Model nutrition assessment report

(adapted from the Save the Children Fund emergency nutrition assessment handbook and the SMART methodology for UNHCR SENS Nutrition Surveys)

> For a full SENS model report, see**:**
> **SENS Pre-module Tool 18-Kakuma Final SENS Report**

SENS REPORT
(region, camp country etc.)

Survey conducted: (month, year)

Report finalised: (month, year)

UNHCR

IN COLLABORATION WITH

(name and logo of agencies involved)

See UNHCR SENS Pre-Module (Survey Steps and Sampling) and the individual survey Modules (Modules 1-6) for guidance on reporting. This report is a modified version of the standard report generated by ENA for SMART software (version 2012).

Executive summary (4-6 pages only; include summary table as shown below)

- Geographic area surveyed, population type, population number (total and U5)
- Dates of survey
- Objectives
- Methodology used (sampling, sample size, main indicators)
- Summary of results as shown in the table below, as well as other important results
- Brief interpretation of the results
- Recommendations (immediate, medium term, long term)

TABLE 1 SUMMARY OF RESULTS

	Number / total	% (95% CI)	Classification of public health significance or target (where applicable)
CHILDREN 6-59 months			
Acute Malnutrition (WHO 2006 Growth Standards)			
Global Acute Malnutrition (GAM)			Critical if ≥ 15%
Moderate Acute Malnutrition (MAM)			
Severe Acute Malnutrition (SAM)			
Oedema			
Mid Upper Arm Circumference (MUAC)			
MUAC <125mm and/or oedema			
MUAC 115-124 mm			
MUAC <115 mm and/or oedema			
Stunting[1] (WHO 2006 Growth Standards)			
Total Stunting			Critical if ≥ 40%
Severe Stunting			
Programme coverage			
Measles vaccination with card or recall (9-59 months)			Target of ≥ 95%

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[1] Note that z-scores for height-for-age require accurate ages to within two weeks (CDC/WFP: A manual: Measuring and Interpreting Mortality and Malnutrition, 2005).

	Number / total	% (95% CI)	Classification of public health significance or target (where applicable)
Vitamin A supplementation within past 6 months with card or recall			Target of ≥ 90%
Diarrhoea			
Diarrhoea in last 2 weeks			
Anaemia			
Total Anaemia (Hb <11 g/dl)			High if ≥ 40%
Mild (Hb 10-10.9)			
Moderate (Hb 7-9.9)			
Severe (Hb <7)			
CHILDREN 0-23 months			
IYCF indicators			
Timely initiation of breastfeeding			
Exclusive breastfeeding under 6 months			
Consumption of iron-rich or iron-fortified foods			
Bottle feeding			
WOMEN 15-49 years			
Anaemia (non-pregnant)			
Total Anaemia (Hb <12 g/dl)			High if ≥ 40%
Mild (Hb 11-11.9)			
Moderate (Hb 8-10.9)			
Severe (Hb <8)			
FOOD SECURITY			
Food distribution			
Proportion of households with a ration card			
Average number of days general food ration lasts out of [insert cycle] days[2] (mean, SD or range)			
Negative household coping strategies			
Proportion of households reporting using none of the coping strategies over the past month			
Household dietary diversity			
Average HDDS (mean, SD / range)			

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[2] In contexts where a mix of full rations and half rations are given, only report this value for the households receiving the full ration.

	Number / total	% (95% CI)	Classification of public health significance or target (where applicable)
WASH			
Water quality			
Proportion of households using improved drinking water source			
Water quantity			
Proportion of households that use:			Average quantity of water available per person / day ≥ 20 litres
≥ 20 lpppd			
15 - <20 lpppd			
<15 lpppd			
Satisfaction with drinking water supply			
Proportion of households that say they are satisfied with drinking water supply			
Safe excreta disposal			
Proportion of households that use:			
An improved excreta disposal facility (improved toilet facility, 1 household)			
A shared family toilet (improved toilet facility, 2 households)			
A communal toilet (improved toilet facility, 3 households or more)			
An unimproved toilet (unimproved toilet facility or public toilet)			
MOSQUITO NET COVERAGE			
Mosquito net ownership			
Proportion of households owning at least one LLIN			Target of >80%
Average number of persons per LLIN (mean)			2 persons per LLIN
Mosquito net utilisation			
Proportion of household members (all ages) who slept under an LLIN			
Proportion of children 0-59 months who slept under an LLIN			
Proportion of pregnant women who slept under an LLIN			

	Number / total	% (95% CI)	Classification of public health significance or target (where applicable)
Indoor residual spraying (OPTIONAL)			
Proportion of households covered by IRS			

1. Introduction

Geographic description of survey area
- Name of country, province, district, sub-district, etc.
- Name of camp(s) or settlement(s)
- Type of setting (e.g., rural, urban, camp, etc.)
- Year of establishment of camp(s) or settlements(s) if applicable
- If available/applicable, the surface area
- If applicable, brief description of terrain (e.g., mountains, desert, etc.)
- If applicable, brief description of the climate and the season when the survey was conducted.

Description of the population
- Total number of people living in survey area (total population and U5)
- If applicable, type of population (resident, IDPs, refugees, mixed, etc.)
- If applicable, length of time the population has resided in the camp(s) or settlements(s)
- If applicable, ethnic and/or religious groups
- Major livelihoods in the area (e.g., agriculture, pastoralist, traders, etc.).

Food security situation
- Relief programmes in area
- Type of food assistance, description of food basket and number of people on food assistance, etc.
- Quality of roads, access to markets, etc.

Health situation
- Availability of health services
- Describe deworming activities for young children e.g. target group, when was the last campaign
- Show the following graphs using UNHCR HIS data from the year preceding the survey (i.e. total and U5 mortality rate, top 5 causes of morbidity in U5).

> For a tool that will automatically generate these recommended graphs, see:
> **SENS Pre-Module Tool 12-Trends and Graphs.**
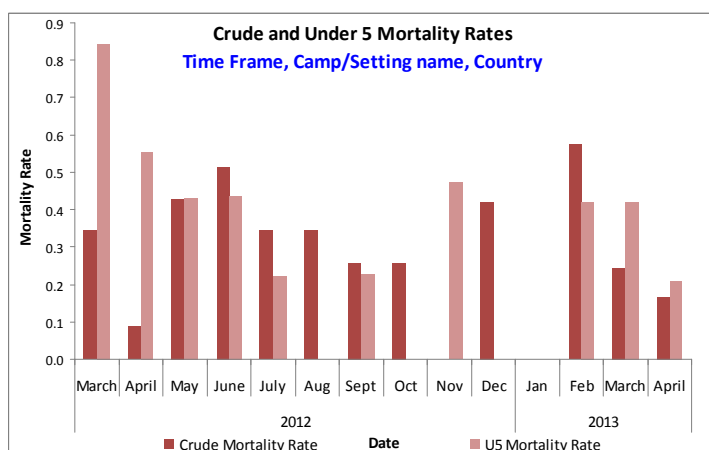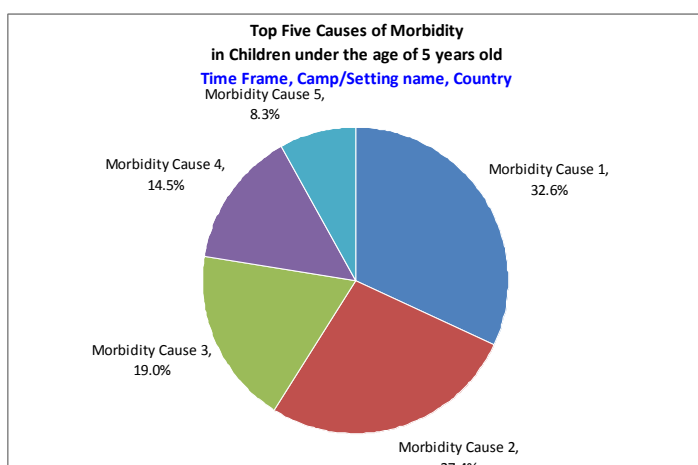
FIGURE 1 CRUDE AND UNDER-5 MORTALITY RATES

Crude and Under 5 Mortality Rates
Time Frame, Camp/Setting name, Country

FIGURE 2 TOP FIVE CAUSES OF MORBIDITY IN CHILDREN UNDER-5

Top Five Causes of Morbidity
in Children under the age of 5 years old
**Time Frame, Camp/Setting name, Country**

Nutrition situation

- Nutrition services and activities
- Admission to therapeutic feeding programmes and targeted supplementary feeding programmes over past 12 months (show following figure)

> For a tool that will automatically generate this recommended graph, see:
> **SENS Pre-Module Tool 12-Trends and Graphs.**

- Nutritional and anaemia status of population
- Results from rapid assessments or other types of nutrition assessments

FIGURE 3 NUMBER OF ADMISSIONS TO TREATMENT PROGRAMMES FOR MAM AND SAM IN CHILDREN 6-59 MONTHS
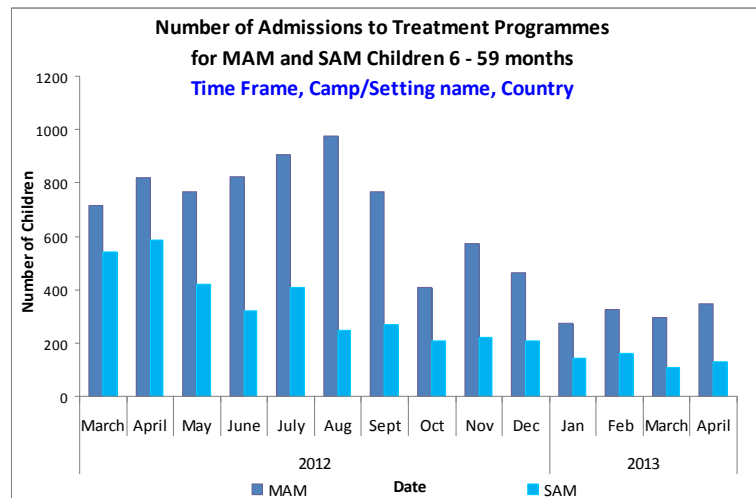
1.1 Survey Objectives

Primary objectives:

- To measure the prevalence of acute malnutrition in children aged 6-59.

