE ADMINISTERED TO ALL ELIGIBLE WOMEN AGED BETWEEN 15 AND 49 YEARS IN THE SELECTED HOUSEHOLD.

No	QUESTION	ANSWER CODES
SECTION IDENTIFICATION THIS SECTION IS TO BE ADMINISTRATED TO ALL ELIGIBLE WOMEN AGED BETWEEN 15 AND 49 YEARS IN THE SELECTED HOUSEHOLDS (ALL HOUSEHOLDS OR HALF OF THE HOUSEHOLDS-REFER TO ANAEMIA ASSESSMENT SCENARIOS IN SENS PRE-MODULE, STEP 8).		
ID1	Camp Name **SURVEY MANAGER INSTRUCTIONS:** FOR OUT-OF CAMP SURVEYS, THIS WILL BE THE VILLAGE OR TOWN NAME. if several SENS surveys are carried out in different settings, specify iN THE MDC CODING If it is in a camp or an out-of-camp setting (e.g. host community SENS or urban SENS). This is needed to adapt the questionnaire	|_____|

	and automatic skip patterns (e.g section DM2 to do in out-of-camp settings only). **CAMPNAME**		
ID2	Section Code / Number **SURVEY MANAGER INSTRUCTIONS:** SPECIFY IF NUMERICAL OR ALPHABETICAL. **SECTION**		|___|___|___|
ID3	Zone Code / Number **SURVEY MANAGER INSTRUCTIONS:** SPECIFY IF NUMERICAL OR ALPHABETICAL. **ZONE**		|___|___|___|
ID4	Block Code / Number **SURVEY MANAGER INSTRUCTIONS:** SPECIFY IF NUMERICAL OR ALPHABETICAL. **BLOCK**		|___|___|___|
ID5	Date of interview (dd/mm/yyyy) **SURVDAT**	Day/Month/Year…..|___|___| /|___|___| / |___|___||___|___|	
ID6	Cluster Number **SURVEY MANAGER INSTRUCTIONS:** FOR SURVEYS USING A CLUSTER SAMPLING ONLY. IN SURVEYS USING A SYSTEMATIC OR SIMPLE RANDOM SAMPLING, OR IN EXHAUSTIVE SURVEY, THE CLUSTER NUMBER WILL BE AUTOMATICALLY "1" IN THE FINAL DATABASE. **CLUSTER**		|___|___|
ID7	Team Number **TEAM**		|___|___|
ID8	Household Number **SURVEY MANAGER INSTRUCTIONS:** They are several options on how to assign numbers to households. The assignment of numbers depends on the survey design, household listing process and survey manager PREFERENCES. REFER TO SENS PRE-MODULE TOOL: [**TOOL 8-** DATA COLLECTION CONTROL SHEET]. FOR A MODEL TOOL ON WHERE HOUSEHOLD NUMBERS CAN BE WRITTEN FOR THE TEAMS TO TRACK AND FOLLOW. **HH**		|___|___|___|

No	QUESTION	ANSWER CODES	
SECTION WM1: Details of the Woman 15-49 years THIS SECTION IS TO BE ADMINISTERED TO ALL ELIGIBLE WOMEN AGED BETWEEN 15 AND 49 YEARS IN THE SELECTED HOUSEHOLDS.			
Note	THESE QUESTIONS NEED TO BE ASKED TO EACH ELIGIBLE WOMAN.		
WM1	ID Number **SURVEY MANAGER INSTRUCTIONS:** INCLUDE AS MANY ELIGIBLE WOMEN AS THERE ARE IN THE HOUsEHOLD. THE ID number is automatically generated IN MDC SURVEYS for each household starting at 1. **WMID**		|___|
WM2	Was consent given for conducting the interview and the measurements? ENSURE THAT YOU HAVE INTRODUCED THE TEAM AND INFORMED THEM ABOUT THE INTERVIEW AND THE MEASUREMENTS. **SURVEY MANAGER INSTRUCTIONS:** If an individual is absent, the team leader should record this information and determine another time to return on the same day. The team should revisit an absent individual up to two times, if it is logistically feasible, on the same survey day AND/or before to leave the survey Area. If they are unsuccessful after this, the individual should be recorded as an absence and they should <u>not</u> be replaced with another household or individual. REFER TO SENS PRE-MODULE TOOL: [**TOOL 8**- DATA COLLECTION CONTROL SHEET] FOR A MODEL TOOL TO HELP TRACK THE ABSENTEES. **WMCONST**	Yes 1 No 2 Absent 3	|___| **IF ANSWER IS 2 OR 3 STOP HERE**
WM3	Name of the woman ONLY WRITE FIRST NAME. **SURVEY MANAGER INSTRUCTIONS:** THIS IS ASKED TO FACILITATE THE INTERVIEW PROCESS. THE NAME OF THE RESPONDENT WILL NOT BE USED. USUALLY ONLY THE FIRST NAME IS ENTERED. **WMNAME**	|_____|	
WM4	Age of [NAME OF WOMAN] in years ONLY WOMEN BETWEEN 15 AND 49 ARE BEING INTERVIEWED. **SURVEY MANAGER INSTRUCTIONS:**		|___|___| years

