Community Management of Acute Malnutrition

An effective approach for treating children with acute malnutrition in their homes

PRIMARY TARGET GROUP

CMAM is used for acutely malnourished children under five, and visibly pregnant and lactating mothers with infants less than six months of age affected by acute malnutrition.

What is this approach?

Malnutrition contributes to 35% of under-five childhood deaths. When WV and local partners identify acute malnutrition in a project area, *Community Management of Acute Malnutrition (CMAM)* provides a rapid response to ensure malnourished children are treated effectively before other medical complications arise. It encourages home-based treatment with adequate follow-up. The use of this model significantly reduces medical complications and deaths from acute malnutrition in young children. In addition good nutrition improves the learning potential of children and promotes healthier pregnancies.

When would this project model be used?

CMAM is used in areas where the incidence of acute malnutrition is over 10% and where a focused, cost-effective intensive intervention for nutrition rehabilitation is required. The model should always be implemented alongside other interventions that address the root causes of malnutrition. It can be used in stable, conflict and emergency contexts.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
CMAM	Community-based Management of Acute Malnutrition
CWBO	Child Well-being Outcomes
DADD	Do, Assure, Don't Do
DPO	Disabled People Organisation
GAM	Global Acute Malnutrition
HIV	Human Immunodeficiency Virus
IPM	Integrated Programming Model (now called World Vision's Development Programme Approach)
MoH	Ministry of Health
MUAC	Middle Upper Arm Circumference
NCoE	Nutrition Centre of Expertise
NGO	Non-Governmental Organisation
NO	National Office
OTP	Outpatient Therapeutic Care
PD/Hearth	Positive Deviance/Hearth
RO	Regional office
RUTF	Ready-to-Use Therapeutic Food
SAM	Severe Acute Malnutrition
SC	Stabilisation Centre
SD	Standard Deviation
SFP	Supplementary Feeding Programme
TFC	Therapeutic Feeding Centre
UNICEF	United Nations Children's Fund
WHO	World Health Organisation
WFP	World Food Programme
WV	WV

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Community-based Management of Acute Malnutrition project model

1. What is '*CMAM*' about?

Community-based Management of Acute Malnutrition (*CMAM*) is an effective approach that builds on local capacity to address acute malnutrition in the community by treating the majority of children in their homes using ready-to-use therapeutic foods (RUTF) instead of treating them in therapeutic feeding centres (TFC). This approach is used extensively within World Vision (WV) and externally.

Traditional approaches to treating acute malnutrition have focused on in-patient care (hospital wards or therapeutic feeding centres). Where severe acute malnutrition (SAM) is common, the number of cases often exceeds available in-patient capacity. This limits project coverage. Traditional in-patient facilities are typically located in larger towns or villages, requiring families to travel long distances to access treatment. As a result, children often arrive too late for treatment or leave before completion of the treatment, leading to high numbers of deaths. *CMAM* was developed in response to these challenges. As a home-based treatment it is empowering to families and results in greater access to assistance so more children requiring treatment are reached and fewer deaths occur.

CMAM was first developed as a response to emergencies but it is increasingly implemented in the context of long-term development.

1.1. What are the issues/problems that the project was developed to address?

Malnutrition contributes to 35% of under-five childhood deaths. The associated effects of poverty, inadequate household access to food, infectious disease, inadequate breastfeeding and complementary feeding practices often lead to illness, growth faltering, nutrient deficiencies, delayed development and death, particularly during the first two years of life.[1]

In addition, some global issues like political and civil conflicts, environmental degradation and natural disasters, increase vulnerability in some of WV's programme areas, putting communities and children at high risk of acute malnutrition.

During the LEAP programme assessment, it may have become clear that severe acute malnutrition is a problem within the programme impact area. If wasting is of concern or at an unacceptable level, it may be necessary to initiate a *CMAM* project with local partners earlier in the Critical Path process than Step 5. *CMAM* is recommended when the level of global acute malnutrition (GAM) is > 10% and the situation is considered critical when GAM is >15%. However, a current as well as historical understanding of the context is needed before making a decision to implement a *CMAM* project.

Root causes of the identified community child well-being priorities are explored in Step 5.3 of the Critical Path. At this point, a working group of local partners will use the *Analyse, Design and Planning tool (ADAPT) for Health and Nutrition* to explore root causes related to health and nutrition priorities. The working group collects additional data to assist in the analysis of the root causes and the identification of the most appropriate projects to consider. *CMAM* is one project model that may be recommended. For this project model

[1] http://www.fantaproject.org/focus/children.shtml

to be considered, severe acute childhood malnutrition will have been identified either as a community priority or as a root cause of a related issue.

1.2. What are the main components of the model?

CMAM is based on four key principles:

1. Ensuring that the majority of children who require treatment for acute malnutrition are receiving care.
2. Identifying children with acute malnutrition early and beginning treatment before additional medical complication occurs.
3. Providing appropriate care, including simple and effective home-based treatment where possible.
4. Allowing children to remain in the project until they recover.

