



Save the Children

**LEARNING PAPER:
OPERATIONALIZATION OF FAMILY MUAC;
A CASE STUDY FROM
SAVE THE CHILDREN'S EXPERIENCE
IN MYANMAR**

SEPTEMBER 2023

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	1
EXECUTIVE SUMMARY	2
INTRODUCTION	4
PROGRAM DESCRIPTION	6
PROGRAM IMPLEMENTATION	8
1) Implementation of Family MUAC through ongoing projects that had mother care groups	8
2) Implementation of Family MUAC in nutrition sensitive projects	10
3) Capacity building for partners through the LEARN project	12
Objective and Methods of Reviewing Save the Children's Family MUAC Experience in Myanmar	12
Data management and Analysis	13
Limitations of this review	14
Fundings	14
Community Level Findings (Community volunteers, Mother care group leaders and Mothers of children 0- 23 months)	16
Key Learnings	17
Bottlenecks and challenges for Family MUAC implementation	18
Recommendations, and next steps for Family MUAC in Myanmar	19
Annex	20

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¹ Community volunteers included community nutrition volunteers, community nutrition counsellors and transitional livelihoods volunteers in the context of this paper

EXECUTIVE SUMMARY

The prevalence of acute malnutrition in Myanmar is considered poor at 7% based on the WHO emergency thresholds for acute malnutrition according to the last Demography Health Survey conducted in 2015-2016 with some states like Rakhine and Yangon having very high and high prevalence of Global Acute Malnutrition at 18% and 15% respectively.² Malnutrition contributes to almost 50% of infant mortality. In recent years, significant improvements in maternal and child health services have contributed to reducing child mortality but the COVID-19 pandemic as well as the current crisis have weakened the health system and hindered access to essential health services.

Nutrition services are included in Myanmar's basic health care package. In 2017, treatment and operational protocols for integrated management of acute malnutrition were launched by the Ministry of Health and UNICEF to provide technical guidance for the prevention and management of acute malnutrition. During this same period, a number of simplifications and modifications to detection and treatment protocols have been developed globally to improve effectiveness, quality, coverage and reduce costs of caring for children with uncomplicated acute malnutrition. One of these approaches which aims to improve coverage of early detection for acute malnutrition is the Family-MUAC. This approach consists of training and equipping caregivers to screen their own children using a Mid Upper Arm Circumference (MUAC) tape and to check for nutritional oedema.

Save the Children started piloting the Family MUAC approach in Myanmar in 2020-2021 in Northern Shan State to provide evidence about the feasibility of this approach. Learnings from this pilot were then used to scale up this approach in Peri Urban Yangon and Rakhine State. After an implementing period of three years, qualitative and quantitative data were collected and analyzed to present the Family MUAC journey in Myanmar. This learning paper describes how the approach was initiated at national and sub national levels; the different typologies that were used in the roll-out; the training methodologies and platforms used; and the key results of the approach. It then provides recommendations for the next steps.

The key learnings of this review include;

- The Family MUAC approach increases awareness of malnutrition amongst caregivers and the number of children identified with malnutrition, however strong referral systems need to be in place to ensure child with malnutrition do get admitted and treated if nutrition commodities are available
- Caregivers are able to accurately measure malnutrition using MUAC and oedema but may get anxious if child is not eventually admitted and treated
- Mother Care Groups (MCG) if established and functional provide an effective platform/ entry point to roll out Family MUAC targeting 0-24 months children. However, other entry points to reach caregivers of children 24-59 months is needed

² Myanmar Demographic Health Survey, 2015- 2016

- Nutrition sensitive interventions (cash, food distributions) provide an opportunity to reinforce early detection of malnutrition and referral, engage with other family members (fathers) and reach caregivers of older children, but this activity needs to be integrated and prioritised by Food Security and Livelihood staff and frontline workers and integrated into their daily work
- The engagement of key stakeholders before, during and after the implementation of the family MUAC approach is key to assess feasibility, select areas of implementation, conduct training and improve access to treatment services.
- The involvement of male caregivers in Family MUAC trainings and measurement activities is key to ensure that mothers/female caregivers receive the adequate support at household level

The key recommendations include;

- **Ensure that children identified with malnutrition can access services where they can get treatment and TSFP services and there is a clear Family MUAC Pathway:** Prior to the implementation of this approach, a clear pathway and risks assessment need to be conducted in consultation with key stakeholders to anticipate and mitigate against challenges that may be experienced by caregivers when accessing treatment. Referral mechanisms as well as a mapping of health facilities providing acute malnutrition treatment, including availability of services linked to nutrition supply chain issues need to be factored in the design.
- **Training**
 - **Materials:** there is a need to standardize training materials, data collection and reporting tools across regions as well as translate the materials to local languages.
 - **Refresher training:** Periodic training sessions on a biannual basis to be incorporated in the rollout plan to increase the level of confidence of caregivers and increase the quality of the MUAC measurements. This is more feasible if outlined in the MCG curriculums.
 - **Inclusion of men in Family MUAC trainings and implementation:** Overall, amongst all caregivers trained on MUAC measurement and detection of nutritional oedema at household level, only 2% were men. During the feedback meetings, women have expressed the desire for their husbands to be trained on the approach so that they can contribute and share the responsibilities of caring.
- **Endorsement of the Family MUAC approach:** The national and sub-national nutrition clusters and the IMAM/IYCF-E Technical Working Group should advocate for the endorsement of this approach by the Ministry of Health officials at national level to increase acceptance.
- **Monitoring and evaluation framework:** Development of a M&E framework and key indicators at cluster level is key to continuously assessing the impact and effectiveness of the approach to inform program adjustments and improvement.
- **Sharing best practices and lessons learned** with other stakeholders and organizations working in health care and nutrition as the next step for broader adoption.
- **Future research into the cost and cost benefit of different implementation approaches** to inform future implementation of Family MUAC and prioritization of active and passive approaches (e.g. expanding training to cover more men, using different delivery platforms for training). It would be beneficial to assess the costs and benefits of each approach to show which has the most impact and represents good value for money.

INTRODUCTION

Myanmar is a country in Southeast Asia with a population of approximately 54 million people, 13.6 million of whom are children.³ Around 70% of the population lives in rural areas. Most parts of the country are generally prone to disasters such as cyclones. The major economic activities range from fishing, crop production and livelihood activities including garment industries and food processing.

The national nutrition situation in Myanmar is considered poor, with child wasting⁴ reaching 7% and strong regional variation with some states like Rakhine, Yangon and Tanintharyi recording very high and high prevalence at 17.6%, 14.8% and 12.7% respectively. Acute malnutrition is further exacerbated by food insecurity, poor health services and lack of safe drinking water, sanitation and hygiene (WASH) services and the ongoing political crisis since February 2021.

Myanmar's administrative body considers the prevention and management of acute malnutrition as one of the crucial components in the basic primary health care package with services well integrated in the primary health care system at all levels. In 2017, the Department of public health released treatment and operational protocols for the integrated management of acute malnutrition. It provides the overall guidance for all actors involved and covers four major components; Community mobilization, Supplementary Feeding Program (SFP) for moderate acute malnutrition, Outpatient Therapeutic Program (OTP) for severe acute malnutrition without complications and Inpatient Therapeutic Care (ITC) - also known as Stabilization Center (SC) - for severe acute malnutrition with complications. Under the community mobilisation component, community health workers and volunteers screen and refer children to health facilities where they are managed.

All nutrition partners (sensitive and specific) are coordinated by the National Nutrition Cluster Coordinator who gets overall support and guidance from the Strategic Advisory Group (SAG+), the Integrated Management of Acute Malnutrition / Infant and Young Child Feeding in Emergencies Technical Working Group (IMAM/IYCF-E TWG) and the Assessment and Information Management Technical Working Group (AIM TWG). The National Cluster is further guided by the Interim Nutrition in Emergencies Guideline (INIE) and the Infant and Young Child Feeding in Emergencies Standard Operating Procedure (IYCF-E SOP) to implement humanitarian activities. Save the Children is a member of the SAG+ and AIMs TWG and Co-Chairs the IMAM/IYCF E TWG. In Rakhine state which hosts 90% of all acutely malnourished children in the country and Save the Children seconded a Sub Nutrition Cluster Coordinator to support the implementation of the Rakhine Nutrition Strategy

Family MUAC also known as Mother MUAC is a community screening approach which empowers mothers, caregivers and other family members to screen for acute malnutrition in their own homes by teaching them how to use a simplified colour coded MUAC tape and check for nutritional oedema and then refer their own children.

