

**The management of
acute malnutrition
at scale:**

**A review of donor
and government
financing
arrangements**

**Main Report
March 2013**



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Throughout this document, quotes from interviewees are indicated in italic text within quotation marks. These quotes have purposely been left unattributed to individuals, as agreed at the outset of this review. Quotes from documents are also in quotation marks, but text is not in italics and the reference is given in an accompanying footnote.

This review document is divided into nine sections. Section one provides an introduction to the scope of the review and to CMAM, section two provides an overview of the financing environment, section three covers what we know about the cost of scaling up CMAM and section four provides an overview of country level experiences of CMAM financing. Section five covers issues relating to sustainability, prevention and integration; section six deals with RUTF production and section seven addresses issues relating to UN roles and responsibilities and memoranda of understanding.

Section eight provides the conclusions and section nine, the recommendations for this review. Annex 1 provides a list of key people interviewed.

In addition to this full review paper, there is a summary report intended for those who are interested in a summary of the key content. Available at www.ennonline.net and limited print on request from office@ennonline.net

Contacts

Jeremy Shoham, email: shoham@btinternet.com and Carmel Dolan, carmel@ennonline.net

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Front cover picture credit: A Hall, Indonesia

List of Acronyms

AM	Acute malnutrition
ARTs	Anti-retroviral therapies
ASALs	Arid and Semi-Arid Lands
BCC	Behaviour change communication
CAP	Consolidated Appeal Process
CERF	Global Central Emergency Fund
CIDA	Canadian International Development Agency
CHAI	Clinton Health Access Initiative
CMAM	Community Based Management of Acute Malnutrition
C-SAM	Community-based treatment of Severe Acute Malnutrition
DALY	Disability-Adjusted Life Years
DFID	UK Department for International Development
DHO	District Health Officer
DSM	Dried skimmed milk
ECHO	European Commission Humanitarian Office
ENCU	Emergency Nutrition Coordination Unit (Ethiopia)
EPI	Expanded Programme on Immunization
EC	European Community
EU	European Community
FANTA	Food and Nutrition Technical Assistance
GAM	Global Acute Malnutrition
GoE	Government of Ethiopia
GoK	Government of Kenya
HINI	High Impact Nutrition Interventions
HIV	Human Immunodeficiency Virus
HPF	Health pooled fund
IMAM	Integrated Management of Acute Malnutrition
ICCM	Integrated Community Case Management (Ethiopia)
IPC	In Patient Care
IPs	Implementing Partners
IYCF	Infant and Young Child Feeding
KSH	Kenyan Shillings
LGA	Local Government Authority
MAM	Moderate Acute Malnutrition

MDGs	Millenium Development Goals
MNP	Micronutrient powders
MoA	Ministry of Agriculture
MoH	Ministry of Health
MoHSW	Minstry of Health and Social Welfare
MOU	Memorandum of Understanding
MYF	Multi-Year Financing
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organisation
NNP	National Nutrition Programme (Ethiopia)
NRU	Nutrition Rehabilitation Unit
OECD	Organisation for Economic Co-operation and Development
ODA	Official Development Assistance
OFDA	US Office for Disaster Assistance
OTP	Outpatient Therapeutic Programme
PLW	Pregnant and lactating women
RUTF	Ready to use Therapeutic Food
SAM	Severe Acute Malnutrition
SFP	Supplementary Feeding Programme
SHARE	Supporting Horn of Africa Resilience
SWAp	Sector Wide Approach
TSFP	Targeted Supplementary Feeding Programme
U5s	Under Fives (Children under five years)
UN	United Nations
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children's Fund
WACRO	West and Central Africa Regional Office (UNICEF)
UNSCN	United Nations Standing Committee on Nutrition
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organisation



Glossary

Acute malnutrition

Acute malnutrition, also known as wasting, develops as a result of recent rapid weight loss or a failure to gain weight. In children, it is measured through the weight for height nutritional index (WFH) or mid-upper arm circumference (MUAC). In adults, it is measured by body mass index (BMI) or mid upper arm circumference. The degree of acute malnutrition is classified as either moderate or severe.

Antiretroviral therapy (ART)

The use of antiretroviral drugs to maximally suppress the HIV virus (a retrovirus that causes AIDS) and stop the progression of HIV disease.

Behaviour change communication (BCC)

A process of any intervention with individuals, communities and/or societies to develop communication strategies to promote positive behaviours which are appropriate to their settings.

Chronic malnutrition

Chronic malnutrition, also known as stunting, is a sign of 'shortness' and develops over a long period of time. In children and adults, it is measured through the height for age nutritional index.

Civil Society Organisations

The multitude of associations around which society voluntarily organizes itself and which represent a wide range of interests and ties.

Community based management of acute malnutrition (CMAM)

An approach for managing acute malnutrition that includes the management of severe acute malnutrition in inpatient care and outpatient care, the management of moderate acute malnutrition, and community outreach (for community mobilisation, early detection and referral of acute malnutrition and home follow-up of problem cases). Also known as CTC and IMAM.

Community-based Therapeutic Care (CTC)

An approach for managing acute malnutrition that includes the management of severe acute malnutrition in inpatient care and outpatient care, the management of moderate acute malnutrition, and community outreach (for community mobilisation, early detection and referral of acute malnutrition and follow-up of problem cases). Term sometimes used interchangeably with CMAM.

Coverage

The proportion of the target population reached by an intervention. Coverage is a key indicator for monitoring and evaluating interventions.

C-SAM (Community-based treatment of severe acute malnutrition)

An approach for managing severe acute malnutrition that includes inpatient and outpatient care (different to CMAM, which manages both severe and moderate acute malnutrition)

Disability Adjusted Life Year (DALY)

A measure of overall disease burden, expressed as the number of years lost due to ill-health, disability or early death.

Evaluation

The systematic assessment of the progress of a piece of work over time. It is a basic and universal management tool for identifying the strengths and weaknesses in a programme.

Food aid

The international sourcing of concessional resources in the form of or for the provision of food.

Food security

All people, at all times, have sustained physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for a healthy and active life.

Global acute malnutrition (GAM)

A population-level indicator referring to overall acute malnutrition defined by the presence of bilateral pitting oedema or wasting defined by WFH < -2 z-score (WHO standards or NCHS references) for children 6-59 months. Global acute malnutrition is divided into moderate and severe acute malnutrition (GAM = SAM + MAM).

Healthcare system

All organisations and institutions involved in the delivery of health services, including governmental, non-governmental, private organisations and institutions.

Household Food Security

All members of the household, at all times, have sustained physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for a healthy and active life.

Human Immunodeficiency Virus (HIV)

A virus that attacks the immune system. After a period of time, if no treatment is given the effect of a weakened immune system will manifest itself through opportunistic infections, weight loss and low grade fever, progressing to the development of Acquired Immunodeficiency Syndrome (AIDS), which is the most advanced stage of HIV infection.

Infant and Young Child Feeding

The feeding of infants (aged less than 12 months) and young children (aged from 12 to <24 months).

Inpatient care (in CMAM)

The care of patients whose condition requires admission to hospital. Patients with complicated severe acute malnutrition are treated in inpatient care before continuing treatment in outpatient care. Alternative terms are Inpatient therapeutic care, Phase I, therapeutic feeding unit, therapeutic feeding centre or stabilisation centre.

Integrated Management of Acute Malnutrition (IMAM)

An approach for managing acute malnutrition that includes the management of severe acute malnutrition in inpatient care and outpatient care, the management of moderate acute malnutrition, and community outreach (for community mobilisation, early detection and referral of acute malnutrition and home follow-up of problem cases). Also known as CMAM and CTC.

Micronutrient Powder (MNP)

Single-dose packets of iron and other vitamins and minerals in powder form that can be sprinkled onto any ready to eat semi-solid food to increase the micronutrient content in the individual's diet without changing their usual dietary habits.

Moderate acute malnutrition (MAM)

Acute malnutrition, also known as wasting, develops as a result of recent rapid weight loss or a failure to gain weight. The degree of acute malnutrition is classified as either moderate or severe. Moderate malnutrition is defined by a MUAC between 115 mm and < 125 mm or a WFH between -3 z-score and < -2 z-score of the median (WHO standards) or WFH as a percentage of the median 70% and < 80% (NCHS references).

Monitoring

The ongoing task of collecting and reviewing programme-related information during the implementation of a program or project.

Mortality rates

A measure of the number of deaths (in general or due to a specific cause) in a population, scaled to the size of the population per unit time.

Multi-Year Financing (MYF)

Financial support extending beyond one year.

Multilateral agencies

An organisation formed between three or more nations to work on issues related to their mutual interests.

Non-Governmental Organisations (NGOs)

Legally constituted organizations that operate independently from any form of government and are not conventional for-profit businesses.

Nutrition monitoring

The process of collecting data and generating regular information on nutritional status and its determinants, for policy development, programme planning and management. Also called nutrition surveillance.

Nutrition Rehabilitation Unit (NRU)

Centres for the inpatient care of patients with complicated severe acute malnutrition. Alternative terms are Inpatient therapeutic care, Phase I, therapeutic feeding unit, therapeutic feeding centre or stabilisation centre.

Official Development Assistance (ODA)

Flows of official financing administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character

with a grant element of at least 25% (using a fixed 10% rate of discount). By convention, ODA flows comprise contributions of donor government agencies, at all levels, to developing countries ('bilateral ODA') and to multilateral institutions.

Outpatient Therapeutic Programme (OTP)

A component of Community-based Therapeutic Care (CTC) or Community-based Management of Acute Malnutrition (CMAM) where children with severe acute malnutrition without medical complications are treated in a community health facility through the provision of routine medical treatment and nutrition rehabilitation with Ready to Use Therapeutic Food (RUTF). Children attend outpatient care at regular intervals (usually once a week) until recovery is achieved (usually two months). The term OTP is sometimes used to describe CTC or CMAM.

Ready to use foods (RUF)

RUF can be eaten without further preparation or cooking. Most RUF have very low moisture content and so can be stored without refrigeration. They are typically energy-dense, mineral and vitamin-fortified foods and can be used for the treatment or prevention of various types of undernutrition.

Ready to Use Supplementary Food (RUSF)

Energy-dense, mineral and vitamin-fortified foods that are designed to provide the quantities of macro and micronutrients needed for the treatment or prevention of moderate acute malnutrition. RUSFs can be eaten without further preparation or cooking and are given as a supplement to the ordinary diet. They have very low moisture content and so can be stored without refrigeration.

Ready to Use Therapeutic Foods (RUTFs)

Energy-dense, mineral and vitamin-fortified foods that are designed to provide the quantities of macro and micronutrients needed for the treatment of severe acute malnutrition. RUTFs have a similar nutrient composition to F100. Most RUTFs are lipid based pastes that can be consumed easily by children from the age of six months without further preparation or cooking. RUTFs have very low moisture content and so can usually be stored without refrigeration. RUTF are not suitable for phase 1 treatment of complicated

severe acute malnutrition in a TFC or SC, where a liquid feed, such as F75, is required.

Scaling-up Nutrition (SUN) movement

A country-led movement that began in 2009 that brings organizations together across sectors to support national plans to scale up nutrition by helping to ensure that financial and technical resources are accessible, coordinated, predictable and ready to go to scale.

Selective feeding programmes

Targeted supplementary feeding or therapeutic care programmes that admit individuals based on anthropometric, clinical or social criteria for correction of acute malnutrition.

Severe acute malnutrition (SAM)

Acute malnutrition, also known as wasting, develops as a result of recent rapid weight loss or a failure to gain weight. The degree of acute malnutrition is classified as either moderate or severe. A child with severe acute malnutrition is highly vulnerable and has a high mortality risk. Severe acute malnutrition is defined by the presence of bilateral pitting oedema or severe wasting, defined by MUAC < 115mm or a WFH < -3 z-score (WHO standards) or WFH < 70% of the median (NCHS references)).

SPHERE Project

A set of minimum standards in core areas of humanitarian assistance. The project was established in 1997 to improve the quality of assistance provided to people affected by disasters, and to enhance the accountability of the humanitarian system in disaster response.

Stock-out

An event that causes inventory to be exhausted.

Stunting

Stunting, also known as chronic malnutrition, where a child fails to grow in height over a long period of time. The definition of being stunted is length/height-for-age < -2 z-score and of severe stunting length/height-for-age < -3 z-score.

Supplementary feeding

The provision of food to the nutritionally or socially vulnerable in addition to the general food distribution to treat or prevent malnutrition.

Supplementary feeding programme

Nutrition programmes that aim to prevent individuals with moderate acute malnutrition from developing severe acute malnutrition, to treat those with moderate acute malnutrition and to prevent the development of moderate malnutrition in individuals. Supplementary feeding programmes can be blanket or targeted.

Targeted Supplementary Feeding Programme

Nutrition programmes that provide nutritional support to individuals with moderate acute malnutrition. They generally target children under five, malnourished pregnant and breastfeeding mothers, and other nutritionally at-risk individuals in the presence of a general food distribution. The objectives are primarily curative and aim to rehabilitate individuals with moderate acute malnutrition, prevent individuals with moderate acute malnutrition from developing severe acute malnutrition, prevent malnutrition in at risk individuals and rehabilitate referrals from the treatment of severe acute malnutrition.

Therapeutic care

Feeding and medical treatment to rehabilitate severely malnourished children.

Therapeutic feeding centre

Centres for the inpatient care of patients with complicated severe acute malnutrition. Alternative terms are Inpatient therapeutic care, Phase I, therapeutic feeding unit, nutrition rehabilitation unit or stabilisation centre.

Therapeutic milk

Milk-based products developed to meet the energy, macronutrient and micronutrient needs of severely malnourished children and promote metabolic balance (F75) and weight gain (F100).

Undernutrition

An insufficient intake of energy, protein or micronutrients, that in turn leads to nutritional deficiency. Undernutrition encompasses stunting, wasting and micronutrient deficiencies.

Wasted

Weight-for-length/height or BMI-for-age below the -2 z-score line. Severely wasted is below the -3 z-score line.

Wasting

See acute malnutrition.

Executive Summary

This review focuses on the financing arrangements for programmes that manage acute malnutrition¹ (AM) at scale through the community based management of acute malnutrition (CMAM) approach.

The review involved country case studies from Kenya, Ethiopia, Malawi and Nigeria (developed based on interviews with government and other stakeholders, plus review of essential documents); in-person and telephone interviews with donors, UN agencies and foundations involved in CMAM financing, programming and research¹, grey literature review; and donor feedback (CIDA and Irish Aid) on findings. The conclusions are aligned in particular with the views of national governments faced with the challenge of scaling up CMAM programming.

Acute malnutrition is a life-threatening condition affecting approximately 60 million children globally. This caseload comprises around 20 million children aged below 5 years with severe acute malnutrition (SAM) and 40 million with moderate acute malnutrition (MAM). Children with SAM and MAM have respectively a nine and three times greater risk of dying than well-nourished children. Acute

malnutrition is a grave problem of global public health significance and one set to escalate. Climate change and the economic downturn are expected to lead to an increase in the acute malnutrition caseload over coming years.

Until the late 1990s, the treatment of SAM was through health facilities. The advent of ready to use therapeutic foods (RUTF) allowed treatment in the community. Today, CMAM programmes are being implemented in over 65 countries. Yet UNICEF estimates indicate that only 2 million of the estimated 20 million SAM cases are currently being treated. MAM treatment through supplementary feeding programmes (SFPs) is not monitored globally but does not appear to have kept pace with the scaling up of SAM treatment. Furthermore, coverage for in-patient care (IPC) for complicated acute malnutrition is also not monitored and therefore, global coverage is unknown. Many countries with very high caseloads of acutely malnourished children – such as Bangladesh, India, Nigeria and Indonesia – have very low CMAM coverage. Should CMAM be scaled up in these high burden countries, global coverage of treatment would substantially increase.

Key findings

The current conceptual, terminological and programmatic demarcation between AM and chronic malnutrition (often referred to as stunting) undermines programming coherence and sustainability. Acute malnutrition is a condition that is endemic to many poor, emergency-prone and fragile country contexts, but is often viewed as an emergency problem. Furthermore, there is emerging evidence that AM has a significant impact on stunting so that unless AM is addressed in all

contexts, efforts to reduce stunting in the critical 1000 day window will be undermined with concomitant impact on human and economic development. There is therefore a pressing need for longer term funding for AM and to broaden the conceptual understanding about the benefits of addressing both forms of undernutrition through common or inter-linked policies and treatment and prevention programmes. This will have implications for the current funding modalities for programme scale up.