	Reported age is recorded. YOU DO NOT NEED TO SEE PROOF OF AGE SHOWING OFFICIAL DATE OF BIRTH. **Lower limit=15 years** **Upper limit=49 years** **WMAGE**		
SECTION WM2: Anthropometry, Physiological and Anaemia Status of the Woman 15-49 years THIS SECTION IS TO BE ADMINISTERED TO ALL ELIGIBLE WOMEN BETWEEN 15 AND 49 YEARS IN THE SELECTED HOUSEHOLD.			
WM5	Are you pregnant? **SURVEY MANAGER INSTRUCTIONS:** Make sure to adapt the question to the context to ensure that it is asked in a culturally acceptable manner. If the answer is 'no' or 'don't know', the woman should STILL be assessed for anaemia and it will be assumed that she is not pregnant. IN SOME SETTINGS, MUAC IS ONLY MEASURED IN PREGNANT AND LACTATING WOMEN (PLW). Skip patternS will need to be added HERE IN ORDER TO ONLY MEASURE MUAC IN PLW. **PREGNANT**	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 2 OR 8 GO TO WM8**
WM6	Are you currently <u>enrolled</u> in the ANC programme? **SURVEY MANAGER INSTRUCTIONS:** Make sure to USE THE LOCAL NAME GIVEN TO THE ANC PROGRAMME. **ANC**	Yes 1 No 2 Don't know 8	|___|
WM7	Are you currently <u>receiving</u> iron-folate pills? SHOW PILL. **SURVEY MANAGER INSTRUCTIONS:** Make sure to USE THE LOCAL NAME GIVEN TO THE IRON-FOLATE TABLET. **FEREC**	Yes 1 No 2 Don't know 8	|___|
WM8	Are you currently breastfeeding? (OPTIONAL) **SURVEY MANAGER INSTRUCTIONS:** INCLUDE THIS QUESTION ONLY IF MUAC IS MEASURED. IN SOME SETTINGS, MUAC IS ONLY MEASURED IN PREGNANT AND LACTATING WOMEN (PLW). Skip	Yes 1 No 2 Don't know 8	|___| **IF ANSWER IS 2 OR 8 GO TO WM10**

	patternS will need to be added HERE IN ORDER TO ONLY MEASURE MUAC IN PLW. **LACTAT**		
WM9	Is the child you are breastfeeding younger than 6 months old? (OPTIONAL) **SURVEY MANAGER INSTRUCTIONS:** if the mother is breastfeeding more than one child, as long as one is younger than 6 months old, choose ANSWER option 1. **LACTATU6**	Yes 1 No 2 Don't know 8	|___|
WM10	Are you currently enrolled in the BSFP? (IF APPLICABLE) SHOW COMMODITY/PACKAGING GIVEN IN BSFP. **SURVEY MANAGER INSTRUCTIONS:** INCLUDE THE LOCAL NAME OF THE BLANKET SUPPLEMENTARY FEEDING PRoduct (BSFP). **WMBSFP**	Yes 1 No 2 Don't know 8	|___|
WM11	[NAME OF WOMAN]'s MUAC in mm (±1mm) or cm (±0.1cm) (OPTIONAL) MEASURE LEFT ARM. APPLICABLE ONLY IF MUAC MEASURED IN CM: DON'T FORGET THE DECIMAL. **SURVEY MANAGER INSTRUCTIONS:** DEPENDING ON THE CONTEXT, MUAC CAN BE MEASURED IN MM OR CM. ADAPT ACCORDINGLY. **Lower limit=160 mm** **Upper limit=500 mm** **WMMUAC**		|___|___|___|mm OR |___|___|. |___| cm
WM12	Units of measurement of your HemoCue device (g/dL or g/L) **SURVEY MANAGER INSTRUCTIONS:** Data analysis and reporting is done in g/dl. The Hb concentrations in g/dl will be automatically calculated in the final database in case of devices in g/l. THIS VARIABLE IS NOT USED DURING ANALYSIS. **WMHBUNIT**	g/dL gdl g/L gl	|___|
WM13	[NAME OF WOMAN]'s haemoglobin in g/dL (±0.1 g/dL) or in g/L (±1g/L) APPLICABLE ONLY IF HB MEASURED IN G/DL: DON'T FORGET THE DECIMAL. **SURVEY MANAGER INSTRUCTIONS:**		|___|___|. |___| g/dL OR |___|___|___|