- To measure the prevalence of stunting in children aged 6-59 months.

- To determine the coverage of measles vaccination among children aged 9-59 months (or context-specific target group e.g. 9-23 months).

- To determine the coverage of vitamin A supplementation received during the last 6 months among children aged 6-59 months.

- To assess the two-week period prevalence of diarrhoea among children aged 6- 59 months.

- To measure the prevalence of anaemia in children aged 6-59 months and in women of reproductive age between 15-49 years (non-pregnant).

- To investigate IYCF practices among children aged 0-23 months.

- To determine the coverage of ration cards and the duration the general food ration lasts for recipient households.

- To determine the extent to which negative coping strategies are used by households.

- To assess household dietary diversity.

- To determine the population's access to, and use of, improved water, sanitation and hygiene facilities.

- To determine the ownership of mosquito nets (all types and LLINs) in households.

- To determine the utilisation of mosquito nets (all types and LLINs) by the total population, children 0-59 months and pregnant women.

- To determine the household coverage of indoor residual spraying.

- *Include other additional objectives negotiated for the survey*

- To establish recommendations on actions to be taken to address the situation in *[insert refugee setting]*

Secondary objectives:

- To determine the coverage of therapeutic feeding and targeted supplementary feeding programmes for children 6-59 months.

- To determine enrolment into Antenatal Care clinic and coverage of iron-folic acid supplementation in pregnant women.

2. Methodology

2.1 Sample size

> For an example on how to report sample size, see:
> **SENS Pre-Module Annex 3-Sample size calculation and sampling example.**

- What sampling methodology (e.g., systematic random sampling, cluster sampling, etc.) did you chose? Why?
- How did you calculate the sample size for anthropometry? (show the sample size calculation, including assumptions for expected prevalence, expected DEFF [if cluster sampling], required precision); if number of children was converted into the number of households, describe how this was done; which software and version was used
- How did you calculate the sample size for the other indicators?
- Describe whether sample sizes were adjusted for non-response, and if yes, justify the predicted non-response rate
- If cluster sampling, how did you decide how many clusters and how many households per cluster?

2.2 Sampling procedure: selecting clusters (where applicable)

- What population figures did you get and from whom (for example, ProGres, beneficiary lists from partners, household counts etc. village level population figures from district council)? How old was population data?
- How did you assign the clusters? (for example, 30 clusters were randomly selected by assigning probability proportional to population size)
- Describe any changes to the selection of the clusters during the survey. How many clusters were not visited and why? Were they replaced, and if yes how replacement clusters were identified?

2.3 Sampling procedure: selecting households and individuals

- How did you choose the households and children within a cluster?
- If simple random sampling was used random selection through enumeration or through segmentation with subsequent enumeration was used, describe briefly how this was carried out?
- If systematic random sampling was used, describe how the total number of houses in the cluster, the sampling interval and the random start were determined.
- If EPI method was used, describe key procedures (how initial direction was determined, how the 1st household was selected, how subsequent households were selected, etc.).
- If other methods were used like segmentation, explain why and briefly describe the methods.
- If several different selection methods were used depending on the cluster, explain which methods were used, and how many clusters used each method?
- Were empty households or households with absent children re-visited? If yes, how?
- Were empty or non-responding households replaced? If yes, how?
- Were all eligible children in selected households weighted and measured?
- Who were survey respondents, and how were they selected within the household?

2.4 Questionnaire and measurement methods

Questionnaire

> For the full UNHCR SENS questionnaire, see:
> **UNHCR Pre-module Tool 9-Full SENS Questionnaire.**

- Show the final questionnaire in Appendix
- In what language was the questionnaire used in the field?
- In what language(s) were the interviews in the field conducted?
- If applicable, was the questionnaire translated and back-translated by a different translator before the survey?
- Was the questionnaire pre-tested (piloted) before the survey?
- Are the copies of the questionnaire in English and in local language included in the Appendices?
- Who performed the interviews and handled the questionnaires (e.g. team leader)?
- Were interviews conducted with a translator in the field?

Measurement methods

> 1. For a description of survey methods to be used for each SENS module, see the relevant section in each individual module.
> 2. For a summary of all measurement methods used in a SENS nutrition survey, see: **SENS Pre-Module Tool 18-Kakuma SENS Report 2012 (page 22-23).**

- How was the data collected for each indicator? (See SENS Guidelines)

2.5 Case definitions, inclusion criteria and calculations

> 1. For a description of case definitions, inclusion criteria and calculation to be used for each SENS module, see the relevant section in each individual SENS module.
> 2. For a 3-page summary of case definitions, inclusion criteria and calculations to be used in a SENS survey, see: **SENS Pre-Module Tool 18-Kakuma SENS Report 2012 (pages 24-27).**

- What was your definition of the household?
- What was the age range of the children included in anthropometry survey? What was the age range for other individual modules?
- If age was unknown, how did you decide whether or not to include children?
- What was your cut-off for deciding whether the height of the child should be measured standing up or lying down?
- What was your case definition for GAM and SAM? Did you ascertain bilateral oedema? If yes, how?
- What growth standard (NCHS or WHO) did you use to report you principal anthropometry results?
- What well-known event did you use to explain to survey responders the date of the start of recall period?
- If other indicators (e.g. anaemia, measles vaccination, diarrhoea, IYCF) were measured, provide case definitions, the way they were assessed (e.g., using HemoCue, or using child's immunization card), the way there were calculated and state who the respondents for these questions were (e.g. household head, mother, father, etc.).

2.6 Classification of public health problems and targets

> 1. For a description of classification of public health problems and targets to be used in a SENS survey, see the relevant section in each individual SENS module.
> 2. For a 2-page summary of classification of public health problems and targets to be used in a SENS survey, see: **SENS Pre-Module Tool 18-Kakuma SENS Report 2012 (pages 27-29).**

- Include the available cut-offs for the classification of public health problems and the targets for the key indicators measured.

2.7 Training, coordination and supervision

Survey teams and supervision
- What was the composition of the survey team?
- How many teams were trained, and how many participated in the survey?
- What were the qualifications (education, experience) of the survey workers?
- How many team supervisors participated in the survey?
- What were the qualifications (education, experience) of the team supervisors?
- Were teams supervised at all times, or were supervisors shared by several teams?

Training
- Who conducted the training for survey teams?
- What did the training cover (e.g. general survey objectives, overview of survey design, household selection procedures, anthropometric measurements, signs and symptoms of malnutrition, data collection and interview skills, mortality interview)?
- Were the anthropometry and/or haemoglobin standardisation exercises conducted as part of the training? If yes, how many children were measured by the teams?
- What was the duration of the training?
- Was the field test conducted? If yes, how many children/households included in the pre-test?

2.7 Data collection

Data collection

- How long did data collection last?
- How did the team introduce themselves and the survey to the selected households?
- How did the team ask for consent? Refer the consent form in Appendix.

Android phones (If smartphones are used for data collection)

- What phone operation system was used?
- What data collection software was used?
- Was paper data collection also used?
- How were the questionnaires developed?
- Was there any external expert assistance provided?
- How many phones did each team use?

2.9 Data analysis

- By whom, where and when was data entered?
- What type of computer programmes did you use?
- What quality control procedures (e.g. double data entry, random checks on a certain percentage of entered records, etc.) were used?
- Were outliers in anthropometry data excluded from the analysis? If yes, how were the boundaries for exclusion defined (e.g. +/- 3 SD of WHZ from the observed WHZ mean)?
- Was the cleaned raw data shared with UNHCR Branch Office and HQ?

3. Results

The percentage of U5 and average household size should be derived if Module 5 (WASH) or Module 6 (Mosquito net coverage) are used in the survey and presented as shown in **Table 2** below. This will help in the planning future assessments.

TABLE 2 DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION

Total households surveyed	*[exclude absent households and refusals; only include households with data]*
Total population surveyed	
Total U5 surveyed	
Average household size	*[total population surveyed divided by total households surveyed]*
% of U5	*[total 0-59 months surveyed divided by total population surveyed × 100]*

The observed non-response rate should be added at the bottom of Table 2 in the final survey report.

3.1 Children 6-59 months

Sample size and clusters

TABLE 3 TARGET AND ACTUAL NUMBER CAPTURED

	Target (No.)	Total surveyed (No.)	% of the target
Children 6-59 months			
Clusters (where applicable)			

TABLE 4 CHILDREN 6-59 MONTHS - DISTRIBUTION OF AGE AND SEX OF SAMPLE (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)

	Boys		Girls		Total		Ratio
AGE (mo)	no.	%	no.	%	no.	%	Boy:Girl
6-17 months							
18-29 months							
30-41 months							
42-53 months							
54-59 months							
Total							

Things to note:

- ▪ The proportion of children with no exact birthdate that is provided in the Plausibility report of ENA for SMART software should be reported at the bottom of **Table 4** in the final report. This is useful for example to interpret the reliability of stunting and underweight data (both indicators use age).

- ▪ The percentage of children recruited on the basis of height (where applicable) should also be reported in the final survey report at the bottom of **Table 4**.

Anthropometric results (based on WHO Growth Standards 2006; NHCS Growth Reference 1977 shown in Appendix)

Exclude z-scores from Observed mean or SMART flags: WHZ -3 to 3; HAZ -3 to 3; WAZ -3 to 3.

