

**EVALUATION OF COMMUNITY
MANAGEMENT OF ACUTE
MALNUTRITION (CMAM)**

Global Synthesis Report

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Evaluation of Community Management of Acute Malnutrition (CMAM): Global Synthesis Report

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The report was prepared by independent consultants Sheila Reed and Camille Eric Kouam based on country case study reports on Chad, Ethiopia, Kenya, Nepal and Pakistan and data gathered through additional sources. Krishna Belbase, Senior Evaluation Officer, managed and led the overall evaluation process in close collaboration with the Nutrition Section, Programme Division, and selected staff from the participating county offices.

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PREFACE

Despite the past and on-going efforts, undernutrition remains a major contributor to mortality of children under five years of age. Recent estimates suggest that undernutrition is associated with 3 million child deaths annually. Acute malnutrition measured as low weight-for-height is a commonly prevalent concern both in emergency and non-emergency situations in over 70 countries. Community management of acute malnutrition (CMAM) has evolved over the past decade as a viable approach to addressing acute malnutrition in young children. UNICEF is currently supporting more than 60 countries in implementing CMAM. Although the coverage and intensity of the programme varies considerably, this is an impressive progress given the fact that until a decade ago CMAM was confined mostly to emergency contexts and being implemented in only a few other countries.

This first comprehensive evaluation of CMAM by UNICEF was commissioned in response to the need to examine the overall progress in implementing CMAM, the effectiveness and efficiency of its strategies and issue related to sustainability, equity and national ownership that are central to its expansion. To safeguard objectivity and independence, the evaluation was conducted by a team of international consultants who were recruited and managed by UNICEF's Evaluation Office. The team of international consultants was supported by national teams in each of the case study countries. The evaluation used an ambitious approach which included detailed case studies of five countries, namely Chad, Ethiopia, Kenya, Nepal and Pakistan with extensive assessment of CMAM and country-specific lessons and recommendations. Each participating country established a national reference group (or steering committee) which provided valuable guidance and support and national ownership to the evaluation. In view of the limited evaluation expertise available at the national level, the evaluation process which combined national teams with international experts has also contributed to capacity development for undertaking such evaluations.

The evaluation would not have been possible without the active engagement and CMAM related technical support by Nutrition Section colleagues in the Programme Division, NYHQ and the respective programme staff in the country offices. The implementation of CMAM is evolving rapidly and it is our hope that the forward looking lessons and recommendations presented in this comprehensive evaluation will positively contribute to the strengthening of on-going efforts to improve the quality and coverage of CMAM, to the sustainability of the achievements made in various contexts and to the evolving partnerships to combat malnutrition among children.

Colin Kirk
Director
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This evaluation is the result of strong commitment, team work and contributions from a large number of individuals and institutions. The evaluation report was prepared by two international consultants, Sheila Reed and Camille Eric Kouam, who worked under the guidance and supervision of Krishna Belbase in the Evaluation Office. Erin Boyd in the Nutrition Section, Programme Division, provided substantive technical support throughout the evaluation and Ilka Esquivel and Dolores Rio made significant contributions in the early phases.

The global synthesis draws heavily on five case study evaluations which included Chad, Ethiopia, Kenya, Nepal and Pakistan. The national team in Chad consisted of Philippe Djékaouyo Nadwai, Naiban Mingueyambaye, Jean Pierre Manssimadji and Salomon Allaramadji. In the UNICEF Country Office (CO), Roger Sodjinou, Marcel Ouattara and Yaron Wolman were the key counterparts. In addition, Mahamat Bechir, David Rizzi, John Ntambi, Augustin Ilunga, Bambe Lamtouin, Mr Beninga, Jean Luboya and Guy Yogo made significant contributions in various phases of the evaluation.

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ASAL	Arid and Semi-Arid Lands
AWG	Average Weight Gain
CBO	Community Based Organization
CHEW	Community Health Extension Worker
CHWs	Community Health Workers
CIDA	Canadian International Development Agency
CMAM	Community Management of Acute Malnutrition
COs	Country Offices
COW	Community Outreach Worker
CTC	Community Therapeutic Care
DANIDA	Danish International Development Agency
DFID	UK Department For International Development
DHIS	District Health Information System
DHO	District Health Office
DHS	Demographic and Health Surveys
DRR	Disaster Risk Reduction
ECHO	Humanitarian Aid and Civil Protection department of the European Commission
ENN	Emergency Nutrition Network
EO	Evaluation Office
EPI	Expanded Programme on Immunization
FANTA	Food and Nutrition Technical Assistance
FBF	Fortified Blended Food
FCHV	Female Community Health Volunteer
FGDs	Focus Group Discussions
FMoH	Federal Ministry of Health
FP	Family Planning
FSNP	Food Security and Nutrition Policy
GAM	Global Acute Malnutrition
GMP	Growth Monitoring Programme
GNC	Global Nutrition Cluster
HINI	High Impact Nutrition Interventions
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HQ	Headquarter
IASC	Interagency Standing Committee
ICCM	Integrated Community Case Management
IDP	Internally Displaced People
IEC	Information, Education and Communication
IMAM	Integrated Management of Acute Malnutrition
IMAMI	Integrated Management of Acute Malnutrition of Infant less than 6 months
IMCI	Integrated Management of Childhood Illness
IP	Implementing Partner
IYCF	Infant and Young Child Feeding
IYCN	Infant and Young Child Nutrition
KAP	Knowledge, Attitudes and Practices
KDHS	Kenya Demographic Health Survey
KP	Khyber Pakhtunkhwa
LFA	Log Frame Analysis
LHW	Lady Health Worker
LOS	Length of Stay
M&E	Monitoring and Evaluation
MAM	Moderate Acute Malnutrition

MCH	Mother and Child Health
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MoH	Ministry of Health
MoPH	Ministry of Public Health
MOPHS	Ministry of Public Health and Sanitation
MoU	Memorandum of Understanding
MUAC	Mid-Upper Arm Circumference
NGOs	Non-Government Organizations
NIS	Nutrition Information System
NNP	National Nutrition Programme
NNS	National Nutrition Strategy
OCHA	Office for Coordination of Humanitarian Assistance
OECD-DAC	Organisation for Economic Cooperation and Development/Development Assistance Committee
OFDA	Office of U.S. Foreign Disaster Assistance
OJT	On the Job Training
PINS	Pakistan Integrated Nutrition Strategy
PST	Pre-service Training
ROs	Regional Offices
RTE	Real Time Evaluation
RUF	Ready to Use Food
RUSF	Ready to Use Supplementary Food
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
SCN	Standing Committee on Nutrition
SFP	Supplementary Feeding Programme
SM	Social Mobilizer
SMART	Standardized Monitoring and Assessment of Relief and Transition
SUN	Scaling Up Nutrition
SWAP	Sector Wide Approach to Programming
TORs	Terms of References
TOT	Training of Trainers
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WFH	Weight for Height
WFP	World Food Programme
WHO	World Health Organization

EXECUTIVE SUMMARY

Severe acute malnutrition (SAM) threatens the survival of children both in emergency and non-emergency settings. Recent estimates suggest that SAM affects between 19 and 26 million children under 5 years of age globally and contributes to nearly 1 million child deaths each year; most SAM cases are not in emergency countries. Treatment of SAM has evolved as a major intervention over several decades but it has had limited reach. The advent of ready to use therapeutic food (RUTF) and a community-based approach, community management of acute malnutrition (CMAM), has made it possible to treat the majority of children in their homes.

The efficacy of the CMAM approach has been demonstrated since 2007 following an endorsement by UN agencies which paved the way for the further expansion of the intervention. CMAM is generally a preventive continuum with four components: 1) community outreach as the basis; 2) management of moderate acute malnutrition (MAM); 3) outpatient treatment for children with SAM with a good appetite and without medical complications; and, 4) inpatient treatment for children with SAM and medical complications and/or no appetite.

A key objective, both globally and nationally, of CMAM is progressive integration into the national health system and ultimately complete government ownership. By the end of 2012, governments in 63 countries had established partnerships with UNICEF, WFP, WHO, donors, and NGO implementing partners (IPs) for CMAM. The Ministries of Health (MoH) assume leadership and coordination roles and provide the health facilities. Implementation arrangements vary in particular contexts or areas. Most countries implement inter-related interventions such as Infant and Young Child Feeding (IYCF), Integrated Management of Childhood Illnesses (IMCI), Mother Child Health (MCH), as well as micronutrient supplementation.

The internal and external inputs for CMAM include policies, commitment of funds, coordination, and technical support available to the MoH and other IPs. Access to services suggests linkages with formal and informal healthcare and community-based organizations or systems. Access to CMAM supplies includes both essential drugs and ready to use therapeutic or supplementary foods. Service quality requires establishment of guidelines, support and supervision for staff, training, and monitoring and evaluation components. Intended outputs are enhanced community knowledge and practices regarding child nutrition and health, improvements in nutritional status of children under five years of age admitted to CMAM, and reduced morbidity and mortality.

Through CMAM services, UNICEF provides technical guidance to improve the quality and access of SAM treatment, and works toward standardized monitoring and evaluation methods to demonstrate impact of the intervention on SAM. UNICEF produces an annual summary, the "Global SAM Treatment Update" to report on the status of SAM treatment in countries where UNICEF-supported CMAM is implemented. UNICEF has made significant investments to scale up treatment of SAM through the CMAM approach including procurement of therapeutic foods, medicines, and equipment. UNICEF currently procures approximately 32,000 MT of RUTF annually which represents an investment of over 100 million dollars. UNICEF also contributes in most countries along with governments and non-governmental IPs to capacity-building and training; establishment of outpatient treatment centres; advocacy, awareness and behaviour change communication; and development of monitoring and information systems.

In recent years, several reviews of CMAM have been conducted; however, there is no evaluation which examines all key aspects of CMAM at both national and global levels. This evaluation is the first to generate evidence on how well the global as well as country level strategies have worked including their acceptance and ownership in various contexts and appropriateness of investments in capacity development and supply components. The process included a comprehensive assessment of CMAM in five countries and drawing synthesized findings and recommendations for governments, UN agencies, NGOs and other stakeholders to use in modifying CMAM policy and technical guidance for both emergency and non-emergency contexts.

Evaluation Scope and Methods

The evaluation scope consists of two interrelated components. First, the evaluation undertook detailed analyses of CMAM in Chad, Ethiopia, Kenya, Nepal and Pakistan. The criteria of relevance, effectiveness, efficiency, sustainability and scaling up were applied to CMAM components and to cross-cutting issues.¹ Data were obtained from secondary sources, health system databases, and observations during visits to CMAM intervention areas. The community perspective was analysed through collection of opinions from caretakers, extended family, community leaders, and community-based health workers in addition to stakeholders from government and assistance agencies. Quantitative data were analysed to determine whether performance targets were met and qualitative data supported the analysis. Secondly, building upon case study evidence, broader research resulted in compiled lessons, good practices and recommendations for UNICEF and partners globally. A global internet survey targeting all 63 countries implementing CMAM, helped to triangulate and validate conclusions from the five country case studies.

Conclusions

The evaluation conclusions are based on the findings detailed in the body of the report, regarding: (1) Relevance of CMAM; (2) CMAM Effectiveness and Quality of Services; (3) Promoting Equity in Access; (4) Progress in National Ownership; (5) Efficiency – Costs, and Supply and Delivery of RUTF; and (6) Sustainability and Scaling Up (Expansion) of CMAM.

1. Relevance of CMAM Guidance and Technical Assistance

The CMAM approach is appropriate to address acute malnutrition, particularly to the degree that CMAM is being sustainably integrated into the national health system. CMAM interventions are becoming regularized within the national health systems, contributing to greater geographic coverage. Inputs have resulted in meeting the Sphere standards for recovery from SAM and successful expansion in times of crisis. Where integration (e.g. governance, finances, planning, service delivery, monitoring and information, demand) is well planned and based on capacity assessments, efficiency has increased and scale up has been facilitated.

Demand for CMAM services has increased; efficient use of community resources for prevention and identification and referral of children with MAM and SAM contributes to demand. Efforts to mobilize communities, develop capacity in the health system, and increase ownership in districts and communities have paid off in higher admissions. Demand is effectively increased through facilitating more participation in planning at the district level, providing more support to community health workers (CHWs), and drawing in private health care providers and other community members.

National contributions to CMAM are growing but scale up (expansion) is challenged by funding constraints for regular programming and reliance on emergency funds and external sources of assistance. Reliance on stop-start, short term, mainly external emergency funding makes CMAM less likely to achieve preventive and sustainable outcomes. Greater accountability for addressing acute malnutrition is signified by more assumption of the cost burden by governments and reassessment of funding practices and sources by assistance partners.

Global and National Guidelines

Global guidance for SAM treatment has contributed to development of national guidelines which offer high value in promoting district ownership. However, lack of agreement on the best approach to address MAM has contributed to inconsistency among countries for MAM management and concomitantly, prevention of SAM. At national levels, where MAM guidelines have

¹ To date, there is no global agreement on MAM management and MAM was assessed in view of nationally accepted protocols.

been developed separately from the other three components or are underdeveloped, the preventive linkages among community outreach, MAM and SAM are weakened.

Global and national guidance is generally adequate for treatment protocols but lacking or fragmented regarding: planning and monitoring, integration of CMAM, equity and gender, community assessment and mobilization, and MAM management. At national level, bodies of guidance are strengthened through integration with IYCF and other interventions. Some of the Sphere minimum humanitarian standards may no longer be relevant for regularized CMAMs so use of Sphere needs further discussion. Standards and indicators are needed for screening, relapse, re-admissions, referrals and home visits (which Sphere does not cover) to promote more effective steering of the intervention.

Technical Assistance

Technical support has resulted in significant gains in process, coverage and outcomes; creation of parallel systems is not sustainable and slows national ownership. Start up and scale up of CMAM is heavily reliant on external support, however, separately managed and funded information systems, supply and delivery, finance and/or management oversight are difficult to effectively assimilate. Where exit plans, MoUs, and other agreements are used to describe roles and responsibilities of IPs and advisors to progressively and efficiently build capacity, assessment of results and transfer of parallel systems into national hands are facilitated. However, this is done on a limited basis; IPs often lack integration or exit plans and strong connection with district level development planning.

Within UNICEF overall, there has been effective support for fund mobilization, emergency nutrition response, and supporting nutrition protocols; expansion of regional roles is important to meet national technical assistance needs. Global and regional technical support was found to be of key importance for guideline development and for designing monitoring plans and tools, studies and participative evaluations and disseminating lessons learned. Greater inputs and roles for regional technical assistance for CMAM are requested by the majority of COs.

Capacity development has significantly promoted quality of services; there is however some redundancy in training among related interventions. On the job training (OJT) surpasses training of trainers (TOT) as the most effective approach. Devoting more resources to pre-service training (PST) has improved nutrition knowledge among medical staff. Training needs assessments did not always examine staff functions, training for community members was found to be very limited and coverage of catchment areas often uneven, with some areas receiving less attention.

2. CMAM Effectiveness and Quality of Services

Overall, CMAM has been effective in helping admitted children to recover from SAM and promoting prevention through community outreach and MAM management. CMAM has been less successful in preventing (rather than treating) SAM. The Sphere standards were met for recovery for MAM management where data was available; and for recovery, death and default in outpatient and inpatient treatment for SAM in the five case study countries. Community members and health workers have affirmed higher levels of knowledge regarding the impact of nutrition on childhood development. Nutrition coordination and advocacy around CMAM has helped nutrition rise on the policy agenda.

Sensitizing the community on acute malnutrition along with active case finding has critically improved admissions to services; the potential of community outreach is constrained by insufficient assessment, planning and funding for mobilization of community resources, weak monitoring, and inadequate support for CHWs. Home visit follow-ups are weak because CHWs require more support in the form of transport and other means to facilitate their access to households. Community sensitization and mobilization have been found to improve where frequent community assessments were carried out and where resources were allocated to support outreach strategies as well as providing incentives for CHWs.

Outpatient treatment services, whether implemented through fixed health facilities, mobile clinics or in refugee camps, are effective in CMAM intervention areas in the case study countries in treating SAM without complications. Training, supervision and well equipped facilities contributed to success. Greater consistency in usage and standards was found to make anthropometric measurements more effective. Sufficient infrastructure to accommodate children and their caretakers and adequate WASH inputs particularly in provision of water taps and acceptable latrines improved quality of services.

The CMAM inputs for inpatient treatment services were found to be only moderately effective due to weak coordination around referrals between inpatient and outpatient care, and weakness in staffing, psychosocial support, and data collection. Gaps in round the clock staff support as well as in strengthening of health staff capacity for providing nutrition services and for data collection and analysis have constrained assessment of effectiveness. Similarly, many facilities lacked sufficient beds for high occupancy times and play areas and toys to provide psychosocial stimulation.

Evidence is insufficient on outputs and outcomes for MAM management. The absence of surveys to measure behaviour changes and lack of reliable data on all MAM performance indicators make it difficult to ascertain effectiveness of the MAM intervention, whether implemented through counselling, provision of supplementary foods, or both. There is not enough data on relapse to provide evidence on linkages between interventions to address SAM and MAM.

Information systems for CMAM developed in parallel to national systems were found to be unsustainable; there was a lack of consensus on practical reporting requirements. Parallel information systems have improved reporting but generally require external support and lack strong connection to national M&E processes. Where undertaken, simplification of data collection and analysis was found to enhance effectiveness. There are important data gaps with regard to relapse, means of detection by type/place of screening; repeat screenings; reasons for default; and effectiveness of counselling.

3. Promoting Equity in Access

Identification of children who might be missed and developing strategies to reach them are top challenges in improving access. Stronger case identification, community assessments and mapping of vulnerability are key tools to improve access. There are important gaps in coverage regarding children and areas both within and outside geographically targeted areas.

Planning among government, assistance partners and communities for CMAM is often disjointed which hampers the promotion of equity as well as coverage. Integrated planning frameworks and use of community assessments were found to help avoid implementation and equity issues, improve coverage and effectiveness and offer health staff greater direction. Where planning exercises included district level government and community stakeholders and made good use of information provided through vulnerability mapping programmes to map and prioritize CMAM target areas, more equitable access was achieved.

Awareness of challenges in estimating geographic and treatment coverage in order to promote more effective strategies to increase access was often weak. Coverage of children with SAM or MAM is far below the global and well below most national levels of need; geographic coverage has improved particularly where CMAM is more fully integrated into the national health system. Insufficient data on population, lack of agreement on calculations, and weak estimate of incidence affect geographic coverage estimates. The importance of treatment coverage surveys is now more widely recognised, however, they often lack funding and reliable data.

4. Progress and Challenges related to National Ownership

A strong nutrition authority and nationally owned overarching strategy for nutrition was found to be important to support CMAM's potential for long-term impact. Although nutrition services are gaining strength, the national nutrition authorities often lack appropriate status and expertise in order to

manage nutrition interventions and advocate for greater resources for CMAM. Nutritionists positioned centrally and in districts have been found to have effectively promoted prevention and recovery but are generally in short supply. Inter-linkages with international activities such as Scaling Up Nutrition (SUN) and the REACH initiative - a country-led approach to scale-up proven and effective interventions addressing child undernutrition through the partnership and coordinated action of UN agencies, civil society, donors, and the private sector, under the leadership of national governments - are sometimes blurred and funding for nutrition strategies is often insufficient.

Agreement on global standards for integration of CMAM management and services into the national health systems is lacking but critical to guide government, UN agencies, IPs and health system staff. Guidance by global standards has effectively steered the development of national strategies; thus a global effort is needed to agree on guidelines for integration which will steer efforts to address capacity issues in the national health system. UNICEF has piloted a Global CMAM Mapping framework which can provide guidance and this can be finalized or revised.

Where CMAM was not integrated with other interventions, health workers often felt overburdened and reported efficiency losses due to duplication and repetition. Insufficient numbers of well-trained health workers were found to be a major constraint for scaling up. Technical assistance was found to contribute to strategies that help to train, motivate and retain trained staff. Although numerous countries have integrated other interventions (e.g. IYCF or IMCI) with CMAM or are planning to do so, effective means to address the challenges presented in terms of different modes of scale up and lack of a unified scale up strategy among interventions have not been widely shared.

5. Efficiency - Costs, Supply and Delivery of RUTF

Cost savings through addressing user/dispenser challenges of ready to use foods have not been fully pursued. The cost of RUTF comprises approximately 50% of recurrent costs where cost of Ready to Use Supplementary Food (RUSF) is not included in calculations, thus cost saving is essential. Sharing of RUTF among siblings, caretaker sales of RUTF, and weak storage management, was successfully addressed in some cases through strengthening sensitization, referrals to food security interventions, counselling, and training.

For scaling up and promoting local production of RUTF, quality assurance remains a major problem. The main limiting factors to local production are quality control in order to meet stringent standards, the need for capital investment, and the sourcing and cost of ingredients. Further research is needed to explore alternative RUTF formulas for local production and use.

Under certain circumstance, investments in improving the efficiency of the national supply and delivery chains were found to help open up more areas to expansion. UNICEF, WFP and IPs currently manage all or part of supply and delivery of CMAM supplies in parallel systems which were found to be unsustainable. The three factors most likely to promote supply chain efficiency were: a) stronger planning and forecasting; b) assessment of national supply chain weakness; and c) usage of the national system by IPs with concurrent capacity development.

Common challenges in funding are lengthy periods for approval of project documents and signing of Memorandums of Understanding which delay implementation; short term agreements of three to six months between UNICEF and IPs adversely affect the motivation and performance of IP staff.

6. Sustainability and Scaling Up (Expansion of CMAM)

The scale-up and integration of CMAM are facilitated by partnerships among government, UNICEF, WFP, WHO, UNHCR and implementing and development partners; a cohesive vision for addressing acute malnutrition does not always exist. In support of CMAM, effective coordination among UNICEF, WHO and WFP has been evident in emergency response; however, isolation of agency-

specific roles has weakened the efficacy of longer term and regularized CMAM in ensuring linkages between inpatient and outpatient care and addressing MAM and SAM.

Globally and nationally, CMAM has not been found to be sustainable as a stand-alone intervention; integrated health and nutrition packages that include CMAM were more successful in strengthening efficiency, effectiveness, sustainability and prevention. A good practice was for CMAM to align itself to other preventive initiatives such as disaster risk reduction (DRR) and include indicators to that effect. The linkages to IYCF and MCH among others, highlight prevention as well as cure. Other means to augment CMAM outcomes include the IMAMI intervention, the HINI approach and greater promotion of traditional weaning foods.

The evolution of CMAM has produced rich knowledge; yet, evaluations and studies, dissemination of lessons and retention of the knowledge and experience accumulated in communities are still scarce. There is a need for more systematic planning and investment in evaluations and studies on the CMAM approach and in disseminating lessons and good practice examples.

Recommendations

Key recommendations are directed toward UNICEF Headquarters (HQ), Regional Offices (ROs) in CMAM priority regions, and to Country Offices (COs) where CMAM is being implemented. Recommendations are expected to be carried out through partnerships with government, UN agencies, IPs and other stakeholders. The recommendations are made in light of forthcoming global guidance (to be contextualized at the national level) on addressing severe acute malnutrition in emergency and non-emergency situations.

Overall, the evaluation recommends that UNICEF continue to promote and support CMAM as a viable approach to preventing and addressing SAM, with an emphasis on prevention through strengthening community outreach and MAM management and integrating CMAM into national health systems and with other interventions.

Ownership and Integration, Strategy and Policy, Guidelines

1. Continue to work with governments, WFP, WHO, IPs, and other stakeholders to secure a common understanding on the most effective means of addressing MAM in order to unify approaches, to strengthen community-based preventive measures, and to prevent SAM and relapses into SAM. UNICEF HQ needs to strengthen dialog with WHO, WFP and other stakeholders to clarify UNICEF's role in MAM management in view of global MoUs, and to make the best use of lessons learned and good practices to address MAM as a chronic problem. UNICEF HQ can call upon ROs and COs to collect input from their regions and countries. This may require global, regional or national workshops, and surveys and studies in various contexts.

2. Establish a guideline or framework for integration of CMAM into the health system and with other interventions that is useful at national level when based on capacity assessments and integrated with national health, nutrition and community development strategies. Through the global integration task force and other forums, UNICEF HQ should seek agreement on an integration framework. Using this guidance, UNICEF can offer technical assistance to help governments and partners develop a sustainable integration plan that will determine appropriate levels and types of external technical support.

3. Facilitate coordination and technical support at regional/national level to expand or develop national CMAM guidelines as CMAM is integrated with other interventions such as IYCF. With the MoH as the lead, UNICEF with oversight support from HQ, can provide technical assistance to assess current guidance and ensure that sufficient detail is included while integrating guidelines with other interventions. Guidance should be strengthened with regard to community outreach activities, MAM

management, cultural adaptation, gender and equity, performance monitoring and administration of RUTF, among others, and include lessons learned.

Performance and Quality of Services

4. Strengthen community outreach by ensuring adequate investment in CMAM outreach activities and their integration with outreach for other public health interventions. UNICEF COs should advocate through dialog with government and through health and nutrition coordination forums for more collaborative use of resources from various interventions, including the work of the CHWs. This may include making greater investments in support for CHWs, and in awareness campaigns and joint strategic planning exercises, ensuring participation of community leaders and private health care providers. More connection needs to be made to national nutrition and health strategies; UNICEF COs should link this process to C4D initiatives and with regular reviews of the community outreach strategy.

5. Decentralize nutrition information systems to strengthen data collection and analysis at district level supporting and reinforcing the MoHs' lead role and joint accountability among the MoH and partners for improving quality. UNICEF should take the lead in supporting the development of nutrition information systems capable of collecting qualitative as well as quantitative data and performing analysis of high quality that will promote aggregation of data at national and global levels. UNICEF can provide more technical support with partners such as WFP, WHO, and IPs to streamline data collection and reporting tools to reduce reporting burdens on staff and consider use of SMS technology for data monitoring. Stakeholders should agree on indicators that are critical and practical to collect and reassess the use of Sphere indicators as CMAM evolves to regular programming. Indicators should be developed to assess performance of community outreach activities and relapse; data should be disaggregated by sex.

6. Define a standardized monitoring system to assess the quality of the CMAM services to inform the MoH, UN partners, IPs and other stakeholders where more capacity is needed. UNICEF COs with technical support from ROs and working with government and partners should agree on a tool that will facilitate joint accountability for capacity development and qualitative monitoring which is integrated with other interventions to the degree possible. This can serve to indicate where greater interface with WASH is needed for acceptable water taps and latrines, and for noting other needs such as waiting areas, beds, play spaces and toys. A 3-tiered tool developed in Ethiopia is suggested as a model to be refined and adapted for this purpose.

Equity in Access, Assessment, Coverage, Planning

7. Strengthen planning for CMAM through conducting community assessments, and greater use of joint integrated results-based planning exercises and mapping information to help prioritize areas for scaling up. UNICEF COs should ensure joint planning with district stakeholders and inclusion of CMAM in district development plans. Planning has to accentuate participation of key community actors, demand challenges for CMAM services, possible equity issues and, identification of children who are most likely to be missed and potential strategies to reach them.

8. Improve awareness and capacity for conducting treatment coverage surveys and using the information to analyze trends. UNICEF COs should support capacity development on treatment coverage and ensure funding for technical assistance to conduct treatment coverage surveys, as well as assessing geographic coverage, with subsequent planning to strengthen and extend coverage.

Maintaining and Improving Efficiency

9. Strengthen means to reduce costs and promote national assumption of costs for ready to use therapeutic and supplementary foods. UNICEF COs need to support the MoH and other implementing partners to address RUTF user/dispenser challenges such as sharing among siblings, caretaker sales, and weak storage management, through guidelines, sensitization, counselling, and training. COs can advocate to strengthen national supply and delivery services through a joint plan to build capacity, as well

as incorporation of CMAM supplies (e.g. RUTF, equipment, medicines) as part of essential care packages to facilitate production and importation.

10. Conduct further operational research to find alternative RUTF formulas to promote feasibility of local production that meets international standards. UNICEF should take the lead to plan and support studies in various contexts working with key actors and providing technical assistance to assess capacity for production using alternatives to peanut-based RUTF. The RO's role needs to be augmented in promoting local/regional RUTF production and sharing technological insights.

Sustainability and Scaling Up (Expansion of CMAM)

11. Strengthen policies and partnerships that sustainably support scale up. UNICEF COs, with advice from ROs, need to ensure that agreements among government, IPs and technical advisors contain exit strategies and benchmarks for capacity building, e.g. for management, supply and delivery and information systems, and avoid unsustainable practices such as salary top offs. MoUs and PCAs should be developed in a timely manner and have sufficient time spans to support longer term goals of the intervention. UNICEF COs need to advocate for sufficient nutrition expertise in the MoH and ensure that its offices and IPs have adequate nutrition staff to coordinate planning and monitoring for scaling up CMAM.

12. Plan and implement exercises which strengthen a joint vision among UNICEF, WFP, WHO, IPs and the MoH on acute malnutrition. UNICEF should, at global, regional and national levels support joint workshops, and joint monitoring and evaluation, for the purpose of developing joint strategies and working toward an updated joint statement on addressing acute malnutrition.

13. Based on training needs assessments, job descriptions and appropriate supervision, scale up on the job training (OJT), training of trainers (TOTs), pre-service training (PST) and refresher training ensuring coverage of districts. CMAM training supported by UNICEF COs and with technical input from ROs should be combined with training for IYCF and other interventions to avoid redundancies and unify messages, through high level consultations with government and national nutrition networks and nutrition coordination mechanisms. The incorporation of nutrition science and CMAM into medical education and training (institutional training for doctors and nurses) needs to be promoted to ensure adequate pre-service training on acute malnutrition.

14. Strengthen prevention of SAM through ensuring that management of acute malnutrition is part of a minimum package of nutrition interventions in all priority countries. With the MoH, UNICEF and other partners through nutrition and health coordination forums need to design and implement a package of nutrition interventions which includes CMAM to manage MAM and SAM delivered as one of the basic health services, and also integrated within a broader intersectoral approach to address the causes of undernutrition. UNICEF HQ, ROs and COs should seek means to align CMAM with preventive interventions such as DRR and include indicators to that effect as well as encouraging countries to use global resources available through SUN and REACH.

15. Strengthen knowledge and lesson dissemination and sharing of successful approaches to integration and scaling up. UNICEF needs to devote more resources to plan and fund evaluations and studies on the CMAM approach in order to disseminate lessons, share good practice examples, and help to retain the knowledge and experience accumulated in communities. UNICEF RO's technical input needs to be strengthened to share regional experiences along with designing integrated monitoring plans and tools. Possible studies include optimizing the roles of CHWs, pursuing integration in various contexts, identifying the reasons for defaults and relapses, documenting options for effective MAM management, improving knowledge, attitudes, and practice for child nutrition, and researching the most sustainable options for addressing acute malnutrition.

RESUMEN EJECUTIVO

La desnutrición aguda grave (SAM, por sus siglas en inglés) amenaza la supervivencia de los niños, tanto en situaciones de emergencia como de no emergencia. Las estimaciones recientes sugieren que la SAM afecta a entre 19 y 26 millones de niños menores de 5 años en todo el mundo, y contribuye a casi 1 millón de muertes infantiles todos los años; la mayoría de los casos de SAM no se registran en los países en situación de emergencia. El tratamiento de la SAM ha evolucionado hasta convertirse en una intervención importante durante varias décadas, pero ha tenido un alcance limitado. La llegada de los alimentos terapéuticos listos para su uso y de un enfoque basado en la comunidad denominado “gestión de la desnutrición aguda en la comunidad (CMAM, por sus siglas en inglés)”, ha hecho que sea posible tratar a la mayoría de los niños en sus hogares.

La eficacia del enfoque CMAM ha demostrado su eficacia desde el año 2007 a raíz del apoyo por parte de varios organismos de las Naciones Unidas que allanó el camino para la ampliación de la intervención. La CMAM es generalmente una escala continua de prevención con cuatro componentes: 1) la divulgación en la comunidad como base, 2) la gestión de la desnutrición aguda moderada (MAM, por sus siglas en inglés), 3) el tratamiento ambulatorio de los niños con SAM que tienen un buen apetito y no presentan complicaciones médicas, y 4) el tratamiento hospitalario de los niños con SAM que presentan complicaciones médicas y/o falta de apetito.

Dos objetivos clave del enfoque CMAM, tanto a nivel mundial como nacional, es su integración progresiva en el sistema nacional de salud y que el gobierno se apropie del enfoque en última instancia. A finales de 2012, los gobiernos de 63 países han establecido alianzas con UNICEF, el PMA, la OMS, donantes y ONG aliadas en la ejecución en torno al enfoque CMAM. Los ministerios de salud asumen funciones de liderazgo y coordinación, y ofrecen los establecimientos de salud. Las disposiciones para su aplicación varían en contextos o zonas concretas. La mayoría de los países aplican intervenciones relacionadas entre sí, tales como la Alimentación del Lactante y del Niño Pequeño, la gestión integrada de las enfermedades de la infancia (AIEPI), la salud de la madre y el hijo, así como la administración de suplementos de micronutrientes.

Los apoyos internos y externos del enfoque CMAM incluyen las políticas, el compromiso de los fondos, la coordinación y el apoyo técnico disponible en el Ministerio de Salud y otros aliados en la ejecución. El acceso a los servicios sugiere vínculos oficiales y no oficiales entre las organizaciones o sistemas de salud, y sus contrapartes basados en la comunidad. El acceso a los suministros del enfoque CMAM incluye medicamentos esenciales y alimentos terapéuticos listos para usar o alimentos suplementarios. La calidad del servicio requiere establecer directrices, apoyar y supervisar al personal, ofrecer capacitación y ocuparse de los componentes de seguimiento y evaluación. Los resultados que se busca obtener son mejores conocimientos y prácticas de la comunidad en relación con la nutrición y la salud infantiles, progresos en el estado nutricional de los niños menores de cinco años de edad incorporados en el enfoque CMAM, y la reducción de la morbilidad y la mortalidad.

A través de los servicios del enfoque CMAM, UNICEF brinda orientación técnica para mejorar la calidad y el acceso del tratamiento de la SAM, y trabaja para establecer métodos estandarizados de seguimiento y evaluación para demostrar los efectos de la intervención sobre la SAM. UNICEF produce un resumen anual, el “Global SAM Treatment Update”, para informar sobre el estado del tratamiento de la SAM en los países donde se implementa el apoyo de UNICEF al enfoque CMAM. UNICEF ha realizado importantes inversiones para ampliar el tratamiento de la SAM por medio del enfoque CMAM, como por ejemplo la adquisición de alimentos terapéuticos, de medicamentos y de equipos. UNICEF adquiere en la actualidad aproximadamente 32.000 toneladas anuales de alimentos terapéuticos listos para su uso, lo que representa una inversión de más de 100 millones de dólares UNICEF también contribuye en la mayoría de los países, junto con los gobiernos y los asociados en la ejecución no gubernamentales, al fomento de la capacidad y la formación; a la creación de centros ambulatorios de tratamiento; a la comunicación para la promoción, la concienciación y los cambios de comportamiento; y el perfeccionamiento de los sistemas de seguimiento e información.

En los últimos años se han llevado a cabo varios exámenes del enfoque CMAM; sin embargo, no hay una evaluación que haya examinado todos los aspectos clave del enfoque CMAM, tanto a nivel nacional como mundial. Esta evaluación es la primera en generar datos empíricos sobre la forma en que han funcionado las estrategias en los niveles mundial y nacional, incluyendo su aceptación y apropiación en diversos contextos y la idoneidad de las inversiones en el desarrollo de capacidades y los componentes de suministro. El proceso incluye una evaluación exhaustiva del enfoque CMAM en cinco países y la elaboración de conclusiones y recomendaciones sintetizadas para los gobiernos, organismos de la ONU, organizaciones no gubernamentales y otras partes interesadas, a fin de utilizarlas para modificar la política y la orientación técnica del enfoque CMAM en los contextos de emergencia y de no emergencia.

Alcance y métodos de la evaluación

El alcance de la evaluación consta de dos componentes relacionados entre sí. En primer lugar, la evaluación realizó un análisis detallado del enfoque CMAM en el Chad, Etiopía, Kenya, Nepal y el Pakistán. Se aplicaron criterios de pertinencia, eficacia, eficiencia, sostenibilidad y ampliación de la escala a los componentes del enfoque CMAM y a las cuestiones transversales. Los datos fueron obtenidos de fuentes secundarias, de bases de datos del sistema de salud, y de las observaciones durante las visitas a las zonas de intervención del enfoque CMAM. La perspectiva de la comunidad se analizó mediante la recopilación de las opiniones de los cuidadores, familiares, líderes comunitarios y personal de salud basado en la comunidad, además de grupos de interés de los organismos gubernamentales y de asistencia. Se analizaron los datos cuantitativos para determinar si se cumplen los objetivos de rendimiento, y los datos cualitativos apoyaron el análisis. En segundo lugar, basándose en los estudios de casos, una investigación más amplia dio como resultado la recopilación de lecciones, buenas prácticas y recomendaciones para UNICEF y sus asociados a nivel mundial. Una encuesta mundial en Internet dirigida a los 63 países que aplican la CMAM contribuyó a triangular y validar las conclusiones de los cinco estudios de caso.

Conclusiones

Las conclusiones de la evaluación se basan en los resultados que se detallan en el texto del informe, en relación con: (1) La pertinencia del enfoque CMAM; (2) la eficacia y calidad de los servicios del enfoque CMAM; (3) la promoción de la equidad en el acceso; (4) los avances en la apropiación nacional; (5) la eficiencia – Costos, y suministro y entrega de alimentos terapéuticos listos para su uso; y (6) la sostenibilidad y ampliación de la escala (expansión) del enfoque CMAM.