	Hb is measured in non-pregnant women only. Record the data according to the unit given by the HemoCue machine (g/L or g/dL). For analysis AND REPORTING, always use or convert the value to g/dL. IN SURVEYS USING MDC METHODS The Hb concentrations in g/l will be automatically CONVERTed in the final database IN G/DL. At elevations above 1000m, Hb concentrations increase. Refer to SENS Anaemia tool for guidance on how haemoglobin is corrected for altitude: [**Tool 5** - Hb Adjustment for altitude]. IN SURVEYS USING MDC METHODS The Hb concentrations will be automatically corrected for altitude. **Lower limit=2.0g/gL** **Upper limit=22.0g/dL** **WMHB**		g/L
ID9	Please take a GPS reading (OPTIONAL) AVOID TAKING IT INSIDE THE HOUSE OR UNDER TREES (TO MAKE IT FASTER). **SURVEY MANAGER INSTRUCTIONS:** Only if the consent was given in the Demography questionnaire. AN ADDITIONAL APPLICATION can be install to CALIBRATE THE GPS (GPS TEST+) in case of LONG WAITING TIME. **GPS**	|_____|	
WM14	**Automatic referral for woman with signs of acute malnutrition:** • Woman needs to be referred for acute malnutrition (if MUAC< [INSERT VALUE] mm) (TO BE INCLUDED ONLY IF MUAC IS MEASURED). FILL OUT A REFERRAL FORM: ONE SLIP IS FOR THE WOMAN AND THE OTHER IS FOR THE HEALTH FACILITY. **SURVEY MANAGER INSTRUCTIONS:** Adapt the ADMISSION CRITERIA CUT-OFFS to the SURVEY context. REFER TO SENS ANTHROPOMETRY AND HEALTH TOOL: [**TOOL 3** – REFERRAL FORM] for an example of a referral slip to use during the survey. THIS VARIABLE IS NOT USED DURING ANALYSIS. **WMREFMAL**		
WM15	**Automatic referral for woman who has severe anaemia:** • Woman needs to be referred for severe anaemia (if Hb<8.0g/dL). FILL OUT A REFERRAL FORM: ONE SLIP IS FOR THE WOMAN AND THE OTHER IS FOR THE HEALTH FACILITY.		

	SURVEY MANAGER INSTRUCTIONS: REFER TO SENS ANTHROPOMETRY AND HEALTH TOOL: [**TOOL 3** – REFERRAL FORM] for an example of a referral slip to use during the survey. THIS VARIABLE IS NOT USED DURING ANALYSIS. REMOVE THIS AUTOMATIC REFERRAL IF THE ANAEMIA MODULE IS NOT INCLUDED. **WMREFAN**
	Interviewer: I confirm that questionnaire is complete: yes/no **SURVEY MANAGER INSTRUCTIONS:** THE INTERVIEWER SHOULD ENSURE THAT THERE ARE NO MISSING VALUES WITHIN THE QUESTIONNAIRE **BEFORE LEAVING THE HOUSEHOLD**.
	Supervisor: I confirm that questionnaire is complete.: yes/no MESSAGE TO INTERVIEWER: DO NOT ANSWER THIS QUESTION. SURVEY MANAGER INSTRUCTIONS: REFER TO THE SENS PRE-MODULE: [TOOL 15- SOP FOR SENS DATA MANAGEMENT] SECTION 1, FOR GUIDANCE ON HOW TO COMPLETE THIS STEP.

Appendix 2: Plausibility check results per camp

Bokolmayo

Overall data quality

Criteria	Flags*	Unit	Excel.	Good	Accept	Problematic	**Score**
Flagged data	Incl	%	0-2.5	>2.5-5.0	>5.0-7.5	>7.5	
(% of out of range subjects)			0	5	10	20	**0** (1.5 %)
Overall Sex ratio	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.667)
Age ratio(6-29 vs 30-59)	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.310)
Dig pref score - weight	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**2** (9)
Dig pref score - height	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**4** (14)
Dig pref score - MUAC	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**4** (13)
Standard Dev WHZ	Excl	SD	<1.1	<1.15	<1.20	>=1.20	
.			and	and	and	or	
.	Excl	SD	>0.9	>0.85	>0.80	<=0.80	
			0	5	10	20	**0** (0.95)
Skewness WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**0** (0.06)
Kurtosis WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**1** (0.33)

Poisson dist WHZ-2	Excl	p	>0.05	>0.01	>0.001	<=0.001	
			0	1	3	5	**0** (p=)
OVERALL SCORE WHZ =			0-9	10-14	15-24	>25	**11** %

The overall score of this survey is 11 %, this is good.