¹ Wasting or oedematous malnutrition.

As yet, there is no agreed vision for how the current level of CMAM programming and financing will be sustained and increased. Meeting the full costs of CMAM programming is generally beyond the reach of many governments high burden countries. A large proportion of CMAM programming costs are due to the high cost of RUTF. The efforts to increase local production of RUTF have not substantially lowered cost. It is widely agreed that effective new formulations are needed (some work is ongoing) to substantially lower costs. Until such time, however, countries with low budget allocations for nutrition will require considerable external donor funding. To avoid the risk of losing the hard won gains for effective treatment of AM, a clearer vision and financial commitment to sustain and increase levels of CMAM programming is needed.

The SUN Secretariat is working with many governments to support national and aggregated global costings of scale-up for nutrition programming (often including CMAM). It is vital that donors and governments continue to work together to determine realistic financing strategies for implementing these plans. In most cases this will undoubtedly require 'front-loading' of donor and possibly private sector support. Over time, though, governments should be able to take increasing responsibility for financing CMAM, as programmes that prevent AM have effect and reduce the AM burden.

Historically, the majority of CMAM financing has been through humanitarian funding mechanisms. Recently, even though CMAM is increasingly being scaled up in non-emergency contexts, humanitarian resources continue to be deployed. This type of financing is not ideal for sustainable programming. In particular, it has led to 'stop-start' programming, poorly integrated programmes and undoubtedly has higher transaction costs for both government and their partners. Some donors are recognising the limitations of financing in this way and are employing alternative mechanisms in chronic emergency settings – such as multi-year humanitarian financing or pooled emergency and development funds. This type of financing should help build greater nutrition resilience in these settings.

In emergencies, as well as non-emergency contexts, financing for CMAM is typically channeled through the UN and non-governmental agencies. This review has found that by-passing government channels for

CMAM financing can prevent government nutrition stakeholders from building up sufficient political capital within their treasury departments, with the result that budget allocations to nutrition are perpetually marginal. This review urges key stakeholders to not only improve tracking of CMAM financing to obtain a clearer picture of the proportions allocated through humanitarian and development mechanisms but also, the arrangements through which financing is channeled. Furthermore, consideration of financing mechanisms that pass directly to governments for scale-up of CMAM (and nutrition more generally) through pooled or matched funds is emphasised. Impediments such as lack of financial transparency and accountability can be obviated through a variety of mechanisms. Such funding arrangements are currently recommended in various international consensus statements such as those concerning aid effectiveness.

Three UN agencies currently have global roles and responsibilities for AM; UNICEF for the treatment of SAM, WFP for MAM and WHO for IPC. This tri-partite architecture is unique for a single health condition. A major challenge is the lack of geographic and programming convergence of the three agencies. In practice this can mean that children who have recovered from SAM and progressed to a state of MAM are either discharged without follow-up treatment or where resources permit, are kept for longer in SAM treatment until they recover fully. There is currently no mapping of the extent to which this happens but interviews conducted as part of this review indicate that this may be a widespread occurrence. There is also no mapping of IPC coverage. However, WHO are known to lack operational capacity and resources in many countries.

These findings raise questions about the accountability for programme coherence when different agencies are required to treat a sliding scale of severity of the same health condition, the transaction costs for this arrangement and, whether there would be cost and programmatic gains if one agency had oversight and responsibility for the management of AM.



1 Introduction

This review is concerned with the financing arrangements for programmes that manage acute malnutrition at scale through the community based management of acute malnutrition (CMAM) approach. By definition, the CMAM approach emphasises community empowerment and ownership of the programme. It is geared towards the early detection, treatment and counselling of moderately and severely acutely malnourished children, in the community, by community agents, in order to prevent associated mortality.

Until the late 1990s, treatment of severe acute malnutrition (SAM) was through therapeutic feeding centres in hospitals and health care centres. Performance was poor, coverage was extremely limited (<5%), mortality was often in excess of 30% and recovery rates were poor. The CMAM approach was first piloted in Ethiopia in 1999 as an alternative to the centre-based model whereby acutely

malnourished children and their caregivers would remain in a hospital or health centre for the duration of the child's treatment. The development of Ready to Use Therapeutic Food (RUTF), which replaced therapeutic milks with their high risk of bacterial contamination, enabled acutely malnourished children to be identified and treated in the community. Development of the approach offered the prospect of dramatically increased access to treatment and coverage.

Since the early piloting in Ethiopia, CMAM has been adopted in over 65 countries (as of end 2012). In 2011, just under two million children aged 6-59 months with SAM were reported as admitted to CMAM programmes, compared with just over one million children reported during 2009². While this large increase partly reflects improved reporting at national level, it is also indicative of the on-going scaling up of treatment of SAM. The latest CMAM

² The number of children treated for moderate acute malnutrition (MAM) through CMAM programmes is not known.

exercise being carried out by UNICEF is likely to show even greater global CMAM coverage³. The total reported admissions, however, represents only 10 to 15 per cent of the 20 million expected global SAM cases annually⁴.

Treatment of moderate acute malnutrition (MAM), however, has often not kept pace with the scaling up of SAM treatment. The pace of coverage for in-patient treatment of complicated SAM is not monitored and therefore, is also unknown.

It is important to note that many countries with very high caseloads of acutely malnourished children, such as India, Nigeria and Indonesia, have extremely low CMAM coverage. Should CMAM be scaled up in such countries, global coverage of treatment will substantially increase.

This review was undertaken by Jeremy Shoham and Carmel Dolan, ENN Technical Directors, and Lola Gostelow, an independent consultant. It is a follow up to the international conference on CMAM co-hosted

1.1 Scope of review, definitions and process

by the Government of Ethiopia and the ENN in Addis Ababa in 2011 and co-funded by the UK Department for International Development (DIFD), Canadian International Development Agency (CIDA) and Irish Aid⁵. At this conference, 24 government representatives from Africa and Asia shared their experiences of CMAM scale up and highlighted the challenges they face with current financing arrangements in terms of resource predictability and sustainability. This review, which is co-funded by CIDA and Irish Aid, focuses on the following areas relating to financing arrangements for CMAM:

1. The enabling and constraining aspects of humanitarian, transition and development financing.
2. The contexts and rationale in which SAM and MAM are jointly addressed in CMAM programming and the key role United Nations (UN) agencies play in enabling programme integration and coordination.
3. Individual donor policies and strategies for supporting CMAM in emergency, transition and development contexts.
4. Opportunities for achieving greater impact of efforts to manage acute malnutrition from which to make recommendations.

The definition of **scale-up** used in this review is the 'widespread achievement of impact at affordable cost'. Increased impact is a function of the coverage of a population, programme effectiveness (quality of implementation and efficacy of interventions employed), efficiency (cost per beneficiary), sustainability (continuity, ownership), and equity (reaching those need in need).

This review focuses on programmes that identify, treat and prevent **acute malnutrition** (wasting or oedematous malnutrition) and related mortality at scale, i.e. SAM and MAM caseloads. The treatment of uncomplicated SAM can prevent complicated SAM and death, while the treatment of children with MAM can prevent the occurrence of SAM. During the review, the interplay between acute and chronic malnutrition (stunting) also emerged as a consideration.

The term **CMAM** reflects an approach that in practice may cover the management of both SAM and MAM, or just SAM alone (which is termed C-SAM by UNICEF). Some governments refer to integrated management of acute malnutrition (IMAM) and others to out-patient therapeutic programme (OTP) instead of CMAM.

³ The UNICEF CMAM mapping report is likely to be available in March 2013.

⁴ The reported global SAM caseload is based on the indicator <-3 z score weight for height. Increasingly MUAC <11.5cm is used to detect and admit SAM children, which if used alone to estimate the global burden would give a markedly lower global caseload. If both indicators are used as distinct criteria, this would increase the global estimate.

⁵ ENN (2012). Conference on Government experiences of Community-based Management of Acute Malnutrition and Scaling Up Nutrition. Conference Report. ENN. January 2012.

Some governments perceive the term CMAM as a western import, which is promoting Ready to Use Therapeutic Food (RUTF). This is particularly the case in Asian countries where the importation of RUTF has been banned (India, Bangladesh) and the lack of Asia specific evidence for the approach has meant that the CMAM approach has not yet been widely accepted.

The term **financing** is about much more than the flow of resources. Financing affects behaviour, aid architecture, the power and influence of different groups, priorities and capacity development. It signals approval or disapproval. There is no neutral choice – making a financing decision always creates consequences that go far beyond the time scale and scope of the funded activity⁶ (OECD, 2010⁶).

The process for this review was three-pronged. First, a number of telephone based and face to face interviews were undertaken with government and agency (UN, donor, foundations) representatives (see Annex 1) involved in nutrition policy, financing and CMAM programming. Second, case studies were developed following dedicated country visits to

Kenya and Ethiopia and from interviews carried out by an ENN consultant already working in Malawi and Nigeria. The case studies served the purpose of exploring the financing arrangements in greater depth and were selected based on the extent of CMAM programming, as well as the level of country interest in the review. Thirdly, published and grey literature relating to CMAM and financing was reviewed.

Towards the latter part of the process, the ENN review team made a series of presentations during face to face meetings with the main UN⁷ and donor stakeholders, to share the preliminary findings and to discuss the emerging issues. This was then followed by presentations at a number of high level nutrition related meetings. The conclusions and recommendations contained in this review are based on a process of synthesising the experiences and perspectives of the many stakeholders interviewed but are aligned in particular with the views of governments faced with the challenges of scaling up CMAM programming. Where recommendations are made by the ENN specifically, these are indicated.



⁶ OECD (2010). Transition Financing: Building a Better Response, *Conflict and Fragility*, OECD Publishing.

⁷ It was not possible to meet face to face with WFP and so telephone based discussions took place.

2 Overview of the global financing environment

Globally, political interest in food security, global hunger and nutrition⁸ is greater than it has been for decades. The development of the Scaling Up Nutrition (SUN) movement, the Hunger Summit in London on the margins of the 2012 Olympic games and various high-level SUN events and actions at country level are testament to an unparalleled momentum in the nutrition sector. The year 2013 is set to be a critical one in furthering this global impetus. A second series in *The Lancet* is expected to provide new evidence and analyses on the effectiveness and efficiency of a wide variety of interventions in combating undernutrition. Furthermore, decisions around how nutrition should be incorporated in the post-Millennium Development Goal (MDG) framework will frame the next chapter of global human development targets and investments and the G8 summit in June 2013 is expected to provide political backing to international and national efforts.

Despite this significant momentum to address undernutrition, levels of financial investment in proven (direct) nutrition interventions vary, but are extremely low. A recent report⁹ estimates that approximately 1% of the US\$11.8 billion required to tackle undernutrition, as estimated by the World Bank in 2010, is being invested in direct nutrition interventions¹⁰.

Out of the 13 direct nutrition interventions promoted globally to reduce undernutrition, the scaling up of therapeutic feeding with RUTF to treat SAM is the most costly, requiring an estimated US\$6.3 billion annually. This World Bank derived figure is likely to be

an over-estimate and a re-costing exercise is underway by the SUN movement secretariat to obtain a more accurate global annual figure for treating SAM. Recent studies have estimated the cost effectiveness ratio of treating SAM through CMAM programming at US\$42¹¹ per DALY averted (Disability Adjusted Life Year). This is within the general range of cost effectiveness ratios estimated for other priority child healthcare/survival interventions, such as case management of lower acute respiratory infections, universal salt iodisation and iron fortification. Table 1 shows other cost-effectiveness estimates for key health interventions.

Official Development Assistance (ODA)¹² to the category 'basic nutrition' increased by 32% over 2000-2008 and doubled in 2008-09. However, levels of basic nutrition ODA are small compared to emergency and development food aid. In 2009, when basic nutrition ODA peaked, it equalled US\$539 million, whereas development food aid amounted to US\$1.9 billion and emergency food aid to US\$3.2 billion. It should be noted, however, that some nutrition interventions may have been reported under other CRS codes (the Creditor Reporting System of the OECD) and an exact quantification of nutrition interventions is not available (Development Initiatives, 2011)¹³.

Furthermore, aid is not necessarily directed to the countries where most of the world's undernourished children live, particularly in the Africa region.

Most direct nutrition programmes are delivered through the health sector or in response to

⁸ Specifically: undernutrition, which encapsulates acute malnutrition, stunting and micronutrient malnutrition.

⁹ ACF (2012). Aid for Nutrition. Can investment to scale up nutrition actions be accurately tracked?

¹⁰ According to the World Bank, the financing gap is slightly less (US\$10.3 billion) as US\$1.5 billion is expected to come from private sources.

¹¹ Wilford, R., Golden, K., Walker D.G (2012). Cost-effectiveness of community-based management of acute malnutrition in Malawi. *Health Policy Plan.* (2012) 27(2): 127-137.

¹² A term coined by the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) and widely used as an indicator of international aid flow.

¹³ D, Coppard and A, Zubairi (2011). Development Initiatives. Nutrition Advocacy Landscaping in Europe: An Analysis of Donor Commitments.

Table 1: Cost effectiveness ratios for most cost effective interventions in two WHO regions in 2000

Countries in south-east Asia with high adult and child mortality			Countries in sub-Saharan Africa with high child mortality		
Intervention package	Description (coverage) of package	Average cost-effectiveness ratio (US\$ per DALY averted)	Intervention package	Description (coverage) of package	Average cost-effectiveness ratio (US\$ per DALY averted)
C1	Zinc fortification (95%) of staple food	14	A1	Vitamin A and zinc fortification (95%)	19
C2	C1 + vitamin A fortification (95%)	35	A2	A1 + measles immunisation (80%)	25
C3	C2 + case management of pneumonia (80%)	64	A3	A2 + measles immunisation (95%)	28
C4	C3 expanded to 95%	70	A4	A3 + case management of pneumonia (80%)	47
C5	C4 + measles immunisation (95%)	75	A5	Vitamin A and zinc supplementation + case management of pneumonia (80%) + measles immunisation (95%)	55
C6	Zinc supplementation + oral rehydration therapy + case management of pneumonia + measles immunisation (95%)	111	A6	A5 + oral rehydration therapy (80%)	72
C7	C6 + vitamin A supplementation (95%)	134	A7	A6 with coverage expanded to 95%	95
C8	C7 + provision of supplementary food and nutrition counselling, and growth monitoring and promotion (95%)	416	A8	A7 + provision of supplementary food and nutrition counselling and growth monitoring and promotion (95%)	225

Source: Tan-Torres Edejer, T. et al (2005). Achieving the millennium development goals for health cost effectiveness analysis of strategies for child health in developing countries. *BMJ*, doi:10.1136/bmj.38652.550278.7C.

humanitarian crises. Furthermore, ODA for basic nutrition is disproportionately channelled via international actors. Unlike other social sectors, delivery of ODA funding for basic nutrition activities (CMAM, direct feeding, micronutrient assessment and provision, nutrition monitoring and education and household food security) is mainly through civil society organisations and multilateral agencies (respectively 35% and 28% in 2009) with only 24% going to governments.

Domestic or government's own expenditure on basic nutrition interventions is essential to scaling up nutrition. Nutrition financing, however, is often

subject to very limited national budgets in developing countries. For example, in Kenya, whilst nutrition has seen a slowly increasing allocation as a proportion of the health budget, from 0.1% in 2009 to 0.5% in 2011, it still only meets around 4% of estimated need. With such small domestic nutrition budgets, many governments are not meeting the very high cost of commodities required for the treatment of acute malnutrition through CMAM programming.

The international aid architecture rigidly compartmentalises humanitarian and development aid (which are governed by different principles, rules

and regulations, standards and often managed by different departments of the same donor agency/organisation). This architecture does not correspond to reality on the ground, which requires simultaneous and coordinated funding for humanitarian, transition and development activities. National and regional organisations, in particular, perceive the lines that the international aid system has drawn between preparedness, relief, recovery and development as artificial and counterproductive. Although the conceptual model of a linear 'continuum' from relief to development has been replaced by a 'contiguuum' that envisages the simultaneous reality, practices have not yet shifted accordingly.

Most humanitarian aid tends to bypass government structures while development aid in most sectors is usually predicated on working with and through governments. However, tracking of aid from all sources to recipients is a challenge, as such information is not routinely compiled and made available.

The largest share of all reported humanitarian resources is still in the form of grants from donor governments to provider organisations (i.e. the UN agencies, international non-governmental organisations (NGOs) and the Red Cross movement). Moreover, this form of grant has grown as a share of the total official humanitarian aid, while core, un-earmarked funds to these same agencies has steadily reduced.