1. Pertinencia de la orientación y la asistencia técnica del enfoque CMAM

El enfoque CMAM es adecuado para tratar la desnutrición aguda, sobre todo en la medida en que este enfoque se está integrando de forma sostenible en el sistema nacional de salud. Las intervenciones del enfoque CMAM se están regularizando en los sistemas nacionales de salud, lo que contribuye a una mayor cobertura geográfica. Los aportes han facilitado el cumplimiento de las normas de Esfera para la recuperación de la SAM y el éxito de la expansión en tiempos de crisis. Cuando la integración (por ejemplo, gobierno, finanzas, planificación, prestación de servicios, seguimiento e información, demanda) está bien planificada y se basa en evaluaciones de la capacidad, la eficiencia ha aumentado y se ha facilitado la ampliación de la escala.

La demanda de servicios del enfoque CMAM ha aumentado; el uso eficiente de los recursos por la comunidad para la prevención, la identificación y la remisión de niños con MAM y SAM contribuye a la demanda. Los esfuerzos para movilizar a las comunidades, el desarrollo de la capacidad en el sistema de salud y el aumento de la participación en los distritos y las comunidades han dado sus frutos en un aumento de las admisiones. La demanda se incrementa efectivamente al facilitar una mayor participación en la planificación a nivel de distrito, proporcionando más apoyo a los trabajadores

comunitarios de salud, y utilizando a los proveedores de salud privados y a otros miembros de la comunidad.

Las contribuciones nacionales al enfoque CMAM están incrementándose, pero el aumento de la escala (expansión) está expuesto a los problemas de financiación de la programación regular y la dependencia de los fondos de emergencia y fuentes externas de asistencia. La dependencia de los fondos temporales y a corto plazo, principalmente la financiación de emergencia externa, hace que el enfoque CMAM tenga menos probabilidades de lograr resultados sostenibles y de prevención. Una mayor responsabilidad para hacer frente a la desnutrición aguda se plasma en una mayor asunción de la carga de los costos por los gobiernos y la reevaluación de las prácticas y fuentes de financiación por parte de los aliados en la asistencia.

Directrices mundiales y nacionales

La orientación mundial para el tratamiento de la SAM ha contribuido a la elaboración de directrices nacionales que ofrecen un alto valor en la promoción de la apropiación por parte de los distritos. Sin embargo, la falta de acuerdo sobre el mejor enfoque para hacer frente a la MAM ha contribuido a la falta de uniformidad entre los países para la gestión de la MAM y, paralelamente, la prevención de la SAM. A nivel nacional, allí donde las directrices de la MAM se han elaborado por separado de los otros tres componentes o están poco perfeccionadas, los vínculos preventivos entre la divulgación en la comunidad, la MAM y la SAM se debilitan.

La orientación mundial y nacional es en general adecuada para los protocolos de tratamiento, pero se observan carencias o fragmentaciones en cuanto a: la planificación y el seguimiento, la integración del enfoque CMAM, la equidad y el género, la evaluación y la movilización de la comunidad, y gestión de la MAM. A nivel nacional, los organismos de orientación se fortalecen por medio de la integración con la Alimentación del Lactante y del Niño Pequeño y otras intervenciones. Puede que algunas de las normas humanitarias mínimas de Esfera no sean pertinentes para los enfoques CMAM regularizados, y por tanto el uso de Esfera necesita un mayor debate. Es necesario establecer normas e indicadores para la detección, recaídas, reingresos, referencias y visitas a los hogares (que Esfera no cubre) a fin de promover una gestión más eficaz de la intervención.

Asistencia técnica

El apoyo técnico se ha traducido en avances significativos en el proceso, la cobertura y los resultados; la creación de sistemas paralelos no es sostenible y ralentiza la apropiación nacional. La puesta en marcha y la ampliación del enfoque CMAM depende en una medida considerable de la ayuda externa; sin embargo, la gestión y financiación por separado de los sistemas de información, de suministro y de prestación, de finanzas y/o de supervisión de la gestión son difíciles de asimilar con eficacia. Cuando se utilizan planes de salida, memorandos de entendimiento y otros acuerdos para describir las funciones y responsabilidades de los aliados en la ejecución y de los asesores para aumentar la capacidad de manera progresiva y eficaz, se facilita la evaluación de los resultados y la transferencia a las autoridades nacionales de los sistemas paralelos. Sin embargo, esto se hace de forma limitada; los aliados en la ejecución a menudo carecen de planes de integración o de salida, así como de una sólida conexión con la planificación del desarrollo a nivel de distrito.

Dentro de UNICEF ha habido, en general, un apoyo eficaz a la movilización de fondos, la respuesta en materia de nutrición en situaciones de emergencia y los protocolos de apoyo a la nutrición; la ampliación de las funciones regionales es importante para satisfacer las necesidades nacionales de asistencia técnica. Se encontró que el soporte técnico mundial y regional tenía una importancia clave para el desarrollo de la orientación y el diseño de planes y herramientas de seguimiento, estudios y evaluaciones participativas y la difusión de las lecciones aprendidas. Se requiere a la mayoría de las oficinas de país mayores aportes y funciones en materia de asistencia técnica regional para el enfoque CMAM.

El desarrollo de la capacidad ha promovido de forma considerable la calidad de los servicios, pero hay algo de redundancia en la capacitación entre las intervenciones relacionadas. La

capacitación en el trabajo supera a la formación de los instructores como el método más eficaz. Dedicar más recursos a la formación antes del servicio ha mejorado los conocimientos sobre nutrición del personal médico. Las evaluaciones sobre las necesidades de capacitación no siempre examinan las funciones del personal; se encontró que la formación de los miembros de la comunidad era muy limitada y la cobertura de las zonas de captación a menudo irregular, ya que algunas zonas reciben menos atención.

2. Eficacia y calidad de servicios del enfoque CMAM

En general, el enfoque CMAM ha sido eficaz a la hora de ayudar a los niños ingresados a recuperarse de la SAM y promover la prevención a través de la ayuda comunitaria y la gestión de la MAM. El enfoque CMAM ha tenido menos éxito en la prevención (en lugar del tratamiento) de la SAM. Las normas Esfera se cumplieron en el caso de la recuperación para la gestión de la MAM donde se disponía de datos, y para la recuperación, la muerte y el abandono del tratamiento ambulatorio y hospitalario de la SAM en los cinco países estudiados. Los miembros de la comunidad y los trabajadores de la salud han reafirmado unos mayores niveles de conocimiento sobre el impacto de la nutrición en el desarrollo infantil. La coordinación y la promoción de la nutrición en torno CMAM han contribuido a que la nutrición ocupe un espacio más importante en la agenda política.

La concienciación de la comunidad sobre la desnutrición aguda, conjuntamente con la búsqueda activa de casos, ha mejorado de manera fundamental las admisiones a los servicios; la posibilidad de la divulgación dirigida a la comunidad se ve limitada por la falta de evaluación, planificación y ayuda para la movilización de recursos de la comunidad, una supervisión eficiente y un apoyo inadecuado para los trabajadores comunitarios de la salud. Las visitas domiciliarias de seguimiento son deficientes porque los trabajadores comunitarios de la salud requieren más apoyo en la forma de transporte y otros medios que faciliten el acceso a los hogares. Se ha encontrado que la concienciación y movilización mejora allí donde se llevaron a cabo con frecuencia evaluaciones de la comunidad y donde se asignan recursos para apoyar las estrategias de divulgación, así como incentivos para los trabajadores comunitarios de la salud.

Los servicios ambulatorios de tratamiento, tanto los que se implementan a través de los establecimientos de salud fijos, las clínicas móviles o en los campos de refugiados, son eficaces en las zonas de intervención el enfoque CMAM en los países estudiados para el tratamiento de la SAM sin complicaciones. La existencia de instalaciones de capacitación y supervisión bien equipadas contribuyó al éxito. Se encontró que una mayor coherencia en el uso y las normas conlleva que las mediciones antropométricas sean más eficaces. Una infraestructura suficiente para acoger a los niños y sus cuidadores, y los insumos adecuados WASH, en particular en la prestación de los grifos de agua y letrinas aceptables mejoró la calidad de los servicios.

Se encontró que los insumos del enfoque CMAM en materia de servicios de tratamiento para pacientes hospitalizados son sólo moderadamente eficaces debido a la deficiencia de la coordinación en torno a las revisiones entre atención hospitalaria y ambulatoria, y la insuficiencia en la dotación de personal, el apoyo psicológico, y la recolección de datos. Las lagunas en el apoyo al personal durante las 24 horas, así como en el fortalecimiento de la capacidad del personal de salud para la prestación de servicios de nutrición y de recopilación y análisis de datos, han limitado la evaluación de la eficacia. Del mismo modo, muchas instalaciones carecían de suficientes camas para las épocas de alta ocupación y de zonas de juegos y juguetes para proporcionar estímulo psicosocial.

No existen suficientes datos sobre los insumos y resultados de la gestión de la MAM. La ausencia de encuestas para medir cambios en el comportamiento y la falta de datos fiables sobre los indicadores de desempeño de la MAM hacen difícil determinar la eficacia de la intervención de la MAM, ya sea cuando se aplica a través de la orientación, del suministro de alimentos suplementarios, o de ambos. No hay suficientes datos sobre la recaída para proporcionar datos empíricos sobre los vínculos entre las intervenciones para hacer frente a la SAM y a la MAM.

Se descubrió que los sistemas de información para el enfoque CMAM desarrollados en paralelo a los sistemas nacionales son insostenibles; había una falta de consenso sobre las necesidades prácticas de presentación de informes. Los sistemas de información paralelos han mejorado la presentación de informes, pero generalmente requieren apoyo externo y carecen de un vínculo sólido con los procesos nacionales de seguimiento y evaluación. Donde se pusieron en práctica, se encontró que la simplificación de la recopilación y el análisis de datos mejoraban la eficacia. Hay lagunas importantes en los datos con respecto a la recaída, los medios de detección por tipo/lugar de la detección; repetición de los exámenes; razones por defecto; y la efectividad de la orientación.

3. Promover la equidad en el acceso

Los principales desafíos para mejorar el acceso son determinar quiénes son los niños que podrían pasar desapercibidos y establecer estrategias para llegar a ellos. Una identificación más sólida de los casos, las evaluaciones de la comunidad y la recopilación de datos sobre la vulnerabilidad son herramientas clave para mejorar el acceso. Hay importantes lagunas en la cobertura tanto en lo que atañe a los niños como las zonas dentro y fuera de las regiones geográficas específicas.

La planificación entre el gobierno, los aliados en la asistencia y las comunidades en torno al enfoque CMAM es a menudo inconexa, lo que dificulta la promoción de la equidad y la cobertura. Se encontró que los marcos de planificación integrada y el uso de las evaluaciones de la comunidad contribuyen a evitar problemas relacionados con la ejecución y la equidad, a mejorar la cobertura y la eficacia y a ofrecer al personal de salud una mayor dirección. Cuando los ejercicios de planificación incluyen a las partes interesadas del gobierno y de la comunidad a nivel del distrito y hacen un buen uso de la información proporcionada a través de programas de recopilación de datos sobre la vulnerabilidad para asignar y priorizar las esferas seleccionadas por la CMAM, se logró un acceso más equitativo.

No suele haber una conciencia firme de los retos en la estimación de la cobertura geográfica y el tratamiento con el fin de promover estrategias más eficaces para aumentar el acceso. La cobertura de los niños con SAM o MAM está muy por debajo de los niveles más mundiales y muy por debajo de las necesidades nacionales; la cobertura geográfica ha mejorado sobre todo cuando la CMAM está más plenamente integrada en el sistema nacional de salud. La insuficiencia de datos sobre la población, la falta de acuerdo sobre los cálculos, y la estimación deficiente de la incidencia afectan las estimaciones de cobertura geográfica. Actualmente se reconoce más ampliamente la importancia de las encuestas de cobertura del tratamiento, aunque a menudo carecen de fondos y de datos fiables.

4. Progresos y desafíos relacionados con la apropiación nacional

Se encontró que una fuerte autoridad en materia de nutrición y una estrategia global de propiedad nacional para la nutrición son importantes para apoyar las repercusiones a largo plazo del enfoque CMAM. Aunque los servicios de nutrición están ganando fuerza, las autoridades nacionales de nutrición suelen carecer del estatus y la experiencia adecuados para la gestión de las intervenciones de nutrición y para abogar en favor de más recursos para el enfoque CMAM. Se ha encontrado que posicionar a nutricionistas a nivel central y en los barrios promueve de manera eficaz la prevención y la recuperación, pero por lo general suele haber escasez de estos especialistas. Las interrelaciones con las actividades en la ejecución, como las iniciativas SUN y REACH, a veces se difuminan y la financiación de las estrategias de nutrición es a menudo insuficiente.

Aunque el acuerdo sobre las normas mundiales para la integración de la gestión y los servicios del enfoque CMAM en los sistemas nacionales de salud es deficiente, resulta fundamental para orientar a los gobiernos, los organismos de las Naciones Unidas, los aliados en la ejecución y el personal del sistema de salud. Una orientación basada en los estándares mundiales ha guiado eficazmente el desarrollo de las estrategias nacionales; por ello, es necesario un esfuerzo mundial para ponerse de acuerdo sobre las directrices para la integración, un paso que servirá para orientar los esfuerzos destinados a abordar los problemas de capacidad en el sistema nacional de salud. UNICEF ha puesto a prueba un marco de “Cartografía Mundial del enfoque CMAM”, que pueden servir de guía, y este marco puede ser finalizado o revisado.

Cuando el enfoque CMAM no está integrado con otras intervenciones, los trabajadores de salud se sienten a menudo abrumados e informaron sobre pérdidas de eficiencia debido a la duplicación y la repetición. La falta de una cantidad suficiente de trabajadores sanitarios bien formados resultó ser un obstáculo importante para la ampliación. Se encontró que la asistencia técnica contribuye a las estrategias que ayudan a capacitar, motivar y retener al personal capacitado. Aunque numerosos países han integrado otras intervenciones (por ejemplo, alimentación infantil o AIEPI) con la CMAM, o tienen previsto hacerlo, no se han compartido ampliamente los medios más eficaces para hacer frente a los desafíos que se presentan en términos de los diferentes modos de ampliación de la escala y la falta de una estrategia unificada para la ampliación de la escala entre las intervenciones.

5. Eficiencia - Costos, suministros y entrega de los alimentos terapéuticos listos para su uso

No se han tratado de conseguir ahorros de los costes abordando los problemas usuario/distribuidor de los alimentos listos para su uso. El costo de los alimentos terapéuticos listos para su uso comprende aproximadamente el 50% de los gastos ordinarios cuando el costo de los alimentos complementarios listos para su uso no se incluye en los cálculos, por lo que el ahorro de los costes es esencial. Los problemas que representan el reparto de alimentos complementarios listos para su uso entre los hermanos, las ventas de estos alimentos por el cuidador, y una gestión deficiente del almacenamiento, se han aliviado mediante el fortalecimiento de la concienciación, la orientación hacia a intervenciones de seguridad alimentaria, el asesoramiento y la capacitación.

Para la ampliación de la escala y la promoción de la producción local de alimentos terapéuticos, el control de calidad sigue siendo un problema importante. Los principales factores que limitan la producción local son el control de calidad con el fin de cumplir con normas estrictas, la necesidad de inversión de capital, y el abastecimiento y el costo de los ingredientes. Se necesita más investigación para explorar fórmulas alternativas que faciliten la producción y la utilización de alimentos terapéuticos listos para su uso a escala local.

Bajo ciertas circunstancias, se encontró que las inversiones en la mejora de la eficiencia de la oferta y las cadenas de suministro nacionales contribuyen a abrir más zonas para la expansión. UNICEF, el PMA y los aliados en la ejecución gestionan actualmente la totalidad o parte de la oferta y la entrega de suministros del enfoque CMAM en sistemas paralelos que resultan insostenibles. Los tres factores que pueden promover con mayor probabilidad la eficiencia de la cadena de suministro son: a) una sólida planificación y previsión; b) la evaluación de las deficiencias en la cadena nacional de suministro; y c) el uso del sistema nacional de aliados en la ejecución con el desarrollo de capacidades concurrentes.

Los problemas comunes en la financiación son la existencia de largos períodos para la aprobación de los documentos del proyecto y la firma de memorandos de entendimiento, lo que supone una demora en la ejecución; los acuerdos a corto plazo de tres a seis meses entre UNICEF y los aliados en la ejecución afectan de forma adversa la motivación y el rendimiento del personal de estos aliados.

6. Sostenibilidad y ampliación de la escala (expansión del enfoque CMAM)

La ampliación y la integración del enfoque CMAM se ven facilitadas por las alianzas entre el gobierno, UNICEF, el PMA, la OMS, el ACNUR y los aliados en la ejecución y el desarrollo; no siempre existe una visión coherente para hacer frente a la desnutrición aguda. En apoyo del enfoque CMAM, una coordinación eficaz entre el UNICEF, la OMS y el PMA se ha puesto de manifiesto en la respuesta de emergencia; sin embargo, el aislamiento de las funciones de los organismos específicos ha debilitado la eficacia a largo plazo y la regularización del enfoque CMAM mediante el establecimiento de vínculos entre atención hospitalaria y ambulatoria, y el tratamiento de MAM y SAM.

A nivel mundial y nacional, no se ha encontrado que el enfoque CMAM pueda ser sostenible como una intervención única; los conjuntos de salud y nutrición integrados que incluyen el enfoque CMAM tuvieron más éxito en el fortalecimiento de la eficiencia, la eficacia, la sostenibilidad y la

prevención. Una buena práctica fue que la CMAM se alineara con otras iniciativas preventivas, como la reducción del riesgo de desastres, e incluyera indicadores en este sentido. Los vínculos con la alimentación infantil y la salud maternoinfantil, entre otros, destacan la prevención y la cura. Otros medios para aumentar los resultados del enfoque CMAM incluyen la intervención IMAMI, el enfoque HINI y una mayor promoción de los alimentos tradicionales de destete.

La evolución del enfoque CMAM ha producido un conocimiento sustancial; sin embargo, las evaluaciones y los estudios, la difusión de lecciones y la retención del conocimiento y la experiencia acumulados en las comunidades siguen siendo escasos.

Recomendaciones

Las recomendaciones esenciales están dirigidas a la sede de UNICEF, las oficinas regionales en las regiones prioritarias del enfoque CMAM y las oficinas de país donde se aplica el enfoque CMAM. Se espera que las recomendaciones se lleven a cabo por medio de alianzas con los gobiernos, los organismos de las Naciones Unidas, los aliados en la ejecución y otras partes interesadas. Las recomendaciones se hacen a la luz de la próxima orientación mundial, (para su contextualización a escala nacional) sobre cómo hacer frente a la desnutrición grave aguda en las situaciones de emergencia y de no emergencia.

En general, la evaluación recomienda que UNICEF continúe promoviendo y apoyando el enfoque CMAM como un proyecto viable para la prevención y atención de la SAM, haciendo hincapié en la prevención mediante el fortalecimiento de la divulgación a la comunidad y la gestión de la MAM, y la integración del enfoque CMAM en los sistemas de salud nacionales y en otras intervenciones.

Apropiación e integración, estrategias y políticas, directrices

1. UNICEF debe seguir trabajando con los gobiernos, el PMA, la OMS, los aliados en la ejecución, y otras partes interesadas para garantizar un entendimiento común sobre los medios más eficaces para hacer frente a la MAM con el fin de unificar criterios, de fortalecer las medidas de prevención basadas en la comunidad, y de prevenir la SAM y las recaídas en la SAM. La sede de UNICEF necesita fortalecer el diálogo con el PMA y otras partes interesadas para aclarar el papel de UNICEF en la gestión de la MAM a la luz de los memorandos de entendimiento mundiales, y para hacer el mejor uso posible de las lecciones aprendidas y las buenas prácticas con el fin de hacer frente a la MAM como un problema crónico. La sede UNICEF puede recurrir a las oficinas regionales y las oficinas en los países para recopilar información sobre sus regiones y países. Esto puede requerir talleres mundiales, regionales o nacionales, y encuestas y estudios en diferentes contextos.

2. En colaboración con sus aliados, UNICEF puede ayudar a establecer una directriz o un marco para la integración del enfoque CMAM en el sistema de salud y con otras intervenciones que sean útiles a nivel nacional cuando se base en evaluaciones de la capacidad y esté integrado en las estrategias nacionales de salud, nutrición y desarrollo de la comunidad. A través del grupo de tareas de la integración global y otros foros, la sede de UNICEF debería buscar un acuerdo sobre un marco de integración. Con esta orientación, UNICEF puede ofrecer asistencia técnica para ayudar a los gobiernos y los aliados a desarrollar un plan de integración sostenible que determine los niveles y tipos apropiados de asistencia técnica externa.

3. UNICEF debe facilitar la coordinación y el apoyo técnico a nivel regional/nacional para ampliar o desarrollar directrices nacionales del enfoque CMAM a medida que este enfoque se integre con otras intervenciones como la alimentación infantil. Con el Ministerio de Salud como organismo coordinador, UNICEF, con el apoyo de supervisión de la sede de la organización, prestará asistencia técnica para evaluar la orientación actual y asegurarse de que se incluyan suficientes detalles, al tiempo que integra las directrices con otras intervenciones. La orientación debería reforzarse con respecto a las

actividades de ampliación comunitaria, la gestión de la MAM, la adaptación cultural, el género y la equidad, la supervisión del rendimiento y la administración de alimentos terapéuticos, entre otros, e incluir las lecciones aprendidas.

Rendimiento y calidad de los servicios

4. Fortalecer la divulgación a la comunidad, garantizando una inversión adecuada en las actividades de divulgación del enfoque CMAM y su integración con la divulgación de otras intervenciones de salud pública. Las oficinas de país de UNICEF deben promover a través del diálogo con el gobierno y por medio de foros de coordinación de salud y nutrición un uso más colaborativo de los recursos de varias intervenciones, incluida la labor de los trabajadores comunitarios de la salud. Esto puede incluir la realización de mayores inversiones en apoyo de estos trabajadores, y campañas de sensibilización y ejercicios de planificación estratégica conjunta, asegurando la participación de los líderes comunitarios y los proveedores privados de servicios de salud. Se debe establecer una mayor relación entre las estrategias nacionales de salud y de nutrición. Las oficinas de país deberían vincularse a este proceso con las iniciativas C4D y con las revisiones periódicas de la estrategia de divulgación a la comunidad.

5. Descentralizar los sistemas de información sobre la nutrición para fortalecer la recopilación y análisis de datos a nivel de distrito que apoyen y refuercen el papel coordinador de los Ministerios de Salud y una responsabilidad conjunta entre el Ministerio de Salud y los asociados para mejorar la calidad. UNICEF debería tomar la iniciativa en el apoyo al desarrollo de sistemas de información sobre la nutrición capaces de recoger tanto datos cualitativos como cuantitativos, y realizar análisis de alta calidad que promuevan la agregación de datos a nivel nacional y global. UNICEF puede proporcionar más apoyo técnico con aliados como el PMA, la OMS y los asociados en la ejecución para simplificar la recopilación de datos y las herramientas de información a fin de reducir la carga que la presentación de informes supone para el personal, y considerar el uso de la tecnología SMS para el control de datos. Los interesados deben ponerse de acuerdo en torno a una serie de indicadores que sean fundamentales y prácticos para recopilar y volver a evaluar el uso de los indicadores de Esfera a medida que el enfoque CMAM evolucione para convertirse en una programación ordinaria. Se deben establecer indicadores para evaluar el rendimiento de las actividades de divulgación a la comunidad y la recaída; los datos se deben desglosar por género.

6. Definir un sistema de monitoreo estandarizado para evaluar la calidad de los servicios del enfoque CMAM con el fin de informar al Ministerio de Salud, los aliados de las Naciones Unidas, los aliados en la ejecución y otras partes interesadas cuando se necesite más capacidad. Las oficinas de país de UNICEF, con el apoyo técnico de las oficinas regionales y en estrecha colaboración con el gobierno y los aliados, deberán ponerse de acuerdo sobre una herramienta que facilite la rendición conjunta de cuentas para el desarrollo de capacidades y el seguimiento cualitativo, que se debe integrar en la medida posible con otras intervenciones. Esto puede servir para indicar cuándo se necesita una mayor interfaz con WASH para grifos de agua y letrinas aceptables, y para señalar otras necesidades, como las salas de espera, las camas, los espacios de juego y los juguetes. Se sugiere una herramienta de 3 niveles desarrollada en Etiopía como modelo que se puede perfeccionar y adaptar para este propósito.

Equidad en el acceso, evaluación, cobertura, planificación

7. Fortalecer la planificación del enfoque CMAM mediante la realización de evaluaciones de la comunidad, y un mayor uso conjunto de los ejercicios integrados de planificación basados en los resultados y la información derivada de la recopilación de datos para ayudar a priorizar zonas para la ampliación. Las oficinas de país de UNICEF deben garantizar la planificación conjunta con los responsables del distrito y la inclusión del enfoque CMAM en los planes de desarrollo de distrito. La planificación tiene que acentuar la participación de los actores clave de la comunidad, los retos que supone la demanda de servicios del enfoque CMAM, las posibles cuestiones de equidad y la

identificación de los niños que tienen más posibilidades de que se les deje atrás, así como las posibles estrategias para llegar a ellos.

8. Mejorar el conocimiento y la capacidad para llevar a cabo encuestas de cobertura de tratamiento y uso de la información para analizar tendencias. Las oficinas de país de UNICEF deben apoyar el desarrollo de la capacidad sobre la cobertura del tratamiento y garantizar la financiación de asistencia técnica a fin de llevar a cabo encuestas sobre la cobertura del tratamiento, así como la evaluación de la cobertura geográfica, con una planificación posterior para fortalecer y ampliar la cobertura.

Mantener y mejorar la eficacia

9. El fortalecimiento significa reducir costos y promover que el país se haga cargo de los costos de los alimentos listos para su uso y suplementarios. Las oficinas de país tienen que abordar los problemas de usuario/dispensador de los alimentos terapéuticos listos para su uso con el Ministerio de Salud, como el reparto entre los hermanos, las ventas por parte de los cuidadores, y la gestión deficiente del almacenamiento, por medio de directrices, concienciación, orientación y capacitación. Las oficinas de país pueden promover el fortalecimiento de los servicios nacionales de suministro y prestación por medio de un plan conjunto para fomentar la capacidad, así como la incorporación de los suministros del enfoque CMAM (por ejemplo, alimentos terapéuticos listos para su uso, equipos, medicinas) como parte de los conjuntos esenciales de atención para facilitar la producción y la importación.

10. Seguir realizando investigaciones operativas para encontrar fórmulas alternativas de alimentos terapéuticos listos para su uso a fin de promover la viabilidad de la producción local que cumpla con los estándares internacionales. UNICEF debería tomar la iniciativa para planificar y apoyar los estudios en diversos contextos de trabajo con los participantes clave y la prestación de asistencia técnica para evaluar la capacidad para la producción mediante alternativas a los alimentos terapéuticos listos para su uso a base de maní. Es preciso incrementar las funciones de la oficina regional para promover la producción local/regional de estos alimentos listos para su uso, y compartir los conocimientos tecnológicos.

Sostenibilidad y ampliación de la escala (expansión del enfoque CMAM)

11. Fortalecer políticas y alianzas que apoyen la sostenibilidad de la ampliación de la escala. Las oficinas de país de UNICEF, con el asesoramiento de las oficinas regionales, tienen que garantizar que los acuerdos entre los gobiernos, los aliados en la ejecución y los asesores técnicos incluyan estrategias de salida y parámetros para el fomento de la capacidad, como por ejemplo para la gestión, el suministro y la entrega, y los sistemas de información, y evitar prácticas insostenibles como salarios superiores. Los memorándums de entendimiento y los PCA deben desarrollarse de manera oportuna y tener períodos suficientes de tiempo para apoyar objetivos de la intervención a largo plazo. Las oficinas de país debe ser tienen que promover que en el Ministerio de Salud haya los suficientes conocimientos técnicos sobre nutrición y garantizar que sus oficinas y las de los aliados en la ejecución dispongan de personal suficiente de nutrición que coordine la planificación y el seguimiento de la ampliación de la escala del enfoque CMAM.

12. Planificar e implementar ejercicios que fortalezcan una visión conjunta entre UNICEF, el PMA, la OMS, los aliados en la ejecución y el Ministerio de Salud en torno a la desnutrición aguda. UNICEF debería apoyar talleres conjuntos, en los planos mundial, regional y nacional, así como un seguimiento y evaluación conjuntos, con el fin de desarrollar estrategias comunes y trabajar en favor de una declaración conjunta actualizada sobre cómo abordar la desnutrición aguda.

13. Sobre la base de evaluaciones de las necesidades de capacitación, descripciones de puestos de trabajo y una correcta supervisión, ampliar la capacitación en el trabajo, la formación de instructores, la formación antes del servicio y cursos de actualización para garantizar la cobertura de los distritos. La capacitación en el enfoque CMAM apoyada por las oficinas de país de UNICEF y con aportes técnicos de las oficinas regionales se debe combinar con la capacitación para la

Alimentación del Lactante y del Niño Pequeño y otras intervenciones a fin de evitar duplicaciones y unificar los mensajes, por medio de consultas de alto nivel con los gobiernos y las redes nacionales de nutrición, y los mecanismos de coordinación de la nutrición. Es preciso promover la incorporación de la ciencia de la nutrición y el enfoque CMAM en la educación y capacitación de los médicos (capacitación institucional para doctores y enfermeros) a fin de garantizar una formación adecuada antes del servicio sobre la desnutrición aguda.

14. Fortalecer la prevención de la SAM asegurando que la gestión de la desnutrición aguda forme parte de un conjunto mínimo de intervenciones de nutrición en todos los países prioritarios. Con el Ministerio de Salud, UNICEF y otros aliados tienen que diseñar y aplicar, por medio de los foros de coordinación de la nutrición y la salud, un conjunto de intervenciones de nutrición que incluya el enfoque CMAM para gestionar la MAM y la SAM como uno de los servicios básicos de salud, que está también integrado en un enfoque intersectorial más amplio para abordar las causas de la desnutrición. La sede de UNICEF, las oficinas regionales y las oficinas en los países deben buscar medios para armonizar la CMAM con intervenciones preventivas como la reducción de riesgos catástrofe e incluir indicadores a tal efecto, así como alentar a los países a utilizar los recursos disponibles a nivel mundial a través de SUN y REACH.

15. Fortalecer el conocimiento, difundir las lecciones y compartir las experiencias exitosas de integración y ampliación. UNICEF necesita dedicar más recursos para planificar y financiar las evaluaciones y estudios sobre el enfoque CMAM, con el fin de difundir las enseñanzas, compartir ejemplos de buenas prácticas, y ayudar a retener el conocimiento y la experiencia acumulados en las comunidades. Es necesario reforzar los aportes técnicos de las oficinas regionales para compartir las experiencias regionales y diseñar planes y herramientas integrados de seguimiento. Entre los posibles estudios cabe destacar la optimización de las funciones de los trabajadores comunitarios de la salud, buscar una mayor integración en diversos contextos, identificar las causas de los abandonos y recaídas, documentar las opciones para la gestión eficaz de la MAM, mejorar los conocimientos, las actitudes y las prácticas de nutrición infantil, e investigar las opciones más sostenibles para abordar la desnutrición aguda.

RÉSUMÉ EXÉCUTIF

La malnutrition aiguë sévère (MAS) menace la survie des enfants tant en situation d'urgence qu'en temps normal. D'après des estimations récentes, la MAS affecte entre 19 et 26 millions d'enfants de moins de cinq ans dans le monde et contribue à près d'un million de décès d'enfants chaque année ; la plupart des cas de MAS ne se trouvent pas dans des pays en situation d'urgence. Le traitement de la MAS est devenu en plusieurs décennies une intervention de premier plan mais avait une portée limitée. L'introduction des aliments thérapeutiques prêts à l'emploi (ATPE) et d'une approche à base communautaire, la prise en charge communautaire de la malnutrition aiguë (PCMA), a permis de traiter la majorité des enfants à domicile.

L'efficacité de la PCMA a été établie depuis 2007 par l'approbation de cette approche par les organismes des Nations Unies, ce qui a permis son adoption à plus grande échelle. La PCMA est généralement un continuum préventif comprenant quatre composantes principales : 1) la mobilisation communautaire comme élément de base ; 2) la prise en charge de la malnutrition aiguë modérée ; 3) le traitement ambulatoire d'enfants atteints de malnutrition aiguë sévère ayant un bon appétit et sans complications médicales ; et 4) le traitement hospitalier d'enfants atteints de malnutrition aiguë sévère avec complications médicales et/ou sans appétit.

L'un des objectifs principaux de la PCMA, à la fois sur le plan mondial et national, est l'intégration progressive dans le système national de santé et à terme, son appropriation complète par le gouvernement. À la fin de l'année 2012, les gouvernements de 63 pays avaient établi des partenariats avec l'UNICEF, le PAM, l'OMS, les donateurs et les ONG, pour la mise en œuvre de la PCMA. Les Ministères de la santé assument un rôle de direction et de coordination, et fournissent les centres de santé. Les modalités de la mise en œuvre varient selon les situations ou les régions. La plupart des pays mettent également en œuvre des interventions apparentées comme l'alimentation du nourrisson et du jeune enfant, la prise en charge intégrée des maladies de l'enfant (PCIME), la santé maternelle et infantile (SMI), ainsi que la supplémentation en micronutriments.

Les intrants externes et internes pour le déploiement de la PCMA incluent les politiques, le financement, la coordination et l'appui technique dont disposent les Ministères de la santé et les partenaires de mise en œuvre. L'accès aux services suppose des liens avec les organisations ou systèmes formels ou informels communautaires et des soins de santé. Les fournitures nécessaires à la PCMA se composent à la fois de médicaments essentiels et d'aliments thérapeutiques prêts à l'emploi ou de compléments alimentaires. Il faut, pour dispenser des services de qualité, établir des principes directeurs, fournir au personnel de l'appui, de l'encadrement et de la formation, et assurer le suivi et l'évaluation. Les résultats escomptés sont : de meilleures connaissances et pratiques de la communauté en matière de nutrition et santé infantile, l'amélioration de l'état nutritionnel des enfants de moins de cinq ans admis au programme de PCMA, et une réduction de la morbidité et de la mortalité.

Dans le cadre des services de la PCMA, l'UNICEF fournit l'appui technique visant à améliorer l'accès et la qualité du traitement de la MAS, et s'emploie à établir des méthodes de suivi et d'évaluation standardisées permettant d'établir l'efficacité des interventions. L'UNICEF rend compte dans un rapport annuel (intitulé "Global SAM Treatment Update") de l'avancée du traitement dans les pays où la PCMA est mise en œuvre avec son soutien. L'UNICEF a réalisé d'importants investissements en vue de traiter à grande échelle la MAS selon l'approche de la PCMA, en fournissant notamment les aliments thérapeutiques, les médicaments et du matériel. L'UNICEF fournit environ 32 000 millions de tonnes d'ATPE chaque année, ce qui représente un investissement de plus de 100 millions de dollars. Dans la plupart des pays, l'UNICEF contribue également, aux côtés des gouvernements et des partenaires de mise en œuvre, au renforcement de capacités et à la formation ; à l'établissement des centres de traitement ambulatoire ; à la mobilisation, la sensibilisation et la communication pour le changement de comportement ; et à l'élaboration de systèmes de suivi et d'information.

Ces dernières années, plusieurs études de la PCMA ont été menées ; cependant, aucune évaluation qui examine tous les principaux aspects de la PCMA n'a été conduite à la fois à l'échelle nationale et

mondiale. La présente évaluation est la première à présenter des données probantes sur le degré d'efficacité des stratégies adoptées tant à l'échelle mondiale que nationale, leur acceptation et leur appropriation dans divers contextes, ainsi que l'adéquation des investissements en faveur du renforcement des capacités et des composantes de l'approvisionnement. Elle se fonde sur une étude approfondie de la prise en charge communautaire dans cinq pays et vise à synthétiser les conclusions et recommandations à l'intention des gouvernements, des organismes des Nations Unies, des ONG et d'autres parties prenantes en vue de modifier les politiques et les orientations techniques relatives à la prise en charge communautaire en situation d'urgence et de non-urgence.

Portée et méthodes d'évaluation

L'évaluation comprend deux composantes interdépendantes. Premièrement, l'évaluation a consisté à mener des analyses approfondies de la PCMA au Tchad, en Éthiopie, au Kenya, au Népal et au Pakistan. Les critères de pertinence, d'efficacité, d'efficience, de pérennité et de mise en œuvre à plus grande échelle ont été appliqués aux composantes de la PCMA et aux questions transversales². Les données ont été obtenues de sources secondaires, de bases de données du système de santé ainsi que lors d'observations effectuées pendant des visites dans les zones d'intervention. Le point de vue de la communauté a été obtenu auprès des personnes en charge des enfants dans les familles (au sens large), des leaders communautaires et des agents de santé communautaire, en plus de divers acteurs gouvernementaux et de bailleurs de fonds. Les données quantitatives ont été analysées afin de déterminer si les cibles de performance étaient atteintes et les données qualitatives ont étayé l'analyse. Deuxièmement, en s'appuyant sur les résultats d'études de cas, des travaux de recherche de portée plus générale ont permis de compiler les leçons apprises, les bonnes pratiques et les recommandations destinées à l'attention de l'UNICEF et de ses partenaires. Une enquête réalisée par Internet et ciblant les 63 pays dans lesquels est mise en œuvre la PCMA a permis de trianguler et de valider les conclusions tirées des cinq études de cas.

Conclusions

Les conclusions de l'évaluation se fondent sur les résultats présentés en détails dans le rapport, concernant : 1) la pertinence de la PCMA; 2) l'efficacité et la qualité des services; 3) la promotion de l'équité en matière d'accès; 4) les progrès dans l'appropriation nationale; 5) l'efficience – coûts, approvisionnement et livraison d'aliments thérapeutiques prêts à l'emploi; et 6) la durabilité et la mise en œuvre à plus grande échelle (expansion) de la PCMA.