A *CMAM* project consists of four components:

1. **Community mobilisation** refers to a range of activities that build a relationship with community members and fosters their participation in the project. These are also oriented to build capacity of the community for early detection of acute malnutrition, adequate referral and prevention. The community mobilisation is an essential step to achieve good coverage.
2. **Supplementary feeding programme (SFP)** provides dry take-home rations and routine basic treatment for children with moderate acute malnutrition without medical complications. Moderate acute malnutrition is defined by a weight for height Z score (WFH) ≥ -3 and < -2 or a mid-upper-arm circumference (MUAC) ≥ 115 mm and < 125 mm. The SFP seeks to prevent deterioration to severe acute malnutrition, reduce deaths by treating children before they are at high risk of dying, and prevent declining maternal nutritional status. A family food ration is provided to prevent household sharing of the malnourished child's ration. Visibly pregnant and lactating mothers, with infants less than six-months who are affected by acute malnutrition, are usually included in the SFP.
3. **Outpatient therapeutic programme (OTP)** provides ready-to-use therapeutic food (RUTF) and routine treatment, using simple medical protocols for children with SAM without medical complications. Severe acute malnutrition is defined by a WFH < -3 or a MUAC < 115 mm. Around 85-90% of children with SAM are treated in OTP, with children attending outpatient care at regular intervals (usually once a week) until they recover (usually a two-month period). Families receive rations to prevent household sharing of the child's RUTF ration.
4. **Stabilisation centres (SC)** provide in-patient care for acutely malnourished children with medical complications. These children are at high risk of death and will be stabilised then referred to OTP for continued treatment within respective communities. Malnourished children under six months of age are usually treated in inpatient settings.

1.3. What are the expected benefits or impacts of this model?

CMAM treats children suffering from acute malnutrition and helps prevent their death. Compared to traditional approaches (treating children in a feeding centre), *CMAM* can significantly reduce the numbers of child deaths, increase coverage rates, be more cost-effective and effectively treat large numbers of malnourished children in a relatively short

time. It may also be integrated with other projects such as health or water and sanitation to address the underlying causes of acute malnutrition.

In general, the key benefits of the *CMAM* project model include:

- decreased risk of child death from infection undermined by malnutrition
- improved access to basic healthcare and nutrition support (Community mobilisation activities, including active case finding of malnourished children, helps to ensure that vulnerable groups who are often excluded, participate in the project.)
- improved child nutritional status
- improved maternal nutritional status
- reduced risk of intra-uterine growth retardation
- improved pregnancy outcomes
- improved learning potential and future performance, due to the prevention or correction of nutrient deficiencies.

1.4. How does the project model contribute to WV's ministry goal and specific child well-being outcomes, and reflect WV strategies?

The project model contributes directly to the aspiration of 'children enjoy good health', and to the child well-being outcome, 'children are well nourished'. This model is aligned with the WV's health and nutrition 'Do, Assure, Don't Do' (DADD) framework by:

- building local capacity to identify and treat acute malnutrition, both in the emergency and development context
- providing equitable access to treatment for acute malnutrition for families and communities
- strengthening the capacity of the existing Ministry of Health (MoH) to address acute malnutrition.

This model also contributes to WV's Global Nutrition and Health Strategy and is included as part of WV's evidence-based health and nutrition interventions.

2. Context considerations

2.1. In which contexts is the project model likely to work best?

CMAM is the internationally agreed standard for treating acute malnutrition. *CMAM* is currently being implemented in a variety of settings including stable and emergency. *CMAM* can be implemented in a range of contexts including urban, rural, programme and non-programme settings, including where HIV is prevalent. It may be implemented in areas of insecurity and conflict, but extreme caution must be exercised in undertaking this project in those contexts.

CMAM is not a standard model for all projects. It is an approach for contexts where a focused, intensive intervention for nutrition rehabilitation is required.

CMAM should be considered and implemented only under the following specific conditions:

- Levels of global acute malnutrition (GAM) are >10% in the under-5 population in the community, or between 5-10% with 'aggravating factors.'[2]
- The absolute numbers of severely malnourished children are high and it is beyond the capacity of the local health facility to manage on its own.

In situations of chronic emergencies, or where a high level of acute malnutrition is not resulting from a recent sudden emergency, *CMAM* can still be implemented as a developmental approach. It is critical to implement *CMAM* alongside other programming interventions that address the root causes of malnutrition.

2.2. In which contexts should this model not be considered?

CMAM should not be considered if:

- The level of global acute malnutrition does not exceed 10 %.
- The level of global acute malnutrition is not between 5 %-10 % with aggravating factors.
- The absolute number of children with acute malnutrition can be effectively managed by the health system.
- The *CMAM* approach is not endorsed by local partners such as the Ministry of Health, UNICEF or an in-country nutrition working group.

2.3. What questions should field staff ask, and are there particular context factors relating specifically to this project model that they should consider when adapting this model?

CMAM is adaptable for addressing acute malnutrition in different contexts, both emergency and stable.

Emergency contexts: In an emergency, *CMAM* projects take place within a hierarchy of interventions aimed at addressing the nutrition crisis. The impact of *CMAM* on acute malnutrition is considerably reduced if adequate food is not available to the general population. *CMAM* goes alongside general food distribution, micronutrients supplementation, blanket food distribution and targeted household distribution.