Around 5% of humanitarian funding between 2006 and 2011 was channelled through humanitarian pooled funds (including the global Central Emergency Response Fund (CERF), and country-level Emergency Response Funds and Common Humanitarian Funds). Pooled humanitarian funds typically operate on annual funding cycles and may align with national priorities to a limited extent

Humanitarian aid is dominated by spending on food aid. Globally, after rising to 40% of the total in 2008 in response to the global food crisis, food aid had fallen to 27% of the total in 2011. In specific crises, very large proportions of the total humanitarian response are food aid. For example, up to 70% of the Horn of Africa appeals have focused on food since 2005. This leaves much smaller proportions of funding for other

preventive and resilience building interventions. For example, livelihood support (cash, vouchers, seeds, tools, etc.) over the same period represented just 15% of the appeals.

Humanitarian funding rose significantly in 2010 (largely due to the Haiti earthquake and floods in Pakistan) but went down in 2011, resulting in widened funding gaps for some major humanitarian appeals. The 2012 Global Humanitarian Assistance Report argues that 2011 had the largest unmet humanitarian needs in 10 years, in spite of the continued growth in humanitarian funding and a doubling of the number of donors contributing to the humanitarian system since 2000.

Sixty eight percent of humanitarian aid in 2009 was spent in 26 countries. These are considered 'long-term' recipients (receiving an above average share of their total ODA in the form of humanitarian aid for eight years or more). Much of this humanitarian aid was given year on year for 9 to 12 month durations. Nineteen of these 26 countries were conflict affected (sometimes referred to as fragile states) and, therefore, present challenging environments for medium to long-term programming that aims to strengthen national capacity.

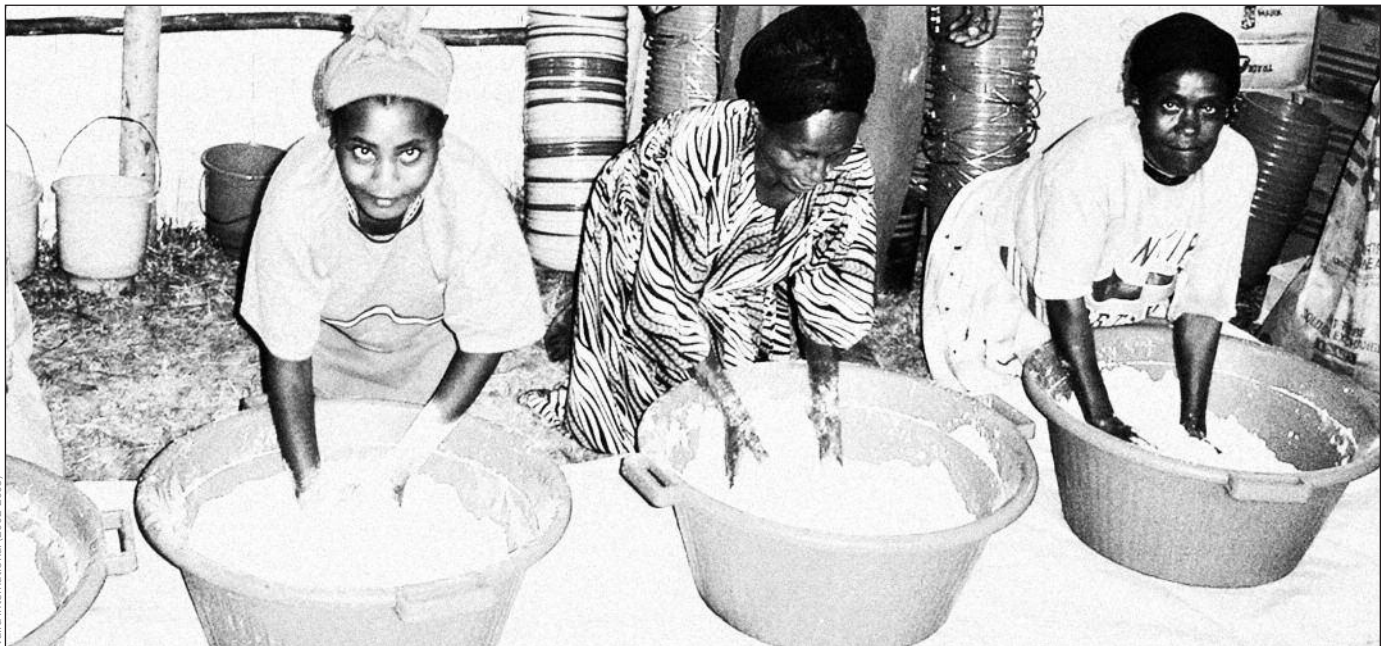
The outlook for ODA is one of low or no growth in the immediate future. Between 2010 and 2011, ODA (excluding debt relief) from OECD DAC donors decreased from US\$ 132.9 billion to US\$ 129.4 billion, a decrease of 2.7%. Bilateral DAC ODA decreased more rapidly than DAC ODA to multilateral organisations, by 4.3% against 1.2% (2011 constant prices). If nutrition ODA follows these global ODA trends, then ODA to nutrition may stagnate or even decrease. Furthermore, the terms in which the ODA is given can also be a significant factor relevant to nutrition. Country Programmable Aid (CPA)¹⁴ is a component of ODA over which recipient countries have a greater influence. The preliminary estimate of ODA from DAC donors and 23 multilateral agencies over 2012-15 suggests that, although in 2012 ODA could increase by 6% in real terms on 2011 levels, global CPA will stagnate from 2013 due to cuts in donor country public budgets.

The Paris Declaration of 2005 and subsequent Accra Agenda for Action (AAA, 2008) and The Busan

¹⁴ CPA is monitored through the OECD DAC Survey on Donors' Forward Spending plans.

Partnership for Effective Development Co-operation (2011) saw donors commit to work on “flexible, rapid and long-term funding modalities, on a pooled basis when appropriate, to bridge humanitarian, recovery and longer term development phases”¹⁵. Yet in practice, implementation of the Paris Principles has been variable, and donor ‘behaviour’ is largely determined by the level of confidence a donor has in

the government in question. Reconstruction and thematic pooled funds offer scope for greater alignment with national development priorities but require high levels of coordination, accountability and visibility. The findings from this review suggest that there has been little adherence to, or consideration of, the Paris Principles¹⁶ with respect to financing for CMAM scale up.



Valid Internacional (2002-2005)

¹⁵ The two largest donors of ODA do not support pooled funding (ECHO and OFDA). DAC governments remain the largest government contributors to humanitarian funding (95% of the total between 2001 and 2010). Together the US and ECHO accounted for 45% of total humanitarian contributions recorded in 2010.

¹⁶ These principles are about the process of providing and receiving aid, not about what development seeks to achieve (i.e. country ownership, alignment of donor support behind national programmes, harmonisation of donor effort in order to reduce fragmentation and high transaction costs, managing for results, and mutual accountability between donors and countries) and are in essence the agreed norms of good governance in development cooperation.

3 What does it cost to scale up CMAM?

Whilst the cost effectiveness of treating SAM is well established (see DALY estimates above), the real costs of taking CMAM to scale are not clear and vary between countries. Costs for start-up, sustained coverage, personnel and community mobilisation and in relation to the cost benefits of integration or convergence with other programmes and sectors are not yet well established in many countries. The SUN movement is supporting some governments to cost nutrition scale-up plans and CMAM is part of this exercise in a number of these countries.

There is a view that the conceptualisation of how to estimate CMAM costs has, up until now, been far too external-agency-centric. For example, the FANTA¹⁷ 2012 costing tool looks at CMAM outside the health system rather than the costs when CMAM is (and should be) integrated within government health systems and with other community based nutrition and health programmes. In principle, such integration should lower the cost of CMAM programming. However, a recently developed 'One-Health Tool' (WHO/UNDP/UNAIDS/World Bank) allows for an integrated costing and planning exercise for 100 different interventions. The tool allows for costing of CMAM at different levels of the system and at different levels of integration with government health budgets. Treatment and prevention of MAM is not yet included in the tool, as large uncertainties remain about optimal ways of addressing MAM. However, the tool is considered to be a 'live' construct that will incorporate MAM as and when consensus emerges with regard to its treatment and prevention.

Another consideration is that costing has not accounted for the actual and potential economic benefits of local production of RUTF, such as support to local agriculture and business development, and in some cases, contributions to export earnings.

At a global level it is reported that the average cost of a case of SAM treated is \$200 per child, with RUTF alone accounting for at least 50% of these costs. The estimated cost for scale-up by the World Bank

(achieving 80% coverage) is US\$2.6 billion annually out of an estimated total cost of US\$11.8 billion for scale up of all 13 interventions¹⁸. Treatment of SAM is therefore one fifth of total scale up budget. If MAM is included, the total amount for global treatment of GAM is \$6.2 billion, over 50% of the total annual estimate for scale up.

Whether these costs can be significantly reduced through local production and/or changing the formulation is unclear and there is a mixed picture from the countries examined for this review (see below). There is on-going work on the viability of using alternative RUTF formulations and into local fortified and much cheaper complementary or supplementary foods for treatment of MAM than foods being produced at international level, e.g. Ready to Use Supplementary Food (RUSF).

In **Ethiopia**, an exercise has recently been undertaken to provide a detailed costing of their OTP (CMAM) programme and to map which agency is providing financing for which part of OTP programming. Two key conclusions emerged. First, the OTP is largely dependent on unpredictable, short term humanitarian emergency funding, which negatively affects its integration into overall planning, financing and transition to a longer term development programme. Second, sustainability of the OTP depends on the ability of the country to finance the RUTF. The Government of Ethiopia (GoE) has not yet allocated any resources for RUTF procurement and, given its high cost, it is unlikely that it will.

Estimates of the costs of SAM treatment through the OTP in Ethiopia vary from US\$66 to US\$156 per child. This range reflects differences between the costs of start-up and scale-up of OTP sites, inclusion of staffing, training and quality control components, locally-produced RUTF and imported supplies. The treatment of MAM is estimated at US\$44 per child. Thus, the combined cost, per child, of treating uncomplicated acute malnutrition is between US\$110 and US\$200.

¹⁷ Food and Nutrition Technical Assistance

¹⁸ The World Bank paper assumes that acute malnutrition will fall by 50% if all other measures are adopted and scaled up.

In **Kenya**, the National Nutrition Plan of Action provides an estimation of the total resources required for implementing the activities of the Plan for the next five years at KSH 67 billion (approximately US\$ 760 million). KSH 13 billion (approximately 20%) is estimated to be needed for the procurement of nutrition commodities (RUTF, therapeutic milks, micronutrient powders, equipment) on the basis of reaching 50% SAM treatment coverage.

A 2011 Integrated Management of Acute Malnutrition (IMAM) evaluation report put the unit

cost of managing a non-complicated case of SAM at US\$93.79 and US\$56.51 for treatment of MAM in an SFP. Thus, the combined cost per child of treating uncomplicated acute malnutrition is \$150. The cost of the IMAM in 2011 was estimated to be US\$6,447,861 (coverage information not provided) with UNICEF's contribution accounting for 54%, WFP's 30%, and the Government of Kenya (GoK) contributing the remaining 16%. In **Malawi**, the unit cost of treating SAM is estimated at US\$50.00 and in **Nigeria**, US\$71.50.



Valid Nutrition, 2008

4 Country level experiences of CMAM financing

This section draws on the experiences of governments and supporting agencies interviewed for this review from a number of countries. More detailed information is provided from four countries

actively scaling up CMAM: **Kenya, Ethiopia, Malawi** and **Nigeria** in the short summaries below. The full case studies for **Kenya** and **Ethiopia** are available electronically on request.

4.1 Humanitarian financing

There is no overview available of the extent to which CMAM is funded via humanitarian funds versus long-term financing (from donor and government's own budgets). In the past, many CMAM programmes began in response to an emergency event and received short term funding of 6 to 12 months. Increasingly, at a global level, CMAM is being introduced in non-emergency contexts and gradually scaled up in stable contexts. However, many of these countries experience periodic emergencies, so funding remains largely humanitarian. For example, UNICEF Supplies in Copenhagen report that approximately 90% of the global orders they receive are from emergency 'top-up' funds and just 9% come from regular resources. This type of financing creates numerous problems for those implementing CMAM programmes. The ENN canvassed views and experiences of CMAM scale up through humanitarian funding arrangements from government and UNICEF staff. A number of examples are given below.

The current crisis in **West Africa** has mobilised resources for CMAM but nearly all of these funding mechanisms are short term and for an average of 12 months. The main donors in the region for CMAM are ECHO (European Commission Humanitarian Office), DFID (Department for International Development (UK)) and OFDA (US Office for Disaster Assistance). Agencies like UNICEF express concern that the costs

of scale up of CMAM are daunting. UNICEF's West and Central African Region (WACRO) covers 24 countries and the vision is to scale up IMAM in all countries. The scale required for treatment in the region is enormous. For example in Niger alone, 300,000 SAM cases are being treated currently and UNICEF and the Government of Niger aim to treat up to 400,000 in 2013. However, *"the sheer cost for countries like Niger and the Democratic Republic of the Congo (DRC) to treat SAM is too scary to even compute"* (UNICEF WACRO).

Countries such as **Sierra Leone, Central African Republic** and **DRC** are facing enormous financing gaps for CMAM programming and are currently meeting only around 17% of funding needs. *"The biggest threat to IMAM is short term funding"* (UNICEF WACRO). Furthermore, each donor has different funding cycles which create *"real headaches as implementing partners have to manage these cycles to prevent supply shortages"* (UNICEF WACRO).

In the UNICEF Middle East and North African (MENA) region, where CMAM is being implemented in **Yemen, Djibouti** and **Sudan**, all UNICEF funding has been short term (6 to 9 months humanitarian funding) up until recently¹⁹. Short term funding has made it very difficult for UNICEF and their implementing partners (IPs) to plan beyond eight month time horizons. Furthermore, UNICEF spends a

¹⁹ However, DFID have just committed to three year funding for nutrition in Yemen which includes CMAM programming. The rationale is that stunting and acute malnutrition are both very high in Yemen.

great deal of time having to seek new funding and setting up new agreements with IPs. Supplies like RUTF can take two months to arrive in the region so, in some cases, UNICEF may only be implementing programmes for four months under a given humanitarian grant.

A key challenge for government and IPs relying on humanitarian funding arrangements is the 'stop-start cycle'. Hard evidence of this is emerging in Kenya, Ethiopia, Somalia and Pakistan. In Ethiopia where there has been significant OTP (CMAM) scale up since 2005, most funding has come through humanitarian mechanisms. By 2011, at the peak of the Horn of Africa crisis, OTP was being delivered at more than 10,000 health posts (or mobile sites). In 2012, which was a non-emergency year, international NGO support to OTP was reduced, which resulted in uncertainty as to whether the scaled up programme could be sustained. Reports on the number of OTPs in operation during 2012 were conflicting with some suggestions that numbers had decreased to 8,000²⁰ and others that the number of OTP sites at the end of the year had increased to 10,787²¹.

In Somalia there were fears that a number of local NGOs that were implementing OTPs with UNICEF support would have to close and that UNICEF would no longer be able to operate all mobile OTPs that they had been operating at the height of the 2011 crisis. However, in 2012 UNICEF managed to take most of the programmes that were threatened with closure through a project cooperation agreement. The remaining sites (many run by the international NGOs, Merlin and Medair) managed to continue by getting core funding from their headquarters on a month by month basis. Recently, a number of donors agreed a multi-year financing (MYF) arrangement for Somalia to overcome some of these problems (see below).

There are numerous other challenges associated with reliance on short-term funding for scaling up CMAM, as follows:

1. Governments and their IPs have difficulties planning for sustainable CMAM programming.
2. Humanitarian funding nearly always bypasses government so that programming is not integrated within government health systems and other national programmes. This reduces cost-

effectiveness and sustainability.

3. Implementing partners find that they need "to shoe-horn in too much and too quickly," especially when funding is delayed, which affects the quality of CMAM programmes.
4. Agencies and governments have to invest considerable resources in writing proposals for 6 to 9 month funding periods and in accommodating the reporting and monitoring requirements of different donors.
5. Certain elements of CMAM are less easy to get funding for, especially community mobilisation, referral from screening site to stabilisation centres (vehicles and fuel) and M&E, as these activities are seen as a government responsibility (see below for more on this issue).
6. Certain types of humanitarian funding, e.g. CERF, do not readily allow for disaster preparedness activities like stock-piling RUTF, although where existing stocks are used up at the start of an emergency, CERF Rapid Response funding can be used to replenish stocks.

