TECHNICAL PROTOCOL

FOR

Standardized Monitoring and Assessment of Relief and Transitions (SMART) Survey in Aweil West County Northern Bahr-El-Ghazal State, South Sudan

Submitted by

REACH Initiative

February 2025

REACH An initiative of IMPACT Initiatives ACTED and UNOSAT

Contents

1.0 BACKGROUND 2
1.1 Introduction 2
1.2 Survey Objectives 5
1.3 Survey Areas 6
1.4 Survey time 6
2.0 METHODOLOGY 7
2.1 Survey Design 7
2.2 Study Population 7
2.3 Sample Size Estimation 7
2.3.1 Anthropometric Sample Size 8
2.3.2 Mortality Sample Size 8
2.3.3 Number of Clusters 9
2.4 Sampling Procedure: Selection of Clusters 9
2.5 Sampling Procedure: Selection of Households and Children 10
2.6 Survey Teams, Training, Data Collection and Data Management 10
2.7 Data Quality 11
2.8 Questionnaire 11
2.9 Data to be Collected 11
2.10 Data Analysis 12
2.11 Ethical Considerations 13
Annex 1. Survey Plan 14
Annex 2. Cluster control form 15
Annex 3. HOUSEHOLD LISTING AND ANTHROPOMETRY 16
Annex 4. FOOD CONSUMPTION LISTING 17
Annex 5. IYCF – 24 hours diet recall form 18

1.0 BACKGROUND

1.1 Introduction

South Sudan, the world's youngest country having gained independence from Sudan in 2011, has faced internal conflict since 2013, causing widespread displacement, disruption of livelihoods, and chronically high levels of acute food insecurity and malnutrition. A Peace deal was signed in September 2018, which resulted in improved security and increased access to affected populations for humanitarian assistance, and an increase in refugees and Internally Displaced Persons (IDPs) returning to their communities[1]. However, as of July 2023, there remained an estimated 2.4 million refugees from South Sudan residing in neighboring countries (Uganda, Sudan, Ethiopia, Kenya, DRC)[2]. The consolidated findings from the IPC Technical Working Group (October 2024) and External Reviews data show that in South Sudan 6.3 million people (47 percent of the total population analyzed) were experiencing high levels of acute food insecurity classified as IPC Phase 3 or above (Crisis or worse), with 1.74 million people in IPC Phase 4 (Emergency)[3]. An estimated 41,000 people were classified in IPC Phase 5 (Catastrophe), including 31,000 South Sudanese returnees who fled the ongoing conflict in Sudan. The most food insecure states with the highest number of people facing IPC Phase 3 or above (Crisis or worse) between September and November 2024 are: Unity state (57%), Jonglei state (53%),Northern Bahr el Ghazal state (51%) and Western Equatoria state (50%). By June 2025 across the country, 2.075 million children are expected to suffer from acute malnutrition. Of those, 646,362 will likely face Severe Acute Malnutrition (SAM). The very high prevalence of acute malnutrition remains a public health concern.

Aweil West County is located in Northern Bahr el-Ghazal State, is one of 76 counties out of 80 to remain in critical (phase 4) in IPC AMN classification. It borders Aweil North County to the north, Aweil East County to the east, and Aweil Centre County to the south. It also borders Western Bahr el-Ghazal State (Raja County) to the west. The livelihood zone for Aweil West County falls under the western flood plains Sorghum and cattle, with grassland, swampy areas of papyrus reed, and pockets of forest being found in this area. A primary road runs from Aweil town to Gorong via Nyamlel and the secondary road runs west from Goron to Raja town (Western Bahr-el Ghazal State). The key livelihood activities include livestock rearing, cereal production, and trade[4]. The main crops that are produced are sorghum and maize, other harvests include pumpkin, cowpeas, sesame and vegetables. Trade was reportedly dampened by the official closure of the border with Sudan in July 2023, however illegal trade persisted throughout the recent civil war in South Sudan. Flooding is a regular concern for both agriculturalists and pastoralists in Aweil West. According to recent IRNA conducted in September 2024, an estimated 2,513 households were severely affected by flooding in Aweil West, with many of them evacuating to higher land to avoid the increasing waters.