Stable or development contexts: *CMAM* can be implemented in stable development situations, where levels of acute malnutrition are high and locally available services for treatment are insufficient. Implementation of *CMAM* in development settings should not be considered a standard intervention. If the level of acute malnutrition is lower than 5%, WV recommends focusing on treatment using local resources with the *Positive Deviance/Hearth* project model and prevention activities. WV's primary focus in nutrition programming is always on preventing malnutrition[3] and supporting to the MoH to strengthen prevention efforts.

Conflict Situations: *CMAM* has been successfully implemented in areas with insecurity or conflict, but only after careful contextual analysis. In such instances, adaptations are usually required. For example, weekly visits to the project site could be replaced with bi-weekly visits to reduce beneficiary travel in highly insecure areas.

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[2] 'Aggravating factors' include: generalised food insecurity or caloric consumption below 2100 kcal/person/day; widespread communicable disease (diarrhoea, epidemic of measles or whooping cough); poor child feeding and caring practices; and crude death rate > 1/10,000/day and/or epidemic of measles or whooping cough.

[3] WV Health Strategy, May 2008.

There are several factors to consider when determining whether *CMAM* programming may be appropriate for a particular context.

1. **Levels of malnutrition:** A recent nutritional survey or rapid assessment (the information cannot be more than six months old) conducted by WV, MoH, or other partners is a potential source of nutritional survey data. Alternatively, trained individuals may need to conduct rapid nutrition screening (using mid-upper arm circumference, MUAC) if the programme team suspects that malnutrition is a problem in the area.
2. **Underlying causes of malnutrition:** Addressing underlying causes in order to prevent malnutrition is critical for the sustained well-being of children. A working group focusing on health priorities will use the ADAPT for Health and Nutrition to assess and analyse underlying causes.
3. **National guidelines:** National guidelines for community management of acute malnutrition must exist within the country. In contexts where such national level guidelines do not exist or are outdated, WV should refer to the global guidelines for acute malnutrition management - available through the WV Nutrition Centre of Expertise (NCoE) - while working with the government and other partners (such as UNICEF or other organisations) to develop or update national guidelines.
4. **Existing capacity:** A careful review of the available human resources (WV staff as well as MoH staff) is necessary before considering *CMAM* implementation because *CMAM* requires trained and experienced health and nutrition staff. Where possible, the local MoH should take the leading role in implementation, with support from WV.
5. **Access to a reliable source of ready-to-use therapeutic food (RUTF) and essential medicines:** WV should partner with UNICEF and other agencies that provide therapeutic products to ensure a reliable supply chain for procurement and delivery of RUTF and essential medicines. WV will procure a small buffer stock of RUTF and essential drugs to cover gaps caused by a potential break in the supply pipeline. For *CMAM* in emergency contexts, WV may directly procure all the RUTF and essential medicines, if required, but only for the short term.
6. **Opportunities for partnership:** In most circumstances, WV does not provide in-patient treatment of severe acute malnutrition. Rather, WV trains volunteer to mobilise, screen, identify and refer malnourished children to a stabilisation centre run by a medical organisation or local health centre. A working group focused on health and nutrition priorities will assess the availability and capacity of local partners to collaborate for a *CMAM* project.

3. Who are the key target groups and beneficiaries of this model?

3.1. Primary target group(s)

The primary target group of *CMAM* are acutely malnourished children under five, and, on a smaller scale, visibly pregnant and lactating mothers with an infant less than six months of age affected by acute malnutrition.

3.2. Who are the intended primary beneficiaries?

The intended primary beneficiaries are the same as the primary target groups.

Beneficiary screening for *CMAM* is by measuring the mid-upper arm circumference (MUAC) of children between six and 59 months of age, and by clinical assessment. MUAC screening

sessions can be conducted at a central location within the community, such as a health post, or community volunteers trained on MUAC measurement may undertake home visits.

All eligible children within a community are screened for acute malnutrition at the beginning of the project. This may require house-to-house MUAC screening to ensure that marginalised groups such as orphans, children with disabilities, and girls are intentionally assessed for eligibility.

Although, systematic screening for women is not usually, pregnant women who are diagnosed malnourished or mothers of children under six months with acute malnutrition will be also included among the beneficiaries. While MUAC can be used for the diagnosis of malnourished women, the diagnosis for children under six months of age should use other criteria since MUAC is not appropriate.

3.3. Life cycle stages to which the model contributes

The life cycle provides a powerful framework for understanding the vulnerabilities and opportunities for investing in children and youth. Human development during childhood and youth is not a uniform process; critical periods exist during the life cycle. Any significant harm that occurs during these critical periods is likely to produce particularly severe, often irreversible, and intergenerational effects. These sensitive periods are also windows of opportunity, as interventions in one generation will bring benefits to successive generations.[4]

Malnutrition left untreated in a young child can cause irreversible brain damage, prevent normal growth and increase the risk of developing chronic disease later in life. All these factors combined lead to less productive adults. *CMAM* makes an important contribution to the entire life cycle but most especially to the early stages of the life cycle by effectively treating malnutrition and therefore preventing such long-term negative effects.

3.4. How will the model include/impact the most vulnerable?

Acutely malnourished children are among the most vulnerable. In addition, traditionally marginalised groups such as girls, in contexts where boys are culturally valued over girls, often receive less care and less food and may therefore be more susceptible to malnutrition.