One of the key considerations that influenced Save the Children for piloting the Family MUAC approach in Myanmar was the need to provide evidence about the feasibility of this approach in a complex environment to influence decision-making at the cluster level through the AIM TWG.

³ [Myanmar Population, 2023](#), accessed on 22nd September 2023

⁴ Wasting is defined as low weight-for-height. It often indicates recent and severe weight loss, although it can also persist for a long time. It usually occurs when a person has not had food of adequate quality and quantity and/or they have had frequent or prolonged illnesses. Wasting in children is associated with a higher risk of death if not treated properly. (WHO)

At the same time, the COVID-19 pandemic hit the country leading to increased restrictions and lockdowns and limitation of health system's access to communities. Save the Children and other partners expressed their concern and the need for an innovative way to reach and engage communities on early case finding without burdening the community volunteer network. This need was exacerbated by the political unrest in 2021 leading to the health system collapse and resulting in the access to health services challenges by the families. The Family MUAC approach was proposed as a key intervention to increase community engagement in early identification and referral for early admission of acute malnutrition.

This paper describes how the approach was initiated at national and sub-national levels, including the training methodologies and platforms that were used, different typologies used in the roll out, key results from using this approach and recommendations for the next steps, with a specific focus on Save the Children's rollout project. It also highlights how caregivers adopted the approach and caregivers' recommendations on what changes they would like to see. The paper also describes the current challenges experienced to date in the implementation of Family MUAC which will need to be addressed before the approach is rolled out to other areas.

PROGRAM DESCRIPTION

In 2020, Save the Children first piloted the Family MUAC approach in Northern Shan state. In 2021, with the encouraging results from this first pilot and the need, regarding the complex situation in Myanmar, for scaling up this approach, the National Nutrition Cluster with support from the Global Nutrition Cluster and UNICEF organized a National Family MUAC Training of Trainers (ToT) for all nutrition cluster partners. Through the Sub Nutrition Cluster coordinators, UNICEF provided MUAC tapes to all partners across the regions willing to implement this approach. The same year, UNICEF developed a MUAC screening video in Burmese to be used for Family MUAC training and shared it with all nutrition cluster partners.

To ensure appropriate and continuous management of acute malnutrition for all malnourished children detected at the community level and referred and avoid under-mining partners' efforts in the implementation of the Family MUAC approach, UNICEF, WHO and WFP have committed, as much as possible, to provide nutrition commodities to partners involved in management of acute malnutrition interventions. In circumstances where Ready to Use Supplementary Food (RUSF) commodities were unavailable, the sub-cluster coordinators and the IMAM/IYCF-E TWG encouraged and trained partners to use the simplified protocols that included the use of RUTF for the management of Moderate Acute Malnutrition (MAM). Figure 1 shows the Family MUAC Journey in Myanmar from 2020 to August 2023

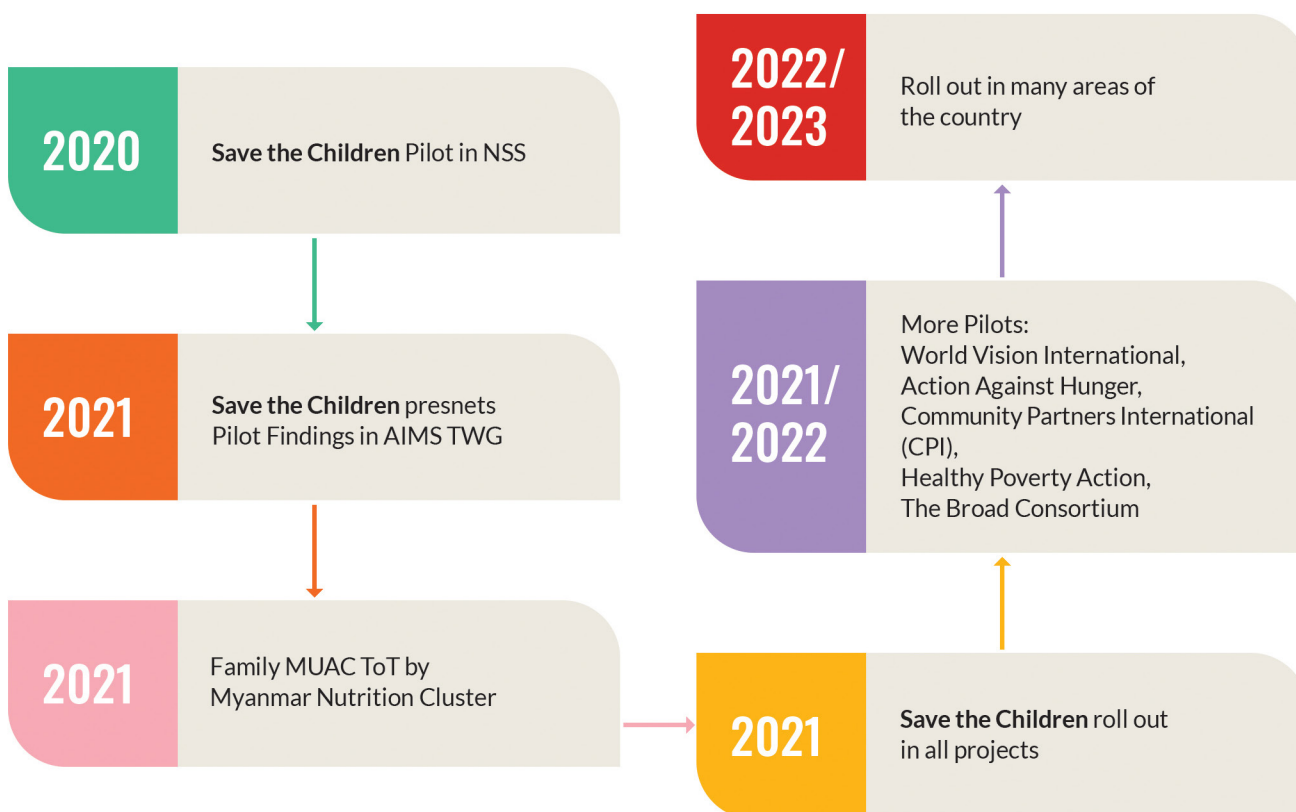


Figure 1: Family MUAC Journey in Myanmar from 2020 to August 2023

To scale up the Family MUAC approach across three states, Save the Children implemented a cascading training approach and took advantage of its presence in the field to incorporate the Family MUAC approach in four existing projects in Peri- Urban Yangon, Northern Shan and Rakhine states. They all had a component of Social Behaviour Change (SBC) and IYCF Mother Care Groups in their implementation strategy.

First Step: While most of the organizations, mainly INGOs, started training their own staff on the Family MUAC approach, Save the Children used two cascading training approaches: (1) through the LEARN project⁵ (funded by LIFT) and (2) at program level through Nutrition Advisors. The training process involved both in-person and virtual trainings depending on access and availability of partners, using in-house materials and the MUAC screening video developed by UNICEF. A one-pager document was produced through the LEARN project, to support the training of community volunteers and mothers (see section below).

Second step: Save the Children and its local partners selected the geographical areas where the Family MUAC approach would be rolled-out and provided capacity building of front-line SCI and partners' staff in these areas. They ensured each project design aligned with family MUAC, and identified contact points to incorporate Family MUAC training and activities, train and equip community volunteers with MUAC tapes and data collection tools (monthly report to be filled in by mother leaders that are part of Mother Care Groups, caregiver report and verification checklist), monitor the activity, conduct field supervision and refresher trainings and document the process. Front-line SCI and partners' staff then trained community volunteers whom in turn trained the mother care group leaders with support from the field staff.