1. Pertinence des principes directeurs et de l'appui technique

L'approche de la PCMA permet de traiter la malnutrition aiguë, particulièrement dans la mesure où elle est durablement intégrée dans le système national de santé. Les interventions de PCMA sont de plus en plus intégrées dans les systèmes nationaux de santé, ce qui contribue à son expansion. Les moyens mis en œuvre ont permis de respecter les normes Sphère pour le traitement de la MAS ainsi que l'expansion réussie du programme en périodes de crises. Lorsque l'intégration (par exemple, la gouvernance, le financement, la planification, la prestation de services, le suivi et l'information, la demande) était bien planifiée et s'appuyait sur des évaluations de capacités, l'efficience s'est améliorée et la mise en œuvre à plus grande échelle a été facilitée.

La demande de services de PCMA a augmenté; l'utilisation efficiente des ressources de la communauté aux fins de prévention, d'identification et d'orientation vers les services adéquats des enfants atteints de malnutrition aiguë modérée ou sévère contribue à la demande. Les efforts

² Il n'existe à ce jour aucun accord mondial sur la prise en charge de la malnutrition aiguë modérée et cette dernière a été évaluée compte tenu des protocoles acceptés à l'échelle nationale.

déployés en vue de mobiliser les communautés, de renforcer les capacités du système de santé et d'accroître l'appropriation à l'échelle des districts et des communautés se sont traduits par un taux d'admission plus élevé. La demande augmente lorsqu'on favorise une plus grande participation à la planification à l'échelle des districts, qu'on apporte un plus grand soutien aux agents de santé communautaire et qu'on fait appel aux prestataires de soins de santé privés et à d'autres membres de la communauté.

Les contributions nationales à la PCMA augmentent mais la mise en œuvre à grande échelle (expansion) se heurte au financement insuffisant des programmes à long terme et à la dépendance à l'égard des fonds d'urgence et sources extérieures de financements. La dépendance à l'égard de financements intermittents, à court terme, et principalement extérieurs réduit la probabilité que la prise en charge communautaire obtienne des résultats préventifs et durables. Une plus grande volonté de remédier à la malnutrition aiguë se traduit par une plus grande prise en charge des coûts par les gouvernements et la réévaluation par les partenaires de développement des modalités et sources de financement.

Principes directeurs mondiaux et nationaux

Les protocoles élaborés à l'échelle mondiale en matière de PCMA ont contribué à l'élaboration de protocoles nationaux qui favorisent considérablement l'appropriation de l'approche au niveau des districts. L'absence de consensus quant à la meilleure approche de traitement de la malnutrition aiguë modérée (MAM) a cependant conduit à un manque de cohérence entre pays en ce qui concerne la prise en charge de la MAM et simultanément la prévention de la MAS. À l'échelle nationale, quand les protocoles de prise en charge de la MAM sont élaborés indépendamment des trois autres composantes ou ne sont pas suffisamment développés, les liens préventifs entre la mobilisation communautaire, la MAM et la MAS sont faibles.

Les protocoles mondiaux et nationaux conviennent généralement aux protocoles de traitement mais sont insuffisants ou fragmentés en ce qui concerne : la planification et le suivi, l'intégration de la PCMA, l'équité et l'égalité des sexes, l'évaluation, la mobilisation communautaire, et la prise en charge de la MAM. À l'échelle nationale, les protocoles sont renforcés par l'intégration avec l'alimentation des nourrissons et des jeunes enfants et d'autres interventions. Certaines normes Sphère peuvent ne plus s'appliquer à la PCMA une fois qu'elle est intégrée. L'usage des normes Sphère est donc à examiner plus en profondeur. Des normes et indicateurs sont nécessaires pour le dépistage, la rechute, les réadmissions, les référencement et les visites à domicile (absents des normes Sphère) afin de promouvoir une orientation plus efficace de l'intervention.

Appui technique

L'appui technique a permis de réaliser d'importants progrès en matière de processus, de couverture et de résultats ; la création des systèmes parallèles n'est pas durable et ralentit l'appropriation nationale. Le démarrage et la mise en œuvre à grande échelle de la PCMA dépend fortement de l'appui externe ; cependant il est difficile d'intégrer efficacement les systèmes d'information, d'approvisionnement et de livraison, ainsi qu'ils sont financés et gérés séparément. L'évaluation des résultats et le transfert des systèmes parallèles aux acteurs nationaux sont facilités lorsque les stratégies de sortie et les mémorandums d'accord décrivent clairement les rôles et responsabilités des partenaires de mise en œuvre et des conseillers pour renforcer progressivement et efficacement les capacités. Cependant, tel n'est pas le cas très souvent. Les partenaires de mise en œuvre n'ont pas très souvent de plans d'intégration ou de sortie, ni de connexion forte avec la planification du développement au niveau des districts.

Au sein de l'UNICEF en général, un appui véritable a été apporté à la mobilisation de fonds, aux réponses d'urgences nutritionnelles et l'appui aux protocoles nutritionnel; l'expansion des fonctions régionales est importante pour répondre aux besoins nationaux d'assistance technique. L'appui technique à l'échelle mondiale et régionale était essentiel à l'élaboration des protocoles nationaux et à la mise au point de plans et d'outils de suivi, d'études et d'évaluations participatives et à la diffusion

des leçons apprises. La majorité des bureaux de pays souhaitent recevoir un appui technique plus important des bureaux régionaux pour la PCMA.

Le renforcement de capacités a considérablement favorisé la qualité des services ; il y a cependant une redondance dans la formation dispensée dans le cadre d'interventions apparentées. La formation continue est plus efficace que la formation des formateurs. L'octroi de ressources plus importantes à la formation initiale universitaire a amélioré les connaissances du personnel médical en matière de nutrition. Les évaluations des besoins de formation n'ont pas toujours tenu compte des fonctions du personnel ; la formation des membres de la communauté était très limitée, et la couverture de zones de rayonnement souvent inégale, moins d'attention ayant été accordée à certaines zones.

2. Efficacité de la PCMA et qualité des services

Dans l'ensemble, la PCMA aide les enfants admis à guérir de la MAS et à promouvoir la prévention par la mobilisation communautaire et la prise en charge de la MAM. La PCMA s'est avérée moins efficace en ce qui concerne la prévention (et non le traitement) de la MAS. Les normes Sphère ont été respectées en matière du taux de guérison des MAM là où l'on dispose de données ; pour ce qui est du taux de guérison, de décès et d'abandon pour le traitement ambulatoire et hospitalier de la MAS dans les cinq pays où ont été réalisées les études de cas. Les membres de la communauté et les agents de santé font état de meilleures connaissances sur l'influence de la nutrition sur le développement des enfants. La coordination en matière de nutrition et le plaidoyer en faveur de la PCMA ont contribué à accorder plus d'importance à la nutrition lors de l'adoption de politiques.

La sensibilisation de la communauté à la malnutrition aiguë ainsi que le dépistage actif des cas de malnutrition ont permis d'augmenter considérablement le nombre d'admissions aux services ; les potentialités de la mobilisation communautaire se heurtent aux insuffisances d'évaluation, de planification et de financement pour la mobilisation des ressources communautaires, aux lacunes en matière de suivi et au manque d'appui aux agents de santé communautaires. Les visites de suivi à domicile sont irrégulières parce que les agents de santé communautaire ont besoin de plus de support sous forme de moyens de transports et autres moyens pour faciliter leur accès aux ménages. La sensibilisation et la mobilisation communautaires s'améliorent lorsque de fréquentes évaluations communautaires sont réalisées et que des ressources sont allouées pour appuyer les stratégies de mobilisation et donner des incitatifs aux agents de santé communautaire.

Les services de traitement ambulatoire, qu'ils soient dispensés dans des centres de santé, des équipes mobiles ou des camps de réfugiés, permettent de traiter efficacement la MAS sans complication dans les zones d'intervention de la PCMA dans les pays où ont été réalisées des études de cas. La formation, la supervision et le bon équipement des centres de santé ont contribué au succès. Une plus grande cohérence en matière d'usage et l'existence de normes ont accru l'efficacité des mesures anthropométriques. Une infrastructure suffisante pour accueillir les enfants et leurs accompagnants ainsi que des moyens adéquats en matière d'eau et d'assainissement, notamment les points d'eau et les latrines acceptables, ont amélioré la qualité des services.

Les moyens affectés au traitement hospitalier n'ont donné que des résultats modérés en raison de la faible coordination pour le référencement entre les soins hospitaliers et ambulatoires, l'insuffisance en personnel de santé, d'appui psychosocial et de collecte des données. L'insuffisance de personnel d'appui disponible 24 heures sur 24 et du personnel pour le renforcement des capacités des agents de santé pour la délivrance des services de nutrition, de collecte et l'analyse des données ont nui à l'évaluation de l'efficacité. De même, de nombreux centres ne disposaient pas de lits en nombre suffisant pour les périodes d'occupation élevée, ni d'aires de jeux et de jouets pour la stimulation psychosociale.

Les données probantes quant aux résultats et aux effets de la prise en charge de la MAM sont insuffisantes. Il est difficile d'évaluer l'efficacité des interventions contre la MAM en raison de l'absence d'enquêtes permettant d'évaluer les changements de comportement, et l'absence de données fiables

pour tous les indicateurs de performance de la MAM, qu'elle soit prise en charge par le counseling, les suppléments alimentaires ou les deux. L'on ne dispose pas d'assez de données sur les rechutes pour établir des liens entre les interventions contre la MAS et celles contre la MAM.

Les systèmes d'information de la PCMA développés parallèlement aux systèmes nationaux ne sont pas pérennes; aucun consensus n'a été trouvé quant aux obligations pratiques de rédaction de rapports. Les systèmes d'information parallèles ont amélioré l'établissement de rapports mais nécessitent généralement un appui externe, et ne sont pas étroitement intégrés aux processus nationaux de suivi et d'évaluation. Lorsqu'elle a été effectuée, la simplification de la collecte et de l'analyse de données a amélioré l'efficacité. D'importantes lacunes existent dans les données portant sur les rechutes, les moyens de détection par type/lieu de dépistage ; les dépistages répétés ; les raisons de l'abandon du traitement et l'efficacité du counseling.

3. Promouvoir l'équité en matière d'accès

L'identification des enfants que l'on risque d'omettre et l'élaboration de stratégies visant à les atteindre sont les principaux obstacles à l'amélioration de l'accès. Une meilleure identification des cas de malnutrition, les évaluations communautaires et une cartographie de la vulnérabilité sont les principaux moyens d'amélioration de l'accès aux services. Il existe des lacunes importantes dans la couverture des soins, à la fois pour des enfants et les zones se trouvant à l'intérieur et à l'extérieur des régions ciblées.

La planification de la PCMA entre les gouvernements, les partenaires d'appui et les communautés est souvent disjointe, ce qui nuit à la promotion de l'équité ainsi qu'à la couverture. Les cadres de planification intégrée et l'utilisation d'évaluations communautaires contribuent à prévenir les problèmes d'équité, à améliorer la couverture et l'efficacité de la prise en charge et à fournir des directives plus claires au personnel de santé. Lorsque les activités de planification ont fait appel aux pouvoirs publics au niveau des districts et aux acteurs locaux, et ont utilisé à bon escient les informations obtenues grâce aux cartographies de vulnérabilité en vue de localiser et de hiérarchiser les zones cibles, un accès plus équitable a été observé.

La prise en compte des obstacles à surmonter lors de l'estimation de la couverture géographique et de la couverture du traitement visant à promouvoir des stratégies plus efficaces de pour améliorer l'accès a souvent été insuffisante. Le taux de couverture des enfants atteints de malnutrition aiguë sévère ou modérée est nettement inférieur aux cibles mondiales et bien inférieur aux cibles nationales ; la couverture géographique s'est améliorée, notamment là où la prise en charge communautaire est plus étroitement intégrée au système national de santé. Les données insuffisantes sur la population, l'absence de consensus sur les calculs et l'estimation inadéquate du taux d'incidence se répercutent sur l'estimation de la couverture géographique. L'importance des enquêtes sur la couverture du traitement est maintenant davantage reconnue mais ces enquêtes manquent souvent de financement et de données fiables.

4. Progrès et défis en matière d'appropriation nationale

Une structure nutritionnelle solide et une stratégie de nutrition faisant l'objet d'une appropriation nationale sont importantes pour appuyer l'impact potentiel à long terme de la PCMA. Bien que les services de nutrition se renforcent, les autorités nationales en la matière n'ont souvent pas le statut et les compétences nécessaires pour gérer les interventions nutritionnelles et préconiser l'affectation de davantage de ressources à la PCMA. Le déploiement de nutritionnistes au niveau central et dans les districts a permis de promouvoir la prévention et le traitement, mais leur nombre est généralement restreint. Les liens avec des activités internationales comme les initiatives SUN et REACH sont parfois vagues et le financement des stratégies de nutrition est souvent insuffisant.

Les normes mondiales d'intégration des services et de la PCMA dans les systèmes de santé nationaux font défaut mais sont pourtant essentielles pour fournir l'orientation nécessaire aux gouvernements, aux organismes des Nations Unies, aux partenaires de mise en oeuvre et au

personnel des systèmes de santé. Les normes mondiales ont effectivement guidé l'élaboration de stratégies nationales ; il faut donc adopter à l'échelle mondiale des principes d'intégration qui orienteront l'action à mener pour remédier aux manques de moyens des systèmes de santé nationaux. L'UNICEF a piloté un cadre mondial de cartographie de la PCMA susceptible de fournir des orientations générales et pouvant être finalisé ou révisé.

Là où la PCMA n'a pas été intégrée à d'autres interventions, les agents de santé se sont souvent déclarés surmenés et ont fait état d'un manque d'efficacité dû au chevauchement et à la répétition d'activités. Le nombre insuffisant d'agents de santé dûment formés a été un obstacle important à la mise en œuvre à grande échelle. L'appui technique a contribué à l'adoption de stratégies qui permettent de former, de motiver et de retenir les personnels de santé à leurs postes. Bien que de nombreux pays aient intégré ou prévoient d'intégrer d'autres interventions (par exemple l'alimentation du nourrisson et du jeune enfant ou la prise en charge des maladies de l'enfance) à la PCMA, les moyens efficaces de remédier aux défis liés aux différents modes de mise en œuvre à grande échelle et au manque de stratégie commune entre les interventions n'ont pas fait l'objet d'une large diffusion.

5. Efficience – coûts, approvisionnement et livraison des ATPE

Les réductions de coûts que l'on pourrait obtenir en remédiant aux problèmes liés aux utilisateurs/distributeurs d'ATPE n'ont pas été pleinement réalisées. Le coût des ATPE représente environ 50 % des dépenses de fonctionnement quand on ne prend pas en compte dans les calculs du coût des suppléments alimentaires prêts à l'emploi. La réduction de ces coûts est donc essentielle. Les problèmes liés au partage des ATPE entre frères et sœurs, la vente d'ATPE par les familles et les problèmes d'entreposage ont été résolus dans certains cas par le renforcement de la sensibilisation, l'orientation vers des interventions de sécurité alimentaire, le counseling et la formation.

En ce qui concerne la mise en œuvre à grande échelle et la promotion de la production locale d'ATPE, l'assurance qualité demeure un problème majeur. Les principaux facteurs qui limitent la production locale sont : le contrôle qualité conforme à des normes élevées, les coûts d'investissement, l'approvisionnement et le coût des ingrédients. Il convient d'effectuer des recherches supplémentaires sur les formules d'ATPE pouvant être produits et consommés localement.

Dans certaines circonstances, les investissements pour améliorer l'efficacité des chaînes nationales d'approvisionnement et de livraison ont favorisé les possibilités d'expansion dans davantage de zones. Actuellement, l'UNICEF, le PAM et les partenaires de mise en œuvre gèrent intégralement ou en partie l'approvisionnement et la livraison des intrants nécessaires à la PCMA, dans le cadre de systèmes parallèles jugés peu durables. Les trois facteurs les plus susceptibles de promouvoir l'efficacité de la chaîne d'approvisionnement sont les suivants : a) une excellente planification et de bonnes prévisions ; b) l'évaluation des faiblesses de la chaîne d'approvisionnement nationale ; et c) l'utilisation du système national d'approvisionnement par les partenaires de mise en œuvre, parallèlement au renforcement des capacités.

Les problèmes de financement courants sont entre autres, de longs délais d'approbation des documents de projets et de signature de mémorandums d'accord, qui retardent la mise en œuvre ; les accords de courte durée (de trois à six mois) entre l'UNICEF et les partenaires de mise en œuvre affectent la motivation et la performance de leur personnel.

6. Pérennité et mise en œuvre à grande échelle (Expansion de la PCMA)

La mise en œuvre à grande échelle et l'intégration de la PCMA sont facilitées par des partenariats entre les gouvernements, l'UNICEF, le PAM, l'OMS, le Haut-Commissariat pour les réfugiés, les partenaires de mise en œuvre et de développement ; il n'existe pas toujours de vision cohésive de lutte contre la malnutrition aiguë. La coordination entre l'UNICEF, l'OMS et le PAM pour la PCMA a été manifeste dans les situations d'urgence ; cependant, l'isolement des organismes dans leurs rôles spécifiques a affaibli l'efficacité d'une mise en œuvre à long terme de la PCMA, l'assurance des liens

entre la prise en charge hospitalière et ambulatoire et des liens entre la prise en charge de la MAS et la MAM.

À l'échelle mondiale et nationale, la PCMA n'est pas pérenne en tant qu'intervention indépendante ; les programmes intégrés de santé et de nutrition incluant la PCMA ont davantage réussi à renforcer l'efficacité, l'efficacité, la pérennité et la prévention. Une approche efficace a consisté à aligner la PCMA sur d'autres initiatives de prévention telles que la réduction des risques de catastrophe et à prévoir des indicateurs à cette fin. Les liens avec les programmes d'alimentation des nourrissons et jeunes enfants et de santé maternelle et infantile, mettent l'accent sur la prévention ainsi que le traitement. L'intervention IMAMI, l'approche HINI et la promotion plus importante des aliments traditionnels de sevrage permettent également d'améliorer les résultats obtenus dans le cadre de la PCMA.

L'évolution de la PCMA a permis d'acquérir de nombreuses connaissances ; cependant les évaluations et les études, la diffusion des leçons apprises de l'expérience et des connaissances acquises dans les communautés demeurent encore limitées.

Recommandations

Les principales recommandations s'adressent au siège de l'UNICEF, aux bureaux régionaux des régions prioritaires et aux bureaux de pays où la PCMA est mise en œuvre. Les recommandations sont censées être mises en œuvre dans le cadre de partenariats avec les gouvernements, les organismes des Nations Unies, les partenaires de mise en œuvre et d'autres parties prenantes. Ces recommandations sont faites au regard des lignes directrices globales à paraître (à adapter au contexte national) sur la PCMA en situation d'urgence et de non-urgence.

Dans l'ensemble, l'évaluation recommande à l'UNICEF de continuer à promouvoir et appuyer la PCMA comme approche viable de prévention et de traitement de la MAS, en mettant l'accent sur la prévention par le renforcement de la mobilisation communautaire, la prise en charge de la malnutrition aiguë modérée, l'intégration de la PCMA dans les systèmes nationaux de santé et dans d'autres interventions.

Appropriation et intégration, stratégie et politiques, principes directeurs

1. L'UNICEF devrait continuer à collaborer avec des gouvernements, le PAM, l'OMS, des partenaires de mise en œuvre et d'autres parties prenantes afin de parvenir à une définition commune des moyens les plus efficaces de prendre en charge la malnutrition aiguë modérée et d'harmoniser les approches, de renforcer les mesures de prévention à base communautaire, de prévenir la malnutrition aiguë sévère et ses rechutes. Le siège de l'UNICEF doit renforcer ses concertations avec l'OMS, le PAM et d'autres parties prenantes afin de clarifier le rôle de l'UNICEF dans la prise en charge de la malnutrition aiguë modérée dans la perspective des mémorandums d'accord globaux ; de mieux mettre à profit les leçons tirées de l'expérience et les bonnes pratiques pour la combattre la MAM comme un problème chronique. Le siège de l'UNICEF peut faire appel aux apports des bureaux régionaux et bureaux de pays dans ce sens. Cela peut nécessiter d'organiser des ateliers mondiaux, régionaux ou nationaux, de conduire des enquêtes et des études dans divers contextes.

2. Etablir des lignes directrices ou un cadre d'intégration de la PCMA dans le système de santé et avec d'autres interventions qui soit utile à l'échelle nationale lorsqu'il se fonde sur des évaluations de capacités et est intégré avec des stratégies nationales en matière de santé, de nutrition et de développement communautaire. Dans le cadre du forum mondial sur l'intégration et d'autres instances, le siège de l'UNICEF devrait chercher à obtenir un consensus sur un cadre d'intégration. En se fondant sur ce cadre de référence, l'UNICEF peut offrir une assistance technique qui aide les gouvernements et les partenaires à élaborer un plan d'intégration durable qui déterminera de manière appropriée les degrés et formes d'appui technique externe requis.

3. Faciliter la coordination et l'appui technique au niveau régional/national afin d'enrichir ou de développer les lignes directrices nationales relatives à la PCMA à mesure que celle-ci est intégrée à d'autres interventions, comme l'alimentation des nourrissons et jeunes enfants. Sous la direction du Ministère de la santé, l'UNICEF peut, avec un appui du siège en matière de supervision, apporter une assistance technique qui permette d'évaluer les consignes actuelles et de s'assurer à ce qu'il y ait suffisamment de détails lors de l'intégration avec les guidelines d'autres interventions. Les consignes devraient être renforcées en ce qui concerne les activités de mobilisation communautaire, la prise en charge de la malnutrition aiguë modérée, l'adaptation culturelle, la dimension genre et l'équité, le suivi des indicateurs de performance et l'administration d'ATPE entre autres, et tenir compte des leçons apprises de l'expérience.

Résultats et qualité des services

4. Renforcer la mobilisation communautaire en garantissant des investissements adéquats dans les activités communautaires de la PCMA et leur intégration avec les activités communautaires d'autres interventions de santé publique. Les bureaux de pays de l'UNICEF devraient préconiser, dans le cadre de consultations avec le gouvernement et de forums de coordination en matière de santé et de nutrition, une plus grande collaboration dans l'utilisation des ressources de diverses interventions, notamment de l'action des agents de santé communautaire. Il peut notamment s'agir de réaliser de plus grands investissements en faveur des agents de santé communautaire, les campagnes de sensibilisation et des planifications stratégiques conjointes, en s'assurant de la participation des leaders communautaires et des prestataires de soins de santé du secteur privé. Davantage de liens doivent être établis avec les stratégies nationales de nutrition et de santé ; les bureaux de pays devraient lier ce processus aux initiatives C4D (« Communication pour le développement ») et faire des revues régulières de la stratégie de mobilisation communautaire.

5. Décentraliser les systèmes d'information nutritionnelle afin de renforcer la collecte et l'analyse de données au niveau des districts, en appuyant et en renforçant le rôle de direction du Ministère de la santé et la responsabilité commune entre le ministère et les partenaires pour l'amélioration de la qualité. L'UNICEF devrait jouer un rôle de leader dans l'appui à apporter à l'élaboration de systèmes d'information nutritionnelles capables de collecter des données qualitatives et quantitatives et d'effectuer des analyses de qualité qui facilitent l'agrégation de données à l'échelle nationale et mondiale. L'UNICEF peut apporter l'appui technique en partenariat avec le PAM, l'OMS et les partenaires de mise en œuvre pour la simplification de la collecte de données et les outils d'établissement de rapports, afin de faciliter la tâche du personnel. Envisager l'utilisation de messages textes (SMS) pour la collecte et le suivi des données. Les parties prenantes devraient convenir sur les indicateurs de performance essentiels et pratiques à collecter, et réévaluer l'utilisation des indicateurs Sphère à mesure que la PCMA est mise en œuvre comme un programme ordinaire. Les indicateurs devraient être conçus de manière à évaluer la performance des activités de mobilisation communautaire et les rechutes ; les données devraient être désagrégées selon le sexe.

6. Définir un système de suivi standardisé visant à évaluer la qualité des services de PCMA afin d'informer le Ministère de la santé, les agences des Nations Unies, les partenaires de mise en œuvre et d'autres parties prenantes quand des moyens supplémentaires sont nécessaires. Avec l'appui technique des bureaux régionaux et en coopération avec les gouvernements et les partenaires, les bureaux de pays de l'UNICEF devraient convenir d'un outil intégré avec d'autres interventions dans la mesure du possible, et qui facilitera la responsabilisation commune en matière de renforcement des capacités et de suivi de la qualité. Ceci peut indiquer qu'une plus grande articulation avec le programme WASH est nécessaire pour la construction des points d'eau et de latrines acceptables et permettre d'identifier d'autres besoins tels que les zones d'attente, les lits, les aires de jeu et les jouets. Un outil à trois niveaux développé en Éthiopie est proposé comme modèle à affiner et à adapter à cette fin.

Équité en matière d'accès, évaluation, couverture et planification

7. Renforcer la planification de la PCMA en conduisant des évaluations communautaires et en ayant davantage recours à des planifications conjointes intégrées et axés sur les résultats, et des informations de cartographie pour hiérarchiser les zones où procéder à une mise en œuvre à grande échelle. Les bureaux de pays de l'UNICEF devraient veiller à ce qu'une planification conjointe soit effectuée avec les parties prenantes au niveau des districts et que la PCMA soit intégrée dans les plans de développement des districts. La planification doit mettre l'accent sur la participation des principaux acteurs communautaires, les problèmes relatifs à la demande de services de PCMA, d'éventuels problèmes d'équité et l'identification des enfants qui le plus de risques d'être omis, et les stratégies potentielles pour les atteindre.

8. Améliorer la prise de conscience et la capacité à conduire des enquêtes sur la couverture des traitements et d'analyser les données pour dégager de grandes tendances. Les bureaux de pays de l'UNICEF devraient appuyer le renforcement de capacités sur la couverture du traitement et veiller à ce que des fonds soient affectés à la conduite d'enquêtes de couverture (traitement et géographique), assorties de plans éventuels pour renforcer et étendre la couverture des services.

Maintenir et améliorer l'efficacité

9. Renforcer les moyens de réduire les coûts et promouvoir une prise en charge nationale des coûts associés aux aliments thérapeutiques et suppléments alimentaires prêts à l'emploi. Les bureaux de pays doivent, avec le Ministère de la santé, remédier aux défis liés aux utilisateurs et distributeurs tels que le partage entre frères et sœurs, les ventes par les familles, et les problèmes d'entreposage, au moyen de protocoles, de sensibilisation, de counseling et de formation. Les bureaux de pays peuvent préconiser le renforcement des services nationaux d'approvisionnement et de livraison dans le cadre d'un plan conjoint de renforcement des capacités, ainsi que l'intégration des intrants (par exemple, aliments thérapeutiques prêts à l'emploi, matériels et médicaments) dans les paquets essentiels de soins afin de faciliter la production et l'importation.

10. Conduire des recherches opérationnelles pour trouver d'autres formules d'aliments thérapeutiques prêts à l'emploi de manière à favoriser une production locale conforme aux normes internationales. L'UNICEF devrait assurer le leadership dans la planification et l'appui d'études dans divers contextes, en coopération avec les principaux acteurs et en apportant l'appui technique nécessaire à l'évaluation des capacités de production d'aliments thérapeutiques autres que ceux à base d'arachide. Les bureaux régionaux doivent être investis d'un rôle plus important en ce qui concerne la promotion de la production locale/régionale d'aliments thérapeutiques et le partage de technologies.

Pérennité et mise en œuvre à grande échelle (Expansion de la PCMA)

11. Renforcer les politiques et les partenariats qui favorisent durablement la mise en œuvre à grande échelle. Les bureaux de pays de l'UNICEF, avec l'appui technique des bureaux régionaux, doivent veiller à ce que les accords entre gouvernements, partenaires de mise en œuvre et conseillers techniques comportent des stratégies de sortie et des normes relatives au renforcement des capacités (par exemple, gestion, approvisionnement et livraison, systèmes d'information) et évitent des pratiques non pérennes, comme les primes salariales. Les mémorandums d'accord et PCA doivent être élaborés sans retard et porter sur des durées suffisamment longues pour faciliter la réalisation des objectifs à long terme de l'intervention. Les bureaux de pays de l'UNICEF doivent faire le plaidoyer pour que le Ministère de la santé dispose de compétences suffisantes en matière de nutrition et doivent veiller à ce que ses bureaux et les partenaires de mise en œuvre disposent du personnel suffisant pour coordonner la planification et le suivi de la mise en œuvre à grande échelle de la PCMA.

12. Planifier et mettre en œuvre des activités qui favorisent l'élaboration d'une vision commune de la malnutrition aiguë entre l'UNICEF, le PAM, l'OMS, les partenaires de mise en œuvre et le Ministère de la santé. L'UNICEF devrait, aux niveaux mondial, régional et national, appuyer des ateliers conjoints, ainsi que le suivi et l'évaluation conjoints, afin d'élaborer des stratégies et une déclaration commune actualisée sur la lutte contre la malnutrition aiguë.

13. En fonction des évaluations de besoins de formation, des descriptions de poste et de la supervision adéquate, mettre en œuvre à grande échelle la formation continue, la formation de formateurs, la formation initiale et le perfectionnement, de manière à couvrir les districts. La formation à la PCMA bénéficiant du soutien des bureaux de pays de l'UNICEF et de la contribution technique des bureaux régionaux devrait être associée à la formation à l'alimentation des nourrissons et jeunes enfants et d'autres interventions, afin d'harmoniser les messages et éviter la redondance ; ceci dans le cadre de consultations de haut niveau avec le gouvernement, les réseaux nationaux et les mécanismes de coordination de la nutrition. Promouvoir l'intégration de la science de la nutrition et de la PCMA dans l'enseignement et la formation médicale (la formation institutionnelle des médecins et du personnel infirmier) afin d'assurer une formation initiale adéquate à la malnutrition aiguë.

14. Renforcer la prévention de la malnutrition aiguë sévère en veillant à ce que la prise en charge de la malnutrition aiguë soit intégrée à un paquet minimum d'interventions nutritionnelles dans tous les pays prioritaires. Avec le Ministère de la santé, l'UNICEF et d'autres partenaires dans le cadre de forums de coordination de la nutrition et de la santé doivent concevoir et mettre en œuvre un paquet minimum d'interventions nutritionnelles qui comprenne la prise en charge communautaire de la malnutrition aiguë sévère et modérée, proposée comme l'un des services de santé de base, et également intégrée à une approche multisectorielle plus générale qui vise à combattre les causes de la dénutrition. Le siège de l'UNICEF, les bureaux régionaux et bureaux de pays devraient chercher des moyens pour aligner la PCMA avec des interventions préventives telles que la réduction des risques de catastrophe et prévoir des indicateurs à cette fin, ainsi qu'encourager les pays à utiliser les ressources existantes à l'échelle mondiale dans le cadre des initiatives SUN et REACH.

15. Renforcer la diffusion des connaissances et leçons apprises, et le partage de connaissances sur les approches réussies d'intégration et de passage à l'échelle. L'UNICEF doit consacrer davantage de ressources à la planification et au financement d'évaluations et d'études sur l'approche de la PCMA afin de diffuser les leçons apprises, de mettre en commun les exemples de bonnes pratiques et d'aider à préserver les connaissances et l'expérience acquises dans les communautés. La contribution technique des bureaux régionaux de l'UNICEF doit être renforcée afin de partager les données d'expériences régionales et de concevoir des plans et des outils de suivi intégrés. Les études à mener pourraient par exemple porter sur l'optimisation des fonctions des agents de santé communautaire, l'intégration dans divers contextes, l'identification des raisons d'abandons de traitement et des rechutes, la documentation sur les options de prise en charge efficace de la malnutrition aiguë modérée, l'amélioration des connaissances, attitudes et pratiques en matière de nutrition des enfants et la recherche des modalités pérennes de lutte contre la malnutrition aiguë.

1 Introduction

1.1 Organisation of the Report

This Evaluation of Community Management of Acute Malnutrition is the first which examines all key aspects of CMAM as well as effectiveness, efficiency, sustainability and scale up issues comprehensively at both national and global level. It analyses the progress achieved in implementing CMAM with detailed assessment in five case study countries, Chad, Ethiopia, Kenya, Nepal and Pakistan and drawing synthesized lessons and findings. Through examining processes and results related to the four components of CMAM, the evaluation generated evidence on “what works well” and “what does not work” on all key steps of CMAM. It examines policy and programmatic aspects, as well as management modalities, and makes recommendations to strengthen both aspects.

The evaluation is intended for use by governments, donors, UN agencies, NGOs and other stakeholders. It will assist to inform UNICEF’s planning processes, to share good practices globally, and to undertake corrective measures and programmatic shifts in various contexts. At the country level, recommendations will be used in designing, planning and implementing the most effective nutrition programmes to address child acute malnutrition. At the global level, the recommendations will be used for modifying CMAM policy and technical guidance for both emergency and non-emergency contexts, and for further advocacy and fundraising efforts.

This report presents evaluation findings, conclusions and recommendations in seven chapters. **Chapter 1** reviews the background of CMAM and discusses the evaluation methodology. **Chapter 2** describes the evolution of CMAM and the four component model which has been modified in the course of five case studies. **Chapter 3** looks at the implementation and quality of services while **Chapter 4** examines assessment, supply and demand, coverage, and planning through the lens of promoting access, equity and gender equality. **Chapter 5** addresses cross-cutting issues in national ownership including integration of CMAM in national health services and with other interventions, **Chapter 6** covers the CMAM cost analysis, use and supply of RUTF, coordination for technical assistance and partnerships. **Chapter 7** presents overarching conclusions and recommendations. Lessons are mentioned at the end of Chapters 3 to 6.

1.2 Background

Acute malnutrition is caused by a decrease in food consumption and/or illness. Sudden weight loss, anorexia, or poor appetite, and medical complications are clinical signs indicating or aggravating the severity of acute malnutrition. There are two forms of acute malnutrition:

- **SAM**, or **severe acute malnutrition**, is defined by the presence of bilateral pitting oedema or severe wasting, defined globally as a very low weight for height, below -3z scores of the median World Health Organization (WHO) growth standards³ in children 6–59 months of age, or middle upper arm circumference (MUAC) less than 11.5 cm. A child with SAM is highly vulnerable and has a high risk of death.
- **MAM**, or **moderate acute malnutrition**, is defined by moderate wasting, that is a weight for height $\geq -3z$ and $< -2z$ score, MUAC ≥ 11.5 cm and < 12.5 cm. These children are vulnerable to illness, have an increased risk of death and can rapidly slide into severe acute malnutrition.⁴

Acute malnutrition threatens the survival of children under-five years of age in developing countries. Recent estimates covering both emergency and non-emergency settings suggest SAM affects between 19 and 26 million children under five years of age globally⁵ and contributes to nearly one million child deaths each year.⁶ The number of children suffering from MAM is approximately 42 million.⁷

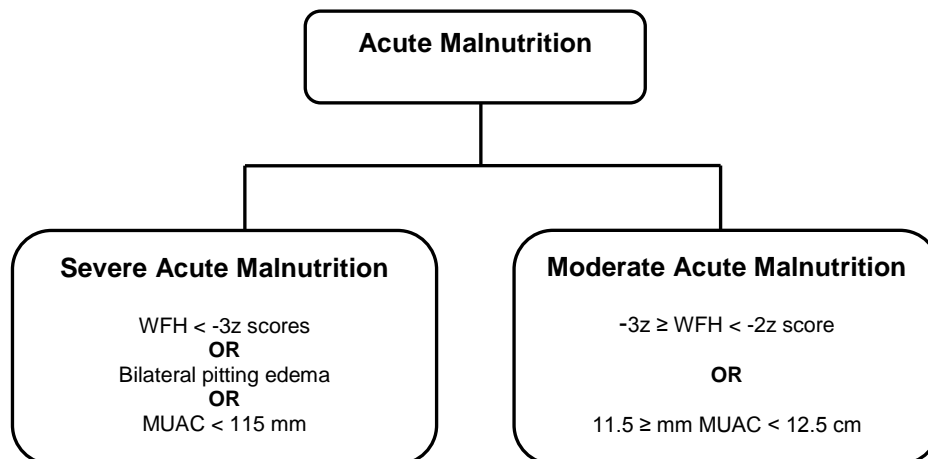
³ Centre for Disease Control and Prevention (CDC).

⁴ FANTA II: **Community Based Management of SAM, Generic Guidelines**. *Food and Nutrition Technical Assistance II*, 2010.

⁵ UNICEF, WHO, The World Bank : **Levels and Trends in Child Malnutrition**, 2012. Globally, an estimated 52 million children under-five years of age, or 8%, were wasted (i.e. weight-for-height below $-2SD$) in 2011 – a 11% decrease from an estimated 58 million in 1990.

⁶Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, Mathers C, Rivera J: **Maternal and child undernutrition: global and regional exposures and health consequences**. *Lancet* 2008, **371**:243-260.

Community Management of Acute Malnutrition (CMAM) is an intervention that can successfully treat the majority of children with SAM at home using ready-to-use therapeutic food (RUTF) and basic medicines. CMAM is now the preferred model for addressing SAM in emergency and non-emergency contexts.^{8,9,10,11} CMAM was endorsed in 2007 by UN agencies, and this endorsement paved the way for the further expansion of the intervention.^{12,13} According to the *UNICEF Global Mapping Review of CMAM* (2011), CMAM was initially introduced as an emergency response to environmental or political crises in nearly half of the countries (26) implementing the intervention in 2010. The high prevalence of acute malnutrition alone was the determining factor for introducing CMAM in 17 countries, while HIV was the direct reason in 3 countries. CMAM is now progressively being scaled-up.¹⁴



The main objective of CMAM is the management of acute malnutrition in children from 6-59 months of age. CMAM is generally composed of four components: 1) community outreach; 2) management of moderate acute malnutrition (MAM); 3) outpatient treatment for children with SAM with a good appetite and without medical complications; and 4) inpatient treatment for children with SAM and medical complications and/or no appetite. The implementation arrangements for CMAM vary in particular contexts or areas. While community outreach creates the foundation, the SAM treatment and MAM management components may work together or outpatient and inpatient treatment may work independently of MAM management.

To date, there is no global agreement on MAM management although there may be nationally accepted protocols. Children with MAM do not typically receive therapeutic treatment through CMAM and services to address MAM are not included in CMAM in every country. In some contexts, Supplementary Feeding Programmes (SFPs) aim to prevent the moderately malnourished from becoming severely malnourished

⁷ Nutritset Website, reference from UNICEF.