In spite of these challenges, there appears to be an intrinsic momentum to continue providing short-term funding for CMAM scale up, as well as for agencies to seek this type of funding. This may simply reflect a pragmatic view that short term funding arrangements offer the best prospect of financing CMAM for UN agencies and international NGOs. Shifting the funding status quo will require additional and collaborative effort.

UNICEF, which procures approximately 80% of the global supply of RUTF for CMAM programming, is trying to do just that and move towards longer-term funding mechanisms. In **Ethiopia**, for example, UNICEF is soliciting donor support to establish a new pool fund, to secure predictable, multi-year financing for RUTF.

From a national government perspective, the challenges of relying on this type of funding may be even greater, especially where governments face frequent or periodic emergencies. There is a sudden need to scale up CMAM to respond to increases in acute malnutrition, but they lack the institutional capacity to do this. In these situations, governments depend on both access to short-term emergency

²⁰ FMOH, personal communication.

²¹ Emergency Nutrition Coordination Unit (ENCU) reporting.

funds and implementing partners to undertake the scale up. The issue for governments then becomes how to link scaled up programming to other programmes and how to ensure coherence of

funding and programming, as emergency and development programmes merge into or out of each other.

Box 1: CMAM scale up in Malawi

Up until 2002, the treatment of wasting in Malawi took place in hospital based nutrition rehabilitation units (NRUs). The 2002 food crises, which saw an increase in the wasting caseload, gave rise to the implementation of a pilot CMAM approach in one emergency affected district, followed in 2004 by a national CMAM dissemination workshop for District Health Officers (DHOs), NGOs and partners. In 2005, three more districts started implementing CMAM. In 2006, CMAM was adopted as the national approach for the management of SAM. Today, CMAM is implemented in all 28 districts of Malawi with over 500 OTP sites, representing 82% of health facilities and 357 supplementary feeding programme (SFP) sites (58% health facility coverage). There are 100 NRUs where complicated cases of SAM are treated. Although the intention was to ensure that each OTP had an SFP programme for discharge of MAM cases, a lack of commodities has meant that this has not been possible.

The CMAM programme targets children less than 12 years of age and includes community level case identification, referral and follow up. SAM children without complications are treated in their homes using RUTF with weekly check-ups in the OTP and complicated SAM cases are admitted for inpatient treatment. Roughly half of MAM children are referred to SFP. Moderately malnourished pregnant and lactating women are given dry take-home rations through the targeted supplementary feeding programme (TSFP).

Scale-up of CMAM in Malawi has emphasised integration within existing institutions and structures so that acutely malnourished children receive the care they need through the same pathways that they routinely access treatment for other illnesses or infections.

Local RUTF production

Malawi is the only country in sub-Saharan Africa producing enough RUTF (via two manufacturing plants) to meet all of the country's needs. The Ministry of Health (MoH) has started procurement of RUTF from its own budget to supplement the supplies procured by UNICEF and other donors. It is **estimated that 50% of the RUTF procurement comes directly from the MoH budget**. Despite this very positive situation, there remains a number of challenges with local production of RUTF, including the dependency on importation of raw materials (powdered milk and the mineral vitamin complex), problems with aflatoxin contamination of the peanuts, reliance on testing and quality assurance of RUTF in Europe, which can mean long delays between production and test results, and a lack of working capital (in dollars) to ensure importation of the key ingredients. There is private sector support for RUTF production in Malawi though this is largely confined to the provision of equipment and technical support. The cost of Malawi's RUTF varies but on average is slightly higher than cost of RUTF produced in Europe.

Financing arrangements

In the early to mid-2000s, CMAM was financed through humanitarian funding mechanisms channelled through international agencies. As the approach was adopted at national level, funding started to come through different sources including the **Health SWAp**, which allocates funding directly to the MoH and gives responsibility to the nutrition unit for procurement of supplies, including RUTF. The SWAp fund provides districts with funds to cover the costs of training, monitoring and supervision. Currently, there are four parallel funding systems in place that finance CMAM:

Box 1: CMAM scale up in Malawi (cont'd)

- A health SWAp that is used for the Essential Health Care Package including nutrition activities. This is the preferred mechanism for most donors (excluding USAID and the UN agencies).
- District partners who fund specific nutrition activities.
- Partners who fund other activities that include a nutrition component, e.g. HIV/AIDS.
- Direct funding to the national level MoH nutrition unit.

Coordination of these funding systems presents a challenge, though the SUN launch in 2011 has seen the establishment of a Malawi donor group for nutrition, leading to better coordination, as well as providing technical assistance for financing.

Nonetheless, current financing arrangements in Malawi are not secure. For example, the Clinton Health Access Initiative (CHAI) are aiming to pull out (they have been funding CMAM supplies for a long time) and UNICEF are also aiming to phase out. Government would like to see CMAM totally integrated into the SUN package as this would help make it more sustainable. Currently, donors have divided up districts to support and two key donors (CIDA and the World Bank – IDA) are contributing a total of US\$ 43.1 million for SUN implementation into 15 districts.

It is estimated that **sustained longer-term funding of CMAM resources will require a total of US\$45,697,975** for a five year period (2011-2015) comprising US\$2,625,000 for training, US\$337,975 for community mobilisation and **US\$42,735,000 for supplies, equipment and service delivery**. Currently, a large amount of financial and logistical support for CMAM is provided by international donors and CHAI. Most of the technical support has come through the CAS (a technical arm of the Ministry of Health). This means that the service faces challenges around longer-term sustainability. Malawi is a country where health services are under-resourced and dependent on external funding sources. In spite of this, there have also been significant achievements around financing. The districts fund some CMAM costs out of district budgets. This includes initial and refresher CMAM trainings, supervision and district based coordination meetings. The MoH and partners are procuring RUTF for the districts and the expansion and certification of local production of RUTF is viewed as a success.

Source: Theresa Banda, ENN Consultant seconded by Valid International

Box 2: CMAM scale up in Nigeria

Levels of wasting in Nigeria were recorded at 17.6% in 1999, 11.2% in 2003 and 14.4% in 2008. Nigeria is ranked as the country with the third highest absolute number of children under five years in need of treatment for SAM²², estimated to be 2 million in 2009 with the majority in the northern part of the country. CMAM was introduced in Nigeria by UNICEF with support from Valid International in 2008 and implementation started in 2009. By the end of 2009, there were two states implementing CMAM. However the 2010 food security crisis in the Sahel zone, which led to an increase in prevalence of acute malnutrition, necessitated a rapid scale up of CMAM to 11 states implementing CMAM by the end of 2011. Subsequent introduction of CMAM in three non Sahelian states aimed at demonstrating that CMAM could be integrated within the routine health and nutrition programmes. In each of these three states, sites were selected to start implementation so that they could be centres of learning for scaling up within the state.

²² ACF Strategic Plan 2010-2015; WHO Global Database on Child Growth and Malnutrition; The Lancet's Series on Maternal and Child Undernutrition.

Box 2: CMAM scale up in Nigeria (cont'd)

Currently, CMAM includes management of SAM (out-patient and inpatient, community mobilization), but does not include MAM. Up until now, almost all funding for CMAM scale up has come from the international humanitarian community. According to UNICEF, **RUTF costs constitute over 90% of the total costs**. The states are able to provide routine drugs and on occasion, funds for monitoring purposes but have not funded RUTF. Only Kebbi state tried to allocate funds for the purchase of RUTF though this was only for one year.

The high cost of RUTF has led to a slowdown in scaling up of CMAM with its purchase dependent upon donor organisations. **The cost of RUTF per child treated is around U\$71.50** including freight charges. Other programmes such as reproductive health, anti-retroviral therapy (ART) and the expanded programme on immunization (EPI), are also reported to be largely dependent on external assistance.

Implementation of CMAM through integration into the primary health care delivery system is managed by the National Primary Health Care Development Agency (NPHCDA) – a parastatal institution that was created through the Federal Ministry of Health (FMOH) to implement primary health care services including immunisations, growth monitoring, micronutrient supplementation and now CMAM. It has structures from Federal to Local Government Authorities (LGA) through the states. Currently, the FMOH does not have a budget line for nutrition, but are advocating for this within government.

CMAM programmes do not admit MAM cases due to limited resources. MAM cases are reportedly counselled on feeding practices and treated for diseases where present. Although globally, WFP has taken on the responsibility for MAM prevention and treatment, they are not operational in Nigeria. Complicated SAM cases are managed in state and referral hospitals and training is usually supported by WHO, although this is sporadic and has not kept pace with the scale up due to lack of resources. In some cases, UNICEF have planned and trained staff involved in inpatient care of SAM cases. There is no official MOU between WHO and UNICEF on this.

In non-emergency affected states such as Gombe, the State and LGAs provide funding for routine drugs for treatment of SAM, training and some monitoring. At referral centres, the state has made arrangements for free medical care of complicated SAM cases. In some states, funding for inpatient care is still a challenge, especially if the SAM case is referred to a tertiary-level hospital. In Gombe, State officials agreed with UNICEF that they would take over the financing of RUTF supplies from January 2010 but they have not yet achieved this. In 2011, the Gombe State government earmarked 50 million Naira (~U\$312,500) for CMAM. However these funds were actually utilised for other health interventions. However, Gombe State did allocate 30 million Naira (~U\$ 187,500) for 2012. This was used primarily for training health workers but not for the purchase of RUTF. Gombe State would like to scale up to other LGAs but this can only happen if there is a secure source of RUTF.

Currently, UNICEF has indicated that they do not have adequate supplies of RUTF for 2013 which means that the state will have to honour their agreement with UNICEF and their commitment. The Children's Investment Fund Foundation (CIFF) has come in to support the scaling up of CMAM in Nigeria with the goal of mainstreaming CMAM into essential health services in Nigeria. The first phase has been approved by their board. This phase aims to learn from what is currently happening on the ground, improve performance of sites and scale up to additional sites within the states in the North and in the south geopolitical zone.

In Nigeria, CMAM implementation is largely dependent on donors who fund the approach through UNICEF, WHO (for inpatient care) and international NGOs. Donors do not directly fund government partly due to their concerns over transparency and accountability. UNICEF has played a key role in mobilising funding from donors for all CMAM components and bringing in other partners to support CMAM implementation. The FMOH is, however, now taking a more leading role with technical support from UNICEF and international NGOs and are able to convene CMAM task-force meetings where donor and partner coordination take place and where it is possible to advocate at federal level.

Source: Theresa Banda, ENN Consultant seconded by Valid International

Box 3: Scale up of the integrated management of acute malnutrition in Kenya

Kenya's goal, 'Vision 2030', is to transform Kenya into a globally competitive and prosperous middle-income country by 2030. The backdrop to this vision is that the nutritional status of children under five years (U5) remains very poor. Between 1998 and 2008, levels of stunting stagnated at 33% (KDHS1998, 2003 and 2008). The national prevalence of acute malnutrition also stagnated at 6.7% (KDHS 2008/09).

Put in numbers, an estimated 2.1 million children U5 are stunted and 400,000 are wasted at any one time (KDHS 2009 adjusted for population growth). Up until 2008/9, the treatment of acute malnutrition was largely confined to non-governmental organisation (NGO) managed and directly implemented projects in the areas of Kenya referred to as the ASALs (Arid and Semi-Arid Lands) where levels of acute malnutrition are, in normal times, considerably higher than the national average. Short-term humanitarian financing has been the mainstay of these projects and, until very recently, they operated outside a coherent government framework and coordination structure.

The High Impact Nutrition Intervention Package

Since 2010, the Government of Kenya (GoK) has been scaling up High Impact Nutrition Interventions (HINI). HINI combines the 11 direct nutrition interventions recommended by the 2008 Lancet nutrition series for scale-up. The integrated management of acute malnutrition (IMAM) is one element of the HINI package. This is seen as a vital step forward in Kenya as it will open non-emergency doors for IMAM financing, integration and coordination.

The GoK is supported to implement HINI by donor, UN and a large number of implementing partner (IPs) agencies at the national and (increasingly) sub-national levels. Essentially, HINI combines treatment of acute malnutrition with interventions aimed at preventing acute malnutrition, stunting and micronutrient deficiencies in the U5s (and in pregnant and lactating women (PLW)). IMAM is the largest component in budgetary terms.

Integrated management of acute malnutrition (IMAM)

IMAM includes the management of severe acute malnutrition (SAM) (in patient and out-patient) and moderate acute malnutrition (MAM) in U5s and PLW. It is highly concentrated in the ASALs (North Rift Valley, Eastern and Coast Provinces) and increasingly in the large urban slum areas where, although levels of acute malnutrition are relatively low, the number of acutely malnourished children is high²³. The GoK vision is to achieve higher coverage in the ASALs and roll out to the rest of the country.

Cost of IMAM in Kenya

Precise annual costs for taking IMAM to scale in Kenya are not known. However the National Nutrition Plan of Action provides an estimation of the total resources required to achieve the goal and objectives outlined in the Food Security and Nutrition Policy. The cost estimates cover the five years (2011-2017) of implementation. The costs are based on an ideal situation and standard costing models rather than past and ongoing programmatic experiences. Overall, the projected total cost for implementing the activities of the Plan for next five years is Kenyan Shillings (KSH) 67 billion (approximately \$ 760 million). KSH 13 billion (approximately 20%) is estimated to be needed for the procurement of nutrition commodities (RUTF, therapeutic milks, micronutrient powders, equipment) on the basis of reaching 50% SAM treatment coverage.

A 2011 IMAM evaluation report put the unit cost of managing a complicated case of SAM at US\$84.54; a non-complicated case of SAM at US\$93.79 and US\$56.51 for treatment of MAM in an SFP. Thus, the combined cost per child of treating GAM (uncomplicated) is \$150.00.

²³ It is estimated that by 2020, 50% of Kenya's population will be urbanised.

Box 3: Scale up of the integrated management of acute malnutrition in Kenya (cont'd)

Government financing

The overall GoK allocation to nutrition from the health budget currently stands at 0.5%²⁴. In 2008/2009, the GoK budget allocation for nutrition programmes was 0.1% (KSH 114 million) and met just 2.2% of the amount required. In financial year 2009/2010, the nutrition component was allocated 0.4% (KSH 163 million) of the total health sector budget respectively.

The GoK's main contribution to IMAM is in human resources at the provincial, district, health facility and community levels. A recent (2011) cost analysis found that UNICEF takes the lead in financial contribution for IMAM, (capital and recurrent) followed by WFP and the GoK. The GoK contribution is estimated at 16%.

Donor financing

IMAM is heavily reliant on donor agency financing. The main current donors are ECHO, DFID and USAID/ OFDA. Funds are allocated to the main UN agencies (UNICEF, WFP), which in turn contract out some programme component to the IPs. Some donors are also directly contracting IPs through a consortium arrangement. IMAM funding, until recently, had been entirely short-term annual funding. However, in the past two years, there has been a change in thinking prompted by the increased international focus on the need to invest and programme to build nutrition resilience. For the very first time the main donors for IMAM have instituted longer term, more predictable financing arrangements through MYF. The main donors have formed a Joint Planning Cell to coordinate their efforts and agree priorities and joint approaches.

²⁴ The estimated per capita expenditure on health services has been rising, from 6.9 USD in 1997 to 34 USD in 2010, however, this is below the recommended investment levels required to deliver health services.

Box 4: CMAM Scale Up in Ethiopia

Ethiopia is one of the success stories in the integration of CMAM into national systems. Having hosted the first pilots of CMAM in 1999, the Ministry of Health (MoH) has gone on to integrate CMAM (or OTP - Outpatient Therapeutic Programme) as one of the service packages in Integrated Community Case Management (ICCM). The geographical coverage of CMAM has consequently expanded dramatically, from less than 500 sites in January 2008 to over 11,000 sites by end 2012. Most of these are at health posts/centres, with a very few being run as mobile units in pastoral areas.

The MoH's strong commitment to expanding OTP services across as much of the country as possible is in recognition that (severe) acute malnutrition is a long-term problem that requires on-going response. This is in the context of a National Nutrition Plan, which, following revisions currently underway, will emphasise the government's drive towards deepening integration of the management of acute and chronic undernutrition, through inter-sectoral efforts involving a number of line-ministries.

Yet, despite this conceptual understanding, and the government's position, the government of Ethiopia (GoE) provides very limited financial support for OTP. The financing of the OTP has been largely secured through short-term humanitarian channels. The programming of OTP has therefore relied heavily on multi-lateral partners, who are the prime recipients of this humanitarian funding. The delineated roles of the main UN agencies involved – UNICEF for the OTP and WFP for the supplementary feeding of moderately malnourished children – have conspired to effectively limit the links between the two programmes.