Three entry points were used to roll out the Family MUAC approach depending on the project context and design:

- Implementation of Family MUAC through ongoing projects that had mother care groups
- Implementation of Family MUAC in nutrition sensitive projects
- Family MUAC training through the LEARN III Project under LIFT UNOPS

⁵ The LEARN project is a national capacity building project funded by LIFT (UNOPS) that focuses on building on the capacity of NGOs through various nutrition related trainings including IYCF, basic nutrition, gender and nutrition linkages and nutrition sensitive agriculture among others. The Project also offers support in program implementation and training for organizations when requested and schedule is flexible. The team is formed of 4 Core Technical Staff that offer both virtual and in-person training and capacity building support. One of SCI Nutrition Advisor gives regular support to the project and the Nutrition Tech Lead when required.

PROGRAM IMPLEMENTATION

1) Implementation of Family MUAC through ongoing projects that had mother care groups

▪ Context

In 2022-2023, Save the Children were working in four field projects located in three states: Yangon, Northern Shan and Rakhine. Each project supported an average of 26 mother care groups (MCG) each with 10-15 Mother Care Group Leaders.

The mother care groups are organized as a group of 10 to 15 mother leaders who are either pregnant or primary caregivers of children 0- 24 months who voluntarily come together to share knowledge on IYCF, WASH and health practices and are selected by the mothers in the villages as their leader. Each mother leader supports 10 to 15 women in her neighborhood and agrees to meet once every two weeks to learn, share experience and track progress on different IYCF and nutrition practices. Each Mother Care Group (MCG) is facilitated by an Outreach staff working for Save the Children who usually manages 4 to 5 Mother Care Groups (MCG) in the project area. The outreach staff facilitates key IYCF sessions, supervises mother care group leaders in the field and trains Mother Leaders on Family MUAC and other key topics. Figure 2 shows the mother care group structure at the community level

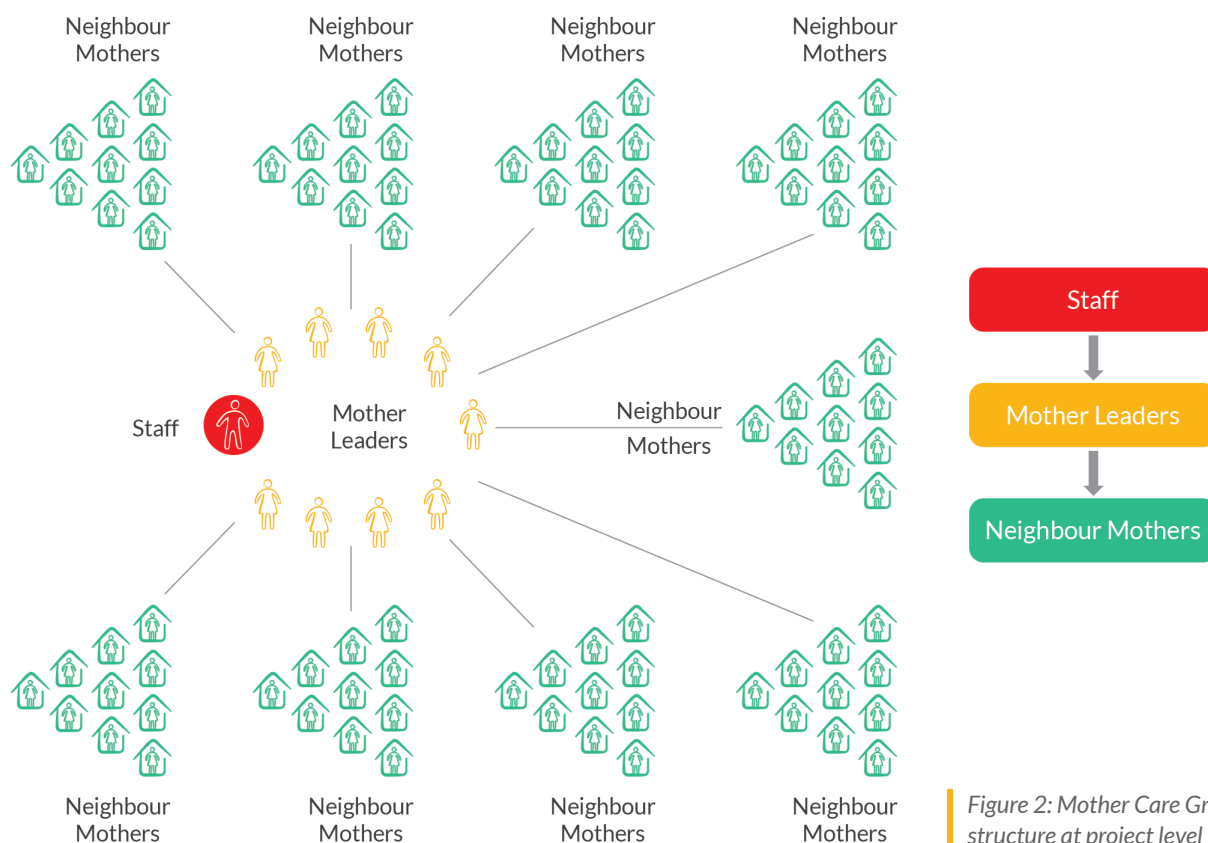


Figure 2: Mother Care Group structure at project level

■ Engagement with stakeholders

In Northern Shan State, prior to the military takeover in February 2021, regular meetings focused on increasing awareness of the Family-MUAC approach, highlighting the relationship between Family MUAC, early case identification, acceptance of referrals and availability of nutrition treatment services were held with the Basic Health Staff (BHS) and the Township Health Department (THD⁶). As a result, the Family MUAC approach was accepted by the BHS at community level. After the take over, the health system broke down and Save the Children was not able to continue meeting and engaging with the BHS staff. However, Save the Children continued engaging with local partners and organisations that provided treatment services to facilitate referrals. -

In Peri Urban Yangon, meetings were conducted with the township health department and the treatment partner Terre Des Hommes (TDH) to strengthen referral linkages.

In Rakhine, at the onset of the Family MUAC scale-up, there was a lot of increased sensitivity in engaging with State Administrative Council (SAC) so no meetings were held until 2022 when engagement principles were relaxed. After the coup, Save the Children directly engaged with agencies and sub national nutrition clusters that were responsible for providing treatment services so that when caregivers and children were referred, they were admitted and treated. However, in 2022 as other BHS and THD staff were reinstated in some regions, advocacy meetings to improve health service delivery and acceptance of care givers of children with self-referrals for MUAC for them to access treatment if confirmed to be malnourished. These were initiated but on a lower scale as guided by the organization engagement policy with the current administrative body.

■ Training

After staff and community volunteers received training, community-level training for mother care group leaders started. Staff led the sessions and the community volunteers co-facilitated. Mother Care Group leaders in Rakhine and Peri Urban Yangon continued to train the neighbouring women in their groups while in Northern Shan State, Community volunteers were the ones responsible to train caregivers. The training slides developed by Save the Children were translated into Burmese and other local languages like Muslim, Shan, and Kayin to aid the learning process. Each caregiver was equipped with a MUAC tape. Face-to-face training sessions lasted for 1- 2 hours and were done in the local language by field staff and volunteers.

All new mothers who joined the Mother Care groups were trained by Community volunteers. The topics included: welcome remarks and an introduction to the family MUAC approach, the objectives of the training, what is malnutrition (oedema and wasting), the effects and how to determine malnutrition followed by a practical demonstration on the use of the MUAC tape and how to seek for health care in case of a child was found malnourished. In addition, topics on what to do when a child was found to be malnourished and where to go for help were included. Each trained caregiver was



Figure 3: The Family MUAC leaflet for Care givers during Training

6 The Basic Health Staff and the Township Health Department are part of the administrative body structures for Primary Health Care . The BHS are responsible for management of acute malnutrition and the THD were responsible for the overall coordination and supervision of the services.

given a new MUAC tape for screening and a family MUAC leaflet translated into the local language and informed of the referral system and support in place. Each mother leader received a referral booklet (paper cards) showing the grading for malnutrition and a family MUAC leaflet shown in figure 3 to support trainings of other women. The referral booklet included colour coded sheets (red and yellow) and basing on the colour the mother had seen on the child's MUAC tape, she would tick on it and go with it to the health centre and in some areas to the community volunteer depending on the referral pathway.

Using this approach, Save the Children trained a total of 14,863 individuals (14,783 female, 80 male) between 2020 (date of the first pilot) and 2023 (end of the roll-out), including: 71 SCI field staff (31F, 40M), 50 partner staff (40 F, 10 M), 317 community volunteers (287 F, 30 M) and 14,425 caregivers (14,414 F, 11 M).