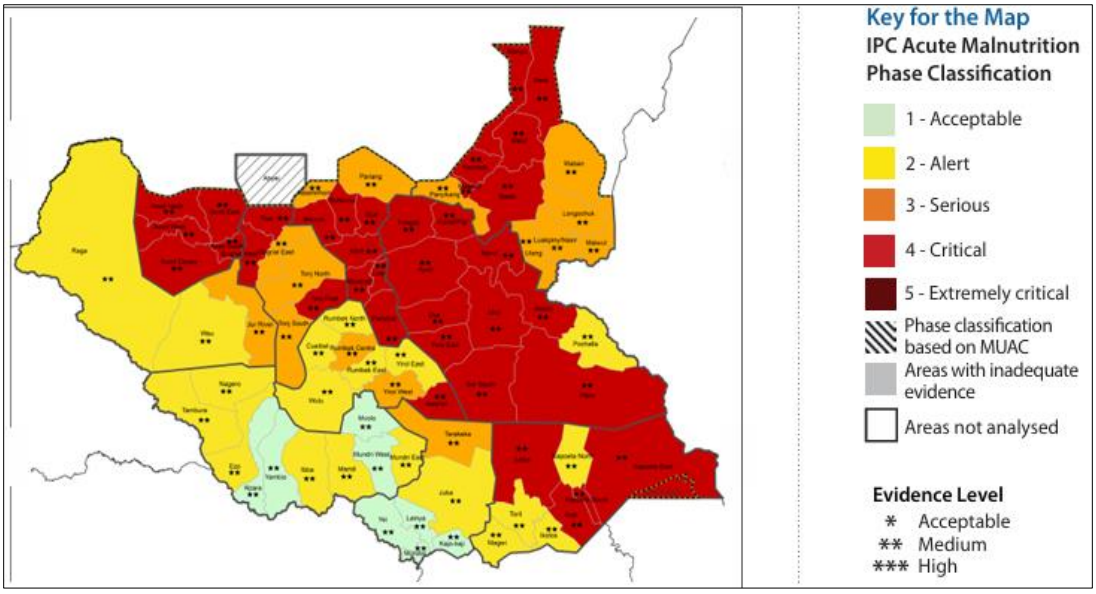
In Aweil West County, the prevalence of Global Acute Malnutrition (GAM) rate based on weight-for-height z-scores was high at a prevalence of 13.8 % (10.0 - 18.6 95% CI), according to the available most recent SMART survey conducted by Concern Worldwide with technical Support from REACH in Aweil West County in January 2020[5]. Though the prevalence was below the emergency threshold (15%) of the World Health Organization (WHO) there are indications of more severity on the situation according to recent assessment such as Food Security and Nutrition Monitoring System (FSNMS) conducted in July 2024 ahead of the IPC

[1] https://www.worldbank.org/en/country/southsudan/overview
[2] https://www.unrefugees.org/emergencies/south-sudan/
[3] South Sudan IPC Report 2024/25
[4] https://www.csrf-southsudan.org/county_profile/aweil-west/
[5] Aweil West _ CWW_REACH_SMART_Final Report.pdf

analysis, there is a need conduct SMART survey to determine the current nutrition situation of the population as well as provide up to date robust data on the food security and public health-related aggravating factors to inform and guide relevant response in the county. As there was no SMART survey conducted recently in Aweil West County, for the sake of this technical protocol, the parameters were taken from the neighboring county Aweil North County SMART survey conducted in March 2024 used to calculate the sample size of the survey. Accordingly, the Aweil North SMART survey revealed a Prevalence of GAM rate based on Weight-for-height Z-score of 26.0% (21.7 – 30.8, 95% CI)[6], which is above the WHO emergency threshold of 15%. Hence, we have taken the prevalence from the FSNMS 2024 finding (21.3%) and used all other parameters from Aweil North SMART survey. Findings from the survey will support planning, targeting and response by ALIGHT, partners and key stakeholders on issues related to nutrition, health, WASH and FSL within the county.

In the most recent IPC for Acute Malnutrition (IPC-AMN) report, published in November 2024[7], Aweil West is classified in as "critical"(phase 4), based on the data obtained from FSNMS, for the analysis period (July-September 2024) as well as for the first (October 2024-March 2025) and second (April-June 2025) projections periods. The major drivers of acute malnutrition include high disease prevalence, poor sanitation, sub-optimal infant and young child feeding practices, and food insecurity.

Figure 1 - South Sudan acute malnutrition situation for first projection period (Oct 2024 - Mar 2025). source, ipcinfo.org

