

# **NUTRITION SURVEY PLAN**

**Dollo Ado refugee camps**

**Bokolmanyo, Melkadida, Kobe, Hilaweyn  
and Buramino camps**

**March to April 2013**

**UNHCR    ARRA    WFP    UNICEF    SC-IIMC    ACF    GOAL**

## Background

Dollo Ado in Southern Ethiopia has been hosting Somali refugees since 2009. Bokolmayo and Melkadida were the initial camps and hosted a population of 40,479 by the end of December 2010. In 2011 there was a high influx into Ethiopia which was associated with famine and insecurity in Somalia. With this Kobe, Hilaweyn, and Bur-Amino camps were opened within the year in June, August and November 2011 respectively to cater for the increased population. At the end of 2011 the Dollo Ado camps had a population of 142,306 individuals which was a 352% increase from 2010. Refugees continued to arrive in 2012 at an average of 2966 individuals per month totalling to 35,594 at the end of December 2012 thus a total population of 180,611 at the end of the year 2012. At the end of January 2013 the population was 184,307 (source: UNHCR ProGres).

The nutrition and health situation in 2012 improved significantly compared to 2011 in all camps with the exception of Buramino. The nutrition survey results showed a global acute malnutrition prevalence of 12.3% (10.4 - 14.5 95% C.I.) in Bokolmanyoo, 15.0% (12.9 - 17.5 95% C.I.) in Melkadida, 13.1% (9.7 – 17.3 95% C.I.) in Kobe, 15.9% (12.2 – 20.5 95% C.I.) in Hilaweyn and 32.7% (28.9 – 36.8 95% C.I.) in Buramino camps respectively. The severe acute malnutrition levels also reduced from a high of greater than 11% to less than 6% in all camps. In 2012, the prevalence of anaemia among children aged 6-59 months ranged from 39.0% to 54.5% while in women of reproductive age group (15-49 years) the anaemia levels ranged from 24.0% to 48.3%. Crude Mortality Rates (CMR) were between 0.3 to 0.8 /10,000/day while the Under Five Mortality Rates (U5MR) were between 1.2 to 1.9/10,000/day as per the latest nutrition surveys in the Dollo camp complex in 2012.

Despite the improvement of the nutrition indicators, the GAM prevalence estimate upper confidence intervals were still above the emergency threshold borderline of 15% in all camps except Bokolmanyoo. Anaemia levels remained above 40% in children 6-59 months (40% is high public health significance problem) and the crude mortality and under-five mortality rates were at or above the emergency threshold. In the absence of sustainable livelihoods and with full reliance on the general food distribution, continued influx of refugees, insecurity and the continued drought situation in the Somali region sustained efforts continued with the aim of improving the nutrition and health status to below the emergency threshold.

The 2012 surveys recommended follow up annual nutrition and health surveys. It is anticipated that the survey findings will enable implementing partners to evaluate the impact of initiated and on-going interventions to ensure provision of optimal health and nutritional care for the refugee population.

## 1. Demography

At the end of January 2013, the total population had reached 183,307 individuals (43,303 households<sup>1</sup>) according to UNHCR ProGress.

### Total Population and < 5 Children in the various Dollo Ado camps as of January 31st, 2013

Camp/Site	Population	HH	<5 children	Average HH size	% of <5 children
Bokolmanyo	40703	9880	6691	4.1	16.4
Melkadida	42575	9360	7110	4.5	16.7
Kobe	32726	7622	6229	4.3	19
Hilaweyn	32075	7405	6182	4.3	19.3
Buramino	36228	9036	7384	4.0	20.4
Total	184307	43303	33596	4.3	18.2

## 2. Objectives of the survey

The main objective of the nutrition survey is to assess the general health and nutrition status of refugees, mortality indices and formulate workable recommendations for appropriate nutritional and public health interventions.

Specific primary objectives of the survey

- a. To determine the prevalence of acute malnutrition among children 6-59 months
- b. To determine the prevalence of stunting among children 6-59 months
- c. To assess the two-week period prevalence of diarrhoea among children 6-59 months
- d. To assess crude and under-five mortality rates in the camps in the last three months
- e. To assess the prevalence of anaemia among children 6-59 months and women of reproductive age (non-pregnant, 15-49 years).
- f. To determine the coverage of measles vaccination among children 9-59 months
- g. To determine the coverage of vitamin A supplementation in the last six months among children 6-59 months and postnatal women

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<sup>1</sup>In ProGres, a household is defined as members sharing a ration card, which does not necessarily reflect the preferred household definition used in nutrition surveys as two or more rations can be combined to form a larger household. In a nutrition survey, a household is usually defined as **a group of people who live together and routinely eat out of same pot.**

- h. To determine the coverage of deworming in the last six months among children 12-59 months
- i. To investigate IYCF practices among children 0-23 months
- j. To assess the coverage of blanket feeding programmes for children 6-59 months
- k. To determine the coverage of ration cards and the duration the GFD ration lasts for recipient households
- l. To determine the extent to which negative coping strategies are used by households
- m. To assess household dietary diversity
- n. To establish recommendations on actions to be taken to address the situation

**Secondary objectives:**

- a. To determine the coverage of selective feeding programmes for children 6-59 months
- b. To determine enrolment into Antenatal Care clinic and coverage of iron-folic acid supplementation in pregnant women

**3. Survey implementation timeline**

Time line	Activity
3 <sup>rd</sup> to 11 <sup>th</sup> February 2013	Pre survey activities (survey team establishment; training planning; survey resources organization and survey plan update)
12 <sup>th</sup> February 2013	Meeting with Dollo Ado partners on survey implementation
15 <sup>th</sup> February 2013	Finalize Survey design, sampling and questionnaire adaptation
15 <sup>th</sup> February 2013	Final updated Survey plan circulation at all levels
10 <sup>th</sup> to 16 <sup>th</sup> February 2013	Equipment standardization
27 <sup>th</sup> to 28 <sup>th</sup> February 2013	Supervisor training and finalization of enumerator training plan
4 <sup>th</sup> to 10 <sup>th</sup> March 2013	Enumerator training and household labelling in Bokolmanyo; Melkadida and Kobe (Training venue: Bokolmanyo)
11 <sup>th</sup> to 22 <sup>nd</sup> March 2013	Data collection in Bokolmanyo; Melkadida and Kobe
25 <sup>th</sup> to 31 <sup>st</sup> March 2013	Enumerator Training and household labelling for Hilaweyn and Buramino (Training venue: Dollo)
1 <sup>st</sup> to 8 <sup>th</sup> April	Data collection in Hilaweyn and Buramino
9 <sup>th</sup> to 25 <sup>th</sup> April	Preliminary report preparation and debrief with partners at Dollo level
17 <sup>th</sup> June 2013	Draft report shared with all stakeholders for comments

## 4. Methodology

In each camp, a cross-sectional survey will be conducted using systematic random sampling. Houses/tents will be physically labelled with unique numbers per block/zone in each camp. To reduce non-response rate and ensure results are representative of people actually living in the camps at the time of the survey, empty tents<sup>2</sup>, as verified through neighbours will not be labelled and thus will not be included in the sampling frame. The sample size will be estimated based on UNHCR registration ProGress data base for population data and the 2012 survey reports along with the current, known contextual information. The sampling interval per camp will be calculated based on actual number of tents that will be physically verified before the survey and the sample size.

### Sample size

The sample size will be calculated with Standardized Monitoring and Assessment of Relief and Transitions (ENACT for SMART) software following UNHCR SENS methodology. In each camp, the sample size will be calculated based on expected GAM prevalence and mortality rate. An estimated GAM prevalence figure of 15% will be used in Bokolmanyó; 18% in Melkadida and Kobe, 21% in Hilaweyn and 37% in Buramino, based on the 2012 survey results where the higher confidence interval range is considered since little is known about progress made since the last surveys. The same rationale was used to calculate mortality sample size for all camps using 2012 survey results. The percentage of under-5 and average household size will also be derived from the 2012 survey results that are considered to better reflect reality. The total population to be surveyed will be derived from ProGres database. A non-response rate of 10% will be used in all camps except Buramino where a non-response rate of 15% will be used as the population is known to be quite mobile. Systematic random sampling methodology will be used for all camps.