CMAM mobilises and provides information to health workers, volunteers and community members to reach malnourished children and their families, and focuses on educating communities to reduce their vulnerability. Additional activities include providing basic information to build awareness of families and local stakeholders, advocating for implementation of policies that will reduce their vulnerability and improve their nutritional status, sharing assessment results and findings to influence policies, conducting community-based nutritional assessments and ensuring that the most vulnerable children are identified and included in *CMAM* interventions.

CMAM is particularly suited to reaching those most vulnerable malnourished children (such as orphans, or those with caregivers unable to take them to in-patient care facilities for treatment) because children can be treated in their homes.

[4] http://go.worldbank.org/GIPDY7HG30

Some examples of how *CMAM* can incorporate specific groups include:

- **Children affected by HIV and AIDS:** *CMAM* can be successfully implemented in both high and low HIV prevalence areas. The general principles and guidelines for the care of severely malnourished in these contexts do not change. *CMAM* provides a potentially non-stigmatising entry point for linking with HIV testing. In addition, research indicates that the majority of children with HIV and AIDS that are severely malnourished that receive treatment with a modified ready-to-use therapeutic food can recover and sustain normal nutritional status.[5]
- **Children with disabilities:** *CMAM* projects ensure vulnerable groups such as malnourished children with disabilities are located and included. In areas where disabled people organisations exist, *CMAM* projects should involve them in the design of the project.

4. How does the project model work?

4.1. Overview of approach/methodology

In general, if severe acute malnutrition is identified as an issue within the primary focus area; specific data is required to undertake a project design. Further information is required on malnutrition levels, community capacity, funding for and supplies of RUTF, and on health system capacity. Technical nutrition input is required if a programme plans to implement *CMAM*. Please contact the regional office to get advice on programming support available.

Community mobilisation: In both the emergency and stable development context, community mobilisation activities are essential to ensure community support and participation in *CMAM*. Insufficient time spent engaging with the community results in negative local perceptions of the project and admissions remain low despite high levels of acute malnutrition. It is important that community dialogue take place around the following issues: purpose of *CMAM*, target groups, admission criteria and the beneficiary selection process in order to avoid creating tensions.

With the help of key community leaders, sensitise populations about *CMAM* aims, methods, and target group, and then mobilise them. The major aim is to increase coverage, treatment compliance and community involvement in the project.

Supplementary feeding and outpatient therapeutic centres: Within days, supplementary feeding can be set up in a variety of locations, together or followed by the establishment of outpatient therapeutic care (situated at existing health facilities where possible). This requires the training of health staff to provide the services and training of community workers and volunteers to help find new cases of malnourished women and children and locate beneficiaries who have dropped out. In areas with existing volunteers, staff can train the volunteers on community sensitisation, case screening, identification and referral.

Stabilisation centres: Once SFP and OTP are functioning well and achieving high coverage, stabilisation centres can then be established, within existing health structures where possible.

Depending on the context, the order of key activities (SFPs, OTPs, SCs) may differ. The timing for establishing an SC depends to some extent on resources. If local infrastructure is

[5] Cited in ENN, Community-based Therapeutic Care (CTC) Special Supplement, 2004. http://www.fantaproject.org/downloads/pdfs/ENNctc04.pdf

available for the establishment of an SC, then an SC can be established early. However, if this is not the case, focus should be on ensuring well functioning SFPs and OTPs before beginning SCs.

Note: WV will not routinely establish stabilisation centres. Due to additional requirements for medical staff and logistics, it is recommended that WV partner with existing government or medical organisations for providing in-patient care.

4.2. What local level partners could/should be involved?

A *CMAM* project is designed with the involvement of key local implementing partners who are part of a working group, such as the Ministry of Health (MoH), the Nutrition sector working group or the Nutrition cluster. In addition, some international partners may be involved in a *CMAM* project at the community level, including UNICEF or the World Food Programme (WFP).

A primary aim of a *CMAM* project is to build the capacity of MoH staff to deliver and manage acute malnutrition services, and to include these services as part of the routine health system. As such, health staff members at the district level need to be involved at all stages of the project.

Potential partnerships with organisations such as UNICEF, WFP and others are formed at the national level. Formal partnerships with the MoH may be formed at the national level as well as at the local level.

TABLE 1: Recommended partners

Potential partner	Priority for partnering	Partner role
Ministry of Health (MoH)	Essential	• Strengthen existing capacity to treat severe malnutrition. • Allocate local resources such as facilities, staff and other logistics required. • Conduct supervision and follow up on the project progress, including screening, treatment, logistics and stock control. • Mobilise the community for community-based screening and referral. • Conduct community-based follow up and proper utilisation of the rehabilitation products for the target groups. • Progressively assume responsibility for project interventions over the life of the project. • Update national guidelines to align with international standards. • Provide overall national coordination for the management of acute malnutrition.
Local government	Essential	• Assign clinical staff for *CMAM* programming. • Monitor and supervise project progress. • Coordinate partners.
UNICEF	Desirable	• Provide RUTF and essential medicines. • Provide technical expertise for rapid assessment and training. • Coordinate experience sharing on *CMAM* programming between various actors at the national level. • Participate in national coordination meetings with relevant partners.
WFP (World Food Programme)	Desirable	• Create access to supplementary food. • Provide operational costs for supplementary food distribution. • Supervise and provide technical support during SFP implementation. • Stay current of ongoing changes such as SFP protocols for the treatment of moderate malnutrition.
Other organisations	Desirable	• Partner with and implement different complementary aspects of the project such as a stabilisation centre operated by a medical organisation. • Train WV staff on *CMAM* programming (Valid International for instance).