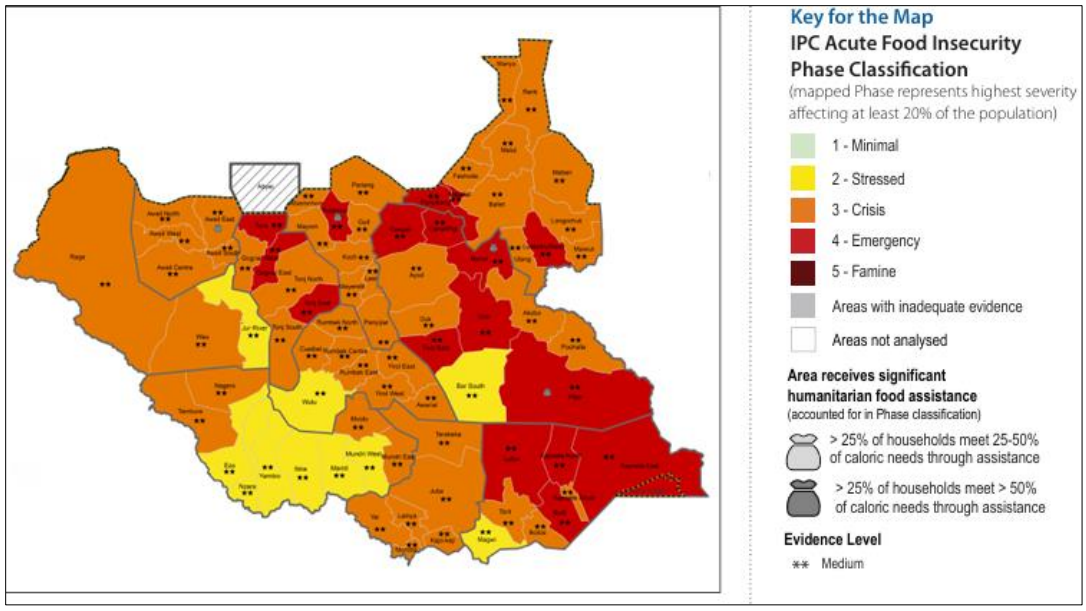


South Sudan's severe food insecurity and malnutrition condition is deteriorating. The situation is becoming worse as a result of the flood of refugees and returnees from the fighting in Sudan, further putting additional pressure on an already fragile country. An estimated 6.3 million people (47 percent of the population analyzed) are classed in IPC Phase 3 or above (Crisis or worse) between September and November 2024. In the first projection period of December 2024 to March 2025, 6.1 million people (45 percent of the population analysed) will likely experience IPC Phase 3 or above (Crisis or worse). Of this total, 4.33 million

[6] SMART survey report in Aweil North county, Northern Bahr El Ghazal state, South Sudan, March 2024
[7] South Sudan IPC Report 2024/25

people (32 percent of the population analysed) are likely to face IPC Phase 3 (Crisis) The need are ever increasing against a shrinking funding envelope, with the 2024 nutrition program being 56 percent funded as of September 2024. This funding shortage affects all the counties including Aweil West.

Figure 2 - South Sudan acute food insecurity situation for projection period (Dec 2024 - Mar 2025). source, ipcinfo.org



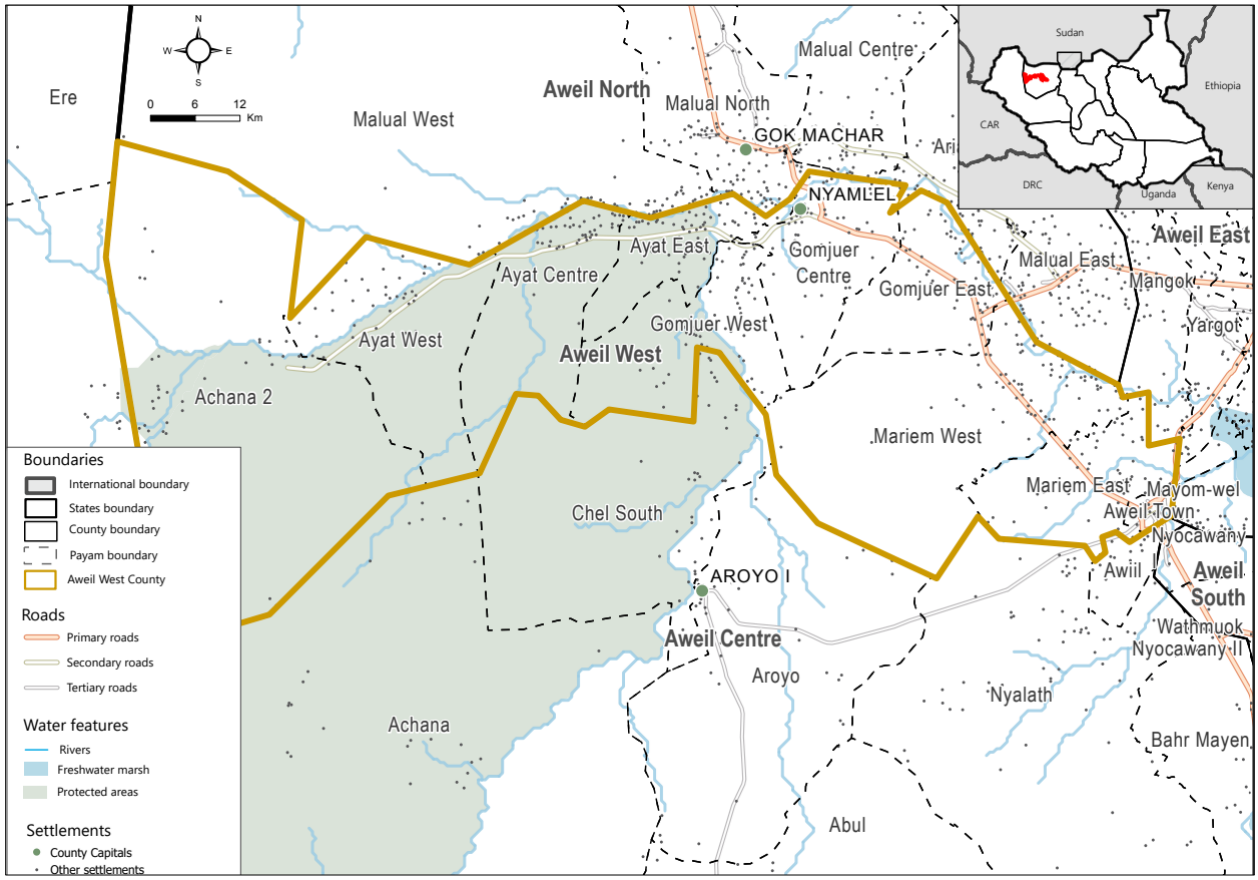
Since the last SMART survey was conducted over 5 years ago (January 2020) by Concern Worldwide with technical Support from REACH[8], there have been an influx of Sudanese refugees and South Sudanese returnees from Sudan into the county, yet limited data on health and nutrition have been gathered.