Usually anthropometric results should be presented based on the WHO Growth Standards 2006 in the main body of the report and in the appendices; the data should be presented based on NCHS Growth Reference 1977. It is important to present both.

TABLE 5 PREVALENCE OF ACUTE MALNUTRITION BASED ON WEIGHT-FOR-HEIGHT Z-SCORES (AND/OR OEDEMA) AND BY SEX (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

	All n =	**Boys** n =	**Girls** n =
Prevalence of global malnutrition (<-2 z-score and/or oedema)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score, no oedema)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

The prevalence of oedema is %

Things to watch out for:

- – Often people disaggregate the main survey results by children's age, nationality, resident status or even cluster to conduct statistical analyses and compare results without considering the limitations of doing so. These analyses need to be interpreted with caution since sample size may not be large enough to detect differences if they exist or differences may be identified when there are none in reality. However, major differences in results between different groups should be looked into and warrant an in depth investigation following the nutrition survey to try to understand if the difference is real and if it is, why there is a difference.

- – GAM and SAM prevalence results from year to year should be presented as shown in the example figure below.

FIGURE 4 TRENDS IN THE PREVALENCE OF GLOBAL AND SEVERE ACUTE MALNUTRITION BASED ON WHO GROWTH STANDARDS IN CHILDREN 6-59 MONTHS FROM 2009-2012. **NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS. IT IS ADVISED THAT PREVALENCE DATA BE OBTAINED FROM NUTRITION SURVEYS CARRIED OUT AT SIMILAR TIMES OF THE YEAR.** (*THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS*)

Trend in Prevalence of GAM and SAM in Children 6-59 months
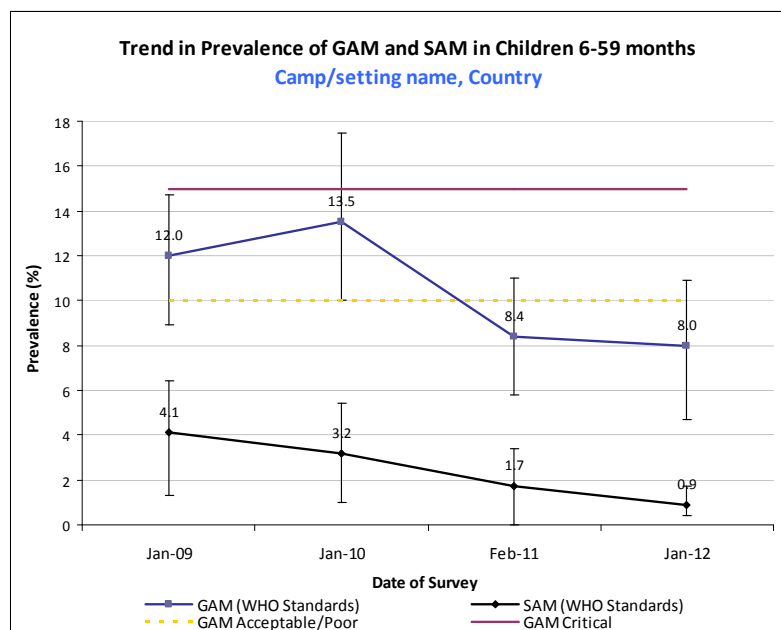Camp/setting name, Country

TABLE 6 PREVALENCE OF ACUTE MALNUTRITION BY AGE, BASED ON WEIGHT-FOR-HEIGHT Z-SCORES AND/OR OEDEMA (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

Age (mo)	Total no.	Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
		No.	%	No.	%	No.	%	No.	%
6-17									
18-29									
30-41									
42-53									
54-59									
Total									

− Wasting prevalence trend by age shown in **Table 6** should also be presented in a graph as shown in the example figure below.

FIGURE 5 TREND IN THE PREVALENCE OF WASTING BY AGE IN CHILDREN 6-59 MONTHS *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
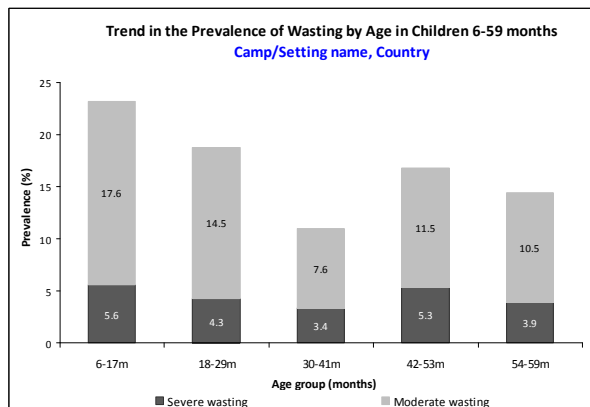

TABLE 7 DISTRIBUTION OF SEVERE ACUTE MALNUTRITION AND OEDEMA BASED ON WEIGHT-FOR-HEIGHT Z-SCORES (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)

	<-3 z-score	**>=-3 z-score**
Oedema present	Marasmic kwashiorkor No. (%)	Kwashiorkor No. (%)
Oedema absent	Marasmic No. (%)	Not severely malnourished No. (%)

FIGURE 6 DISTRIBUTION OF WEIGHT-FOR-HEIGHT Z-SCORES (BASED ON WHO GROWTH STANDARDS; THE REFERENCE POPULATION IS SHOWN IN GREEN AND THE SURVEYED POPULATION IS SHOWN IN RED) OF SURVEY POPULATION COMPARED TO REFERENCE POPULATION (*THIS FIGURE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)
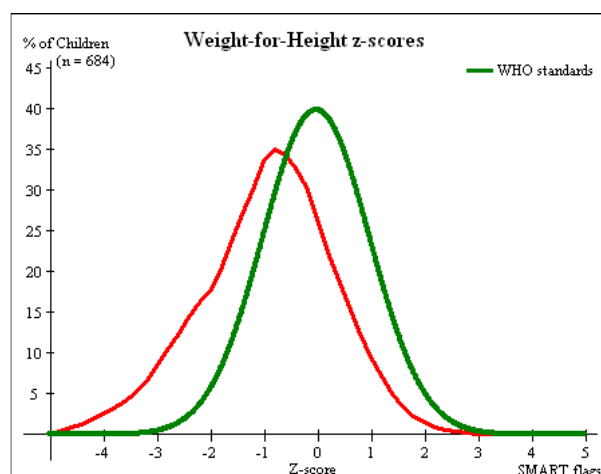
TABLE 8 PREVALENCE OF MUAC MALNUTRITION (*THESE RESULTS ARE AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE HOWEVER YOU NEED TO CHANGE THE CUT-OFF DESCRIPTIONS ACCORDING TO UNHCR'S DEFINITIONS AS SHOWN BELOW*)

	All n =	Boys n =	Girls n =
Prevalence of MUAC < 125 mm and/or oedema	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of MUAC < 125 mm and >= 115 mm, no oedema	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence MUAC < 115 mm and/or oedema	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

TABLE 9 PREVALENCE OF MUAC MALNUTRITION BY AGE, BASED ON MUAC CUT OFF'S AND/OR OEDEMA (*THESE RESULTS ARE AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE HOWEVER YOU NEED TO CHANGE THE CUT-OFF DESCRIPTIONS ACCORDING TO UNHCR'S DEFINITIONS AS SHOWN BELOW*)

		MUAC < 115 mm		MUAC >= 115 mm and < 125 mm		MUAC > = 125 mm		Oedema	
Age (mo)	Total no.	No.	%	No.	%	No.	%	No.	%
6-17									
18-29									
30-41									
42-53									
54-59									
Total									

TABLE 10 PREVALENCE OF UNDERWEIGHT BASED ON WEIGHT-FOR-AGE Z-SCORES BY SEX (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)

	All n =	Boys n =	Girls n =
Prevalence of underweight (<-2 z-score)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of moderate underweight (<-2 z-score and >=-3 z-score)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of severe underweight (<-3 z-score)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

TABLE 11 PREVALENCE OF STUNTING BASED ON HEIGHT-FOR-AGE Z-SCORES AND BY SEX *(THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

	All n =	Boys n =	Girls n =
Prevalence of stunting **(<-2 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of moderate stunting **(<-2 z-score and >=-3 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of severe stunting **(<-3 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

FIGURE 7 TRENDS IN THE PREVALENCE OF GLOBAL AND SEVERE STUNTING BASED ON WHO GROWTH STANDARDS IN CHILDREN 6-59 MONTHS FROM 2009-2012**. NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS. IT IS ADVISED THAT PREVALENCE DATA ARE OBTAINED FROM NUTRITION SURVEYS CARRIED OUT AT SIMILAR TIMES OF THE YEAR.** *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
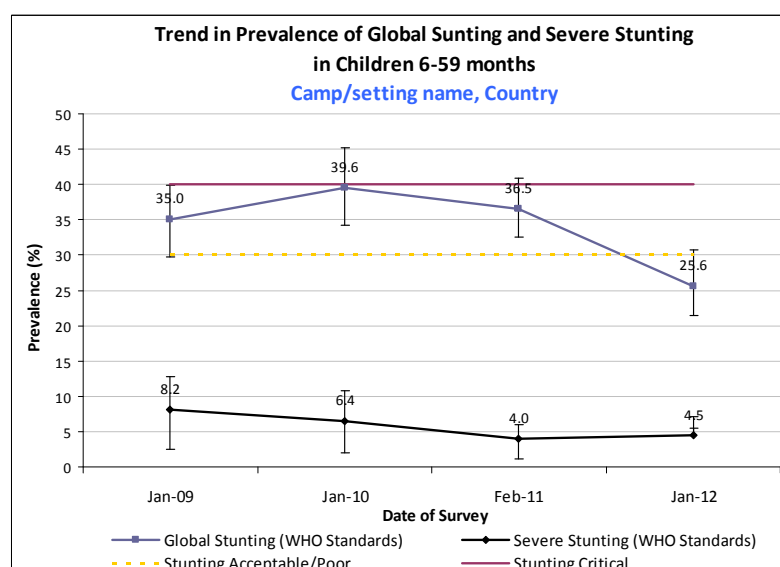
TABLE 12 PREVALENCE OF STUNTING BY AGE BASED ON HEIGHT-FOR-AGE Z-SCORES (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)

		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							
18-29							
30-41							
42-53							
54-59							
Total							

– Stunting prevalence trend by age shown in **Table 12** should also be presented in a graph as shown in the example figure below.