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<sup>2</sup> An empty tent will be considered an abandoned tent and excluded from the nutrition survey if no one was present in that tent for the last one month.

### Sample size calculation: Anthropometry and Mortality for the various Dollo Ado Camps

	Bolkomanyo	Melkadida	Kobe	Hilaweyn	Buramino
Estimated prevalence (%) (survey 2012)	15	18	18	21	37
± Desire precision (%) (UNHCR SENS guidelines)	3.5	4	4	4	5
Average household size (surveys 2012)	5.1	5.2	4.4	4.9	4.4
<5 population (%) (survey 2012)	24	23	26	25	22
Non response households (%)	10	10	10	10	15
Total camp population (ProGres) <sup>3</sup>	40703	42575	32726	32075	36228
Children to be included	382	341	339	378	341
Households to be included for Anthropometry and Health module (ENA for SMART)	386	352	366	380	461

### Sample size calculation Mortality

	Bolkomanyo	Melkadida	Kobe	Hilaweyn	Buramino
Estimated rate (deaths/10,000/day)	1	0.7	1	1.3	0.8
± Desired precision (deaths/10,000/day) (SMART guidelines)	0.50	0.40	0.50	0.65	0.45
Average household size	5.1	5.2	4.4	4.9	4.4
Recall period	100	104	108	86	89
Non response households (%)	10	10	10	10	15
Population to be included	1481	1557	1364	1318	1629
Households to be included	323	333	344	299	435

Following SMART recommendations and considering that little differences were found between the anthropometric and mortality household sample sizes (<50 households difference), the values were compared and the higher value was chosen as final sample size for the survey.

<sup>3</sup> Since the U5 population is <10,000 in all camps, the sample size calculation needs to be corrected to account for small population size.

### Final sample size for all modules

Households to be included for Anthropometry and Health module and mortality (ENA for SMART)	386	352	366	380	461
Households to be included for children Anaemia module (UNHCR SENS guidelines)	386	352	366	380	461
Households to be included for IYCF module (UNHCR SENS Guidelines)	386	352	366	380	461
Households to be included for women Anaemia module (UNHCR SENS guidelines)	193	176	183	190	230
Households to be included for Food Security module (UNHCR SENS Guidelines)	193	176	183	190	230
Households to be included for WASH module (UNHCR SENS Guidelines)	193	176	183	190	230

### Sampling procedure: Selecting households and sample subjects

Using the list generated from the physical counting and labelling of tents/ houses in the camps, a sampling interval for each camp will be determined by dividing the total number of verified tents/houses by the estimated sample. The first household will then be determined randomly using the lottery method by drawing a random number within the sampling interval. The interval will be applied across the sampling frame to generate a list of households to be visited in the field.

Each team will be provided with a list of households to be surveyed on a daily basis. If an individual or an entire household is absent the teams will be instructed to return or the household or revisit the absent individual up to two times on the same survey day. If they are unsuccessful after this, the individual or the household will be recorded as an absence and they will not be replaced with another household or individual.

If the individual or an entire household refuses to participate then it will be considered a refusal and the individual or the household will not be replaced with another.

If a selected child is disabled with a physical deformity preventing certain anthropometric measurements, the child is still included in the assessment of the other indicators.

If it is determined that a selected household does not have any eligible children, the relevant questionnaires should still be administered to the household and any eligible women.

It is important to measure the children who are located in nutrition or health centres. The team should go to the centre if it is feasible to do so to take the measurements and information from the child. If it is impossible to visit the centre, the child should be given an ID number and should be considered as absent and not replaced. A note should be made that the child was in a nutrition/health centre at the time of the survey. This recommendation differs from the standard SMART recommendation which considers nutrition surveys that are usually conducted in large geographic areas and where it is often not possible to go to the nutrition or health centres for measurement of the admitted children.

## 5. Questionnaires

The questionnaires are included in **Appendix 1**.

The questionnaires will be prepared in English language and administered in Somali language via translation if the enumerator does not speak Somali. The questionnaires will be pre-tested before the survey.

Five module questionnaires will be designed to provide information on the relevant indicators of the different target groups as indicated in the survey objectives. The five module questionnaire covers the following areas and the following measurements:

**Module 1: Mortality-** This will include questions related to mortality in the last three months among the whole population. A specific date will be used as a recall date.

**Module 2: Food Security-** This will include questions on access and use of the GFD ration, negative coping mechanisms used by household members and household dietary diversity.

**Module 3: Women 15-49 years-** This will include questions and measures on women aged 15 – 49 years. Information will be collected on women's pregnancy status, coverage of iron-folic acid pills and ANC attendance for pregnant women, post-natal vitamin A supplementation, and haemoglobin assessment for non-pregnant women.

**Module 4: Children 6-59 months-** This will include questions and measures on children aged 6-59 months. Information will be collected on anthropometric status, oedema, enrolment in selective feeding programmes and blanket

programmes (CSB++), immunisation (measles), vitamin A supplementation and deworming in last six months, morbidity from diarrhoea in past two weeks and haemoglobin assessment.

**Module 5:** Infant 0-23 months- This will include questions on infant feeding for children aged 0- 23 months.

## **6. Measurement methods**

### **Household-level indicators**

**Mortality:** An individual-level mortality form similar to the 2012 nutrition survey will be used. Data entry and analysis will be done in ENA for SMART with the household-level summary data derived from the form by hand.

**Food security:** The questionnaire used will be from UNHCR's Standardised Expanded Nutrition Survey Guidelines for Refugee Populations Version 2 (2013)

### **Individual-level indicators**

**Sex of children:** gender will be recorded as male or female.

**Birth date or age in months for children 0-59 months:** the exact date of birth (day, month, and year) will be recorded from either an EPI card, child health card or birth notification if available. If no reliable proof of age is available, age was estimated in months using a local event calendar or by comparing the selected child with a sibling whose ages are known, and will be recorded in months on the questionnaire/Phone. If the child's age cannot absolutely be determined by using a local events calendar or by probing, the child's length/height will be used for inclusion; the child has to measure between 65 cm and 110 cm. Note that the UNHCR Manifest will not be used to determine age of children <5 years because it does not reflect the correct birthdate.

**Age of women 15-49 years:** Reported age will be recorded in years.

**Weight of children 6-59 months:** measurements will be taken to the closest 100 grams using an electronic scale (SECA scale) with a wooden board to stabilise it on the ground. Clothes will be removed and only very light underwear will be allowed. If this is a problem, teams will be instructed to take weight inside of the surveyed tent/house. The double-weighing technique will be used to weigh young children unable to stand on their own or unable to understand instructions not to move while on the scale.

**Height/Length of children 6-59 months:** children's height or length will be taken to the closest millimetre using a wooden height board (Shorr Productions). Due to limited age documentation available in the surveyed area, height will be used rather than age to decide on whether a child should be measured lying down

(length) or standing up (height). Children less than 87cm will be measured lying down, while those greater than or equal to 87cm will be measured standing up.

**Oedema in children 6 months-59 months:** bilateral oedema will be assessed by applying gentle thumb pressure on to the tops of both feet of the child for a period of three seconds and thereafter observing for the presence or absence of an indent. All oedema cases reported by the survey teams have to be verified by the survey coordinators and will be referred immediately after.

**MUAC of children 6 months-59 months:** MUAC will be measured at the mid-point of the left upper arm between the elbow and the shoulder and taken to the closest millimetre using a standard tape. MUAC will be recorded in centimetres.

**Child enrolment in selective feeding programme for children 6-59 months:** selective feeding programme coverage will be assessed for the outpatient therapeutic programme and for the supplementary feeding programme. This should be verified by card or by showing images of the products being given in each programme (for e.g. PlumpyNut, CSB++ sachet).