▪ Referral system and support for transportation cost

Save the Children and the Sub Nutrition Cluster coordinator had to advocate with the Basic Health Staff and Township Health Department to consider referrals from community volunteers of children screened through family MUAC as the community volunteers were the only person responsible for community referrals as stated in the integrated Management of Acute Malnutrition (IMAM) protocol. Caregivers' self-referrals were not authorized. In case a child was identified as malnourished by his/her caregiver, the mother had to take the child to the community nutrition volunteer to validate the measurement. If confirmed, the mother would be given a referral note to take the child to the nearest health centre.

However, in some regions like Rakhine, where Save the Children were running its own treatment programs in IDP camps, caregivers were allowed to self-refer themselves to the treatment center. To increase access to treatment, mothers with referred children were given a transport refund to cover their travel costs. This cost was allocated for each village located at more than 5 kms from a health center. The amount given was calculated based on the usual public transport cost of the region. To receive this assistance, a mother had to share the referral form signed by the health worker at the health centre.

▪ Monitoring and supervision

To check the accuracy of MUAC measurements by mothers, a quarterly cross check review was conducted where 30% of the mothers underwent a cross check test with the community volunteers. The refresher training was informed by this MUAC measurement quarterly review.

2) Implementation of Family MUAC in nutrition sensitive projects

▪ Context

The initial plan was to scale up family MUAC in projects with a mother care group approach (mainly due to budget constraints). However, a huge number of caregivers (mainly caregivers with children 25-59 months) were missed as they were not part of the MCG. As mentioned previously, the MCG groups targets mainly caregivers with children 0- 24 months (about 2 years) and pregnant women. To train caregivers with children 25-59 months on how to measure MUAC and check for bilateral oedema and refer the Family MUAC approach had to be integrated with interventions targeting a wider age bracket, such as Blanket Supplementary Feeding Program (BSFP), Cash transfer activities, and General Food Distribution (GFD), without adding too much stress on the budget. The organisation flow and activity design during this integration process was the same for GFD, BSFP and Cash distribution activities as shown below in figure 4. The availability of Food security community volunteers and the willingness of the project staff working on these projects to support the integration of Family MUAC were enablers in the roll out of Family MUAC training in these projects.

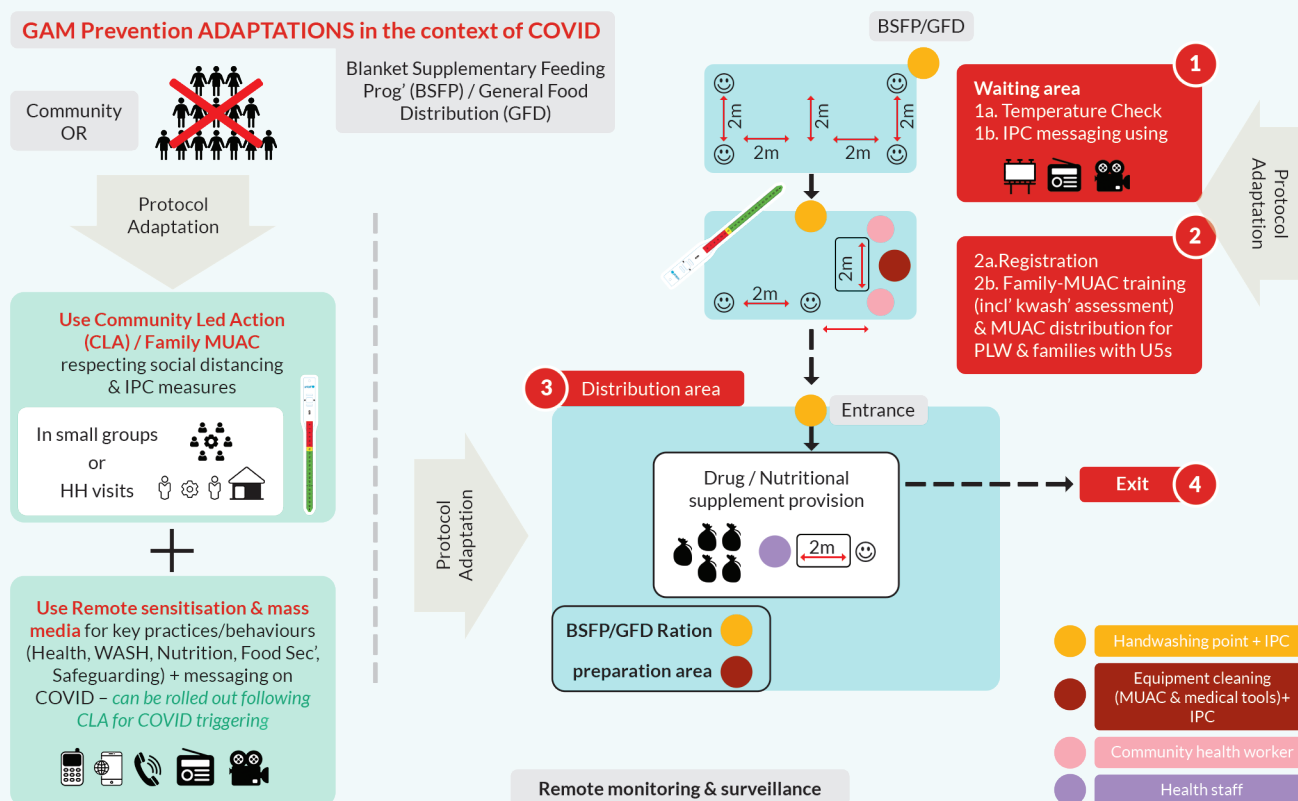


Figure 4: The General Food Distribution Flow Chart with Family MUAC process included

Figure 4 above shows one of the flow charts for General Food Distribution with adaptations to include Family MUAC. These interventions were operational in 2021 when the COVID -19 Infection Prevention Control measures were in place and incorporated in the design.

Training

Prior to any BSFP or GFD, only households selected to receive food were asked to attend the distribution sites. Any beneficiary with likely symptoms for COVID 19 was advised to notify the volunteers so the food can be delivered directly at household level. Apart from the sensitization messages on how to stay safe from COVID 19 and what to do in case of someone was suspected to be infected by COVID 19, the BSFP and GFD were organized in 3 stages: **In stage 1**; beneficiaries would enter into the triage area designated by the distribution team and screened for any symptoms of COVID 19 and temperature was checked using a non-offensive temperature gun. A minimum of 2 m distance was used as shown in the demarcations to maintain the recommended distance. **In stage 2**, beneficiaries were registered and all pregnant women and caregivers of children under 5 years received Family MUAC training. The training was organised in groups of 5 mothers and the sessions facilitated by the field security volunteer took 30 minutes. Each mother received one MUAC tape and a record sheet for tracking the measurements of the child over the two months period. On the following distribution schedule (approx two months later), the caregiver returned with the record sheet and handed it over to the volunteer. **In stage 3**, the beneficiaries received the nutrition supplies and exited the cycle.

Referral system

During the training sessions at the GFD and BSFP sites, the volunteers informed the caregivers about the referral pathways in place in case the child had a yellow or red colour on the MUAC tape. These community

volunteers were allocated per village tract and easily identified by the mothers since they all live in the same area. The community volunteers would then write a referral note to be taken to the centre. Those that did not have nutrition treatment health centres in the proximity were given a transport refund.

▪ Monitoring and evaluation

The monitoring of the Family MUAC activities provided some challenges; it was difficult to track the progress of the measurements the mothers were taking at household level as the Food Security and Livelihoods (FSL) also known as transitional livelihood volunteers had other competing tasks. Tracking the number of children screened was also difficult as many mothers did not come back with the reports.

