

# Terms of Reference for SMART Survey

Gender-responsive nutrition support and enabling nutrition environment for the most vulnerable women, men, boys, and girls in South Sudan program.

Twic East County Jonglei State

# FUNDED BY: ECHO



September 2023

#### 1.0 Background

According to the recent IPC analysis, between April to July 2022, an estimated 7.74 million people (62.7% of the population) will likely face Crisis (IPC Phase 3) or worse acute food insecurity. Twic East of Jonglei State and Pibor Administrative Area were classified in Emergency (IPC Phase 4) acute food insecurity from April to July 2022. – Food insecurity in South Sudan is driven by multiple shocks, including climatic (floods, dry spells, and droughts), insecurity (caused by sub-national and localized violence), population displacements, persistent annual cereal deficits, diseases and pests, the economic crisis, the effects of COVID-19, limited access to basic services, and the cumulative effects of prolonged years of asset depletion that continue to erode households' coping capacities, and the loss of livelihoods. Access constraints and the lower than required humanitarian assistance in the face of increasing needs will likely result in.

This is a one-year project which seeks to alleviate human suffering and maintain dignity through the provision of integrated primary health care, nutrition, WASH, and protection services to conflict-affected and vulnerable populations of Twic East in Jonglei state.

Life-saving nutrition services through the CMAM approach are core to the project's design, the components of CMAM being community outreach and mobilization; management of SAM without medical complications through outpatient therapeutic programs (OTP); Referral of SAM cases with medical complications to the stabilization center's (SC); and outpatient targeted supplementary feeding programs (TSFP) to manage MAM. The project teams will work through community-based approaches to raise awareness of good nutrition practices (particularly infant and young child feeding (IYCF)) and early referral to nutrition services, given their importance for prevention of malnutrition, and reducing risk of associated mortality and adverse developmental outcomes. As critical, health and basic WASH assistance play a vital role in the prevention of acute malnutrition and deterioration of nutritional status, nutrition activities will be complemented by primary health care services with clear nutrition outcomes, and provision of safe water, basic hygiene items, and hygiene promotion campaigns. Based on plans agreed with health authorities and the Nutrition, Health, and WASH Clusters.

CARE's intervention will reach, 42,104 (18,681 women, 17,243 men, 3,214 girls 2,966 boys) in Twic East.

**Project Title**: To provide an integrated mobile response to Twic East County's flood and conflict-affected residents in hard-to-reach areas.

The ultimate outcome: Save lives and improve the health and nutrition status of women, men, girls, and boys in conflict-affected and vulnerable communities through gender-sensitive lifesaving services in South Sudan

#### 1.1 Immediate outcomes:

- Result: Increased access to safe nutrition services for prevention, identification, referral and treatment of severe and moderate acute malnutrition for girls and boys under 5 and pregnant and lactating women integrated with minimum WASH package
- Result 2: Vulnerable populations have improved access to integrated, accessible, safe, quality comprehensive primary health services.
- Result 3: Contingency planning and preparedness for response.

#### **1.2 SMART Survey Purpose**

- Estimate the prevalence of acute malnutrition (Global and severe) amongst children aged 6-59 months.
- Estimate retrospective crude and under five mortality rates.
- Estimate the prevalence of morbidity among children 6-59 months in the last two weeks prior to the survey date.
- Determine factors associated with malnutrition among children 6-59 months.
- Estimate measles vaccination and Vitamin A supplementation proportion.
- To establish the prevailing Infant and Young Child Feeding (IYCF) Practices.

#### 1.3 Scope of work

- 1. Sampling and estimating the sample size: Definition of the representative target population. The sample size will be determined by appropriate sampling techniques (ENA software) and the chosen level of precision agreed upon.
- 2. Methodology: SMART methodology with clearly defined sampling techniques and sample size.
- 3. Quality Control: A clear description of high-quality control mechanism that will ensure a quality survey.
- 4. Conduct daily data quality checks and reviews (this allows for detection of mistakes and correction of the mistakes the following day)
- 5. Meet with the team daily in the morning and at the end of the day to get feedback of the work during the day.
- 6. Supervise data team and analysis, lead the synthesis, produce a final survey report and feedback findings submitted to CARE South Sudan for review by MEAL Coordinator, ACD Program, Area Managers, Nutrition tech Advisor, Nutrition Managers, SMOH, and finally to the Nutrition Cluster for Validation.