Box 4: CMAM Scale Up in Ethiopia (cont'd)

In addition, and perhaps more problematically, there are deep governance divides that affect the GoE's strategic approach to nutrition. Most importantly, these concern the MoH and the Ministry of Agriculture (MoA). To date, the MoH has been concerned primarily with the reduction of stunting (and expansion of the OTP), whilst the MoA has been responsible for addressing moderate acute malnutrition in crises. This reflects the wider remit held by the MoA, of overseeing Ethiopia's disaster risk management efforts. The Disaster Risk Management and Food Security Section (DRMFSS) of the MoA hosts the Emergency Nutrition Coordination Unit (ENCU) and the Nutrition Cluster Coordinator. This has resulted in a schism between how undernutrition is understood, monitored and tackled. So, although the OTP delivery is integrated within the health system, its monitoring is consolidated by the ENCU in the MoA. Similarly, data on the supplementary feeding programme is compiled by the MoA not MoH.

Thus, although the responses to both severe and moderate acute malnutrition are funded nearly entirely through humanitarian funds, they are programmed by different agencies, under the coordination of different line-ministries, with limited consolidation of the information systems used by each. This is widely acknowledged and there is now a great deal of hope and expectation – both within government and amongst partners – that the revised National Nutrition Programme (NNP), and the increasing momentum of the SUN movement in Ethiopia, will create bridges and help bring about greater coherence and alignment in how undernutrition is managed in the country.

The absolute costs of the OTP are significant, and undermine the programme's long-term sustainability. The commodity component of the OTP (i.e. ready-to-use food, RUTF) is estimated by UNICEF at \$21.5 million per year²⁵, to treat around 300,000 SAM cases (i.e. \$72 per case or \$66 per case if administrative costs are not included)²⁶. This covers the current coverage of OTP, numbering nearly 11,000 sites. Should the coverage increase to all health posts, then the number of SAM cases treated would rise to around half a million, requiring a budget of around \$35-38 million per year.

According to UNICEF's purchases – and bearing in mind that UNICEF supplies 95-98% of RUTF used in Ethiopia – the RUTF costs amount to 80-90% of the overall programme costs for OTP. Even with increased local production, this proportion would remain substantially above the 50% estimate often used. Added to cost is the logistical challenge of supplying all the OTP sites with the necessary RUTF, medicines and equipment, as well as the capacity challenge faced by the health extension workers actually delivering the OTP services. The UN agencies and NGOs offer vital support to government on both these fronts.

There are several potential developments that could deepen the extent of OTP integration into the health system and increase its 'ownership' by the government of Ethiopia:

1. UNICEF has begun to consult on the possible merit of establishing a central multi-donor funding mechanism for OTP, which would secure a predictable, multi-annual RUTF pipeline. Key to its success will be the support provided by development rather than humanitarian donors.
2. There is potential for RUTF to be procured through an existing pooled funding mechanism (the MDG fund), as long as this was endorsed by the Ministry of Finance as well as Health.
3. Growing attention to resilience may help to provide a much-needed bridge across the 'humanitarian/development divide' – both in terms of thinking and funding. There seems to have emerged a new openness for the Humanitarian Response Fund to commit to fund CMAM every year as part of a resilience-building agenda.

²⁵ Concept Note, UNICEF Ethiopia, November 2012. Strengthening Resilience to Nutrition Insecurity by Ensuring Continuous Access to Quality Community Management of Acute Malnutrition/ Therapeutic Food Financing.

²⁶ These figures are broadly in line with the calculation estimates calculated in the CMAM evaluation: *The overall average cost per child for established sites is estimated to be \$110, ranging from \$90 to \$152. ... However, from a programme perspective marginal cost is more relevant than the average cost as some of the cost of components such as clinical service, technical assistance and fixed supplies remain the same regardless of the CMAM provision. Thus, marginal cost, by including only costs elements that vary by the level of output, is found to be \$73, ranging from \$61-\$85.*

4.2 Transition financing and resilience

There is no strict definition of transition financing although the term implies financing arrangements which allows 'transition' between humanitarian and development funding. The extent to which CMAM scale up is being funded by transition financing arrangements evolving within the donor community is unclear. It is also unclear whether MYF from humanitarian budgets fall under the umbrella of 'transition' funding or under the emerging focus for financing resilience as described below.

The multi-year Consolidated Appeal Process (CAP) in the **Occupied Palestinian Territories** could be classified as transition funding, as might the recent three year nutrition grant from DFID for **Yemen** which is resourced from both humanitarian and development budgets. In the latter case, DFID had been providing annual support via the CAP (mainly to UNICEF and WFP) in Yemen. However, the DFID regional view was increasingly that acute malnutrition was not a new problem in Yemen and would continue for years, so that there was little sense in providing annually negotiated short-term funding. Furthermore, since the same partners were delivering development and humanitarian projects in Yemen, and the causal overlap between wasting and stunting was significant, closer alignment and integration was seen as necessary. This justified the combined use of emergency and development funding, for three years, to support direct and nutrition sensitive programming. This type of MYF appears to be increasingly used by DFID, which has already provided MYF for the humanitarian response in Somalia and approved a MYF for the Arid and semi-Arid Lands (ASALs) in **Kenya** to support a range of high impact nutrition interventions (HINI) including CMAM.

The recent increased focus on resilience seems to be translating into increased MYF commitments at country level. With regard to European Union (EU) financing, for example, resilience in the Horn of Africa is being funded through a new transition financing arrangement called SHARE (Supporting Horn of Africa Resilience). In **Ethiopia**, this is being used by both the EU Delegation and ECHO to fund a multi-year integrated approach to addressing undernutrition (wasting and stunting). This joint resilience agenda incorporates aspects usually deemed as

'development' (such a policy and capacity strengthening efforts) with 'relief' efforts, including OTP scale-up. More generally, ECHO is recognising that its normal criteria for intervention, that are largely based on thresholds, are not conducive to effective recovery and stronger resilience and new guidance is being developed.

In **Kenya** where, until very recently, IMAM funding had been entirely short-term (through the CAPs), the past 12 to 18 months has witnessed a 'sea change' in thinking about nutrition (and particularly HINI) amongst the donors. This has arisen because of two inter-linked factors. Firstly, the 2011 emergency in Kenya saw considerable delays in the overall response to very high levels of acute malnutrition and prompted a re-think about the norm to wait for emergency thresholds to be reached before short-term humanitarian finance mechanisms are activated and thus often delaying response implementation. Secondly, the increased international focus on the need to invest and programme to build resilience in high burden and vulnerable countries has begun to resonate amongst donors and agencies in Kenya. There is a growing momentum to challenge their own donor agency institutional and financing barriers, which view acute malnutrition as a humanitarian (short term) concern whilst stunting is viewed as a development concern requiring (unlike acute malnutrition) long-term solutions. In the words of one donor agency representative interviewed in Kenya,

"most donors are organised around emergencies and development assistance but not to address resilience and in Kenya, after another drought emergency response cycle, actions identified post emergency are rarely followed up and are forgotten. This is a clear development failure."

In **Ethiopia**, such a shift is only now beginning. New interest is emerging from government and development donors who see support to the OTP as a constituent within the wider resilience-building agenda. This agenda includes the need to reduce the size of the (seasonal) spikes in acute malnutrition and to increase the interval between their occurrences, so OTP is understood as a key contribution towards this.

Similarly, the EU is providing three year funding for **Niger, Liberia** and **Guinea** in the context of the drought in the Sahel. The reason this has happened is that the ECHO office has been advocating for

development thinking for CMAM rather than a humanitarian approach in these chronic emergency environments (UNICEF WACRO).

4.3 Development financing

There are multiple sources of funding in development contexts (e.g. bilateral, multilateral, private and domestic resources) but external financing for nutrition from development budgets as described above is limited and tends to be 'projectised'.

It is not possible to track the levels of funding from the different sources used to fund CMAM scale up in development contexts thus far. There are currently no databases that allow this type of analysis. However, it is clear that funding for CMAM can come from a variety of divisions and units within the same donor organisations and that there may be little coordination or interaction between them. This lack of internal coordination is likely to be most pronounced between the humanitarian and development arms of a given donor. It is also clear that the vast majority of longer-term funding for

CMAM scale up from the main donors has been through multilateral agencies as opposed to international NGOs. There are currently no mechanisms in place to determine the extent to which development financing of nutrition is channelled through government rather than implementing partners or 'third parties' and how this compares with other sectors. The evidence obtained through this review, however, suggests that only a small percentage of this funding goes directly through government. A clear consequence of this is that nutrition stakeholders within government remain marginalised with respect to internal government decision-making over resource allocation while at the same time consolidating a culture of external resource dependency for nutrition (see below).

4.4 Funding directed through governments

Where resources are channelled through governments, it is often through a pooled funding or a 'Common Fund' mechanism and is being employed to fund nutrition interventions (including CMAM) in a small number of countries e.g. **Zambia, Zimbabwe** and **Mozambique**. Donors may be concerned about the transparency of this mechanism or choose not to utilise the mechanism where there is a lack of policy alignment between the external donor community and a government²⁷.

The MDG pooled fund in **Ethiopia**, which is managed by the Ministry of Economic Development, has significant funds, amounting to over US\$100 million in 2011/12 (and is set to nearly double that in 2012/13). With political agreement, this could become an opportunity to secure longer-term financing for CMAM, by contributing to the procurement of RUTF. However, other competing government priorities may preclude this. Furthermore, 'leakage' of RUTF into local markets, and

²⁷ For example, the government in Ghana has had a strong focus on treatment of SAM. This used to be funded through a pooled mechanism, but this ceased when the main donors (USAID, CIDA and Japan International Cooperation Agency (JICA)) prioritized direct programme funding.

serious logistical limitations in the effective delivery of OTP supplies to health centres and posts, would also need to be resolved before donors would approve this use of the MDG fund. Another opportunity may emerge in the possibility of establishing a pooled fund to support the next phase of the National Nutrition Programme (NNP). This may be considered under the umbrella of the SUN movement, and CMAM would be an integral component - not separate or vertical but embedded in the government's overarching scale-up plan. The rhetoric has moved away from 'emergency funding' and 'emergency programmes' to 'scale up of the NNP' and capacity to meet surge in demand for OTP. The divide between emergency and non-emergency is no longer considered relevant or helpful in Ethiopia.

Nepal is an example where a pooled health fund is being used explicitly to help scale up CMAM. Following a successful pilot, the World Bank invested US\$10 billion into the health SWAp, to support CMAM and IYCF, though this is still insufficient for the planned national scale-up. Advocacy for other donors to invest is on-going, and the government plans to increase this allocation.

The experience of the **Liberia** Health Pooled Fund (HPF) demonstrates how pooled funding is feasible in fragile contexts. The HPF was established to support Liberia's reconstruction following the cessation of the civil war. The idea was to provide un-earmarked funding to help finance unfunded needs within the national health plan, and to reduce transaction costs associated with managing multiple donor projects. This was to be made possible by strengthening the financial capacity of the MoHSW (Ministry of Health and Social Welfare) to administer the funds along similar lines as for budget support. Following some donor reluctance initially, four donors (DFID, Irish Aid, UNICEF and UNHCR) eventually made commitments. In order to manage the fiduciary risk of putting large sums of money into a newly emerging government, a number of safety mechanisms were put in place, including a commission audit. Although the HPF was the least used funding mechanism by donors²⁸, and provided only one sixteenth of the total health expenditure²⁹, it has been pivotal in enabling institutional capacity strengthening, government stewardship and donor coordination.

4.5 New thinking on financing arrangements

A recent review of financing mechanisms in fragile states³⁰ echoes many of the findings above with regards to donor financing arrangements and argues against 'business as usual'. Instead, a different approach is suggested:

- More aid can be provided through government systems. This would likely deliver faster development outcomes that are better aligned with country priorities, but would also strengthen the accountability of government to its citizens, build legitimacy and deepen government capacity through learning by doing.
- Pooled funds can provide close alignment with national priorities, build on national systems,

consolidate small projects into scalable national programmes, and harmonise and simplify the transaction costs of foreign assistance.

- Pooling funds also pools risks amongst donors.
- Donors must try to publish information on spending at the same time as governments are setting their budgets, using the same classifications. Donors are then more likely to align their aid with government policies and priorities, making it easier for the government to coordinate aid spending with government spending.

Another recent study³¹ has looked at the enormous funding gap for scaling up nutrition interventions,

²⁸ Only 10% of donor funding has so far gone through towards the HPF.

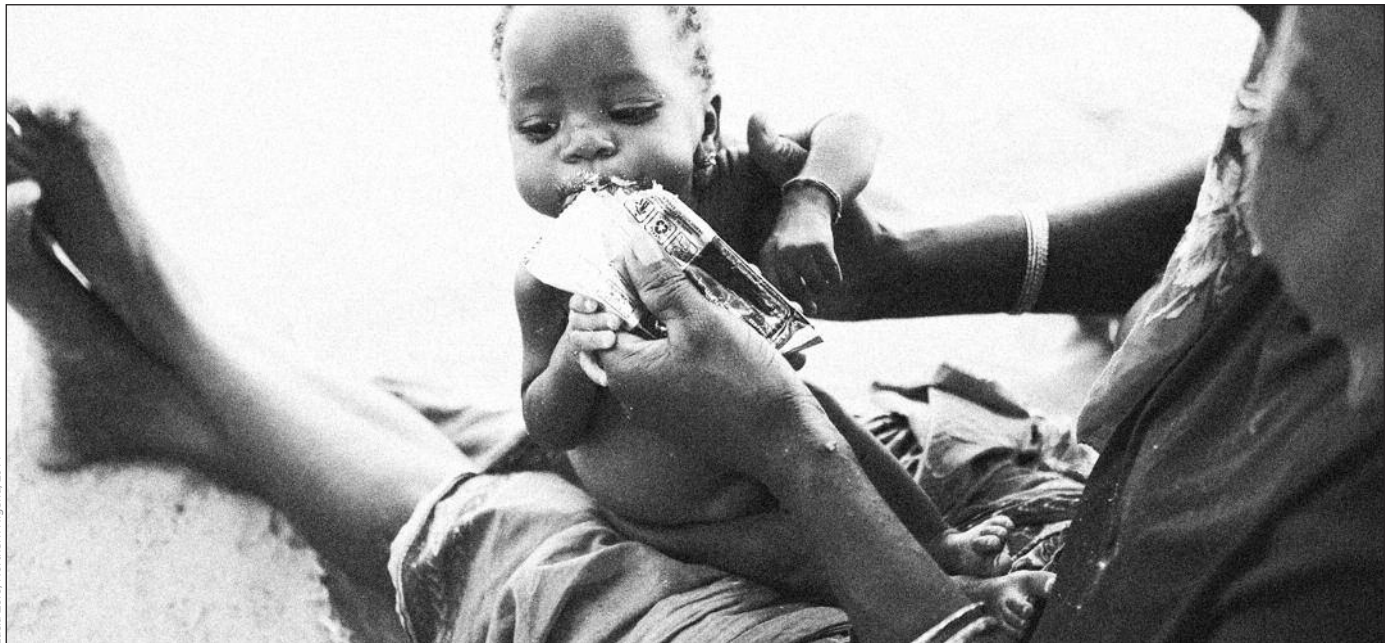
²⁹ Seventy five percent of the HPF has been used for expanding access to services and 25% for building new infrastructure.

³⁰ Manuel, M. et al. (2012). Innovative aid instruments and flexible financing: Providing better support to fragile states. October 2012.

³¹ ACF (2012). Aid for Nutrition. Using innovative financing to end undernutrition. September 2012.

including CMAM. The report highlights the historical precedent for sharing costs, whereby national governments tend to provide labour and implementation costs, while donors supply materials. With regard to the package of 13 high impact direct nutrition interventions, the report determines that the relative contributions from external funders and government approximate a 50/50 split overall but vary by intervention – ranging from 90/10 to 10/90, with 30/70 estimated for treatment of SAM. Interestingly, the study found that MAM treatment appears to have the largest share of costs from external funders (reflecting the food costs and the size of interventions). Using this model, analysis of the implied domestic contribution for CMAM on a per capita basis (rather than by percentages) shows wide variation, e.g. **Vietnam** is low at US\$0.83 while **Burkina Faso** is high at US\$3.30 per head. In fact,

there is a negative correlation between per capita domestic contributions and per capita income so that poorer countries might be required to make larger contributions than wealthier ones using this approach. The authors acknowledge that this may risk undermining support for desirable community interventions (e.g. CMAM) at government level. A number of ways of resolving this are suggested including requesting external donors to fund total SAM costs rather than only material costs (note that this would disproportionately benefit countries with highest SAM prevalence or ensure full integration of SAM treatment into basic health packages rather than creating more vertical approaches). As some countries with high SAM prevalence are not the poorest, donors only seem to pick up all the SAM costs in countries below a certain level of per capita income.