3) Capacity building for partners through the LEARN project

National Level training by the Save the Children LEARN Program funded by the Livelihoods and Food Security Fund (LIFT)

The LEARN III project is a three-year project that started in 2020 at the height of the COVID 19 pandemic. It is funded by the Livelihoods and Food Security Fund (LIFT) that is managed by the *United Nations Office for Projects Services (UNOPS)*. The LEARN project is a capacity building arm for about 75 food and nutrition security partners working for LIFT-funded projects and the members under the SUN CSA network. Capacity-building topics include; Basic Nutrition training, WASH and Nutrition, Nutrition Sensitive Agriculture, Nutrition and Gender, Infant and Young Child Feeding and M&E among others. A team of 5 technical staff under the LEARN III project working under Save the Children were responsible for conducting both virtual and in-person training. The Family MUAC training was included as a training package on request by LIFT to support the nutrition cluster in rolling out this approach across the country. To date, Save the Children through the LEARN project has trained 82 organisations on the Family MUAC approach with 226 staff trained (127 female, 99 male). Cascade trainings conducted by organisations with support from the LEARN team is not included in this paper. Each organisation linked with either WFP and UNICEF to acquire MUAC tapes from sub national level through arrangements of the cluster. To continue sharing information and learning about the Family MUAC, the LEARN team set up a Family MUAC Community of Practice in the second quarter of 2022 as a forum to spearhead its adoption across partners. To date, 20 organizations (9 INGOs and 11 NNGOs) with 30 members meet to learn on a quarterly basis with 3 successful meetings organized since its inception.

Objective and Methods of Reviewing Save the Children's Family MUAC Experience in Myanmar

The objectives were:

- To identify the benefits and challenges in implementing the Family MUAC approach in Myanmar
- To document the lessons learned from implementing Family MUAC in Save the Children programmes and generate recommendations for further scale up by nutrition cluster partners

Data collection methods

A mixed methods approach was used, combining quantitative program data and qualitative assessments.

Quantitative methods:

Collection and analysis of program data from 5 Save the Children projects between 2021 to 2023 with data visualization using Power Bi

Qualitative data methods:

A mix of qualitative methods including focus group discussions (FGD), online interview, and key informant interviews (KII). Qualitative data collection tools were developed and administered by Save the Children's Technical Lead and Nutrition Advisors. Participants were selected based on the role they played in training, coordination and implementing the approach in Myanmar, to get a diverse set of perspectives from program managers, decision makers and those who were involved more closely in the implementation. Below is a summary of participants and methods used:

- Focus Group Discussions with 14 key Save the Children project staff through 3 virtual meetings, each lasting between 1- 2 hours. For NSS area (4 participants were present, 4 participants from the Peri Urban Yangon) and 5 participants from Rakhine State.
- Focus Group Discussions with 7 participants: 1 UNICEF Nutrition Cluster Coordinator, 2 members of the IMAM/IYCF-E Technical Working Group and 4 Sub National Nutrition Cluster Coordinators.
- Key Informant virtual Interview with one LIFT (UNOPS) representative from the nutrition section.
- 12 Focus Group Discussions with Community volunteers, mother leaders and mothers who had been trained on Family MUAC using a Burmese-translated questionnaire.

Data management and Analysis

Informed consent

For the virtual meetings,, informed consent was sought before the start of the meeting. And a particular request on whether they would like the names of the organisations to be mentioned in the study. For community level interviews and discussions, a verbal consent form was completed and agreed upon before the start of the questionnaire.

For Save the Children, NGO and cluster staff, questions were developed and recorded in English. However, during the discussion, some participants opted to use Burmese which was translated back to English by Save the Children's nutrition advisors. Separate reports were collected for each session held with different cadres and then one combined report was merged to reflect the general reflections of the participants.

For community-level participants (CVs, mother leaders, Neighbour women) the following process was followed for each project area. In Yangon area, where Burmese is predominantly spoken, Burmese was used in the development of the questionnaire by the M&E Coordinator⁷. This was later translated back to English for reporting. In Northern Shan and Rakhine states, the questionnaires were first translated to Burmese for training of office-based staff who oversaw data collection. The Save the Children staff with the help of community volunteers translated the questionnaire into other local languages, predominantly Muslim and Rakine for Rakhine state and Shan, Pao and Hindu for Northern Shan State. Discussions were conducted in these local ethnic languages, which were recorded in the local language and then translated back to English at the office by the M&E team. The Research and Learning Specialist managed all the data collected from the field, was coded and thematically reported in the analysis. This was then analyzed thematically, and one report submitted to the Nutrition Advisors and Nutrition Technical Lead. The roles and responsibilities of different cadres are found in Annex 8.

⁷ M&E coordinators are based at regional level and manage all data collection processes at regional level. They monitor Family MUAC data bases, provide guidance in data collection and reporting.

LIMITATIONS OF THIS REVIEW

- Language barriers were a challenge with some community members in one project location which required additional translators to collect responses
- Respondents may have felt the pressure to report positively about the experience of implementing the Family MUAC approach as it was Save the Children staff collecting qualitative data
- They may be some recall bias as respondents were reflecting on several years of implementation experience
- Due to time and resource constraints, it was not possible to explore all angles of implementation with a larger representative sample of programme participants

FINDINGS

Quantitative project findings for Save the Children Projects between December 2021 and July 2023; 203 (112 female, 91 male) SCI and partner staff were trained on the Family MUAC approach . 317 (287 female, 30 male) Community volunteers, mother leaders and food security and livelihoods (FSL) volunteers have been trained on family MUAC. 14,374 caregivers (14,363 female, 11 male) have been trained so far screening over 16,077 children (8,422 girls, 7,655 boys), identifying 259 children (167 girls, 92 boys) as malnourished. Amongst them 240 children (153 girls, 87 boys) were confirmed by health workers as malnourished, meaning that 93% of the measurements done by community volunteers, mother leaders and FSL volunteers were correctly done. However, amongst the 240 children confirmed as malnourished, only 35% - 84 children (50 boys, 34 girls) were admitted on the Save the Children programs and others referred to health facilities. This paper does not report on whether these children were admitted or not in a treatment program. Figure 5 shows the progress of Family MUAC between 2021 and 2023.

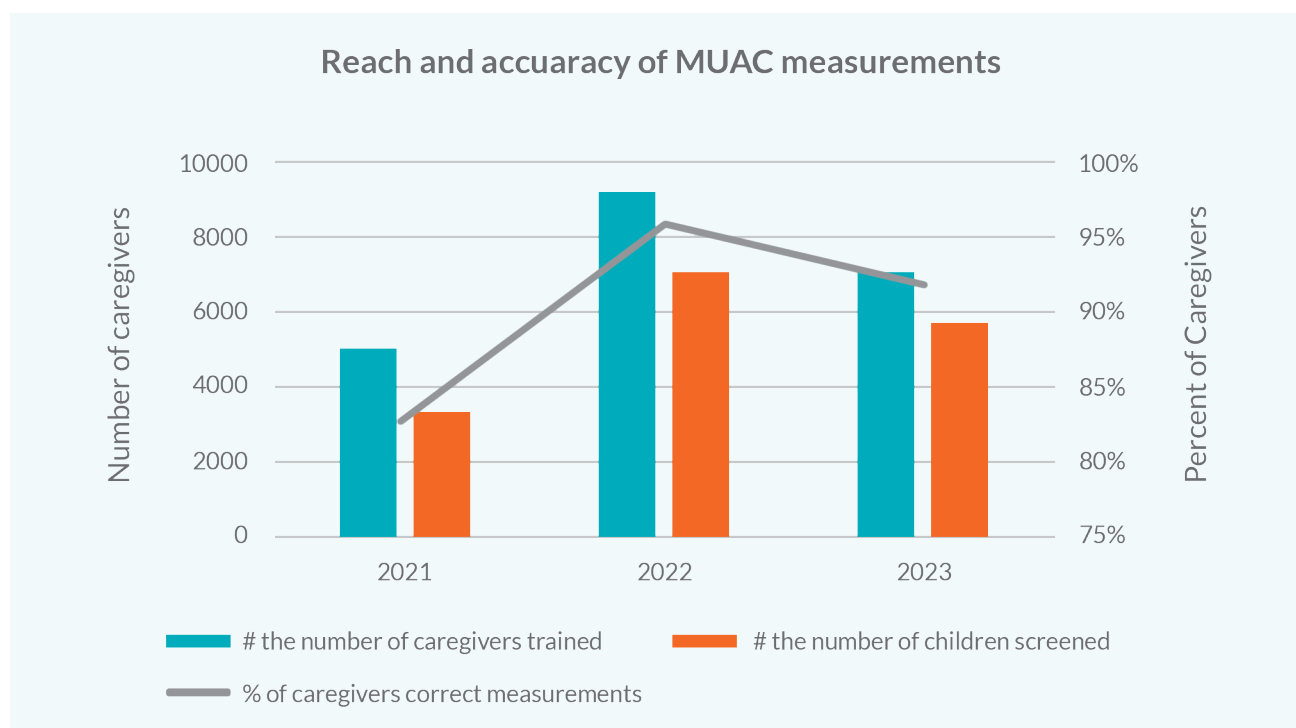


Figure 5: The progress of Family MUAC between 2021 and 2023

The number of children screened increased as the number of caregivers were trained, from just 2,000 screened in 2021 to nearly 16,000 in 2023. The MUAC measurements were overall quite accurate increasing from 83% in 2021 to 96% in 2023, with a slight drop to 92% in 2023.