#### 1.4 Location:

The SMART Survey will be conducted in Twic East County.

#### 2 Methodology

#### 2.1 Approach

The survey will employ a cross-sectional study design with two-stage cluster sampling based on the SMART Methodology. The sampling frame will be drawn from the population of respective payams and bomas of Twic East County including the islands.

Two-stage sampling techniques will be used. In the first stage, clusters will be selected randomly and the sample size for the respective clusters will be allocated using Probability Proportion to Population Size (PPS). The Emergency Nutrition Assessment (ENA) for Standardized Monitoring of Relief and Transitions (SMART) will be used to determine the sample size for both anthropometric and retrospective mortality and cluster assignment in the study area using the appropriate prevalence of malnutrition in the Counties of Twic East County including the islands.

The second stage of sampling: selection of households and children

### 2.1.1 Selection of Households

Upon arrival at the randomly selected village, the survey team will meet the village chief/elder, introductions will make, and the purpose of the survey and the survey sampling procedure explained. Segmentations will be made depending on the size of the village. The team will list all the households residing in the village with the help of the village chief or representative. After drawing up the list of the households and assigning each household a number, households will be selected using a Random Number Table for the simple random sampling method. The team will start with a convenient randomly selected household.

# 2.1.2 Selection of Children

In every household visited the mother/caregiver will be interviewed. If there are children between 0 - 59 months old in the household, the child health and IYCF questions will be administered, along with the household questions. All eligible children aged between 6 - 59 months in each visited household will be included for the anthropometric questions.

#### 2.1.3 Reserve clusters

Five reserve clusters will be identified by the ENA software, and they will be used to replace the original clusters that will not be reached due to inaccessibility and any other concern.

#### 2.2 Training

Training will be conducted for five days, including a field test, and training will cover survey objectives, basic malnutrition, the concept of sampling and SMART survey methodology followed by anthropometric measurements, recognition of the signs and symptoms of malnutrition including nutritional bi-lateral oedema and how to fill the questionnaire and how to interview households.

A standardization test will be done during the fourth day of the training to verify anthropometric skills of enumerators and to detect differences among measurers. Ten children will be measured once by the survey supervisor and then each of the enumerators will be allowed to measure the children's weight, height and MUAC twice with a time interval between individual measures.

The pilot survey will be conducted in an area which is not selected for the survey. Observations of errors in the performance of each team with regards to undertaking measurements and completing the questionnaires will be identified, discussed and corrected with all team members by the team leader and the Survey consultant.

#### 2.3 Data collected.

Four questionnaires will be used to collect the data: a mortality questionnaire asked in all households, an anthropometric questionnaire asked for all children 6-59 months, a child health and feeding questionnaires for all children between 0-59 months; and a household questionnaire asked at all households containing children less than five years, which includes WASH, livelihoods, and health related questions.

#### 2.4 Data analysis

#### 2.4.1 Interpreting the data

The SMART survey is a cross-sectional study that generates descriptive data such as the prevalence of malnutrition by taking a 'snapshot' at one point in time for one location. The statistical tests determine if the difference in figures amongst variables is far enough apart to really be a 'significant' difference where one can see a trend developing. Simply, this significant difference should be shown throughout this report by the p-value, which if less than 0.05 means that there is a significant difference and 95% confidence intervals (CI) should be used to judge the statistical precision of point estimates, whereby the more precise the estimate, the tighter the CI. Where means are presented throughout the report, an SD will be presented which is the measure of spread around the mean.

#### 2.5 Classifying malnutrition.

#### 2.5.1 Weight-for-height

Weight-for-height z-scores (WHZ) will be calculated to give the prevalence of acute malnutrition or wasting. Wasting can be assessed by comparing a child's weight with the weight that would be expected from a healthy child of the same height and sex. For the purposes of this survey, the WHO Growth Standards, 2006 will be used as healthy comparison group to obtain z-scores.

A z-score will be used to measure how far the child deviates from the mean WHO standard for his age or height, and therefore a measure of how well he is growing compared to the 'norm.' As seen below wasting is defined as <-2 z-scores (global acute malnutrition), whereas severe wasting is defined as <-3 z-scores (severe acute malnutrition)

 Table 1: Wasting as defined by WHO.