**Measles vaccination in children 6-59 months:** measles vaccination will be assessed by checking for the measles vaccine on the EPI card if available or by asking the caregiver to recall if no EPI card was available. For ease of data collection, all children aged 6-59 months will be assessed for measles but analysis will only be done on children aged 9-59 months.

**Vitamin A supplementation in last 6 months in children 6-59 months:** whether the child received a vitamin A capsule over the past six months will be recorded from the EPI card or health card if available or by asking the caregiver to recall if no card is available. A vitamin A capsule image will be shown to the caregiver when asked to recall.

**Deworming:** whether the child received a deworming tablet over the past six months will be recorded from the EPI card or health card if available or by asking the caregiver to recall if no card is available. A deworming tablet image will be shown to the caregiver when asked to recall.

**Haemoglobin concentration in children 6-59 months and women 15-49 years:** Hb concentration will be taken from a capillary blood sample from the fingertip and recorded to the closest gram per decilitre by using the portable HemoCue Hb 301 Analyser (HemoCue, Sweden). If severe anaemia is detected, the child or the woman will be referred for treatment immediately.

**Diarrhoea in last 2 weeks in children 6-59 months:** an episode of diarrhoea is defined as three loose stools or more in 24 hours. Caregivers will be asked if their child had suffered episodes of diarrhoea in the past two weeks.

**ANC enrolment and iron and folic acid pills coverage:** if the surveyed woman is pregnant, it will be assessed whether she is enrolled in the ANC programme

and is receiving iron-folic acid pills. An iron-folic acid pill image will be shown to the pregnant woman when asked to recall.

**Post-natal vitamin A supplementation:** if the surveyed woman delivered a baby in the last six months, it will be assessed by card or recall whether she has received vitamin A supplementation after delivery. A vitamin A capsule image will be shown when asked to recall.

**Infant and young child feeding practices in children 0-23 months:** infant and young child feeding practices will be assessed based on UNHCR Standardised Expanded Nutrition Survey Guidelines for Refugee Populations (2013)

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

## 7. Case definitions and calculations

**Mortality:** The crude death rate (CDR) and the U5 death rate (U5DR) is expressed as the number of deaths per 10,000 people per day. The formula below was applied:

$$\text{Crude Death Rate (CDR)} = 10,000/a * f / (b+f/2-e/2+d/2-c/2)$$

Where:

**a** = Number of recall days

**b** = Number of current household residents

**c** = Number of people who joined household during recall period

**d** = Number of people who left household during recall period

**e** = Number of births during recall period

**f** = Number of deaths during recall period

**Malnutrition in children 6-59 months:** Acute malnutrition is defined using weight-for-height index values or the presence of oedema and classified as show in the table below. Main results are reported after analysis using the WHO 2006 Growth Standards.

### Definitions of acute malnutrition using weight-for-height and/or oedema in children 6–59 months

Categories of acute malnutrition	Z-scores (NCHS Growth Reference 1977 and WHO Growth Standards 2006)	Bilateral oedema
Global acute malnutrition	< -2 z-scores	Yes/No
Moderate acute malnutrition	< -2 z-scores and $\geq$ -3 z-scores	No
Severe acute malnutrition	> -3 z-scores	Yes
	< -3 z-scores	Yes/No

Stunting, also known as chronic malnutrition is defined using height-for-age index values and is classified as severe or moderate based on the cut-offs shown below. Main results are reported according to the WHO Growth Standards 2006.

### Definitions of stunting using height-for-age in children 6–59 months

Categories of stunting	Z-scores (WHO Growth Standards 2006 and NCHS Growth Reference 1977)
Stunting	<-2 z-scores
Moderate stunting	<-2 z-score and $\geq$ -3 z-score
Severe stunting	<-3 z-scores

Underweight is defined using the weight-for-age index values and was classified as severe or moderate based on the following cut-offs. Main results are reported according to the WHO Growth Standards 2006

### Definitions of underweight using weight-for-age in children 6–59 months

Categories of underweight	Z-scores (WHO Growth Standards 2006 and NCHS Growth Reference 1977)
Underweight	<-2 z-scores
Moderate underweight	<-2 z-scores and $\geq$ -3 z-scores
Severe underweight	<-3 z-scores

Mid Upper Arm Circumference (MUAC) values is used to define malnutrition according to the following cut-offs in children 6-59 months:

Low MUAC values cut-offs in children 6-59 months

Categories of low MUAC values

<12.5 cm

$\geq$  11.5 cm and <12.5 cm

< 11.5 cm

**Child enrolment in selective feeding programme for children 6-59 months:**

Feeding programme coverage is estimated during the nutrition survey using the direct method as follows (reference: Emergency Nutrition Assessment: Guidelines for field workers. Save the Children. 2004):

Coverage of SFP programme (%) =

100 x

No. of surveyed children with MAM according to SFP criteria who reported being registered in SFP

No. of surveyed children with MAM according to SFP admission criteria

Coverage of TFP programme (%) =

100 x

No. of surveyed children with SAM according to OTP criteria who reported being registered in OTP

No. of surveyed children with SAM according to OTP admission criteria

**Infant and young child feeding practices in children 0-23 months:** Infant and young child feeding practices were assessed as follows based on the UNHCR SENS IYCF module (Version 2 (2013)) that are based on WHO recommendations (WHO, 2007 as follows:

*Timely initiation of breastfeeding in children aged 0-23 months:*

Proportion of children 0-23 months who were put to the breast within one hour of birth

Children 0-23 months who were put to the breast within one hour of birth

Children 0-23 months of age

*Exclusive breastfeeding under 6 months:*

Proportion of infants 0-5 months of age who are fed exclusively with breast milk: (including expressed breast milk or from a wet nurse, ORS, drops or syrups (vitamins, breastfeeding minerals, medicines)

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

Infants 0-5 months of age

*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

*Introduction of solid, semi-solid or soft 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

*Children ever breastfed:*

Proportion of children born in the last 24 months who were ever breastfed

Children born in the last 24 months who were ever breastfed

Children born in the last 24 months

*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

*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

**Anaemia in children 6-59 months and women of reproductive age:** Anaemia is classified according to the following cut-offs in children 6-59 months and non-pregnant women of reproductive age. Anaemia cut-offs for pregnant women should be adjusted depending on the stage of pregnancy (gestational age). Pregnant women are not included in routine UNHCR nutrition surveys for the assessment of anaemia due sample size issues (usually a small number of pregnant women is found) as well as the difficulties in assessing gestational age in pregnant women.

**Definition of anaemia (WHO 2000)**

Age/Sex groups	Categories of Anaemia (Hb g/dL)			
	Total	Mild	Moderate	Severe
Children 6 - 59 months	<11.0	10.9 - 10.0	9.9 - 7.0	< 7.0
Non-pregnant adult females 15-49 years	<12.0	11.9 - 11.0	10.9 - 8.0	< 8.0

Classification of public health problems and targets

**Mortality:** The following thresholds are used for mortality.

**Mortality benchmarks for defining crisis situations (NICS, 2010)**

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

**Anthropometric data:** UNHCR's target for the prevalence of global acute malnutrition (GAM) for children 6-59 months of age by camp, country and region is < 10% and the target for the prevalence of severe acute malnutrition (SAM) is <2%.

The table below shows the classification of public health significance of the anthropometric results for children under-5 years of age according to WHO.

**Classification of public health significance for children under 5 years of age**

Prevalence %	Critical	Serious	Poor	Acceptable
Low weight-for-height	≥20	15-19	10-14	<10
Low height-for-age	≥40	30-39	20-29	<20
Low weight-for-age	≥30	20-29	10-19	<10

**Selective feeding programmes:** UNHCR Strategic Plan for Nutrition and Food Security 2008-2012 includes the following indicators. The table below shows the performance indicators for malnutrition treatment programmes according to UNHCR Strategic Plan for Nutrition and Food Security 2008-2012 (same as Sphere Standards).