Graph showing the training and screening results in Yangon, Rakhine and NSS

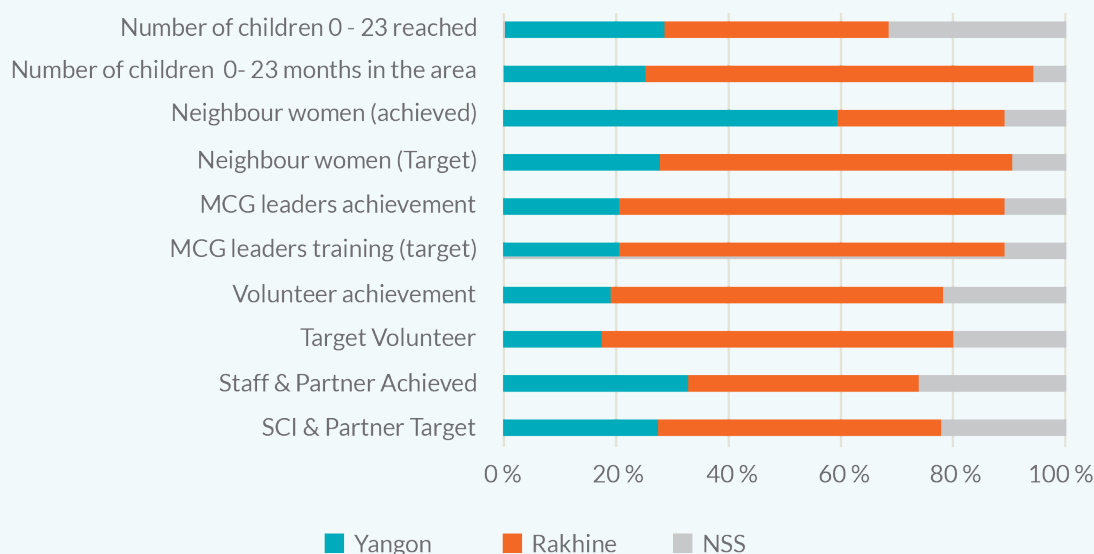


Figure 6: Graph showing the number of cadres trained and the numbers screening per project area

The following graph shows the Family MUAC training results and the number of children screened versus the project area target for the three locations; Peri Urban Yangon, Rakhine and Northern Shan states. From the graph, showing almost 100% trained for staff, volunteers and MCG leaders in all locations. In Yangon, more than 100% neighbor women (caregivers 0-23) months were trained more than the target in Yangon and Northern Shan state while just around 50% reached in Rakhine. Over 100% of the targeted children in Peri Urban Yangon and NSS have been screened with Rakhine just still at 60% of the target to be reached. The graph shows that the more caregivers trained at community level, the higher the screening results for children.

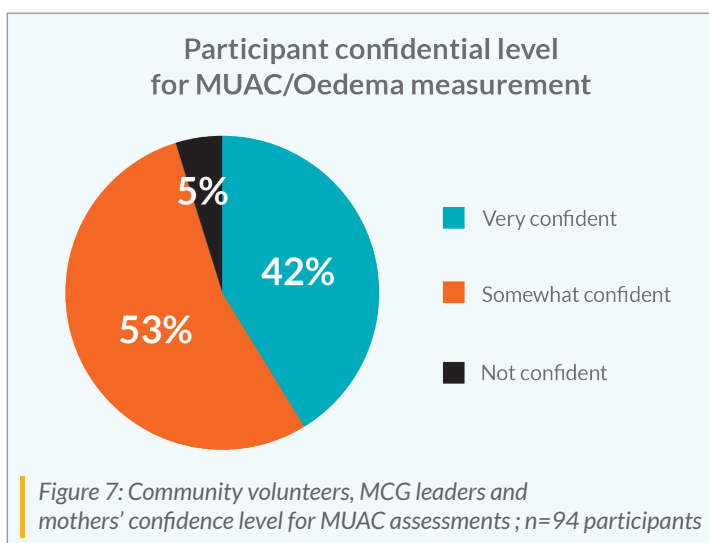
Qualitative thematic findings for Save the Children Staff, nutrition cluster members and LIFT (UNOPS) staff

Acceptance of the approach All respondents thought that the Family MUAC approach has shown promising results in increasing the identification of malnourished children at low cost and increasing caregiver awareness about malnutrition. In NSS, the data from this approach was used to advocate for the establishment of IMAM treatment services through mobile clinics in camps. The Family MUAC data collection tools for monitoring child MUAC assessments were used to take immediate action as soon as the child recorded a yellow MUAC. With learning from Save the Children pilot in 2020-2021, other partners adopted the approach across the country increasing its uptake. However, there were some persistent challenges with implementation, in some locations in NSS, mothers expressed anxiety when their children were malnourished and then were unable to access treatment at the sites due to the lack of supplies or health workers, especially after the February 2021 crisis that had led to the Civil Disobedience Movement (CDM). To manage this new situation, Save the Children partnered with a local agency that received nutrition commodities from WFP to manage children identified with acute malnutrition.

Donor and Nutrition Cluster support to the approach: The LIFT project saw the Family MUAC approach as a way to increase awareness and access to treatment for acute malnutrition to children in hard-to-reach areas, empowering communities to identify and refer malnourished children in a timely manner. Organizations on the other hand noted that there was need to improve the coordination of the Family MUAC at sub national and national level and the need for the Nutrition cluster to have this approach adopted in the guidelines for smooth coordination at sub national level.

Community Level Findings (Community volunteers, Mother care group leaders and Mothers of children 0- 23 months)

In July 2023, 12 Focus Group discussions (FGDs) were conducted at the community level with 94 participants (40% were mother-care group leaders, 38% were Neighbour women (also known mothers with children 0-23 months under the MCG model) and 22% were community volunteers. The FGDs were held separately for each cadre to enable a comfortable sharing session for all members. Participants were selected from Peri Urban Yangon, NSS and Rakhine states. The confidential criteria are based on the ability to take correct MUAC and oedema measurement and the colour codes for referral to the health centre.



Motivation and Implementation of Family MUAC: From the community feedback, mothers expressed their aspirations of health and nutrition with one mother mentioning “I want my children to be a healthy, brilliant, tall and able to contribute to our country” Mother Leader, Rakhine state. Most participants said that they had conducted MUAC measurements and seen other members of the community doing the same on a monthly basis.

Training and Supervision of Family MUAC: All the participants reported having received training and acknowledged the value of the training which enabled them to make measurements and make informed referrals. The majority of the participants mentioned that the training received was adequate as they were able to take the MUAC and Oedema assessment correctly and understood the referral colours (yellow and red correctly).

Many participants indicated that they received guidance and training from both the project staff and volunteers on how to correctly use MUAC colour bands and assess oedema. Mothers usually shared the information received with other mothers in the same area and played a critical role in disseminating information about measurements and making sure children were screened correctly.

Challenges in Implementation: Participants (CNVs and MCG leaders) shared several challenges when conducting Family MUAC training with caregivers. These included:

- Mothers missing training appointment dates;
- Lack of basic tools such as MUAC tapes, record cards, pens and pencils for mothers; these materials were destroyed by cyclone mocha in May 2023
- Mothers who had been trained in Family MUAC and tried to access treatment shared a number of challenges in receiving care. These included: limited opening hours in some health centres resulting in delays in accessing treatment; long waiting times of 3-4 hours to see a health care provider and communication gaps; transportation difficulties due to rough roads and costs; insufficient nutrition commodities for treatment of acute malnutrition; safety concerns due to political instability and overcrowding at the health centers.

