FINANCING THE SUSTAINABLE SCALE-UP OF CMAM IN HIGH-BURDEN COUNTRIES

With case studies from Nepal & Kenya

DISCUSSION PAPER MARCH 2017
Action Against Hunger (ACF) is an international humanitarian organisation committed to ending child hunger and fighting malnutrition. With over 30 years of expertise in emergency situations of conflict, natural disaster & chronic food insecurity, ACF runs life-saving programmes providing communities with access to safe water and sustainable solutions to hunger.

International Medical Corps’ mission is to relieve the suffering of those impacted by war, natural disaster, and disease, by delivering vital health care services and sustainable development projects that focus on training. We run nutrition and food security programmes in some of the world’s most food-stressed areas, helping devastated populations return to self-reliance.

Global Health Advocates (GHA) France works to promote universal and equitable access to health worldwide, including access to nutrition interventions. Its goal is to reinforce the political and financial support provided by French and EU decision-makers on these matters.

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Acronyms

ACF  Action Against Hunger
ASALs  Arid and Semi-Arid Lands
 BMGF  Bill & Melinda Gates Foundation
CB-IMCI  Community-Based Integrated Management of Childhood Illness
CHAI  Clinton Health Access Initiative
CIF  Children’s Investment Fund Foundation
CMAM  Community-based Management of Acute Malnutrition
CRS  Creditor Reporting System
CSANN  Civil Society Alliance for Nutrition, Nepal
CSO  Civil society organization
DFID  UK Department for International Development
ECHO  European Commission Humanitarian Aid & Civil Protection
HI尼  High-Impact Nutrition Interventions
HIV  Human immunodeficiency virus
HLNFSSEC  High Level Nutrition & Food Security Steering Committee
IDA  International Development Association
IMAM  Integrated Management of Acute Malnutrition
IMAMI  Integrated Management of Acute Malnutrition in Infants
IMCI  Integrated Management of Childhood Illness
IYCF  Infant and Young Child Feeding
KEMSA  Kenya Medical Supply Authority
MAM  Moderate acute malnutrition
MoFA  Ministry of Federal Affairs & Local Development
MoH  Ministry of Health
MoHP  Ministry of Health and Population
MoMS  Ministry of Health & Medical Services
MoPHS  Ministry of Public Health & Sanitation
MSNP  Multi-sectoral Nutrition Plan
MUAC  Mid-upper arm circumference
NGO  Non-governmental organization
NICC  Nutrition Interagency Coordinating Committee
NNAP  National Nutrition Action Plan
NNFSS  National Nutrition & Food Security Secretariat
NPC  National Planning Commission
ODA  Official Development Assistance
OECD  Organisation for Economic Co-operation & Development
OFDA  US Office of Disaster Assistance
OTP  Outpatient therapeutic program
REACH  Renewed Efforts Against Child Hunger & undernutrition
RUF  Ready-to-use food
RUTF  Ready-to-use therapeutic food
RUSF  Ready-to-use supplementary food
SAM  Severe acute malnutrition
SUN  Scaling Up Nutrition Movement
TB  Tuberculosis
UNICEF  United Nations Children’s Fund
USAID  United States Agency for International Development
WASH  Water, Sanitation and Hygiene
WFP  World Food Programme
WHO  World Health Organization
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Executive Summary

This discussion paper looks at the experiences of Nepal and Kenya in scaling-up Community-based Management of Acute Malnutrition (CMAM) and explores the wider issues of sustainable financing of CMAM to help tackle childhood wasting by 2025. Some 50 million\(^1\) children under five suffer from acute malnutrition, or wasting. Of these 50 million, 34 million are cases of moderate acute malnutrition (MAM) and 16 million are of severe acute malnutrition (SAM). SAM is the most life-threatening form of child undernutrition and is responsible for one million\(^2\) deaths annually.

Investment in a highly effective approach to identifying, rehabilitating and curing children with SAM – the decentralised CMAM approach\(^i\) – has seen SAM treatment services spread to 80 countries and the number of children treated tripled from a million in 2009 to 3.2 million in 2015.\(^3\) Despite this, global wasting prevalence levels remain stubbornly high and the case for rapid investment and scale-up to treat and prevent acute malnutrition is profound. A number of countries – such as Ethiopia, Malawi, and Niger – have achieved widespread CMAM scale-up to date, while others such as Nigeria have begun investing national budgets in CMAM at the state level.

Both donors and Governments of countries affected by high wasting rates, however, currently spend only tiny amounts on CMAM and high costs and sustainable financing are significant barriers to wider scale-up. Some 31 donors currently spend less than 1% of their Official Development Assistance (ODA) on ‘nutrition-specific’ support – which includes support for CMAM – while 24 high-burden countries allocate a mean of just 1.7% of general government expenditure to ‘nutrition-sensitive’ interventions, covering a range of sectors, including health. Scale-up is hampered by weak health care systems, a lack of integration of CMAM into essential health packages, short-term humanitarian donor funding for many CMAM initiatives, and perceptions that CMAM is an externally funded initiative, and not a core health priority or development issue.

This research examined two countries, Nepal and Kenya, both of which have made efforts to scale-up CMAM and are taking steps to ensure more sustainable financing to tackle acute malnutrition. Nepal has gone from CMAM pilots in six areas with high levels of acute malnutrition in 2008 to plans to cover 35 most affected by 2017. Kenya has rolled out CMAM (known in the country as Integrated Management of Acute Malnutrition) in badly affected areas since 2008 and is aiming for coverage across the whole country through support for a package of 11 High-Impact Nutrition Interventions (HiNi).

We identified the following key success factors in Nepal and Kenya in relation to scale-up:

- **High political and public health priority** – increased high-level political will and priority to tackling malnutrition has galvanised the adoption of CMAM in Nepal, with impetus coming from the Prime Minister’s office and the wider global nutrition agenda. In Kenya, leadership by the First Lady and national Nutrition Patron has kept reducing child mortality and malnutrition high on the political agenda.

- **Increased policy commitment to tackling nutrition** – Nepal has shown leadership in developing concerted policy targets and commitments to tackling child wasting and nutrition, represented most prominently in its comprehensive Multi-sectoral Nutrition Plan (MSNP) from 2012. Kenya, too, has developed a comprehensive National Nutrition Action Plan (NNAP), which runs until 2017.

- **Ministry of Health support and integration into existing health systems** – Nepal’s MSNP calls for management of SAM and MAM to be fully integrated into routine health services. The Ministry of Health and Population has worked with partners to train health volunteers and workers in CMAM at district and community levels. In Kenya, the Ministry of Public Health & Sanitation championed IMAM and its protocols have been integrated into Kenya’s Essential Package for Health – as well as routine HIV screening.

\(^i\) The CMAM approach covers the treatment of both severe and moderate acute malnutrition.
**Multi-sectorial coordination** – multi-sectorial coordination of nutrition strategies, programmes and plans has seen much progress in Nepal since the MSNP in 2012. In Kenya, coordination among stakeholders within the nutrition sector has improved since Kenya joined the SUN Movement in 2012.

**Moving towards financial sustainability** – Nepal has established a budget line for MSNP and nutrition-specific interventions, which is a key step towards greater financial sustainability. However, the Government of Nepal spent just 1.1 percent of its total government budget on nutrition in 2015-16 – and just $3 million on acute malnutrition. Similarly, nutrition has its own budget line within the Kenyan Health Sector Strategic and Investment Plan, although the Government allocated only an estimated $8.4 million – or $0.18 per capita – for nutrition-specific interventions in 2014. Overall, Kenya spent just 1.3 percent of its total health budget on nutrition-specific interventions.

**Resource mobilisation**

Recent estimates suggest governments as a whole must invest an additional $70 billion over ten years to achieve the World Health Assembly (WHA) targets on stunting, anaemia and exclusive breastfeeding by 2025 and treat at scale severe acute malnutrition. Within this package, an $9.1billion is needed to treat SAM. More will be required for the treatment of moderate acute malnutrition and prevention of acute malnutrition overall. Governments of affected countries and donors currently spend tiny amounts on nutrition-specific interventions and overall the World Bank say a 3.5 fold increase is required to close the funding gap by 2025.

