



MUAC and IYCF-E Screening Protocol

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1. INTRODUCTION AND BACKGROUND

The Nutrition Cluster was officially launched in August 2021 to respond to the humanitarian needs in the country that were albeit at a smaller scale than is the present situation. The 2022 Nutrition Cluster needs according to the humanitarian response plan (HRP) increased markedly from the previous year's forecasts. While the entire HRP's needs are 14.4 million, 6.2 million targeted population and a funding requirement of 826 million USD on the one hand. On the other hand, the nutrition cluster forecasts 2 million people in need (PiN), 1 million are targeted and 61 million USD funding is required. These funds will be needed to support programme needs among children below five years and pregnant and lactating women (PLW) across a range of programme response activities. These range from treatment of severe acute malnutrition (SAM), moderate

acute malnutrition (MAM), infant and young child feeding in emergencies (IYCF-E), preventive supplementation of food and micronutrient support for the relevant groups.

The nutrition cluster forecasts a 61 million USD funding requirements to support the increasing needs in a complex operating environment constrained by inaccessibility, conflict and displacement among many impediments. Urgent financial resources are required to fund response activities, supplies delivery and resolution of tax exemption issues is needed to avert a pipeline breakdown sometime in September/ October 2022.

Subnational nutrition cluster coordination strengthening is a priority in Myanmar. Presently, there are about 80 cluster members at national level and subnational cluster coordination platforms are functional in Kachin, Shan North, Rakhine and Kayin. There is need to operationalize other platforms in both Yangon and Nay Pi Taw. Additionally, assessments to understand the situation with respect to nutrition is also an urgent requirement. Finally, flexible humanitarian response modalities are needed to reach out to stricken communities displaced by conflict and often difficult to reach.

There is a scarcity of recent information on the nutritional status in Myanmar, save for the 2016 DHS. Apart from this, there is scant information from localized screening activities that shows low proxy-GAM/ MAM and SAM and most of these assessments are not representative, not exhaustive and the quality needs a lot of improvement.

There is a generally restrictive environment to undertake assessments and the only possible evaluation options are MUAC screening using SMART guidelines. Recently a pilot screening was done in Rakhine and Yangon by Action Contre la Faim, WVI and MHAA a local INGO. Technical support was being provided by the Action Against Hunger Regional Information Management Specialist including plausibility checks on the data quality. The pilot screening results were as follows:

Action Contre la Faim – A total of 3,113 children were screened in various townships and villages in Sittwe area and 282 children with varying forms of acute malnutrition and or oedema were identified during the reporting period. Proxy-GAM was 4.0%, proxy-MAM was 3.4% and proxy-SAM was 0.6%.

World Vision International – A total of 1,984 children were screened in various townships and villages in Yangon – Dagon Seikkan area and 16 children with varying forms of acute malnutrition and or oedema were identified during the reporting period. Proxy-GAM was 0.4% and proxy-MAM was 0.4%. No cases of SAM were identified. A total of 16 children with acute malnutrition were identified and referred for management and 14 of them were below 2 years of age.

Myanmar Health Assistant Association (MHAA) – A total of 1,820 children were screened in various townships and villages in Rakhine – Mrauk-U area and 52 children with varying forms of acute malnutrition and or oedema were identified during the reporting period. The results of the pilot project conducted by MHAA were proxy-GAM was 1.3% and proxy-MAM was 1.1% and

Bilateral pitting oedema	Absent	Present
Mid-upper arm circumference (MUAC)	≥ 115 and < 125 mm	< 115 mm

Exclusive breastfeeding under six months (EBF) is defined by WHO and UNICEF as the practice whereby an infant receives only breast milk from the mother or a wet nurse or expressed breast milk. For the purposes of this screening exercise, it is operationalized as the percentage of infants 0–5 months of age who were fed exclusively with breast milk during the previous day. This will be determined based on four key questions around if the child was breastfed, if the child consumed liquids, if the child consumed infant formula, and if the child consumed any soft, semi-solid, or solid foods the previous day, as presented in **Annex 5**. In order for an infant to be considered exclusively breastfed, the caregiver should respond “yes” to breastfeeding but “no” to the three other questions, as demonstrated in **Table 2** below.