Mothers confirmed that they received support from community volunteers and Save the Children staff once a child with acute malnutrition was identified. The support included confirming the Oedema and MUAC reading, encouraging treatment centre visits, helping with transportation when parents were unavailable; following up on treatment progress and providing counselling on feeding practices. The MCG leaders mentioned that they were able to prepare the referral form accurately, but others engaged with Save the Children staff directly to have these admissions done at the center. The collaborative efforts between mothers, community volunteers and staff ensured that children were identified early and referred for treatment. From the FGD sessions conducted with all the community level participants (CVs, MCG leaders, mothers/neighbour women), the following actions were recommended:

- Training: monthly refresher training to improve measurement skills
- Tools and materials: the need for durable measurement tools such as standard UNICEF MUAC tapes and MUAC paper recording tool, to prevent damage by environmental factors (see annexes 5 and 6).
- Advocacy to increase access to treatment services in communities. Community members requested staff negotiate better with the administrative body health staff to improve access and quality of treatment, and support adequate transportation in terms of availability and timely reimbursements.



There is an under 5 children with yellow color. I consult with SCI staff and said to tell the mother to go to the clinic, but the mother did not go due to transportation difficulty.

CNC, Ho Kho Camp,
Kutkai, NSS

Feedback mechanisms on implementation challenges to project staff: Participants mentioned they had various opportunities of providing feedback in detail below. During MCG monthly meetings, CV monthly review meetings, face to face or via phone for any challenges they face. They also agreed that they are attentive to their concerns through face-to-face interactions and phone conversations. However, a few participants expressed hesitancy in sharing their challenges with project staff, especially those relating to medical expenses and transportation costs, as they thought the organization would not cover these costs. They also highlighted the importance of open communication and suggested the idea of setting up a complaint and feedback box in the community.

Key Learnings

- The Family MUAC approach increases awareness of malnutrition amongst caregivers and the number of children identified with malnutrition, however strong referral systems need to be in place to ensure child with malnutrition do get treatment
- Caregivers are able to accurately use MUAC and check for nutritional oedema, but may get anxious if child is not eventually admitted and treated or management due to lack of supplies at the health centre.
- Mother Care Groups (MCG) if established and functional provide an effective platform/entry point to roll out Family MUAC targeting 0-24m children. However, other entry points to reach caregivers of children 24-59 months is needed
- Nutrition sensitive interventions (cash, food distributions) provide an opportunity to reinforce, engage with other family members (fathers) and reach caregivers of older children, but this activity needs to be integrated and prioritised by Food Security and Livelihood staff and frontline workers and integrated into their daily work
- The engagement of key stakeholders before, during and after the implementation of the family MUAC approach is key to assess feasibility, select areas of implementation, conduct training and improve access to treatment services.
- The involvement of male caregivers in Family MUAC trainings and measurement activities is key to ensure that mothers/female caregivers receive the adequate support at household level

Bottlenecks and challenges for Family MUAC implementation

Limited coverage for treatment programs; Treatment programs for malnourished children are majorly centred around Rakhine state with others still grappling with access to these services in health facilities or mobile outreaches. Even within Rakhine, some townships are not fully covered by partners leading to breaks in referral services. There are ongoing engagements at the cluster level to encourage partners to venture into new areas and for some areas, partners have integrated CMAM services with mobile outreaches and in some cases used RUTF dosage for management of MAM cases. Without continuity of treatment care for children who are identified as being acutely malnourished, the impact of Family MUAC will be limited

Unfunctional referral linkages: In some locations even when mothers were referred to access treatment, they opted not to travel to receive treatment due to two reasons. They did not have available cash at the moment to travel to the sites and secondly, some of the mothers complained of no treatment at the site so did not find the motivation to go there. The program adapted by changing the reimbursed fees as advances rather than later to increase referral acceptance. However, in the Northern Shan state; some mothers, even though they received the money, still opted not to travel citing poor services. In Northern Shan State, the OTP contact time is quite low and, in many cases, seen at least once a month, which leads to increased treatment periods.

One-off training and no follow-up training conducted once roll out is completed: For the projects that are more than 6 months in nature, it was found necessary to retrain mothers and caregivers on the Family MUAC approach every 6 months to maintain their skills. In some projects, it's been suggested to be included as one of the standard modules for Mother Care Groups so that all referencing materials for SBCC are in one place. Some projects to combat this are using quarterly meetings with mothers to conduct refresher training.

Gaps in identification of children; While Family MUAC increases early identification of acute malnutrition via mothers of children 0-23 months, there is a high likelihood that many children were missed since the number screened represented 1.6% GAM.

Need for further Capacity strengthening among NGOs. As Family MUAC was a relatively novel approach in Myanmar, several organisations had not yet had exposure or experience in implementing the approach, including local partners, especially those who were not working in a consortium with organisations who did have experience from other countries. Initially, training was facilitated by Save the Children under the LEARN project and tools were provided for rolling out at the project level. Virtual and on-site support was provided for some organisations through the LEARN project but not for all due to conflicting work plan with the LEARN Team. Continued support and engagement is needed during the introduction of a new approach to build and sustain capacity, especially in the context of high staff turnover.

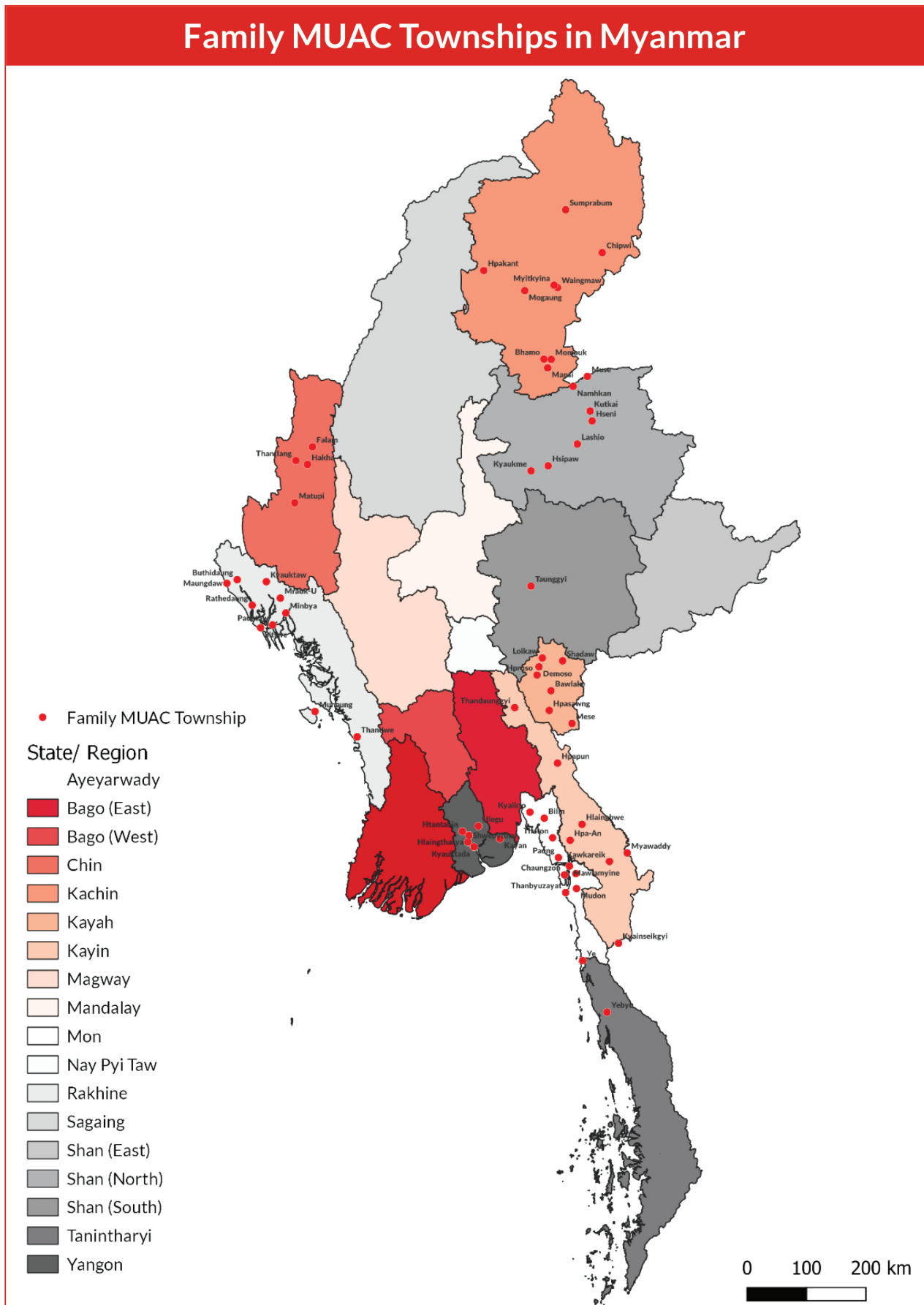
Lack of national operational protocols supporting the Family MUAC approach. There was limited uptake of the Family MUAC approach by some partners as it is not currently incorporated into the treatment or operational protocols for the management of acute malnutrition. While partners are aware of the piloting of the Family MUAC, without clear endorsed guidance on how to implement the approach, they are cautious to roll it out further.