REACH Initiative, present in South Sudan since 2012, has been conducting needs assessments and providing evidence-based information to inform the humanitarian response in South Sudan. And since 2019, REACH has engaged with the Nutrition Information Working Group (NIWG), participating in the IPC Acute Malnutrition analysis workshops, and providing technical support to nutrition partners for SMART surveys implementation in the country. SMART survey is a methodology widely used in Sub-Saharan Africa to conduct timely nutrition surveys, by governments and humanitarian partners alike, in all types of contexts (emergency, development, displaced populations, etc.). SMART surveys are generally recommended to be conducted on twice a year in relation to pre and post-harvest periods, to accommodate seasonal malnutrition, and can be conducted at the national or regional level, and even on a smaller scale.

The nutrition situation in Aweil West has not been regularly monitored through annual SMART surveys, with the last one conducted in January 2020. In order to fill the information gap on the current nutrition situation in Aweil West County, REACH Initiative is planning to conduct a SMART survey from, approximately, March 3rd to March 21st of 2025, collecting anthropometric and mortality data, as well as key multi-sectoral indicators – on Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH), and Health - to better understand the status of Acute Malnutrition (AMN) in Aweil West County, as well as its key drivers.

[8] Aweil West _ CWW_REACH_SMART_Final Report, January 2020

Figure 3: Aweil West County Reference Map



1.2 Survey Objectives

General Objectives

To assess the nutrition situation and retrospective mortality rates amongst the overall population and to analyse the possible factors contributing to acute malnutrition of the community in Aweil West County. In particular, the following are the specific objectives of the assessment:

Specific Objectives

1. To estimate the prevalence of acute malnutrition, stunting and underweight among children (boys and girls) aged 6 – 59 months in Aweil West County.
2. To estimate the retrospective Crude Mortality Rate (CMR) for the overall population and Under 5 Mortality Rate (U5MR) Aweil West County.
3. To estimate the coverage of various immunizations in Aweil West County including:
    - Vitamin A supplementation (for children 6-59 months)
    - Deworming (for children 12 to 59 months)

- Measles vaccination coverage among children 9-59 months.

4. To assess childhood morbidity and health-seeking behaviors among households with children aged 6-59 months in Aweil West County.
5. To assess the nutritional status of women of reproductive age (15-49) in Aweil West County.
6. To assess IYCF Practices such as breastfeeding and complementary feeding among mothers who have children under the age of two years in Aweil West County.
7. To assess the WASH situation in Aweil West County (Main water source, distance/time to water source, water treatment status, access to soap, access to latrine).
8. To assess the food security and livelihoods situation in Aweil West County [Food Consumption Scores (FCS), Household Hunger Scale (HHS), main livelihoods, and Livelihood Coping Strategies (LCS)].
9. To formulate practical interventions and recommendations for both emergency and long-term programs of Nutrition actors in Aweil West County.

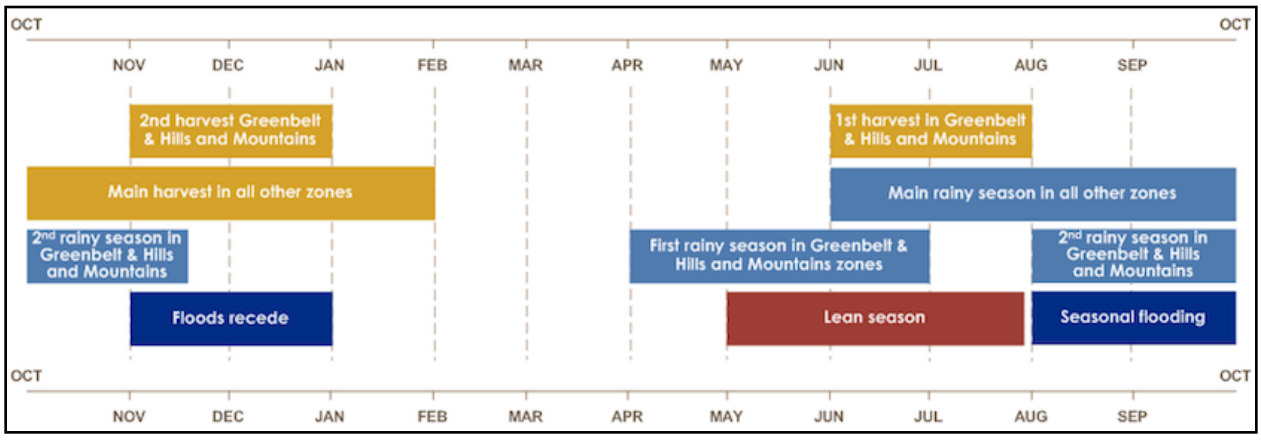
1.3 Survey Areas

The SMART survey will be implemented in the whole Aweil West County, consisting of the following payams: Achana, Ayat Centre, Ayat East, Ayat West, Gomjuer Centre, Gomjuer East, Gomjuer West, Mariem East, Mariem West.