Lucia Zoro, Northern Nigeria, 2011

5 Sustainability, prevention and integration

The sustainability of the current level of CMAM programming and future planned scale up is a considerable challenge given the very high programmatic costs. When asked about sustainability of CMAM, a commonly stated view amongst many of those interviewed was that *“the only route to sustainability is through the prevention of acute malnutrition”*, i.e. by reducing the number of cases needing treatment in the first place. *“The challenge is to link up nutrition, not scale it up”* (DFID Ethiopia).

Interest is also growing in the potential impact of reduced levels of stunting on levels of acute malnutrition either through the efforts of other sectors (for example WASH, social transfer programmes) and/or through other health and nutrition actions such as IYCF, BCC (behaviour change communication) and micronutrient supplementation. There is also interest in the impact of untreated acute malnutrition on levels of stunting. Indeed, an increasingly held view is that the strategies to prevent acute malnutrition are largely similar to those aimed at preventing chronic malnutrition (stunting) as the causal pathways to these outcomes are likely to be similar. Concern has been raised that CMAM *“leads to a lot of confusion because the view is that this is somehow completely different to tackling chronic malnutrition, but it isn’t”* (World Bank, REACH, SUN Secretariat) and that *“CMAM needs to be seen as integral to the prevention of stunting.”* Examples have been given of countries (e.g. Ethiopia and Mozambique) where the identification of children at risk of acute malnutrition at community level and in need of referral for treatment is *“nested in other community nutrition activities and is part of a broader nutrition management approach at community level”* (World Bank, REACH). Box 5 summarises the current knowledge about the links between acute malnutrition and stunting.

The current separation of acute and chronic malnutrition along conceptual, programmatic, financial and institutional lines will need to be overcome to maximise any beneficial synergies through the integration of actions at country level. Many agencies are placing increased emphasis on prevention. For example, WFP are producing a new

strategic plan which sees treatment and prevention of MAM as a continuum. Furthermore, WFP states that *“in many countries, treatment of MAM is not sustainable”*, and that *“sustainability must be based on prevention”*. UNICEF is also re-emphasising prevention alongside treatment and a recent meeting with WFP allowed discussions to take place as to how both agencies can *“combine efforts and link sectorally to prevent acute malnutrition”* (UNICEF HQ). The World Bank view acute malnutrition as a development issue and have concerns that *“any delay in the treatment of acute malnutrition will impact on stunting”* (World Bank HQ).

Whilst this emerging emphasis on prevention of acute malnutrition and on the need to integrate efforts to address acute malnutrition with efforts to address chronic malnutrition are unquestionably appropriate, the lack of predictable long-term funding for CMAM inhibits linkages within the health and nutrition sector and with other enabling sectors. Donor agencies interviewed during this review commented that CMAM is still often viewed as a *“one-off intervention which is not part of government plans”* (USAID/OFDA Headquarters) echoing the misconception that acute malnutrition is largely a humanitarian problem. Also that, *“persistent caseloads of acute malnutrition are not being dealt with through short term methods and that development funds are needed alongside emergency funds which then continue once the emergency is over”*. Frustration that *“responsibility for CMAM largely resides in the humanitarian sector which inhibits government capacity and imposes stop start programming and exposes CMAM to the vagaries of short term funding”* leads to the conclusion widely articulated by those interviewed that *“longer-term development partners need to take much more responsibility for CMAM”* (Irish Aid, OFDA Kenya, DFID Kenya).

Another facet of CMAM financing as described above is that virtually all is going to the multilateral agencies, and then international NGOs. This review found only limited examples of financing directly via government. The extent to which this is typical of broader financing for nutrition is unclear but it is unlikely to be unique to CMAM. For some donors (USAID, ECHO) this appears to be governed by institutional and legal

Box 5: Links between acute malnutrition and stunting

The relationship and associations between acute malnutrition and stunting are not yet well understood. Undernutrition is a multifaceted process, resulting from a complex web of interactions, from the molecular and microbiological level of the individual, to the cultural and socioeconomic features of societies. While both types of undernutrition share the same causal pathways and are therefore unquestionably linked, limited evidence is currently available to describe the relationship and associations between them, and whether one precedes, or predisposes to, the other.

Stunting has been shown to precede acute malnutrition in small infants (in Malawi). Less clear is whether wasting precedes (or predisposes the child to) stunting. However, it could be expected that periods of acute malnutrition might affect linear growth patterns if sufficient 'catch up growth' is not achieved after each episode of wasting. It could also be anticipated that, where a child suffers repeated episodes of wasting, they will be less likely to ultimately reach their optimal height, particularly if the next episode of wasting occurs during the period of catch up growth. Children being treated for acute malnutrition can take up to 100 days to recover (or even longer when they relapse). During this period of recovery, the linear growth of a child will be curtailed. There is strong evidence demonstrating that the first 1000 days of life (700+ days ex-utero) are a critical window of opportunity for addressing stunting. Yet, since prolonged or recurrent periods of acute malnutrition most commonly affect children within these first 1000 days (especially those aged 12 to 24 months), it is likely that this will block a significant proportion of the period for optimal child growth.

Furthermore, the results of recent research show that there is an additive or cumulative risk of mortality when a child has acute malnutrition and is also stunted. It therefore makes sense to consider acute malnutrition and stunting together³².

A large review³³ of 175 studies examined the associations between stunting and acute malnutrition and concluded that while there was a correlation between the two conditions in Asia and the Eastern Mediterranean, there was low correlation in Africa and Latin America. As the review found comparable degrees of stunting across the regions, the authors concluded that acute malnutrition and stunting prevalence may reflect underlying dietary insufficiency in different ways. Areas with high rates of wasting do have high rates of stunting, but areas with low rates of wasting can still suffer from high rates of stunting due to ongoing nutritional deficiencies; the prevalence of wasting does not therefore act as a good indicator for the prevalence of stunting.

The authors explained that stunting is a far more common event than the prevalence of earlier wasting instances can explain. It is likely that the cause of stunting in each country is due to a mixture of exposures, some having more to do with quality of diet or lack of specific micronutrients, others having to do with environmental exposures or access to treatment of infectious diseases, and only some of these potential causes would involve wasting. The authors conclude that acute malnutrition in the form of wasting is associated with the process of stunting, and prevention of wasting could therefore potentially increase attained stature in children.

What is clear is that more evidence is required in order to better understand the complex relationships and associations between these two forms of malnutrition. Deeper understanding of changes in weight and length will mean that resources can be better targeted to combat malnutrition, reducing child mortality and ultimately leading to increased economic productivity and health gains in adulthood.

³² McDonald, C.M. et al (2013) The effect of multiple anthropometric deficits on child mortality: meta-analysis of individual data in 10 prospective studies from developing countries. *AJCN*, February 2013.

³³ Victora C. G (1992). The association between wasting and stunting: an international perspective. *Journal of Nutrition*. 06/1992; 122(5):1105-10

requirements while, for other donors, there appears to have been a gradual shift away from funding governments and an increase in funding through the multilateral agencies. The effects of such donor behaviour on government behaviour are hard to quantify but one likely consequence is that governments may come to view CMAM as *“a donor funded short term programme for which they have little responsibility”* in spite of its inclusion in national plans. Another possible consequence is that *“governments think they can get funding from UNICEF, CIFF and other agencies for CMAM, so don’t need to earmark domestic budgets for this programme”* (World Bank).

Parallels can be drawn between the current situation of CMAM financing and to the Extended Programme on Immunisation (EPI), HIV, Vitamin A supplementation and malaria programmes of ten to twenty years ago *“whereby funding was largely externally held and donor driven”* (World Bank). With respect to EPI, in the early 1990s there was a real reluctance by governments to cover the recurring costs, but this dramatically shifted over a period of ten years once governments were encouraged to include the medium term costs in their public expenditure plans and the case for impact of these programmes was effectively made to the ministries of finance. As stated by one interviewee, we *“need to have this 10 year time horizon for CMAM”* (REACH). In the early days of HIV scale up, programming started off on the back of emergencies and funds bypassed government. Subsequently, the establishment of the Global Fund meant that resources went directly to governments and at the same time, there was considerable investment into reducing the cost of ARTs (undertaken by UNITAID). It should be noted, however, that HIV probably got global funding *“because it was seen as a security issue and not a development issue and it had a huge civil society and human rights focus”* (WHO). Today, there is an estimated 50% global coverage of ART.

Concern has also been raised that the current financing arrangements means that *“nutrition actors in government are not getting to deal with funding on a regular basis”*. For example, in Ethiopia, the donor funding for nutrition that goes into the government budgetary system (as opposed to the significantly more that goes into multilateral partners), tends to be administered by the Ministry of Finance and Economic Development (MoFED) rather than the MoH. Furthermore, nutrition departments in government are often marginalised, and lack the

confidence or capacity to negotiate robustly in annual budget decision making. They also mainly communicate with UN agencies rather than directly with their own government or the larger donors where the real influence resides.

Another related consideration is that the transaction costs of donors funding SAM and MAM treatment and prevention through UN agencies and international NGOs compared to funding directly through government may be considerably higher, although no analyses or modelling have yet been undertaken to demonstrate this. Questions have been raised during this review about the incentives for UN agencies to drive CMAM programming costs down from the current levels and whether the current status quo may hinder increased government capacity and ownership of CMAM. Similarly, questions emerge as to whether UNICEF and other IPs are driving the process of scale up too hard and too quickly, thereby bypassing or avoiding a more ‘organic’ and advocacy led process whereby government builds up a political commitment and domestic support for embedding the CMAM into health system strengthening, with resulting long term sustainable domestic resource commitments.

Another tension that may arise over allocation of resources concerns the relative prioritisation given to SAM versus MAM and the extent to which donors are aware of the ambiguity around integration of MAM treatment and prevention into C-SAM and implications for resource flows and allocation (see section below). Whether and how donors plan globally and at country level to divide resources between SAM and MAM treatment and prevention is unclear, though it likely that the unambiguous cost-effectiveness of SAM treatment in contrast to the lack of evidence for MAM treatment and prevention is likely to be influencing resources decision making. There is a real concern amongst many donors and governments interviewed about the product driven focus of MAM treatment and prevention and the need to focus on non-product based approaches to MAM. There are examples of governments and agencies discharging recovered SAM children into IYCF counselling programmes to continue their recovery (though the effectiveness of these approaches are not yet clear) in the absence of SFPs which are often not available in development contexts.

6 RUTF production

One of the major challenges to CMAM programming is the long-term provision of supplies (RUTF, therapeutic milk, antibiotics, equipment). In **Malawi**, the only country globally that produces all its RUTF, still faces constraints (see Box 1, p19). The cash flow for the districts to purchase supplies is particularly difficult (large amounts of cash are needed for procurement). Funding to districts where decentralisation of health systems has occurred can be problematic, with donors and agencies preferring to fund centrally to reduce fiduciary risk. Cash flow problems for supplies are beginning to emerge and periodic stock outs are reportedly leading to lowered outcomes for the beneficiaries. In addition the CHAI are trying to pull out (they have been funding supplies for a long time in Malawi).

In **Mozambique**, the main challenge is also supplies because of the expense of procurement, logistics and storage of RUTF. In an emergency, UNICEF brings in supplies but, otherwise, the Government of Mozambique has responsibility, although typically they need UNICEF to assist each year as government lacks sufficient funds to meet the demand.

In **Ethiopia**, supplies are much more difficult to fund and stock outs are reported,

“First, because of the expense when so much is needed and secondly, because historically the supplies have been funded through emergency channels, so it has been really difficult to try and get longer term funders interested in taking it on”.

As a response to this, UNICEF is consulting key stakeholders on the possible merit of establishing a central funding mechanism for securing the RUTF pipeline, thereby avoiding the delays and stock-outs experienced when demand increases. The total annual cost for RUTF supplies has been estimated at US\$21.5 million, using an estimate of US\$66³⁴ per child.

A widely held view is that most governments of poor countries will never be able to fully finance treatment

of acute malnutrition from their domestic budgets because of the very high costs of RUTF and so will always need an element of donor or private sector financing. The belief that greater competition amongst producers at international level or that local production of RUTF may partly resolve this challenge may be misplaced. This is partly because ingredients like dried skimmed milk (DSM) and vitamin mixtures are so costly. Packaging (which contains aluminium) is also a significant cost. Indeed, local production can be more expensive. The main reasons for this are because of the import duties for the raw materials, inefficiencies of production in developing countries, product testing costs, no access to cash loans (can be 20% interest) and difficulties with cash flow. The best local suppliers are probably those working in export zones, so that importation costs can be avoided, although these suppliers will still face import duties to neighbouring countries. It has been argued that, if RUTF can be put onto the essential supplies list, then the government could buy it more easily and avoid the importation taxes for raw materials associated with local production (see below).

Once a decision is made to invest in local production, UNICEF often takes the role of trying to help with setting standards, providing guidance on what to expect, what inspections will be needed, securing procurement, etc. When local production is established, UNICEF are often prepared to pay a higher cost to help stimulate and establish the production, e.g. in Haiti and Sudan the cost is much higher than if bought at price on the international market.

There are many countries with a high need for RUTF and no local production, e.g. **Yemen, Pakistan** and **Chad**. Private sector organisations that are trying to produce RUTF in-country (e.g. in Kenya and Ethiopia,) are facing a number of obstacles, including sourcing high quality ingredients, quality production issues, etc. Nevertheless, the cost-savings can be significant. In **Ethiopia** for example, UNICEF bought local RUTF in

³⁴ The planning figure normally used is US\$100/child, but this includes humanitarian start-up costs as well as programme maintenance, logistics, training, M&E, etc. The UNICEF figure does not cover administrative costs, staff costs or training but covers commodity procurement, logistics and M&E.

2012 at US\$50.66 per carton. It also purchased internationally (at US\$54.18 per carton) and had the additional freight cost of US\$6.65 per carton, totalling US\$60.82 for the imported RUTF. This constitutes a 20% higher cost increment for imported versus locally produced RUTF. But, because of concerns around capacity and quality, UNICEF is aiming only at a 50/50 split between local and imported RUTF.

Local production of RUTF is also starting in some west African countries (e.g. Niger) and planned in others (e.g. Burkino Faso, Senegal, Nigeria and Cameroon) but it is acknowledged that local production in these countries will only marginally reduce the cost of RUTF (lower transport costs) as the producers still have to import DSM. The main benefits of local production are therefore preventing stock outs, reducing lead time to delivery, and slightly lower costs due to avoidance of some import taxes. By 2010, UNICEF was procuring 23% of its RUTF from locally produced sources.

In **Ghana**, where it is hoped to start production of RUTF in 2015, discussions are underway to 'ring fence' the cost of RUTF through the national health insurance scheme fund and, in this way, ensure its supply and reduce dependency on external donors. In contrast, the use of RUTF is viewed in many Asia countries (India, Bangladesh) with scepticism. In these countries, CMAM is viewed as a 'western construct' pushing a particular product when other products (less costly, locally produced) may well suffice. In **Bangladesh**, treatment of SAM is being carried out in some districts using a non-patented locally produced RUTF. RUTF as per an international/UNICEF approved import is banned.

In **Kenya**, during the 2011 emergency, the World Bank secured additional funds through the Kenya Health Programme for the drought response, providing a US\$12.7 million loan to the Government of Kenya for the procurement of RUTF and RUSF. The loan represented the first time the World Bank has directly supported nutrition in Kenya and the World Bank is now considering expanding its nutrition support "to advocate for RUTF and RUSFs (as well as micronutrient powders (MNP)) to be part of the governments essential medical supplies system" known as KEMSA (World Bank, Kenya). This would mean that KEMSA can either directly procure these commodities or be responsible for collection from the main port of entry (Mombasa). Importantly, it would also mean that as the

Government of Kenya has these commodities on their books, they become part of regular funding and thereby, are likely to remain in the treasury annual budgets.

Work is also ongoing into alternative formulations of RUTF and in particular replacing the DSM component. Some trials are showing that these products have a similar impact on reducing mortality but that there is a longer period required for recovery leading to higher default rates. However, even with alternative formulations, the most optimistic forecasts are that cost will not be reduced by more than 20-25%. Research into alternatives to RUTF is also underway in **India** with support from the Gates Foundation. This is a randomised control trial which will compare locally produced RUTF with alternative formulations. Results from this study are not expected until 2015.