4.3. Partnering capacity considerations

TABLE 2: Partnering capacity contexts	
Partnering Capacity Context	**Guidance to implement this project model**
No or very few organisations (mobilise)	In such contexts, typically emergency settings or protracted crises, WV will take the primary role in implementing all aspects of *CMAM*. The primary objective of a *CMAM* project in such contexts is to respond quickly and effectively to the nutritional crises, thereby preventing child deaths. Partnering with other international organisations and UN agencies is a potential opportunity in such environments.
Weak organisations (build capacity)	Where partnering organisations are present, but weak, a plan for building partners' capacity to implement the *CMAM* project model should be developed during the project design. This should include a transition plan and timeline for gradually increasing the responsibilities of partners, while minimising direct WV support. In such contexts, WV needs to provide more direct support for *CMAM* implementation at the onset of a project and diminish their involvement over time as partnership capacity grows. A minimum two-year period is needed for building partner capacity.
Strong organisations, not child-focused or not networked (catalyse)	The *CMAM* project model can be used as a catalyst to focus partners' attention on the critical issue of child malnutrition. Existing networks and community-based organisations, while perhaps not child focused, can serve key roles in community mobilisation for *CMAM*.
Established child-focused partnerships (join)	As *CMAM* is designed to build local capacity to address child malnutrition, the implementation of this model can serve as a platform for developing partnerships that are child-focused. WV can play an important role in bringing local partners together to focus on the issue of child nutrition and health through the implementation of the *CMAM* project model.

4.4. How does the model promote the empowerment of partners and project participants?

CMAM seeks to build (local) capacity of families, households, communities and health facilities to treat and prevent acute malnutrition in children. *CMAM* improves local partner capacity to provide nutrition education, early detection of malnutrition cases, referral and follow up. This enables families to care for their malnourished child by providing treatment for acute malnutrition within the community.

The project builds on the existing health system with involvement of the MoH staff at all stages.

Ideally, WV will provide initial focused support for the treatment of acute malnutrition through *CMAM*, which will then be carried on by the MoH. In contexts with weak civil society, WV may need to handle the initial management of the project. However, once the level of acute malnutrition is below the emergency threshold, the focus of the project should involve a progressive transition to the Ministry of Health and local partners. The duration of transition to local management will vary depending on the context and on local capacity. Where WV is building the capacity of Ministry of Health to implement *CMAM*, a minimum of 24 months is required to transition *CMAM* management and operational support from WV to the MoH and local partners. Routine health services will continue the *CMAM* project. A transition plan, including timelines, must be developed with partners during the planning stages of *CMAM*.

5. Project DME

5.1. What are the goal and outcomes that will be sustained as a result of this project model?

The *CMAM* project goal is to reduce the morbidity and mortality of children under-five years of age due to malnutrition. The project should result in a decrease of the global acute malnutrition rate to less than 10% and a decrease in the severe acute malnutrition rate to less than 2%.

The outcomes that are to be sustained are listed below.

The Ministry of Health will have:

- better coverage of malnutrition treatment in terms of the number of patients that can be treated
- a higher quality of treatment and better performance in terms of cure rate, fewer defaults, shorter recovery period and less institutional occupation
- trained staff.

At the community level:

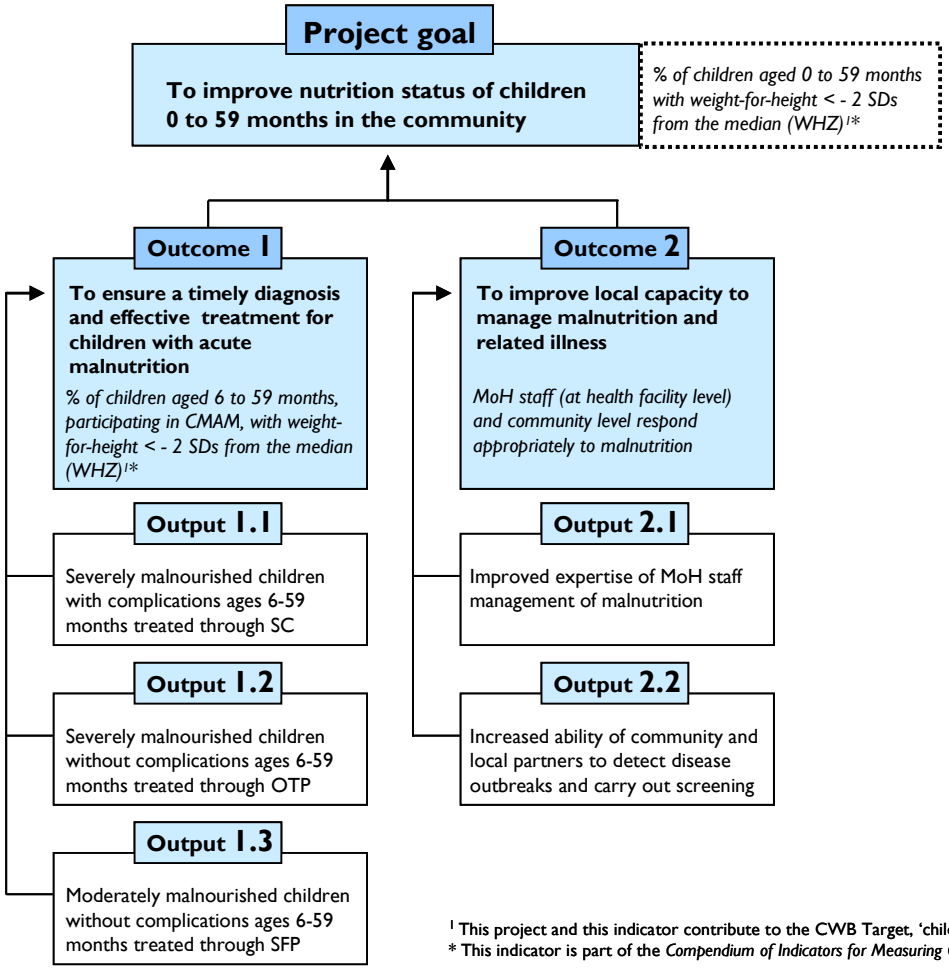
- Local partners and community members can recognise the signs of malnutrition resulting in early diagnosis.
- Local partners and community members understand the causes of malnutrition and good feeding practices.

At the household level:

- Parents and caregivers can recognise the signs of malnutrition resulting in early diagnosis.
- Parents and caregivers understand the causes of malnutrition and good feeding practices.
- Parents and caregivers understand how to use RUTF and treat acute malnutrition.

5.2. Sample logframe for this project model

The diagram below shows the logic of this project model. The indicators shown below illustrate the types of indicators that can be used. An illustrative logframe including a range of potential indicators is provided in *Appendix B*.



[1] This project and this indicator contribute to the CWB Target, 'children are well nourished'.
* This indicator is part of the *Compendium of Indicators for Measuring Child Well-being*

5.3. Recommended monitoring methods

Each site monitors key project indicators and prepares monthly reports that are reviewed to assess overall *CMAM* quality and effectiveness. Detailed reporting requirements are described on the FANTA website.[6] WV standard *CMAM* reporting forms can be requested from NCoE. In addition to routine monthly monitoring, a mid-term review is conducted to review project progress. At the end of the project, a final evaluation is conducted to assess overall impact. In addition to the working group of local partners, community members and key stakeholders are involved in both evaluations and findings must be shared with them.

All monitoring and evaluation activities must include data that is collected and processed in a way that allows gender-based analysis of results.

[6] FANTA-2 Project Website: Training Guide for CMAM http://www.fantaproject.org/cmam/training.shtml

An online database (https://cmam.wvncoe.org/) has been developed to standardise and centralise data collected across the entire WV partnership and allows project managers to track the effectiveness of the *CMAM* project relative to international standards. Access to the database is restricted and can be obtained through the NCoE. The project should also monitor the capacity of local level partners over time and determine the appropriate time for a complete handover.

5.4. Advocacy component(s)

Within the scope of this project model, advocacy activities may focus on improving access to local health services, including advocating for the integration of growth monitoring protocols within the local government health infrastructure and for access to adequate health services to reduce illnesses, which affects malnutrition.

Citizen Voice and Action (*CVA*) is a local level advocacy methodology that aims to improve essential services (like health) by improving the relationship between communities and government. Sometimes, WV staff will have identified shortfalls in government services during the LEAP Programme Assessment or during Steps 2, 3 and 4 of the Critical Path. Sometimes, the starter group or working group have identified crucial gaps in government services. *CVA* can be used to complement a sectoral project model like *CMAM*.

CVA is considered an 'enabling' project model within WV's Development Programme Approach (formerly called integrated programming model (IPM)). This means it is used as a component of another project when improving government provided services are considered a community priority for child well-being. For example, *CVA* can be used as a component of a health project, like *CMAM*.

Prior to any programme considering adopting *CVA*, the initial 'organisational and staff preparation phase' must have been completed at the national office level. As a result of this, communities should be ready to engage governments in a constructive, productive and well-informed manner. It is also essential that the programme staff have been trained in *CVA* and have excellent facilitation skills. For more information, see the *Citizen Voice and Action* project model on the Guidance for Development Programmes website (www.wvdevelopment.org).

5.5. Critical assumptions and risk management

The successful implementation of this project model depends on the transfer and retention of skills in the national and programme offices. *CMAM* often begins as an emergency response with time constraints due to limited funding. It is crucial for offices to budget and retain staff who have been trained in *CMAM* and can successfully implement transition strategies and provide technical support to the MoH. Also, trained staff must be available in the national offices to respond to any recurrent emergencies and lead *CMAM* implementation as needed.