FIGURE 8 TRENDS IN THE PREVALENCE OF STUNTING BY AGE IN CHILDREN 6-59 MONTHS *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
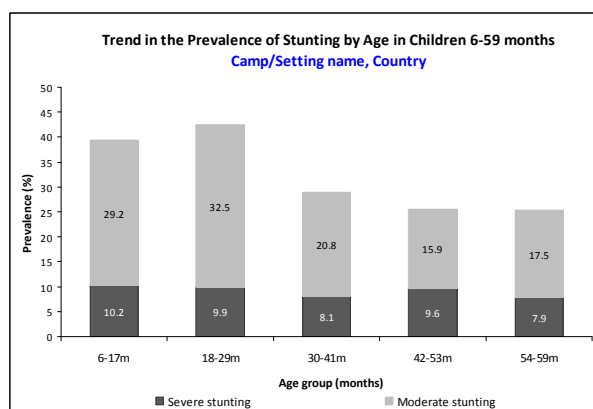
FIGURE 9 DISTRIBUTION OF HEIGHT-FOR-AGE Z-SCORES (BASED ON WHO GROWTH STANDARDS; THE REFERENCE POPULATION IS SHOWN IN GREEN AND THE SURVEYED POPULATION IS SHOWN IN RED) OF SURVEY POPULATION COMPARED TO REFERENCE POPULATION (*THIS FIGURE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)
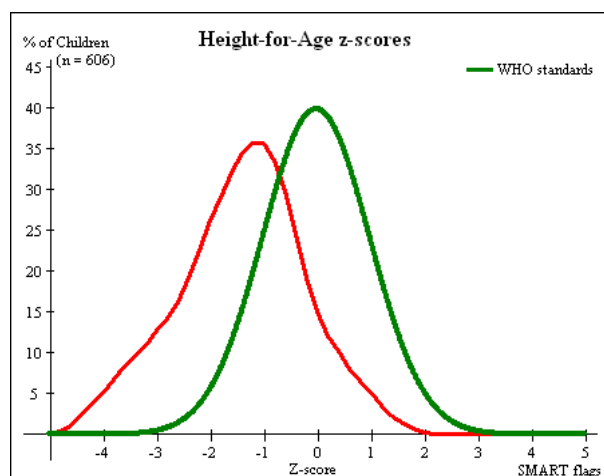

TABLE 13 MEAN Z-SCORES, DESIGN EFFECTS AND EXCLUDED SUBJECTS (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE; NO DESIGN EFFECT SHOULD BE PRESENTED IF SIMPLE OR SYSTEMATIC RANDOM SAMPLING WAS USED*)

Indicator	n	Mean z-scores ± SD	Design Effect (z-score < -2)	z-scores not available*	z-scores out of range
Weight-for-Height	mean±SD of WHZ				
Weight-for-Age	mean±SD of WAZ				
Height-for-Age	mean±SD of HAZ				

* contains for WHZ and WAZ the children with oedema.

- The flagging criteria used for anthropometric indices should be added to analysis section of the final report. (e.g. SMART flags and ranges used like -/+3 from the observed mean).

Feeding programme coverage results

TABLE 14 PROGRAMME COVERAGE FOR ACUTELY MALNOURISHED CHILDREN

	Number/total	% (95% CI)
Supplementary feeding programme coverage		
Therapeutic feeding programme coverage		

- It is calculated based on the admission criteria used in the survey setting. Where admission is based on MUAC, WHZ and oedema, you may show two tables of results, one table showing the programme coverage based on MUAC and oedema only, and one table showing the programme coverage based on all three admission criteria.

> To see the two recommended tables, see:
> SENS **Pre-Module Tool 18-Kakuma SENS Report 2012 (page 38).**

- Children with WHZ flags should be excluded from the coverage analysis.

Measles vaccination coverage results

TABLE 15 MEASLES VACCINATION COVERAGE FOR CHILDREN AGED 9-59 MONTHS (*OR OTHER CONTEXT-SPECIFIC TARGET GROUP*) (N=)

|	Measles (with card) n=	Measles (with card <u>or</u> confirmation from mother) n=
YES	% (95% CI)	% (95% CI)

Vitamin A supplementation coverage results

TABLE 16 VITAMIN A SUPPLEMENTATION FOR CHILDREN AGED 6-59 MONTHS WITHIN PAST 6 MONTHS (*OR OTHER CONTEXT-SPECIFIC TARGET GROUP*) (N=)

	Vitamin A capsule (with card) n=	Vitamin A capsule (with card <u>or</u> confirmation from mother) n=
YES	% (95% CI)	% (95% CI)

- Measles and vitamin A supplementation coverage results from year to year should be presented as shown in the example figure below.

FIGURE 10 TRENDS IN THE COVERAGE OF MEASLES VACCINATION AND VITAMIN A SUPPLEMENTATION IN LAST 6 MONTHS IN CHILDREN 6-59 MONTHS FROM 2009-2011 **NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS.** *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
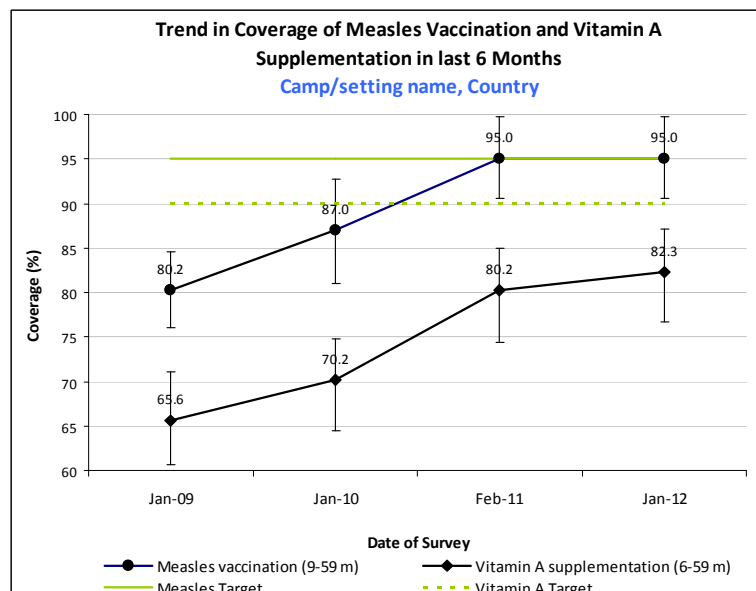
Diarrhoea results

TABLE 17 PERIOD PREVALENCE OF DIARRHOEA

	Number/total	% (95% CI)
Diarrhoea in the last two weeks		

Anaemia results

TABLE 18 PREVALENCE OF TOTAL ANAEMIA, ANAEMIA CATEGORIES, AND MEAN HAEMOGLOBIN CONCENTRATION IN CHILDREN 6-59 MONTHS OF AGE AND BY AGE GROUP

	6-59 months n =	6-23 months n=	24-59 months n=
Total Anaemia (Hb<11.0 g/dL)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Mild Anaemia (Hb 10.0-10.9 g/dL)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Moderate Anaemia (7.0-9.9 g/dL)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Severe Anaemia (<7.0 g/dL)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Mean Hb (g/dL) (SD / 95% CI) [range]	g/dL (SD or 95% CI) [min, max]	g/dL (SD or 95% CI) [min, max]	g/dL (SD or 95% CI) [min, max]

TABLE 19 PREVALENCE OF MODERATE AND SEVERE ANAEMIA IN CHILDREN 6-59 MONTHS OF AGE AND BY AGE GROUP

	6-59 months n =	6-23 months n=	24-59 months n=
Moderate and Severe Anaemia (Hb<10.0 g/dL)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

− Anaemia prevalence (mild, moderate and severe) and mean Hb results in children 6-59 should be presented from year to year as shown in the example figures below.