Table 2: Examples of Exclusive Breastfeeding Determination during Screening

Breastfed	Yes	Breastfed	Yes	Breastfed	No
Liquids	No	Liquids	Yes	Liquids	No
Infant formula	No	Infant formula	No	Infant formula	Yes
Foods	No	Foods	No	Foods	No
Exclusively breastfed		NOT exclusively breastfed		NOT exclusively breastfed	

Dietary diversity is defined as children 6-23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day. The eight food groups used for tabulation of this indicator are the following:

- (A) Breast Milk
- (B) Grains, Roots, Tubers, and Plantains *examples: Potato, Rice, Corn, Wheat*
- (C) Pulses (Beans, Peas, lentils), Nuts and Seeds *examples: Chickpeas, split yellow peas, Peanut, Sunflower seeds, Pumpkin seeds*

(D) Dairy Products (Milk, Yogurt, Cheese) *examples: Milk, yogurt*

(E) Flesh food (Meat, Fish, Poultry, Organ, Meats) *examples: Chicken, Beef, Fish*

(F) Eggs

(G) Vitamin-A rich fruits and vegetables *examples: Carrots, Papaya, Pumpkin*

(H) Other fruits and vegetables *examples: Watergrass, Lady finger, Eggplant, Banana, Watermelon*

3. ORGANIZATION AND COORDINATION

At national level this exercise will be organized, coordinated, and supported by Action Contre la Faim, UNICEF, Save the Children, and the AIM-TWG. These agencies will also lead the Phase I training. For the Phase II training and data collection, partners will organize, coordinate, and support their CHWs in their respective programme areas, with targeted support from the above-mentioned national level actors.

3.1 PERSONNEL AND TRAINING

The training will be cascaded from national to programme level. The training is structured as two phases:

Phase I: Training of partners

This training will function as a remote workshop, where partners will be trained on how to both manage their screening exercise as well as how to train their CHWs. The training will take place primarily in Burmese, with slides in English (Phase I only) and Burmese (to cascade to Phase II). The following topics will be covered and discussed:

- Anthropometric data collection
- The MUAC Tool for data collation and analysis
- ENA for SMART for data quality (optional)
- IYCF-E data collection
- Data reporting
- Referrals and GBV
- Mobile data collection (optional)
- Standardization test (optional)

There will also be a supplementary session to discuss how to mitigate challenges to data collection in the field as well as time for outstanding questions around planning.

Phase II: Training of CHWs

Where feasible, these trainings will take place in-person in the programme areas. The slides in Burmese from the Phase I training will be made available for partners to use in training their CHWS. The training slides cover the following:

- Anthropometric data collection
- IYCF-E data collection
- Referrals and GBV
- Mobile data collection (optional)
- Standardization test (optional)

3.2 DATA COLLECTION AND ENTRY

Partners have two options for data collection: using paper forms/registers or using an electronic questionnaire for mobile data collection.

The electronic XLS-based questionnaire was developed by UNICEF and adapted for this screening exercise. The electronic questionnaire allows CHWs to enter anthropometric and IYCF-E data in real time and send it to UNICEF's remote server.

Where paper forms are used, partners can either use their own pre-existing screening forms or registers, or they can adopt the paper forms presented in **Annex 4** and **Annex 5** for the screening exercise.

3.3 DATA ANALYSIS AND REPORTING

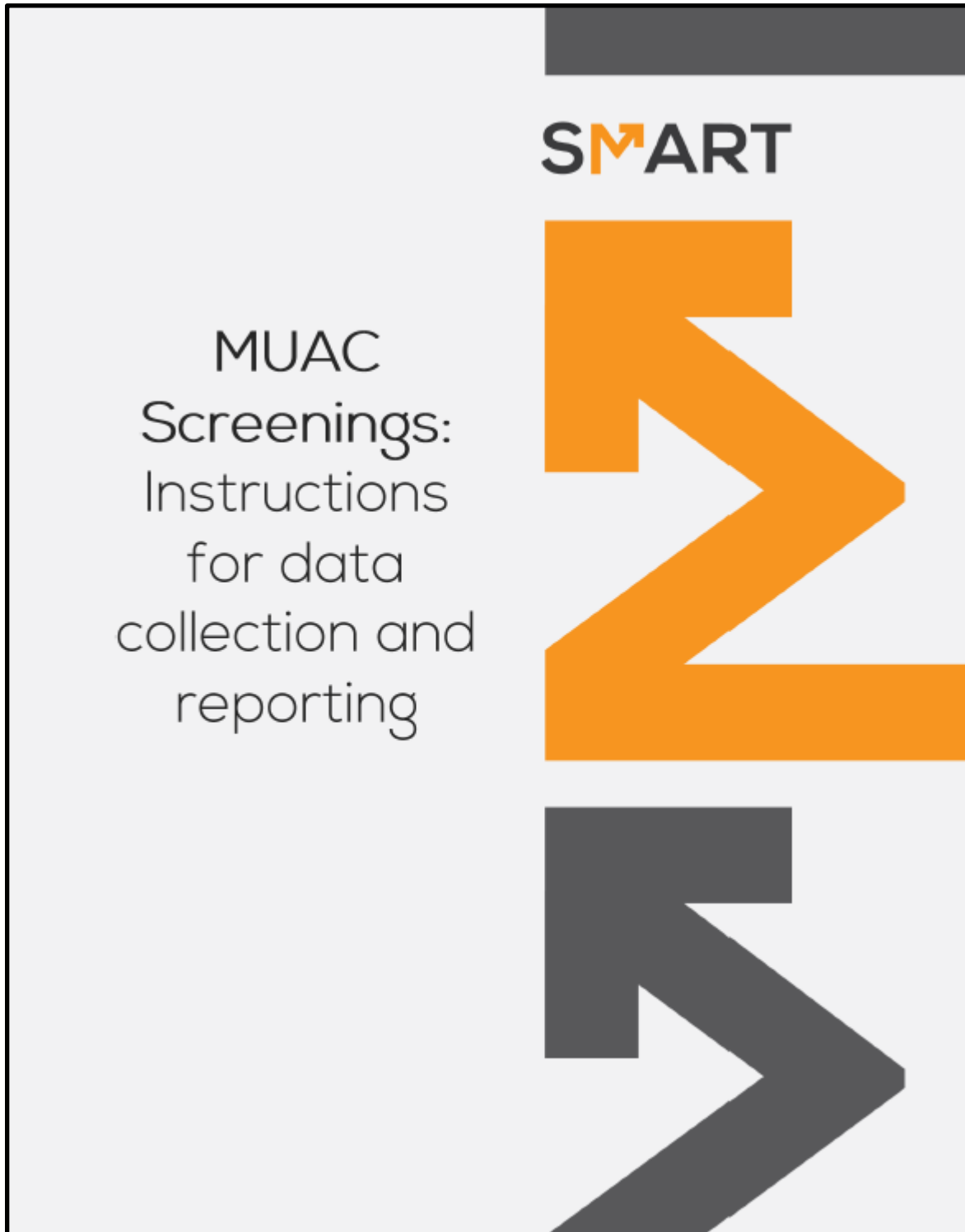
Partners are expected to report the results of their respective MUAC screenings using the SMART MUAC Screening Tool in **Annex 2** following the guidance in **Annex 1**. This same tool will be used for basic analysis to generate estimates of proxy-GAM from MUAC and edema results.