⁸ USAID FANTA, WFP, UNICEF: *Interagency Review of Selective Feeding Programmes in South, North and West Darfur States, Sudan*. March 8-April 10, 2008.

⁹ Collins S, Sadler K, Dent N, Khara T, Guerrero S, Myatt M, Saboya M, Walsh A: **Key issues in the success of community-based management of severe malnutrition**. *Food Nutr Bull* 2006, **27**:S49-82.

¹⁰ Deconinck H, Swindale A, Grant F, Navarro-Colorado C: **Review of Community-based Management of Acute Malnutrition (CMAM): Synthesis of Lessons in Integration of CMAM Into National Health Systems**. Washington, DC: FANTA Projec. Academy for Educational Development 2008.

¹¹ Collins S, Grobler-Tanner C: **Community Therapeutic Care (CTC): A new approach to managing acute malnutrition in emergencies and beyond**. FANTA, 2004.

¹² WHO, WFP, UN/SCN, UNICEF: **Joint Statement. Community-based management of severe acute malnutrition**. Jun. 2007.

¹³ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons**. *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012.

¹⁴ UNICEF: **Global mapping Review of Community-based management of acute malnutrition with a focus on severe acute malnutrition**. Nutrition Section, *Nutrition in Emergency Unit, UNICEF NY and Valid International*. March 2011.

and to rehabilitate them, usually by providing a food supplement to a general ration or the basic diet. In other contexts the use of local nutritious foods is promoted.

In most countries CMAM is implemented with support from a host of partners. Within the UN, supporting governments to implement SFPs generally falls within the mandate of WFP while supporting national efforts to treat SAM falls within UNICEF's and WHO's. A key objective of CMAM is progressive integration into the national health system and ultimately complete government ownership. The Ministries of Health (MoH) assume coordination roles and leadership for CMAM and generally provide the health facility infrastructure and services of staff in undertaking the CMAM activities. In some contexts, non-governmental organisations (NGOs) may establish treatment centres with linkages to the national health system. By the end of 2012, governments in 63 countries had established partnerships with UNICEF, WFP, WHO, donors, and NGOs for CMAM.¹⁵

UNICEF has made significant investments to scale up treatment of SAM through CMAM initiatives. UNICEF's contribution includes procurement of therapeutic foods (RUTF, F-75 and F-100), medicines, and equipment. UNICEF currently procures approximately 32,000 MT of RUTF which represents an investment of over 100 million dollars a year.¹⁶ The agency also contributes in most countries along with governments and IPs to capacity building and training; establishment of outpatient treatment centres; advocacy, awareness and behaviour change communication; and development of a monitoring and information system. The WHO supports normative policies at the global level and training for inpatient treatment services in partnership with UNICEF in some contexts.

To consolidate the achievements made and to further enhance and expand CMAM services, there was a need to generate concrete evidence on how well the global as well as country level strategies have worked including their acceptance and ownership in various contexts, appropriateness of investments in capacity development and supply components. In recent years, several reviews of CMAM have been conducted. However, there is a lack of evaluations which examine all key aspects of CMAM programming and programme effectiveness, efficiency, sustainability and scale up issues comprehensively. This evaluation aimed to fill this gap through a comprehensive assessment of CMAM in five countries and drawing synthesized lessons and findings for use by national governments, UN agencies, NGOs and other stakeholders.

1.3 Evaluation Scope and Methodology¹⁷

The evaluation of CMAM has been commissioned by UNICEF's central Evaluation Office through evaluations in five countries and a global synthesis. In addition to recommendations to strengthen national CMAM in the five countries, the study of CMAM in various contexts allowed comparisons and provided evidence for the synthesis. UNICEF's goal for the evaluations is to strengthen on-going and future interventions by generating and disseminating evidence on CMAM experiences related to processes, outputs, outcomes, coverage and scale up options. This synthesis aims to clarify the overall effectiveness of CMAM as well as the effectiveness of supporting strategies and to identify good practices and lessons which are useful globally.

The specific objectives of the evaluation, as presented in the Terms of Reference (Appendix A), were to:

- a) Undertake an analytical assessment of the progress achieved in implementing CMAM globally with detailed assessments in 5 case study countries to identify key successes, good practices, and gaps / constraints that need to be addressed.
- b) Examine CMAM performance in the case study countries using the standard OECD/DAC criteria of relevance/appropriateness, efficiency and quality of services, effectiveness, impact (potential) and sustainability.

¹⁵ CMAM implemented in some form, a few countries do not implement the full 4 component model.

¹⁶ UNICEF: **Terms of Reference. Evaluation of Community Management of Acute Malnutrition.** Evaluation Office, New York and Nutrition Section, PD, New York. 2011.

¹⁷ Compiled from the UNICEF: **Terms of Reference. Evaluation of Community Management of Acute Malnutrition.** Evaluation Office, New York and Nutrition Section, PD, New York. 2011. (also the TOR for Pakistan, Chad and Kenya case studies); Nepal TOR, Ethiopia TOR; Inception Report (Reed and Kouam, September 2011); "Proposal to Clarify Synthesis Survey Purpose and Scope for the Global Evaluation of Community Management of Acute Malnutrition" (Reed and Kouam, August 2012).

- c) Examine the effectiveness of related cross-cutting issues such as coordination and management; gender and other forms of equity; capacity development; advocacy and policy development; and information/data management.
- d) Document good practices and generate evidence-based lessons and recommendations to strengthen on-going efforts towards expansion of CMAM coverage in countries in need and for strengthening global /regional level guidance and support.

The evaluation scope consists of two interrelated components. First, the evaluation undertook assessments of the progress achieved in implementing CMAM globally with detailed analyses in five countries, i.e. Chad, Ethiopia, Kenya, Nepal and Pakistan. In these countries, the evaluation examined processes and outcomes related to the four components of CMAM. It generated evidence on “what works well” through examination of policy and programmatic aspects, as well as management modalities through use of Organisation for Economic Cooperation and Development/Development Assistance Committee (OECD-DAC) evaluation criteria, and cross-cutting issues.¹⁸ Secondly, building upon case study evidence, broader research resulted in compiled lessons, good practices and recommendations for UNICEF and partners globally.

This section provides an overview of the users of the evaluation, management, teams and phases, and evaluation questions, methods and constraints. It also summarizes the data collection and analytic approaches implemented across the evaluation data sources. (Please see the Annexes for documents consulted and global survey questionnaire.)

Users of the Evaluation

The lessons and recommendations from the evaluation will be used for strengthening existing interventions as well as for resource mobilisation for effective CMAM strategies and interventions in areas in need. The synthesis report will serve as a tool for UNICEF and its partners globally and nationally to make decisions regarding scaling up the intervention. The five finalized country reports are expected to be used by stakeholders such as national health and nutrition sector staff, UNICEF, Implementing Partners (IPs), WFP and WHO, as well as donors and academic institutions.

Evaluation Management, Teams and Phases

The evaluation was managed by the UNICEF Evaluation Office (EO) in UNICEF’s New York headquarters, and the country level case studies were co-managed by UNICEF Country Offices in coordination with relevant departments of the Ministry of Health. Evaluation teams at the country level included national consultants who undertook the majority of the data collection, and two international consultants who provided oversight on methodology and contributed to the data collection and analysis. In each country, evaluation oversight committees or steering groups were formed and generally included representatives from the national health sector, staff from UNICEF, WFP, WHO, donor agencies, IPs and academic institutions. This synthesis report was written by the international consultants.

The evaluation was conducted in five phases: (1) an inception phase which culminated in an inception report (Reed and Kouam, September 2011); (2) data collection and analysis for five country CMAM evaluations (May 2011 through February 2012); (3) finalization of country reports (March through September 2012); (4) undertaking a global internet survey (October through December 2012); and, (5) completion of the synthesis report (January through March 2013).

During the inception phase, April through September 2011, the international team completed four main activities: (a) a detailed review of CMAM documents and reports provided by HQ staff; (b) development of an evaluation plan; (c) development of the synthesis outline; and, (d) selection of national evaluation teams.

¹⁸ Organisation for Economic Cooperation and Development/Development Assistance Committee (OECD-DAC): **Guidance for Evaluating Humanitarian Assistance in Complex Emergencies**. 1999; and Organisation for Economic Cooperation and Development/Development Assistance Committee (OECD-DAC): **Evaluating Humanitarian Action Using the OECD-DAC Criteria; an ALNAP Guide**, 2006.

During the second phase, evaluation teams completed data collection in the five countries including interviews with key informants and focus groups and observations of CMAM activities. The third phase resulted in five country reports.¹⁹ During a fourth phase, an internet survey was conducted and analysed. The synthesis process undertaken from January to March 2013 involved a comprehensive document review.

Evaluation Questions

The evaluation questions were organized by OECD/DAC criteria. Except for questions pertaining to sustainability and scaling-up which focus mainly on country-level services, all of the evaluation questions apply to both country- and global-level analyses.

Relevance questions largely concerned appropriateness of strategic direction in relation to context, assessed needs and national priorities, and whether official guidance and technical assistance is adequate. **Coverage** was examined relative to the national or sub-national level standards and needs for SAM treatment and MAM management. To judge **effectiveness**, the evaluation looked at how well the CMAM components were implemented relative to global and national standards. The evaluation investigated **cost efficiency** issues using data available in the country, comparing costs within CMAM intervention areas and among partners, if applicable, examining options and seeking means to achieve the lowest cost. The cost per recovered child was calculated in each case study country.

To answer the **impact** questions, the evaluation used secondary evidence of impact where available; the focus is largely on outcomes and what is likely to produce results following a causal pathway, comparing CMAM/IMAMs that are at different levels of evolution and government ownership and those using various management arrangements. The evaluation examined administrative, institutional, technical and financial **sustainability** and explored the possible opportunities for expansion of effective CMAM interventions. **Cross cutting issues** were assessed with regard to national ownership, integration into national health services and with other interventions, coordination and partnerships, information and monitoring systems, capacity building, and equity and gender equality.

1.3.1 Evaluation Methods

The international consultants developed an overarching Evaluation Matrix which detailed indicators and data sources, and broke the questions into sub-questions, under the categories of global and country issues. The aim was to prepare to collect and analyse data and to clarify needed background information. A draft CMAM logic model was developed for the evaluation which illustrates causal links between implementation of CMAM components and the expected outputs and outcomes; this model was vetted in the case study countries and has been modified accordingly. (See discussion in Chapter 2.)

The case studies were retrospective and descriptive analyses and assessed process, output and outcomes of CMAM employing a primarily qualitative approach, with four major techniques of data collection: (1) secondary data review of documents and quantitative data from CMAM intervention areas and data bases; (2) individual interviews; (3) focus group discussions (FGD); and (4) direct observations of operations at CMAM intervention areas. Key indicators compiled included: outpatient and inpatient activity indicators (recovery rate, default rate, length of stay, weight gain, mortality rate and coverage rate); Community outreach indicators (screening, referral and admissions); Outcome indicators (e.g. child mortality and morbidity, global acute malnutrition-GAM, MAM, and SAM prevalence estimates; and, Cost indicators (per unit costs and capital and recurrent costs).

1.3.2 Data Collection and Analytic Approaches

The data from different sources and methods of inquiry were summarized and triangulated, using at least three different sources, to verify the findings and their programmatic implications. The chronological

¹⁹ Evaluation of Community Management of Acute Malnutrition: Nepal Country Case Study (Sheila Reed, Camille Eric Kouam, Devendra Chhetri, Pushpa Kamal Subedi, Prakesh Sapkota, and Uddhav Sigdel, July 2012); Pakistan Country Case Study (Sheila Reed, Camille Eric Kouam, Parvez Paracha, Zia-Ud Din, Niamat Ullah, Adil Saeed, and Yasmin Asif); Ethiopia Country Case Study (Abebe Alebachew, Habtamu Fekadu, Sheila Reed, Camille Eric Kouam, and Meselech Roro); Chad Country Case Study (Camille Eric Kouam, Philippe Djékaouyo Nadwai, Naiban Minguéyambaye, Jean Pierre Manssimadji, Salomon Allaramadji and Sheila Reed); Kenya Country Case Study (Sheila Reed, Camille Eric Kouam, Lina Njoroge, Geoffrey Onyancha, Haile Selassie Okuku, and Clare Momanyi).

progression of case study data collection in the five countries and reporting allowed an iterative process during which inquiry and analysis were refined and targeted.

In all of the case study countries, quantitative data was available through health, nutrition, or CMAM reporting mechanisms, and from clinics and hospitals in the sampled districts. Qualitative data was obtained from baseline survey reports, the CMAM policy and documents and previous reports, as well as primary data collected through interviews, FDGs and observation.

Country Case Studies

Selection criteria for case study countries (Chad, Ethiopia, Kenya, Nepal and Pakistan) included: geographical location (Africa, Asia) with the aim of achieving a balance among regions; programmes older than two years; different implementing contexts between and within countries (e.g. emergency versus non-emergency or regular), the country office's interest in participation and the potential for CMAM expansion. The evaluation focused in Nepal on five pilot districts and in Pakistan on one province, Khyber Pakhtunkhwa (KP), while Ethiopia, Chad and Kenya included all areas implementing CMAM or IMAM (in Kenya). The following chart indicates the duration, scope, type and level of scale up at the time of the data collection and analysis. Funding in each country came from a variety of sources, mainly emergency funds.

Table 1.1 Duration, Scope and Characteristics of CMAM in case study countries

Country	Duration of the intervention	Scope of the intervention (at the time of evaluation)	Scale Up Envisioned or in Process
Nepal	Pilot - 3 years	5 Districts out of 75 in the country	Envisioned to 6 or more additional districts
Pakistan	3 years	KP, Singh and Punjab Provinces (the evaluation took place in KP only)	To more districts in the provinces
Ethiopia	From 2002	8,100 of 13,636 health services areas	Increasing treatment coverage countrywide
Chad	7 years; from 2004	11 regions supported out of the 22 regions of the country	Expansion to more regions Increased geographic coverage
Kenya	From 2007. Integrated into High Impact Nutrition Interventions (HINI) since 2010	National although stronger in Urban and Arid and Semi-Arid Lands (ASAL); approximately 899 sites	Expansion to more districts Increased geographic coverage

For the five country evaluations, countries responded to the global TOR and included additional questions or issues according to the context and programme needs. The global TOR was adopted in total in Pakistan, Chad and Kenya. The Nepal TOR was adjusted to include relevant questions on the pilot activities. The Ethiopia TOR was modified with regard to the depth of investigation into MAM management as another evaluation aimed to cover this component.

The selection of CMAM intervention areas sampled in the evaluations followed country-specific sampling plans. In Nepal, all five pilot districts were visited. In the other four countries, intervention areas were selected based on criteria which would allow cross comparisons and study of variations, such as partnerships, demographics, geographic locations, presence of other related interventions and size of facilities, among others. Semi-structured discussion guides and observation checklists were developed and tested in Nepal, the first country visit, and adjusted accordingly. In the other countries these tools were adapted to the health system structure before use. In Chad they were translated into French, the country's official language.

Document Review

Reviews were conducted of country-specific documents regarding the five case study countries; global policy, guidance and studies were also referred to by national/international teams. The synthesis process involved a broader document search. For the case study countries, the documents available to the teams were augmented by those provided by UNICEF Country Offices (COs), government counterparts and IPs. These included national policy and strategy documents, annual reports, studies and evaluations, workshop proceedings, and minutes and publications from nutrition coordination groups. Nutrition and

health surveys were widely consulted including baseline and emergency assessments, country Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Survey (MICS) data.

Key Informant Interviews

Feedback was obtained at UNICEF headquarters among health, nutrition and evaluation office staff before and after the case study country visits and reporting. In case study countries, individual interviews were held with stakeholders, including staff from central and local government, UNICEF COs and Regional Offices (ROs), Implementing Partners, WFP, WHO, donors and academics. As part of the synthesis process, additional interviews were held with selected management staff.

Focus Group Discussions (FGD)

Focus groups were organized among caretakers, both mothers and fathers of children with SAM and MAM admitted, as well as parents of recovered children. The FGDs also took place among community leaders, community health workers, and community volunteers to document their perceptions on the performance, relevance and effectiveness. Semi-structured interview guides were used to generate discussion and gather feedback for improvement.

Observations of CMAM Operations

A checklist was developed to document observations of activities in clinics, hospitals and health posts, including the adequacy of infrastructure and equipment, availability of guidelines and standards, supplies of RUTF and medicines, and procedures followed by health workers in anthropometric measurement, admissions, treatment and reporting.

Global Internet Survey

A global internet survey (referred to herein as the *2012 Global CMAM Synthesis Survey*) was an important data source for the global level analysis. The survey covered the following topics: access to outpatient and inpatient treatment, implementation of community outreach, management of MAM, geographical and treatment coverage, national ownership, standards and guidelines, roles of community health workers, integration of CMAM into national health services and with other interventions, intersectoral coordination, supply chain efficiency, and challenges to scaling up.

A key purpose of the *2012 Global CMAM Synthesis Survey* was to include input in the synthesis exercise from non-case study CMAM countries, including UNICEF offices as well as partners and other organizations. The objectives of the survey were to:

1. Help triangulate and validate the conclusions and recommendations from the five country case studies through inclusion of other country-based perspectives;
2. Gather feedback from respondents on actions to strengthen CMAM through global and regional initiatives.

The survey was piloted through the UNICEF Pakistan CO in August 2012 and launched online in September 2012 for a three week period. The response was 81% (51 out of 63 potential respondents, largely through the UNICEF COs) of countries implementing CMAM and/or requesting supplies of RUTF (a few do not implement the entire 4 component model or have limited usage of RUTF).

1.3.3 Cost Analysis

In each of the five case study countries, an analysis was conducted of CMAM programme costs in order to ascertain the per unit costs of treatment and to determine whether conclusions could be drawn regarding cost efficiency in various contexts. Cost data was obtained from UNICEF, WFP, IPs and from government staff. A time allocation template was used to assess staff time per CMAM component/service delivery activity, and associated costs computed as a proportion of their annual salaries. The annual value of the capital cost was estimated taking into account the life of the capital goods considered. For example the life of the capacity building training costs was assumed to be over five years. Data regarding the government capital investments such as buildings, medical equipment and utilities such as gas and water were not available, thus not included in the government contribution. Due to lack of screening data, the community outreach component has been excluded from the analysis in Ethiopia, Chad and Kenya. The financial contribution of WFP was captured in the analysis only in Kenya, while the IPs contribution

could be estimated only in Pakistan. The analysis approach was similar in all five case study countries which allow comparability of the results. (See matrix in annexes which presents an overview of the scope of interventions and costs data gathered in the five countries.)

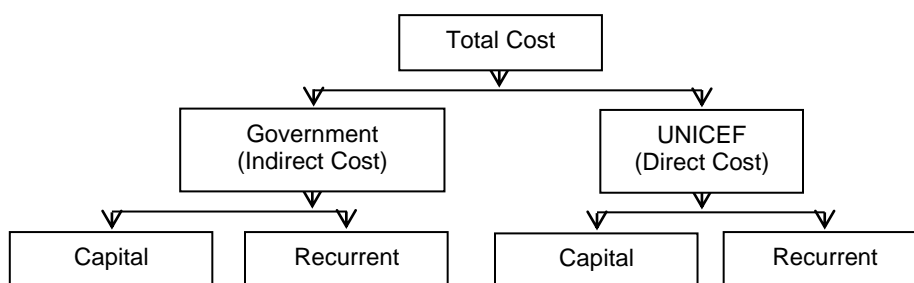


Figure 1.1 Disaggregated Total Annual CMAM Expenses

1.3.4 Evaluation Constraints and Limitations

Despite the constraints and challenges, the evaluation provides valuable information as per the TOR. The field work was completed more than a year ago thus some of the information synthesized from the case studies may be outdated, nevertheless, the majority of the findings are still relevant and useful. The following are noted as challenges to the analysis and the means used to address them.

- **Challenges in comparison of results of interventions.** Comparison of interventions among countries was difficult due to varying contexts, with a range of levels of development and time spans for implementation, and where resources and capacity also differ. Aids used in facilitating comparisons included use of analysis matrices and cross-referencing on the global survey results.
- **Data quality, representativeness and consistency.** The quality of some data and data analysis was weak in the five case study countries. Data analysis was not always available particularly regarding baselines, outcomes and potential impact. However, performance data was carefully examined during the case study exercises and only the strongest data sets that were representative were used for the analysis. Data was triangulated to reach conclusions in the case study countries and further triangulated to make cross country comparisons for the synthesis.
- **Absence of comparison groups.** Due to time and data availability constraints, the evaluation did not perform comparisons of CMAM to other models for addressing SAM. The team studied other evaluations and used interview data to gather opinions on alternative interventions.
- **Lack of global agreement for management of MAM.** The evaluation assessed MAM management against national guidance or guidelines being followed by other organizations, as well as exploring the cooperation between actors addressing SAM and MAM.

2 The Evolution of CMAM

2.1 CMAM Evolution in Various Contexts

Over the past decade there has been a global initiative to shift from facility-based treatment approaches to a decentralized community based approach. This shift is founded on evidence that the majority of children with severe acute malnutrition (SAM) are never brought to health facilities and in these cases, only an approach with a strong community component can provide them with an appropriate care.²⁰ Previously, children with SAM were often required to stay in nutrition rehabilitation centres for long periods which posed difficulties for caretakers and led to a high default rate. In addition, the capacity of the facilities was limited and could not address malnutrition on a large scale.

Major impetus for the implementation of CMAM through the national health system were the publication in 2004 and 2006 of the Community Therapeutic Care (CTC) approach by Valid International^{21,22}, the publication in March 2007 of the WHO/WFP/SCN/UNICEF *Joint Statement: Community-based management of acute malnutrition*²³, the lessons learned from the international conference on the integration of CMAM in 2008²⁴, and the 2008 Food and Nutrition Technical Assistance Project (FANTA) training guide.²⁵ Since then, the development and/or refinement of national CMAM guidelines has brought the global guidance into national context.

In all five case study countries, CMAM was initiated as a largely externally supported emergency response only minimally or partially integrated into the national health system. National stakeholders progressively assumed greater ownership in all of the countries and CMAM was scaled up. (Table 2.1 summarises the evolution of CMAM in the five case study countries). In **Ethiopia**, CMAM began as an emergency response to an increase in SAM during a period of drought and food shortages in 2002 and became more integrated during two subsequent drought emergencies. In **Nepal**, the increasing prevalence of acute malnutrition alerted the Ministry of Public Health (MoPH) and a feasibility study in 2007 laid the groundwork in five pilot districts. In **Pakistan's KP** and **Chad**, CMAM was initiated as an emergency response to support refugees and IDPs in 2008 and 2004 respectively. The government of **Kenya** launched IMAM (Integrated Management of Acute Malnutrition) in 2008 closely followed by development of "National Guidelines for Integrated Management of Acute Malnutrition" in 2009.

CMAM has been expanded in both size and concept. **Kenya** has included IMAM as one of 11 High Impact Nutrition Interventions (HINI) adopted since August 2010. In 2012, **Nepal** expanded CMAM to six new districts and it became the Integrated Management of Acute Malnutrition (IMAMI) that includes infants under six months of age. In **Pakistan's KP**, one district is managing a pilot non-emergency CMAM in seven health facilities and CMAM has been initiated as an integrated service in Punjab province. In **Ethiopia and Kenya**, the rapid scale-up of outpatient treatment services has helped to control the dramatic increase of SAM cases consecutive to the 2011 East African drought.

Linkages with other nutrition interventions generally include Infant and Young Child Feeding (IYCF), micronutrient supplementation to children and women, food fortification, and food distribution in food insecure areas. Linkages and entry points have been widely established with mother and child health (MCH), antenatal care, expanded programme on immunization (EPI), integrated management of childhood illnesses (IMCI), growth monitoring programmes (GMP), and HIV treatment, among others.

²⁰ WHO, WFP, UN/SCN, UNICEF: **Joint Statement. Community-based management of severe acute malnutrition.** Jun. 2007.

²¹ Collins S, Grobler-Tanner C: **Community Therapeutic Care (CTC): A new approach to managing acute malnutrition in emergencies and beyond.** FANTA, 2004.

²² FANTA: **Community-based Therapeutic Care (CTC): A Field Manual.** Food and Nutrition Technical Assistance, Oxford, 2006, www.fantaproject.org/ctc/manual2006.shtml

²³ WHO, WFP, UN/SCN, UNICEF: **Joint Statement. Community-based management of severe acute malnutrition.** Jun. 2007.

²⁴ ENN: **International Workshop on Integration of Community Management of Acute Malnutrition.** Emergency Nutrition Network, Washington DC, April 28-30, 2008.

²⁵ FANTA: **Training guide for CMAM.** Food and Nutrition Technical Assistance, FANTA Project, 2008. www.fantaproject.org.

According to the 2012 Global CMAM Synthesis Survey, most CMAM interventions are currently either regularized (41.7% = 25 countries), that is, implemented in regular (non-emergency) contexts and being integrated into health system functions, or a combination of regular and emergency (41.7% = 25 countries) context. Relatively few are purely emergency response (11.7% = 7 countries), and some are difficult to categorize, including those with newly initiated CMAMs (5.0% = 3 countries). The oldest CMAMs tend to be regularized (Figure 2.1). In most countries, CMAM is managed by the government, with support from NGO Implementing Partners, UNICEF, WHO, and WFP, and a host of other partners.

1. Please indicate the context in which CMAM is being implemented in your country,

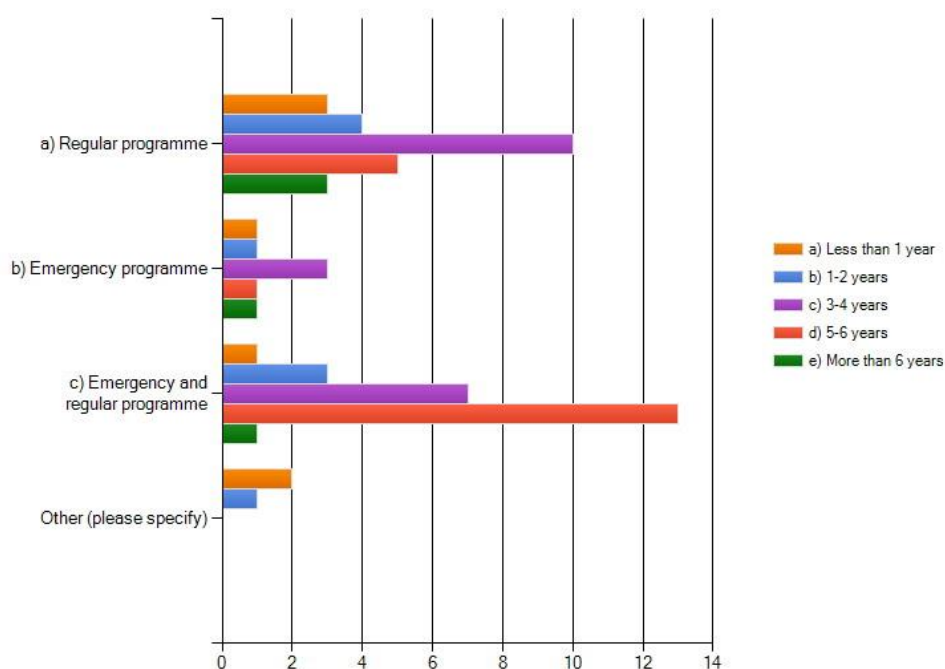


Figure 2.1: Context in which CMAM is being implemented, Global CMAM Synthesis Survey (2012)

Table 2.1: Matrix summarizing the initiation and progress of CMAM implementation in the five case study countries

	Initial phase	Intermediate phase	National ownership phase	Implementation modality
Nepal 5 Pilot Districts 75 outpatient and 6 inpatient treatment services	2007 - 2008 - Study on the feasibility of CMAM -Development of national guidelines -Initiation of a pilot intervention in five districts	2008 - CMAM is included as one of the activities under the Nutrition Project in the Country Programme Action Plan (CPAP) for 2008-2012	From 2012 Expansion to 6 other districts as IMAMI and implementation by the District Health Offices	-Through local and International NGOs at the start, with technical and financial support from UNICEF and other partners -Direct support of District health facilities by UNICEF later on
Pakistan (KP Province) 220 outpatient SAM and MAM services; 11 inpatient treatment services	2008 - Initiated as an emergency response to support IDPs following monsoon rains and floods	2009 -Expansion to other camps and host districts	2010 - 2011 -Development of national guidelines -Reduction of the number of IDPs sites as IDPs began returning to their homes -Expansion to other host districts	-Through local and International NGOs with UNICEF support and other partners -Direct support of District health facilities by UNICEF from 2012

			2012 -Start the integration into seven health facilities of one District as a pilot non-emergency CMAM intervention	
Ethiopia 8100 outpatient treatment services and 473 inpatient treatment services	2002 - Initiated in response to an emergency (during a period of drought and food shortage); establishment of structures for SAM treatment in the health centres and hospitals	2004 – 2008 - Introduction of the approach to SAM treatment using community-based system; treatment managed through outpatient treatment centres established within the national health centres	From 2008 -Inclusion of CMAM in the HSDP IV and NNP/NNS -Scaling-up in the country	-Through local and International NGOs with UNICEF support and other partners -Direct support of District health facilities by UNICEF and other partners
Chad 178 Outpatient treatment centres, 27 inpatient, and 200 MAM services	2004 -Launching CMAM as an emergency response in the camps	2007 -Development of the national CMAM guidelines -Piloting the intervention in three government health centres in one region outside the camps	2009 -Expansion to 10 more regions outside the camps	-Through local and International NGOs with UNICEF support and other partners -Direct support of District health facilities by UNICEF and other partners
Kenya 899 sites (inpatient and outpatient treatment services)	2004 -Launching CMAM by NGOs	2008 -Development of national IMAM guidelines integrated into High Impact Nutrition Initiative (HINI) -Launching CMAM as an emergency response to food security crisis	2010 - Inclusion of CMAM into the national nutrition strategy	-Through local and International NGOs with UNICEF support and other partners -Direct support of District health facilities by UNICEF and other partners

The role of UNICEF in various phases of the intervention

UNICEF is one of the principal organisations supporting the implementation and scale up of the CMAM approach with respect to managing severe acute malnutrition (SAM). UNICEF is the main provider of RUTF, therapeutic milk (F-75, F100) and other essential supplies in treating SAM. UNICEF also provides technical guidance and supports capacity building efforts of Ministries of Health (MoHs) and non-governmental organisations (NGOs) to improve both the quality and access of SAM treatment.

A key component of UNICEF's work is monitoring and evaluation (M&E) to demonstrate impact. The need to have a standardised method to compile, collate and compare information on impact and increase accountability related to the management of SAM has been evident for some time. A Global Mapping Review in UNICEF-supported countries was conducted in 2010, based on 2009 data, to determine the current situation of CMAM programming with a focus on SAM treatment, and the findings were shared in March 2011. A major finding of this CMAM Mapping Review was the need to improve the quality and frequency of SAM treatment performance reporting and one specific recommendation was to develop a Global SAM reporting system. One step in addressing this has been the development of an annual summary, referred to as the 'Global SAM Treatment Update' to report on the status of SAM treatment for 2011 in UNICEF-supported countries.²⁶

According to the Joint Statement on CMAM (2007), the role of UNICEF along with WHO and WFP is to mobilize resources, facilitate local production of RUTF, support nutrition protocols, work with the government, private sector and NGOs, conduct operational research to refine protocols and jointly

²⁶ UNICEF Nutrition in Emergencies Unit and Valid International: Global Reporting update: **SAM treatment in UNICEF supported countries**. *ENN Field Exchange*, 2013, **43**: 38.

implement CMAM in emergency and non-emergency situations. During different phases of the intervention in the five case study countries, UNICEF has played the following roles:

Funding. UNICEF was the main source of CMAM funds from the start of the intervention in **Nepal, Pakistan** and **Kenya**. UNICEF funded the development of the national guidelines and the pilot intervention in five districts in Nepal in 2007, and has initiated the expansion in 2012. In Pakistan, UNICEF provided funds for the renovation and equipping of inpatient therapeutic centres, and funded in 2012 the integration of CMAM in seven health facilities of KP province as a pilot non-emergency intervention. UNICEF led the mobilisation of resources for scaling up the intervention in 2008 in **Ethiopia** and 2009 in **Chad**. Currently, UNICEF funds the employment of 18 qualified nutritionists in arid and semi-arid land (ASAL) districts of Kenya who support the ministries and partners overall nutrition strategy and implementation.

Technical support. In the five case study countries, UNICEF provided direct support to the MoH and through IPs for the development of national CMAM guidelines, capacity building of health workers, and monitoring, supervision, reporting and evaluation. The CO provides technical support to the DHOs through nutritionists and CMAM monitors in **Nepal**, and through Nutrition Focal Points in **Chad**. In **Pakistan**, UNICEF HQ and the Regional Office in South Asia (ROSA) expanded the staff in the CO, and the organisation developed the Nutrition Information System (NIS) and supported the MoH in the development of the Pakistan Integrated Nutrition Strategy (PINS) and accompanying operational plan. This was also the case in **Kenya** for the development and implementation of the HINI.

Procurement of equipment and supplies. UNICEF is the main provider of anthropometric and clinical equipment, as well as medicines and RUTF to the five case study countries.

Advocacy. UNICEF advocated for the implementation of CMAM through the national health system from its initiation in **Nepal**. Along with the FMOH in **Ethiopia**, the organisation advocated for transferring responsibility for SAM treatment from NGOs to the FMOH and its decentralized health system, which led to the scaling up of the intervention through the national health system in 2008. In **Kenya**, UNICEF advocated for sustainable nutrition policies and interventions, leading to the development of the HINI which includes IMAM.

Nutrition humanitarian cluster coordination. In **Pakistan**, UNICEF established with the KP Department of Health a provincial nutrition cluster in 2009 and has supported a nutrition sub-sector cluster coordinator within the Health and Nutrition Early Recovery Working Group. In **Nepal, Ethiopia, Chad and Kenya**, UNICEF co-leads the nutrition cluster with the Ministries of Health and, for example, maps nutrition interventions and harmonises resource allocations.

Intersectoral coordination for addressing causes of acute malnutrition. In **Nepal**, UNICEF initiated intersectoral coordination between the water and sanitation and the food security sectors. In **Kenya**, the organisation played an integral role in promoting intersectoral coordination, by co-leading the education cluster with the Ministry of Education, the child protection cluster with the Ministry of Gender and Children's Affairs, and the WASH cluster with the Ministry of Water and Irrigation. In **Chad, Ethiopia and Pakistan**, intersectoral collaboration is still developing.

2.2 The CMAM Four Component Model

A draft CMAM logic model was developed to guide the evaluation process (See Figure 2.1). The model links intervention investment (inputs) to products (outputs, including activities) and to anticipated changes in the target population (outcomes) and extends to anticipated changes in the larger community (impact). The model illustrates causal links between implementation of CMAM components and the expected outputs and outcomes, which are considered "ideal" in terms of the implementation of the intervention. The six building blocks of the WHO health system model (governance, financing, human resources, supply, service delivery and health information system) are part of the inputs. The draft model was modified through discussions in the five case study countries.

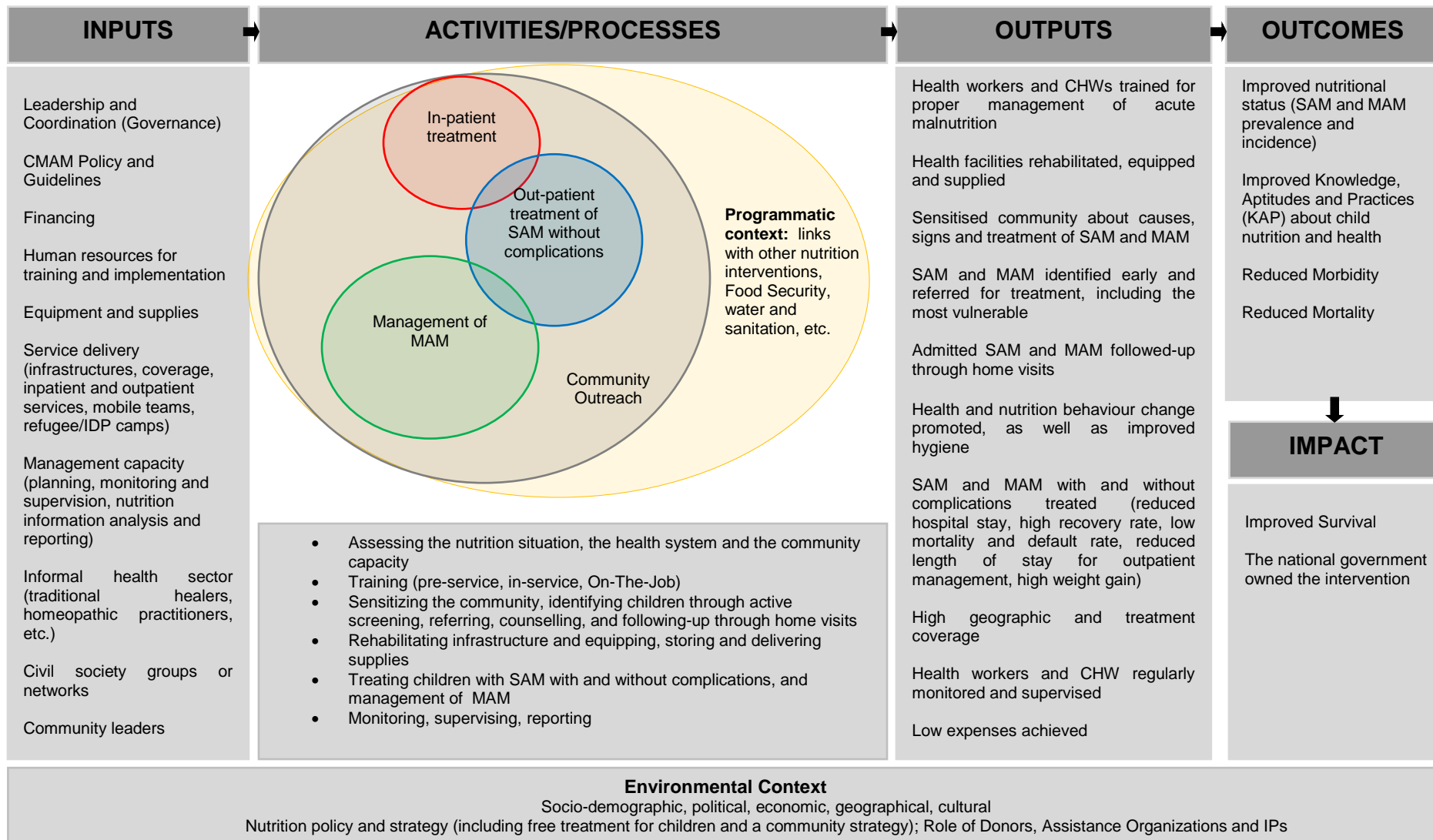
The CMAM approach must be seen as a continuum of prevention, with the aim of community outreach being the prevention of acute malnutrition, the aim of MAM management being the prevention of SAM, the aim of outpatient treatment being the reduction of need for inpatient treatment, and the aim of inpatient treatment being the prevention of death. The **inputs** as per the model include: leadership and coordination, CMAM policy and guidelines, financing, service delivery, human resources, equipment and supplies, management capacity, and community resources including caretakers and extended family, the informal health sector, civil society groups and community leaders. The **activities and processes** needed are assessments of the nutrition situation, the health system, and community capacity; training health workers; rehabilitating and equipping health facilities; storing and delivering supplies; and, monitoring, supervising and reporting on the activities. The diagram under activities and processes depicts the **inter-relationship between the four components** and the context of implementation among other sectors and interventions.