Global Acute Malnutrition (GAM)	<-2 z-scores / <80% median weight-for-height
Moderate & severe wasting	(WFH) and/or oedema
Severe Acute Malnutrition (SAM)	<-3 z-scores / <70% median weight-for-height
Severe wasting	(WFH) and/or oedema

### 2.5.2 Mid-upper arm circumference (MUAC)

The MUAC increases in size during the first six months of a child's life quite significantly, but relatively little between the ages of 1-5 years. At birth an infant's upper arm circumference is about 105 mm. By the age of one year, it will have grown on average to about 165 mm. Over the next four years until the child is five years old, the circumference only grows about 10 mm to 175 mm at the most. Any child aged between 1-5 years whose arm circumference is less than 125 mm may be acutely malnourished and less than 115 mm severely malnourished. MUAC is a simple and important tool as it is the best predictor of those cases most at risk of dying once the MUAC falls below 115 mm; however, it is not a sensitive early predictor of malnutrition.

### 2.5.3 Height-for-age

Height-for-age z-scores will be calculated to give the prevalence of chronic malnutrition or stunting. Stunting can be assessed by comparing a child's height with the height of a healthy child of the same age. Stunting is an index of long-term nutritional deprivation where growth is being compromised to conserve nutrients and energy for the maintenance of the body. It is also necessary to know the exact age of the child to accurately determine stunting as seen in the Table below, stunting is defined as <-2 z-scores, whereas severe stunting is defined as <-3 z-scores.

**Table 2:** Stunting as defined by WHO.

Global Chronic Malnutrition Global Stunting	<-2 z-scores / <90% median height-for-age (HFA)
Severe Chronic Malnutrition Severe Stunting	<-3 z-scores / <80% median height-for-age (HFA)

### 2.5.4 Weight-for-age

Weight-for-age z-scores will be calculated to give the prevalence of under nutrition or underweight. Underweight will be assessed by comparing a child's weight with the weight of a healthy child of the same age. It is also necessary to know the exact age of the child to accurately determine underweight. Underweight is defined as <-2 z-scores, whereas severe underweight is defined as <-3 z-scores.

### Population cut-offs for malnutrition

The Table below defines the population cut-offs for determining the severity of the malnutrition when the prevalence of acute and chronic malnutrition is known. These levels are internationally agreed upon and provide an objective basis for developing responses to increased levels of acute and chronic malnutrition. To interpret proportions at a population level with meaning, absolute numbers are also necessary (i.e., 8% of a large population will be many more than 15% of a small population).

 Table 3: WHO population cut-offs for chronic and acute malnutrition

Index	Normal/Low	Poor/Medium	Serious/High	Critical/Very high
Global Underweight	<10%	10-19.9%	20-29.9%	>30%
Global Chronic Malnutrition	<20%	20-29%	30-39%	<u>&gt;</u> 40
Global Acute Malnutrition	<5%	5-9%	10-14%	<u>&gt;</u> 15

(GAM) Mean weight for height z- score	>-0.40	-0.40 to -0.69	-0.70 to – 0.99	<u>&lt;</u> -1.00
--	--------	----------------	--------------------	-------------------

### 2.6 Data Quality Issues

The designed data collection techniques, Quality of data should not be compromised, and maximum care should be taken to avoid or at least minimize errors at all stages of the SMART Survey. Some techniques such as, but not limited to, the following will be applied:

- Before data collection: Pilot testing the data, collection tool will be required in order to verify the reliability and validity of the tool. This includes for both face to face and remote approaches.
- During field data collection: For household surveys, data entry will be on the spot using an electronic questionnaire. Monitoring enumerators for accuracy in doing the interview and in capturing data will be necessary. Checking through all completed responses (on a daily basis) to ensure any mistakes or inconsistencies are corrected on time will add value to the quality of data.
- Data analysis: Perform iterative data analysis which involves continuously analyzing key variables as part of data quality checks using various methods such as: frequencies or cross-tabulations or any forms of regressions.

### 3.0 Communication of Findings/Reflection

SMART Survey findings will be validated by the community through South Sudan Nutrition Cluster. Once the validation is completed then the final report will be produced.