FIGURE 11 TRENDS IN ANAEMIA CATEGORIES IN CHILDREN 6-59 MONTHS FROM 2009-2012. **NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS. IT IS ADVISED THAT PREVALENCE DATA ARE OBTAINED FROM NUTRITION SURVEYS CARRIED OUT AT SIMILAR TIMES OF THE YEAR.** *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
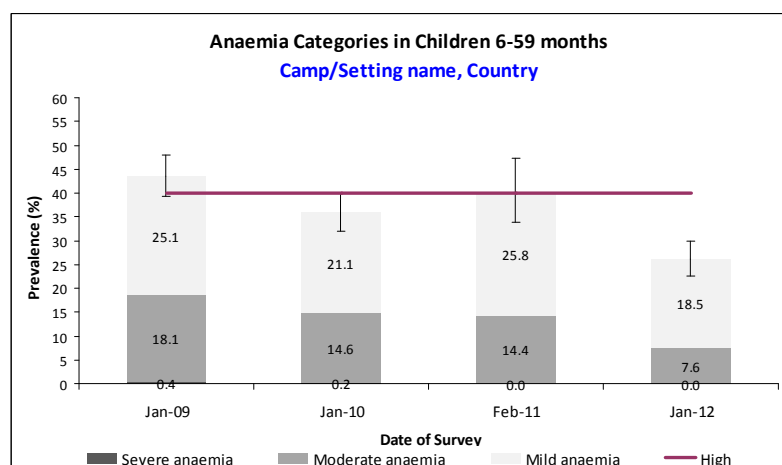

FIGURE 12 TREND IN TOTAL ANAEMIA (<11 G/DL), AND MODERATE AND SEVERE ANAEMIA (<10 G/DL) WITH 95% CI IN CHILDREN 6-59 MONTHS FROM 2009-2012. **NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS. IT IS ADVISED THAT DATA ARE OBTAINED FROM NUTRITION SURVEYS CARRIED OUT AT SIMILAR TIMES OF THE YEAR.** *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
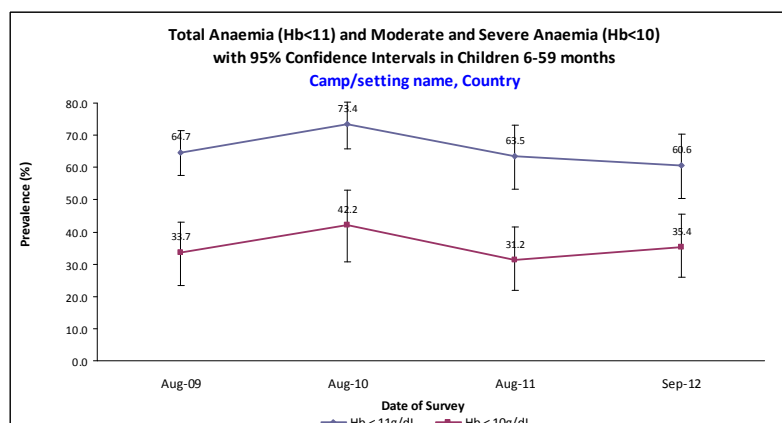
FIGURE 13 TREND IN MEAN HAEMOGLOBIN CONCENTRATION WITH 95% CI IN CHILDREN 6-59 MONTHS FROM 2009-2012. **NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS. IT IS ADVISED THAT DATA ARE OBTAINED FROM NUTRITION SURVEYS CARRIED OUT AT SIMILAR TIMES OF THE YEAR**. *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
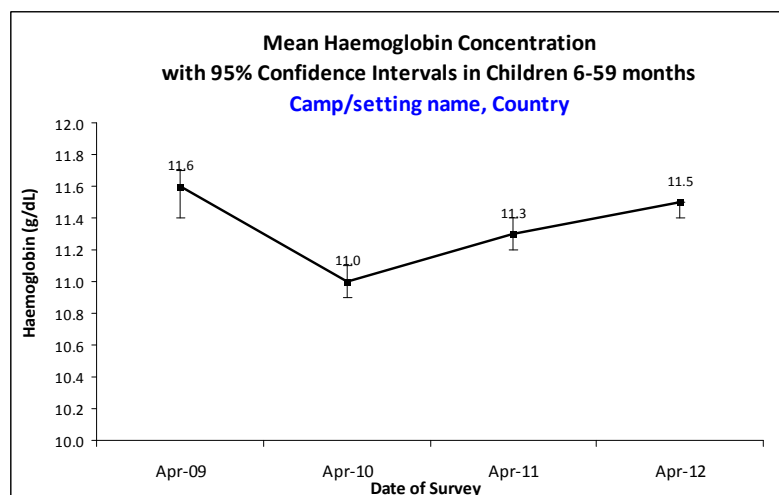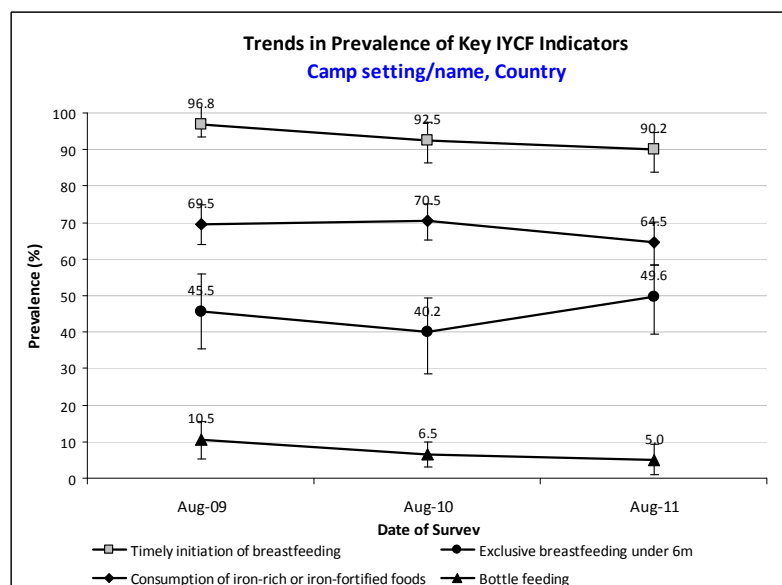

3.2 Children 0-23 months

TABLE 20 PREVALENCE OF INFANT AND YOUNG CHILD FEEDING PRACTICES INDICATORS

Indicator	Age range	Number/ total	Prevalence (%)	95% CI
Timely initiation of breastfeeding	**0-23 months**			
Exclusive breastfeeding under 6 months	**0-5 months**			
Continued breastfeeding at 1 year	**12-15 months**			
Continued breastfeeding at 2 years	**20-23 months**			
Introduction of solid, semi-solid or soft foods	**6-8 months**			
Consumption of iron-rich or iron-fortified foods	**6-23 months**			
Bottle feeding	**0-23 months**			

- The prevalence of a few IYCF indicators should be presented from year to year as shown in the example figures below.

– When IYCF indicators are collected in nutritional surveys based on GAM in children aged 6-59 months, it is not feasible to achieve a large enough sample size for some of the indicators to be estimated as precisely as desired, especially for indicators covering a very narrow age range (e.g. 12-15 months, 6-8 months). Hence, trend analyses need to be interpreted with caution. Nevertheless, trend analyses are useful for assessing the situation and major differences seen from year to year should warrant further investigation.

FIGURE 14 KEY IYCF INDICATORS FROM 2009-2011 *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*

Prevalence of intake

Infant formula

TABLE 21 INFANT FORMULA INTAKE IN CHILDREN AGED 0-23 MONTHS

	Number/total	% (95% CI)
Proportion of children aged 0-23 months who receive infant formula (fortified or non-fortified)		

Fortified blended foods

TABLE 22 FBF INTAKE IN CHILDREN AGED 6-23 MONTHS [PRODUCT TO BE ADAPTED: THE FBF MAY BE CSB+ FOR EXAMPLE; DO NOT INCLUDE TABLE IF NO FBF DISTRIBUTED]

	Number/total	% (95% CI)
Proportion of children aged 6-23 months who receive FBF		

TABLE 23 FBF++ INTAKE IN CHILDREN AGED 6-23 MONTHS [PRODUCT TO BE ADAPTED: THE FBF++ MAY BE CSB++ FOR EXAMPLE; DO NOT INCLUDE TABLE IF NO FBF++ DISTRIBUTED]

	Number/total	% (95% CI)
Proportion of children aged 6-23 months who receive FBF++		

Special nutritional products

TABLE 24 LNS INTAKE IN CHILDREN AGED 6-23 MONTHS [PRODUCT TO BE ADAPTED: THE LNS PRODUCT MAY BE NUTRIBUTTER® OR PLUMPY'DOZ® FOR EXAMPLE; DO NOT INCLUDE TABLE IF NO LNS DISTRIBUTED]

	Number/total	% (95% CI)
Proportion of children aged 6-23 months who receive LNS		

TABLE 25 MNP INTAKE IN CHILDREN AGED 6-23 MONTHS [PRODUCT TO BE ADAPTED: THE MNP MAY HAVE A SPECIFIC NAME; DO NOT INCLUDE TABLE IF NO MNP DISTRIBUTED]

	Number/total	% (95% CI)
Proportion of children aged 6-23 months who receive MNP		

3.3 <u>Women 15-49 years</u>

TABLE 26 WOMEN PHYSIOLOGICAL STATUS AND AGE

Physiological status	Number/total	% of sample
Non-pregnant		
Pregnant		
Mean age (range)		

TABLE 27 PREVALENCE OF ANAEMIA AND HAEMOGLOBIN CONCENTRATION IN NON-PREGNANT WOMEN OF REPRODUCTIVE AGE (15-49 YEARS)

Anaemia in non-pregnant women of reproductive age (15-49 years)	All n =
Total Anaemia (<12.0 g/dL)	(n) % (95% CI)
Mild Anaemia (11.0-11.9 g/dL)	(n) % (95% CI)
Moderate Anaemia (8.0-10.9 g/dL)	(n) % (95% CI)
Severe Anaemia (<8.0 g/dL)	(n) % (95% CI)
Mean Hb (g/dL) (SD / 95% CI) [range]	g/dL (SD or 95% CI) [min, max]

− Anaemia prevalence (mild, moderate and severe) and mean Hb results in women of reproductive age (non-pregnant) should be presented from year to year as shown in the example figures below.