1.4 Survey time

This survey will be conducted during the post-harvest period (month of March) according to the South Sudan seasonal calendar, a time when households are generally expected to have some produce available. Please refer to the South Sudan seasonal calendar in the image below for further understanding.

Figure 4 - South Sudan seasonal calendar[9]



[9] FEWS NET South Sudan Famine Early Warning Systems Network (fews.net)

2.0 METHODOLOGY

2.1 Survey Design

The survey will apply cross-sectional study design with a two-stage cluster sampling using the SMART methodology with the clusters being selected using the probability proportional to population size (PPS). Stage one sampling will involve the sampling of the clusters (the smallest geographical units, in our case villages) to be included in the survey while the second stage sampling will involve the selection of the households from the sampled clusters. The survey targets children 6-59 months and households in assessing the nutrition and mortality indicators, respectively.

2.2 Study Population

The target population for this survey will be: 1) Children aged 6 – 59 months for the anthropometric, children aged 0 -23 months for Infant and Young Child Feeding (IYCF) practices, and 2) General population for the Mortality, Food Security and Livelihoods (FSL), Health, and Water, Sanitation and Hygiene (WASH) components, including in this group Pregnant and Lactating women (PLW) to investigate about child health seeking behavior components.

Table 1: Indicators and target population

	Key Indicators	Target Population
1.	Prevalence of acute malnutrition 2-week retrospective child morbidity & health-seeking behaviour	Children 6 – 59 months
2.	Vitamin A supplementation	Children 6 – 59 months
3.	Measles coverage	Children 9 – 59 months
4.	Deworming	Children 12 – 59 months
5.	Prevalence of PLW acute malnutrition by MUAC	WRA (15 -49 years)
6.	Infant and young child feeding practices	Children 0-23 months
7.	Under-five mortality rate	Children 0-59 months
8.	Crude mortality rate	All persons (households)
9.	FSL- HHS, FCS and LCS	All persons (households)

2.3 Sample Size Estimation

Sample size calculation for the survey will be based on the expected prevalence of Global Acute Malnutrition (GAM) and Mortality Rate in the survey areas. The parameters used have been extracted from the previous survey reports conducted by REACH in Aweil North County, a neighboring populations with similar

characteristics. The Anthropometric and mortality sample sizes have been calculated using Emergency Nutrition Assessment (ENA) software (January 11th, 2020, version) following SMART methodology.

2.3.1 Anthropometric Sample Size

Table 1: Sample Size (Anthropometric)

Parameter	Aweil West County	Justification
Estimated Prevalence (%)	21.3%	April 2024 Aweil North County SMART survey, the GAM rate was reported as 26.0% (21.7 – 30.8, 95% CI). However FSNMS 2024 resulted in 21.3% and expected to remain the same for this period as well. this was used.
Desired Precision	4	Reasonable precision for expected prevalence as recommended by SMART survey guidelines.
Design Effect	1	The April 2024, the Aweil North SMART design effect was 1. This was used expecting less heterogeneity .
Children to be Included	**438**	
Average Household Size	6.1	From Aweil North SMART survey conducted by REACH in April 2024.
% children Under-Five	24.4%	From Aweil North SMART survey conducted by REACH in April 2024.
% Non-Respondents	3%	Expected non-response
Households to be Included	**337**	

2.3.2 Mortality Sample Size

Table 2: Sample Size (Mortality)

Parameter	Aweil West County	Justification
Estimated death rate per 10,000/day	0.40	The Estimated CMR from the Aweil North SMART Survey was 0.40 (0.20-0.77, 95% CI)
Desired Precision	0.35	Applicable precision for CDR <1 as per the SMART guidelines.
Design Effect	1.5	As per the recommended by SMART guidelines.
Recall Period	90	A standard recall period of 90 days was used to plan this survey. This will be adjusted on the ground depending on the contextual data available.
Population to be Included	**2276**	
Average Household Size	6.1	From Aweil North SMART survey conducted by REACH in April 2024.
% Non-Respondents	3%	Expected non-response
Households to be Included	**385**	

The maximum sample size is found to be the Mortality sample size calculation, and this will be considered the final sample size, with **385 households** in Aweil West County to be included in the survey.

2.3.3 Number of Clusters

To determine the number of clusters required, the number of households that a team can comfortably survey in a day was estimated using the parameters found in Table 3 below:

Table 3: Number of households a team can sample in a day

Activity	Estimated Time
Departure from Office	**7:30 AM**
a. Daily morning briefings	*15 min*
b. Travel to clusters	*50 min*
c. Introduction and HH list development	*30 min*
d. Lunch break	*30 min*
e. Total Time from one HH to another	*5 min*
f. Travel back to base	*50 min*
Total time for HH listing, travelling and breaks (a + b + c + d + f)	175 min
Arrival back to Base	**5:30 PM**
Total available time in a day	10 hrs (600 minutes)
Available time for work	600 - 175 minutes= 425 minutes
Time taken to complete one questionnaire	*30 minutes*
Total time per household + e	*35 minutes*

Note: The above are only estimates based on past experience but will be updated after the pilot survey has been conducted and thus, slight changes may be expected.