**Performance indicators for selective feeding programmes (UNHCR Strategic Plan for Nutrition and Food Security 2008-2012)\***

	Recovery	Case fatality	Defaulter rate	Coverage		
				Rural areas	Urban areas	Camps
<b>SFP</b>	>75%	<3%	<15%	>50%	>70%	>90%
<b>TFP</b>	>75%	<10%	<15%	>50%	>70%	>90%

\* Also meet SPHERE standards for performance

**Measles vaccination coverage:** UNHCR recommends target coverage of 95% (same as Sphere Standards).

**Vitamin A supplementation coverage in children:** UNHCR Strategic Plan for Nutrition and Food Security (2008-2012) states that the target for vitamin A supplementation coverage for children aged 6-59 months by camp, country and region should be >90%.

**Anaemia data:** UNHCR Strategic Plan for Nutrition and Food Security (2008-2010) states that the targets for the prevalence of anaemia in children 6-59 months of age and in women 15-49 years of age should be low i.e. <20%. The severity of the public health situation should be classified according to WHO criteria as shown in the table below.

### Classification of public health significance (WHO 2000)

Prevalence %	High	Medium	Low
Anaemia	≥40	20-39	5-19

### 8. 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 ARRA, WFP, UNICEF and major partners implementing health and nutrition projects in the camps (IMC, ACF, GOAL, and SC-I).

Activity	Action Point	Responsible
Partner participation:	<p>All organizations working in the camps will contribute to the survey teams to form two teams. One team will work in Bokolmanyo, Melkadida and Kobe while the other will work in Hilaweyn and Buramino.</p> <p>Details of participations as follows:</p> <p>Bokolmanyo; Melkadida and Kobe team</p> <ol style="list-style-type: none"> <li>1. Anthropometric measurers : 6 people from IMC and 6 from SC-I</li> <li>2. IYCF and FS data collectors: 3 people from IMC and 3 from SC-I</li> <li>3. HB (Haemoglobin data collectors): 6 People from ARRA</li> <li>4. Mortality data collectors: 3 people from IMC and 3 person from SC-I</li> <li>5. 6 HB assistants from IMC and 6 HB assistants from SC-I</li> </ol> <p>Hilaweyn and Kobe team</p> <ol style="list-style-type: none"> <li>6. Anthropometric measurers : 12 people from GOAL</li> <li>7. IYCF and FS data collectors: 3 people from ACF and 3 from GOAL</li> <li>8. HB (Haemoglobin data collectors): 6 People from ARRA</li> <li>9. Mortality data collectors: 6 people from ACF</li> <li>10. 6 HB assistants from ACF and 6 HB assistants from GOAL</li> </ol>	The sub-offices to organize the team accordingly. UNHCR and ARRA to coordinate and support partners in the field.
Survey supervisors: The survey supervisors to be assigned from major stakeholders of the survey	<p>UNHCR: Two people</p> <p>WFP: One person</p> <p>UNICEF: One person</p> <p>ARRA : One person</p> <p>ACF: One person</p> <p>IMC: Two people</p> <p>GOAL: One person</p> <p>SC-I: One person</p>	Arrangements to be done at sub-office level, UNHC and ARRA to lead on organizing the team

	The supervisors will make up one supervisory team for all camps.	arrangement
Logistics: Transport to be shared among partners	Contributions of vehicles: <ul style="list-style-type: none"> <li>• UNHCR: 2</li> <li>• WFP:2</li> <li>• UNICEF: 2 (The six vehicles will be used for supervision and support partners to transport the team members)</li> <li>• IMC,SC-I,GOAL and ACF to arrange vehicle for their teams</li> </ul>	All partners
Survey materials Mobile phone, anthropometric measurement tools, HB machine etc to be contributed by partners per survey team	<ul style="list-style-type: none"> <li>• 6 Length/height board: UNHCR</li> <li>• 8 Digital weighing scale: UNHCR</li> <li>• 8 HB 301 Hemocue machine: UNHCR</li> <li>• HB accessories (Lancet, micro cuvettes, batteries etc.): UNHCR</li> <li>• MUAC tape : UNHCR</li> <li>• Stationeries and other survey related expenses: UNHCR</li> </ul>	All partners: UNHCR to coordinate
Survey team training and implementation preparations	<ul style="list-style-type: none"> <li>• Responsibilities to be shared among partners in Dollo. Arrangements to be finalized before the 15<sup>th</sup> of February 2013.</li> </ul>	ARRA and UNHCR to coordinate
Finalize survey proposal and share with partners	<ul style="list-style-type: none"> <li>• The survey proposal/TOR should be finalized and shared with partners for feedback before 15<sup>th</sup> of February</li> </ul>	UNHCR and ARRA to finalize the document and share with partners

## **9. Survey training**

### **Language**

English language will be used for training, communication, data collection tools and reporting. Local translators will be recruited to facilitate the translation of English vis-à-vis local language (Somali) during the assessment.

### **Training**

Training will be organized in Dollo Ado for survey participants. Survey supervisors will be responsible for the organization and facilitation of the training. The training sessions will be organized for four/five days and will cover the following topics:

#### **Training Topics**

- Objectives of the nutrition survey
- Anthropometrical measurements: height/length, weight and MUAC measurement techniques and precautions on taking measurements
- Age assessment: preparation of local calendar and how to use local calendar to assist mother to recall the age of their children.
- Assessment of health status of the child (illness), immunization and mortality data
- Hemoglobin measurement, use of a blood analyzer machine (HemoCue)
- Standardization exercise for anthropometric and hemoglobin measurements
- Data collection and interview techniques, procedures
- How to fill the formats properly with practice (data recording procedure and precautions ethical considerations of assessment and sampling procedures.

## **10. Survey quality**

### **Quality control**

Quality will be maintained through comprehensive training of enumerators, data collectors and supervisors. Training will covers interview techniques, sampling procedure, inclusion and exclusion criteria, and sources of errors when taking measurements, standardizing the questions in the questionnaire, levels of accuracy required in anthropometric measurements, diagnosis of oedema, handling of equipment during the survey, calibration of anthropometric measurement tools etc. will be checked regularly. A pilot test will be conducted to assure the quality of tools, methodology and data collection mechanisms. The SMART plausibility check for anthropometric measurements will be generated daily; in addition, all questionnaires will be manually checked for completeness, consistency and accuracy daily. These checks will be used to provide feedback to the teams to improve data collection as the survey progressed.

#### ***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.
- Every morning calibrated the electronic scales weighing.
- 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.

## **11. Data collection and analysis**

Data will be collected using questionnaires on the various modules.

Data cleaning and analysis will be done by using Epi-Info 3.5.4 and ENA for SMART (Nov 2012 version) software. 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.

## **12. 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 in order to discuss and clarify questions and reservations that they have on the process of surveying their population. All concerned persons must be informed about the reason for taking blood and measurement of Anaemia status. 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 they will not get any kind of benefit for participating in the survey
- 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 BF programs.

## **13. 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 presentation of the anthropometric results will include the prevalence of global acute malnutrition as well as the prevalence of moderate and severe acute malnutrition. The final report will be shared with relevant partners and stakeholders for action, as per the survey SMART recommendations.

## **Annexes**

- 1 Survey questionnaires
- 2 Survey requirements
- 3 Local Calendar
- 4 Survey area map

## Annex 1: Nutrition Surveys Questionnaires February 2013

### Nutrition Surveys Questionnaires February 2013

#### 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 A HOUSEHOLD AS A GROUP OF PEOPLE WHO LIVE TOGETHER AND ROUTINELY EAT OUT OF SAME POT. 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 [organization/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.

UNHCR and other IPs working in the nutrition and health sectors are sponsoring this nutrition survey

Taking part in this survey is totally your choice. You can decide to not participate or stop taking part at any time and 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 aid you receive.

If you agree to participate, I will ask you some questions about your family. We will then measure the arm circumference, weight and height of children who are older than 6 months up to 5 years. In addition to these assessments we will also 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 your verbal consent. Be assured that any information that you will provide will be kept strictly confidential.