Recommendations, and next steps for Family MUAC in Myanmar

The key recommendations include;

- **Ensure that children identified with malnutrition can access treatment and there is a clear Family MUAC Pathway:** Prior to the implementation of this approach, a clear pathway and risks assessment need to be conducted in consultation with key stakeholders to anticipate and mitigate against challenges that may be experienced by caregiver when accessing treatment. Referral mechanisms as well as a mapping of health facilities providing acute malnutrition treatment, including availability of services linked to nutrition supply chain issues need to be factored in the design.
- **Training**
 - **materials:** there is a need to standardize training materials, data collection and reporting tools across regions as well as translate the materials to local languages.
 - **Refresher training:** Periodic training sessions ranging from monthly, quarterly and biannually should be incorporated in the rollout plan to increase the level of confidence of caregivers and increase the quality of the MUAC measurements.
 - **Inclusion of men in Family MUAC trainings and implementation:** Overall, amongst all caregivers trained on MUAC measurement at household level, only 2% were men. During the feedback meetings, women have expressed the desire for their husbands to be trained on the approach so that they can contribute and share the responsibilities of caring.
- **Endorsement of the Family MUAC approach:** The national and sub- national nutrition clusters and the IMAM/IYCF-E Technical working Group should advocate for the endorsement of this approach by the Ministry of Health officials at national level to increase acceptance.
- **Monitoring and evaluation framework:** Development of a M&E framework is key to continuously assessing the impact and effectiveness of the approach to inform program adjustments and improvement.
- **Sharing best practices and lessons learned** with other stakeholders and organizations working in health care and nutrition as the next step for broader adoption
- **Future research into the cost and cost benefit of different implementation approaches** to inform future implementation of Family MUAC and prioritization of approaches (e.g. expanding training to cover more men, using different delivery platforms for training) it would be beneficial to assess the costs and benefits of each approach to show which have most impact and represent good value for money.

Figure 8: Showing the townships of Family MUAC implementation in Myanmar



ငါးနှစ်အောက်ကလေးများအား မိသားစုအတွင်း လက်မောင်းလုံးပတ်တိုင်းတာခြင်းအား လစဉ်စစ်ဆေးခြင်း မှတ်တမ်း

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Annex 3: Mother Leader Monthly Report Template

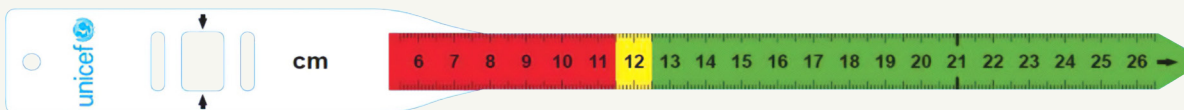
If Mother Care Group approach is implementing, Family MUAC report can be attached in the monthly report of Mother Leader.

အိမ်နီးချင်း မိခင်အဖွဲ့ဝင်များ စာရင်း

ယခုစယားသည် အိမ်နီးချင်း မိခင်အဖွဲ့ဝင်များ စာရင်းဖြစ်ပါသည်။ အိမ်နီးချင်း မိခင်အဖွဲ့ကို အိမ်နီးချင်း မိခင်ခေါင်းဆောင်မှ ဦးဆောင်ပါသည်။

[illegible]

Annex 6: MUAC Tape _ UNICEF



Annex 7: Mother Leader Monthly Report

Mother Leader Monthly Report for MUAC														
Village Tract Name:		မြို့နယ်:					လ:							
Village Name:		Mother Leader Nameဒေါ်ခမ်းလူ												
စဉ်	မိခင်အမည်	တိုက်ရိုက် (✓)	မှတ်ချက် (✓)	ကလေးအမည်	မွေးနေ့	ကလေးအသက်	ကျား/မ	မိခင်တိုင်တာသော ကလေးလက်မောင်းလှံပတ် (✓)			Mother Leader တိုင်တာသော ကလေးလက်မောင်းလှံပတ် (✓)			မှတ်ချက်
								စိမ်း	ဝါ	နီ	စိမ်း	ဝါ	နီ	
1	A			နန်းမိုဝိုင်			မ							correct
2	ဒေါ်အေးအီ			မနန်းမိုဝိုင်အောင်			မ							correct
3	ဒေါ်အေးပန်			မနန်းအောင်မိုဝိုင်			မ							uncorrect
4	ဒေါ်လှဦး			မနန်းစံဖွေး			မ							correct
5	ဒေါ်ခမ်းအိမ်													

Annex 8: List of Members participating in the study in Myanmar

Mabasa Farawo	Nutrition Cluster Coordinator Myanmar	FGD participant
Walton Beckley	Nutrition Specialist UNICEF	FGD participant
Jennie Hilton	Nutrition Specialist (Retainer) LIFT and Access to Health Fund UNOPs, Myanmar	Key Informant
Tin Ni Lar Win Kyaw Zun Tun Aung Thu Chai	Sub-national Nutrition Cluster Coordinators	FGD participants
Dr. Zay Ya Soe	Member IMAM/IYCF TWG/ Project Manager LEARN III Project	FGD participant
Dr. Saw Eden	Co-chair IMAM/IYCF TWG	FGD participant
SCI Project Team FGD discussants		
Rakhine state Dr Sanda Lin Dr Zaw Hlaing Myo Lwin Moe Aung Hnin Hsu Wai Kyaw Zin Tun	Head of Program Nutrition Health and Nutrition Program Manager Project Coordinator Nutrition Project Coordinator Nutrition Project Coordinator Nutrition	Provided quantitative Data and FGD discussions for project staff
Northern Shan State Kyaw Han Tun Seimt Seimt Zaw	Project Manager Child Poverty MEAL Officer	Provided quantitative Data and FGD discussions for project staff
Peri Urban Yangon		
Myat Ko Ko Aye	Project Coordinator – Nutrition	Provided quantitative Data and FGD discussions for project staff
Htun Aye	Project Officer _Nutrition	Provided quantitative Data and FGD discussions
Naw Madonna Day Nyar	MEAL Coordinator	TOT trainer, Transcription and Translation for Urban FGD
Saw Naing	MEAL Manager	MUAC Paper Dashboard Power BI developer

RAKHINE FGD interviewers		
Moe Zaw Nyein	Area MEAL Coordinator, Rakhine	Transcription and translation for Rakhine FGDs
Khine Thazin	Information Management Assistant	Facilitator, Note Taker
Myat Kay Khine	MEAL Assistant	Facilitator, Note Taker
Nandar Soe	Accountability Assistant	Facilitator, Note Taker
Kaung Eain Khant	MEAL Officer	Facilitator, Note Taker,
Ma Hnine	Accountability Assistant	Note Taker
Phyo Paing Than	Information Management Assistant	Note Taker
Urban FGD interviewers		
Khin Sandar Hlaing	MEAL Officer	Facilitator
Ye Min Htun	MEAL Assistant	Note Taker
BRICKS FGD interviewers		
Zaw Myo Aung	Area MEAL Coordinator, Northern Shan State	Transcription and translation for BRICKS FGDs
Seimt Seimt Zaw	MEAL Officer	Facilitator
Zaw Htwe Aung	MEAL Assistant	Note Taker