Given the above, the number of households that a team can comfortably visit in a day is calculated as follows:

425 (min) / 35 (min) = 12.14 ~ **12 HH/per day**

Given the above, the number of clusters per survey area is presented in the table below:

	Aweil West County
Total number of HH based on sample size calculation	**385**
Total number of HH to be assessed per day per team	12
Clusters Needed	32.08
Rounded UP	**33**

2.4 Sampling Procedure: Selection of Clusters

A two-stage cluster sampling design will be used to sample the survey clusters and households. In the first stage, clusters will be assigned using Probability Proportional to Size (PPS). The sampling frame for the 1st stage sampling will be the list of villages with the population estimates in each of the survey areas. The list of villages will then be entered into ENA for SMART software (version Jan 2020) and clusters assigned using

probability proportional to size (PPS).

2.5 Sampling Procedure: Selection of Households and Children

Definition of household for the survey: The second stage sampling involves the selection of 12 households per cluster through a simple random sampling using a random number generator (RNG) installed in the data collection tablets. For this survey, a household (HH) will be defined as a group of people living together, who cook and eat from the same cooking pot. Polygamous families will be defined based on the same, if each wife has her own pot, even if living in the same compound, this will be treated as different households.

***Household selection techniques*:** The standard definition of a HH will be shared with enumerators to guide them in developing the HH listing within the cluster. On arrival in the selected clusters, the team leader will meet with the village elders. The team will introduce themselves, explaining the survey objectives as well as expectations from the elder. Then either of the following two methods will be used for household listing: 1) A verbal listing from one or more community leaders, and, if not possible, then 2) A manual house to house listing. They will each be assigned a number, and the numbers will be selected randomly using the random number generator application in smart phones. Twelve households will be randomly selected from the complete list of HHs. These are the HHs that will be visited by the survey team. The village guide and community leaders will support the teams in updating the list of households.

For clusters/villages with more than 150 HHs segmentation will be used to first select one portion of the cluster that will represent the cluster. Selection of segments will be done using either PPS or simple random sampling, depending on the population sizes of the specific segments[10]. In the selected segment, the process of HH selection will follow the same process done in each cluster for the selection of the 12 HHs. Households will be selected using a Random Number Generator software.

In selected households, all eligible children (aged 6-59 months) will be measured, and the household questionnaire applied. Absent households and households with absent children will be re-visited and information of the outcome recorded on the cluster control form. This form will also be used to record information on absent and non-responding households.

2.6 Survey Teams, Training, Data Collection and Data Management

- Survey Teams: Six teams with four members (1 Team Leader, 1 measurer, 1 assistant, 1 enumerator) in each team will be involved in the execution of the survey. At each cluster, a local guide will be employed to facilitate data collection at the household level. The survey teams will be recruited by REACH with the involvement of the local officials at Aweil West County level. To the extent possible, the team members will be a mix of both male and female persons and will be recruited from the local communities. REACH will supervise the teams with technical support from ALIGHT organization.
- Training: The survey teams will be trained for five days, with the training planned to start on March 3rd, 2025. The training will cover various components including taking anthropometric measurements, sampling of households, data collection tools, digital data collection, data quality checks, and standardization exercise among other themes. The training of the enumerators will be facilitated by SMART certified staff and staff with experience conducting SMART surveys.

[10] As per the SMART Guidelines, if the Segments will have almost equal population sizes, then, SRS will be used; but if the population sizes will be different, then PPS method will be used

- Supervision: The overall management of the survey will be done by REACH Initiative with support from ALIGHT. Maximum supervision of the survey teams will be ensured to facilitate quality data.
- Data Entry and Management: Data will be collected through REACH tablets using Kobo/ODK. The data collection tools will be programmed and uploaded onto the tablets which will be used by the survey teams. The teams will be uploading the collected data to a central server on a daily basis to allow the Survey Manager to review the data collected each and every day and clean the data and give the feedback every morning to the teams.

NB: Backup manual forms will be carried by each team as a contingency plan in any eventuality that teams face challenges with the SMART phones

2.7 Data Quality

In order to ensure optimal and high data quality, a number of measures will be put in place which includes:

a) The survey will be done in accordance with the submitted protocol, and the following will be ensured:
   - Training of survey teams is done using standardised material as recommended by SMART Methodology
   - Undertaking of standardisation test as part of the training; taking appropriate steps thereafter based on performance of the survey teams
   - Appropriate calibration of survey equipment, during the training and on every morning before proceeding to the field for data collection
   - Plausibility checks will be conducted on a daily basis and inform the daily debriefing sessions which will be conducted every day

b) Data will be collected a digital platform, and control checks and skip patterns will be programmed to improve the data quality.

c) Anthropometry data will be auto analysed using ENA software anthropometry section. The same software will be used to analyse the mortality data.

2.8 Questionnaire

The survey will adopt the data collection tools which have been developed by the Global SMART Team for both anthropometric and mortality surveys. Other indicators will be collected using the modules in line with current Food Security and Nutrition Monitoring System (FSNMS) questionnaires as much as possible.