The main **outputs** are sensitised communities, children with MAM and SAM identified, referred, admitted, treated and followed up, trained health workers, rehabilitated, and well equipped and supplied health facilities. For management of children with MAM and outpatient and inpatient treatment of children with SAM, the performance indicators are recovery rate, default rate, transfer rate, length of stay, average weight gain, mortality rate and coverage rate, as per the Sphere Minimum Standards in Humanitarian Assistance and the Global Nutrition Cluster (GNC) standards, and those established by WHO and UNICEF globally and partners at the national level. For community outreach, the indicators are % of total children under the age of five in the district being screened for malnutrition, % of screened children referred to outpatient services sites, % of referred children that are admitted in the outpatient services, % of caretakers of admitted children receiving counselling on improved child feeding and care practices, and level of community awareness of the existence of treatment services for acute malnutrition. The inputs are programmed for high levels of geographic and treatment coverage, well monitored and supervised activities, and low intervention expenses, the indicators for the cost being per unit cost (capital and recurrent) as well as cost per child.

CMAM is implemented among varying socio-demographic, political, economic, geographical, and cultural contexts that influence its implementation. There are linkages between CMAM and the other nutrition and health interventions (in a programmatic context) targeting under-five children that may influence the expected CMAM outcomes and impact. These **outcomes** are improved nutritional status of children, reduced morbidity and mortality, as well as improved Knowledge, Attitudes and Practices (KAP) about child nutrition in the community. Outcome indicators are child mortality and morbidity prevalence, GAM, MAM, and SAM prevalence. The **impact** is manifested through the survival of children because of better quality of life, as well as the ownership of the government for CMAM. Overall, the investment (inputs) produces changes at the level of children (improved nutritional status), the community (awareness and involvement), the health workers (improved management capacity), and the local authorities (ownership) and may contribute, along with other child health, nutrition and development interventions, to achieve the MDGs 1 and 4.

In order to apply and refine the model, its limitations need to be examined. From a preventive perspective, if a child with MAM does not benefit from a MAM intervention, her or his status may deteriorate to SAM after some time if the household does not have the necessary knowledge and resources to help the child progress to normal status. The MAM intervention is necessary to prevent deterioration, but there is insufficient evidence and agreement on the most efficacious approach (e.g. through provision of fortified blended food (FBF), ready to use foods - RUFs, other supplementary foods, local nutritious foods and counselling and integration with other interventions.)

Figure 2.2: Logic model used for CMAM evaluation in the five case study countries



The preventive approach is important to prevent relapses, or return to a moderate or severe acutely malnourished status after recovering. A child who has recovered from MAM evolves to a normal status and to community based support. A child who has recovered from SAM evolves to moderate status or MAM, again highlighting the need for effective MAM management to prevent relapses.²⁷ The lack of agreement on a global level on the most effective treatment for MAM limits the efficacy of the model, as there are inconsistent approaches among countries. Interviewees pointed out the importance of strengthening coordination among donors, among IPs, and between donors and IPs. It is relevant to consider malnutrition broadly (without segmenting chronic and acute or severe and moderate). Advocating adoption and use of a model that links prevention to governments, donors and IPs might harmonise allocation of funds among the CMAM components and to more effectively plan activities.

2.3 CMAM Policy and Partnership Arrangements

Globally, UNICEF's Medium Term Strategic Plan (2006-2011) prioritizes four focus areas, including young child survival and development, which is an overarching theme for malnutrition. In **Nepal** and **Ethiopia**, the principles underlying CMAM form an integral part of a national nutrition policy and strategy. In **Ethiopia**, CMAM is included in the Health Strategy Development Plan IV and the National Nutrition Strategy. In **Kenya**, IMAM is part of the HINI and is included in the National Nutrition Action Plan (2012-2017). **Pakistan** and **Chad** do not yet have a national nutrition strategy that imbeds CMAM. In the five case study countries, CMAM national guidelines adapted from international guidelines are developed, and efforts were made to harmonize these guidelines with other national protocols such as IMCI in Nepal (e.g. adding MUAC to the identification of SAM and MAM).

In **Nepal**, the administration and management arrangements for CMAM have been set out in MoUs and agreements among the MoHP, UNICEF and other partners. An IP was later replaced by consultants and advisors from the MoHP and UNICEF. In two districts national NGOs provided technical assistance based on the consensus between UNICEF and the MoH. In **Pakistan**, **Ethiopia** and **Chad**, the government, UNICEF, WFP, WHO and IPs are sharing CMAM responsibilities. In **Kenya**, a partnership framework between the MoH, UNICEF, WFP and NGOs to support Delivery of Essential Nutrition Services in the country was developed in 2010 to guide implementation of nutrition interventions.

The establishment of these agreements clarifies the roles and responsibilities between the MoH and partners, generally through a signed annual work plan or Memorandum of Understanding (MoU). Generally, the MoH leads the implementation and management of CMAM by providing health facilities and staff, co-chairs the nutrition cluster with UNICEF, participates in coordination with UNICEF, other UN agencies and IPs in assessment and planning, development and dissemination of national guidelines, OJT tools and other relevant documents to sub-national level. The MoH also supports sub-national level capacity building, supervision and mentoring, and facilitates signing of MoUs with partners. UNICEF and WHO provide technical and operational support for implementation and scale up of outpatient and inpatient treatment services. WFP supports supplementary feeding for MAM management. IPs support the implementation of CMAM through the government health facilities in collaboration with the MoH staff. Main donors identified in the five case study countries are DFID, USAID, CIDA, the Central Emergency Response Fund (CERF), the European Union (EU), ECHO, the World Bank, OFDA, the Japan Government, the MDG Achievement Fund, the French Government and DANIDA. (Please see annexes for a table depicting shared roles among partners in the five case study countries.)

²⁷ A wasted child with SAM when admitted for treatment progressively gains weight, from < -3z score, progressing to between -3z score to < -2z score, defined as MAM status. A child cannot jump directly from SAM to normal, whatever the weight gain speed. One exception is a child with oedema who could appear as "normal" or "moderate" in terms of weight/height after reduction of oedema, but during that phase of oedema reduction there is "weight loss" rather than "weight gain" because of oedema reduction. So the child receives SAM treatment for at least two weeks to make sure that oedema is gone. The prevalence of oedema is generally very low, and the majority of SAM cases do not have it. So, children progress to normal status through MAM status.

3 Effectiveness of CMAM Services

This chapter presents findings on CMAM's overall effectiveness and on effectiveness of the four CMAM components: community outreach, services for children with Moderate Acute Malnutrition (MAM), outpatient treatment for children with severe acute malnutrition (SAM) without medical complications, and inpatient treatment for children with SAM and medical complications. The effectiveness of information and monitoring systems is also covered.

3.1 CMAM Outcomes and Overall Effectiveness

As per the evaluation logic model, implementation of CMAM should result in: 1) improved nutritional status of children in the community (reduction in MAM and SAM prevalence and incidence), 2) reduced morbidity and mortality, and 3) improved Knowledge, Attitudes and Practices (KAP) about child nutrition and health. Overall, the success of CMAM is seen through achievement of the Sphere standards for recovery for MAM management (Pakistan, Chad and Kenya, where complete data was available), and for recovery, death and default in outpatient and inpatient treatment for SAM in most areas in the five case study countries. In **Ethiopia**, where CMAM is implemented in over 8,000 intervention areas, CMAM is credited with successfully averting childhood deaths which decreased markedly after the introduction of CMAM, and remains at an acceptable level of 5% or below. The intervention is expected to contribute to decline in under five mortality in the future although the specific impact has not been assessed.

Geographic coverage has improved markedly in all five case study countries as well as globally. A measure of effectiveness of geographic coverage is whether the facilities providing CMAM services can efficiently cover the catchment area (and in some cases beyond if there are no other local CMAM intervention areas) and respond to increasing numbers of SAM cases. In **Kenya**, caseloads in the urban areas have steadily doubled each year from an initial 1,600 in 2008 to 4,700 in 2010, while maintaining quality within Sphere standards for recovery and death rates. The evidence of **Ethiopia's** capacity to effectively identify and treat SAM is further strengthened by Ethiopia's response to the 2011 East African drought. The increase in SAM cases was detected early because of an abnormal increase in the number of admissions; treatment was timely and the mortality rate was very low. In **Pakistan**, the existence of CMAM in KP since 2009 has contributed to a decrease in mortality rates, and to a lower post-emergency GAM rate in KP compared to Sindh and Punjab, during the 2010 flood emergency. (However, additional data is needed to confirm whether CMAM was a major contributing factor to less than serious levels of GAM post flood disaster, as disaster preparedness in general was higher in KP than in other provinces.)²⁸

In **Chad** nutrition anthropometric surveys were conducted in 2008 before the scaling-up process, and every six months after starting the scaling up in 2009. Survey findings indicated that CMAM contributed to the stabilization of the nutrition situation in some regions (by preventing aggravation), and to its improvement in other regions, through reduced prevalence of acute malnutrition and mortality rates.²⁹ However, the absence of anthropometric surveys conducted before and after the intervention in other countries limited the analysis of the change produced by the intervention on the outcome indicators. Similarly, in all countries, the absence of KAP surveys conducted before, during and/or after the intervention limited the analysis of the effectiveness of the intervention on knowledge, aptitude and practices of the targeted communities. Nevertheless, discussions with community members confirmed that they were aware of the CMAM and could refer malnourished children for services.

CMAM has contributed to other positive outcomes as well. In many countries, nutrition coordination and advocacy around CMAM has helped nutrition to rise on the policy agenda and resulted in development of strategies and policies that include CMAM in some countries. Health staff in the five case study countries were appreciative of training which enhanced their knowledge of the impact of nutrition on health. The evaluation thus confirms that CMAM saves lives through prevention and by addressing SAM. Through the strengthening of preventive measures as per the CMAM model, prevalence of SAM should be reduced,

²⁸ Government of Pakistan: **Flood Affected Nutrition Survey (FANS) in KP, Pakistan**. Nov. 2010.

²⁹ Gouvernement du Tchad : **Rapport préliminaire enquête nutritionnelle et de mortalité dans 11 régions du Tchad, du 16 août au 15 septembre 2011**.

however, CMAM needs to be continued as an effective approach to address SAM where it exists as a chronic problem and in emergencies.

3.2 Community Outreach: Facilitating Community Connections

The community outreach component characterises the community based foundation of CMAM. The ultimate objectives of community outreach are to ensure that the maximum possible number of acutely malnourished children access treatment, and to increase community awareness of malnutrition. Activities are mainly carried out by community health workers (CHWs) who live and work in their own or nearby communities.³⁰ They are trained for implementation of outreach activities, generally community sensitization, case identification through screening and referral, counselling, and follow-up through home visits.

The *Government Experiences in Scaling Up CMAM, Synthesis of Lessons* (2012) notes two major issues which were reinforced by evidence in this evaluation.³¹

1. There is less intense focus by implementers on the community outreach component, as compared to the other three CMAM services, which poses a challenge to improving prevention and coverage.
2. The CHWs facilitate linkages to successful treatment for SAM cases and MAM management. Their workloads are often substantial and there is a risk of over-burdening them, affecting motivation and attrition.³²

In the five case study countries, efforts are being made by government, UNICEF and IPs to strengthen community outreach and numerous good practices are mentioned in the discussion below. However, outreach outcomes were often difficult to assess. (Weaknesses in community outreach have been identified in other evaluations.³³) Some issues that have affected outcomes are the following.

1. Unlike the other three CMAM components, performance indicators are not agreed for community outreach activities. Although screening targets are generally set in planning documents, data is not always collected or precise on screenings and referrals.
2. The requirements for numbers of screenings per child per year are not determined.
3. Community assessments are not always conducted prior to start up or scale up of CMAM to support strategic planning based on local knowledge, attitudes and practices.
4. Some stakeholders who can contribute to a strategic approach for outreach like traditional healers are not included in CMAM.
5. Referrals to MAM management, outpatient, and inpatient services are not always followed up by caretakers and community workers thus malnourished children who need CMAM services can be missed.
6. Home visit follow-ups are inadequate and not reported.
7. Most sets of national guidelines for CMAM do not cover community outreach activities in enough detail, outlining roles and responsibilities and making connections to the facility based services.
8. CHWs need more support and motivation in the form of supervision, incentives or payments and transport, among others.
9. More funds, capacity development and management resources are needed for community outreach.

³⁰ CHW titles vary by country. In Nepal: Female Community Health Volunteers (FCHV); In Pakistan: Lady Health Workers (LHW), Lady Health Visitors (LHV) and Community Health Workers (CHW) in the government health system, and Social Mobilizers (SMs), Community Outreach Workers (COWs) and Nutrition and Health Educators for IPs; In Ethiopia: Village Community Health Workers (VCHW) and Health extension Workers (HEWs) - the VCHW role in community outreach was transferred to the Health Development Army (HAD); In Chad: Community Health Workers (CHW), community volunteers and Traditional Birth Attendants (TBA); In Kenya: Community Health Workers (CHW) in the government health system, and Community Health Promoters (CHP) in the refugee camps.

³¹ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012p 27-29.

³² *Ibid*, pages 27-29.

³³ Deconinck H, Bahwere P, Serigne Mbaye D, de Bernardo D, Pierre A: **Review of Community-Based Management of Acute Malnutrition Implementation in West Africa: Summary Report.** *Washington, DC: FHI 360/FANTA-2 Bridge*, 2011.

; Deconinck H, Bahwere P, Adou P: **Review of Community-Based Management of Acute Malnutrition Implementation in Niger.** *Washington DC: FANTA*, 2011.

3.2.1 Human Resources for Community Outreach

In the five case study countries there were various levels of motivation among community-based health workers (CHWs) and some were related to incentives they personally received as well as supervision and other forms of support provided. The complex relationships among CHWs and their supervisors, the conditions under which they work, their responsibilities and the outcomes of their efforts all require more analysis among stakeholders. This is even more important as strategies under discussion in some countries and being tested in a few are to capacitate them to provide services that are currently health facility-based such as distribution of RUTF. According to the *2012 Global CMAM Synthesis Survey*, capacity development of CHWs through training, monitoring and regular supervision, and provision of incentives/salaries are the main facilitating factors for increasing their efficiency and effectiveness.

*It is important to link community outreach for acute malnutrition with existing community health and nutrition outreach systems or initiatives, and further strengthen the outreach system.*³⁴

The CHWs fall under many categorizations related to their qualifications and duties, and statuses as volunteers or paid employees (for example, they are often the vaccinators for immunization campaigns, which they are well paid for). The CHWs carry out a number of extension activities determined by nationwide health strategies. In addition to screening for malnutrition, many CHWs also offer treatment services; e.g. for malaria, diarrhoea, and acute respiratory infections (ARI). Countries may also organize community members as cohesive forces to promote development goals. **Ethiopia's** on-going mobilization of the Health Development Army and **Kenya's** development of community units are examples of community based support for national health and other sectoral strategies.³⁵

In **Chad and Pakistan**, in areas where the CHW network is weak or has been disrupted by crises, CMAM implementing partners (IPs) may employ CHWs as full or part time staff or they may work as volunteers. In Chad for example, some IPs provide a salary and transportation, while some do not provide this support. In Pakistan's KP, a parallel system existed for the most part, with IP supported community outreach workers (COWS) working alongside government supported Lady Health Workers (LHWs) implementing other national public health strategy activities including IYCF.

In some countries, government acknowledgment of the critical role played by the CHWs has resulted in providing incentives for them from national budgets, which is the most sustainable means of supporting their contribution. In most cases, this also includes a stronger supervisory plan. The Government of **Pakistan** has committed to providing payment to LHWs who are a formidable task force (more than 100,000 were regularized in 2012), even though they might be overburdened. To support implementation of **Kenya's** essential package for health, the community health extension workers (CHEWs) will be paid approximately \$25 per month to encourage them to stay in post for longer.³⁶

Performance differences have been noted in terms of whether CHWs are unpaid or receive regular payment for their work and/or work under incentive-based systems. Deconinck et al³⁷ observed in **West Africa** that the motivation of unpaid outreach workers tended to fade over time. However, the terms and results of payment, as well as setting realistic expectations are important considerations. In **Kenya**, CHWs have difficulties covering large expanses in the arid lands and large numbers of people in the crowded urban slums. In **Somalia's** South Central Zone, the CHWs are, in effect, salaried through the incentives they are paid which encourages them to take on large areas (for which they are paid more) but

³⁴ FANTA II: **Community Based Management of SAM, Generic Guidelines**. *Food and Nutrition Technical Assistance II*, 2010.

³⁵ The HDA consists of scaling up best practices by organizing and mobilizing families with a network between five households and one model family to influence one another in practicing a healthy life style.

³⁶ Wambani Sallie V: **Integrated management of acute malnutrition in Kenya including urban settings**. *Field Exchange, ENN*. Jul. 2012, p 82.

³⁷ Deconinck H, Bahwere P, Serigne Mbaye D, de Bernardo D, Pierre A: **Review of Community-Based Management of Acute Malnutrition Implementation in West Africa: Summary Report**. *Washington, DC: FHI 360/FANTA-2 Bridge*, 2011, P 23-24.

that they may not be able to cover effectively.³⁸ In **Sudan**, IP supported CHWs were paid more than senior MoH staff; CHW salaries were not sustainable and provoked resentment.³⁹

The CHWs are generally supervised by district health staff from local clinics and health posts or designated staff in IPs, who may be tasked with multiple duties in addition to CMAM. In the five case study countries, CHWs have performed more effectively when given strong supervision and support, often in the form of training, transport, lunches, and other means to help them reach children and caretakers in their homes and communities. In **Nepal**, to jump start CMAM, monitors hired by UNICEF worked effectively with CHWs. Similarly, in **Pakistan's KP**, community outreach results were the strongest when Social Mobilizers (SMs) and COWs worked closely together in the communities to promote screening and admission.

3.2.2 Strategic Use of Resources for Community Outreach

Increasing effectiveness of community outreach and efficiently scaling up will require expanding the critical mass of human resources who have contact with and can influence caretakers with malnourished children to seek CMAM services. Private health care providers serve a large proportion of health care needs and in most rural areas traditional healers are the first in line for children's health care. However, these actors were not always included in outreach activities in the case study countries. CHWs, community members and beneficiaries interviewed stressed the importance of involving them because of their strong influence in the community.

Launching awareness campaigns and joint strategic planning exercises to include more community leaders, private health care providers, and influential members will likely require more funds than are currently allocated for these purposes, but the investment should pay off in greater coverage and efficiency. More connection needs to be made to national nutrition and health strategies and more collaborative use of resources from various interventions promoted, including the work of the CHWs. This process could be linked to the UNICEF C4D initiatives.⁴⁰ Further, the community outreach strategy should be reviewed regularly.

3.3 Effectiveness of Community Outreach Activities

Community outreach typically consists of four major activities: community mobilization and sensitization, screening and active case finding, referral to CMAM services, and follow-up through home visits. The effectiveness of these activities are analysed below. In the five case study countries, the community outreach sections of national guidelines fell short in providing sufficient guidance. More emphasis is needed to feature community outreach as a key mechanism to promote coverage and prevent default and relapse, and to detail roles and responsibilities.

3.3.1 Community Sensitisation and Mobilisation

Community sensitization and mobilization involves *getting information on community structure and its key stakeholders, understanding the local perception of malnutrition and involving key community members from the outset of CMAM*. FANTA guidance recommends the use of standardised messages adapted to different audiences to facilitate uniform and accurate information sharing on malnutrition, its causes and treatment, and places where treatment services are available.

³⁸ Matunga L, Bush A: **Integrated management of acute malnutrition scale up: lessons from Somalia operations**. *Field Exchange, ENN*, Jul. 2012, p 32.

³⁹ Forsythe V et al: **Community Outreach for Community-Based Management of Acute Malnutrition in Sudan**. Washington, DC: AED, 2010.

⁴⁰ A C4D strategy at UNICEF typically encompasses *i) setting social and behavioural outcomes*, as well as communication objectives that identify key desired behaviours or social practices among children and their communities; *ii) audience analysis* that identifies key participant groups in the communication process as well as the networks of influencers and community mobilizers who can be called upon during an initiative to influence or support behaviour and social change among the key participant groups; *iii) designing creative approaches* that consist of plans for the development of content, materials and channels of communication; *iv) developing an implementation plan* that includes the schedule and resource implications of events and actions for activating the development, dissemination and utilization of C4D messages and materials, and *v) developing monitoring and evaluation plans* that clearly lay out the indicators and research methods for measuring performance and impact of C4D initiatives. Source: UNICEF website.

There were significant challenges in the five case study countries for community mobilization. These included lack of recognition of the signs of wasting, weak understanding of factors contributing to malnutrition (even among health workers and elites), lack of concern about the poorer members of society, language/dialect differences, weak acceptance of male responsibility in child care, and reliance on private practitioners including pharmacists, herbalists and traditional or faith healers. In **Nepal**, coverage of community outreach activities in the areas covered by sub-health posts was usually lower than the areas surrounding an outpatient CMAM facility. Thus, there is a need to strengthen/expand community sensitization to the sub-post areas. In **Pakistan's KP**, planning needed to take into consideration the traditional roles of male protection of household access and permission needed from men for women's involvement outside the home.

The strategy for community mobilization for CMAM is often efficiently combined with those of other health and nutrition interventions and may utilize some of the same mechanisms, such as mothers' groups, public discussions, printed materials and mass media. Success of sensitization was attributed in **Nepal and Kenya** to transmitting CMAM messages with those of other interventions such as IYCF by health workers in clinics and in communities. However, approaches were not always unified. In **Chad**, IPs used various sensitization materials; some were imported from other countries and not adapted to the country context and to the populations in the camps who originated from different countries. In addition, the sensitization strategy was not harmonized among different IPs and its effects were not evaluated.

An initial and critical input to promoting an equitable strategy for targeting and accessing children is sensitizing community leaders and influential people. In **Nepal**, local leaders were drawn into discussions about the management of CMAM, for example, through meetings with medical staff and administrators in the district health offices. In **Pakistan's KP** CMAM intervention areas, one CHW worked independently with the objective of reaching community notables, religious scholars, and community counsellors to educate them on CMAM and elicit their support.

When CMAM was initiated or scaled up in some areas, greater investment of funding and human resources were needed to launch awareness campaigns. Mass media activities to support the efforts of CHWs tend to significantly increase CMAM performance.⁴¹ In **Nepal**, community sensitisation was complemented by national IPs who carried out activities including the production of radio broadcast information, cooking demonstrations, nutrition days in local schools, CMAM orientations for faith healers and mothers' groups, and street drama performances. This combination of community mobilization activities significantly boosted admissions in some districts. In **Pakistan's KP province**, IPs and health workers organized regular meetings, and advocacy seminars to ensure parents' participation, which played a pivotal role in enhancing community motivation. In **Chad** the main contributing factors were regular supervision of CHWs by IPs, and providing them with salary/incentives. In the areas covered by mobilisation and sensitisation, people were aware of the causes and signs of malnutrition and the existence of services to manage it.

3.3.2 Screening and Active Case Finding

The CHWs conduct screening and active case finding using Middle Upper Arm Circumference (MUAC) and checking for bilateral pitting oedema; case confirmation is usually performed at the health facilities through weight/height measurements. In four of the case study countries, case identification for SAM through MUAC is based on the WHO revised growth standard (2009) that included MUAC <115 mm and bilateral pitting oedema, and MUAC between 115 and 125 mm for MAM. Ethiopia had not yet adopted the newest standards, due to resource implications that would result in a dramatic increase of the number of admissions (SAM in Ethiopia is MUAC <110 mm and MAM between 110 and 120 mm). There are no globally specified performance indicators for screening, however screening targets are generally agreed in each country, particularly in emergency response by the MoH and nutrition clusters or coordination groups.

⁴¹ Concern Worldwide. **Final Evaluation of Concern Worldwide/MoHP CMAM Pilot Project in Bardiya District, Nepal**. Feb. 2010. p26.

Among case study countries, national guidelines do not specify frequency of screening but generally recommend that all opportunities should be used to screen children. In **Nepal**, these opportunities include daily routine work of CHWs, growth monitoring and promotion activities, mothers' group meetings, Early Childhood Development (ECD) days, as well as organized screening events. In **Ethiopia**, Community Health Days (CHD) are also used. In Ethiopia, as well as in other countries, active case finding has improved significantly in recent years and training and improved supervisory support for CHWs have been credited with this success.

In the five case study countries, the majority of CHWs effectively used the MUAC tape and looked for bilateral pitting oedema. However, the use of MUAC depended on the skill of the user, the tension placed on the tape, and its interpretation. The MUAC tape classifies children as red, yellow or green, and this may not contribute to identify moderately malnourished children close to the cut-off point with SAM who may be more at risk than those closer to normal range. Health workers do not note when children are close to cut-offs for SAM and refer them for more intensive counselling and monitoring. Furthermore, mistakes sometimes resulted in stress for mothers and children if they were not placed in the appropriate service or not admitted to CMAM.

The push to energize active case finding has paid off in all case study countries. Respondents to the 2012 *Global CMAM Synthesis Survey* selected stronger case identification (through screening with MUAC and referral) as the most important mechanism for increasing access and promoting equity. Survey respondents overwhelming (65%) identified active case finding as the strongest element of community outreach. (Figure 3.1) Good practices include providing extra support (e.g. training, transport, supervision) for community health workers. Nevertheless, screening effectiveness was difficult to appraise because the available data did not specify whether screening was performed at mass screenings, community based routine screenings or at clinics, and they did not also indicate repeat screenings. They were not disaggregated by gender, except in Pakistan. Another challenge for screening was determining targets, which were vastly exceeded or not met in some areas because of difficulties in estimating the population.

3.3.3 Referrals to CMAM Services

According to national guidelines, children with severe acute malnutrition (SAM) identified through screening are referred to a health facility for diagnosis confirmation and admission for treatment. Children with moderate acute malnutrition (MAM) are referred to supplementary feeding or other services such as counselling. Referral forms are required. Referrals were effectively implemented in **Pakistan's KP** where they were recorded in the Nutrition Information System (NIS). In **Pakistan's KP**, 60% of children were referred to the outpatient services by CHWs using a referral slip. A significant number of them (36%) were referred by other family and community members. Only 3% were considered to be self-referred, when they presented to the health facility for other health issues and during clinical examination they were identified as malnourished.

However, in the other four countries, CHWs did not record the number of referrals, and data indicating percentages of children referred to CMAM services were not available. This created a gap in the linkages between the screening and referral processes. According to CHWs and health workers, some caretakers did not follow through on referrals because of long distances to the health facility, frequent migrations of the pastoral communities, preference for traditional healers, and stigmas associated with HIV, poverty and a malnourished child. Similar observations were made by Paluku et al⁴² in **Ghana**.

3.3.4 Follow Up Through Home Visits

Both global and national CMAM guidelines⁴³ state that SAM case follow-up in the home is performed in order to “*check on a child who is not thriving or responding well to the treatment, to learn why a child was absent from an outpatient care follow-up session and to learn why a child defaulted*”. As part of their

⁴² Paluku B, Akortey Akor S, Neequaye M, Sagoe-Moses I: **Report on the Review of the Integration of Community-Based Management of Severe Acute Malnutrition into the Ghana Health Services**. Washington DC: FANTA-2 Bridge/FHI 360, Aug/Sept. 2010.

⁴³ FANTA: **Training guide for CMAM**. Food and Nutrition Technical Assistance, FANTA Project, 2008. www.fantaproject.org. Module 3, page 3.

responsibilities, CHWs are tasked with conducting home visits on a regular basis, although the number of recommended visits and reporting requirements are generally not stipulated. Respondents to the 2012 *Global CMAM Synthesis Survey* said that case follow-up through home visits was the weakest activity (Figure 3.1). The three main reasons were too many programmes to implement by CHWs, insufficient motivation, and insufficient monitoring and supervision (Figure 3.2).

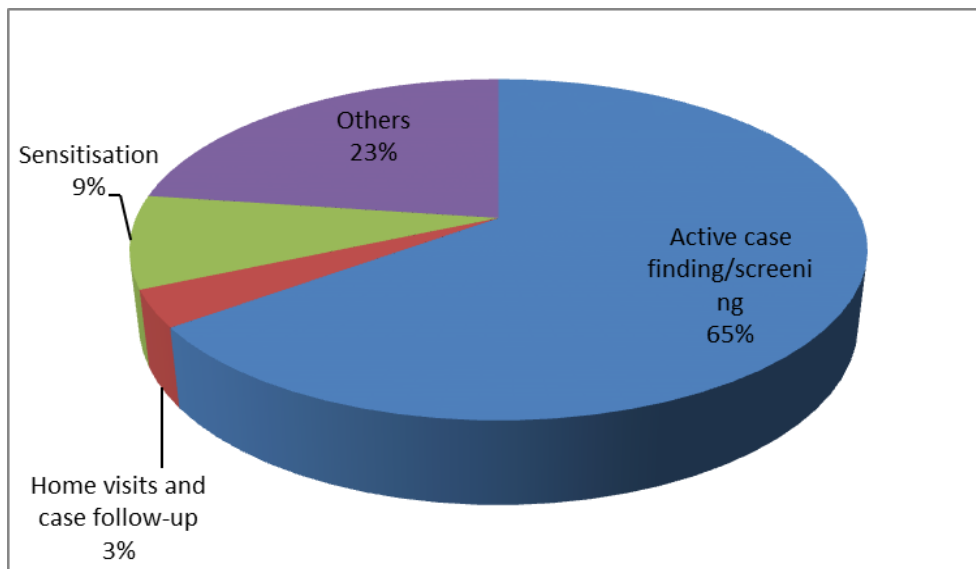


Figure 3.1: Strengths of activities performed in community outreach, Global CMAM Synthesis Survey (2012)

Good practices included developing a community strategy that defined a package of activities to be performed by CHWs, and using different opportunities to screen and follow-up children. In **Nepal**, to complement home visits, CHWs attended women’s group monthly meetings and encouraged defaulters to re-join the health centres for treatment. In **Chad**, CHWs who had transportation means such as motorcycles performed home visits more frequently. Major reasons for weak follow-up mentioned by COWs in **Pakistan’s KP** were the difficult terrain to reach families particularly in cold weather and unavailability of families due to their migration to other towns and cities. Female health worker acceptance in the communities posed another major challenge.

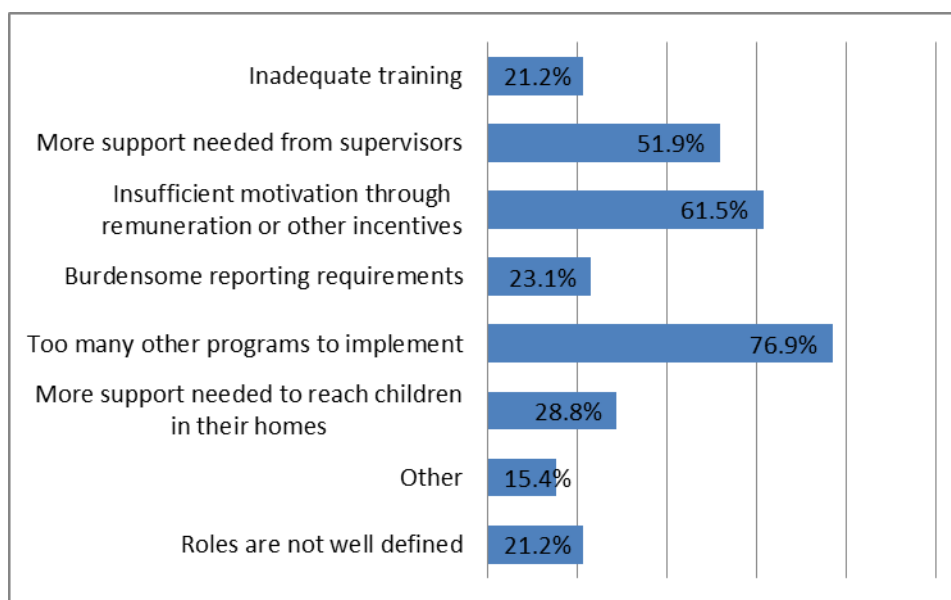


Figure 3.2: Challenges faced by CHWs in their roles to implement CMAM, Global CMAM Synthesis Survey (2012)

3.4 Services for Children with Moderate Acute Malnutrition (MAM)

The objectives for MAM management are to cure moderate malnutrition and to prevent children from becoming severely malnourished. Global guidelines generally address supplementary feeding programmes in emergency situations, however, as mentioned in Chapter 2, there is no global agreement on management of MAM and no body of guidance at global level. Most national CMAM guidelines have sections devoted to MAM management, although in general these are much less detailed than the treatment protocols for SAM. In some countries such as **Nepal and Ethiopia**, guidelines for MAM are being developed as a separate body of guidance from the other three CMAM components. The effectiveness of this approach for health workers involvement in the preventive aspects of CMAM, which link community outreach to prevention of acute malnutrition and MAM management to prevention of SAM, is in question. The **Ethiopia** Country Case Study recommended merging MAM and SAM guidelines.⁴⁴

Children who need MAM management usually receive ready to use supplementary foods (RUSF) and/or Fortified Blended Foods (FBFs), and nutrition counselling is provided to their caretakers. In Nepal, children identified with MAM do not receive supplementary foods, unless through general food distribution in food insecure areas, rather caretakers are counselled as per the IYCF protocol. In Chad, Kenya, Ethiopia and Pakistan's KP province, RUSF, nutrition counselling and medical treatment for common ailments are provided.

Key questions regarding MAM management are whether it is effectively preventing SAM through contributing to sustainable behaviour changes, and how can the outcome/impact be assessed in terms of success in addressing MAM. Answers were difficult to ascertain because of the absence of surveys that measured behaviour changes and lack of reliable data on all performance indicators, especially the relapse rates. Overall, there is not enough evidence that the inputs and linkages for MAM management are working to produce the outputs desired as per the CMAM model.

3.4.1 Capacity and Performance of MAM Services

Generally health workers provide counselling and medicines to help manage MAM and are the same staff who support outpatient treatment. Children with MAM are monitored bi-weekly or monthly at health facilities during RUSF distribution. As the case with other CMAM services, there were insufficient qualified

⁴⁴ Evaluation of Community Management of Acute Malnutrition: Ethiopia Country Case Study (Abebe Alebachew, Habtamu Fekadu, Sheila Reed, Camille Eric Kouam, and Meselech Roro).

staff as reported by other CMAM evaluations and staff did not have adequate time to devote to counselling.⁴⁵ The distribution of RUSF most of which is supplied by WFP may require additional staff due to its bulk, however, denser forms of RUSF are being used in some countries.

Collection and analysis of MAM admission and discharge data were often not rigorously performed. In Nepal, no quantitative data was available on the number of children with MAM identified in screening and referrals and those who received counselling and follow-up by FCHVs. (MAM data were not analysed for Ethiopia as that is being done in another evaluation.) Data on the recovery, death, and default rates were available for Pakistan's KP, Chad and Kenya where the Sphere standards were met (See Table 3.3). For the average weight gain (AWG) and length of stay (LOS), data were not fully available in these countries, health workers not having the time to collect and compute them. Because of measurement errors in Pakistan's KP, the AWG could not be correctly judged by Sphere standards. Since there is no routine follow-up of children with MAM in Nepal, it was difficult to ascertain how long it takes for counselling to be effective in restoring the child to a normal status.

Table 3.1: Performance indicators for Services to Manage MAM

	Sphere Standard	Nepal	Pakistan	Ethiopia	Chad	Kenya
Recovery rate	> 75%	N/A	95.3%	N/A	81.7%	80.5
Death rate	< 10%	N/A	0.0%	N/A	0.6%	0.4
Default rate	< 15%	N/A	4.2%	N/A	9.9%	14.4
Length of stay (LOS)	≤ 90 days	N/A	71.5	N/A	N/A	81.1
Average Weight gain (AWG)	> 3g/kg/d	N/A	NA	N/A	N/A	N/A
Relapse rate	-	N/A	N/A	N/A	N/A	3.7

N/A: Data Not Available

In **Kenya**, the success of the three main performance indicators was attributed to the integration of the management of MAM within the primary health care services and among the High Impact Nutrition Interventions (HINI); on the job training (OJT) has been developed to support mentoring for HINI including MAM management. Training has improved health worker's understanding of malnutrition and to help them view nutrition as a critical part of health service delivery. In **Pakistan's KP**, data collection on MAM was improved through the Nutrition Information System (NIS) and joint monitoring with WFP.