Buramino Plausibility Result

Overall data quality

Criteria	Flags*	Unit	Excel.	Good	Accept	Problematic	**Score**
Flagged data	Incl	%	0-2.5	>2.5-5.0	>5.0-7.5	>7.5	
(% of out of range subjects)			0	5	10	20	**0** (1.0 %)
Overall Sex ratio	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.353)
Age ratio(6-29 vs 30-59)	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.186)
Dig pref score - weight	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**0** (5)
Dig pref score - height	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**4** (14)
Dig pref score - MUAC	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**4** (13)
Standard Dev WHZ	Excl	SD	<1.1	<1.15	<1.20	>=1.20	
.			and	and	and	or	
.	Excl	SD	>0.9	>0.85	>0.80	<=0.80	
			0	5	10	20	**0** (1.02)
Skewness WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**0** (-0.04)
Kurtosis WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**0** (-0.09)
Poisson dist WHZ-2	Excl	p	>0.05	>0.01	>0.001	<=0.001	
			0	1	3	5	**0** (p=)
OVERALL SCORE WHZ =			0-9	10-14	15-24	>25	**8** %

The overall score of this survey is 8 %, this is excellent.

Hilaweyn Plausibility Result

Overall data quality

Criteria	Flags*	Unit	Excel.	Good	Accept	Problematic	**Score**
Flagged data	Incl	%	0-2.5	>2.5-5.0	>5.0-7.5	>7.5	
(% of out of range subjects)			0	5	10	20	**0** (0.3 %)
Overall Sex ratio	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.783)
Age ratio(6-29 vs 30-59)	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.189)
Dig pref score - weight	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**2** (8)

Dig pref score - height	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**4** (13)
Dig pref score - MUAC	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**0** (0)
Standard Dev WHZ	Excl	SD	<1.1	<1.15	<1.20	>=1.20	
.			and	and	and	or	
.	Excl	SD	>0.9	>0.85	>0.80	<=0.80	
			0	5	10	20	**0** (0.99)
Skewness WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**1** (-0.20)
Kurtosis WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**0** (0.05)
Poisson dist WHZ-2	Excl	p	>0.05	>0.01	>0.001	<=0.001	
			0	1	3	5	**0** (p=)
OVERALL SCORE WHZ =			0-9	10-14	15-24	>25	**7** %

The overall score of this survey is 7 %, this is excellent.

Kobe Plausibility Result

Overall data quality

Criteria	Flags*	Unit	Excel.	Good	Accept	Problematic	**Score**
Flagged data	Incl	%	0-2.5	>2.5-5.0	>5.0-7.5	>7.5	
(% of out of range subjects)			0	5	10	20	**0** (0.0 %)
Overall Sex ratio	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.579)
Age ratio(6-29 vs 30-59)	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**4** (p=0.018)
Dig pref score - weight	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**2** (9)
Dig pref score - height	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**4** (13)
Dig pref score - MUAC	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**4** (13)
Standard Dev WHZ	Excl	SD	<1.1	<1.15	<1.20	>=1.20	
.			and	and	and	or	
.	Excl	SD	>0.9	>0.85	>0.80	<=0.80	
			0	5	10	20	**0** (1.09)
Skewness WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**1** (0.23)
Kurtosis WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**0** (-0.12)
Poisson dist WHZ-2	Excl	p	>0.05	>0.01	>0.001	<=0.001	
			0	1	3	5	**0** (p=)
OVERALL SCORE WHZ =			0-9	10-14	15-24	>25	**15** %

The overall score of this survey is 15 %, this is acceptable.

Melkadida Plausibility Result

Overall data quality

Criteria	Flags*	Unit	Excel.	Good	Accept	Problematic	**Score**
Flagged data	Incl	%	0-2.5	>2.5-5.0	>5.0-7.5	>7.5	
(% of out of range subjects)			0	5	10	20	**0** (0.7 %)
Overall Sex ratio	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.254)
Age ratio(6-29 vs 30-59)	Incl	p	>0.1	>0.05	>0.001	<=0.001	
(Significant chi square)			0	2	4	10	**0** (p=0.974)
Dig pref score - weight	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**0** (7)
Dig pref score - height	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**2** (11)
Dig pref score - MUAC	Incl	#	0-7	8-12	13-20	> 20	
			0	2	4	10	**2** (10)
Standard Dev WHZ	Excl	SD	<1.1	<1.15	<1.20	>=1.20	
.			and	and	and	or	
.	Excl	SD	>0.9	>0.85	>0.80	<=0.80	
			0	5	10	20	**0** (1.03)
Skewness WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**0** (0.12)
Kurtosis WHZ	Excl	#	<±0.2	<±0.4	<±0.6	>=±0.6	
			0	1	3	5	**1** (-0.32)
Poisson dist WHZ-2	Excl	p	>0.05	>0.01	>0.001	<=0.001	
			0	1	3	5	**0** (p=)
OVERALL SCORE WHZ =			0-9	10-14	15-24	>25	**5** %

The overall score of this survey is 5 %, this is excellent.