We analysed the ODA that key donors (the EU, UK and US) gave for interventions relating to acute malnutrition between 2010 and 2014 and found they gave just $270 million to 362 projects during this period. (N.b. this analysis excluded financial support given by these donors via multilateral aid channels and only captured projects containing the term ‘acute malnutrition’.) The EU supported the most projects relating to acute malnutrition (171), although most of these were funded via emergency or humanitarian funds. The US supported 161 interventions, while the UK supported 30 projects. However, financial support by all three donors already appears to have peaked. Innovative finance could contribute an additional $3.4 billion over ten years. Promising initiatives and channels for increasing funding for CMAM identified include:

- UNITAID
- UNILIFE
- The Power of Nutrition
- The Global Financing Facility in Support of Every Woman Every Child
- The Global Fund to Fight AIDS, Tuberculosis and Malaria
- World Bank
- Bill & Melinda Gates Foundation
- Children’s Investment Fund Foundation

High burden countries currently spend about $2.9billion on nutrition-specific interventions, however, it is estimated Governments will need to mobilize an additional $3.9 billion per year over ten years to reach the three global nutrition targets mentioned above and to treat SAM at scale. Nutrition-sensitive allocations currently represent only about 1.7 percent of total government spending and it is recommended that domestic Governments should commit at least 3 percent of relevant Government budgets for nutrition. Financial sustainability lies in taking greater domestic ownership of CMAM, driving down ready-to-use therapeutic food (RUTF) costs and making sustained investments in prevention strategies.

Governments and donors must triple their nutrition-specific contributions to help achieve their goals on the treatment of wasting and other areas, while at the same time doing more to tackle the root causes of undernutrition. Additional support from international funds, innovative finance and philanthropy can help fill some of the $900 million-a-year funding gap.

Read our policy recommendations and discussion points on pages 30-31 of the full report.
1. Introduction

This discussion paper looks at the experience of Kenya and Nepal in scaling-up Community-based Management of Acute Malnutrition (CMAM) and explores the wider issues of sustainable financing of CMAM to help contribute to country-level and global goals to tackle childhood wasting by 2025. We examine the role that must be played by donors in supporting scale-up, with a particular focus on the EU, the United Kingdom and United States, and also explore the different options for new, innovative financing. It is estimated that Governments as a whole must invest an additional $9.1 billion in 37 high-burden countries over 10 years to treat severe acute malnutrition. What can be learned from CMAM scale-up efforts in Kenya and Nepal and where might the additional sustainable finance come from?

An estimated 50 million children under five worldwide suffer from acute malnutrition, a condition also known as wasting. Described as an ‘everyday emergency’ in view of its existence in stable, development contexts as well as in humanitarian emergencies, wasting affects mostly children under five, with the vast majority of cases found in low- and middle-income countries. Of these 50 million, 16 million are cases of severe acute malnutrition (SAM) and 34 million are cases of moderate acute malnutrition (MAM).

Children with wasting have a very low weight for their height and/or a mid-upper arm circumference (MUAC) of less than 125 millimetres (<115 millimetres for SAM). Children with SAM may also have nutritional oedema – characterized by swollen feet, face and limbs. SAM is one of the top nutrition-related causes of death in children under five worldwide and a child with SAM is twelve times more likely to die than a well-nourished child. Most deaths from acute malnutrition are linked in a vicious circle to illness and infections such as measles, malaria, diarrhoea, pneumonia, tuberculosis (TB) and HIV/AIDS. Such are the high risks of mortality that current global levels of severe wasting are responsible for one million deaths annually. Furthermore, if children with moderate acute malnutrition (MAM) do not receive proper treatment, many will go on to develop SAM.

50 million children under five worldwide suffer from acute malnutrition
34 million are cases of moderate acute malnutrition
16 million are cases of severe acute malnutrition
Of the total number of wasted children about 34 million live in Asia and 14 million live in sub-Saharan Africa. While a significant number of the world’s wasted children live in countries with high levels of food insecurity and protracted crises, the majority are in non-emergency contexts, including countries such as India, Indonesia, Niger and Sri Lanka. Moreover, current global estimates may well underestimate the actual annual burden. Most surveys lack any correction for incidence and depending on the timing of the survey on which they are based, estimates may also miss large seasonal peaks of wasting.

Despite the scale of the problem, until the early 2000s, wasting appeared to be a neglected issue. Little support went towards large-scale efforts to tackle the condition and few countries had policies for identifying and treating SAM and MAM-affected children. However, the adoption of a new approach – the community-based management of acute malnutrition (CMAM) – changed the public health nutrition landscape by bringing treatment out of hospitals and into the community.

The community-based model is described as arguably one of the most important paradigm shifts in public health nutrition within the last decade. Nowadays, 80 countries implement SAM services – although just 16 of these provide national treatment coverage greater than 50 percent of need. The case for widespread scale-up to prevent and treat severe and moderate acute malnutrition is urgent and profound. Globally, 25 countries have wasting rates above the public health emergency range – greater than 10 percent prevalence – and the global wasting prevalence has remained steady at 8 percent, with a recent minimal decline to 7.4 percent.
2. What is CMAM?

To what extent has it been scaled up to date?

Growth of CMAM

Dramatic improvements in identifying, rehabilitating and curing children with SAM have been made – and CMAM has been central to these efforts. Global treatment of SAM is estimated to have more than tripled from 1 million children in 2009 to 3.25 million in 2015.

Children with SAM were previously treated as inpatients at district hospitals or clinics, often based in towns far away from family homes. High transport and care costs, limited bed availability and long stays of between five and eight weeks for both children and carers were significant barriers to access. Unsurprisingly, these centres served only 4-10 percent of the affected population and death rates were typically 20 to 30 percent.

Now with recovery rates of 84 percent, low default rates, death rates of 1.5 percent, and standard treatment periods of 45 days, the decentralized CMAM approach is predicated on early case identification and is based on the following main components:

- **Community outreach and mobilization**
  
  Based on active case finding and sometimes going door-to-door, community health workers and health volunteers are trained to screen and actively identify cases of acute malnutrition amongst children aged 6-59 months by measuring MUAC with plastic colour-coded tape measure strips. A simple traffic light system alerts health workers if children are in the ‘red zone’ and are severely acutely malnourished or in the ‘yellow zone’, indicating moderate acute malnutrition.

- **Outpatient therapeutic program (OTP)**
  
  Children aged 6-59 months with SAM and few medical complications (75 to 80 percent of affected children) are referred to an outpatient therapeutic programme (OTP), which is usually part of a local
2. What is CMAM?

The CMAM programme begins by sending a child to a designated health centre. The program checks a child’s weight-for-height and offers routine medical care before sending the child home with enough energy-dense ready-to-use therapeutic food (RUTF) until the next visit. Visits to the OTP/health centre take place on a weekly basis, so that treatment can be monitored. Lipid-based and refrigeration-free RUTFs are administered by mothers or carers and allow recovery to take place in the community.

▶ Inpatient care

Children aged 6-59 months with severe acute malnutrition and medical complications (about 15 percent of cases) are referred to hospitals, where they are stabilised and treated with therapeutic milk products called F75 and F100. The children are linked to an OTP before discharge and undergo continued treatment within the community.

▶ Supplementary feeding

In most countries, CMAM offers supplementary feeding for children with MAM. Those with MAM in emergencies are often treated with specially formulated supplementary foods – including ready-to-use supplementary foods (RUSFs), such as Plumpy’Sup, the lipid-based nutrient supplement Plumpy’Doz, plus fortified blended flours (FBFs) and Supercereal Plus (formerly called Corn Soy Blend Plus (CBS++). In more stable environments there is an increasing preference for nutrition education guidance on healthier diets. This promotes high-quality home-available food that is coupled with general health promotion to mitigate underlying factors contributing to wasting, for example, WASH (water, sanitation and hygiene) and health-seeking behaviours. Treatment efforts for MAM can also be linked to preventive strategies, such as cash transfers and fresh food baskets. These interventions can be targeted at households or communities which are vulnerable to undernutrition.

Moving on from an ad hoc and largely parallel NGO-led pilot phase, CMAM began to be adopted on a wider scale – primarily in short-term emergency and humanitarian crises – after it was officially endorsed by the World Health Organization (WHO), World Food Programme (WFP) and United Nations Children’s Fund (UNICEF) in 2007. This paved the way for international agencies, donors and Governments to begin scaling-up CMAM at the national level and to view community-based management of SAM and MAM as integral to routine health activities.

Although CMAM is proven to be highly effective in a variety of contexts, the scale-up of these interventions is still limited: less than 20 per cent of affected children are able to access the care and treatment they need. This is partly because treatment of SAM and MAM for children is more expensive than other nutrition interventions. The intensive curative nature of the CMAM intervention requires a significant amount of time spent with health care providers – including initial triage, anthropometric measurement and diagnosis, assessment of complications, drug, RUTF and RUSF dispensing, nutrition counseling for mothers and weekly follow-up visits.