You can ask me any questions that you have about this survey before you decide whether to participate. Thank you



## Mortality Questionnaire (One questionnaire / HH)

Date of interview (dd/mm/yyyy)	Camp	Zone	Block Number
____/____/2013		____	____
HH Number	Team Number	Consent	
____	____	YI____ N ____	

#	COL1 NAME	COL2 Sex M/F	COL3 AGE IF ≥5 YRS UNIT: YEARS	COL4 AGE IF < 5 YRS UNIT: MONTHS	COL5 BORN BETWEEN END OF DEYR AND TODAY (Y/N)	COL6 JOINED HOUSEHOLD BETWEEN END OF DEYR AND TODAY (Y/N)
---	--------------	--------------------	--------------------------------------	--	--	--

**A. LIST ALL MEMBERS WHO ARE CURRENTLY LIVING IN THISHOUSEHOLD AND ROUTINELY EAT FROM THE SAME POT**

01						
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						

**B. DID ANY MEMBERS OF THE HOUSEHOLD LEAVE BETWEEN END OF DEYR AND TODAY? IF SO LIST THEM**

01						
02						
03						
04						
05						
06						

**C. DID ANY MEMBERS OF THE HOUSEHOLD DIE BETWEEN END OF DEYR AND TODAY? IF SO LIST THEM**

01						
02						
03						

**MORTALITY SUMMARY (for supervisor only)**

		TOTAL	UNDER 5
1. Members present now	A. COL 1	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
2. Joined household between end of DEYR and today	A. COL 6	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
3. Members that left the household between end of DEYR and today	B. COL 1	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
4. Births between end of DEYR and today	A, B. COL 5	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
5. Deaths between end of DEYR and today	C. COL 1	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

**NB:**

- Household members are defined as members who are living together in the camp and who are eating routinely from the same cooking pot
- Members of the household present now are the members who slept in the household last night. Members of the household who slept here last night but who are away today to the market/elsewhere and will return before the end of the day should be listed here also.
- A child who was born and dead during the recall period is counted as a death only when entering data in ENA (SMART Version 1, April 2006).

**Questionnaire for WOMEN 15-49 YEARS (every other HH)**

This questionnaire is to be administered to all women aged between 15 and 49 years IN THE SELECTED HH

Date (dd/mm/yyyy)					Camp			Zone		Block Number	
_ _ / _ _ /2013								_ _		_ _	
Team Number											
					_ _						
W1	W2	W3	W4	W5	W6	W7	W8	W9	*W10	W11	
Woman ID	HH	Consent given 1=yes 2=no 3=absent	Age (years)	Did you give birth in the last 6 months?  1=yes 2=no (go to W7) 8=unk (go to W7)	Did you receive a vitamin A capsule after delivery? (SHOW CAPSULE)  1=yes card 2=yes recall 3=no 8=unk	Are you pregnant? (Wax Maad Leedahay)  1=yes 2=no (go to HB) 8=unk (go to HB)	Are you currently enrolled in the ANC?  1=yes 2=no	Are you currently receiving iron-folate tablets? (SHOW PILL)  1=yes 2=no 8=unk	Hb (g/dL)  (FOR NON PREGNANT WOMEN ONLY)	Woman referred for anaemia  1=yes 2=no	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											

\*W10: REFER TO CLINIC FOR SEVERE ANAEMIA IF HB <8.0 G/DL UNK=UNKNOWN

**Questionnaire for CHILDREN 6-59 MONTHS (every HH)**

THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO ALL CARETAKERS OF A CHILD THAT LIVES WITH THEM AND IS BETWEEN 6-59 MONTHS OF AGE

Date (dd/mm/yyyy)			Camp											Zone		Block Number			
_ _ / _ _ /2013														_ _		_ _			
			Team Number																
			_ _																
C1	C2		C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19
Child No	HH No	Name	Consent given 1=yes 2=no 3=absent	Sex (m/f)	Birthdate* dd/mm/yyyy	Age** (months)	Weight (kg)	Height (cm) ±0.1cm	Oedema *** (y/n)	MUAC *** (cm)	Is child enrolled in a nutrition program?  1=TFP(S C/OTP) 2=TSFP 3=None	Is this child enrolled into BSFP?  1=Yes 2=No	Measles  1=Yes card 2=Yes recall 3=No or don't Know	Vit. A in past 6 months (SHOW CAPSULE) 1=Yes card 2=Yes recall 3=No or don't Know	Deworming in past 6months (SHOW TABLET) 1=Yes card 2=Yes recall 3=No or don't Know	Has [name] had diarrhoea in the last two weeks, including today? #  1=yes 2=no 8=unk	Has [name] had other sickness in the last two weeks, including today?  1=yes 2=no 8=unk	If yes to C16 and/or C17, did the child visit a health facility?  1=yes 2=no 8=unk	Hb (g/dL)  REFER CHILDREN WITH <7G/DL
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

\*Record from EPI/health card/age documentation if available. Leave blank if no valid age documentation. \*\*Estimate using event calendar and recall if age documentation not available. #Diarrhoea: 3 or more loose stools within 24hrs \*\*\*C9 & C10: REFER TO CLINIC FOR MALNUTRITION IF NOT ALREADY ENROLED IN SFP / OTP IF OEDEMA=Y OR MUAC < 12.5CM; C19:REFER IF HB IS<7 G/DL

**Infant and young child feeding questionnaire (1 questionnaire per child  
0-23 months)**

Date (dd/mm/yyyy)		Camp	Zone	Block Number	
_ _ / _ _ /2013			_ _	_ _	
HH Number		Team Number	Child Number		
_ _		_ _	_ _		
QUESTION			ANSWER CODES		
SECTION 1					
1.	Sex	Male .....	1		
		Female .....	2	___	
2.	Birthdate ( <i>Taariikh dhalasho</i> ) RECORD FROM AGE DOCUMENTATION. LEAVE BLANK IF NO VALID AGE DOCUMENTATION.	Day/Month/Year... ___ ___ / ___ ___ / ___ ___ ___			
3.	Child's age in months ( <i>Da'da bilo ahaan</i> ) ESTIMATE USING EVENT CALENDAR AND RECALL IF AGE DOCUMENTATION NOT AVAILABLE			___ ___	
4.	Has [NAME] ever been breastfed? <i>Ilmahan mala naas nuujiyay waligii</i>	Yes .....	1	IF ANSWER IS 2 or 8 GO TO Q7	
		No.....	2		
		DK .....	8		
5.	How long after birth did you first put [NAME] to the breast? <i>Markuu ilmuhu dhashay muddo goormaad ku duwday naaska</i>	Less than one hour .....	1	___	
		Between 1 and 23 hours .....	2		
		More than 24 hours.....	3		
		DK .....	8		
6.	Was [NAME] breastfed yesterday during the day or at night? <i>Ilaa shalay iyo xalay ma siisay naas</i>	Yes .....	1	___	
		No.....	2		
		DK .....	8		
SECTION 2					
7.	Now I would like to ask you about liquids that [NAME] 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?  <i>illaa shalay ilmaha ma siisay wax ka mid ah waxyaalaha hoos ku qoran ?</i>	ASK ABOUT EVERY LIQUID. IF ITEM WAS GIVEN, CIRCLE '1'. IF ITEM WAS NOT GIVEN, CIRCLE '2'. IF CAREGIVER DOESN'T KNOW, CIRCLE '8'. EVERY LINE MUST HAVE A CODE.			
			Yes	No	DK
	7A: Plain water for example (Biyo caadi ah ama biyo madow)	7A.....	1	2	8
	7B: Infant formula for example ( <i>Nan, mamix, choice, S26, caanaha ilmaha, sida mamix-caanah dasada yar</i> )	7B.....	1	2	8
	7C: Milk other than breast milk, such as tinned, powdered, or fresh animal milk for example ( <i>Caanaha naaska marka lagareebo, sida ookale, canaha daasada ama qardaasyada, caano xoolo</i> )	7C.....	1	2	8
	7D: Juice or juice drinks: ( <i>Sharaab sida cambe liin iwm</i> )	7D.....	1	2	8
	7E: Clear broth:(fuud/maraq xoolo)	7E.....	1	2	8
	7F: Sour milk or yogurt for example ( <i>Caano fadhi ama gadhood, suusac iwm</i> )	7F.....	1	2	8