FIGURE 15 TRENDS IN ANAEMIA CATEGORIES IN WOMEN OF REPRODUCTIVE AGE (NON-PREGNANT) FROM 2009-2012. **NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS. IT IS ADVISED THAT PREVALENCE DATA ARE OBTAINED FROM NUTRITION SURVEYS CARRIED OUT AT SIMILAR TIMES OF THE YEAR.** *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
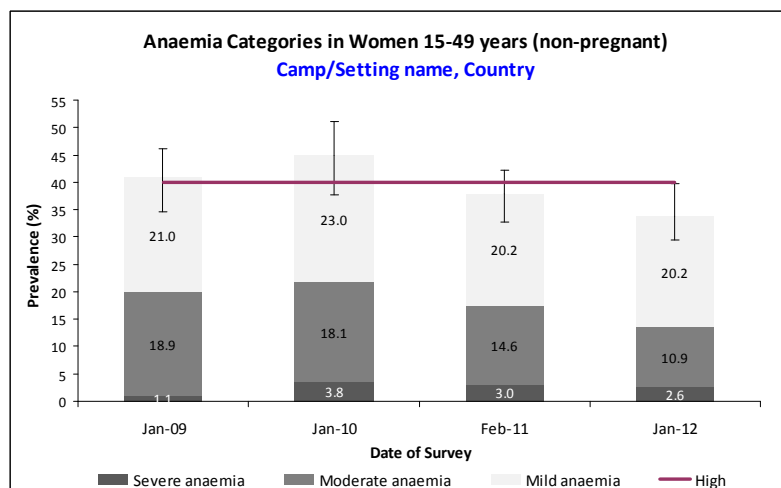

FIGURE 16 TREND IN MEAN HAEMOGLOBIN CONCENTRATION WITH 95% CI IN WOMEN OF REPRODUCTIVE AGE (NON-PREGNANT) FROM 2009-2012. **NOTE THAT A TREND CAN ONLY BE IDENTIFIED WHEN THERE ARE AT LEAST THREE TIME POINTS. IT IS ADVISED THAT DATA ARE OBTAINED FROM NUTRITION SURVEYS CARRIED OUT AT SIMILAR TIMES OF THE YEAR.** *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*

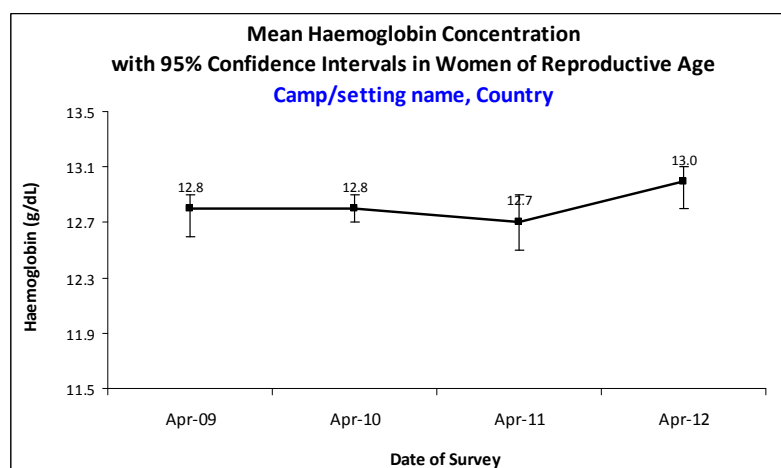
TABLE 28 ANC ENROLMENT AND IRON-FOLIC ACID PILLS COVERAGE AMONG PREGNANT WOMEN (15-49 YEARS)

	Number /total	% (95% CI)
Currently enrolled in ANC programme		
Currently receiving iron-folic acid pills		

3.4 Food security

TABLE 29 FOOD SECURITY SAMPLING INFORMATION

Household data	Planned	Actual	% of target
Total households surveyed for Food Security		*[only include households with data; exclude absent households and refusals]*	

Access to food assistance results

TABLE 30 RATION CARD COVERAGE

	Number/total	% (95% CI)
Proportion of households with a ration card		

Out of the households reporting not to have a ration cards, add the following text description when relevant:

[insert proportion] said it was because they were not given one at registration, even if they were included in the targeting criteria; [INSERT PROPORTION] said it was because they lost their ration card; [INSERT PROPORTION] said it was because they traded or sold their card; [INSERT PROPORTION] said it was because they were new arrivals who were eligible but were not yet registered; [INSERT PROPORTION] said it was because they were not included in the targeting criteria; and [INSERT PROPORTION] gave other reasons.

TABLE 31 REPORTED DURATION OF GENERAL FOOD RATION 1[3]

Average number of days the food ration lasts (Standard deviation or 95% CI)	Average duration (%) in relation to the theoretical duration of the ration*
days	**%**

*For example, if the average number of days the food ration lasts is 21 days out of the 30 days, then the average duration in relation to the theoretical duration of the ration is calculated as follows: 21 days/30 days x 100=70%.

---

[3] In contexts where a mix of full rations and half rations are given, only report this value for the households receiving the full ration.

TABLE 32 REPORTED DURATION OF GENERAL FOOD RATION 2

	Number/total	% (95% CI)
Proportion of households reporting that the food ration lasts the entire duration of the cycle		
Proportion of households reporting that the food ration lasted:		
≤75% of the cycle [INSERT DAYS]		
>75% of the cycle [INSERT DAYS]		

Negative coping strategies results

TABLE 33 COPING STRATEGIES USED BY THE SURVEYED POPULATION OVER THE PAST MONTH

	Number/total	% (95% CI)
Proportion of households reporting using the following coping strategies over the past month*:		
Borrowed cash, food or other items *with or without interest*		
Sold any assets that would not have normally sold (furniture, seed stocks, tools, other NFI, livestock etc.)		
Requested increased remittances or gifts as compared to normal		
Reduced the quantity and/or frequency of meals		
Begged		
Engaged in potentially risky or harmful activities [LIST ACTIVITIES]		
Proportion of households reporting using none of the coping strategies over the past month		

* The total will be over 100% as households may use several negative coping strategies.

Household dietary diversity results

The following information needs to be added as text in the results:

"The last general food distribution ended [INSERT NUMBER] days prior to the start of the survey data collection. OR Vouchers or cash grants for food were last provided on [INSERT DATE] [i.e. [INSERT NUMBER] days prior to the start of the survey data collection"

The general in-kind food aid distribution usually lasts more than one day and may be organised by family size, hence the surveyed households will be at different times of the cycle which may have an impact on the HDDS results and this needs to be considered in interpreting the data.

You should also provide an explanation on the season when the survey was conducted and its impact on the overall food availability. For example: "The survey was conducted during the annual lean season, during which the overall food availability is limited. It is hence likely that the household dietary diversity score is lower than it would be e.g. after the harvest." Note also any extraordinary event that may have affected household dietary intake, such a drought or a festivity.

TABLE 34 AVERAGE HDDS

	Mean (Standard deviation or 95% CI)
Average HDDS	

* Maximum HDDS is 12.

FIGURE 17 PROPORTION OF HOUSEHOLDS CONSUMING DIFFERENT FOOD GROUPS WITHIN LAST 24 HOURS *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
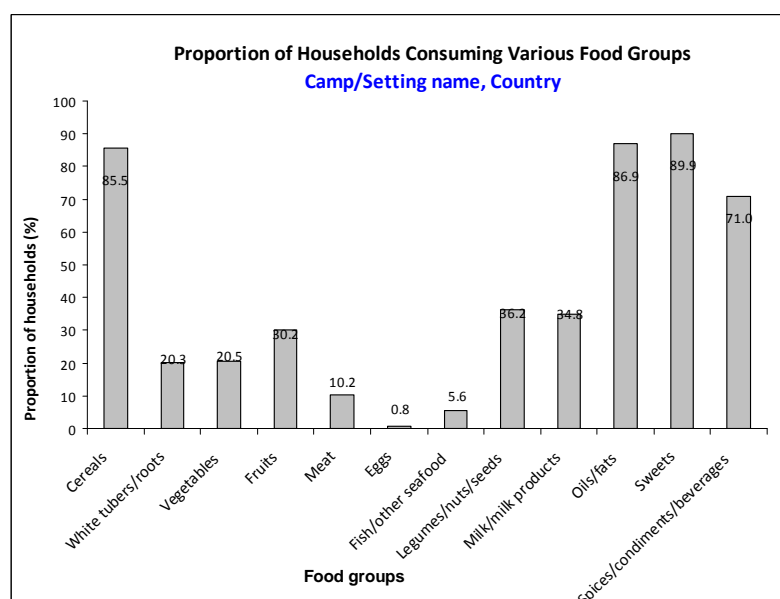
TABLE 35 CONSUMPTION OF MICRONUTRIENT RICH FOODS BY HOUSEHOLDS

	Number/total	% (95% CI)
Proportion of households *not consuming any* vegetables, fruits, meat, eggs, fish/seafood, and milk/milk products		
Proportion of households consuming either a plant or animal source of vitamin A		
Proportion of households consuming organ meat/flesh meat, or fish/seafood (food sources of haem iron)		

3.5 Food aid flow (OPTIONAL)

Insert food aid flows analysis (see Module 4 for more details).

3.6 WASH

TABLE 36 WASH SAMPLING INFORMATION

Household data	Planned	Actual	% of target
Total households surveyed for WASH		*[only include households with data; exclude absent households and refusals]*	

TABLE 37 WATER QUALITY

	Number/total	% (95% CI)
Proportion of households using an improved drinking water source		
Proportion of households that use a covered or narrow necked container for storing their drinking water		

TABLE 38 WATER QUANTITY: AMOUNT OF LITRES OF WATER USED PER PERSON PER DAY

Proportion of households that use:	Number/total	% (95% CI)
≥ 20 lpppd		
15 – <20 lpppd		
<15 lpppd		

Add the average water usage in lppd at the bottom of **Table 38** in the final report.