More significantly, protein, energy and micronutrient-rich ready-to-use foods (RUFs), such as RUSFs and RUTF pastes, are also relatively expensive. Often imported and currently made from high quality peanuts, dried skimmed milk powder, sugar, oil, vitamins and micronutrient supplements, the predominant RUTF product, Plumpy’Nut (patented and predominantly made by French company Nutriset) for example is costly at $3,500/tonne and currently accounts for about half all CMAM costs. Complex storage, logistics and distribution also add to the final costs.
**High CMAM costs**

The resultant costs of CMAM can be fairly substantial for affected countries. The average costs of successfully curing a child through CMAM range from $135 per child in Ethiopia, $165 in Bangladesh, $169 in Malawi, $203 in Zambia and $219 in Nigeria. Although the absolute costs of implementing CMAM are significant, the fact that treatment targets a group at very high risk of death means that it is as cost-effective as ‘cheaper’ but less targeted interventions. Furthermore, the World Bank recently estimated that the overall cost of RUTFs will likely fall over the next decade due to a combination of efficiencies and calculate on this basis that the average cost of CMAM treatment could drop to $100 per child.

Although most RUTFs are currently manufactured in and imported from advanced economies, and despite a restrictive patent held by Nutriset in about 35 African countries, the technology to produce them has been introduced in poor countries with minimal industrial infrastructure. As a result, local production of RUTFs is increasing. Local producers in 16 developing countries – including Burkina Faso, Ethiopia, Kenya, Malawi, Niger and Sudan – now supply UNICEF, the world’s largest RUTF purchaser and distributor. UNICEF says RUTF manufactured closer to where the needs are most critical reduces delivery lead-times and transport costs. In 2015, 38 percent of the 34,851 tonnes of RUTF procured by UNICEF was sourced locally. UNICEF’s goal is to increase this to 50 percent, but access to financing is one of the primary bottlenecks for local suppliers. Other efforts to drive down RUTF costs include cheaper low-dose RUTF protocols and the development of alternative RUTF formulas that make use of locally available ingredients, such as soya-maize-sorghum RUTF.

**Global goals on wasting**

The 2012 World Health Assembly (WHA) target is to reduce and maintain childhood wasting to less than 5 percent by 2025. Like the stunting target, the WHA target for wasting was incorporated into the Sustainable Development Goals in 2015. Despite these high-level global commitments to scaling-up the treatment and prevention of wasting, there are no explicit targets or indicators for adopting CMAM at scale or for treatment coverage, and consequently many obstacles remain. Furthermore, wider country-level scale-up of CMAM has been hampered by weak primary health care systems and a lack of integration of CMAM into the essential health packages of high-burden countries, short-term (typically six to twelve months) and unpredictable humanitarian donor funding for many CMAM initiatives, and perceptions that CMAM was an externally funded stand-alone initiative, and not a core public health priority or development issue.

Some early adopter countries are forging ahead in scaling-up CMAM, at least in terms of the proportion of health facilities offering the service. Ethiopia, Malawi and Niger have achieved high geographic coverage – as of 2013, reported as 60 percent, 87 percent and 89 percent, respectively. Strong national ownership, high political commitment, Ministry of Health support, integration into health systems and a more coordinated cross cutting multi-sector approach have contributed to their success. However, they have also received substantial funding, intensive NGO support and international attention for the management of SAM. Only Malawi has committed to take over the financing of the CMAM programme by developing a costed operational plan for integrating CMAM into Ministry of Health services. Niger has yet to integrate nutrition into its annual planning and budgeting, leaving NGOs to fund doctors and nurses, while UNICEF
pays for 80 percent of RUTFs. Ethiopia has relied on short-term funding from donors in ‘non-emergency’ periods. As a result, it has scaled-up CMAM without a central plan.56

Finally, however, Nigeria stands out in that it has both successfully begun to scale-up CMAM in 11 worst affected northern states and has started committing domestic resources to the programme. Supported by a $35 million investment from the Children’s Investment Fund Foundation (CIFF),57 the Government of Nigeria committed $2.2 million for the CMAM programme in 2014 from state and federal funds and has been urged by stakeholders to increase its financial commitment to CMAM over the longer term.58

Finance for CMAM scale-up

The world must invest an additional $70 billion by 2025 in order to achieve the WHA global nutrition targets on stunting, anemia, breastfeeding and treat SAM at scale, according to the World Bank.59 Of that, an extra $9.1 billion will be required over ten years in low and middle-income countries to treat and mitigate the impacts of severe acute malnutrition. This equates to an additional $910 million per annum.60

These nutrition-specific investments would allow treatment for an additional 91 million children and would prevent 860,000 child deaths.61

These calculations do not include estimates for scaling-up efforts to prevent SAM and treat and prevent MAM. However, fully costed estimates and additional resources for these interventions are urgently required too. Strategies for preventing acute malnutrition dovetail with public health interventions promoting optimal child growth and development. This includes the promotion of appropriate breastfeeding and complementary feeding practices, universal access to appropriate health care services to prevent and treat disease, improved sanitation and hygiene practices, and micronutrient supplementation.62 Food security programmes – including food, cash, vouchers or sustainable agriculture – are also important components. What is also clear is that OECD donors currently spend only an extremely small and stagnating portion of their Official Development Assistance (ODA) budgets on ‘nutrition-specific’ interventions, which include therapeutic feeding for SAM and MAM – as well as other proven direct interventions, such as promotion of exclusive breastfeeding, zinc and vitamin A supplementation, salt iodization, deworming, improved hygiene and hand washing, food fortification and complimentary feeding for infants and children.63

Some 31 OECD and bilateral donors – including the European Union (EU), the Bill & Melinda Gates Foundation (BMGF) and CIFF – spent under 1 percent of their aid – $900 million – on nutrition-specific support in 2014.64 Furthermore, nutrition-specific aid is largely concentrated on 12 so-called ‘donor darlings’ – from Ethiopia to Bangladesh and Malawi – and is not necessarily directed to ‘donor orphan’ countries where wasting burdens are highest, such as South Sudan, Djibouti or Chad.65 Similarly, high-burden countries currently allocate only very small amounts of their national budgets to nutrition-specific interventions. Recent budget analysis in 24 countries for the Scale-Up Nutrition (SUN) Movement found the mean nutrition-sensitive allocation – which includes CMAM allocations – was just 1.7 percent of general government expenditures, with spending ranging from 0.01 to 7.78 percent.66

Below we look at recent experience from Kenya and Nepal in their efforts to scale-up CMAM and to ensure more sustainable financing to prevent and treat acute malnutrition. We look at how both countries went from start up to scale-up, and identify key success factors.
3. Case studies: Kenya and Nepal

Note on research

Research trips were made to Nepal and Kenya by co-author Dr Eric Kouam, while a consultant Yann Dutertre undertook research in Burkina Faso. In Nepal and Kenya, interviews were conducted with more than 30 government officials, donor representatives, researchers and other key informants. (See Annex II for the list of these interviews.) A comprehensive literature review and 13 follow-up interviews were then carried out by lead author Alex Wijeratna in October 2016.

From start-up to scale-up

Nepal

The Ministry of Health and Population (MoHP) and UNICEF launched the first of six CMAM pilot interventions in 2008 in areas with high levels of acute malnutrition and across a range of mountainous, hilly and low land terrains. Partner international NGOs such as Action Against Hunger and Concern Worldwide were involved in the implementation of the pilot phase, which demonstrated significantly improved recovery and death rates for SAM and MAM.

While national stunting prevalence rates in Nepal have dropped significantly from 57 percent to 37 percent between 2001 and 2016, acute malnutrition prevalence rates have remained stubbornly high at 11 percent (or above) since 2001.

The CMAM pilots and OTPs were established through integration with existing health systems and were embedded through extensive training of key actors such as Female Community Health Volunteers (FCHVs) and primary health care staff. Children were seen during routine health check ups and acute malnutrition was treated in the same way as any other childhood illness – it was diagnosed through normal consultation and treated through regular CMAM services at the health post until resolved. Stabilization centres for inpatient care were integrated with MoHP facilities and a comprehensive National Medical Protocol for CMAM and Treatment Guidelines for Outpatient Treatment for CMAM were issued to guide practitioners. The management of MAM was integrated with existing Infant and Young Child Feeding (IYCF) counseling and the promotion of home-based preparation of supplementary foods. After the pilot stage in five districts, the CMAM model has begun to be scaled-up and also included Integrated Management of Acute Malnutrition in Infants (IMAMI). It is planned that 35 most affected districts will offer CMAM services by 2017.