	7G: Thin porridge for example ( <i>Boorash khafiif ah</i> )	7G.....1	2	8	
	7H: Tea or coffee with milk ( <i>Shaah ama bun caano leh iwm</i> )	7H.....1	2	8	
	7I: Any other water-based liquids Sodas, other sweet drinks, herbal infusion, gripe water, clear tea with no milk, black coffee, ritual fluids ( <i>biges, bun, casmale, biyo tiira, soda</i> )	7I.....1	2	8	
8.	Yesterday, during the day or at night, did [NAME] eat solid or semi-solid (soft, mushy) food? For example ( <i>illaa shalay ilmaha ma siisay cunta la tumay ama cunta yar adag ama cunta adag</i> )	Yes ..... 1 No ..... 2 DK..... 8		<input type="checkbox"/>	
<b>SECTION 3</b>					
9.	Did [NAME] drink anything from a bottle with a nipple yesterday during the day or at night? ( <i>Cunuga makucabay masaasad, duuda am dalo ib leh</i> )	Yes ..... 1 No ..... 2 DK..... 8		<input type="checkbox"/>	
<b>SECTION 4</b>					
10.	Is child aged 6-23 months? ( <i>Cunuga majiraa 6-23 bilood</i> ) REFER TO Q2	Yes ..... 1 No ..... 2		<input type="checkbox"/> <b>IF ANSWER IS 2 STOP NOW</b>	
11.	Now I would like to ask you about some particular foods [NAME] 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? ( <i>Imika waxaan doonayaa in aan kuwareysto cuntooyiin qaas ah oo cunuga uu cunay ama gooni ha u cuno ama rashiin kujiro shaygan</i> )	ASK ABOUT EVERY ITEM. IF ITEM WAS GIVEN, CIRCLE '1'. IF ITEM WAS NOT GIVEN, CIRCLE '2'. IF CAREGIVER DOESN'T KNOW, CIRCLE '8'. EVERY LINE MUST HAVE A CODE.			
			Yes	No	DK
	11A. Flesh foods like <i>hilib, kaluun, digaag, beer, /wadna, kilyo iwm</i>	11A.....1	2	8	
	11B. CSB+	11B.....1	2	8	
	11C. CSB++/Super cereal +(SHOW SACHET)	11C.....1	2	8	
	11D. Plumpy'Nut® (SHOW SACHET)	11D.....1	2	8	
	11E. Plumpy'Sup® (SHOW SACHET)	11E.....1	2	8	
	11G. Infant formula: for example Nan, mamix, choice, anchor, S26( <i>caano boodhe, sahha</i> )	11G.....1	2	8	
	11H. List any iron fortified solid, semi-solid or soft foods designed specifically for infants and young children available in the local setting that are different than distributed commodities.( <i>Serifam , Cerelac</i> )	11H.....1	2	8	

## Food Security questionnaire (1 questionnaire per every other household)

Date (dd/mm/yyyy)		Camp	Zone	Block Number
_ _ / _ _ /2013			_ _	_ _
HH Number		Team Number		
_ _		_ _		
No	QUESTION	ANSWER CODES		
SECTION 1				
1.	Does your family receive general food ration distributed by ARRA?  <i>Reerku mahelaa rashiinka ey bixiso hayada ARRA?</i>	Yes ..... 1 No..... 2	_ _  <b>IF ANSWER IS 1 GO TO Q3</b>	
2.	Why do you not receive the general food ration?  <i>Waa maxaay sababta uu reerka u qaadanin rashiinka lagabixiyo xarada?</i>	No ration card.....1 Lost card .....2 Traded card .....3 Not registered but eligible.....4 Not eligible (not in targeting criteria).....5 Other .....6	_ _	
3.	How many days did the food from the general ration from the [insert] cycle of [insert] month last? <i>(Imisa cisho ayuu raashinka bishu idin gaadhsiiya(qor inta maalmood) hadday tahay 30 cisho u wareeg S5)</i>	Number of Dates _____  <b>IF ANSWER IS &gt; or =30 days GO TO Q5</b>	_ _	
4.	What is the <i>main</i> reason the general ration did not last until the next distribution?  <i>(haddi cuntadu inikufilneen 30 casho maxaa sabaabay)</i>	Amount given is not adequate.....1 Part of food sold to buy other items.....2 Food sold for milling cost.....3 Food sold to pay debt.....4 New arrival family.....5 Gave to livestock .....6 Shared the food with kins .....7 Others .....8	_ _	
5.	In the last month, have you or anyone in your household borrowed cash, food or other items with or without interest? <i>(Bishii lasoodaafay qof qooyaska kamid ah masoodensaday lacag, ama raashin ama wax kale oo an riba lahayn)</i>	Yes ..... 1 No.....2	_ _	
6.	In the last month, have you or anyone in your household sold any assets that you would not have normally sold (furniture, seed stocks, tools, other NFI, livestock etc.)? <i>(Bishii lasoodaafay qof qooyaska kamid ah ma iibiyay alaabta guriga, harurka, qalabka, iyo xoolo, iwm)</i>	Yes ..... 1 No.....2	_ _	
7.	In the last month, have you or anyone in your household been requested increased remittances or gifts as compared to normal? <i>(Bishii lasoodaafay qof qooyaska ah madalbaday in loo soo xawilo lacag dheerad ah ama deeq ka badan intii hore)</i>	Yes ..... 1 No.....2	_ _	
8.	In the last month, have you or anyone in your household reduced the quantity and/or frequency of meals? <i>(Bishii lasoodaafay qof qooyaska ah ma dhimay qiyaasta rashiinka guriga lagakariyo ama madimay waqtiyaha raashiinka lacuna guriga)</i>	Yes ..... 1 No.....2	_ _	
9.	In the last month, have you or anyone in your household begged? <i>Bishii lasoodaafay qof qooyaska ah maraasaday caawitan ama masw baryotamay)</i>	Yes ..... 1 No.....2	_ _	
10.	In the last month, have you or anyone in your household engaged in: killing of wild animals, cutting of big trees and selling, stealing, cross boarder smuggling, charcoal burning or any other risky or	Yes ..... 1 No.....2	_ _	

	harmful activities <i>Bishii lasoodaafay qof qooyaska ah maka qeeyb qaatay waxyaala sida cidoodka oo la ugaarto, dhirta oo laguuro, kutoroban iwm)</i>		
11.	Do you have one or more children 5-14 years of age currently living in the household? Qooyaska ma leeyahay cunug da'disa 5-14 sano ama kayar?	Yes ..... 1 No..... 2	<input type="checkbox"/> <b>IF ANSWER IS 2 GO TO SECTION 2</b>
12.	In the last month, have you or anyone in your household sent your child or children 5-14 years to work outside the household in order to get income (cash or in-kind)?  <i>Bishii lasoodaafay qof qooyaska ah ma u diray cunug 5-14 in uu kasoo shaqeeeyo meel ka baxsan guriga sifa uu dahqaale guriga u keeno)</i>	Yes ..... 1 No..... 2	<input type="checkbox"/>