Lucia Zoro, Northern Nigeria, 2011

7 Division of responsibility between UN agencies for acute malnutrition

Global responsibility for acute malnutrition has been divided between the four main UN agencies (UNICEF, WFP, WHO, UNHCR) in recent years. UNHCR is responsible for SAM management in refugee contexts and has MOUs in place with WFP to govern areas of collaboration. Most critical to this review are the specific responsibilities of UNICEF, WFP and WHO.

What appears to have begun as a pragmatic division of labour between UNICEF and WFP around food and non-food supplies in the nineties (WFP for food, UNICEF for more specialised commodities) has evolved into discrete areas of responsibility for MAM and SAM prevention and treatment between these two agencies. The evolution from the 1997 UNICEF/ WFP MOU, to the latest version (2011), sees UNICEF with responsibility for SAM (and more specifically, outpatient treatment) and WFP with responsibility for the treatment and prevention of MAM. In principle, WHO governs complicated SAM (in-patient care) and is also the source of normative guidance for all UN

agencies. The separation of acute malnutrition in this way between UNICEF, WFP and WHO is possibly a unique situation, without parallel for other child survival related conditions. How this is playing out at the global, regional and country levels is described below.

Originally the community based model for treatment of acute malnutrition envisaged that SAM and MAM treatment would be integrated into the same programme. In 2005/6, UNICEF and WFP began the process of establishing a global MOU setting out that UNICEF would take responsibility for implementing or supporting the implementation of OTPs to manage the uncomplicated SAM caseload while WFP would take responsibility for implementing or supporting the implementation of SFPs for MAM. In 2011 UNICEF and WFP renewed their MOU in the form of a revised technical matrix of collaboration to define roles and mutual commitments for treating acute malnutrition, which should act as a guide to country level MOUs. Both this agreement and the more recent WFP

Nutrition Policy (2012) clearly state that WFP is the UN lead agency for MAM treatment and prevention and UNICEF (or UNHCR) for SAM treatment³⁵.

With the objective of strengthening UNICEF/WFP collaboration at regional and country level, the 2011 matrix for collaboration clearly states that “WFP will work on MAM wherever UNICEF is doing C-SAM” and that this updated division of labour is “aiming for synergistic effects of complementary resources and activities”. In addition, it states that WFP agree to build the capacity of governments to address MAM with a focus on the 1000 day window so that MAM programmes include pregnant and lactating women. The agency roles and responsibilities for SAM and MAM are not mutually exclusive; provision is made for WFP to get involved in SAM treatment and UNICEF to get involved in MAM treatment in case the focal agency is not able to provide the service. In general, WFP will coordinate the organisation of SFPs, “except in situations, agreed upon by both agencies, where UNICEF is in a better position to carry out this responsibility”. The procedure proposed is to

negotiate this at country-level (with HQ support if needed). Whilst WFP has a responsibility “in consultation with partners to provide food for TFPs according to established UN protocols in areas where UNICEF is not able to do so” (2011), it is not clear if this includes therapeutic food and how other elements of support that would be missing in UNICEF’s absence, would be delivered. Under this matrix, both MAM and SAM treatment are located within the CMAM approach. Of note, WFP is also increasingly taking responsibility for MAM in non-emergency contexts.

A general principle reflecting current practice is that hospital based management of acute malnutrition comes under WHO and outpatient treatment under UNICEF. WHO is working on a global MOU with UNICEF on CMAM. WHO have in some instances developed an MOU with UNICEF on the management of SAM at regional/country level, specifying respective roles and responsibilities, e.g. in Pakistan. Such negotiated responsibilities are dependent on country capacity (WHO HQ).

7.1 Fulfilling roles and responsibilities within MOUs

7.1.1 Moderate acute malnutrition

Numerous interviews with Government, UNICEF and donor staff have indicated that there appear to be significant challenges for WFP in fulfilling these relatively new roles and responsibilities, particularly in non-emergency contexts. Although WFP is often able to implement MAM programmes in emergency contexts, there can still be confusion and inconsistencies in the coverage of interventions in relation to OTPs in these contexts. For example, MAM programming in **Kenya** is only taking place in some areas where OTPs are being implemented by UNICEF. Although the extent of overlap is not fully known, it is estimated that 20% of IMAM programming excludes

SFPs. The extent of overlap in **Ethiopia** is even lower. In countries like **Nigeria** and **Ghana** where WFP does not have a presence, the focus of implementing partners is on SAM treatment alone with management of existing cases of MAM being supported through IYCF interventions.

In **Malawi** there was a clear agreement between WFP and UNICEF regarding MAM and SAM responsibility and today, the CMAM programme combines both treatment of SAM and MAM, targeting children under 12 years of age and pregnant and lactating women. However, only 58% of OTPs have associated SFPs (see Box 1).

³⁵ UNICEF and WFP (2005). Updated guidance on mutual areas of responsibility and collaboration for nutrition. An update to the UNICEF, WFP 2005 MOU. See also WFP/EB.1/2012/5-A. WFP Nutrition Policy, February, 2012. Paragraph 23.

In **Ethiopia**, there have been significant difficulties in providing a seamless connection between the management of SAM and MAM. These start at the monitoring/screening/referral stage, but most significant is the issue of programme performance. Whilst the OTP has been shown to be effective in reducing mortality associated with SAM, the performance of the SFP has been seriously questioned. The result has been that donors, with the notable exception of DFID, have been unwilling to continue funding the SFP unless and until its performance is seriously improved. To this end, WFP has been piloting approaches in selected areas through 2012, using underspend from the 2011 crisis. In the meantime, from January to October 2012, WFP responded to 273 priority districts of the 600 or so districts that had an OTP (45%); the majority of OTP sites therefore have no linked supplementary feeding component.

In **Somalia**, “WFP MAM programming has been ad hoc” (UNICEF Somalia) and UNICEF have frequently had to take this role on for long periods in different regions. There have been many occasions in which children graduating from OTPs have had to be discharged with no SFP follow up care. Where WFP have been absent, it has been difficult for UNICEF to provide the level of SFP support necessary.

In **Sierra Leone** the Government is struggling with MAM/SFPs as this is not being well financed by WFP and there are numerous stock-outs. OTP is being financed by UNICEF, though geographical coverage is only 50% while actual caseload coverage is far less. The Government of Sierra Leone are unable to fill the gaps that are evident in MAM programming.

In **Sudan**, MAM is not being adequately addressed as part of CMAM programming. WFP only have funding for Darfur even though their MOU dictates that they should be covering other areas where UNICEF are working (east and southern Sudan).

Djibouti has a CMAM programme that has been expanding since (Sudanese) drought and refugee displacement in 2011. Here, UNICEF is implementing both SAM and MAM (SFP) as part of CMAM. UNHCR is also involved but UNICEF was on the ground first and so has a more evolved programme. UNICEF has been discussing with WFP the need for MAM programming since the introduction of the cluster in Djibouti.

In **Yemen** there has been a big effort to increase coverage of MAM and SAM via CMAM since 2011. Currently UNICEF is not doing much MAM treatment

compared to SAM due to lack of resources. A significant constraint is the lack of IPs on the ground as there are few international NGOs. However, since the beginning of the year, WFP has been attempting to implement food security programmes in the same areas that UNICEF is implementing CMAM.

In **West Africa**, a regional protocol covering SAM and MAM is being developed. UNICEF will focus on scale-up plans for SAM only. Although there is a need for similar scale-up plans for MAM, these may be delayed as WFP is facing resource constraints.

There is also confusion about the choice/effectiveness of products versus non-food based approaches to treat and prevent MAM. In

Mozambique, there are differences of opinion about how best to address MAM. USAID, for example, finance programmes which focus on BCC around IYCF and some treatment, but do not support a product driven MAM approach.

There are many unanswered questions about how and what type of programming should be taking place for children with MAM in the context of CMAM programming. For example, it is unclear whether, under the recent MOU, WFP envisages taking responsibility for the entire MAM caseload in a given area or whether the responsibility only applies to those MAM individuals who have recovered from SAM through OTP treatment. The former has far more significant resource and pipeline implications. It is also unclear to what extent C-SAM programmes are discharging cases at mild rather than moderate levels of acute malnutrition, and under what circumstances different cut-offs are being applied.

What is clear is that there is an apparent disconnect between UNICEF (and IPs and other supporting agencies) promoting C-SAM and WFP talking about MAM prevention and treatment either in parallel with C-SAM or (in some documents) integrated with CMAM.

A recent UN agency meeting in Geneva (November 2012) began to examine the roles, mandates and operational capacities of respective UN agencies with a view to strengthening cooperation and programme coherence in a number of programming areas, including CMAM. A decision was taken to examine more closely at least four UN agency programmes (Chad, Sudan, Bangladesh and Kenya) in order to determine how cooperation and coordination can be improved and whether current MOUs may need to

be modified. All three main UN agencies in question are starting to discuss the programmatic terminology around acute malnutrition and whether to move

away from the term CMAM. Their concern is whether the term CMAM is a programmatic and conceptual 'straitjacket'.

7.1.2 Severe acute malnutrition

In most CMAM programmes, the medical component of complicated SAM is managed in a hospital setting and it is often assumed that such facilities can take care of them. This, however, is not always the case as health facilities need additional support and capacity development, especially as caseloads increase with the scale up and expansion of CMAM programmes. Recent mapping of CMAM scale up by UNICEF does not indicate the extent to which in-patient care (through stabilisation centres and hospitals) has kept pace with scale up in terms of caseload, capacity strengthening and resources. However, anecdotal evidence suggests that in-patient care may not always keep pace with OTP roll out. Furthermore, aggregated data on performance of programmes (as presented in the UNICEF mapping reports) does not appear to disaggregate performance of children with uncomplicated malnutrition in OTPs and children with complicated malnutrition.

Most of the funding for CMAM programming go into the outpatient component (rightly given 95% of SAM cases can be successfully treated in the community) and WHO is sometimes told by donors to request the funds for in-patient care from UNICEF. However, where WHO cannot secure funds for an IPC role, they cannot build capacity at country level. If there is not adequate capacity, then it is difficult to engage adequately. Hence, WHO ends up not having a presence and then fails to secure funds. A vicious cycle ensues. However, it is not only an issue of financing. In some countries, WHO lacks presence/capacity (e.g. Ethiopia) and UNICEF has no option but to fill the gap for IPC. In **Kenya**, for example, WHO also struggles to capture funding for IPC unless it is during an emergency appeal, in which case it draws on health related appeals for funding. Outside of emergencies, WHO is not a significant player in the IMAM Kenya programme.

Reports from UNICEF staff in **West Africa** highlight the challenges of working with WHO as it does not

have capacity to support in-patient care. In **Somalia**, WHO has had minimal presence and input into the scaling up of stabilisation centres. This has therefore not kept pace with the expansion of OTPs and SFPs (the number of SCs/hospitals where complicated malnutrition can be treated have remained static at 25). WHO has also not been involved in the nutrition cluster meetings in Nairobi where programming in Somalia is planned. During the Horn of Africa response, there were challenges and issues around where SAM treatment was located in terms of coordination. In-patient treatment comes under the health systems that fall under the health cluster but the nutrition cluster argued that in-patient care is a nutrition programme and, since WHO is a member of the Nutrition Cluster, this covers the health aspect. At the recent UN agency meeting in Geneva (see above) WHO clarified that it intends to move further away from any form of operational role in the future.

What is clear from the above with regard to UN agency roles in the treatment of acute malnutrition within a context of rapidly scaling up CMAM is that, up until very recently, there has been little strategic work at global level regarding how SAM and MAM treatment and prevention fit together within coherent programming. The separation of acute malnutrition between UNICEF, WFP and WHO can create a lack of continuum of care. What also appears to be happening is that the three UN agencies are securing different resources from various sources, and may have to compete with each other for financing. Furthermore, the agencies have different criteria for determining the geographical target areas in which they work. These factors may make it more difficult to coordinate with each other and, importantly, with governments to ensure alignment and programme coherence with their priorities. The recent meetings amongst the UN agencies to examine mandates and ways of working in relation to acute malnutrition and stunting are a step towards resolving some of these inter-agency challenges.



8 Lessons from this review

Misconceptions around acute malnutrition need to be challenged. There is need to prioritise prevention and treatment programmes as part of integrated and long-term high impact direct nutrition intervention packages (for example with IMCI, IYCF) alongside nutrition sensitive strategies.

In order to encourage a broader conceptualisation of the problems amongst governments and other stakeholders, advocacy needs to emphasise how acute malnutrition reduces the window of opportunity for addressing stunting. Furthermore, when the two conditions exist in the same individual there is a significant cumulative risk of mortality³⁶. In addition, advocacy to promote the development of costed plans for scale up of CMAM need to emphasise that these are not fixed costs, since other preventive activities should lead to a reduction in the acute malnutrition caseload; thus costs should diminish over time as treatment programmes are scaled down. Countries prone to emergencies,

however, should be aware of the need to retain capacity and resources to scale up if the prevalence of acute malnutrition increases, in order to address the consequences of both immediate and longer term malnutrition.

Current financing arrangements from multiple sources and through multiple supporting and implementing partners inevitably pose challenges for government in coordination, in making resource allocation decisions and in ensuring alignment of programmes with national policies. Exceptionally, the World Bank is increasingly providing significant loans directly to governments for CMAM programming, including RUTF purchase (e.g. in Nepal and Kenya).

The current donor agency financing arrangements for CMAM (and nutrition more generally) largely flow through the multilateral agencies and non-governmental organisations (NGOs), which is likely to inhibit the leveraging of domestic budgets by

³⁶ McDonald, C et al (2013). The effect of multiple anthropometric deficits on child mortality: meta-analysis of individual data in 10 prospective studies from developing countries. *American Journal of Clinical Nutrition*. Feb 20th 2013, doi 10.3945/ajcn.112.047639

nutrition departments in ministries. Treasuries therefore tend to view CMAM programmes as external to their financial considerations.

Governments may need support to develop well costed national nutrition plans. Once these have been developed, many countries will need considerable external financial support to implement them. At the same time, there are a number of countries who can and should be able to allocate significant domestic resources to cover scale up costs. Clarity and agreements are needed on the realistic split between domestic and external resource requirements and how this should change over time on a country specific basis. Cost sharing by donors and governments should, where possible, offer a route to leveraging greater domestic budget allocations to finance nutrition scale up, including CMAM.

The remit of development actors has generally not included the treatment of acute malnutrition. However, the persistence of chronically high levels of acute malnutrition should be recognised as both a development and humanitarian issue, and needs to therefore become a key concern of development actors (implementing partners and donors alike).

The onset of emergencies in a context where governments allocate regular domestic resources for treatment could dictate that humanitarian financing be deployed to deal with surges in cases of acute malnutrition and in this way, guarantee alignment of these resources with existing government arrangements.

A significant impediment to scaling up CMAM is the cost of RUTF. Although local production is increasing globally, it is unlikely to significantly lower costs. Local production will however confer other advantages, e.g. improved supply chain and economic benefits for local farmers. Exploration of options to bring down the cost through research into different RUTF formulations and RUTF alternatives is on-going but needs much greater emphasis and rapid dissemination of findings. There is the potential to put RUTF on the essential medical supplies list thereby obviating import taxation and further reducing prices.

It is likely that the transaction costs of multiple UN agencies and implementing partners (NGO) involvement in the treatment and prevention of acute malnutrition is considerable and that costs can

be reduced by streamlining responsibilities. Furthermore, the overview and process for setting roles and responsibilities needs to be reviewed and clarified with respect to how a condition like acute malnutrition is 'carved up' and then allocated to multiple agencies, without full consideration as to how their respective programmes are to be coordinated.

Over the longer term, it is highly unlikely that governments and supporting donors and partners can afford the cost of treatment of MAM alongside SAM as envisaged in the original CMAM model, i.e. using ready to use foods. There is limited understanding of whether current approaches to the treatment of MAM are effective, affordable and feasible. Research into the prevention and treatment of MAM needs to become a funding priority for multiple stakeholders with a focus on non-food (for example IYCF counselling, cash and vouchers) as well as food based approaches.