Many CHWs and health workers thought nutrition counselling was more effective when combined with provision of supplementary foods. However, it was reported in the four countries using supplementary food distribution to address MAM that it has caused dependency among some beneficiary families who sell the foods for income. Another common practice was sharing among household members. Protection rations distributed in times of food shortages allowed the malnourished child to consume the intended foods. Interviewees in the five case study countries proposed strengthening children's nutrient intake by supporting production on a large scale of local complementary foods (such as Sarbattom Pitho in Nepal and supplementary flour in Kenya). This could be achieved by using community resources through vouchers (depending on the local market supply), and/or cash interventions. In **Kenya**, a local NGO has started the production of supplementary flour with ingredients obtained from farmers' collectives hence empowering them. Studies have to be conducted on the effectiveness of supplementary flour in improving

⁴⁵ Deconinck H, Bahwere P, Serigne Mbaye D, de Bernardo D, Pierre A: **Review of Community-Based Management of Acute Malnutrition Implementation in West Africa: Summary Report.** Washington, DC: FHI 360/FANTA-2 Bridge, 2011.

the nutritional status of children with MAM.

Respondents to the *2012 Global CMAM Synthesis Survey* pointed out that the monitoring of performance indicators is one of the three elements of MAM management that require the most strengthening, along with the integration of MAM with other interventions such as IYCF, and stronger intersectoral coordination to promote addressing of root causes of MAM (Figure 3.3). (See discussion on coordination in Chapter 5.)

Due to the inefficiencies in MAM management, the critical need for prevention of SAM, and the large numbers of children with MAM, a study of the effectiveness of current strategies is important and agreement on the most effective strategies and way forward. Respondents to the *2012 Global CMAM Synthesis Survey* stressed the importance of monitoring the effectiveness of MAM management particularly as a preventive measure against SAM. Measuring behaviour changes in child feeding practices, along with human resource availability and community support were identified as the three greatest challenges to monitoring MAM management (Figure 3.4). Seeking strategies to address these challenges in different contexts might improve the quality of the intervention, thereby enforcing its effectiveness. As per the respondents, the other challenges to overcome would be the regular supervision of the intervention; the regular follow-up of children, especially those admitted by the mobile teams; and ensuring long term funding for the MAM intervention.

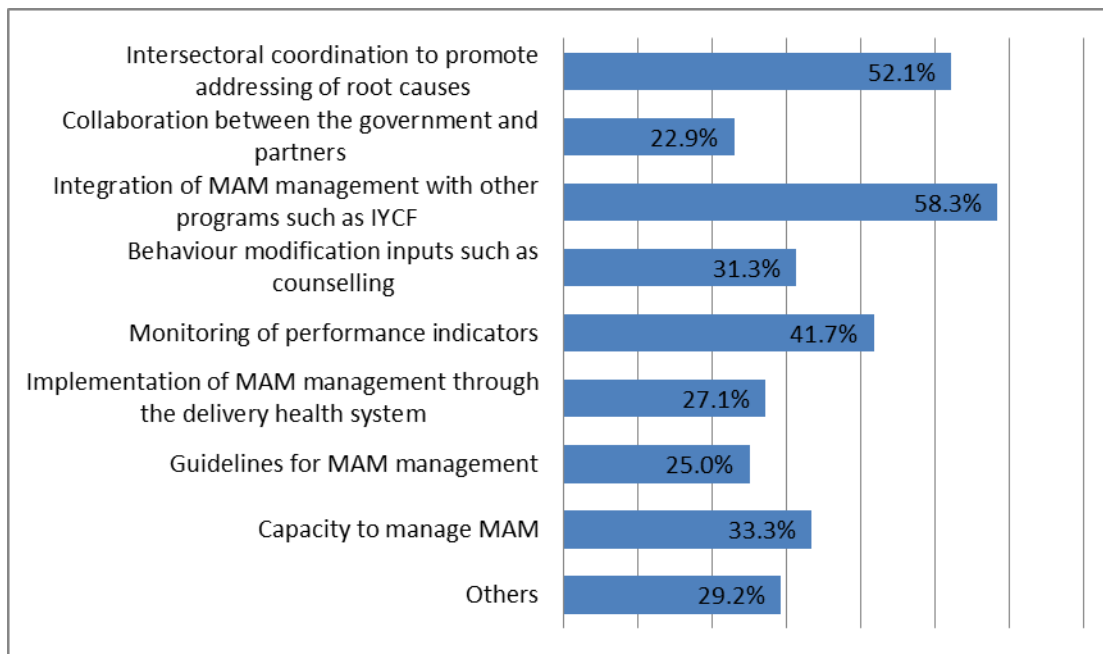


Figure 3.3: Elements of MAM management that require the most strengthening, Global CMAM Synthesis Survey (2012)

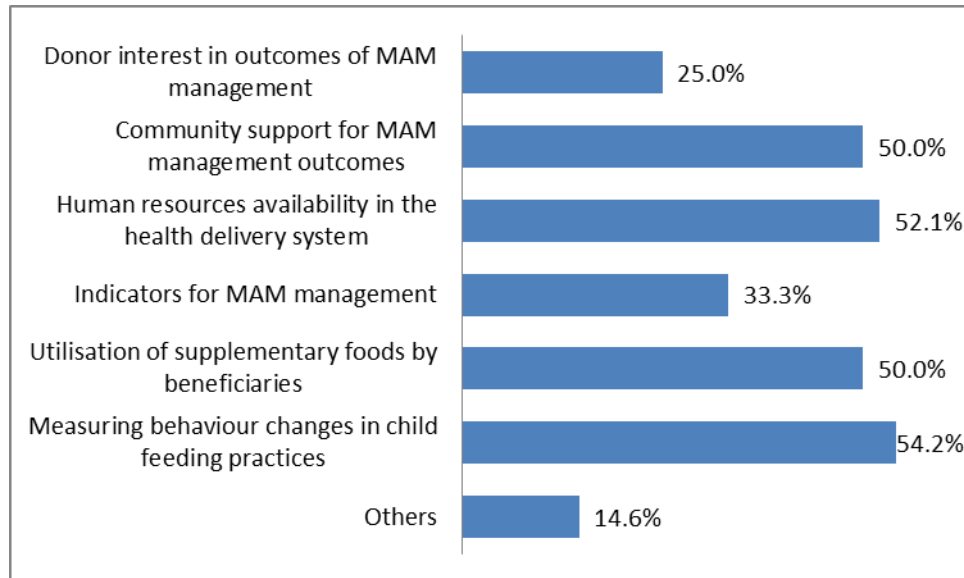


Figure 3.4: Challenges to monitoring the effectiveness of MAM management, Global CMAM Synthesis Survey (2012)

3.5 Outpatient Treatment Services for SAM Without Complications

In the five case study countries, outpatient treatment services were usually located in health system facilities, except in refugee and IDP camps and where mobile services were operational. Most facilities provided primary health care services such as the Expanded Programme of Immunization (EPI), Infant and Young Child Feeding (IYCF), Family Planning (FP), and the Integrated Management of Childhood Illnesses (IMCI). In the case study countries, health centres were staffed by MoH personnel who received technical support from IPs. In **Chad**, one week day is dedicated to nutrition activities in the outpatient centres when volunteers assist in anthropometric measurements, appetite tests, nutrition counselling, and distribution of RUTF. The treatment is free of charge in **Nepal and Pakistan**, while in **Ethiopia, Chad and Kenya** beneficiaries usually have to pay for additional medicines as well as laboratory tests.

3.5.1 Capacity of the Outpatient Treatment Services

The capacity of the outpatient services was good in the five case study countries. While there were exceptions, most services had necessary equipment and tools (e.g. height boards, weight scales, MUAC tapes, equipment for clinical examination of children, anthropometric tables) in good working condition. The registration forms, formats and national CMAM guidelines were available. Activities were well organized, with good crowd management; most health workers were helpful and had positive attitudes with caretakers; for the most part children were correctly measured and the grade of oedema (if present) accurately assessed. Caretakers received information on how to administer medicines and RUTF.

However, the procedures for taking anthropometric measurements need strengthening and greater standardization. CHWs did not always use the MUAC effectively in **Pakistan's KP, Nepal and Ethiopia**, where the MUAC tape was either too loose or tight, which affected readings. In **Pakistan's KP**, confirmation of nutrition status in the health facilities inconsistently used weight/height or MUAC. In general, health facilities lacked waiting areas and sufficient space to accommodate children and their caretakers, and there was a deficit of water taps and acceptable latrines. Setting a good example was **Chad**, where covered waiting areas, latrines and incinerators were built at outpatient sites during health centre rehabilitations. Play areas and toys for psychosocial support were lacking in all the sampled sites. Health workers did not always have time to provide nutrition counselling to caretakers.

Human Resources for Outpatient Treatment. Substantial investments in training health workers were made in all the case study countries and contributed to the overall success of the outpatient treatment. However, in all case study countries, there were insufficient numbers of qualified staff. Health workers in

all countries complained about a heavy workload and/or irregular supervision of nutrition activities. In **Chad**, health centres are often managed by assistant nurses rather than nurses as per MoH norms. In **Nepal**, district health offices wanted stronger and more frequent technical input from central MoH experts.

3.5.2 Performance of Outpatient Treatment Services

In the five case study countries, outpatient treatment was successful in meeting the Sphere minimum humanitarian standards for recovery, death, and default rates, whether implemented through the fixed health facilities, mobile clinics or in refugee camps. (See Table 3.1) In regard to the relapse rate, data were analysed in Nepal and for some districts in Kenya. (In Chad and Ethiopia, recording the relapse data is not required and it was not available for Pakistan's KP.) In Nepal, the relapse rate was higher in some districts due to recurrent diarrhoea, especially in the terai (lowland) districts, as well as issues in food security and household food management.

The length of stay (LOS) and the average weight gain (AWG) were not recorded on a regular basis in all of the districts in Nepal, Pakistan, Ethiopia and Kenya. The LOS and AWG did not meet the Sphere standards in Pakistan's KP in districts recording the data. In Chad, the national guidelines do not stipulate recording of these two indicators, as they were considered not relevant for the intervention and health workers did not have time to compute them. The LOS and AWG are important indicators because they measure how efficiently resources are being used and possibly also whether the treatment is relevant. However, they require record keeping over time on each child and calculation of weight gain or loss, therefore, national stakeholders should decide on whether their collection is required in each site or could be sampled, and how to facilitate their collection.

Where the LOS and AWG did not meet standards, the reasons tended to be inconsistencies in taking anthropometric measurements, inadequate monitoring of compliance with RUTF administration requirements, and the tendency for children to remain longer in the treatment if the weight gain was not effectively collected and recorded. In several countries, health workers came under pressures from caretakers and community members to let children continue to receive RUTF after they had recovered.

Table 3.2: Performance indicators for Outpatient Treatment Services

	Sphere Standard	Nepal	Pakistan	Ethiopia	Chad	Kenya
Recovery rate	> 75%	86.1%	91.5%	83%	88.4%	80.7%
Death rate	< 10%	0.7%	0.2%	0.6%	2.2%	1.5%
Default rate	< 15%	9.0%	7.5%	5%	3.1%	12.9%
Length of stay (LOS)	≤ 60 days	49	70	N/A	N/A	58.5
Average Weight gain (AWG)	> 5g/kg/d	4.8g/kg/d	2g/kg/d	N/A	N/A	N/A
Relapse rate	-	1.2	N/A	N/A	N/A	3.2%

N/A: Data Not Available

In **Ethiopia**, the quality of outpatient treatment services was perceived to be highly correlated with the overall quality of health services, i.e. lower performing areas in CMAM also had weaker performance in other health services. The main factors contributing to good performance in Ethiopia were a) frequent supervision by the FMoH staff and partners; b) continuous capacity building through training and on-the-job support; c) monthly tracking of the CMAM data by the district and regional health bureau; d) the availability of quick reference and job aids; and, e) standard operating procedures.

Ethiopia, with the highest number of CMAM outpatient sites, uses a standardized quality monitoring system which has improved quality by identifying the service gaps in a timely manner leading to management of the problems through coaching and agreement on recommendations. The monitoring checklist has sections to assess each of the CMAM activities (including community mobilization, admissions and discharges, referrals and complications, recording and reporting, supplies and stocks, as well as supervision of CMAM services) consolidated into a three tier grading system. Over 70% of the outpatient sites in the majority of the districts had scores of greater than 50%, which indicates that they are working well. Over time, the proportion of woredas (districts) scoring more than 70% increased while those scoring below 50% decreased.

3.6 Inpatient Treatment Services for SAM with Complications

The objective of inpatient treatment is to stabilize medical complications of admitted SAM cases and to ensure feeding with therapeutic milk, as per the WHO protocol⁴⁶, which forms the basis of national guidelines. Globally there is no standard for the number of inpatient treatment facilities.⁴⁷ In Ethiopia, the plan is to establish one per district, but the other countries do not have explicit plans. In Pakistan and Nepal, inpatient treatment was free of charge, but this was not the case in Ethiopia, Chad and Kenya where beneficiaries had to pay for laboratory tests.

A major challenge is tracking referrals both to and from inpatient services and ensuring that caretakers bring their children to be admitted and then return them to outpatient services. *Children 6-59 months admitted into inpatient care for stabilisation will be referred to outpatient care as soon as the medical complication is resolving, the appetite has returned and/or the oedema is reducing.*⁴⁸ Caretakers often faced transport and time constraints in reaching the inpatient services. Coordination and communication was also weak between the outpatient and inpatient service providers regarding the progression of children to and from inpatient services.

3.6.1 Capacity of Inpatient Treatment Services

In the five case study countries, most of the inpatient treatment services are established in the hospital paediatric or female wards with support from the MoH, UNICEF and WHO. (In refugee camps, health centres usually house an inpatient therapeutic feeding unit.) Space was limited in most of the hospitals because establishment of a nutrition therapeutic unit was not considered while designing the facility. In **Pakistan's KP**, six beds located in the paediatric ward were adequate for the caseload, but in **Nepal** only two beds were available for all hospitalised children in the district.

The quality of inpatient services in sampled sites was good to very good. There were adequate stocks of supplies (therapeutic milk and medicines) and the required equipment. Anthropometric measurements were effectively performed. Treatments generally adhered to the protocols set out in the guidelines. Play areas and toys were lacking in all the sampled sites – play stimulation is important for the recovery of severely malnourished children with medical complications and is a Sphere standard.

Human resources for inpatient treatment. In the five case study countries the inpatient services were staffed by one or more medical professionals and supporting staff. Health workers complained about heavy workloads because they also performed other duties. Medical staff received training supported by the MoH, WHO and/or UNICEF. A common challenge faced across the countries was the high staff turnover and rotation. Most paediatricians and nurses had no pre-service training in nutrition, and after they gained experience with CMAM, they might be transferred which caused inefficiencies. Similar observations were made in CMAM reviews in **Mozambique**⁴⁹ and in **nine West and Central African**

⁴⁶ WHO: **Guidelines for the in-patient treatment of severely malnourished children.** Geneva, 2003. www.who.int/nutrition/publications/guide_inpatient_text.pdf.

⁴⁷ There is no standard for the number of beds. This depends on the caseload, which also depends on seasons. Generally during rainy seasons there are more admissions of SAM with complications, due to high incidence of diarrhoea and other infectious diseases. This is also the case during lean season in some countries. The beds might be empty in some periods, but insufficient in others, thus the children may be admitted in the adult wards.

⁴⁸ FANTA II: **Community Based Management of SAM, Generic Guidelines.** *Food and Nutrition Technical Assistance II*, 2010.

⁴⁹ Possolo E, Novele Ngovene Y, Arts M: **Community management of acute malnutrition in Mozambique.** *Field Exchange, ENN*, Jul. 2012, p 50.

countries.⁵⁰

3.6.2 Performance of inpatient treatment services

In the five case study countries, inpatient data was not available for Pakistan's KP and Ethiopia and was inconclusive for Chad. In Nepal and Kenya, performance of inpatient services was generally good (See Table 3.2). The implementation of inpatient activities has resulted in high stabilized rate (95.3%), low death rate (0.4%) and low default rate (2.7%) in **Nepal**. In **Kenya**, 85% of children admitted were stabilized, 8.7% died, and 1.4% defaulted, with 6.1% relapse rate. The average LOS was 8.4 days. In **Chad** the high death rate in the two regions where inpatient data were available was attributed to children's advanced illness when admitted (mothers opted to first take them to traditional healers), and inadequate staff for 24 hour surveillance; consequently children mainly died during the night.

There were data gaps on all performance indicators, particularly the LOS and AWG, such that national performance indicators could not always be assessed. Data analysis on inpatient services is important for scale up, as it helps to provide an understanding of what may lead to morbidity and mortality as well as to stabilization. In **Pakistan's KP**, computers were not available at start-up of CMAM in some inpatient treatment facilities, so months of data was not easily accessed, thus computers are a priority for start-up.

Table 3.3: Performance indicators for inpatient Treatment Services

	Sphere Standard	Nepal	Pakistan	Ethiopia	Chad	Kenya
Stabilized rate	> 75%	95.3%	N/A	N/A	62.8%	84.6%
Death rate	< 10%	0.4%	N/A	N/A	14%	8.7%
Default rate	< 15%	2.7%	N/A	N/A	11.9%	1.4%
Length of stay (LOS)	≤ 15 days	N/A	N/A	N/A	N/A	8.4
Average Weight gain (AWG)	> 8g/kg/d	N/A	N/A	N/A	N/A	N/A
Relapse rate	-	N/A	N/A	N/A	N/A	6.1%

Data for 2010 in Chad, only for two sites, was not representative of all the supported regions.

The quality of inpatient treatment was facilitated by various inputs. In **Ethiopia**, integration of inpatient services into the government health service delivery system promoted referrals and recovery. In **Kenya**, on the job training (OJT) with well-developed tools and training guidelines, offers a structured and standardized approach to capacity assessment and focus on the key OJT steps.

3.7 Information, Reporting and Monitoring Systems

The UNICEF Global Mapping Review of CMAM (2010) and its update (2012) point to lack of consistent information and harmonization in reporting systems which poses challenges for evaluating effectiveness, and this issue is reinforced in reviews, evaluations and synthesis reports. The UNICEF Global SAM Treatment Update (2012) notes higher levels of reporting globally since 2009 indicating a great improvement in data collection at the national level.

Reporting – The information systems are fed by data collected in communities and districts, often hand written, thus, working toward clean data capture and timely compiling and transmission requires strong supervision and training and adequate human resources. In terms of scale up, imposing greater reporting

⁵⁰ Grellety Y, Schwartz H, Rizzi D: **Management of acute malnutrition. Programme review and evaluation.** Report 2010. *Field Exchange, ENN*, Jul. 2012, p 84.

burdens on health workers or use of complex formats for gathering CMAM data clearly does not work well. Work has been done in some countries by UNICEF to simplify the forms, however, consolidating the sheer number of forms requires greater attention. In **Nepal**, there are reportedly 32 forms that need to be completed by health workers each month on various interventions. A main barrier to simplification is the resistance of partners to adjustment and merging of the forms. CMAM reporting is being integrated with Integrated Management of Childhood Illnesses (IMCI) in Nepal, however, there are fears that it may suffer the same weaknesses as the IMCI reporting system.

Consolidating the reporting formats goes hand in hand with agreement among implementers on what data needs collection. The efficacy of CMAM has been demonstrated through the Sphere indicators especially upon start up and expansion, however some have proved to be too labour intensive to collect on every child such as the Length of Stay and Average Weight Gain. Since they are important to judge efficiency, it may be possible through national information systems to sample these indicators or conduct periodic studies to provide direction for steering the intervention.

Further, some data needed to understand weaknesses in implementation are not available. These include: relapse (not available in some countries); means of detection by type/place of screening; number of repeat screenings as a share of the total number of screenings; qualitative data on, for example, the effectiveness of community outreach activities, reasons for default, and effectiveness of counselling; the number of referrals to outpatient and inpatient treatment and subsequent admissions; and, MAM performance indicators. Comparative data is also needed such as the malnutrition rates and number of deaths related to malnutrition outside CMAM targeted areas in order to assess possible impacts of CMAM.

The Health Management Information System (HMIS) versus other systems – In the case study countries, most CMAM data is analysed through systems put into place for that purpose, typically because the HMIS does not have the capacity in terms of quality and timeliness to meet emergency funding reporting requirements. Once parallel systems are created through external funds, they tend to be sustained as long as funding is available, even though they are expensive and collect too much detailed information. In the initial stages of CMAM implementation, plans should be made to simplify data collection needs and to integrate external systems with national systems as soon as possible.

In **Ethiopia**, the HMIS is under development thus CMAM reporting is managed through the mainly externally supported ENCU, and requires additional staff at regional level. The separation has meant that data has not been tracked and utilized by FMoH as part of its sector planning and M&E processes. However, monitoring has improved through checklists for site visits and central and regional coordination meetings to review performance data. Improvement was attributed to: a) UNICEF's commitment to support and strengthen the system; b) the high demand for CMAM information by FMoH especially during peak seasons and emergencies; and, c) donors' concern regarding the quality of CMAM with the rapid scale up. **Ethiopia's** effective response to the 2011 food security crisis was partially due to increases in SAM admissions.

In **Nepal**, the pilot CMAM monitoring system is generally managed by CMAM focal points at the DHO or CMAM consultants using desktop computers provided by CMAM funds. While this has strengthened reporting at the district level, the central nutrition unit lacks capacity to process the incoming data. In **Pakistan**, although the MoH has operated an HMIS since 1991, a Nutrition Information System (NIS) was developed in 2010 for the purpose of tracking CMAM performance by IPs who facilitate data transfer with some oversight by UNICEF. Joint monitoring by IP's, DoH, UNICEF, WFP and WHO, helped to promote results-oriented activities in several flood and conflict crises.

Building on the district health systems in **Kenya**, the MoPHS and UNICEF have supported a District Health Information System (DHIS) since 2011 which tracks 11 nutrition indicators linked to the HINI. Surveillance data is triangulated with other information sources such as morbidity data, short and long rains assessment reports, and food security updates. The DHIS, supported by training packages and data capture tools, has provided timely data that has been useful in understanding trends, making decisions and responding to malnutrition crises.

Site visit monitoring. In **Nepal**, CMAM monitors hired initially by UNICEF/IPs were instrumental in helping to develop technical capacity in the staff and were assimilated into the DHO structures which helped to promote sustainability. In **Pakistan's KP**, a record of field monitoring reports and action plans are updated weekly in the UNICEF Peshawar office. Joint monitoring is a means of promoting interagency and intersectoral coordination and collaboration; it is not always undertaken but is effective when it is. In **Kenya**, joint planning between WFP, UNICEF, NGOS and the MoH has improved joint monitoring.⁵¹

Reviews and adjustment of resources. Although CMAM was initiated seven years ago in Chad, and five years ago in Kenya (IMAM) and Pakistan, this evaluation is the first direct appraisal of the effectiveness, efficiency and sustainability. As per global standards, planning should include regular reviews and evaluation and secure and reserve funding for these exercises. The CMAM reviews in Bardiya (2009) and in Nepaljung (2010), **Nepal**, promoted numerous steering actions agreed by district stakeholders. Evaluations and monitoring reports should focus on activities used to support the CMAM components but they do not all cover them, particularly follow-up for MAM including counselling, data collection challenges in health posts, integration of CMAM with other interventions and prevention of acute malnutrition.

3.8 Chapter Summary

Measurable outcomes indicate that CMAM has saved lives through achieving the Sphere standards for recovery for MAM management (in Pakistan, Chad and Kenya) and for recovery, death and default in outpatient and inpatient treatment for SAM in most areas in the five case study countries. Geographic coverage has improved markedly and many facilities providing CMAM services can efficiently cover the catchment areas in emergencies. CMAM has contributed to nutrition coordination and advocacy and helping nutrition to rise on the policy agenda. CMAM needs to be continued as an effective approach to address SAM where it exists as a chronic problem and in emergencies.

Increased community awareness about the existence of services for malnourished children helped to identify and refer children in a timely manner for treatment. Active case finding was effective in increasing admissions. Combining **community mobilisation and sensitisation** for CMAM with those of other health and nutrition interventions contributed to its effectiveness, along with using various community health opportunities to screen children. CHWs devote less attention to home visit follow-ups because they have too many programs to implement and they are not regularly monitored and supervised which affects their motivation.

Improvements are needed in **data recording and analysis** for community mobilisation and sensitisation, screening, referral, and follow-up through home visits. More emphasis is needed to feature community outreach as a key mechanism to promote prevention and prevent default and relapse. Involving traditional healers and the private sector during planning and implementation of community outreach, along with more support to CHWs, and linking the community outreach process to the UNICEF C4D initiatives may improve access, coverage and overall effectiveness of the strategy.

Integration of **MAM management** within the primary health care services might have contributed to its effectiveness. However, monitoring of performance indicators requires strengthening, along with the integration of MAM with other interventions such as IYCF and stronger intersectoral coordination. A study of the effectiveness of current strategies for MAM is important. Agreement on the most effective strategies to address root causes of MAM and to prevent SAM is needed.

The performance of **outpatient treatment services** for SAM indicates that the inputs provided are largely effective in meeting the Sphere standards whether managed directly by national health system staff or through IPs. Health workers are able to achieve good performance if they are well trained and effectively supervised, and if the health centres are well equipped and regularly supplied. Similarly, inputs provided to **inpatient treatment services** were effective in managing SAM with complications. However, communication mechanisms between inpatient and outpatient services need improvement, along with

⁵¹ Evaluation of Integrated Management of Acute Malnutrition, Kenya Case Study, page 52.

allocation of more space and beds, play areas, toys, round the clock staffing, as well as data monitoring and analysis.

Lack of harmonization in **reporting systems** poses challenges for evaluating effectiveness. Partners need to collaborate to agree on what needs to be reported, possibly through sampling, and to merge forms. Parallel systems for **information management** are not sustainable; plans should be made for simplification of reporting tools and integration with national systems. Joint monitoring is not always undertaken but is effective when it is. Evaluations and monitoring activities should be planned and budgeted well in advance and should cover all CMAM challenges.

Lessons learned: Effectiveness of CMAM Services

Community outreach. *A formula for successful community outreach includes supervision and support, along with incentives or salary provided to CHWs, involving private health care providers and traditional healers in the community outreach strategy, integration of CMAM with other outreach strategies, and joint planning by the government and partners on all levels (e.g. central and districts).*

The lack of detailed information in the guidelines on the frequency and procedures for screening, active case findings, referrals, follow up through home visits, and absence of tools and nutrition information systems make the assessment of the overall effectiveness of community outreach component difficult.

Inpatient and Outpatient treatment services. *Without relapse data and an analysis of the reasons for relapse and default, defining appropriate preventive interventions in the community may be difficult, thus such knowledge is important for scaling up CMAM.*

When standardized quality monitoring procedures are used such as monitoring tools and regular site visits, the quality of inpatient and outpatient services for SAM can measurably improve.

MAM management. *Insufficient data for appraising the effectiveness of MAM management limits understanding of its linkages with SAM, particularly in preventing SAM and/or helping children to progress to normal status and reduces efficiency and effectiveness of the intervention.*

Reporting systems: *Heavy reporting burdens for health workers through numerous formats for various interventions may result in job stress, thus collaboration to merge reporting formats can help to keep reporting burdens at reasonable levels and facilitate integration of interventions and cross analysis.*

Information and knowledge management: *As parallel systems for information management are not sustainable, plans should be made for simplification of data and integration with national systems to avoid complex systems and databases that are difficult to assimilate into national systems.*

When joint (e.g. government, UNICEF, WFP, donors) monitoring and evaluation activities are planned and budgeted well in advance and cover all CMAM challenges, they pay off in more efficient and effective steering of the CMAM intervention.

4 Promoting Equity in Access to CMAM

UNICEF's equity strategy seeks to address the needs of the poorest and marginalized populations following assessments identifying the most vulnerable girls and boys and reaching high coverage even in the hard-to-reach populations.⁵² The evaluation assessed two objectives of equitable service delivery in CMAM: (1) serving the most vulnerable and hard-to-reach populations; and, (2) promoting equal access (parity) among those receiving, supporting, and delivering CMAM services. Focus is on the rights of children to adequate food and nutrition as well as global and national obligations to promote fulfilment of these rights.

This chapter discusses the identification and inclusion of stakeholders, particularly vulnerable children, in CMAM through community assessments, nutrition surveys, joint assessments and through efforts to increase demand for CMAM services. The challenges regarding assessment of coverage, through calculation of geographic and treatment coverage, are explored. Issues regarding gender equality are discussed as well as guidance available for equity and gender equality in CMAM. Finally, good practices for planning to promote equity are mentioned.

4.1 Challenges in Assessment

The *2012 Global CMAM Synthesis Survey* indicated that identification of children who might be missed is a top challenge in improving access. Approximately 30% of the countries also identified lack of a strategy to include the most vulnerable children as a major challenge, not correlated to the age or type of the CMAM implementation. Health workers bear responsibility for seeking out malnourished children in the community, however, they may not be aware of groups who might be missed or lack access to them. It is only by identifying these children that strategies can be developed to include them. The *2012 Global CMAM Synthesis Survey* pointed to stronger case identification, mapping of vulnerability and community based assessments as three key tools to increase access. (See Figure 4.1 below.)

Active case finding has improved substantially in the five case study countries, through stronger training and supervision and merging MAM and SAM identification with other interventions. Nevertheless, some children lacked access in every country. These included children living in remote, insecure, and difficult to reach areas, lower castes, those who migrate or move frequently in search of livelihoods (e.g. pastoralists, the extremely poor, slum dwellers), those who do not typically use public or private health services or lack information on services, those who are HIV positive and not yet identified, and those with strong male protection of household access, among others. Children with SAM or MAM and not included in the geographically targeted areas and/or not benefitting from other interventions that target malnourished children are also considered among the most vulnerable.

As discussed in Chapter 3, within the CMAM/IMAM targeted areas, children likely to be missed include those who are not screened, or children who are screened and referred but not taken by caretakers to the outpatient, inpatient or supplementary feeding centres. Across case study countries, health workers did not always track and prevent defaults or relapses and collect evidence as to the reasons. Data is largely not collected regarding referrals, follow-ups on referrals, or defaults. Performance data may count defaults as new admissions without documenting frequent default/returned children – or not document those who relapse. For scaling up CMAM, data collection and analysis requires significant strengthening to promote the use of information on children who lack access to inform planning and targeting.

While active case finding has increased admissions, more progress is needed, both within and outside geographically targeted areas and greater attention drawn to areas that have not yet been included in CMAM. Efforts to identify and treat those affected by HIV/AIDS offer good practices and linking CMAM to HIV/AIDS resources may help to identify more children. In **Kenya**, some CMAM sites especially in urban slums specifically seek HIV positive children. In **Pakistan's KP**, IPs are increasing their efforts to reach

⁵² UNICEF: *Terms of Reference - Research Paper on Applying the Equity Approach in Humanitarian Action and Fragile Settings*. Jul-Aug. 2011, UNICEF.

HIV/AIDS positive people through non-public channels and strengthening relevant capacity of women community workers and staff. In **Ethiopia**, the Food by Prescription program which provides RUTF to people living with HIV/AIDS (PLWHIV) offers entry points in communities where CMAM is not yet targeted.

22. What three tools or mechanisms are needed to strengthen efforts to reach the most needy children?

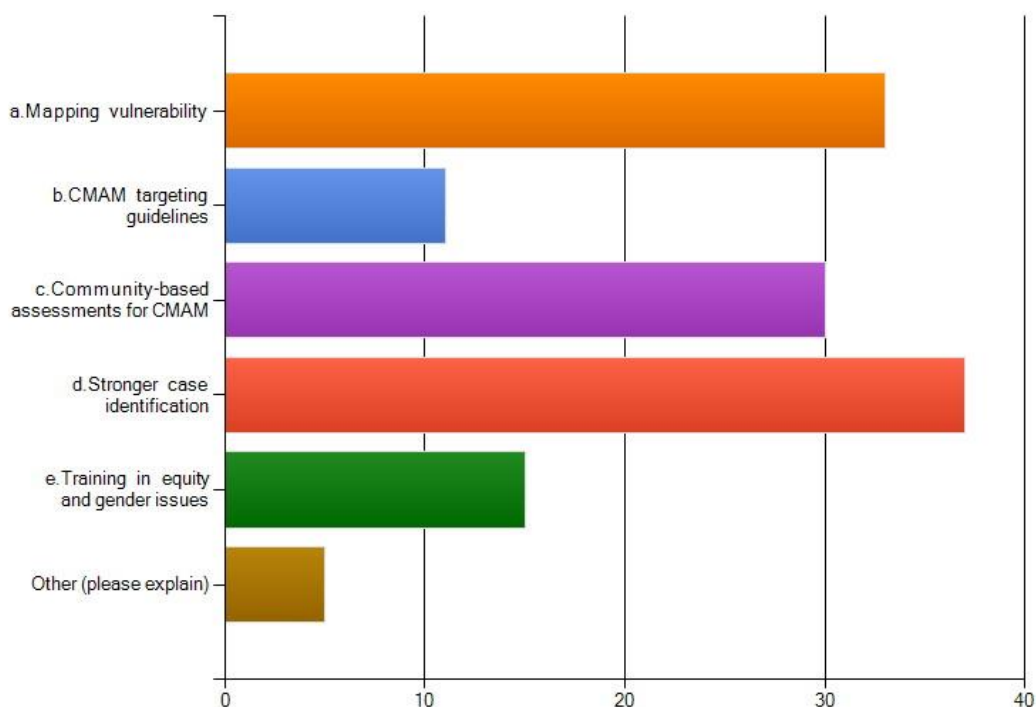


Figure 4.1 Most Effective Tools or Mechanisms to Improve Access, Global CMAM Synthesis Survey (2012)

Community Assessments. The 2012 *Global CMAM Synthesis Survey* indicated that community assessments are a key tool to improve access. FANTA guidance recommends community assessments to clearly identify contextual factors that will limit or facilitate services to manage MAM and treat SAM. They draw in participation of community stakeholders and targeted groups, providing as well as collecting information.⁵³ The process of developing pilot strategies offers opportunities to do in-depth community-based studies which may be applicable in scaling up to other areas. The pre-project assessments in 5 pilot districts in **Nepal** helped to build CMAM upon a solid set of national feasibility and district-based exercises which included nutrition surveys, health system assessments, and appraisal of health behaviour practices. The Nepal assessments identified supply and demand issues for CMAM within the health services and set out the roles of NGOs and national health staff. In **Kenya**, a KAP survey for IYCF pilot strategies researched three potential approaches and contributed to lessons.⁵⁴

Community assessments reveal perceptions that may affect sensitization and mobilization strategies and increase efficiency at start-up of CMAM. For example, in some areas of **Pakistan's KP**, at the onset of CMAM implementation, community health workers and IP staff encountered resistance from community leaders due to misperceptions about NGO assistance that resulted in caretakers refusing screening of their children. The community outreach strategies had to be reformulated and were ultimately effective.

⁵³ FANTA: **Training guide for CMAM.** *Food and Nutrition Technical Assistance*, FANTA Project, 2008. www.fantaproject.org. Module 3.

⁵⁴ Concern Worldwide. **The KAP Survey For IYCF Pilot Strategies In Urban Slums Of Korogocho, Mukuru Njenga And Nyalenda. Kenya.** Nov. 2011.

Community assessments, however, did not always take place particularly in the emergency response mode, and nutrition surveys or rapid assessments did not always delve deeply enough into community contexts and dynamics to help identify malnourished children who might be missed and barriers to access. Assessments at times were carried out by different organizations without a consistent approach among them making comparative analyses more difficult.

Nutrition Surveys. Regular nutrition surveys are needed to assess changing vulnerabilities and the effects of chronic and acute conditions but they may not always occur in all areas due to funding and planning constraints. Surveys tended to be largely quantitative analyses of anthropometric data, but well-designed surveys should interface with the objectives of community assessment, helping to initiate dialogs with health workers, community leaders, IPs, CBOs, government authorities, and donors. Large and country wide nutrition surveys typically take many months to be completed and even more time to become public. Smaller, localized nutrition surveys tend to be more flexible and can supply results relatively quickly for local decision makers. **Kenya** conducts district level revolving nutrition surveys (long rains, short rains and Standardized Monitoring and Assessment of Relief and Transition (SMART) methodology surveys).

Surveys may inadvertently miss the hard-to-reach children sometimes due to logistical or time constraints or migration of target populations, thus estimates of SAM prevalence may be lower than in reality. In **Nepal's** five pilot districts, most admissions surpassed baseline estimates, despite low geographic coverage by the CMAM outpatient facilities, suggesting need for new surveys. In **Kenya**, numbers of malnourished children surged over the caseload projections in the food security emergency of 2010-11. Since surveys are a snapshot in time, a range of estimates maybe very useful, such as noting children who will be particularly vulnerable in emergencies or food security crises in contingency planning exercises. These can include the vulnerable groups mentioned above and those close to MUAC cut-offs for MAM and SAM.

Some emergency nutrition surveys were late to inform planning. In **Pakistan**, the Flood Affected Nutrition Survey (FANS) in KP in November 2010 was praised as a multi-agency coordinated effort, but took place three months after food aid distribution was initiated, missing opportunities to assess immediate nutrition impact of the disaster and for early nutrition response.⁵⁵ Thus preparedness for nutrition surveys, jointly determining the potential TOR (e.g. objectives, quantitative and qualitative questions and mode of implementation, potential funding sources) is important to jumpstart them in emergencies. Further, given the potential lag time in starting nutrition surveys, there is a need to have some community data on hand for rapid start up or expansion of CMAM, combining community assessments with surveys or testing contextual assumptions with some questions in the survey.