2.9 Data to be Collected

1. **Anthropometry for children aged 6 -59 months**
   - **Age:** Will be determined using birth/health cards/records if available and local calendar of events which will be jointly developed by local leaders and survey enumerators.
   - **Sex:** Male or female.
   - **Weight:** Children's weights will be taken without clothes using mother and child digital weighing scales (SECA scales with precision of 100gm).
   - **Height/length:** Children will be measured using the wooden UNICEF measuring boards (precision of 0.1cm). Children less than 2 years of age will be measured lying down, while those greater than or equal to 2 years of age will be measured standing up.

- **Mid-upper arm circumference (MUAC):** MUAC measurements will be taken at the mid-point of the left upper arm using both the child and adult MUAC tapes (precision of 0.1cm) for children 6-59 months and for women of reproductive age between 15-49 years of age.
- **Bilateral pitting oedema:** Will be assessed by the application of normal thumb pressure on both feet for 3 seconds.
- **Referral:** All children with acute malnutrition and not already enrolled in treatment will be referred using referral forms to existing TSFP and OTP programs in the county.

2. **Demographics and Mortality:** The following information will be collected for all current household members: age in years, sex, whether they were born, or had joined the household during the recall period of 90 days (will be amended in the field). For household members that left during the recall period, data will collected of their age in years, sex, and whether they had joined or born into the household during the recall period. For persons who have died during the recall period, will collect age in years, sex, whether born or joined the household during the recall period, as well as estimated cause and location of death.
3. **Health Interventions Data for children aged 6 -59 months:** Vitamin A supplementation, deworming and measles immunization data will be collected through health cards or recall.
4. **Morbidity**: Two-week retrospective morbidity data will be collected from mothers/caregivers of all children (6-59 months) included in the anthropometric survey.
5. **Food Security Indicators for the overall population**:
    a. **Food Consumption Scores (FCS):** is an indicator of the general quantity and quality of foods being consumed in a household, based on how many days any household members have consumed 9 distinct food groups within a 7-day recall period. Households are categorized into different categories of severity based on their responses. FCS is often used as a proxy for quality of food consumed. Standard FCS thresholds are <21 for 'poor', =>21 - <=35 for 'borderline' and >35 for 'acceptable'.
    b. **Household Hunger Scale (HHS):** measures the perceived hunger by asking the frequency a household has experienced three common experiences associated with hunger in the past 30 days (no food in the house, slept hungry, gone whole day and night without food). HHS is often used as a proxy for quantity of food consumed. Thresholds and categories used for analysis are those used for IPC AFI in South Sudan.
    c. **Livelihood Coping Strategies (LCS)** – measures what behaviours or actions that households are taking to cope with not having enough food or resources to get food. Ten coping strategies are asked about which are categorized as Emergency, Crisis, or Stress strategies.
6. **WASH for the overall population** – indicators on main water source, access to latrines, distance/time to water source, access to soap and water treatment will be asked.

2.10 Data Analysis

The anthropometric and mortality data will be analysed using ENA for SMART (Jan 2020 version). The other additional data (immunization, maternal nutrition, morbidity etc.) will be analysed using other software like R and SPSS. Various statistics will be used to summarize the data including percentages, means, and medians, among others. The analysed data will be presented in both tabular and graphical presentations. The preliminary datasets will be available within 7 days after the last day of data collection, and the preliminary report within 14 days. The preliminary report will be reviewed internally before submission to the Nutrition Information Working Group (NIWG) for validation.