**SECTION 2**

13.	Now I would like to ask you about the types of foods that you or anyone else in your household ate yesterday during the day and at night.  I am interested in whether you or anyone else in your household had the item even if it was combined with other foods.  <i>(Fadlan qeex cunnooyinka ee shalay reerku cunay maalinimadii. Ka bilow cuntada u horraysa)</i>	<b>READ THE LIST OF FOODS AND DO NOT PROBE. RECORD (1) IN THE BOX IF ANYONE IN THE HOUSEHOLD ATE THE FOOD IN QUESTION, OR (0) IN THE BOX IF NO ONE IN THE HOUSEHOLD ATE THE FOOD.</b>	
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	<p><b>1A. Cereals from own food aid ration:</b> wheat ,rice or any foods made from these (Canjeero, Cambuulo, Baris; rooti,lyo boorash)</p> <p><b>1B. Cereals purchased, exchanged ,home-grown ,gift and not from own food ration:</b> wheat ,rice, pasta, bread, porridge ( Baris, Basto, Rooti, lyo boorash )</p> <p><b>1C. Fortified blended foods:</b> CSB+, CSB++ or any other food made from these.</p> <p><b>2. White roots and tubers:</b> Any green bananas, plantains, white potatoes, white yam, white cassava, or other foods made from roots (<i>moos ceyriin, baradho</i>)</p> <p><b>3A. Vitamin A rich vegetables and tubers:</b> Any carrot, pumpkin, squash, or sweet potato that are orange inside + other locally available vitamin A rich vegetables (e.g. red sweet pepper) (<i>qumbe, karoot</i>)</p> <p><b>3B. Dark green leafy vegetables:</b> Any dark green leafy vegetables, including wild forms + locally available vitamin A rich leaves such as amaranth, arugula, cassava leaves, kale, spinach (<i>Caleen cagaaran sida kosta gooman cagaar iwm</i>).</p> <p><b>3C. Other vegetables:</b> Any other vegetables (e.g. bamboo shoots, cabbage, green pepper, tomato, onion, eggplant, zucchini) + <i>other locally available vegetables (tamata, basal, cabash, basbas cagaar. Ton)</i></p> <p><b>4A. Vitamin A rich fruits:</b> Any mango (ripe, fresh and dried), ripe papaya, and 100% fruit juice made from these + <i>other locally available vitamin A rich</i></p>	<p>1A..... <input type="checkbox"/></p> <p>1B..... <input type="checkbox"/></p> <p>1C..... <input type="checkbox"/></p> <p>2..... <input type="checkbox"/></p> <p>3A..... <input type="checkbox"/></p> <p>3B..... <input type="checkbox"/></p> <p>3C..... <input type="checkbox"/></p> <p>4A..... <input type="checkbox"/></p>
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fruits (*canbo kartay, cambe,, papaya,qara*)

**4B. Other fruits:** Any other fruits such as apple, avocados, banana, coconut flesh, lemon, , including wild fruits and 100% fruit juice made from these(*ananas, tufax, afkadho, moos, liin- iwm*)

4B.....|\_\_|

**5A. Organ meat:** ber, kilyo, wadna iwm

5A.....|\_\_|

**5B. Flesh meats:** hilib xoola sida ari, lo' geel, ida, digaag ama hilib cidood

5B.....|\_\_|

**6. Eggs:** bet/ukun noc kasta

6.....|\_\_|

**7. Fish and seafood:** kaluun, kaluun laqalajjay,, tuna/kaluunka gasacadaha, iwm

7.....|\_\_|

**8A. Legumes, nuts and seeds from own food aid ration:** Misir/Digir

8A.....|\_\_|

**8B. Legumes, nuts and seeds purchased, exchanged, home-grown, gift and not from own food aid ration:** Any dried peas, lentils, nuts, seeds or foods made from these (*Misir, sida digir marawe, digir soomali,*

8B.....|\_\_|

**9. Milk and milk products:** Any milk, infant formula, cheese, yogurt or other milk products (*caano dhamaan, cano fadhi, garoor*)

9.....|\_\_|

**10A. Oils and fats from own food aid ration:** Vegetable oil (*saliida lagabixiyo xarada –sida saliid cadeey*)

10A.....|\_\_|

**10B. Oils and fats purchased, exchanged , home-grown, gift and not from own food ration** Oil, fats, ghee or butter added to food or used for cooking (*saliida xarada aan lagabixinin-sida macsaro, sixin, subag iwm.*)

10B.....|\_\_|

**11. Sweets:** sugar, honey, sweetened soda or sweetened juice drinks, sugary foods such as chocolates, candies, cookies, sweet biscuits and cakes (*macmacaanka (sokor, malab, soda, cabitaan lamacaaneyay, nacinac, buskut, doolsha halwa*)

11.....|\_\_|

**12. Spices, condiments, beverages:** (*filfil madoow, cusba,heel, basbaas, shah, bun .*)Any spices (black pepper, salt), condiments (soy sauce, hot sauce), coffee, tea, alcoholic beverages

12.....|\_\_|



## Annex 2: Survey requirements

Item	Pack size	Packs required
Survey equipment		
Printer Cartridge( HP LaserJet 9050; plc. 6)	1	1
Notebooks	12	5
Printing paper	500	12
Waste Bags for biohazard	10	5
Zip lock bags, medium size, for supplies	1	50
Antiseptic Swabs	100	52
Gloves Large	100	104
Gloves Medium	100	104
Haemoglobin Eurotrol HemoTrol 301 High	1	1
Haemoglobin Eurotrol HemoTrol 301 Low	1	1
Haemoglobin Eurotrol HemoTrol 301 Normal	1	1
HemoCue cleaning spatula packs	5	12
HemoCue 301 Analyser	1	8
HemoCue 301 Analyser Cases	1	8
Hemocue Safety Lancets	200	26
Hemocue Micro cuvettes for 301 Analyser	200	26
Plasters	50	104
Spare batteries for HemoCue	2	50
Spare batteries for weight scales	2	50
Kitchen paper roll	1	50
Tissues	1	100
Calculator (Casio; medium size)	1	6
Paint for marking houses (5 litres ;dark blue)	5	30
Paint Brushes for marking houses	1	150
White board markers	12	5
Clipboard	1	7
Height/length measurement board (130cm)	1	5
Kit bag (Sports bag) or backpack	1	5
MUAC; Child;11.5 red/PAC 50	50	2
MUAC; Adult; without colour/PAC 50	50	5