Joint and Multi-Sectoral Assessments. Multi-agency multi-sector assessments are increasing in frequency. Some real time evaluations (RTE) of emergency response pointed to need for stronger earlier joint assessments which may have enhanced implementation efficiency. These included **Pakistan's** response to the flood emergency (2010) and **Kenya's** response to the food security emergency of 2010-2011.⁵⁶ Good practices in surveys which are multi-sectoral link anthropometric findings with food security, hygiene habits, health care and nutrition practices. Hybrid surveys have the potential to be cost effective while providing the information needed to effectively plan CMAM. The **Kenya** Urban Comprehensive Food Security & Vulnerability Analysis and Nutrition Assessment (2010) is a joint effort and effectively combines a food security survey, background study on education, migration and housing, WASH, capital holdings, livelihood profiles and household food consumption outcomes as well as factors associated with the nutritional status of children.⁵⁷

⁵⁵ Government of Pakistan: **Flood Affected Nutrition Survey (FANS) in KP, Pakistan**. Nov. 2010.

⁵⁶ Inter-Agency Standing Committee (IASC): **Interagency Real Time Evaluation of the Humanitarian Response to Pakistan's 2010 Flood Crisis**, DARA, 2011; Inter-Agency Standing Committee (IASC): **Real Time Evaluation (RTE)**. Kenya 2012.

⁵⁷ Nzuma J, Ochola S: **Kenya Urban Comprehensive Food Security & Vulnerability Analysis (KU-CFSVA) and Nutrition Assessment, Republic of Kenya**. WFP, FAO and FEWS-NET, 2010, p7.. The survey identified the most vulnerable people as having: lowest school enrollment; most frequent use of non-durable material for housing; highest crowding index; most frequent use of unimproved sources of water; most frequent use of unimproved sanitation and waste disposal practices; highest proportion of

4.1.1 Assessment of CMAM Service Supply and Demand

The challenges in access can be viewed from a service delivery as well as from a demand perspective that considers the views of caretakers and their decision as to whether to benefit from CMAM services. Some observations are the following.

- Assessments focus more intensely on supply than demand – placing emphasis on programming services rather than researching demand issues, i.e. what influences caretaker's decisions to use CMAM services. More information needs to be gathered from the caretakers' point of view regarding distances and difficulties encountered in accessing CMAM services.
- Supply has focused more on in/outpatient service delivery through facility based protocols than on community issues, such as sensitization, and malnutrition inter-linkages, such as MAM with SAM.
- Demand data is needed for other sectors related to nutritional status, including health, WASH, and agricultural development. Assessments of other sectors are often conducted separately and may not include strong connections to nutrition. Integrated SMART surveys offer a means to bring other sectors into the analysis.⁵⁸

4.1.2 Supply and Demand Challenges in the Health Delivery Systems

In most countries, the national health system is the main vehicle for delivery of CMAM services: case finding, outpatient and inpatient services, and frequently also MAM management. Knowing what draws caretakers to its services is important for planning and also to improve knowledge regarding other potential paths to identification and treatment of SAM. (See also discussion on Sustainable Integration of CMAM into the National Health System in Chapter 5.)

The role of private clinics and traditional practitioners in identification of malnourished children and treatment by private health care staff or referral to CMAM should be discussed in assessments and included in planning. In **Nepal**, district assessments for CMAM found that families sought medical assistance either in private or public systems and many used pharmacies while a very small percentage used traditional healers. In some districts usage of private health facilities was over 40%, particularly in remote mountainous areas (e.g. Mugu). In **Pakistan**, a reported 50% of health care is provided by private clinics. In **Kenya**, thousands of private clinics in the communities are run by nurses with a small percentage run by doctors.⁵⁹ The WHO has estimated that in Sub-Saharan Africa traditional healers outnumber trained health practitioners and the majority of the population uses traditional medicine.⁶⁰

In **Niger**, despite health care providers, caregivers, and communities admitting that caregivers commonly seek care from a traditional healer as a first-line service for an acutely malnourished child, it appeared that health care providers of the MoH and NGOs do not usually collaborate with the informal health system.⁶¹ While it is evident that involving the informal health system in CMAM can help to break down barriers to access and improve utilization of services, changes in KAP on the part of government and partners may be needed to enhance awareness of the important role that the informal health system can play.

As discussed in Chapter 3, the quality of CMAM services in health facilities was found to be good to very good and improving in all countries. Similar reasons were identified in **Nepal, Kenya and West Africa** for non-use of or dissatisfaction with a government health facility. These included too long distances to reach the facility; cost of the services; frequent outages of drugs; long waiting times for consultation; and,

households in the poorest wealth quintile; highest proportion of expenditures devoted to food and among the lowest absolute value of expenditures per capita; high proportion of households adopting a "dependents" livelihood strategy (begging, borrowing, remittances); lowest immunization, vitamin A and deworming coverage; most frequent untimely introduction of complementary foods for children; and lowest proportion of children meeting minimum dietary diversity.

⁵⁸ Example: Kibwezi M, Kathonzweni: **Integrated SMART Survey Report, Districts & Kalawa, Nguu, Mulala, Kiou and Malili Divisions, Makueni County, Kenya, ACF-USA** 2011.

⁵⁹ Wikipedia, Healthcare in Kenya. In 2011 there were 65,000 nurses on their council's register. A smaller number of private clinics, mostly in the urban areas, are run by clinical officers and doctors who numbered 8,600 and 7,100 respectively in 2011. These figures include those who have died or left the profession hence the actual number of workers is lower.

⁶⁰ UNAIDS Case Study: **Involving Traditional Healers in increasing access to AIDS care and prevention in East Africa**. 2002.

⁶¹ Deconinck H, Bahwere P, Adou P: **Review of Community-Based Management of Acute Malnutrition Implementation in Niger**. Washington DC: FANTA, 2011.p20-21.

negative aspects of staff behaviour.^{62 63} In addition, barriers to use of nutritional services in urban informal settlements of **Kenya** included local cultural beliefs around the signs of malnutrition, HIV stigma, and not knowing about the nutrition services.⁶⁴ The *2012 Global CMAM Synthesis Survey* underscored two major challenges to access as the logistics of getting services to children in need (and vice versa) and shortages of health workers to implement CMAM services. *In Niger, Kenya, Somalia, Ethiopia, Sierra Leone and Pakistan one of the main CMAM scale up barriers identified is human resources.*⁶⁵

4.2 Challenges in Targeting and Coverage

The five case study country reports address both geographic and treatment coverage. The formulas have been agreed globally. (See Figures 4.2 and 4.3)

4.2.1 Geographic Coverage

Geographic coverage is defined as the proportion of primary health care facilities in the area offering CMAM services to the total number of primary healthcare facilities in the area. It is defined in terms of working facility per numbers of the population and measures access to services for management of SAM. There is no global standard for geographic coverage of outpatient services, however, there is generally a nationally determined objective, frequently aligned with the health facility coverage standards. There is no standard for the number of inpatient treatment facilities; WHO recommends to establish them and to build their capacity according to the expected number of SAM cases with medical complications.

Estimating Geographic Coverage. The *2012 Global CMAM Synthesis Survey* ranked the major challenges to estimating geographic coverage (See Figure 4.2). Lack of sufficient data on population is the key reason for challenges in geographic targeting. Greater efforts are needed to gain agreement on the formula for geographic coverage. “Other” reasons include the pilot nature of CMAM in some countries (e.g. **Indonesia, Rwanda, Nepal**) where only a few districts are targeted. Some countries aim for inclusion of all health facilities while others do not expect to have 100% coverage. Weak estimate of incidence is another constraint.

Geographic targeting tends to be based within administrative boundaries of districts or provinces and/or areas prone to emergencies such as in the Arid and Semi-Arid lands (ASAL) of **Kenya**, the conflict and flood affected provinces in **Pakistan**, the Band du Sahel in **Chad** and the terai (lowlands), hills and mountains in **Nepal**. In **Kenya**, there is some momentum toward targeting based on livelihood zones, which may offer a practical way to view the nutrition impact of the food security situation.⁶⁶

The governments and implementing partners typically aim for the maximum coverage that can be realistically attained during the planning period and with available financial and human resources (e.g. 70% for geographic outpatient coverage as in Nepal’s 5 pilot districts). Yet acutely malnourished children residing outside the borders of target areas do not have access to CMAM services, although they may benefit from other childhood development interventions.⁶⁷ Nevertheless, this is an impetus to a scale up effort.

⁶² Nzuma J, Ochola S: **Kenya Urban Comprehensive Food Security & Vulnerability Analysis (KU-CFSVA) and Nutrition Assessment, Republic of Kenya.** WFP, FAO and FEWS-NET, 2010, p 62.

⁶³ Deconinck H, Bahwere P, Serigne Mbaye D, de Bernardo D, Pierre A: **Review of Community-Based Management of Acute Malnutrition Implementation in West Africa: Summary Report.** Washington, DC: FHI 360/FANTA-2 Bridge, 2011. P 35.

⁶⁴ Government of Kenya, UNICEF, Concern Worldwide: **Kenya Case Study on Informal Settlements Briefing Note: Reaching Children in the Urban Informal Settlements of Nairobi and Kisumu, High Impact Nutrition Interventions (HINI).** Presentation, GoK, UNICEF and Concern Worldwide Nov. 2011.

⁶⁵ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** Emergency Nutrition Network, CMAM Conference, Addis Ababa, 2011. Jan 2012. p 26.

⁶⁶ Government of Kenya, WFP, FAO, FEWSNET: **Comprehensive Food Security and Vulnerability Analysis (CFSVA) and Nutrition Assessment in Kenya High Density Urban Areas.** 2010. This analysis is based on division of the urban areas across the country into livelihood zones which contributed to understanding of the impact of 10 classifications of livelihoods on food security and malnutrition.

⁶⁷ The evaluation did not conduct a comparative study on CMAM versus non-CMAM served areas.

12. Background to question #12 using UNICEF agreed definition and calculation: Geographical coverage can be defined as the proportion of primary healthcare facilities in the program area that deliver CMAM services to the total number of primary healthcare facilities in the program area. It is defined in terms of working facility per number of population and measures geographic distribution of facilities and access to services for management of SAM in the program area. Geographical coverage = PHC facilities delivering CMAM services/total PHC facilities. What is the major challenge in your country to estimating geographic coverage to treat admitted SAM cases in CMAM targeted areas (please select one):

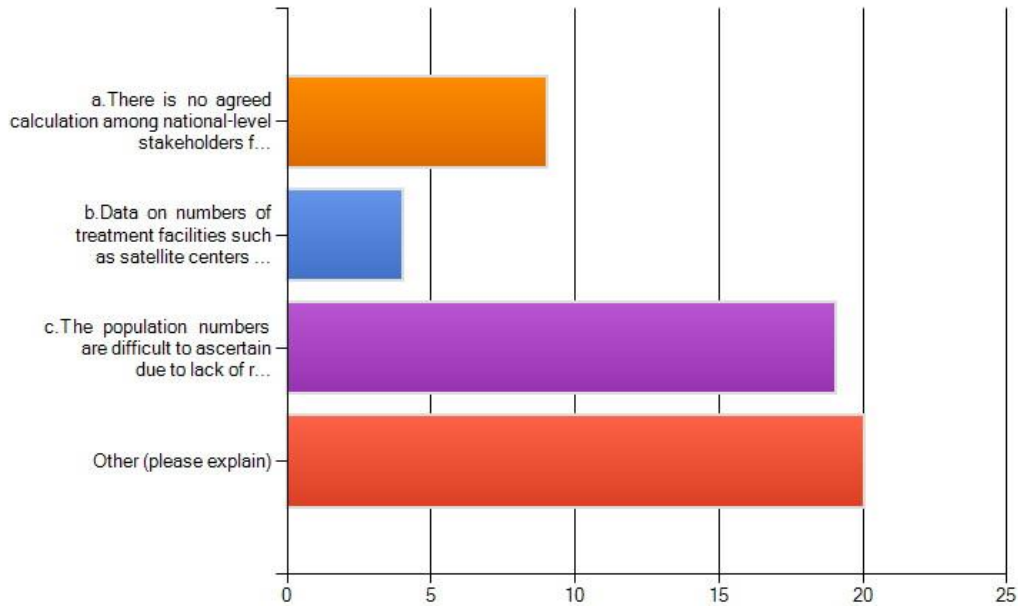


Figure 4.2 Major Challenges in Measuring Geographic Coverage, Global CMAM Synthesis Survey (2012)

In the case study countries with longer and regularized CMAMs, geographic coverage has improved significantly, particularly where CMAM is more fully integrated into the national health system. In the past decade, CMAM services in **Ethiopia** were extended from 44 to 8,100 facilities providing outpatient services and 473 health centres and hospitals providing in-patient care. Approximately 61% of 12,000 health posts and 52% of 1,850 health centres have outpatient services while 22% of health centres and 61% of hospitals provide CMAM inpatient services.⁶⁸ In **Kenya**, from 2009 to 2011, the proportion of health facilities offering IMAM services has increased from 50% to 83% (899 outpatient sites) in the targeted districts.

In **Ethiopia**, determination of geographic targeting depends mainly on two factors: a) the distribution of the health facilities; and, b) targeting logic. Health system expansion is guided through a population standard (one health centre for 25,000 people and one health post for 5,000); the main challenge has been the applicability of standards to sparsely populated regions and long distances to reach CMAM sites. Most CMAM facilities are in the four major agrarian regions (the most densely populated among the regions) as well as “hot spots” most vulnerable to emergencies, which promotes efficiency but challenges equity since other areas are also in need.

In the case study countries, constraints to expanding CMAM geographic coverage are mainly linked to human and financial resources and reflect operational challenges faced by the national health system. An assessment was performed in 2009 in **Nepal's** Bardiya district to determine whether CMAM was capable of having the needed impact and it was found that the overall coverage in the district was <50%. Distance was a key barrier to access, even if calculations indicate that average walking distances were well within

68 UNICEF/ENCU data base.

the norm of CMAM elsewhere. This suggested a low cost-benefit ratio (high effort, low reward) and/or the need for further decentralization of CMAM services.⁶⁹

Questions persist as to the effect of the long distances needed to travel to receive CMAM services when areas do not have sites within the Sphere recommended distance of two hours walk. Some children and/or health workers in places such as Turkana in **Kenya** and the mountainous areas of KP in **Pakistan** and in **Nepal**, such as in the Mugu high mountains, need to walk 4-8 hours. The adequacy of coverage in these situations may not be tested until a nutrition crisis emerges.

In regard to **inpatient treatment geographic coverage**, infrastructure is not sufficient in many health facilities to allow establishment of an inpatient ward for severely malnourished children; decisions to reserve and develop a dedicated site are based on uncertain predictions of usage. Numbers of complicated cases may vary seasonally, and wards may be empty at times and overflowing at others. In some cases such as in **Pakistan's KP**, the inpatient facility may be located in a city center necessitating transport or complex travel to the location, especially challenging for rural families and in insecure and mountainous areas. Caretakers are required to stay with their children during the inpatient stay, posing difficulties when they have other children and livelihoods to attend to.

4.2.2 Treatment Coverage

Treatment coverage is defined as cases treated divided by cases in need. Treatment coverage surveys are important to collect evidence on the percentage of children who gained access to services as well as to identify children that have not been reached. They can also help to identify areas of probable low and high coverage and reasons for coverage failure. In the case study countries, treatment coverage surveys were rare except in Ethiopia where they are more routine. Interviewees and documents attempted to estimate the extent of treatment coverage using various sources of data but they generally lacked adequate evidence without treatment coverage surveys.

The *2012 Global CMAM Synthesis Survey* ranked the major challenges to conducting treatment coverage surveys. (See Figure 4.3) Treatment coverage surveys are not planned or funded, and reliable data is not available on which to make the coverage calculation such as estimates of SAM prevalence. Furthermore, technical expertise is rarely available. For example in **Sudan**, there are only 10 people trained in conducting coverage surveys, and they are not fully dedicated to this work. In a few countries, coverage surveys are conducted by NGOs only in their areas of implementation. "Other" responses indicated that a number of countries had not had CMAM long enough to undertake a treatment coverage survey. A major challenge was ascertaining population numbers partially due to lack of registration of new-borns and constant in and out migration. In **Nepal** for example, the number of admitted children was 17% higher than the expected (based on the prevalence of SAM), with an overall treatment coverage of 120%.

⁶⁹ Concern Worldwide. **Final Evaluation of Concern Worldwide/MoHP CMAM Pilot Project in Bardiya District, Nepal**. Feb. 2010. P 22 - 23. This analysis was performed using Simplified-LQAS Evaluation of Access and Coverage (SLEAC).

13. Background to question #13 using UNICEF agreed calculation: Treatment coverage = cases treated/needNeed = Population 6-59m* x [Prevalence (Prevalence x 1.6)] What is the major challenge to conducting treatment coverage surveys in CMAM targeted areas:

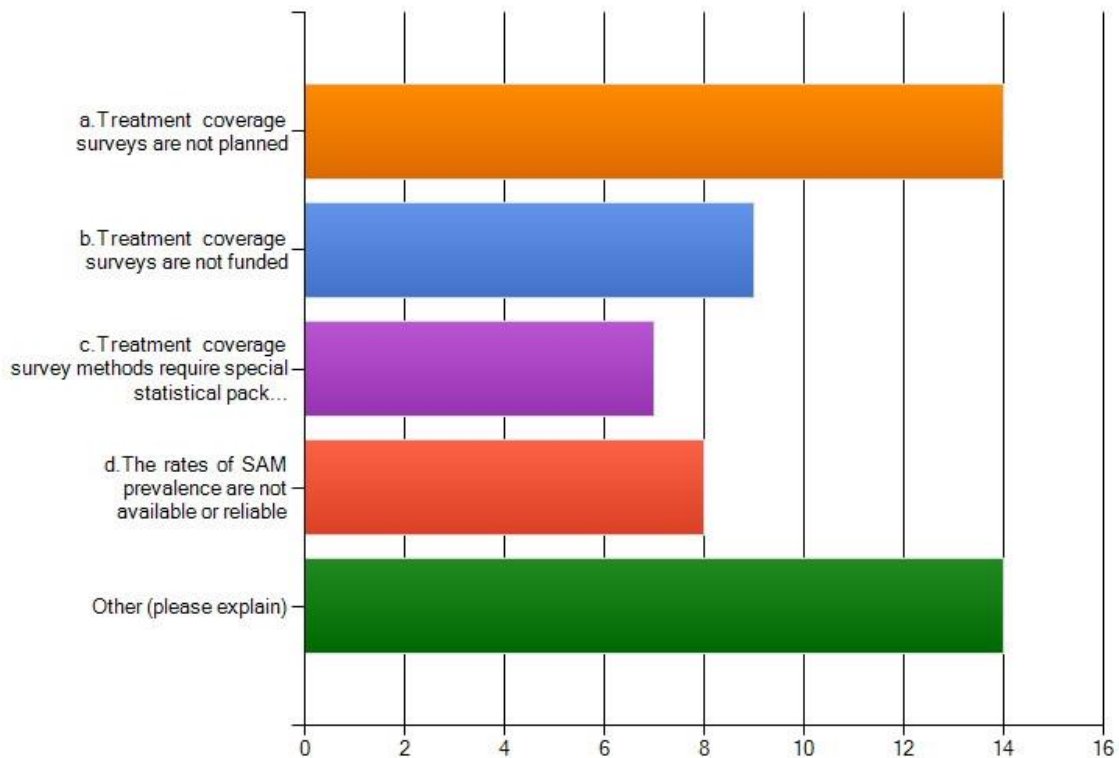


Figure 4.3 Major Challenges in Conducting Treatment Coverage Surveys, Global CMAM Synthesis Survey (2012)

The recognition of the importance and the use of treatment coverage surveys are increasing along with opportunities for planning and funding them. They are used in **Niger, Burkina Faso and Sierra Leone**.⁷⁰ In general treatment coverage surveys are conducted in CMAM intervention areas and not on a national level. Methodology such as 3M⁷¹, CSAS⁷² or SQUEAC⁷³ is employed to measure coverage against the Sphere standards. In **Ghana and Yemen** treatment coverage surveys are planned. In Ghana funds became available through UNICEF and USAID. Treatment coverage methodology has been agreed among partners in 2012 and coverage investigation is now being rolled out in **Kenya**. In **Pakistan**, an initial training for SQUEAC has taken place and a multi-agency core assessment team formed as a pool of resource persons for current and future coverage assessment exercises.⁷⁴

4.2.3 Improving coverage

Strategies to facilitate access for the hard-to-reach children in geographically targeted areas are expanding. Alternative strategies for assessing coverage are not fully explored. Regional and cross

⁷⁰ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. p 37.

⁷¹ Coverage surveys following CSAS, SLEAC, SQUEAC, or S3M (Simple Spatial Survey) methods adhere to the "no service - no survey" principle. S3M (2010) is a wide-area version of CSAS using improved spatial sampling and more efficient use of data.

⁷² Centric Systematic Area Sampling (CSAS) provides an overall estimate and a spatial distribution map of programme coverage, and a ranked list of programme-specific barriers to service access and uptake.

⁷³ SLEAC (2008, Simplified LQAS Evaluation of Access and Coverage) is a rapid method and can map coverage over wide areas (e.g. national coverage surveys); designed for low cost M&E at clinic level. SQUEAC (2008 Semi- Quantitative Evaluation of Access and Coverage) uses a two-stage screening test model.

⁷⁴ Pakistan Nutrition Cluster: **Pakistan Nutrition Cluster Update**, Dec. 2012 to Jan. 2013.

border coordination and analysis is important to factor in the effects of migration on CMAM effectiveness, for example between Pakistan and Afghanistan and between India and Nepal, and could help in development of strategies to track children who migrate frequently. Greater coverage of the most vulnerable children may be achieved by positioning CMAM in areas where predominant livelihoods have the most impact on access to food, not necessarily defined by district borders.

Results of the *2012 Global CMAM Synthesis Survey* indicate the relative levels of effectiveness of actions to improve **coverage of outpatient treatment**, as follows. (A number of countries did not have developed enough CMAM interventions to answer the question.) In **Mainland Tanzania**, support through the Clinton Foundation, PEPFAR and the Global Fund has scaled up treatment services and increased the demand for outpatient treatment. Several countries used a combination of approaches. **Mali** has: 1) integrated outpatient treatment services in all community health centres; and, 2) expanded partnerships with NGOs to support these health structures as well as community screening.

1. Using or expanding satellite or sub-post outpatient treatment (27.6%)

In **Nepal**, a number of outpatient facilities have been added increasing admissions while other health facilities which are not designated as outpatient treatment facilities also provide some services for MAM and SAM such as counselling and educating as well as mobilizing the FCHVs and health workers.

2. Defining or expanding roles of community health workers to manage RUTF (20.7%)

Alternatives to health post centered treatment of SAM are being tested and increasing in usage, with the aim of reducing the need for caretakers to travel long distances. In **Bangladesh**, a study aimed to examine the effectiveness of adding the diagnosis and treatment of SAM to the community case management (CCM) package delivered by community health workers outside health facilities. Results show that when SAM is diagnosed and treated by community health workers (CHWs) a very high proportion of malnourished children can access care and they are very likely to recover. CHWs can identify and treat SAM early avoiding need to refer children to inpatient treatment.⁷⁵

3. Expanding staff or opening hours in existing facilities (10.3%)

4. Using or expanding mobile outpatient treatment (6.9%)

*“The use of mobile teams is a resource efficient solution being tried in **Somalia** with local partners, in Afar and Somali regions of Ethiopia by the MoH, in the north of Kenya and in Balochistan (Pakistan). These teams are able to reach difficult areas, in some cases with multiple services (CMAM, IMCI and water, sanitation and hygiene (WASH) in Ethiopia) and are linked to a central static site for support and reporting purposes.”*⁷⁶ In the five case study countries, the use of mobile teams was still very limited and since they relied largely on external support and sometimes on management by IPs, they tended to be expensive, however, with further experience, efficiency and prospects for sustainability are likely to increase.

Results of the *2012 Global CMAM Synthesis Survey* indicate levels of effectiveness of actions to improve **access to inpatient treatment**, as follows. Among “other” responses (23.6%), a significant number of countries mentioned support for transport of children and their families to and from the inpatient services to be among the major factors increasing access, with CMAM training for the inpatient staff and engagement with health unit senior management to be other important factors.

1. Opening more inpatient treatment centres in hospitals (27.3%)
2. Improving procedures among inpatient and outpatient treatment to transfer and track children with complications (27.3%)
3. Merging the inpatient CMAM ward or beds with other inpatient services in hospitals (16.4%)
4. Expanding staff or facilities in already established inpatient treatment facilities (5.5%)

⁷⁵ Sadler K, Puett C, Mothabbir G, Myatt M: **Community Case Management of Severe Acute Malnutrition in Southern Bangladesh**. *Save the Children and Feinstein International Centre*, Jun. 2011.

⁷⁶ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons**. *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. p 39.

4.3 Promoting Gender Equality

Global recommendations on sex-disaggregation of data are not completely adhered to for CMAM. While nutrition surveys tend to disaggregate data, the data collected in health centres is not consistently disaggregated or analysed. Admission data tend to be gender specific but important analyses on whether, for example, more children of one sex tend to recover, default, or die are missing. Reasons for non-collection or lack of analysis of sex-disaggregated data include insufficient directives, weak supervision or staffing shortages or lack of awareness of the need (and standards) to do so. Thus sex-disaggregation of data still needs to be reinforced by the ministries of health and partners.

Among CMAM admissions, data at country level indicated that access to CMAM was not restricted by sex, even where tendencies to favour boys are well documented, pointing to effective community sensitization and health worker efforts. However, not all activities and categories of data were analysed with a gender lens so possible gender-related issues may have been overlooked. For example, in **Nepal**, slightly more girls benefit from CMAM while the malnutrition prevalence is higher in boys, however, the reasons for this have not been studied. In fact, age appears to be a more significant factor than sex: Younger children tend to receive less attention from caretakers regardless of sex.

In many countries, women may be burdened by low levels of literacy, insecurity in remote areas, limited income opportunities, large numbers of children and heavy home management duties, among others, that may explain low participation in developmental activities. The impact of participation in CMAM on women's workload should be more fully analysed. For instance, the travel to collect RUTF weekly or bi-weekly was seen to impose hardships for both women and children in some sites, particularly where women are largely responsible for planting and harvesting.

In some case study countries, **greater participation of fathers and other male caretakers** such as grandfathers and uncles has been promoted, and strategies and activities developed to include males for example in sensitization, discussions, and support groups. In **Nepal** village leaders and politicians were included in district health centre discussions regarding CMAM services. In **Pakistan**, social mobilizers who were males created mass nutrition awareness particularly among men through the establishment of nutrition support committees (NSCs) and corner advocacy meetings that facilitated the community outreach worker's (COWs) entries into the households for screening. In Ethiopia, Chad and Kenya men have not yet been systematically targeted.

In the 2010 flood response in **Pakistan**, UNICEF and IPs incorporated gender equality considerations in project designs, including for WASH activities, gender sensitivity sessions for Lady Health Workers (LHW), and targeted safe spaces for women and children. UNICEF supported a gender and child cell within the National Disaster Management Authority in late 2010 and encouraged disaggregation of data by sex and age, which, a UNICEF report claims, strengthened strategic gender equality practice.⁷⁷ Both the *Pakistan Flood Relief and Early Recovery Response Plan (PFRERP)* and *Kenya Emergency Humanitarian Response Plan (EHRP) 2012+* (of which nutrition was a part) utilized a Gender Marker exercise. In **Kenya**, \$330 million worth of projects received a scoring of 1 indicating that projects have been designed to contribute in some limited way to gender equality. Projects amounting to \$18.5 million have received a zero which indicates no signs that gender issues were considered in project design.

Gender related CMAM human resources issues. Most of the large national networks of CHWs and volunteers are women who are also tasked with their own household duties and for some, have limited literacy. In the case study countries, many of the CHWs needed capacity development to enhance their understanding of the principles of nutrition and use of anthropometric measurements. Women health workers require special support in societies where male permission is needed to gain access to mothers and children. In **Pakistan's KP**, community outreach was more successful in areas where management gave sufficient resources and training to the COWs and facilitated their access.

⁷⁷ UNICEF: *Children in Pakistan – One Year after the Floods*. Jul. 2011.

4.4 Guidance on Equity and Gender Equality

Guidance for incorporating human rights and gender equality perspectives into management particularly in emergencies is generally available to health workers and assistance organizations. It can for example be found (mainly in English) on nutrition coordination forum websites. However, many CMAM-related documents, such as assessments, surveys, agreements, and evaluative reports fall short in devoting adequate attention to gender and equity issues. Some national guidelines on addressing acute malnutrition refer to human rights principles but most bodies of guidance and standards for CMAM do not adequately integrate gender equality and equity in terms of practice.

If stakeholders at all levels are not aware of potential equity issues, they may go unnoticed in the course of administration and implementation. Thus, practical and culturally specific guidance is needed for health workers implementing CMAM who rely on national guidelines, training materials and job aides to alert them to procedures, to focus their attention on tracking efforts to agreed objectives and reporting. Principles and realities of equity need to be mentioned in all forms of guidance, in coordination forums and in community discussions, and then translated for stakeholders into practical actions. Importantly, documentation of equity findings in assessments and evaluations is critical to inform stakeholders' planning for scaling up.

4.5 Challenges in Planning to Promote Equity

Global guidance suggests means to include relevant stakeholders and information in planning. This guidance includes use of results based planning, joint planning through programme cycles, and supporting participation of stakeholders who can contribute to efficiency and effectiveness. Challenges to planning in view of these principles include removing barriers to reaching more marginalized people.

*Results-based planning and management requires UNICEF and its cooperating partners to clearly define the expected results at the outset, agree on performance indicators, allocate resources to achieve the results, and to regularly review and evaluate progress, making adjustments as necessary.*⁷⁸ The Log Frame Analysis (LFA) helps stakeholders to set out and to understand expectations, risks as well as assumptions that are made regarding the capacity to achieve results.

The **LFAs** were developed at the onset or scale-up of CMAM, either as part of emergency response plans (**Pakistan, Kenya**) or pilot interventions (**Nepal**), however, in general, LFAs were not regularly updated taking into consideration changing information and circumstances, and revising targets accordingly. Further, district and health staff members were not always aware of the country-based targets that had been set, such as for screening and admissions, which do not have global Sphere performance indicators, and most were not able to speak to the achievements as per any of the targets. Judging progress toward the targets forms a basis for M&E; evaluation discussions often had to consider targets that were obsolete or overtaken-by-events.

Some **good practices** are noted in planning in **Kenya**. The HINI indicators were set out in the Summary Results Matrix which incorporates indicators directly relevant to IMAM and IYCN, and with the Health Sector wide Approach (SWAP).⁷⁹ Demand for IMAM as part of routine health services has increased due to its inclusion in district annual operational plans from 2008 onwards.

Many interviewees confirmed that joint coordinated planning among the government, UN and IPs for nutrition interventions needs to be stronger in terms of both preparedness and response, and conducted in collaboration with other sectors. The need for stronger planning is reflected in the non-achievement of some of the Sphere standards, uneven capacity among districts, and the gaps in performance data. The following are challenges noted in planning.

⁷⁸ UNICEF website

⁷⁹ Wambani Sallie V: **Integrated management of acute malnutrition in Kenya including urban settings**. *Field Exchange, ENN*. Jul. 2012, p 82. Presented by Valerie Wambani, MoPHS, CMAM/SUN conference held in Addis Ababa in November 2011. The Sector Wide Approach to Programming (SWAP) is a government plan for the sector based on the national policy framework and including strategy for delivery, expenditure plan and performance monitoring framework, through which the international community fund that sector.

Inclusion of stakeholders. Planning exercises may need to be prefaced by awareness raising and discussion of roles that community members and private sector health providers can play in CMAM. In some countries, inclusion of districts and smaller administrative levels in the planning process is not sufficient. In **Ethiopia**, woreda (district) based planning did not include CMAM indicators in the annual targets, annual review meetings and supportive supervision. More involvement of the IPs was needed to ensure that their interventions and resources were incorporated into the annual planning process and to assist government in its effort to make CMAM part of the woreda-based plan.

Inclusion of equity and gender equality and joint sector indicators. Indicators to measure progress on inclusion of the most needy children and steps toward analyzing gender risks and addressing them were not always included in the LFAs. Alignment of CMAM with other preventive initiatives in a health and nutrition package of interventions, as well as with WASH and food security and disaster risk reduction (DRR) may help to integrate prevention and preparedness objectives.

Vulnerability Mapping. Planning exercises have not always taken into account information provided in various mapping programs and in many countries, mapping and prioritization of CMAM target areas have not yet been fully undertaken. The *2012 Global CMAM Synthesis Survey* indicated that mapping was the most valuable tool to increase access to CMAM. Various stakeholders carry out mapping exercises which are widely available. The nutrition cluster typically maps the 3W/4W (who, what, where and when) which helps to identify gaps in nutrition services. Programme maps may also indicate where complementary activities cover near and long term malnutrition issues. For example, **Nepal's** IMAMI covers a small proportion of need in Nepal but other programmes with nutrition indicators such as USAID's Feed the Future are active in other areas. Coverage maps, maps to show incidence and prevalence and to indicate "hot spots" most vulnerable to crises are also available.

Maps would be most helpful at a district level to help identify areas where vulnerable children live and combined with community assessment data would be a powerful force to target community outreach efforts. Maps are constrained by the data available to create them notably population data. Mapping exercises which do not use visual maps include the gap identification exercises such as the UNICEF Global Mapping Review of CMAM. A variety of nutrition surveillance and information systems operate in Africa, including the Multiple Indicator Cluster Survey (MICS), FEWSNET, WFP-VAM as well as on-going area surveys. These systems supported by multiple organizations cover various aspects of WHO's nutrition surveillance goals and sometimes work in collaboration with each other.⁸⁰

The key to mapping utility is to take action based on analysis of the information available. A key conclusion of the *Interagency Standing Committee (IASC) Real Time Evaluation (RTE) – Kenya 2012* 2011 food security crisis was that despite good early warning data well in advance, the response was driven by reactive decision-making in 2011.

4.6 Chapter Summary

Top challenges for CMAM are ensuring access for children who need CMAM services but are not identified through screening procedures and/or do not present for admission, and developing strategies to reach them. Stronger case identification, mapping of vulnerability and community based assessments are three key tools to increase access. **Active case finding** has significantly improved but some children with SAM or MAM lack access in every country studied. To promote equity, greater attention needs to be drawn to children that are hard to reach and to those areas that have not yet been included in CMAM.

CMAM is more effective when built into district-based exercises which include nutrition surveys, health system assessments, and appraisal of health behaviour practices. **Assessments** are not always planned, budgeted and conducted in a timely manner, and assessment design is not always agreed among implementing partners to allow comparisons. Community assessments, KAP surveys, nutrition surveys and joint surveys are intended to draw in participation of community stakeholders and delve deeply into community contexts to avoid problems in implementation. Good examples are Standardized Monitoring

⁸⁰ Smith E: **Nutrition Surveillance Systems in Kenya. A review and recommendation report supported by UNICEF ESAR**, March 2006, p 2-4.

and Assessment of Relief and Transition (SMART) methodology surveys, and surveys which are multi-sectoral. Assessments do not focus enough on **demand** and roles of the informal health system. Addressing health system weaknesses in joint assessment and planning is essential to support CMAM, including the logistics of getting services to children in need (and vice versa) and addressing shortages of qualified health workers.

Major challenges to estimating **geographic coverage** are lack of sufficient data on population, lack of agreement on calculations, and weak estimate of incidence. Geographic coverage has improved particularly where CMAM is more fully integrated into the national health system. The recognition of the importance of **treatment coverage** surveys is growing but they may lack funding and reliable data. Alternative strategies for assessing coverage may include regional and cross border coordination and use of livelihood zones. The most successful strategies for **expanding outpatient treatment** include adding satellite or sub-post outpatient treatment, and defining roles of community health workers to manage RUTF. Support to improve **access to inpatient treatment** includes transport of children and their families, opening more inpatient treatment centres, and improving procedures among inpatient and outpatient treatment to transfer and track children with complications.

Global recommendations for **disaggregation of data by sex** are not always adhered to for CMAM implying need for stricter enforcement. Data at country level indicated that access to CMAM was not restricted among boys and girls. There is greater participation of fathers and other male caretakers in sensitization, discussions, and support groups. Good practices are UNICEF's support for a gender and child cell within the national disaster management authority and a Gender Marker exercise in emergency response projects. Overall, CMAM-related guidance and documents do not devote needed attention to gender and equity issues.

Challenges in planning include strengthening **use of results-based and joint planning** through frequent updating of log frame analyses, integrating CMAM and equity indicators with other interventions and including more community stakeholders such as informal sector health providers. District administrations should be involved in CMAM planning and resource management for effective transfer of responsibilities from external actors. CMAM should align itself to other preventive initiatives such as WASH, food security and disaster risk reduction (DRR) and include indicators to that effect. Planning exercises should use various mapping programmes and map and prioritize CMAM target areas.

Lessons Learned: Promoting Equity in Access

Assessments: *Conducting community assessments before and during implementation of CMAM saves time in community sensitization by drawing in participation of community stakeholders, and identifying contextual factors and demand issues that will limit or facilitate services. Without community assessments, mistakes can occur due to perceptions that may affect success of sensitization and mobilization strategies. When anthropometric surveys are conducted, the opportunity should be used to include questions on community characteristics that may affect access to services for certain groups as well as gender-related effects.*

Assessments need to be planned, budgeted and conducted in a timely manner, aiming for consistency among implementing partners to avoid problems and inefficiencies in implementation.

Geographic and Treatment Coverage: *Coverage indicators need to be built into the CMAM design to ensure that geographic coverage is tracked, treatment coverage surveys are funded and that results will be available to map and prioritize districts for scaling up.*

Information from treatment coverage surveys combined with community assessments is important for identifying the most vulnerable and potentially missed groups within the geographically targeted areas; without this information, there is not likely to be enough evidence regarding the numbers and characteristics of vulnerable children to effectively target and plan to include these children.

Gender Equality: Adherence to gender and equity guidance should not be assumed and attention needs to be paid to ensuring that data is disaggregated by sex, staff are aware of potential gender and equity issues through training and guidelines, and that equity is a criterion in reviews and evaluations.