The Ministry of Health and Population (MoHP) and UNICEF launched the first of six CMAM pilot interventions in 2008 in areas with high levels of acute malnutrition and across a range of mountainous, hilly and low land terrains.
Kenya

Until 2008, the treatment of acute malnutrition in Kenya was largely confined to overcrowded inpatient services in Ministry of Health-run District and Provincial hospitals which treated all cases with therapeutic milk-based formulas (F-75 or F-100) or in stand alone emergency-focused NGO projects in disaster-prone areas referred to as the ASALs (Arid and Semi-Arid Lands), where even in stable times the levels of acute malnutrition are far higher than the national average.72

While improving, the nutritional status of children under five in Kenya is still extremely poor. An estimated 2.1 million are stunted and at any one time 400,000 are acutely malnourished.73 Although national wasting rates have declined significantly from 7 percent to 4 percent by 2014, 13 percent of children are wasted in the North Eastern region and a quarter are wasted in remote areas such as Turkana.74 Children most vulnerable to wasting live in households that include pastoralists, slum dwellers, refugees, internally displaced persons and those living with HIV/AIDS.75

In response to an acute food crisis in 2007, election violence in 2008, and in the absence of a national CMAM scale-up plan in place, a CMAM system known as Integrated Management of Acute Malnutrition (IMAM) was included in district annual operational plans from 2008 onwards in Nairobi, Kisumu East and the 22 ASAL districts, covered by 700 health facilities, and leading it to become part of routine health service delivery in these areas.76 Working under a tripartite agreement between the Ministry of Health, UNICEF and WHO and under a new county-based decentralized structure, short-term emergency and humanitarian financing has underpinned these projects. Until recently, they operated outside any coherent Government framework and coordination structure,77 although a National Guideline for IMAM was launched by the newly-formed Ministry of Public Health & Sanitation (MoPHS) and the Ministries of Health and Medical Services (MoMS) in 2009.78

Since a pilot in three districts in 2010, the Ministry of Public Health & Sanitation and MoMS have championed and have been rapidly expanding a package of 11 High-Impact Nutrition Interventions (HiNi) with the support of the UN, donors and a range of implementing partners.79 Now integrated with the primary health care system and district monitoring system, HiNi combines CMAM with efforts to prevent acute malnutrition, stunting and micronutrient deficiencies in under-fives and pregnant and lactating women. This includes programmes on IYCF, improved WASH practices, vitamin A supplementation, zinc supplementation for diarrhoea management, deworming, iron-folic acid supplementation for pregnant women, salt iodization and multiple micronutrient fortification.80

In budgetary terms, IMAM is the largest component of HiNi81 and it combines the management of both SAM and MAM through a continuum of care and is closely integrated with existing screening and management of HIV/AIDS and infections such as TB.82 IMAM provision is highly concentrated in the ASALs (North Rift Valley, Eastern and Coast Provinces), although it is rapidly expanding in urban slum areas. The latest SAM and MAM cure rates are 76 percent and 82 percent, respectively.83 There are plans in the National Nutrition Action Plan 2012-2017 to scale-up IMAM coverage across the whole country.84
CMAM: Success factors and financial sustainability

Higher political and public health priority

Nepal

Driven mainly by the global nutrition agenda, increased high-level political will and priority to tackling malnutrition has galvanized adoption of the CMAM model in Nepal. The Prime Minister and others such as the Council of Ministers and Ministers of five key line ministries have been crucial in raising the political priority of adopting and implementing a multi-sectorial approach to tackling nutrition (which includes treatment and prevention of SAM). The Prime Minister was vice chair of the National Planning Commission (NPC) that set up a High Level Nutrition and Food Security Steering Committee (HLNFSSC) to oversee the operationalization of Nepal’s 5-year Multi-sectoral Nutrition Plan (MSNP 2013-2017) in 2012. The HLNFSSC is accountable and reports directly to the Prime Minister. Further high-level impetus was provided as Nepal became an early member of the SUN Movement in May 2011 and after the Prime Minister subsequently appointed the head of the NPC as the SUN Focal Point.

Kenya

The commitment of Kenya’s First Lady, Margaret Kenyatta, to reducing child mortality and malnutrition has been an important factor in Kenya’s success in keeping nutrition high on the political agenda. She established the Beyond Zero campaign in 2014 to improve maternal, newborn and child health and strengthen HIV/AIDS control. Her successful work as Kenya’s Nutrition Patron allowed her to use the Beyond Zero campaign platform to advocate for the role of nutrition in reducing maternal and child deaths. Complimenting the more prominent formal role that the powerful Office of the President now plays in nutrition and national disaster coordination, such high-level leadership by the First Lady has been deemed essential for keeping nutrition firmly on the political landscape.
Increased policy commitment for tackling nutrition

Nepal

Government-led but with significant input from development partners such as UNICEF, the EU and the UN REACH partnership,93 Nepal has shown leadership and developed concerted policy commitments to tackling nutrition and acute malnutrition.94 A national Nutrition Assessment and Gap Analysis was conducted in 2010 to assess maternal and child nutrition, and which recommended the establishment of a multi-sector architecture approach to address nutrition-related issues.95 As a result, and under NPC leadership and with input from the Ministries of Health and Population, Urban Development, Education, Agriculture and Federal Affairs and Local Development (and later the Ministry of Women, Children and Social Welfare), a Multi-sectoral Nutrition Plan (MSNP) was formulated.96

Building on five key sector reviews and based on a genuine ‘bottom-up’ planning process defined by the Local Self-governance Act (1999),97 the MSNP not only aims to treat and prevent SAM and MAM through the community-based approach, but also considers factors that limit the capacity of Government institutions to implement the MSNP.98 With a target of cutting child wasting to 5 percent by 2017, the cost of the MSNP over five years is approximately $193 million (about $39 million per year) or a per capita annual cost of about $1.99 A recent review found the MSNP has helped create an identity for nutrition in Nepal, and has increased priority in four out of six key ministries and increased funding for nutrition-related activities.100

Kenya

The Kenyan Government has a set of well-regarded Constitutional commitments, long-term strategies, policies and action plans that demonstrate a firm policy commitment to tackling nutrition and embedding IMAM on a nationwide scale. To support Kenya’s long-term development goals Kenya Vision 2030101 was launched in 2008, and this was soon enhanced by a progressive new Constitution in 2010. The revised Constitution recognizes the right to health, the right to be free from hunger and children’s right to access basic nutrition.102 It also created a semi-autonomous devolved system of governance with 47 counties, each of which is responsible for delivering health and nutrition programmes to ensure these rights. A multi-sectoral National Food and Nutrition Security Policy was endorsed by nine ministries in 2012,103 and this was soon followed by the National Nutrition Action Plan 2012-2017 (NNAP),104 which lays out a framework for treating and preventing SAM and MAM through Hini. The estimated total cost of the NNAP is $826 million over five years – averaging $165 million per year and with a per capita annual cost of less than $4.1105 Budget breakdowns show 87 percent of the NNAP’s costs – some $716 million – are for nutrition-specific interventions and over half of these, $364 million, are intended for tackling acute malnutrition.106
Ministry of Health support & integration into existing health systems

Nepal

Importantly, the MSnP advocates for management of both SAM and MAM to be fully integrated into routine health services. The Ministry of Health and Population (MoHP) leads on nutrition in Nepal and its policy and technical guidance was strengthened and supported by the establishment of a new Nutrition Technical Committee housed within the MoHP. The MoHP worked with development partners to design and implemented training packages for health care professionals and volunteers at district and community levels. This includes partners hiring CMAM monitors to support District Health Officers, and rolling out training for health professionals at district-level Primary Health Care Centres and Health Posts, and also for Village Health Workers and Maternal and Child Health Workers. The MoHP also developed intervention programmes such as Community-Based Integrated Management of Childhood Illness (CB-IMCI) and worked to integrate community-based nutrition activities with other health and development programmes, such as Decentralized Action for Children and Women, the Community-Based New Born Care Package, Early Childhood Development and CB-IMCI. However, integration of CMAM into the national health system was noted as weak by a UNICEF evaluation in 2012 due to a lack of qualified staff and high staff turnover from the district to grassroots levels. A recent review of MSnP in 2016 continues to highlight a lack of nutrition staff at the implementation level in all districts (especially in remote and inaccessible areas), and notes those staff in post were overburdened with multiple priorities.

Kenya

Efforts to integrate IMAM into government health service systems in Kenya accelerated following the tripartite agreement with the Ministry of Health, UNICEF and WHO in 2007 which changed the Ministry of Health’s implementing strategy and marked a stronger partnership with international, local and faith-based organizations. By late 2008, 400 health workers in the ASALS were trained in IMAM using standardized treatment protocols based on the new National Guideline on IMAM and a cadre of District nutritionists were supported in monitoring and reporting IMAM activities.