### 3.1 SMART Survey Products/Deliverables

There will be key deliverables of this process:

- An inception report clearly outlining the approach, indicators, methodology and tools Include an annex highlighting how COVID-19 safeguards will be achieved.
- Finalize survey tools and inclusive and gender sensitive sampling design.
- Enumerator training, tool, pre- testing and data collection
- A comprehensive and well-organized final SMART Survey report in electronic version word and PDF based in the template structure in annex below. (Not more than 30 pages)
- Supporting files, original and cleaned datasets, statistical output files, photos, etc.
- Fact sheet or abstract and power point presentations to be used for dissemination of results to stakeholders.

### 3.2 Lessons Learned

The lessons learnt through the entire SMART Survey shall be documented and shared with the Project team and CARE quality department so that they may be taken into consideration for future studies. The documentation of these lessons will be vital for reflection, growth, and continued improvement.

### 4.0 Limitations

This SMART Survey will be undertaken with some limitations. These may include:

- Security: Given the current restrictions in the country, the SMART Survey may be affected by the volatile security condition in some areas.
- Travel Schedules: International and domestic travel between states is mostly by air using UN Flights. In addition, travel schedules may change due to flight cancellations and other technical issues.
- Statistics: Country demographics may not be readily up-to-date hence the consultant may have to undertake additional data collaboration.

## 4.1 Additional Information

- Consultants shall be required to sign and abide to the CARE Safeguarding Policy (which includes prevention of sexual exploitation and abuse, and behavior protocols)
- Consultants shall abide by beneficiary data privacy/management policies.

# 4.2 Ethical Considerations, Confidentiality, and Proprietary Interests

- The Consultancy Firm holder needs to apply standard ethical principles of during the assignment. Some of these must deal with the confidentiality of interviewee statements when necessary, refraining from making judgmental remarks about stakeholders.
- The incumbent shall not either during the term or after termination of the assignment, disclose any proprietary or confidential information related to the service without prior written consent by the contracting authority. Proprietary interests on all materials and documents prepared by the contract holder under this assignment shall become and remain properties of CARE.

# 5.0 Appendix 1: SMART Survey Report layout

CARE International in South Sudan will discuss with the successful consultant (s), the content and length of the final report. However, below is a suggested outline for the report.

- 1. Cover page (1 page)
- 2. Table of Contents (1 page)
- 3. Acknowledgements (1 page)
- 4. Glossary (1 page)
- 5. Introduction (1 page)
- 6. Description of Project (1 2 pages)
- 7. Executive summary (2 Pages)
- 8. SMART Survey Introduction/Background/relevant context information (max 2 pages)
- 9. Methodology (max 2 pages)
- 10. Findings (max 10 pages)
- 11. Lessons learned from the SMART Survey process (max 1/2 pages)
- 12. Conclusion and recommendations (max 3 pages)
- 13. Summary table of indicator SMART Survey results.
- 14. Appendices (to include copies of all tools, list of enumerators, survey timeline including all KII and FGD participants, and discussion transcripts (as many pages as necessary- please reference the annexes in the report, but include them in a zip file as a separate document

### 6.0 Consultant profile

- The consultant should preferably be a holder of a postgraduate degree in public health, Nutrition or a related discipline.
- Qualified and experienced consultant with Health and Nutrition background in surveys and assessments using SMART methodology.
- Minimum experience of having led SMART or similar surveys in Sub-Saharan Africa
- Proven team-leading and managerial experience.
- Knowledge of working with conflict-affected populations
- The consultant must have a strong background in statistics and data analysis. Must know SPSS, STATA, EPI info, and ENA for SMART and all relevant computer applications in general.
- Excellent reporting and presentation skills.
- Excellent knowledge of and experience with humanitarian guidelines and principles.
- Willingness to travel extensively and work under pressure & meet deadlines.
- Ability to work in a multicultural and inter-sectoral environment.
- Ability to work collaboratively as a team with the other staff members.
- Ability to coordinate, direct and supervise others to achieve a common goal.
- Ability to live and work in an isolated area in conditions of limited comfort.