TABLE 4: Risk mitigation		
Critical assumptions	**Importance (high/medium)**	**Management response**
Delay in staff recruitment	High	Timely announcement, recruitment and staffing of new positions
High staff turnover	High	Budget permanent position in Nutrition including *CMAM* in Job description
Lack of permanent institutional capacity in *CMAM*	High	Roster staff trained in different components of *CMAM* programmes including community mobilisation, technical set up and coverage surveys.
Misuse or misallocation of resources	Medium	Particularly in emergency settings (where resources are generally lacking) it is possible that resources can be misused, stolen or redirected from the most vulnerable children and their families. Although RUTF is not as easy to misuse as milk, sugar or oil, it is still important to follow procedures for guarding against this risk.
Low commitment of partners at community level	High	Motivation through skill trainings and provision of materials required for their duties and reporting
Low participation of beneficiaries in the project	High	Continued education and motivation, conduct community mobilisation study and develop well-designed community mobilisation strategy

5.6. Sustainability

Many national governments have developed guidelines for the management of acute malnutrition that are based upon the integration of *CMAM* within routine health services. In such contexts, WV's primary role is to support the government to implement these guidelines, by building the capacity of local health services in areas of high need. *CMAM* projects target, and are therefore usually integrated within, the local health system. *CMAM* sites are established at existing community facilities and are staffed by local health workers. Often, the stabilisation centre is located at a local hospital or mission facility.

WV's role is to build the capacity of local partners to implement *CMAM* through training, on-the-job mentoring, support for project design, set-up, monitoring and evaluation. This typically may require greater engagement by WV at the beginning of the project, with a gradual transition of *CMAM* management and operations to local MoH authorities.

CMAM mainly focuses on strengthening local health systems and volunteers so that they continue to function after the project is finished. A transition plan, including timeline, should be developed with partners during the project design.

6. Protection and equity considerations

6.1. How can child protection be promoted in the implementation of this project model?

As with any WV intervention that involves children, it is critical that project staff identify possible child protection issues that may arise from the implementation of *CMAM*. For example, there is some risk that community volunteers who conduct mobilisation and MUAC measurements in patient's homes could abuse or exploit the children they contact.

The standard WV child protection practices and child protection modules should be included in the trainings for staff. The project should also:

- Develop a plan for dealing with possible issues of abuse between volunteers and children.
- Develop criteria for selecting and screening volunteers, especially in regards to protection issues.
- Provide instructions and tools to sensitise volunteers to issues of child abuse and protection, even culturally-embedded practices that may cause harm to children.
- Train staff and volunteers to identify and report child protection incidents.

6.2. How can the model promote equitable access to and control of resources, opportunities, and benefits from a gender perspective as well as other perspectives, such as disability, ethnicity and faith?

- Include both girls and boys (aged six to 59 months) in the project and monitor the gender balance of project admissions.
- Note and record gender in initial nutrition surveys and monitor gender biases in participation.
- Ensure that all children suffering from acute malnutrition, regardless of gender, ability, ethnicity or faith have equal access to care.
- Promote gender equity through changed mindset of the community in relation to traditional and cultural practices that negatively affect female nutrition.
- Ensure gender equity among paid staff and community volunteers.
- Ensure that the most vulnerable such as malnourished children with disabilities are located and included.
- Consider religious views and cultural food habits when selecting products used in *CMAM* projects.

Increasing women's ability to respond appropriately to malnutrition empowers women and supports positive female influence at the household or community level. Improved self-esteem and confidence of women can contribute to improved well-being of their children.

7. Project Management

7.1. National office support required for project implementation and success

Two elements must be in place at the national office level before a *CMAM* project can begin:

1. **A careful review of the available human resources (WV staff as well as MoH staff):** *CMAM* requires trained and experienced nutrition and health staff. Technical assistance must be available for this project to begin. National offices implementing a *CMAM* project must ensure that staff recruited for this project are qualified and experienced in nutrition programming. The national office health and nutrition manager will provide technical support for the project. However, it is also necessary to place qualified health and nutrition staff at the project level.
2. **Access to a reliable source of ready-to-use therapeutic food and essential medicines:** WV should partner with UNICEF and other agencies that provide

7.2. Technical assistance needed

Regions are primarily responsible for maintaining a core group of technical staff that has the competency to assist national offices in identifying and addressing new needs for *CMAM* as they arise. At a national level, *CMAM* capacity building seeks to equip national offices and local MoH with the capacity needed to start up a *CMAM* project as the need arises, with assistance from the region if required.

Technical support is available from the national office health and nutrition manager, the regional nutrition advisors, the WV Nutrition Centre of expertise (NCoE) or through a consultancy agreement with Valid International.[7]

Four points of technical assistance have been identified in the *CMAM* project life cycle:

- preparation, feasibility and community mobilisation strategy
- community mobilisation, set-up, design and implementation
- coverage survey and mid-term review
- final evaluation.

At each of these points, an experienced technical advisor provides hands-on field training. Each project phase includes specific training plans and capacity building objectives. The regional nutrition advisor can assist in developing a technical assistance plan, including budget needs for *CMAM*.

7.3. Guidelines for staffing

Typically, a CMAM coordinator is required to work alongside any existing health and nutrition project staff. *Appendix G* outlines the recommended positions and number of staff required for different aspects of a *CMAM* project. Specific numbers will vary depending on the context.