Impetus and nutrition budgets also grew following a post-election violence peace deal in 2009 that saw the Ministry of Health split into the Ministry of Public Health & Sanitation (MoPHS) and Ministry of Medical Services (MoMS). The community health and primary care focused MoPHS promoted the inclusion and integration of IMAM into HiNi and a streamlined Integrated Reporting System – the District Health Management Health System – was established in 2012. IMAM is now integrated in the community-based Kenya Essential Package for Health, and IMAM protocols routinely incorporate HIV/AIDS screening, counseling and nutrition support.

It is also proposed that existing parallel procurement and supply management chains for RUTF and other key nutritional commodities – such as therapeutic milk and RUSF – are integrated with the Government’s Kenya Medical Supply Authority (KEMSA). Pilots are ongoing in two counties to merge UNICEF and WFP supply management chains with KEMSA’s warehouses, logistics and distribution networks to supply country and sub-county health facilities and outreach sites, and it is anticipated that full, nationwide supply chain integration will occur soon under KEMSA. Local production of RUTF is also being promoted in Kenya in an effort to diversify and shorten RUTF supply chains and promote local agricultural production.
Multi-sectoral coordination of nutrition

Nepal

Although still with room for improvement, multi-sectoral coordination of nutrition has seen much progress since the MSnP was established in 2012. Besides establishing a strategic High Level Nutrition and Food Security Steering Committee (HLNFSSC) under the NCP and involving five key Ministries, a second crucial step was to establish a more operational, coordinating body called the National Nutrition and Food Security Secretariat (NNFSS) in 2013. Set up and funded by REACH, the NNFSS is supported by a National Nutrition and Food Security Coordination Committee (NNFSCC) which in turn coordinates regular meetings of three multi-stakeholder working groups – on advocacy and communication, capacity development and monitoring and evaluation. As a result of improved coordination, a recent review found Government, donors and CSO stakeholders said they were now working in a consolidated form, especially when finalizing guidelines and manuals relating to MSNP. However, while stakeholders felt coordination at the national level had improved, many were concerned that Parliamentary and cabinet-level sub-committees on nutrition may not have ever met and that the HLNFSSC had only met once or twice in the three years to mid 2016.

Kenya

There is now close coordination among stakeholders within the nutrition sector in Kenya. Much of this improvement has occurred since Kenya joined the global SUN Movement in 2012 to increase coordination and collaboration among a range of nutrition stakeholders. Although a Multi-sectoral Food Security and Nutrition Secretariat envisaged by the Kenya Food and Nutrition Security Policy (KFNSP) does not yet exist, a multi-sectoral and multi-stakeholder road map is under development to anchor nutrition coordination at the highest level.

In the meantime, the Nutrition Interagency Coordinating Committee – chaired by the Head of the Nutrition and Dietetics Unit at the Ministry of Health and who is also the SUN Government Focal Point 13 – coordinates nutrition-specific interventions. The NICC involves five ministries, the UN, local and international civil society organizations (CSOs) and academia, and is assisted by a SUN Technical and Advisory Committee, comprised of the nine ministries that signed up to the KFNSP. A highly functional National Emergency Nutrition Coordination platform has also been established to prepare for and deal with natural disasters and emergencies.
Towards financial sustainability

**Nepal**

Although combined allocations for nutrition have steadily increased between 2013-14 and 2015-16 in Nepal, there are still limited amounts available for the treatment of acute malnutrition. Some $169 million was allocated for nutrition – both on and off-budget – by donors, partners and the Government in 2015-16, representing an increase of 17 percent each year. Donors and external development partners make up 75 percent of all nutrition allocations, while the Government funds 25 percent. Overall, however, the Government allocated just 1.1 percent of its total government budget to nutrition in 2015-16, or just 0.4 percent of GDP.

Further analysis for the SUN Movement’s Civil Society Alliance for Nutrition, Nepal (CSANN) shows that current funding allocations for nutrition-specific interventions, including IMAMI, are grossly inadequate. The cost of scaling-up nutrition-specific interventions in the MSnP is estimated at $78 million over five years, including $13m for acute malnutrition, and overall approximately $39 million per year. However, CSANN finds just $9.1 million of the nutrition budget was allocated for nutrition-specific interventions in 2015-16 – representing a large funding gap. Of this allocation, only about $3 million of the budget went towards acute malnutrition management in 2015-16, down from over $4 million in 2013-14. Much of the recent growth in MSnP-related funding is externally funded and driven by the global nutrition agenda. The Government should therefore significantly increase its allocations for treating and preventing acute malnutrition. It has taken some steps towards greater ownership of the issue. The institution of a specific budget line for MSnP and nutrition-specific interventions that is channeled through the Ministry of Health and Population is considered a major boost for the financial sustainability of MSnP. In addition, all sub-national MSnP funds to municipalities, districts and Village Development Committees (VDCs) are now channeled and reported through the Ministry of Federal Affairs and Local Development (MoFALD). Finally, the Ministry of Finance has demanded greater aid transparency and accountability and encouraged all external development partners to shift more funding ‘on-budget’ so they are managed through the Ministry of Finance and reported in the Nepal budget (known as the ‘Red Book’) and included in sector planning.  

**Kenya**

Although nutrition has been mainstreamed and now has its own budget line within the Kenyan Health Sector Strategic and Investment Plan, the Government is unable to meet the financial commitments required to scale-up all the nutrition-specific interventions set out in the National Nutrition Action Plan (NNAP). The NNAP estimates the cost of nutrition-specific interventions over five years is $716 million, of which the largest portion, $364 million, is for tackling acute malnutrition. However, the Kenyan Government currently allocates only a tiny fraction of its budget on nutrition-specific and IMAM interventions. Recent SUN Movement budget analysis estimates the Government allocated just $8.4 million – or $0.18 per capita – for nutrition-specific interventions in 2014, while the Head of Nutrition and Dietetics at the Ministry of Health says about 8 billion Kenyan shillings (or about $7.9 million) was allocated for nutrition-specific interventions in 2014-2015 (see graph on next page). In relative terms, the nutrition-specific budget allocation has dipped to just 1.3 percent of Kenya’s total health budget in 2015-2016 (see graph on next page). Kenya’s health sector has been underfunded for decades despite Government promises to increase health spending to 15 percent of Government expenditure, as pledged in the 2001 Abuja Declaration (total health spending is rising and stood at 7.8 percent of total Government expenditures in 2012-2013 and is projected to reach 15 percent in 2018.) In addition,
devolution of the country into 47 counties also complicates nutrition resource allocations, as budgets are now dependent on county prioritization and financial management. To date, seven county nutrition action plans have been developed and costed, while 17 more are being drafted.\textsuperscript{141}

**KENYAN NUTRITION SPECIFIC BUDGET ALLOCATIONS** (Kenyan shillings)

To make up this funding gap, the SUN Movement says alignment of donor funding with the NNAP is underway. The SUN Movement analysis estimates that external funding accounts for 99 percent of all nutrition-specific interventions in 2014.\textsuperscript{142} UNICEF is the leading financial contributor to IMAM, followed by WFP and the Government, whose main contribution to IMAM is in the provision of human resources, not money.\textsuperscript{143} IMAM is accordingly quasi exclusively reliant on donor financing. The main donors are the European Commission Humanitarian Aid and Civil Protection (ECHO), the UK Department for International Development (DFID), and the US Office of Disaster Assistance (OFDA) and USAID.\textsuperscript{144} Funds are allocated off budget to the main UN agencies (UNICEF and WFP), which in turn contract out to implementing partners. Until recently, IMAM funding was entirely annual, unpredictable and short term, but donors have begun shifting to longer-term and more predictable financing through multi-year funds.\textsuperscript{145} Some, such as the World Bank’s International Development Association (IDA), have begun to provide the Government of Kenya with large loans ($12.8 million) – known as ‘credits’ – for the purchase RUSF and RUTF.\textsuperscript{146}

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% OF NUTRITION ALLOCATION WITHIN THE HEALTH BUDGET IN KENYA

To date, seven county nutrition action plans have been developed and costed, while 17 more are being drafted.\textsuperscript{141}

**KENYAN NUTRITION SPECIFIC BUDGET ALLOCATIONS** (Kenyan shillings)

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Within a context of recurrent droughts, food crises, political turmoil and high rates of acute malnutrition, Burkina Faso has struggled to embed and promote CMAM on a sustainable financial basis. Since CMAM was introduced by the Red Cross in 2007 following an acute food crisis, ownership and handover to the Ministry of Health has faced a number of serious challenges. On the plus side, in 2007 the Government developed its first protocol for the Integrated Management of Acute Malnutrition (IMAM) and RUTFs are now included in the list of medicines available at the Generic Drugs Purchasing Agency. And cure rates in programmes appear to meet international standards (92 percent). However, progress has been held up by a severe shortage of funds. Government funding for nutrition remains extremely low to this day – just 0.6% of the state budget in 2015. ‘Stop start’, short term and unpredictable emergency and humanitarian funding by development partners has hampered longer term planning and a dearth of funds for training and out-of-date Ministry of Health national guidelines on CMAM integration into decentralized health systems have affected national ownership and long term financial feasibility. Furthermore, the $70 million costed Plan Stratégique Nutrition 2010-2015 included an estimated $47 million for nutrition-specific interventions (including $32 million for acute malnutrition), however, it did not include the costs of implementing specific nutrition programmes at regional and district levels.