# 7.0 Evaluation and Award of Consultancy

CARE South Sudan will evaluate the proposals and award the assignment based on technical and financial criteria. CARE reserves the right to accept or reject any proposal received without giving reasons and is not bound to accept the lowest, the highest or any bidder. Only the successful applicant will be contacted. The evaluation criteria associated with this TOR is split between technical and financial as follows:

- 1. 70 % -Technical
- 2. 30 % -Financial

# 7.1 Technical Evaluation Criteria

Technical Criteria	Description
General understanding of the TOR.	Does the proposal demonstrate a clear understanding of the TOR? Does the consultant try to interpret the objectives?
Methodology	To what extent is the methodology clear and detailed? Is the sampling method and sample size computation scientifically acceptable? Are all the relevant methods of data collection included in the proposal?
Team composition	Does the consultant (or proposed team) have the necessary competencies and experiences as described in the TOR to undertake this study?
Experience	Experience of conducting baseline and evaluation surveys in South Sudan, preferably within proposed geographical area has competitive advantage. Experience with similar assignments with INGOs/ other organization
Workplan	Is an action plan part of the proposal? Is it reasonable or realistic? Does it meet the expected deadlines? Is it flexible to accommodate any changes without compromising the deadline and quality of products
Budget	To what extent is the presented budget reasonable. Is the budget clearly aligned with the planned amount?

### 8.0 Payment Terms and Conditions

100% payment will be made upon completion, submission, acceptance and approval of the final report.

### 9.0 Budget

No.	Description	# of consultants	Period days	Rate per day	Total Cost (US\$)	Remarks
1	Consultant's fees (excluding data enumerators' costs)	1	22	Lumpsum		The consultant fee must be inclusive of 20% government taxes
2	Airticket International flight return and required vIsas	1	1			The consultant will bear the cost and CARE will reimburse as per actual upon submission of the original invoice.
3	Accommodation in Juba	1	4			CARE will make the booking and cover the cost.
4	Perdiem in Juba	1	4			Eligible. Per diem will be paid as per CARE policy .

Cost of the Evaluation: should be summarised as follows with a detailed breakdown attached:

5	Flight ticket Juba -Bor and	1	2 ways	CARE will make the booking
	Bor -Juba		ticket	and will cover the cost
6	Accommodation, internet in	1	22 days	CARE will make the booking
	Bor			and will cover the cost.
7	Perdiem in Bor	1	22	Eligible. Per diem will be paid
				as per the CARE policy
8	Stationery			CARE will cover the cost
9	Transportation in the field			CARE will cover the cost
10	Enumerators			CARE will cover the cost
	Total budget			

Logistical support (scheduling of interviews, arrangement of field accommodation during data collection, access to official facilities including internet, documentation—printing, photocopying of tools etc.) will be provided by CARE. The consultant will work with and report to CARE South Sudan MEAL Coordinator and the coordination of overall evaluation work will be supported by the Programme Manager. All communications related to this assignment will be copied to CARE South Sudan DCP Programs, PDQ-Coordinator & Research Manager..

### Note:

- The consultant is responsible to pay printing and data entry and analysis cost.
- The consultant is also responsible for COVID expenses and adherence to regulations including testing, evacuation and quaratine as per the relvant national authorities' guidance applicable at the time. CARE shall facilitate the process of compliance with COVID regulations.
- CARE South Sudan shall withhold relevant taxes as per the Taxation Act, 2009.
- The payments will be in one instalment after the completion of the task and submission of final acceptable report to CARE

### 10.The application process

Interested Parties are requested to submit a proposal explaining their comprehension of the proposed consultancy, and how they would approach this assignment with a summary of their methodology especially in terms of how the party plans to meet the objectives. Additionally, they should submit one or two examples of similar evaluations (including a combination of quantitative and qualitative methodologies) conducted previously. The application should include a team composition with Lead Consultant and at least 2-3 experienced evaluators. International consultants/firms must show proof of in-country capacity to carry out the evaluation within the context of COVID-19 restrictions. The application should include a minimum of three CVs of the persons to be involved in the assignment, relevant experience, a detailed budget in USD, and time availability.

The deadline for submission of proposals from interested parties is 30th August 2023

Proposals must contain a proposed methodology, work plan, and budget.

Proposals can be submitted to. <u>SSD.Procurement@care.org</u>

## **Guiding Principles and Values:**

Adherence to the CARE Code of Conduct, PHSEA, Child Safeguarding practices, and confidentiality when interviewing or photographing children.

Only shortlisted consultants/consultancy firms will be notified.

NB: The consultancy is for a period of 22 days spread from 9th to 30th September 2023