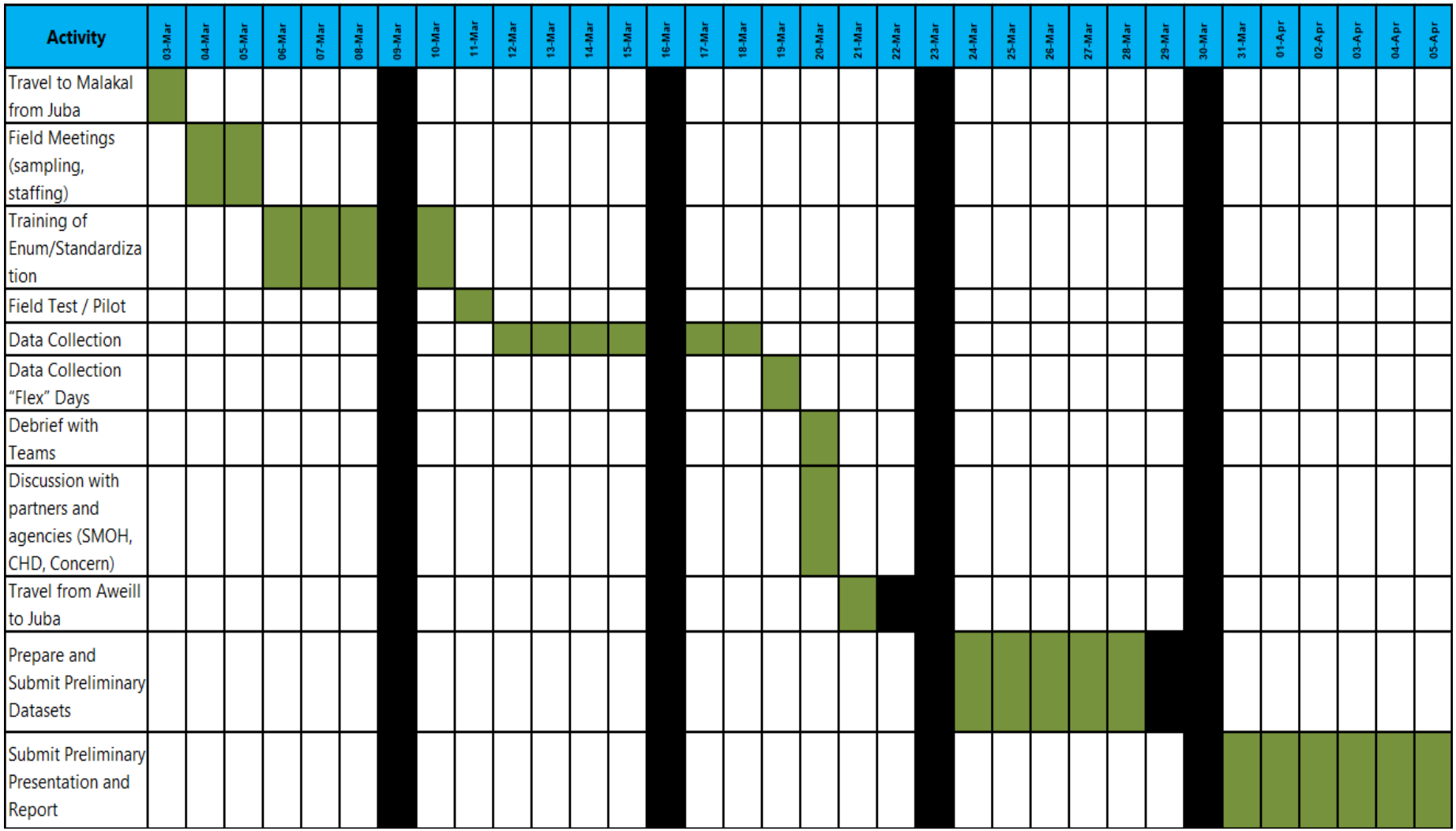
2.11 Ethical Considerations

Informed consent – All households will be asked for informed consent prior to the survey. If a household does not wish to participate, they will be counted as non-response and the team will move to the next sampled household.

Keeping confidentiality of personally identifiable information (PII) – All personally identifiable information, such as names and Global Positioning System (GPS) data, will be removed from any analysis after data collection concludes and will not be shared either internally with HQ or externally with partners.

Referral – Children identified as having acute malnutrition (either by MUAC, weight for height, or oedema) will be appropriately referred to health/nutrition services by the survey team leader.

Annex 1. Survey Plan



Annex 2. Cluster control form

State: _____County: _____ Payam: _____ Boma: _____ Village: _____ Cluster No.:_____ Team No.:_____

Survey Date: / / Team Leader:

HH no	**Name of HH Head**	**Outcome** 1 = completed 2 = partly completed 3 = refused 4 = absent*	**eligible children**	**eligible children measured**	**needs to be revisited** Yes or No	**visited** Yes or No	**Outcome (If necessary)** 1 = completed 2 = partly completed 3 = refused	**Comments**
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

Annex 3. HOUSEHOLD LISTING AND ANTHROPOMETRY

Cluster Number:	Site Name:	
Team No:	Household No:	County:

Current household members							
Name	Sex	Age	Joined or born?	Weight (kg)	Height (cm)	MUAC (cm)	Oedema (Y/N)
Household members who have left since (_____)							
Household members DIED since (____)							
				Cause Death: Location Death:			
				Cause Death: Location Death:			

Annex 4. FOOD CONSUMPTION LISTING

Cluster No:		Site Name:			
Team No:		Household No.		County:	
Day	Breakfast	Lunch	Dinner	Other	
[Yesterday]				□ None □ Oil □ Sugar	□ Salt □ Onions □ Milk
				□ None □ Oil □ Sugar	□ Salt □ Onions □ Milk
				□ None □ Oil □ Sugar	□ Salt □ Onions □ Milk
				□ None □ Oil □ Sugar	□ Salt □ Onions □ Milk
				□ None □ Oil □ Sugar	□ Salt □ Onions □ Milk
				□ None □ Oil □ Sugar	□ Salt □ Onions □ Milk
				□ None □ Oil □ Sugar	□ Salt □ Onions □ Milk

Annex 5. IYCF – 24 hours diet recall form

Cluster No:		Site Name:		
Team No:		Household No.	County:	
Day	Breakfast	Lunch	Dinner	Other
Morning / Breakfast				□ None □ Sugar □ Water □ Sweets □ Breastmilk
Snacks?				□ None □ Sugar □ Water □ Sweets □ Breastmilk
Lunch				□ None □ Sugar □ Water □ Sweets □ Breastmilk
Snacks				□ None □ Sugar □ Water □ Sweets □ Breastmilk
Evening / Dinner				□ None □ Sugar □ Water □ Sweets □ Breastmilk