Now with alarming wasting rates of 10.9 percent and with 510,000 children suffering from acute malnutrition, development partners – such as UNICEF, WFP, WHO, USAID and ECHO – fund the overwhelming majority of costs of scaling-up CMAM and the full purchase of RUTF. Although sub-national SAM programme coverage rates were estimated to be 35 to 62 percent in 2014, the estimated SAM burden rose to 152,000 children in mid 2016. The Government allocated just $4.9 million for nutrition-specific interventions in 2014, or about $0.23 per capita. Without a specific budget line and channeled mainly through the Ministry of Health, recent budget analysis shows the Government’s allocation for nutrition fell sharply by 36 percent between 2014 and 2015, largely due to budget cuts following a popular uprising.
4. Resource mobilisation

Recent estimates suggest governments must invest an additional $70 billion over ten years – or an extra $7 billion a year in high-burden countries – to achieve three of the WHA global nutrition targets by 2025 (stunting, anaemia and exclusive breastfeeding) and treat SAM at scale. Within this package, about $9.1 billion extra over ten years – or $900 million a year – will be required to treat and mitigate the impacts of severe acute malnutrition. More will be required for effective prevention strategies.

Put in context, an extra $7 billion a year may seem large, but it pales in comparison to the $585 billion a year spent on agricultural subsidies or the $490 billion a year spent on fuel subsidies. There are a number of precedents for this kind of increase in international aid in order to tackle a global public health concern. For example, the global HIV/AIDS movement saw funding rise from less than $0.5 billion to $15 billion a year between 2001 and 2011 – at a rate of expansion greater than what is required for nutrition. Governments and donors currently spend very small amounts – an estimated $3.9 billion a year – on nutrition-specific interventions and the World Bank say a 3.5-fold increase is required to close the funding gap by 2025. While there is currently no overview of how much funding goes specifically towards CMAM interventions, below we explore where the extra resources may come from.

Donor aid for CMAM

Recent global initiatives are offering some promise of longer term funding to support scale-up of CMAM as an integral part of nutrition-specific interventions. The main emergency donors continue to be the major funders for SAM management, such as ECHO, OFDA, DFID, Government of Japan, Irish Aid and UNICEF. Below we look in more detail at the CMAM and nutrition-specific aid policies of the EU, UK and US, followed by a briefer analysis of other donors.

European Union (EU) – Building on the EU’s aid policy on nutrition in 2013, ECHO released a staff working document on Addressing Undernutrition in Emergencies and an associated follow-up A Roadmap for Response which highlight a firm commitment to the management of SAM and MAM through CMAM and stresses the importance of maximizing the sustainability of nutrition interventions where possible “by promoting their integration into national policy frameworks and plans (eg in health policy, emergency response plans, national protocols for the treatment of undernutrition).” The working document highlights ECHO’s role as an advocate of greater national and international mobilization and more effective support for the long term as well as during the emergency phase.
For example, three-year EU Food Facility funds were established in response to the 2008 food price crisis in Mali: the Food Facility funded UNICEF to monitor child malnutrition and manage SAM treatment. More recently, the EU regional project on Maternal and Young Child Nutrition Security in Asia includes 4-year funding for management of SAM, covering Bangladesh, Indonesia, Lao PDR, Nepal and the Philippines. Overall, the EU says it will commit $533 million for high-impact nutrition-specific and $4 billion for wider associated ‘nutrition-sensitive’ interventions during 2014-2020. However, a European Parliament resolution in 2016 urged the European Commission to go much further and set out a newly specified commitment and target to tackle wasting amongst children under five from its development programmes and to back this target with an additional €1 billion for nutrition-specific interventions (including wasting treatment) over the 2016-2020 period.

**US Agency for International Development (USAID)** - USAID’s Multi-Sectoral Nutrition Strategy 2014-2025 endorses the scale-up and strengthening of the CMAM approach in countries where USAID works. The strategy promotes establishing linkages with complementary programmes and strengthening professional and institutional capacity to implement CMAM services. Much of the support is through the FANTA III programme, but other long term funding is becoming available as part of wider nutrition packages. USAID, for example, awarded $50 million over five years to an NGO/university consortium for an integrated nutrition programme in Ethiopia, including a sizable amount for SAM management. The award includes improvements to district health systems to manage SAM, although no funds go directly to the Government. USAID also funds initiatives to promote local production of RUTF, such as in Uganda. Overall, the US says it will provide $1.1 billion for nutrition-specific and $8.9 billion for wider nutrition-sensitive interventions over a three-year period to 2014.

**UK (DFID)** - The management of acute malnutrition was included as a key nutrition intervention for infants and young children by DFID in its SUN position paper in 2011. DFID’s multi-year non-emergency support in northern Nigeria to improve maternal, newborn and child nutrition by providing £52 million over six years is a high-profile example of that commitment. Funds are divided between UNICEF and the international NGOs Save the Children and ACF for delivery of nutrition interventions through routine health services funded by the Government. A large portion goes towards CMAM, however, none of the funds go directly to the Government to support domestic costs of implementation. Overall, the UK has committed to invest approximately $1 billion in nutrition-specific and $922 million in nutrition-sensitive interventions between 2013 and 2020.

In the box on page 24, we present the results of our analysis of the EU, UK and US’ bilateral aid for acute malnutrition programmes over the 2010-14 period.
Research conducted for this paper examined ODA flows from the EU, UK and US for aid projects and interventions that contained the term ‘acute malnutrition’ in the project description between 2010 and 2014 (see Table 1). The source for this analysis was the OECD DAC Creditor Reporting System (CRS). This single keyword search enabled us to detect project descriptions which included CMAM (community-based management of acute malnutrition), as well as mentions of severe acute malnutrition and moderate acute malnutrition.

Our research found these three key donors to nutrition funded a total of 362 projects relating to acute malnutrition during this period. These projects appeared under five out of the 36 CRS purpose codes assessed:

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<th>CODE NUMBER</th>
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<th>DESCRIPTION</th>
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<tr>
<td>12240</td>
<td>Basic Nutrition</td>
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<td>52010</td>
<td>Food Aid/ Food Security Programmes</td>
<td>Emergency relief</td>
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<tr>
<td>72010</td>
<td>Material Relief Assistance &amp; Services</td>
<td>Relief coordination; protection &amp; support services</td>
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<tr>
<td>72040</td>
<td>Emergency Food Aid</td>
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<tr>
<td>72050</td>
<td>Relief Coordination; Protection &amp; Support Services</td>
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12240 & 52010 are development aid codes; 72010, 72040 & 72050 are humanitarian aid codes

There are a number of important caveats to mention in relation to the research exercise:

O1 | The analysis does not cover CMAM aid given by the EU, UK and US via multilateral channels. Multilateral aid flows are not reported on the CRS. Multilateral aid for CMAM from these three donors is likely to be substantial.

O2 | It is likely that a significant share of the UK, EU and US’ emergency aid for CMAM is grouped under broader project descriptions using terms such as ‘emergency nutrition’ or ‘emergency program for nutrition’, where the term ‘acute malnutrition’ is absent.

O3 | Owing to inadequate project descriptions in the CRS (particularly for the EU and US), it was not possible to differentiate between treatment and prevention for acute malnutrition in aid projects. The projects we examined could therefore cover i) only treatment, ii) only prevention, or iii) both.

O4 | Although the CRS database includes project description in English, French and Spanish, the analysis was only performed in English which could have led to the exclusion of projects addressing acute malnutrition when they were described in French or Spanish. Projects between 2010 and 2014 were included in the analysis.