The IYCF-E results of these screening should be reported in the Excel database presented in **Annex 3** and will be analyzed using Excel.

Once partner data has been received at national level, one consolidated final report will be swiftly drafted, finalized, and shared with partners.

4.0 ANNEXES

ANNEX 1: SMART MUAC Screening Tool: Instructions for data collection and reporting





Instructions for data collection and reporting in MUAC screenings

The primary purpose of MUAC screening is to find and refer the children eligible for nutrition treatment. The secondary purpose is to use screening data to better understand the nutrition situation in the area.

Please follow these simple instructions. If you do not follow these instructions and do not use included data collection and analysis tools in the attached Excel file your data cannot be used for the secondary objective.

1. Data collection:

Use tally sheet included on the **2. Tally Sheet** tab of the Excel file.

Note, you do not need to establish the exact age of the child, only establish whether (1) the child is in the eligible age range (e.g., 6-59 months), and (2) whether the child is above or below 2 years of age

Optional: Instead of **2. Tally Sheet** you can use **4. Tally sheet 2 Optional**

Using tally sheet 4 will be much more complex, since it requires recording exact MUAC measurement of each child, and then entering these data into Excel using the same **4. Tally sheet 2 Optional** page

However, using the **4. Tally sheet 2 Optional** is highly recommended if feasible, since recording MUAC measurements for each child allows for much more advanced analysis of the quality of data and increases confidence when using these data for decision making.

Using this option is especially useful if doing exhaustive door-to-door outreach screenings

2. Data reporting:

For reporting you will only use attached excel file

- a. First, fill out carefully all fields on the **1. Title Page**. Note, your report will not be accepted unless **1. Title Page** is filled out
- b. If you used **2. Tally Sheet** for data collection in the field, enter the tallied numbers from your sheets into the table on page **3. Results** of the attached Excel file. Follow instructions provided under the table, they are very simple and self-explanatory. Stop here, you are ready to send your report.
- c. If you used **4. Tally sheet 2 Optional** for data collection in the field, first enter the data from your tally sheets into Excel file attached, page **4. Tally sheet 2 Optional**. After entering the data, tally the numbers of children and enter them in the table on page **3. Results**. Stop here, now you are ready to send your report.

3. Data interpretation

Interpretation of data collected in MUAC screenings is a very complex process, and depends on many factors – the setting, sample size, quality of data, representativeness by age and sex, coherence with other available data, etc. It will be conducted by nutrition technical staff at higher levels.

If you are doing MUAC screening of pregnant and lactating women, use **5. Tally sheet PLW** in attached Excel file for data collection in the field.

For reporting, you still must fill out **1. Title Page** information in full. Then report the number of PLW in two categories – below 230 mm and above or at 230 mm, that's all.