TABLE 39 SATISFACTION WITH WATER SUPPLY

	Number/total	% (95% CI)
Proportion of households that say they are satisfied with the drinking water supply		

FIGURE 18 PROPORTION OF HOUSEHOLDS THAT SAY THEY ARE SATISFIED WITH THE WATER SUPPLY *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
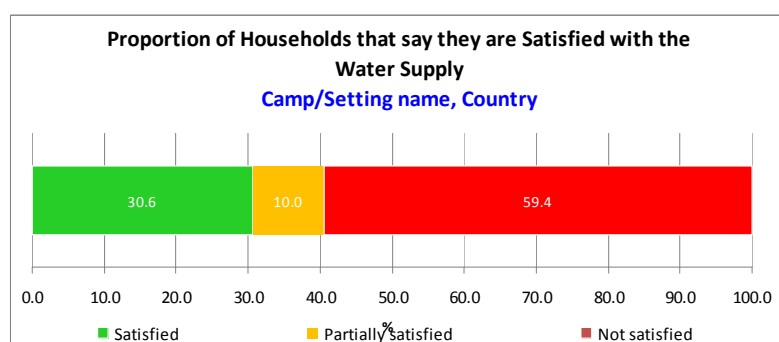

FIGURE 19 MAIN REASON FOR DISSATISFACTION AMONG HOUSEHOLDS NOT SATISFIED WITH WATER SUPPLY *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
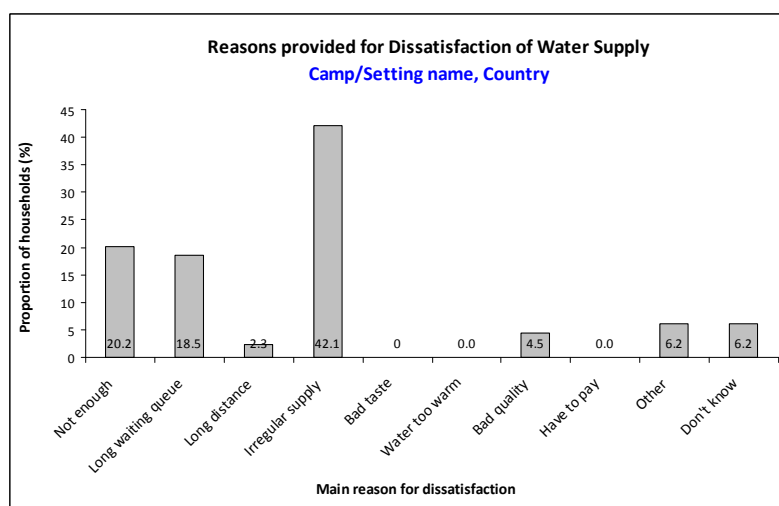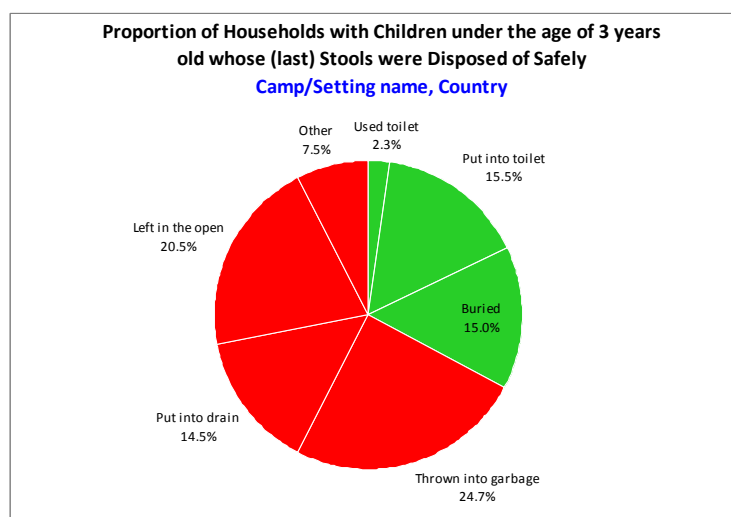
TABLE 40 SAFE EXCRETA DISPOSAL

	Number/total	% (95% CI)
Proportion of households that use:		
An improved excreta disposal facility (improved toilet facility, 1 household)*,**		
A shared family toilet (improved toilet facility, 2 households)**		
A communal toilet (improved toilet facility, 3 households or more)		
An unimproved toilet (unimproved toilet facility or public toilet)		
Proportion of households with children under three years old that dispose of faeces safely		

*To maintain consistency with other survey instruments (e.g. the multiple indicator cluster survey), UNHCR SENS WASH module classifies an **"improved excreta disposal facility"** as a toilet in the "improved" category **AND** one that is **not shared** with other families / households.

According to UNHCR WASH monitoring system, an **"improved excreta disposal facility" is defined differently than in survey instruments and is defined as a toilet in the "improved" category AND one that is shared by a *maximum* of 2 families / households or no more than *12 individuals*. Therefore, the following two categories from the SENS survey definitions are considered "improved excreta disposal facility" for UNHCR WASH monitoring system: "improved excreta disposal facility (improved toilet facillity, 1 household)" and "shared family toilet (improved toilet facility, 2 households)".

FIGURE 20 PROPORTION OF HOUSEHOLDS WITH CHILDREN UNDER THE AGE OF 3 YEARS WHOSE (LAST) STOOLS WERE DISPOSED OF SAFELY *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*

Proportion of Households with Children under the age of 3 years old whose (last) Stools were Disposed of Safely
Camp/Setting name, Country

- Other 7.5%
- Used toilet 2.3%
- Put into toilet 15.5%
- Buried 15.0%
- Thrown into garbage 24.7%
- Put into drain 14.5%
- Left in the open 20.5%

3.7 Mosquito Net Coverage

TABLE 41 MOSQUITO NET COVERAGE SAMPLING INFORMATION

Household data	Planned	Actual	% of target
Total households surveyed for mosquito net coverage		*[only include households with data; exclude absent households and refusals]*	

TABLE 42 HOUSEHOLD MOSQUITO NET OWNERSHIP

	Number/total	% (95% CI)
Proportion of total households owning at least one mosquito net of any type		
Proportion of total households owning at least one LLIN		

FIGURE 21 HOUSEHOLD OWNERSHIP OF AT LEAST ONE MOSQUITO NET (ANY TYPE) *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
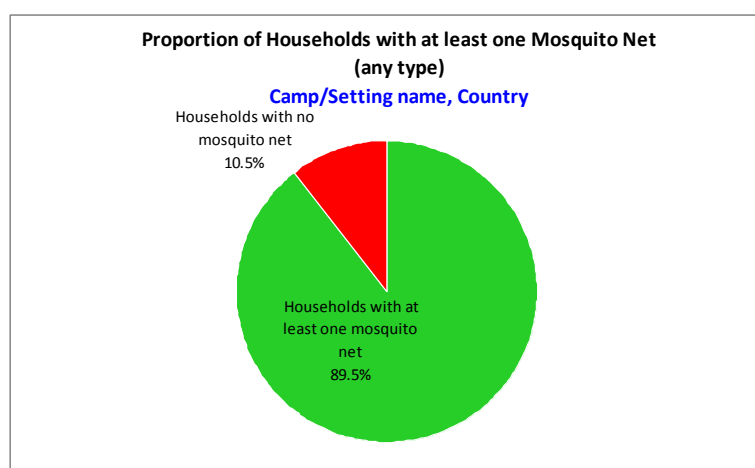

Proportion of Households with at least one Mosquito Net (any type)
Camp/Setting name, Country

- Households with no mosquito net 10.5%
- Households with at least one mosquito net 89.5%

FIGURE 22 HOUSEHOLD OWNERSHIP OF AT LEAST ONE LLIN *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
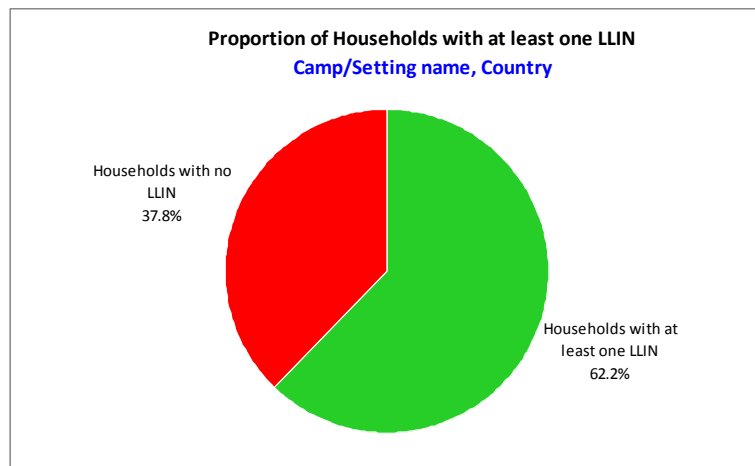

Proportion of Households with at least one LLIN
Camp/Setting name, Country

Households with no LLIN 37.8%

Households with at least one LLIN 62.2%

TABLE 43 NUMBER OF NETS

Average number of LLINs per household	Average number of persons per LLIN
Mean	Mean

TABLE 44 MOSQUITO NET UTILISATION. **NOTE THAT IT IS NOT REQUIRED TO INCLUDE CONFIDENCE INTERVALS FOR THESE INDICATORS AS THEY ARE COMPLEX TO CALCULATE**

	Proportion of total population (all ages)		Proportion of 0-59 months		Proportion of pregnant women	
	Total No=	**%**	**Total No=**	**%**	**Total No=**	**%**
Slept under net of any type	No	**%**	No	**%**	No	**%**
Slept under LLIN	No	**%**	No	**%**	No	**%**

FIGURE 23 MOSQUITO NET UTILISATION BY SUB-GROUP *(THIS FIGURE CAN BE AUTOMATICALLY GENERATED BY USING SENS PRE-MODULE TOOL 12 – TRENDS AND GRAPHS)*
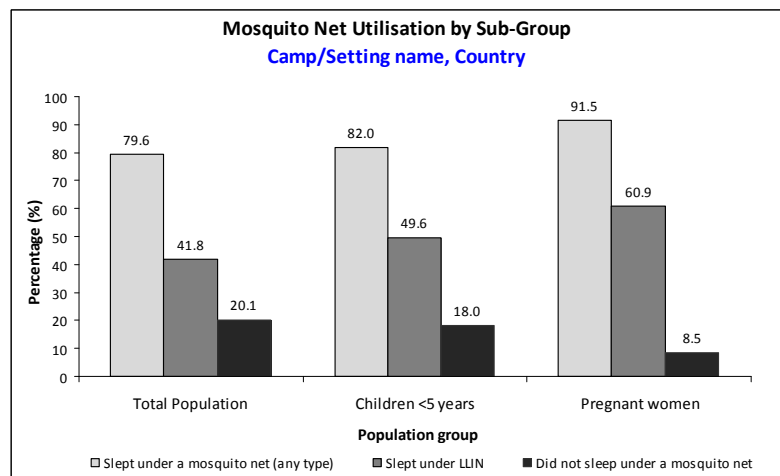

TABLE 45 INDOOR RESIDUAL SPRAYING HOUSEHOLD COVERAGE (OPTIONAL)

	Number/total	% (95% CI)
Proportion of households covered by IRS		

3.8 Other results

Include other results and figures.