The results of the analysis are presented in Tables 1-3 and Figure 1 on the following page.
The main conclusions are:

- The research found a total of $270 million was disbursed to the 362 acute malnutrition projects between 2010 and 2014.
- Of the three donors studied, the EU was the largest donor for bilateral acute malnutrition programmes over the 2010-14 period ($134 million in 171 interventions), followed by the UK ($71 million; 30 projects). The US came third, spending $66 million on 161 projects.
- UK spending has grown substantially since 2012 (see Figure 1), perhaps a sign of the UK Government’s increased commitment to nutrition following the Nutrition for Growth Summit held in London in June 2013.
- The EU’s annual disbursements peaked at $38 million in 2011, & declined to $23 million in 2014.
- Nearly all the EU’s projects—159 out of 171—were classified under humanitarian aid codes. This would suggest that the bulk of EU aid for acute malnutrition is used to support CMAM in emergency contexts, involving short-term project cycles of less than one year. There is therefore a need to extend the duration of these projects and fully integrate them with wider development objectives.
- By contrast, 19 out of the UK’s 30 projects for acute malnutrition and 158 out of the US’ 161 projects were coded as ‘basic nutrition’ or ‘food aid/food security programmes’, which are development aid codes. The vast majority of the development aid-classified projects fell under ‘basic nutrition’. This indicates that UK spending on CMAM is spread across humanitarian and development contexts. It was surprising to find such a low number of US projects reported under emergency codes. As mentioned above, we believe this is because a large number of US emergency CMAM projects were not detected via our search using the keyword ‘acute malnutrition’.

Finally, our research found the top recipient countries from the EU, UK and US for aid projects containing acute malnutrition between 2010 and 2014 were Nigeria ($43 million), Niger ($29 million), Liberia ($23 million) and DR Congo ($22 million). (See Annex I of this paper for the full list of recipient countries.)
Other donors - it is estimated that traditional ODA will need to contribute an extra $25.6 billion over ten years to help fill the $70 billion funding gap by 2025. However, at present just five key donors fund three quarters of nutrition-specific interventions, while the others’ contribution is negligible. The top five donors for nutrition-specific interventions – the US, Canada, EU, UK and BMGF – provided 75 percent of the $900 million that was spent by 31 OECD-plus donors on nutrition-specific interventions in 2014. Only 11 of the 31 donors allocated more than $10 million, and 13 donors spent less than $1 million on nutrition-specific interventions (see graph above). The Global Nutrition Report 2016 points out that an additional $10 million from each of the 20 donors who currently spend less than $10 million on nutrition-specific interventions would add $200 million per year to nutrition-specific disbursements, an increase of 22 percent on the total. Overall, the Global Nutrition Report 2016 concludes that donors must triple their commitments to nutrition and mobilize an additional $2.6 billion annually over ten years. Higher prioritization means ODA would need to boost expenditures on nutrition from a current average of 1 percent of total ODA to 2.8 percent by 2021, after which it would taper back to 1.8 percent by 2025.

High-burden country governments

There is also scope for high-burden governments to increase their funding for CMAM and a wider package of nutrition-specific interventions. There are currently very few examples of significant incorporation of SAM and MAM management into regular government budget programming. UNICEF evaluations show that a portion of capital and recurring costs are being met domestically in Chad, Ethiopia, Kenya, Nepal and Pakistan, and only in Malawi has RUTF been purchased directly by the Government. The Government in Nigeria also recently made a $2.2 million contribution to CMAM scale-up in 11 states.

Although in-country nutrition budget tracking and analysis is notoriously difficult and opaque, it is estimated domestic governments currently spend $2.9 billion on a wider package of nutrition-specific...
interventions. However, it is estimated Governments will need to mobilize an additional $3.9 billion per year – or an extra $39.7 billion over ten years – from domestic budgets to reach the WHA targets on stunting, anaemia and exclusive breastfeeding, and treat SAM at scale. At present, nutrition-sensitive allocations represent only about 1.7 percent of total government spending in 24 high-burden countries. The main sectors looked at for the MOSUN 2016 study were agriculture, education, health, social protection and WASH. The Federation of African Nutrition Societies (FANUS) recently recommended a target for African governments to commit at least 3 percent of all sector budgets for nutrition. Broadly in line with this and to achieve full scale-up, the World Bank say governments in high-burden countries would need to increase the share of their projected spending on health that is directed to nutrition from a current average of 1 percent to nearly 2.9 percent by 2025. Although ambitious, many countries have shown it is achievable, and high-burden countries like Ethiopia, India, Malawi and Pakistan are moving in this direction.

In general, CMAM scale-up continues to be hampered by weak health care systems, a lack of integration of CMAM into essential health packages, short-term humanitarian donor funding for many CMAM initiatives, and perceptions that CMAM is an externally funded initiative, and not a core health priority or development issue.

**Innovative finance, international funds for nutrition and philanthropic organisations**

Even if all OECD countries were to meet the 0.7 percent target for aid spending, it is doubtful that traditional sources of aid alone would be sufficient to fill the funding gaps by 2025. Experts say innovative finance mechanisms could help, with the World Bank estimating that innovative sources could contribute an additional $3.4 billion over ten years. Below are some promising key initiatives for increased funding for CMAM, covering international funds and philanthropic organisations.

**UNITAID**

Specific funding for RUTF has been prioritized by UNITAID, a specialized innovative finance organization that contributes to scaled-up access to treatment for HIV, TB and malaria through funding from a global solidarity tax on airline tickets. Committing $2.2 billion for all programmes since it was established in 2006 and seated within the WHO, UNITAID supports nutrition activities as part of a joint project with the Clinton Foundation Initiative on paediatric HIV/AIDS and prevention of mother-to-child transmission (known as ‘CHAI’ or more recently as the Clinton Health Access Initiative). CHAI is UNITAID’s largest grantee and has received $596 million since 2006. Closely linking HIV treatment with SAM management, CHAI buys and provides RUTF in 25 eligible countries and is the third largest purchaser of RUTF, behind UNICEF and Médecins Sans Frontières. CHAI offers Governments support for CMAM scale-up and CHAI-procured RUTF is used to treat SAM-affected children whether HIV-positive or not. CHAI also invests in supply-side efforts to reduce the price of RUTF via cheaper alternative formulas and fosters new regional and local supplies of RUTF. UNITAID’s new strategy from 2017 to 2021 was due for approval by the end of 2016.

**UNITLIFE**

Launched in 2015 and based on the UNITAID model, UNITLIFE is a relatively new innovative financing mechanism that uses micro levies from extractive industries to increase resources for tackling maternal and child malnutrition in sub-Saharan Africa. Based on small solidarity taxes on the sale of oil, gas and mining, seven African countries have agreed to implement the levy. Mali has agreed to impose a 10-cent tax on each gram of gold sold in 2017 and Congo has already started to levy a 10-cents tax on each barrel of oil and begun to earmark it, collecting $5m in the first year. Hosted by UNICEF, the
creators of UNITLIFE say the fund will raise about $300 million annually to improve childhood nutrition, and say if all oil-producing countries globally imposed the levy, the mechanism could generate $1.6 billion annually. Researchers say the money collected will be put in a fund managed by UNICEF for food supplements for children, although it is currently unclear to what extent CMAM or RUTF will be funded by this new fund.

The Power of Nutrition

The Power of Nutrition is a relatively new independent fund that says it will target $1 billion in new private and public sector financing to children’s nutrition by 2020. Launched in 2015 and based on a matched contribution and co-financing model, the fund’s investments are targeted at five malnutrition ‘hotspots’ in Asia and sub-Saharan Africa. Support for CMAM services to prevent and manage SAM is one of a key set of high-impact interventions that the fund is seeking to invest in. Backed by the Children’s Investment Fund Foundation (CIFF), DFID and UBS Optimus Foundation, its implementing partners are UNICEF and the World Bank’s IDA. The fund has arrangements in place to unlock the first $200 million, and ‘pay-for-results’ investment has already started on a $44 million 5-year child nutrition initiative in Tanzania. The fund is also currently seeking investment partners to support initiatives to tackle acute malnutrition in Cameroon, Liberia, Madagascar and Niger.

Global Financing Facility in Support of Every Woman Every Child (GFF)

Experts say the World Bank-based GFF may offer nutrition-related funding opportunities. This is being borne out as GFF say they have already started to invest in an essential package of nutrition services and CMAM in the Northeastern states in Nigeria. Announced in 2014, this multi-donor trust fund aims to improve the health and quality of life of women, adolescents and children, and prevent millions of stillborn, maternal and child deaths by 2030. To achieve this, it plans to mobilize $57 billion by 2030 and says it has a particular focus on key issues such as nutrition. Along with strengthening health systems, it has the flexibility to make targeted investments in sectors such as education, water, sanitation and social protection to meet its goals.