Taking action to strengthen the management of undernutrition

1 Clarify the links between acute malnutrition and stunting

As an agency with the mandate to provide normative guidance on nutrition issues, WHO is well placed to compile a briefing note on the relationship between acute malnutrition and stunting based on the published literature. This note should be contextualised by providing an overview of the evidence for persistent high levels of acute malnutrition in many countries and the high burden of stunting in others. Based on this, the note should seek to clarify that 'acute malnutrition' is not simply a result of emergency events and should challenge interpretation or assumptions associated with the terminology to clarify misconceptions about its 'emergency' nature. Furthermore, the note should underscore the need for coherent approaches to the treatment and prevention of acute malnutrition over the long-term. Key areas for research could usefully be

highlighted, such as prospective studies using existing treatment programmes showing the impact of acute malnutrition on stunting and cognitive development.

The SUN Secretariat, along with others such as REACH, are encouraged to continue to clarify to governments the programmatic advantages of linking acute malnutrition and stunting and the theoretical underpinning of this. Key messages to relay are that acute malnutrition is a development concern in the interests of child survival and that it reduces the window of opportunity for addressing stunting and therefore future human capital and development. This necessitates prioritising prevention and treatment programmes as part of integrated and long-term high impact direct nutrition intervention alongside nutrition sensitive strategies.

2 Clarify and streamline donor policies and financing arrangements

There is an opportunity for donor agencies to develop clearer policy statements and operational strategies around the relationship between acute malnutrition and stunting and the implications for their investments in prevention and treatment of acute malnutrition. These policies could clarify that programmes for the prevention and treatment of acute malnutrition can be financed out of development funding windows where there is no emergency. Furthermore, where an emergency occurs, it is imperative not to displace development

financing. In some contexts it may be appropriate to combine humanitarian and development funding.

In recurrent or chronic emergency contexts and in fragile states, where humanitarian funding dominates, donors can explore ways of instigating multi-year funding and/or combining humanitarian and development funding to achieve greater CMAM scale and thus nutrition resilience. Each donor will have different sets of institutional and political challenges in achieving this, so good practice examples might

be shared between donors to fuel ideas. If this ambition is underpinned by clearly articulated donor nutrition policies, which explicitly acknowledge that the persistently high prevalence or high burden of acute malnutrition in many countries is a

development concern rather than a problem to be addressed through emergency response, then advocates of this type of financing arrangement will have greater leverage within their organisations to effect change.

3 Strengthen nutrition governance

In the interests of strengthening nutrition governance, donors could increasingly explore opportunities to fund CMAM (and nutrition programming in general) through direct support to governments in certain contexts (e.g. pooled or earmarked funds or direct budget support), rather than through UN and international NGO implementing partners. However, for this to occur, national CMAM plans/strategies need to be embedded in the pooled fund agreement so that nutrition managers have explicit access to these resources.

Where donors continue to fund through multilateral or international NGO partners, it would be advisable to consider the increased transaction costs of this approach and a clear exit strategy. Where the impediments to funding government are directly concerned with accountability, transparency and 'corruptability' efforts could be made over a realistic time-frame to address these, i.e. institution of an effective audit system.

In order to make progress on these issues, the ENN would advise that advocacy efforts are undertaken through high-level donor forums to develop joint statements of intent by donors. This process could be supported by ensuring the development of more sophisticated finance tracking mechanisms than currently exist so that donor financing arrangements can be monitored more closely. Again, the SUN movement offers a practicable avenue for this, where donors have already embarked on a process to develop a shared approach to tracking resources aimed at nutrition.

In addition, good practice examples of where donors have entered into a more equitable arrangement with governments for financing CMAM through formally agreed cost sharing should be actively shared between donor organisations.

In general, it is in the interests of all stakeholders that there is greater transparency around donor financing of nutrition, including prevention and treatment programmes for acute malnutrition. Existing mechanisms could help make donors more accountable, such as the annual report submitted by the SUN movement to the UN Secretary General; the annual reports to the G8 and African Union on the New Alliance on Food Security and Nutrition³⁷; reports submitted to the World Health Assembly as part of the monitoring of the agreed global 2012 target to reduce stunting by 40% by 2025; as well as specific analyses of these trends undertaken by specialist agencies such as Development Initiatives.

Looking forward, there may also be scope to incorporate such donor accountability in the post-Millennium Development Goal (MDG) framework³⁸, either in association with a specific nutrition target or as part of a wider priority around child mortality, aid effectiveness or good governance. Donor accountability could also be strengthened under the auspices of the EC; following the same process that is being prepared currently within the SUN movement, the EC could track and report on nutrition spending by all EU member states (many of whom are not members of the SUN movement), thereby broadening the reach of such accountability systems.

³⁷ There are five objectives agreed to by the New Alliance, including one on nutrition and one on accountability. <http://www.whitehouse.gov/the-press-office/2012/05/18/fact-sheet-g-8-action-food-security-and-nutrition>.

³⁸ The current Millennium Development Goals expire at the end of 2015. Although much will have been achieved over their 15-year life span, many of the targets set for each of the eight goals will not have been reached. A process is underway to consider whether new global goals should be set for 2016 onwards and what these should cover.

The importance of nutrition governance also plays out at country level. In Ethiopia, for example, the government's strategic leadership on nutrition is beginning to address the historical schism between

how undernutrition is understood, monitored and managed. Options are currently being explored as to how best to bring all aspects of undernutrition together coherently.

4 Clarify UN roles and responsibilities

Treatment of MAM is not always considered or included as a core component of CMAM. WFP, which has assumed responsibility for addressing MAM, is absent from many of the countries with high prevalence rates or high burdens of MAM. Where WFP is not present in a country, clarity is needed as to whether and how UNICEF needs to be resourced to fulfil the role of supporting children with MAM having graduated from SAM treatment, a responsibility implicated in the WFP/UNICEF matrix of collaboration (2011). Equally, in areas where UNICEF is not present but WFP is, clarity is needed as to how uncomplicated SAM cases should be treated.

Given that CMAM scale up relies on integration into existing health systems and good inpatient support for the complicated caseload, the role of WHO in enabling this, in terms of global overview as well as country level support to government, needs strengthening. The current situation whereby WHO

has to seek funding for this role from other UN agencies will need to be addressed

In addition, and as a minimum, there is an urgent need for the global mapping of OTPs, which is currently carried out by UNICEF annually, to be complemented by mapping of SFPs and stabilisation centres within CMAM programmes. This could be informed by a country based analysis showing each agency's presence and the burdens of MAM and SAM and would assist donors in determining whether to invite or support new proposals. This type of mapping could be supported by WFP and WHO respectively, or where these agencies are absent or lack capacity, with the support of UNICEF. Without this information, it is impossible to know the extent to which the current UN tripartite arrangement is providing the level of support needed to scale-up on a country by country basis or where critical gaps exist which need to be filled.

5 Inform country level strategies for funding CMAM scale up

Given the recent surge in costing exercises for scaling up national nutrition programming, including CMAM, it is very important that such calculations are based on integration of CMAM programmes into existing health services, and take account of the decline in acute malnutrition as prevention efforts achieve impact. Good examples of this type of costing should be captured and disseminated for replication in other countries, with donors supporting governments in

undertaking these exercises. The World Bank is well placed to offer such support, having led the international costing efforts to date and been instrumental in supporting the development of national costed plans in specific countries. The SUN movement is another critical actor in this area, having catalysed a great deal of the country costing work undertaken in the last two years. Members of the SUN Donor Network will play a key role in furthering such efforts.

Based on these costing exercises, donors will increasingly have an opportunity to work together on a country by country basis to agree a strategy and vision for financing of CMAM within efforts to scale up nutrition generally. Donor coordination forums at country level could provide the impetus for this in 'signed up' countries. At the global level, donors may explore different strategies for how to support governments scaling up programmes for the

prevention and treatment of acute malnutrition. These strategies will need to account for different elements of and contexts for programming, such as supplies versus human resources, relative gross domestic products (GDP) of countries and increasing domestic expenditure by governments over a realistically set time frame. These strategies can then be clearly articulated in donor policy documents.

6 Enable better technical coordination between donors

The ENN, in the course of this review have observed that there may be added value in greater technical coordination between donor organisations at global level and recommend that a regular technical forum for donor organisations working in the nutrition sector be convened. While the SUN Donor Network meets via teleconference on a regular basis, it is not clear whether this mechanism sufficiently allows donors to review nutrition policies and financing arrangements as a group. A global forum for technical discussion

would also allow donors to collectively prioritise key research areas and institutional arrangements for the delivery of nutrition programmes at country level. The SUN secretariat would be well suited to take a lead on this global forum, given the need to span development and emergency focused donors. The process could start with a small group of interested donors, perhaps involved in the SUN movement, with the UN Standing Committee on Nutrition (UNSCN) brought in as a partner to the process.

7 Priorities for donor research and study

Funding for research into different RUTF formulations and alternatives is a priority. The findings from on-going research in India need to be rapidly disseminated once available. It will also be important to more actively engage the support of the private sector in developing cost saving value chain models for local production of RUTF. Furthermore, product standards for treatment of SAM (SPHERE and World Health Organisation) may need to be revised if cheaper and more sustainably funded formulations are to be used.

Another priority area for research is cost-effectiveness of different approaches for preventing and treating

MAM. The EC could lead on this research, building on ECHO's recent consultation on the prevention and treatment of MAM, but securing broader involvement across the humanitarian and development communities.

There needs to be a review of lessons learnt from the roll out and scale up of anti-retroviral therapy (ART) and malaria programmes globally, which have been underpinned by innovative financing arrangements. Lessons may well help inform efforts to scale up CMAM programming. One lesson had been identified already: "In the past decade, the great majority of additional funding for health has been through new

vertical funds focused principally on specific diseases or interventions, such as vaccination. Important as these are, the record shows that their unintended consequences have included a neglect of broader health objectives and systems. In addition, because the arrival of the new vertical funds was not accompanied by mergers, closures or acquisitions of existing organizations, they also contributed to a greater fragmentation of an already highly fragmented organisational framework.³⁹ Indeed, the outcome document of the Fourth High Level Meeting on Aid Effectiveness (the 'Busan Partnership Agreement') seeks to address this, stating: "We will make effective use of existing multilateral channels, focusing on those that are performing well. We will work to reduce the proliferation of these channels and will, by the end of 2012, agree on principles and guidelines to guide our joint efforts."⁴⁰

The ENN conclude that an economic and risk analysis should be undertaken to compare the transaction (and opportunity) costs of having several UN agencies and implementing partners responsible for acute malnutrition, with having a single agency with overall responsibility. The analysis will need look at the advantages and disadvantages of different options for ensuring optimal coverage for the treatment of acutely malnourished children. Based on these findings and a review of programming experiences in a number of countries, a high level meeting with UN organisations and donor organisations could be convened to agree a set of recommendations on UN agency responsibilities in this area. It will then be possible to identify how programmes to address acute malnutrition can be better aligned and coordinated within national contexts.

Ghana case study presentation, CMAW Conference 2011



³⁹ Keith A. Bezanson and Paul Isenman. 2012. "Governance of New Global Partnerships: Challenges, Weaknesses, and Lessons." CGD Policy Paper 014. Washington DC: Center for Global Development. <http://www.cgdev.org/content/publications/detail/1426627>.

⁴⁰ Busan Partnership Agreement', Fourth High Level Meeting on Aid Effectiveness, 2011

Annex 1 Key people interviewed

Donor Agencies

OFDA/USAID	Peter Morris
	Mark Phelan
	Judy Canahuati
	Greg Collins
	Ann Pennistan
	Greg Gotleib
	Caroline Mutumba
	Susan Bradley
	Tim Quick
	Rebecca Egan
	Violet Dancheck

CIDA	Karine Tardif	
	Benjamin Yung	
	Jennifer Bloom	
	Julita Manda	
	Janine Cocker	
	François Dupuis	
	Dagmo Nour	
	Sonya Rabeneck	
	Trish Chang	
	Anna Jeffery	
	Irish Aid	Mags Gaynor
		Nuala O'Brien
Emma Ward		
Mary Corbett		

EU Dev Co and ECHO	Pedro Campo Llopiz
	Jaques Prade
	Maria Ralha
	Claire Chastre
DFID	Anna Taylor
	Abigail Perry
	Rob Hughes
	Jenny Amery
	Chris Lewis
	Lizzie Smith
	Katie Cuming
	Andrew Clayton

UN Agencies

UNICEF	Jan Komrska
	Dolores Rio
	Erin Boyd
	Werner Schultink
	Vilma Tyler
	Enrique Paz
	Bertha Jackson
	France Begin
	Dorothy Foote
	James Kingori
	Felicite Tchibandat
	Hélène Schwartz

WHO	Zita Weise Prinzo
	Eyerusalem Kebede Negussie
	Karin Stenberg
	Juan Pablo Pena-Rosas
	Carmen Casanovas
	Kaia Engesveen
	Ulysses Panisset
	Lulu Muke
	Daniel Ernesto Albrecht Alba
	Marzella Wusterfeld

WFP	Lynnda Keiss
	Margot Vandervelden
UNHCR	Caroline Wilkinson

Other organisations

ACF	Sandra Matuma
	Elise Rodriguez
Valid	Anne Walsh
	Theresa Banda
CIF	Augustin Flory
	Charles Bleehen
Gates Foundation	Ellen Piwoz

REACH	Bjorn Ljungqvist
SUN Secretariat	David Nabarro
	Anthea Webb
	Patrizia Fracassi
Individuals	Heather Papowitz
	Hedwig Deconnick
	Tasneem Mowjee
	Tanya Khara

World Bank	Meera Shekar
	Ziauddin Hyder
FANTA 3	David Doledec
	Giles Bergean
Development Initiatives	Lydia Poole
	Mariella Di Ciommo
Bread for the World	Asma Lateef

Countries

Malawi	Catherine Mkangami, Save the Children
Mozambique	Edith Possolo, MoH
Sierra Leone	Aminata Shamit Koroma, MoHS
Somalia	Peter Hailey, UNICEF
	Leo Matunga , UNICEF
Ghana	Alice Nkoroi, FANTA2
	Mike Neequaye, Ghana Health Service
Pakistan	Dur-e-Shehwar Khan
	Baseer Abdul Khan
Cambodia	Mary Chea, National Nutrition Programme
Zimbabwe	Wisdom Dube, UNICEF
Nigeria	Chris Osa Isokpunwu
Uganda	Albert Lule
Zambia	Agnes Angola, Ministry of Health
Bangladesh	S M Mustafizur Rahman
Nepal	Shyam Raj Upreti, Child Health Division
	Saba Mebrahtu, Chief, Nutrition Section UNICEF
South Sudan	Victoria Eluzai, Ministry of Health
Tanzania	Helen Sumu, Ministry of Health and Social Welfare
Kenya	Terrie Wefwafa, MoPHS
	Valerie Wambani ,MoPHS
	Judith Nyakawa , MoPHS
	Chris Porter, DFID
	Nick Cox, USAID
	Rose Ndolo, World Vision
	Anne Gitumu, AMREF
	Thomas Ndambu, IMC
	Gemma Dominguez, MSF-Spain
	Martha Kihara, MSF Spain
	Joy Kiruntimi, ACF
	Yacob Yishak, Concern
	Yvonne Forsen, WFP
	Mathieu Joyeux ,UNICEF
	Granine Moloney, UNICEF
Brendah Akwany, UNICEF	

Ethiopia	Pankaj Kumar, Concern Worldwide
	Lulseged Tolla, Concern Worldwide
	Ferew Lemma, MoH
	Sylvie Chamois , UNICEF
	Tewoldeberha Daniel, UNICEF
	Joan Matji, UNICE
	Peter Hawkins, DFID
	Berhanu Hailegiorgis, DFID
	Shaun Hughes, DFID
	Getahun Teka, WHO
	Jutta Neitzel, WFP
	Johan Heffinck, ECHO
	Laurent Saillard, ECHO
	Hailu Samuel, WHO
	Frew Tekabe, World Bank
	Jonathon Anderson, OFDA
	Kate Farnsworth, OFDA
	Mary Harvey, USAID
	Mesfin G. Beko, MoH
	Israel Hailu, MoH
	Isaak Manyama, Emergency Nutrition Unit, MoAgr
	Martha Woldie, JICA
	Alemayehu Semunigus, EU Delegation
Arnaud Demoor, EU Delegation	
Yetayish Maru, Save the Children	
Sherry Hornung, CIDA	
Bogalech Malefia Teseganehi, MoH	
Dr Sereke, MoH	
Julie De Bons, ACF	
Fabienne Rouseau , ACF	



Produced by the ENN,
32, Leopold Street, Oxford, OX4 1TW, UK
Tel: +44 (0)1865 324996
Fax: +44 (0)1865 597669
email: office@ennonline.net
www.ennonline.net