3.9 Limitations

Include limitations of survey, e.g.: poor quality of age data impacting on the reliability of the stunting and underweight results; unreliable population data for cluster selection; quality of training; limited supervision due to security reasons; overall quality of anthropometric data from SMART plausibility check.

4. Discussion

4.1 Nutritional status of young children

- Discuss sample sex ratio — any bias? If so, explain why you think there is bias
- Prevalence of acute malnutrition
- If previous survey results are available, how do these results compare to before, or to other areas nearby (e.g. the local population surrounding the camp(s) or settlement(s)?
- How does the prevalence compare to national benchmarks of malnutrition?
- Is the prevalence of malnutrition typical or not?
- What are the major acute causes of malnutrition if known or suspected (taking into account causes already addressed by other interventions)? Consider immediate, underlying and basic causes.
- What are the prospects for the coming months? Will the situation get better or worse (refer to seasonal changes etc.)
- Who is worst affected?
- What are the chronic causes of malnutrition?
- What does the community recommend?
- Does the story fit together? If not what are the unanswered questions?
- A diagram to show the causal framework of malnutrition may be useful.

4.2 Programme coverage

- Coverage for measles vaccination, vitamin A supplementation within last 6 months, any SFP/TFC programmes, ANC and iron-folic acid supplementation.
- If previous survey results are available, how do these results compare to before?
- How does the prevalence compare to targets for programme coverage?
- Explanation for coverage (good/bad/why)

4.3 Anaemia in young children and women

- Prevalence of anaemia
- If previous survey results are available, how do these results compare to before, or to other areas nearby?
- How does the prevalence compare to benchmarks of anaemia?
- Is the prevalence of anaemia typical or not?
- What are the major causes of anaemia if known or suspected (taking into account causes already addressed by other interventions)?
- Who is worst affected?
- What does the community recommend?
- Does the story fit together? If not what are the unanswered questions

4.4 IYCF indicators

- Results from key indicators
- If previous survey results are available, how do these results compare to before, or to other areas nearby?
- What does the community recommend?
- Does the story fit together? If not what are the unanswered questions

4.5 Food security

- Results from key indicators
- If previous survey results are available, how do these results compare to before, or to other areas nearby?
- What is the state of the pipeline?
- Has there been any recent change in food assistance?
- What does the community recommend?
- Does the story fit together? If not what are the unanswered questions

4.6 WASH

- Results from key indicators
- If previous survey results are available, how do these results compare to before, or to other areas nearby?
- How do the results compare to benchmarks for WASH indicators?
- What does the community recommend?
- Does the story fit together? If not what are the unanswered questions

4.7 Mosquito net coverage

- Mosquito net ownership and utilisation results by net type, total population and vulnerable population groups (i.e. children U5 and pregnant women).
- If previous survey results are available, how do these results compare to before, or to other areas nearby?
- How does the results compare to benchmarks for coverage of mosquito nets?
- What does the community recommend?
- Does the story fit together? If not what are the unanswered questions

4.8 Other collected information/data

- Include interpretation of results

5. Conclusions

Overall conclusions on the severity of the situation and the urgency of the response required

6. Recommendations and priorities

Remember to prioritise recommendations and try to give a time when action would be appropriate (e.g. immediate, medium term or longer term).

Future nutrition monitoring

- Is it necessary to carry out another nutrition survey in this area in the near future? Who should do it? Should there be any changes to the survey methodology? When should the survey take place?

7. References

List all secondary sources to which you have referred in the text.

8. Acknowledgements

1. List all government departments, International agencies, International NGOs, National NGOs and other organisations that supported or participated in the survey. (All involved in planning the survey and those organisations or individuals who have provided staff, vehicles, equipment, logistics).

2. List donors and other sources of funds

3. List the individuals involved in the survey
    Supervisor/Manager:
    Consultants/ Trainers/ Advisors/ analysts:
    Logistics/administration:
    Team members:
    Translators:
    Drivers:
    Others

4. (Optional) List those who gave permission/ authorisation and otherwise supported the survey in a non-participatory way.

9. Appendices

Appendix 1

SMART Plausibility Check (PC) Report

Instructions for presentation of the PC report are as follows:

- If PC < 15%, only show the overall data quality summary table.

- If PC>15%, carefully examine the anthropometric data for all teams and by teams; and show the details of the problematic areas in the Appendix along with a short interpretation. UNHCR HQ should be contacted for assistance in analysing problematic scores from the SMART PC reports.

Appendix 2

Assignment of Clusters

Geographical unit   Population size Assigned cluster

Appendix 3

Evaluation of Enumerators (results from anthropometric standardisation test)

Appendix 4

Result Tables for NCHS growth reference 1977

TABLE 46 PREVALENCE OF ACUTE MALNUTRITION BASED ON WEIGHT-FOR-HEIGHT Z-SCORES (AND/OR OEDEMA) AND BY SEX (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)

	All n =	Boys n =	Girls n =
Prevalence of global malnutrition (<-2 z-score and/or oedema)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score, no oedema)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

The prevalence of oedema is %

TABLE 47 PREVALENCE OF ACUTE MALNUTRITION BY AGE, BASED ON WEIGHT-FOR-HEIGHT Z-SCORES AND/OR OEDEMA (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

Age (mo)	Total no.	Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
		No.	%	No.	%	No.	%	No.	%
6-17									
18-29									
30-41									
42-53									
54-59									
Total									

TABLE 48 DISTRIBUTION OF SEVERE ACUTE MALNUTRITION AND OEDEMA BASED ON WEIGHT-FOR-HEIGHT Z-SCORES (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE*)

	<-3 z-score	>=-3 z-score
Oedema present	Marasmic kwashiorkor No. (%)	Kwashiorkor No. (%)
Oedema absent	Marasmic No. (%)	Not severely malnourished No. (%)

TABLE 49 PREVALENCE OF ACUTE MALNUTRITION BASED ON THE PERCENTAGE OF THE MEDIAN AND/OR OEDEMA (USING THE NCHS GROWTH REFERENCE) (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

	n =
Prevalence of global acute malnutrition (<80% and/or oedema)	(n) % (95% CI)
Prevalence of moderate acute malnutrition (<80% and >= 70%, no oedema)	(n) % (95% CI)
Prevalence of severe acute malnutrition (<70% and/or oedema)	(n) % (95% CI)

TABLE 50 PREVALENCE OF MALNUTRITION BY AGE, BASED ON WEIGHT-FOR-HEIGHT PERCENTAGE OF THE MEDIAN AND OEDEMA (USING THE NCHS GROWTH REFERENCE) (*THIS TABLE IS AUTOMATICALLY GENERATE BY ENA FOR SMART SOFTWARE*)

Age (mo)	Total no.	Severe wasting (<70% median)		Moderate wasting (>=70% and <80% median)		Normal (> =80% median)		Oedema	
		No.	%	No.	%	No.	%	No.	%
6-17									
18-29									
30-41									
42-53									
54-59									
Total									

TABLE 51 PREVALENCE OF UNDERWEIGHT BASED ON WEIGHT-FOR-AGE Z-SCORES BY SEX *(THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

	All n =	Boys n =	Girls n =
Prevalence of underweight **(<-2 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of moderate underweight **(<-2 z-score and >=-3 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of severe underweight **(<-3 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

TABLE 52 PREVALENCE OF STUNTING BASED ON HEIGHT-FOR-AGE Z-SCORES AND BY SEX *(THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

	All n =	Boys n =	Girls n =
Prevalence of stunting **(<-2 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of moderate stunting **(<-2 z-score and >=-3 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)
Prevalence of severe stunting **(<-3 z-score)**	(n) % (95% CI)	(n) % (95% CI)	(n) % (95% CI)

TABLE 53 PREVALENCE OF STUNTING BY AGE BASED ON HEIGHT-FOR-AGE Z-SCORES (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE)*

Age (mo)	Total no.	Severe stunting (<-3 z-score)		Moderate stunting (>= -3 and <-2 z-score)		Normal (> = -2 z score)	
		No.	%	No.	%	No.	%
6-17							
18-29							
30-41							
42-53							
54-59							
Total							

TABLE 54 MEAN Z-SCORES, DESIGN EFFECTS AND EXCLUDED SUBJECTS (*THIS TABLE IS AUTOMATICALLY GENERATED BY ENA FOR SMART SOFTWARE; NO DESIGN EFFECT SHOULD BE PRESENTED IF SIMPLE OR SYSTEMATIC RANDOM SAMPLING WERE USED*)

Indicator	n	Mean z-scores ± SD	Design Effect (z-score < -2)	z-scores not available*	z-scores out of range
Weight-for-Height	mean±SD of WHZ				
Weight-for-Age	mean±SD of WAZ				
Height-for-Age	mean±SD of HAZ				

Appendix 5

Maps of area

Appendix 6

Questionnaires

Appendix 7

Local event calendar used during the survey to estimate age of young children