The Global Fund to Fight AIDS, Tuberculosis and Malaria

Thanks to a recent push by different agencies, there is growing scope to include CMAM along with other nutrition support in Global Fund proposals. Joint UNAIDS and WHO technical guidance notes for Global Fund proposals inform countries that they can include management of severe acute malnutrition linked to HIV programming. Indeed the Global Fund’s new funding model strongly encourages applicants to include reproductive, maternal, newborn and child health interventions.
relevant to HIV/AIDS, TB and malaria in their concept notes. The Global Fund will fund initiatives to strengthen health systems and train health extension workers (such as on sanitation and nutrition in Ethiopia) to treat multiple conditions from the outset, increase coverage of integrated services and supply chains, provide funds for essential medicines and commodities (such as RUTF in Zambia) and improve integrated health management information systems (such as in Ghana). The Global Fund is the largest financier of TB and malaria funding and the second-largest external source for AIDS funding, and overall has disbursed $30 billion since 2002.

**World Bank, BMGF, CIFF**

The World Bank Group is scaling-up its support. In the two years that followed the June 2013 Nutrition for Growth Summit in London, it nearly tripled its direct financing for maternal and early childhood nutrition programmes to $600 million. An estimated 90 percent of this has come from the International Development Association (IDA), the World Bank’s fund for the poorest countries. In October 2016 it hosted an international conference, called the Human Capital Summit, which had a strong focus on nutrition.

Finally, some new resources are potentially becoming available to support this agenda at both the global and national level. This includes more recently established partners such as Bill and Melinda Gates Foundation – who plans to invest $492 million on nutrition-specific interventions by 2020 (alongside $370 million on nutrition-sensitive interventions) – and even newer ones such as the Children’s Investment Fund Foundation, who has committed $793 million on mostly nutrition-specific interventions – including CMAM – by 2020 and have signed up to the No Wasted Lives campaign coalition, which aims to mobilize more money to tackle acute malnutrition. BMGF has also begun to finance CMAM scale-up pilots in India and is interested in financing SAM prevention initiatives, as well as technical research including optimizing service delivery.
5. Conclusions

Our findings from Nepal and Kenya show that progress on tackling SAM and MAM has been achieved because both Governments made tackling wasting a higher political and public health priority, they increased their policy commitment to tackling nutrition, they enlisted Ministry of Health support and took steps to integrate CMAM into routine health systems, they promoted a multi-sectoral approach to tackling nutrition and established specific budget lines and started to take some financial ownership for CMAM scale-up costs. Financial sustainability lies in taking greater domestic ownership of CMAM, driving down RUTF costs and making widespread and sustained investment in comprehensive prevention strategies.

More widely, Governments and donors currently dedicate only very small amounts to CMAM scale-up and overall they must more than triple their nutrition commitments to help achieve global wasting targets by 2025. Additional contributions from associated international funds, innovative finance mechanisms and philanthropy can also help fill some of the current $900 million-a-year funding gap.

Recommendations

All high-burden countries

◆ Should establish specific nutrition budget lines (usually under the health budget) and increase national budget allocations to enable nationwide CMAM scale-up
◆ Should target at least 3 percent of their relevant national budgets towards tackling nutrition
◆ Should invest in strengthening their health systems and include nutrition as part of a basic health package

Kenya

◆ Should intensify its financial commitment for nationwide CMAM scale-up through HiNi

Nepal

◆ Should revitalize parliamentary, cabinet and high-level nutrition and food security committees in order to deepen national ownership of the MSNP

All donors

◆ Should triple their financial commitment to nutrition over ten years and significantly increase multi-year funding for CMAM scale-up in high-burden countries
◆ Redirect support for CMAM scale-up towards those countries with high wasting burdens
◆ Improve the quality of reporting on the CRS and reform donor reporting purpose codes, increasing consistency with the language used for the reporting. This would help to increase transparency and to better identify and track nutrition interventions, such as CMAM.
Should encourage and invest in health system strengthening and the inclusion of nutrition treatment of severe acute malnutrition within a basic health care package of services

EU

◆ The European Commission (EC) should develop a specific target to treat and prevent wasting in children under five in development contexts by 2025.
◆ The European Commission (EC) should pledge an additional €1 billion for multi-year, nutrition-specific interventions, including CMAM, by 2020 in order to help achieve the WHA and SDG nutrition goals.
◆ Ensure humanitarian support for CMAM interventions is multi-year and fully integrated with wider development objectives.

EU & US

◆ Improve the level of detail available in the 'long descriptions' of nutrition/acute malnutrition projects on the CRS: the information provided should be specific to each project.

Discussion points

O1 | To what extent are the key success factors for CMAM scale-up identified in Nepal and Kenya present in other countries with high-burdens of wasting?

O2 | If donors increase their funding in future for CMAM in non-emergency settings, via multi-annual programmes, what is the best way to spend this additional aid? (E.g. capacity-building for health services; technical advice on CMAM; training?)

O3 | Which international funds have the strongest potential to raise additional resources for wasting treatment in developing countries?

O4 | What are the best options for reducing the cost of SAM treatment? (E.g. different dosages of RUTFs; increased local production of RUTFs.)

O5 | How can MAM and SAM treatment approaches be better integrated?
Annex I

OECD DAC analysis of acute malnutrition projects: methodology and additional data

Co-author Dr Eric Kouam screened in November 2016 all 36 CRS purpose codes for the EU, UK and US with the keyword ‘acute malnutrition’ and identified 362 projects under five CRS purpose codes (basic nutrition, food aid/food security programmes, material relief assistance and services, emergency food aid, and relief coordination; protection and support services). This keyword search was then also applied to the ‘short description’ and ‘long description’ of each project. He also tested keyword searches using ‘wasting’ as well as acronyms such as CMAM, SAM, MAM and RUTF. However, he found that there was always a reference to ‘acute malnutrition’ in project descriptions which contained one or more of these terms.

### Recipient Countries by Volume of Aid Received from EU, UK and US for Acute Malnutrition Projects

(amounts in USD millions, bilateral aid only)

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<th>Country</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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The list of the 36 CRS purpose codes that were included in the initial screening is included below.

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<td>12220 Basic health care</td>
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<td></td>
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<td></td>
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<td></td>
<td>12281 Health personnel development</td>
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<td></td>
<td>14031 Basic drinking water supply</td>
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### Annex II

#### List of interviews for Nepal & Kenya case-studies

**Nepal**

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<tr>
<td>Min Raj Gyawali</td>
<td>National Nutrition &amp; Food Security Secretariat (NNFSS)</td>
<td>Programme Officer (Nutrition)</td>
</tr>
<tr>
<td>Savila Malla</td>
<td>National Nutrition &amp; Food Security Secretariat (NNFSS)</td>
<td>Advocacy &amp; Communication Specialist</td>
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<tr>
<td>Ingo Neu</td>
<td>National Nutrition &amp; Food Security Secretariat (NNFSS) and REACH</td>
<td>Lead facilitator</td>
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<tr>
<td>Giri Raj Subedi</td>
<td>Health Division, Department of Health Services, Ministry of Health</td>
<td>Chief of Nutrition Section</td>
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<tr>
<td>Mim Hamal</td>
<td>Delegation of the European Union to Nepal</td>
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<tr>
<td>Manav Bhattarai</td>
<td>World Bank</td>
<td>Health Specialist</td>
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<tr>
<td>Debendra Adhikari</td>
<td>USAID</td>
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<td>Daniel Verschneider</td>
<td>USAID</td>
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<td>Anirudra Sharma</td>
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<td>Allison Prather</td>
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<td>Ashok Bhurtyal</td>
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<td>Juliette Sequin</td>
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<td>Martin Rosselot</td>
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**Kenya**

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<td>Lucy Kinyua</td>
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<td>Rose Wahu</td>
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<td>TB programme</td>
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<td>Viddah Owino</td>
<td>International Rescue Committee</td>
<td>Nutrition Coordinator</td>
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<td>Yacob Yishak</td>
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References

1 http://www.who.int/nutgrowthdb/jne_brochure2016.pdf
2 http://www.who.int/nutrition/topics/Statement_community_based_man_sev_acute_mal_eng.pdf?ua=1
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22 IFPRI (2016) Nourishing Millions, Stories of Change in Nutrition
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43 IFPRI (2016) Nourishing Millions, Stories of Change in Nutrition, Chapter 5
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