SMART

Nutrition Assessment Tally Sheet (MUAC)

Date: _____

Location (State/ County): _____

Males

	Oedema	<115 mm		115-124 mm			≥125 mm					
< 2 Years Old	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
≥ 2 Years Old	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000

Females

	Oedema	<115 mm		115-124 mm			≥125 mm					
< 2 Years Old	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
≥ 2 Years Old	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000



MUAC SCREENING MEASUREMENT and TALLY SHEET

Village / Camp / Location: Measurer: Date:

INSTRUCTIONS:

Determine if the child is 2 years or older or below 2 years of age, and use the left side for children less than 2 years old and the right side for children 2 years or older. Record the sex of the child in the first column (Male or Female). Record the MUAC measurement, to the nearest mm, in the 'MUAC measurement' column. Mark an 'X' in **EITHER** the normal or moderate or severe column as per the MUAC measurement. Check for Oedema and record in the last column. Add the totals in the last row.

6 Months - <2 Years Old							≥ 2-5 Years Old						
Child No	Sex (M / F)	MUAC measurement (to nearest mm)	Normal ≥125mm (Green)	Moderate 115-124mm (Yellow)	Severe <115mm (Red)	Oedema (Y / N)	Child No	Sex (M / F)	MUAC measurement (to nearest mm)	Normal ≥125mm (Green)	Moderate 115-124mm (Yellow)	Severe <115mm (Red)	Oedema (Y / N)
1							1						
2							2						
3							3						
4							4						
5							5						
6							6						
7							7						
8							8						
9							9						
10							10						
11							11						
12							12						
13							13						
14							14						
15							15						
16							16						
17							17						
18							18						
19							19						
20							20						

Page 1

Add header

SMART

Nutrition Assessment Results

		Males		Females		Total		Weighted Total**	Percent of children over 2 years of age in the sample
		N	%	N	%	N	%		
< 2 Years Old	Oedema		#DIV/0!		#DIV/0!	0	#DIV/0!		
	<115 mm		#DIV/0!		#DIV/0!	0	#DIV/0!		
	115-124 mm		#DIV/0!		#DIV/0!	0	#DIV/0!		
	≥125 mm		#DIV/0!		#DIV/0!	0	#DIV/0!		
	Total	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!		
≥ 2 Years Old	Oedema		#DIV/0!		#DIV/0!	0	#DIV/0!		
	<115 mm		#DIV/0!		#DIV/0!	0	#DIV/0!		
	115-124 mm		#DIV/0!		#DIV/0!	0	#DIV/0!		
	≥125 mm		#DIV/0!		#DIV/0!	0	#DIV/0!		
	Total	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!		#DIV/0!
Total	Oedema	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!	
	<115 mm	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!	
	115-124 mm	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!	
	≥125 mm	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!	
	Total	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	#DIV/0!	

Instructions: Fill in the cells that have a white background (C5-C8, C10-13, E5-8, E10-13). The rest of the cells will be filled in automatically.

** MUAC shows a known bias towards younger children. In a balanced sample we expect approximately two thirds (~66%) of the sample to be over 2 years old. If too few older children are included in the sample use the weighted total. Percentage of children over 2 is shown in the last column.

3. Results

4. Tally sheet 2 Optional

5. Tally sheet PLW



ANNEX 5: IYCF-E Paper Data Collection Form (English version)

IDENTIFIER VARIABLES	Screening Date (dd/mm/yy)	State	Township			
	Village/Settlement Name	Team/CHW No:				

Do Not Read Answer Choices to the Respondent Unless Indicated to do so

Infants under 6 months						
1. Was (name) breastfed yesterday during the day or at night? (Y/N/DK)						
2. Did (name) drink any other liquids yesterday during the day or at night? (Y/N/DK)						
3. Did (name) drink infant formula yesterday during the day or at night? (Y/N/DK)						
4. Was (name) fed any solid, semi-solid, or soft food yesterday during the day or at night? (Y/N/DK)						

Children 6-23 months						
5. Now I would like to ask you about everything that (name) ate yesterday during the day or at night. I am interested in foods your child ate whether at home or somewhere else. (Answer can be more than one group, select all that apply) <ul style="list-style-type: none"> (A) Breast Milk (B) Grains, Roots, Tubers, and Plantains examples: Potato, Rice, Corn, Wheat (C) Pulses (Beans, Peas, lentils), Nuts and Seeds examples: Chickpeas, split yellow peas, Peanut, Sunflower seeds, Pumpkin seeds (D) Dairy Products (Milk, Infant formula, Yogurt, Cheese) examples: Milk, yogurt (E) Flesh food (Meat, Fish, Poultry, Organ, Meats) examples: Chicken, Beef, Fish (F) Eggs (G) Vitamin-A rich fruits and vegetables examples: Carrots, Papaya, Pumpkin (H) Other fruits and vegetables examples : Watergrass, Lady finger, Eggplant, Banana, Watermelon 						