While all staffing should eventually be fully funded by the MoH, various positions may initially be funded by WV or other partners. *Appendix E* provides an example of how multiple partners can implement a CMAM project together.

7.4. Guidelines for resources needed for project implementation

The resources and budget required for *CMAM* can vary significantly depending on the context. Some of the key variables are:

- geographical spread and density of malnourished children (greater spread and lower population density will lead to increased costs)
- basic infrastructure available
- existing health and logistic infrastructure and staff

[7] WV International has signed a CMAM Institutional Capacity Building agreement with Valid International. Valid provides hands-on technical support and mentoring for country-level CMAM projects. WV's global CMAM capacity building is coordinated through the Nutrition Centre of Expertise. For more information contact: nutrition_coe@wvi.org.

- rate of recovery of children
- quality of roads and therefore cost of transport
- availability of storage at *CMAM* distribution sites
- technical support and capacity building required. (If the national office has little *CMAM* experience, external technical support is required for project implementation. This support is provided through WV's partnership with Valid International, or by WV's regional nutrition advisors and *CMAM* advisor. The costs of capacity building will vary depending on the level of technical support required and who provides it.)[8]

Appendix H contains an overview of basic resources needed for *CMAM*, and includes possible partner contributions.

The precise duration for a *CMAM* intervention varies according to context. However, two to three years of funding is required in order to allow sufficient time for WV to support and invest in the key elements required for successful integration and sustainability of *CMAM* into the government health system. These elements include the creation of an enabling environment for the delivery of quality services, access to services, developing competencies for *CMAM* and access to supplies. However, it is not desirable or sustainable for WV to continue to implement long-term *CMAM* projects.

In a crisis context where WV is the primary implementer of *CMAM*, the project will continue for as long as levels of global acute malnutrition remain high (>10%) in the intervention area.

7.5. Critical success factors for the model

A number of factors are essential for the success of a *CMAM* project:

- availability of nutrition technical support (WV national office nutrition and health advisor and a WV regional nutrition advisor)
- experienced local level staff
- integration with MoH (Projects planned and implemented with the MoH provide the greatest opportunity for strengthening local institutional capacity, transfer of skills and the sustainability of the project.)
- community participation (Community volunteers actively participate in case finding and referrals of the project. For example, they may locate malnourished children and refer families to the *CMAM* project, as well as follow up on absent children or those who have been rehabilitated.)
- logistics supply chain (As *CMAM* uses decentralisation of activities to achieve greater coverage, a functioning logistical system that continues over the life of the project, is essential.)
- reliable and constant source of RUTF and supplementary food is available.

[8] The regional nutrition advisor can assist in developing technical assistance plan, including budget needs.

8. Any necessary tools

- National Guidelines for the management of Severe Acute Malnutrition (available from national Ministry of Health)
- WHO/WFP/UNICEF statement endorsing *CMAM* (http://www.who.int/nutrition/publications/severemalnutrition/978-92-806-4147-9/en/index.html and

  http://www.who.int/nutrition/publications/severemalnutrition/9789241598163/en/index.html)
- CTC Field Manual 2006, Valid International (http://www.validinternational.org/demo/index.php)
- FANTA training guidelines for *CMAM*, 2008 (http://www.fantaproject.org/cmam/training.shtml)
- Emergency Nutrition Network – Field Exchange. (Special supplement on CTC programming, good case studies and field examples: (http://fex.ennonline.net/102/contents.aspx).

9. Linkages and integration

9.1. Child Sponsorship

CMAM projects include all children (both registered and non-registered) within a community who suffer from acute malnutrition. Monitoring of the nutrition indicators included in the *Sponsorship Minimum Programming Standards*[9] will assist the project in identifying registered children who require treatment. Child sponsorship monitors trained in MUAC may also assist with MUAC screening activities for registered children.

In designing the project, where possible, register children associated with the *CMAM* project.

9.2. Enabling project models

Many factors contribute to malnutrition. Therefore, a broad, multi-sectoral approach is required to both prevent and treat malnutrition. While *CMAM* will provide treatment for acute malnutrition, other interventions are required to address the underlying causes, and ultimately to prevent malnutrition.

Collaboration between sectors may include (but is not limited to) the following:

- **Food security**: Target food security projects to include families with a child who is enrolled in a *CMAM* project.
- **Nutrition**: Link malnutrition prevention activities to *CMAM* projects by ensuring children discharged from *CMAM* are participating in local nutrition related projects (such as growth monitoring and promotion, vitamin A supplementation and *PD/Hearth* projects).
- **Water, sanitation and hygiene:** Link to projects focused on the provision of appropriate latrine and water facilities within the community.

[9] All RC in the age group 0–59 months are monitored for their participation in health and nutrition activities, and All RC in the age group 0-59 months are following their growth curve, and if not, appropriate action is taken.

Appendices

Appendix A – Illustrative logframe

Appendix B - Suggested project timeline

Appendix C - Key indicators for monitoring and evaluation

Appendix D - Staffing with partners

Appendix E - Example of CMAM transition to MoH

Appendix F - Guidelines for CMAM staffing

Appendix G - Overview of basic resource requirements[10]

[10] Above table formatted with information from resource requirement sections of Valid International CTC Field Manual, 2006.

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