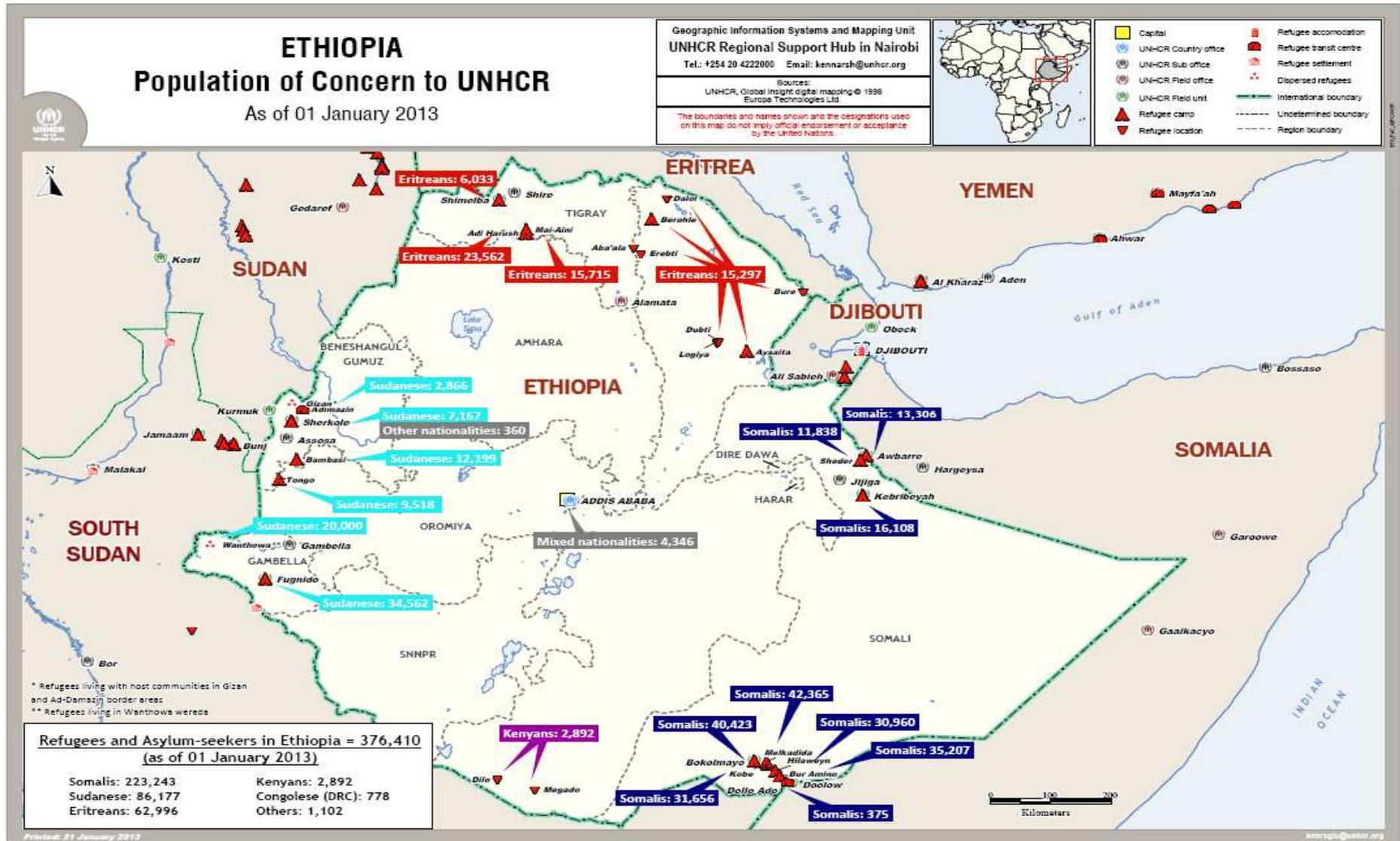
Erasers	1	10
Pencil sharpener	1	10
Pencils	1	10
5kg test weight	1	3
Biros (pens)	50	2
Height screening sticks	1	7
Mother child electronic scale	1	6
Flipcharts	1	5
<b>Training</b>		
Qualified enumerator per diem (B,M,K teams)	36	5
Refreshments ( 2 trainings *30 Pax + 10 supervisors+ 2 data clerks)	82	5
<b>Data collection</b>		
Supervisor per diem (NGO)	6	15
Supervisor per diem (UN)	4	15
Qualified enumerator per diem (NGO)	60	13
Incentive enumerator per diem (NGO)	6	25
Guide token	6	25
Drivers (UN)	6	15
Drivers (UN)	6	10
Drivers (NGO)	10	13
Refreshments during data collection	96	25
<b>Data Entry</b>		
Data clerks	2	4
<b>Community outreach and house labelling</b>		
Community mobilizers	250	5
House Markers Incentive	250	5

### Annex 3: Local Calendar: To be modified

Seasons	Religious Holidays	Local Event (in camp of surrounding villages)	Arabic Calendar	Somali Calendar	Month / year	Age (m)
End of Jiilal			Maarso	Malmadone	March 2013	0
Mid of Jiilal			Febrayo	Mowlid	February 2013	1
Beginning of Jiilal			Janaayo	Safar	January 2013	2
End of Deyr			Bisha diseenbar	Zako	December 2012	3
Mid of Deyr			Bisha kow iyo Tobnad	Arafa	November 2012	4
Beginning of Deyr			Bisha Tob	Sidatal	October 2012	5
End of Xagaa			Bisha Sagaalad	Soon fur	September 2012	6
Mid of Xagaa	Ramadhan (20/08/2012)End of Ramadhan		Bisha Sideedaad	Soon /Ramadhan	August 2012	7
Beginning of Xagaa			Bisha Todobaad	Shaba'an	July 2012	8
End of Gu'		Refugee Day	Bisha Luuly	Rajab	June 2012	9
Mid of Gu'			Bisha Shanaad	Jamadol akhir	May 2012	10
Beginning ogf Gu'			Abrilil	Jamadol awal	April 2012	11
End of Jiilal			Maarso	Malmadone	March 2012	12
Mid of Jiilal			Febrayo	Mowlid	February 2012	13
Beginning of Jiilal			Janaayo	Safar	January 2012	14
End of Deyr			Bisha diseenbar	Zako	December 2011	15
Mid of Deyr			Bisha kow iyo Tobnad	Arafa	November 2011	16
Beginning of Deyr			Bisha Tob	Sidatal	October 2011	17
End of Xagaa			Bisha Sagaalad	Soon fur	September 2011	18
Mid of Xagaa	Ramadhan (30/08/2011)End of ramadhan		Bisha Sideedaad	Soon /Ramadhan	August 2011	19
Beginning of Xagaa			Bisha Todobaad	Shaba'an	July 2011	20
End of Gu'		Refugee Day / Moon eclipse	Bisha Luuly	Rajab	June 2011	21
Mid of Gu'			Bisha Shanaad	Jamadol akhir	May 2011	22
Beginning of Gu'			Abrilil	Jamadol awal	April 2011	23
End of Jiilal			Maarso	Malmadone	March 2011	24
Mid of Jiilal			Febrayo	Mowlid	February 2011	25
Beginning of Jiilal			Janaayo	Safar	January 2011	26
End of Deyr			Bisha diseenbar	Zako	December 2010	27
Mid of Deyr			Bisha kow iyo Tobnad	Arafa	November 2010	28
Beginning of Deyr			Bisha Tob	Sidatal	October 2010	29
End of Xagaa	End of Ramadan (09/09/2010)		Bisha Sagaalad	Soon fur	September 2010	30
Mid of Xagaa	Beginning Ramadan		Bisha Sideedaad	Soon /Ramadhan	August 2010	31
Beginning of Xagaa			Bisha Todobaad	Shaba'an	July 2010	32
End of Gu'		Refugee Day	Bisha Luuly	Rajab	June 2010	33
Mid of Gu'			Bisha Shanaad	Jamadol akhir	May 2010	34
Beginning ogf Gu'			Abrilil	Jamadol awal	April 2010	35
End of Jiilal			Maarso	Malmadone	March 2010	36
Mid of Jiilal			Febrayo	Mowlid	February 2010	37
Beginning of Jiilal			Janaayo	Safar	January 2010	38
End of Deyr			Bisha diseenbar	Zako	December 2009	39
Mid of Deyr			Bisha kow iyo Tobnad	Arafa	November 2009	40
Beginning of Deyr		Mental Health day	Bisha Tob	Sidatal	October 2009	41
End of Xagaa	End Ramadan		Bisha Sagaalad	Soon fur	September 2009	42
Mid of Xagaa	Beginning Ramadan		Bisha Sideedaad	Soon /Ramadhan	August 2009	43
Beginning of Xagaa			Bisha Todobaad	Shaba'an	July 2009	44

End of Gu'		Refugee day	Bisha Luuly	Rajab	June 2009	45
Mid of Gu'			Bisha Shanaad	Jamadul akhir	May 2009	46
Beginning ogf Gu'		Madobadki Bisha moon eclipse	Abriil	Jamadul awal	April 2009	47
End of Jiilal			Maarso	Malmadone	March 2009	48
Mid of Jiilal			Febrayo	Mowlid	February 2009	49
Beginning of Jiilal			Janaayo	Safar	January 2009	50
End of Deyr			Bisha diseenbar	Zako	December 2008	51
Mid of Deyr			Bisha kow iyo Tobnad	Arafa	November 2008	52
Beginning of Deyr			Bisha Tob	Sidatal	October 2008	53
End of Xagaa	End Ramadan (30/09/08)		Bisha Sagaalad	Soon fur	September 2008	54
Mid of Xagaa	Beginning Ramadan		Bisha Sideedaad	Soon /Ramadhan	August 2008	55
Beginning of Xagaa			Bisha Todobaad	Shaba'an	July 2008	56
End of Gu'		Refugee day	Bisha Luuly	Rajab	June 2008	57
Mid of Gu'			Bisha Shanaad	Jamadul akhir	May 2008	58
Beginning ogf Gu'			Abriil	Jamadul awal	April 2008	59
End of Jiilal			Maarso	Malmadone	March 2008	60

Annex 4: Survey area including the other camps in Ethiopia Map



Figures shown in this map should be considered as provisional (Source: UNHCR Representation in Ethiopia)