Planning: Monitoring and evaluations assess progress toward CMAM's planned results and steer the intervention, thus it is critical to follow global guidance on results based planning including joint development of LFAs and regular updating. Without their full inclusion in planning, district health staff may not be aware of the country-based results and indicators; they should be able to speak to the achievements as per the planned results.

Guidance from previous CMAM evaluations has promoted inclusion of private sector health providers, yet this is rarely done, and since they constitute a potentially strong force for community mobilization, stakeholders need to brainstorm and plan the best means to include them in CMAM.

Districts, as major administrative areas of implementation of CMAM, need to include CMAM indicators including gender indicators in their annual targets, annual review meetings and supportive supervision. Districts must participate in planning and be aware of IPs' results based plans, resources and exit plans in order to make CMAM part of the district annual plans.

Vulnerability Mapping. Planning exercises should take into account information provided in various mapping programs (e.g. 3 or 4 W, Multiple Indicator Cluster Surveys (MICS), FEWSNET, WFP-VAM) as well as on-going area surveys in order to plot maps for prioritization of areas for scaling up. This includes planning in districts and communities where maps would be most helpful to identify areas where vulnerable children live and combined with community assessment data would be a powerful force to target community outreach efforts.

5 Progress and Issues in National Ownership

National ownership is characterized by the demonstrated political will of governments to address acute malnutrition as well as other forms of undernutrition. National ownership is considered critical for the scaling up (expansion) as well as integration of CMAM into national health services and with other interventions. It includes development of policies and strategies with the aim of studying the magnitude of the problem and its outcomes on child development and investing in preventing acute malnutrition and reducing the impact.

This chapter first covers facilitating factors and challenges in respect to national ownership of CMAM. These include development of national guidelines for CMAM, nutrition policies and strategies, leadership for nutrition coordination and prevention of acute malnutrition, and dedication of financial support for nutrition. Sustainable integration of CMAM into the national health system and with other interventions is then discussed. Integration is characterized by management of SAM and MAM through CMAM, delivered as one of the basic health services and imbedded as part of a broader set of nutrition activities (e.g. IYCF, stunting, micronutrient supplementation), which is in turn integrated within a multi-sectoral approach to tackle the determinants of undernutrition.⁸¹

Integrated approaches at the global level are resources for national efforts. These include Scaling Up Nutrition (SUN)⁸² and Accelerating the Scale Up of Food and Nutrition Actions (REACH).⁸³ The SUN UN Systems Network is led by the UN Standing Committee on Nutrition (UNSCN) and the UN REACH Partnership. The UN System Network brings together the global level UN normative platform for policy and technical harmonization with country level coordination in support of national nutrition plans and joint UN efforts. REACH focuses on strengthening government capacity to scale-up nutrition actions and improving multi-sectoral nutrition management and governance. REACH encourages UN Agencies in their efforts to think beyond their individual mandates and to work together towards common objectives, around a shared vision. REACH is now present in 12 out of the 36 SUN countries and supporting SUN processes that are rapidly taking root at country level.

5.1 National Ownership of CMAM through Nutrition Policy and Authority

In the five case study countries, institutionalization of nutrition has occurred rather recently and nutrition structures have been building capacity at national, provincial and district levels. While there has been improvement globally in reducing MAM and SAM, more work is needed to promote government commitment of funds and coordination among nutrition interventions. Globally, an estimated 52 million children under-five years of age, or 8%, were wasted (i.e. weight-for-height below $-2SD$) in 2011 – an 11% decrease from an estimated 58 million in 1990; a decrease in Asia, most in South-Central Asia. These children are at substantial increased risk of death.⁸⁴ In the five case study countries, the following comparisons are made:

In **Nepal**, wasting as a measure of acute malnutrition has remained stagnant over the last decade; it was estimated at 11% in 2001, 13% in 2006, and 11% in 2011; SAM affects 2.6% of children under five years of age. In **Pakistan**, there has been no significant improvement in the nutritional status of children, 15.1% were wasted in 2010-2011 compared to 13.1% in 2001-2002. In **Ethiopia**, progress has been made in reducing MAM but the prevalence of SAM has not been significantly reduced during the past three decades. The 2011 Ethiopian Demographic Health Survey reported 10% of children 6-59 months of age (equivalent to 1.5 million children) are wasted; approximately 2% of these children (310,000) have severe acute malnutrition. In **Chad**, from 1997 to 2010, the prevalence of acute malnutrition has remained

⁸¹ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. P12; definition of integration agreed by conference participants.

⁸² <http://scalingupnutrition.org/>

⁸³ REACH governance was strengthened by the formal establishment of the REACH Steering Committee made up of FAO, UNICEF WHO and WFP, with IFAD participating as an advisory partner.

⁸⁴ UNICEF, WHO and the World Bank: **Levels and Trends in Child Malnutrition.** 2012. Key Facts and Figures.

stagnant, varying from 15.6 to 22%, particularly in the regions of the Sahel belt. In **Kenya**, the 2008-09 results compared with the 1998 and 2003 Kenya Demographic and Health Survey (KDHS) reveals almost no change in the proportion of children who are stunted, wasted, and underweight; 7% are wasted, with 2% severely wasted.

The *2012 Global CMAM Synthesis Survey* ranked having a national guidelines (62%), a national nutrition policy or strategy with CMAM included (46%), and leadership for coordination (40%) as three of the most important factors for increasing ownership at district level, where CMAM is largely implemented. (See Figure 5.1).

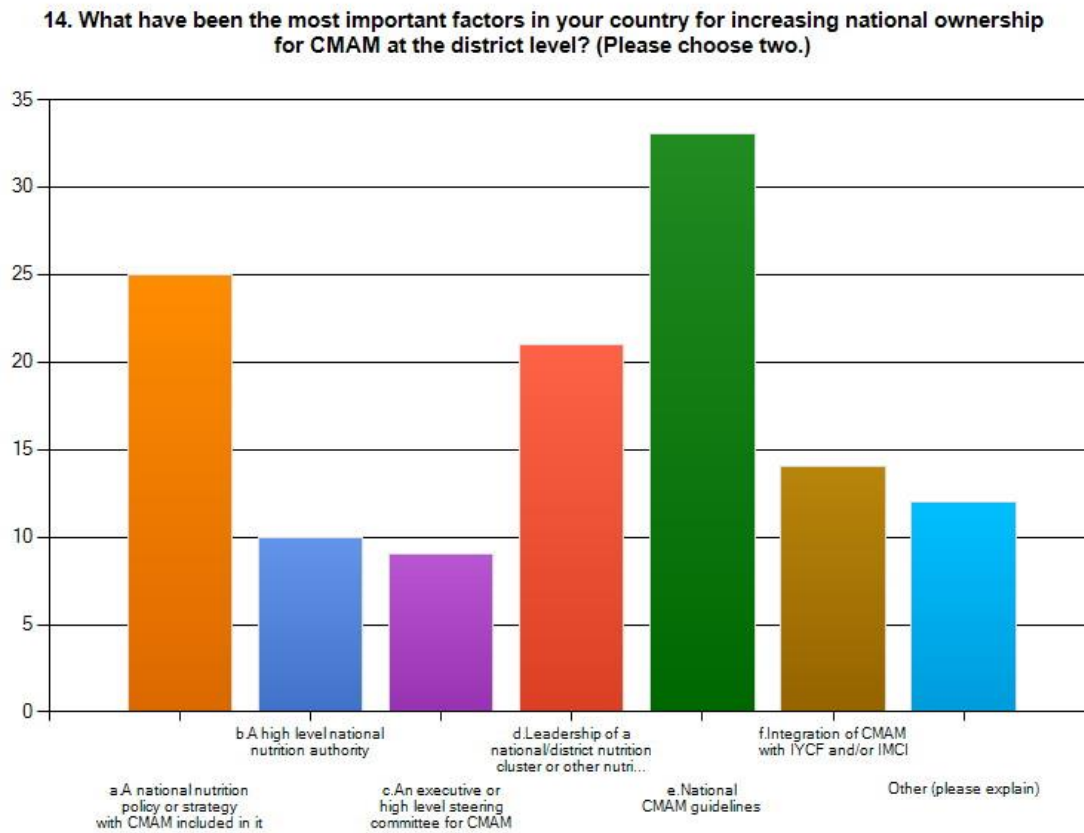


Figure 5.1: Key Factors for Increasing National Ownership, Global CMAM Synthesis Survey (2012)

5.1.1 National CMAM Guidelines

As per the *2012 Global CMAM Synthesis Survey*, national guidelines are of the highest value in promoting national ownership for all types of CMAMs: emergency, regular, and mixed emergency/regular. Each of the case study countries has developed a set of national guidelines as a result of multi-agency efforts. Global guidance was drawn upon, such as the 2000 Valid International Handbook on Community Therapeutic Care (CTC), the “WHO Guidelines for Inpatient Treatment” (1999 with 2003 amendment), Joint Statement on CMAM⁸⁵ (2007), the FANTA Project CMAM training package (2009) and The Sphere Project Handbook – Humanitarian Charter and Minimum Standards for Humanitarian Response. Forthcoming is a WHO protocol on the management of SAM in inpatient and community settings (2013). Various bodies of global guidance are available but are not always incorporated into national guidelines which are the most widely used by national stakeholders.

In case study countries, national guidelines describe well defined, comprehensive and clear standardized treatment protocols based on global and national standards and they have all been developed into

⁸⁵ WHO, WFP, UN/SCN, UNICEF: **Joint Statement. Community-based management of severe acute malnutrition.** Jun. 2007.

training materials and courses. Treatment protocols for SAM in inpatient care and outpatient care are generally tailored to the countries' needs, although more work could be done to customize them. Quality assessments of CMAM sites indicated that guidelines were available to staff and consulted as needed.

In **West Africa**, regional CMAM guidance has been developed. However, most interviewees in the case study countries agreed that development of national guidelines is more efficient and utilitarian than regional guidelines, but there needs to be a regional awareness, for example, to take into consideration the variations such as Somalia's protocols compared to Kenya's or Ethiopia's, and standards that will be applicable in refugee emergencies.

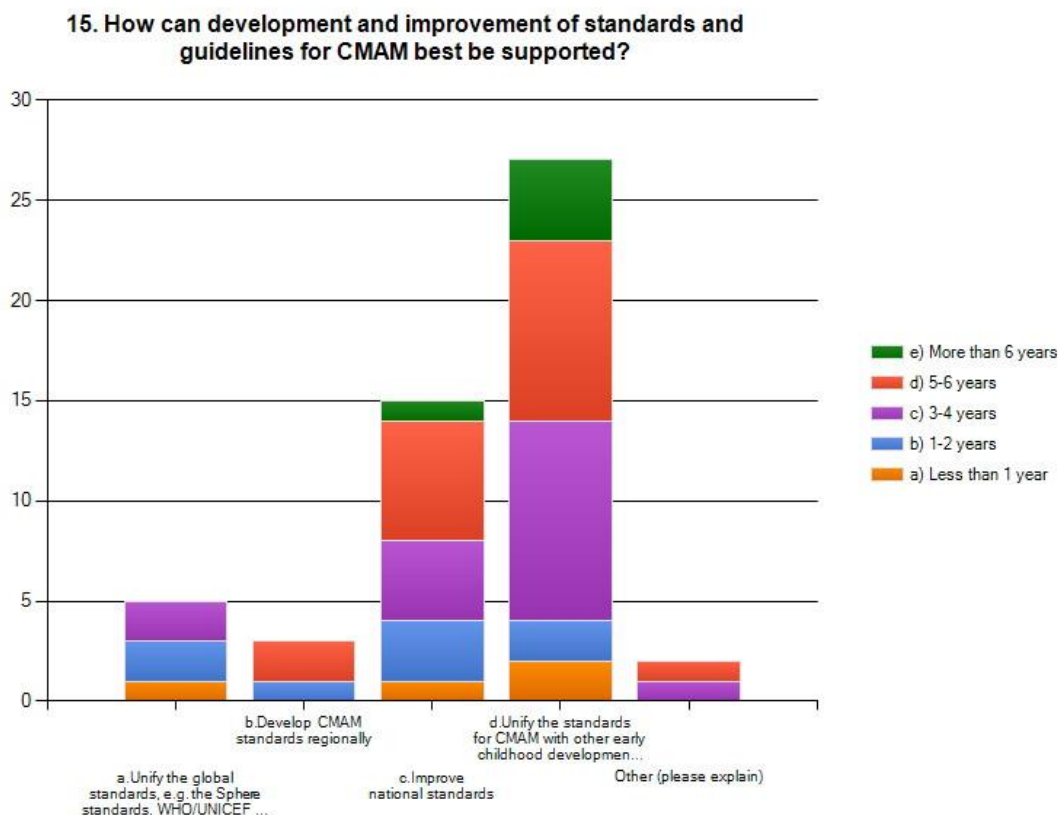


Figure 5.2: How Improvement of Standards and Guidelines Can Best Be Supported, Global CMAM Synthesis Survey (2012)

There are numerous good practices in guideline development, dissemination and training. In **Kenya and Ethiopia**, the national guidelines along with job aids such as posters, counselling cards, and flowcharts have been powerful tools for promoting and strengthening services. **Kenya's** guidelines include detailed inputs for counselling in households. The **Pakistan National CMAM Guidelines (2010)** specifies steps for monitoring and tracking children; as a result, reporting on monitoring visits and information exchanges have improved in quality and detail. In **Nepal**, step by step guidance in the Health Workers Training Manual (2009) effectively builds upon the guidelines.

The national CMAM guidelines tend to focus on treatment protocols and require expansion to discuss planning and results, cultural adaptation, gender and equity, and performance monitoring, as well as to clarify screening, admissions and referral procedures. Making improvements and relevant training should be ongoing and serve as opportunities for dialog as well as to strengthen the weak areas in CMAM implementation, such as community outreach. Countries should develop their own models for addressing acute malnutrition relevant to the context of service provision; merging CMAM guidelines with those of

other interventions could help to improve efficiency. The *2012 Global CMAM Synthesis Survey* indicates overwhelmingly that integration with IYCF and other interventions is needed the most in terms of improving standards and guidelines. Furthermore, the Sphere minimum humanitarian standards were agreed upon to serve in emergencies; standards may need to be revised to represent higher or long term expectations within the national health system.

5.1.2 National Nutrition Priorities

*The implementation and scaling up of CMAM, as with other forms of nutrition programming, requires continuous government commitment to produce clear benefits over time.*⁸⁶

The Government experiences of scale-up of CMAM (2012) analysis of political coordination around CMAM indicates that strong executive commitment and action in **Malawi, Niger, Mozambique** and **Sierra Leone** has advanced coordination of nutrition interventions under the MoH, strengthened MoH influence and has also shown commitment to protect government funding for such activities or secure sustainable sources of donor funding in the long run.⁸⁷

In the five case study countries, critical interconnected and essential components of nutrition governance were seen to be: 1) nutrition authority and leadership; 2) nutrition policy and strategies; and, 3) dedicated financial support for nutrition interventions. The premier recommendations in all five case study country evaluations were for greater government devotion of funds to indicate long term, developmental level commitment to reducing malnutrition, and development of a national nutrition policy and strategy, if one does not exist, which ensures appropriate levels of nutrition authority to implement the policy.

Ethiopia implements a national nutrition strategy (2008) but dedication of government funds is still missing. In **Nepal**, a national nutrition policy has been in place since 2004 but requires greater advocacy and implementation at all levels. In **Pakistan**, central nutrition authority is restricted to a small unit. Progress has been made in developing a Provincial Integrated Nutrition Strategy for KP, which would be aligned to the national Pakistan Integrated Nutrition Strategy (PINS), however, the PINS does not have any funding attached to it. In **Kenya**, despite significant progress in nutrition, it remains low on the political agenda as indicated by minor budget allocations. In **Chad**, a national centre of nutrition and food technology is charged with coordinating nutrition interventions, but does not have sufficient resources due to lack of government funding for nutrition.

1.) Nutrition Authority and Leadership

Many of the risk factors for premature mortality and disease burden among children under five years of age are nutrition-related, thus, ensuring strong national nutrition authority is critical. The *2012 Global CMAM Synthesis Survey* ranked having a high level national nutrition authority as important - particularly for emergency CMAM, while having an executive or high level steering committee was seen as more important for regular CMAM.

The national body responsible for nutrition needs to be positioned where it will have the needed authority, with related levels of responsibility and accountability, with advocacy clout in related departments and ministries as well as being supported budget-wise and this support needs to be extended to the county/district administrations, particularly in the process of decentralization.⁸⁸ While nutrition services are gaining strength in all of the case study countries, the nutrition authority has not been given adequate capacity to manage the various nutrition interventions or to advocate for greater resources including for CMAM services. In **Nepal** this was particularly true in relation to advocating for more outpatient and inpatient services and for expansion of CMAM into other districts. In four of the case study countries, the national nutrition services either lack department status (**Nepal, Pakistan**) and/or need more nutrition experts (**Nepal, Pakistan, Chad, Kenya**). Nutrition may be administered by ministry staff with little

⁸⁶ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. P 50.

⁸⁷ Ibid, pages 51-57.

⁸⁸ Shrimpton R, Saldanha L: **Kenya Nutrition Programme Review.** March 2011.

nutrition training, as in **Pakistan**. In **Ethiopia**, the Ethiopian Nutrition Coordination Unit (ENCU) is quasi-governmental with external support, while the Federal Ministry of Health administers nutrition policy.

Nutrition services are commanding more authority and assuming greater responsibility in provinces and districts. In **Sudan**, the Ministry of Health is decentralised and so strong leadership at state level has been an important influence from the MoH. A strong force of nutrition experts has been effective in **Zimbabwe** and **Kenya** where nutritionists are assigned to each district. In **Chad**, nutrition focal points are in charge of follow-up and supervision, offering needed support, but they are nurses rather than nutritionists. Building nutrition expertise among health professionals is considered critical given the shortage of nutrition experts and on the job training and pre-service training is needed for this purpose.

Building future national nutrition leadership and authority is also important. In **Pakistan**, few academic institutions provide nutrition courses, graduate or undergraduate; nutrition science integration in medical science is weak and treatment centered. There are trends toward including academic institutions in nutrition policy discussions as in **Ethiopia, Nepal and Kenya**.

Leadership for Nutrition Coordination. The *2012 Global CMAM Synthesis Survey* found that leadership for nutrition coordination is viewed as a key contributor to district ownership. Most countries have seen a number of central and local coordination groups forming. In **Kenya**, at national level, an Inter-ministerial Coordination Committee (ICC) is effectively bringing together government ministries involved in nutrition related programs. Several coordinating bodies in nutrition and health were established at provincial and district levels, however the efficacy of these groups has not been evaluated. In **Ethiopia**, national strategies for community development have resulted in mandatory formation of small groups supporting health and nutrition with responsible leaders.

In recent years, the OCHA-inspired cluster or technical forums have moved multi-agency nutrition coordination into its own realm separate from health and now more closely aligned with food security and with nutrition cluster leadership at global level. This means the functioning of both the central and the “sub-clusters” and other coordination groups must help to develop capacity in districts and other smaller administrative units for planning and monitoring. However, the degree of government staff participation in the cluster or technical forums has been mixed. Nutrition coordination at the provincial level is supported by the MoH and UNICEF co-chairs in **Pakistan’s KP**. Sub-clusters and working groups at provincial level are being strengthened in many countries, while they are currently under formation in some, such as in governorates in **Yemen**.

Arguably, the nutrition cluster/technical forum is not a sustainable mechanism unless taken over by national actors, however, its life span however temporary may be profitably used to link the emergency gains to long term policies and strengthen both vertical and horizontal coordination. The challenge is to find a way to maintain momentum so that visions are realized. To its advantage, the cluster generally has tools at its disposal such as websites, and usually donor backing to promote its function and connections to influence donors. This is sometimes dropped in non-emergency times with the downsizing or exit of OCHA and the sustainability of the cluster/forums becomes at risk; this is where it is important that UNICEF continue its support.

Intersectoral coordination. Promotion of greater inter-sectoral coordination was a key recommendation of interviewees in all five case study countries. For example, areas targeted for interventions to address acute malnutrition did not intersect completely with food aid or WASH. In **Chad**, nutrition coordination largely occurs within the cluster system; meetings between sectoral sub-clusters every 6 months are planned to harmonize activities.

Significant challenges exist for smoothing the way. Within UNICEF as in many other agencies, there are funding and administrative barriers to working inter-sectorally, the design of interventions mainly depends on donors and the donors are rarely the same for WASH and nutrition; each donor targets different regions and few are interested in long term investments. Thus planning interventions among sectors can be challenging and planning is more often done within the sector. Governments with support of donors

and assistance agencies should facilitate joint sector planning by removing funding and planning constraints and through greater efforts to advocate for cross sector planning and funding.

The 2012 *Global CMAM Synthesis Survey* respondents rated inter-sectoral coordination to be moderately effective (63%), not effective (35%) and very effective (2%). Numerous good practices are noted in inter-sectoral coordination.

- In the **Philippines**, SAM/GAM trends are shared with other clusters in order to improve or address underlying causes such as healthcare access, WASH access, etc.
- In **Chad**, the 'WASH in Nut' strategy in some feeding centers supported by UNICEF has led to an improvement in key nutrition outcomes.
- **Yemen** conducts the micro-plan approach after each SMART survey per governorate according to the malnutrition results. Then malnutrition is addressed through different key sectors such as WASH, education, food security, social protection, child protection and health.
- In **Cambodia**, a joint Food Security and Nutrition monitoring system is linked to the Emergency Food Reserve in draft legislation. Some local governments provide support to families affected by malnutrition and IYCF communication materials include WASH.
- In **Vietnam**, the CMAM areas are defined by a multi-dimensional child deprivation analysis (including poverty and utilisation of basic social health services).
- In **Kenya**, intersectoral collaboration is being strengthened with support from the MoPHS Nutrition Coordinator and UNICEF has delegated a WASH officer to support the WASH/nutrition linkages for HINI.

2.) Nutrition Policy and Strategy

The 2012 *Global CMAM Synthesis Survey* ranked having a national nutrition policy or strategy with CMAM included as one of the most important factors for increasing ownership at district level. This was important in both emergency and mixed emergency/regular CMAMs. Although many relevant government policies particularly in health and agricultural development can be cited as supportive for nutrition interventions, a nationally owned overarching strategy for nutrition is important to support CMAM's potential for long term impact. "...The need to reflect CMAM in a national overarching health policy is paramount if scale-up of the delivery of treatment through national health structures is to be properly supported and resourced."⁸⁹ Inclusion of CMAM in health policies and strategies is useful particularly if central health funds can cover some of the CMAM costs as the case with **Zimbabwe's** Health Transition Fund.

In many countries, however, health policy does not effectively articulate a national nutrition strategy, although disease control efforts for malaria, HIV/AIDS and maternal, new-born and child health contain nutrition components. Strategic nutrition inter-linkages need to be stronger and their relationships highlighted to international activities such as the SUN initiative, and the UN Comprehensive Framework for Action for Global Food Security and Climate Change Mitigation, among others.^{90 91} The *Nutrition Cluster Evaluation, Pakistan Flood Response* (September 2011) has concluded: "...a lack of overarching nutrition policy and strategy has resulted in an absence of clear coordination and strategic approach to Nutrition programming amongst agencies...".⁹²

In **Kenya**, a Food Security and Nutrition Strategy and Nutrition Policy (FSNP, 2011) and the 2012-2017 National Nutrition Action Plan (NNAP) have been adopted. The NNAP effectively provides a practical framework for coordinated implementation of nutrition interventions across sectors. While the FSNP provides a strong basis for food security development, it does not provide adequate guidance for addressing major causes of child malnutrition. A national nutrition strategy is currently in draft form.

⁸⁹ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. P 61.

⁹⁰ Shrimpton R, Saldanha L: **Kenya Nutrition Programme Review.** March 2011, Exec Sum.

⁹¹ Pilot project to strengthen emergency nutrition training in pre-service and in-service training courses, International Public Nutrition Resource Group and Emergency Nutrition Network; Initial visit to Kenya, 2010 and report of follow-up 2011.

⁹² GNC: **Nutrition Cluster Evaluation, Pakistan Flood Response, Interagency team: MOH, NGO's.** *Global Nutrition Cluster*, Sept. 2011, p 5.

3.) Dedicated Financial Support for Nutrition Interventions

As mentioned in numerous evaluations and synthesis exercises, funding parameters are a major constraint to sustainable CMAM. Emergency funds do not always translate to longer term interventions. Further, funds need to match government requirements such as for health service insurance or other long term measures to provide health services. While dedicated government commitment to funding the nutrition sector is poor in most case study countries, significant national contributions are made to supporting CMAM through the national health system. However, this contribution has been difficult to estimate and more effort is needed to ascertain costs and publicize use of government resources, as a means to demonstrate increasing national commitment as CMAM is integrated and scaled up. (See Chapter 6 for further discussion.)

In the meantime, strong advocacy is required to demonstrate the efficacy of increased investment in solutions for malnutrition. **Malawi** is cited as a good example of nationally dedicated funds for CMAM, particularly production and procurement of RUTF. In **Nigeria**, the three tiers of government (federal, state and LGA), provide an opportunity to secure funding. Although federal funding has not been forthcoming, some funding was available at state level for procurement of RUTF. At the LGA level, it has been possible to secure commitment for local distribution of supplies. In **Kenya**, a World Bank loan has been made available to fund RUTF. Governments, partners and donors need to work with stakeholders to identify accessible sources of funding such as through SUN, REACH, private funds, and initiatives for HIV and AIDS, MDGs, Disaster Risk Reduction, among others, to gain support for long term CMAM.

The synthesis of lessons, prepared by the Emergency Nutrition Network (ENN), CMAM Conference Addis Ababa, 2011, notes that: *in countries experiencing periodic emergencies, the challenge of 'stop start' support to governments for CMAM, particularly from NGOs and UN agencies and usually driven by funding constraints. It can hinder progress for scale-up and lead to inappropriately resource intensive solutions to implementation issues. Emergency driven funding can also shift ownership away from government, complicate programme coordination and lead to parallel programming, e.g. dual reporting systems.*⁹³ These unsustainable outcomes were all noted in the five case study countries.

An alternative framework for CMAM has been suggested to combat reliance on emergency funds.⁹⁴ This framework relies on the setting of local thresholds corresponding to the number of children with SAM that the health system can manage with minimal partner support. This would usually be on a facility by facility basis but could be on a district basis. Agreement would then be reached between district/sub-national/national health teams and potential support partners, as to the type and intensity of external support required on an ongoing basis (potentially minimal and focusing at district or sub-national level) and what additional support to add as the thresholds are exceeded. The focus therefore is on dealing with the so called 'grey area' between emergency and development funding mechanisms.⁹⁵

5.2 Sustainable Integration of CMAM in Health Systems and With Other Interventions

A predominant goal of CMAM globally and nationally is ensuring sustainability by integration of the management and services into the national health systems. However, there are no global standards for integration and there is no commonly accepted definition of integration into national health systems. What is globally agreed in principle, as per mandates of UN agencies and NGOs, is that integration is a measure of sustainability and for CMAM, necessary for prevention and expansion in emergencies. Interviewees and evaluations attest to positive outcomes of integration of CMAM. *The integration of CMAM in the national health system is ultimately contributing to sustainability because many health care*

⁹³ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network, CMAM Conference, Addis Ababa, 2011. Jan 2012.*

Hailey P, Tewoldeberhe D. **Suggested New Design Framework for CMAM programming.** *ENN Field Exchange, 2010, 39: 41-45.*

⁹⁵ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network, CMAM Conference, Addis Ababa, 2011. Jan 2012. p 31.*

providers have been trained and are enabled in the provision of CMAM as part of a national scale up.⁹⁶

The 2012 Global CMAM Synthesis Survey ranked the challenges to integration of CMAM into health services. There is a broad range of progress on integration among respondents. Integration is greatly challenged where health services themselves are very limited as in **Somalia**. In **Eritrea**, CMAM was integrated in national health services in all of its aspects from the start. “Other” challenges include need for greater national priority for CMAM, moving away from labelling CMAM as “emergency” only and facing competing priorities for interventions that have more regular funding, as well as need for more nationalization of guidelines and training materials.

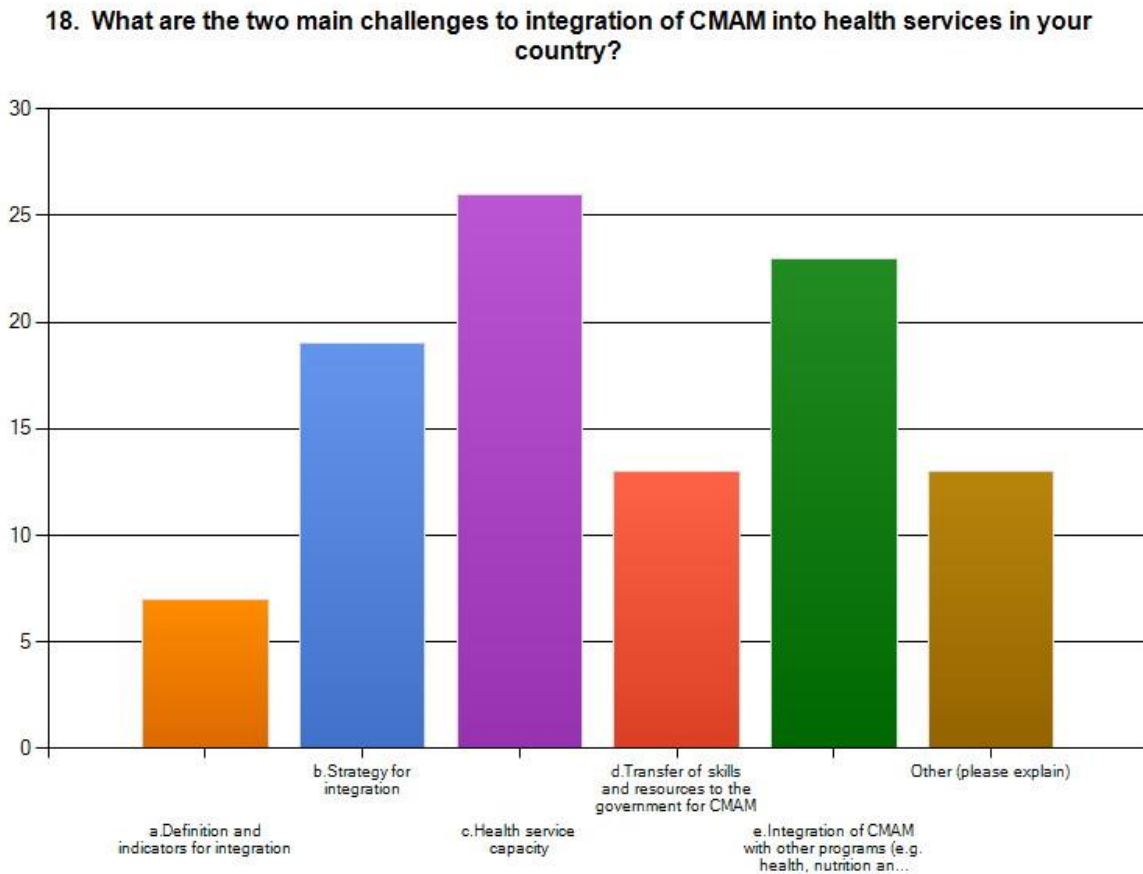


Figure 5.3: Main Challenges to Integration of CMAM into National Health Services, Global CMAM Synthesis Survey (2012)

5.2.1 Defining and Strategizing Integration

The Global CMAM Mapping Review (UNICEF, 2011) recommended the following: *Develop integration indicators: that demonstrate progress into health initiatives including Integrated Management of Childhood illness (IMCI), HIV/AIDS and tuberculosis, incorporation into annual health plans, health financing, pre-service training for doctors and nurses, etc. National budgets allocated to SAM could also be useful.* The 2012 Global CMAM Synthesis Survey indicated that pinning down definitions and indicators of integration was less important than other challenges, although still one of the main challenges. A strategy for CMAM integration was highlighted as a critical need among survey respondents. A challenge for CMAM is to determine how it is best integrated into the national health

⁹⁶ Deconinck H, Bahwere P, Adou P: **Review of Community-Based Management of Acute Malnutrition Implementation in Niger.** Washington DC: FANTA, 2011. p 8.

system and to set appropriate goals for management.

Health system capacity is the greatest challenge; it is clear that the effectiveness of CMAM will depend largely on the functioning and efficacy of the health delivery system. Health system capacity assessments to manage a nutrition intervention are recommended at the start of CMAM although this may not be newly undertaken. Addressing the weaknesses in the health care system needs to go hand in hand with CMAM integration. This will require, for example, the Ministries responsible for health and nutrition and development partners, e.g. UNICEF, WHO, WFP, IPs and relevant donors to work closely together.

Although integration is proceeding or planned in the five case study countries, integration has placed too much pressure on health staff. Staff expressed frustration at work burdens imposed by multiple interventions and reporting formats as well as roles and responsibilities that are not harmonized. In addition, some aspects of integration tended to be carried out piecemeal while others are considered to be parallel, partially integrated or co-managed. The presence of various levels of CMAM integration among countries suggests an analysis is needed of the relative merits of integration in various contexts.

Adoption, diffusion and eventual assimilation of an intervention in a health system necessarily involve their translation and transformation to ensure alignment of intervention elements with critical health system functions.⁹⁷ UNICEF is piloting a Global CMAM Mapping Framework for institutional integration of management of severe acute malnutrition into national health systems.⁹⁸ The objective is to support countries in assessing gaps, planning, priority actions and to guide sustainable scaling up. The framework uses the six WHO health system (HS) building blocks (governance, financing, human resources, supply, service delivery and health information system) as the health system entry points in this proposed framework.

When finalized, the Global CMAM Mapping framework will be extremely useful in planning but it was not available for the evaluation. In the five case study countries, a similar framework was used to review progress toward sustainable integration. Integration must factor in the many aspects of service delivery. Critical health systems interventions include: 1) Governance; 2) Planning; 3) Financing; 4) Service delivery; 5) Monitoring and evaluation; and, 6) Demand generation.⁹⁹ As discussed in Chapter 4, evaluating demand is critical and should be part of any framework to capture the viewpoint of communities and vulnerable groups and to balance the supply and programming perspectives.

Overall, sustainable integration has been minimally or partially achieved in the five case study countries and interviewees and evaluative reports generally agree on the need for accelerated integration. Many interviewees expressed concern that sustainable integration is at risk of being fragile unless there is agreement on a vision in each country of what sustainable integration means. Governments should decide where investment is the most critical and research may be needed on cost effectiveness to promote sound investment. For example, greater investment in health system staff capacity may pay off in terms of preventing MAM and SAM and medical complications, thus reducing costs. The CMAM model illustrates a progression of inputs and outputs but does not limit the means to achieve the outputs. For example, the cost of RUTF may be a considerable challenge and thus alternatives that will work in the realm of national capacity should be sought.

Evolving Roles of Implementing Partners (IPs) in Integration. In all five case study countries, IPs formed largely effective partnerships to support the government especially during high incidences of SAM and helped to build national capacity. CMAM sites run by government without NGO support were occasionally noted as less effective, but the comparison should be made with caution. NGOs, especially

⁹⁷ Atun R, de Jongh T, Secci F, Ohiri K, Adeyi O: **A systematic review of the evidence on integration of targeted health interventions into health systems.** *Health Policy and Planning* 2010, **25**: 1-14.

⁹⁸ UNICEF: **Global mapping Review of Community-based management of acute malnutrition with a focus on severe acute malnutrition.** Nutrition Section, *Nutrition in Emergency Unit, UNICEF NY and Valid International.* March 2011. P10. UNICEF ESARO started developing the framework in January 2011 (in 18 out of 21 ESARO countries), but this had to be interrupted because of Horn of Africa crisis. An extensive literature review continued in October 2011.

⁹⁹ Atun R, de Jongh T, Secci F, Ohiri K, Adeyi O: **Integration of targeted health interventions into health systems: a conceptual framework for analysis.** *Health Policy and Planning* 2010.

the large international, generally have their own resources to call upon and for some, many years of experience with CMAM. Costing exercises suggest that international NGOs have higher administrative and human resources costs than local NGOs, but overall they may be cost effective in promoting timely start-ups or expansion, although this will vary with circumstances. The challenge is to define how IPs can best promote sustainable integration. Determining this should be based on capacity needs assessments and setting out the support needed; a phased approach which incrementally hands more responsibility to government staff is likely to be appropriate where government capacity is inadequate.

In **Kenya**, IPs are transferring their roles in IMAM to the national health system through joint plans (and accompanying MoUs) between the government, UNICEF and IPs which fortify IP mandates to enhance national performance and move more responsibility and accountability to districts and communities. The IP support in Kenya now focuses on transferring capacity to the district particularly for supervision, supply management, monitoring and reporting. In **Ethiopia**, Concern Worldwide has defined its role through MoUs with regional health bureaus as a technical advisory one rather than as direct implementer of CMAM.¹⁰⁰

Lack of exit strategies or structured plans for capacity transfer may constrain progress on hand over of responsibilities to the government especially at the district level. In **Ethiopia**, most CMAM services are supported by IPs, who vary in their scale of support to woredas (districts). IP exit strategies differ on the time span and degree of scaling down their operation; some IPs do not have an exit strategy at all. Woredas are generally not informed about IP exit strategies although they need to be partners in the assessment of the capacity put into place which affects sustainability after IPs have departed.

Nepal's pilot project indicates that outcomes for integration may not always be stronger through NGOs than working directly with district health systems. IPs initiated CMAM in three districts but local ownership was weak. UNICEF later worked directly with health system staff in pilot districts by installing national technical advisors with very good results, ownership in one district was achieved in less than one year and technical advisors were released. Progress was not quite as efficient in other districts, however, plans were made for staff to share and gain experiences through mentoring.

5.2.2 Integration of CMAM with Other Interventions

The Joint Statement on CMAM (2007)¹⁰¹ promotes integration with other interventions which address HIV/AIDs and saving children's lives through:

“Integrating the management of severe acute malnutrition with other health activities, such as: preventive nutrition initiatives, including promotion of breastfeeding and appropriate complementary feeding, and provision of relevant information, education and communication (IEC) materials, and with activities related to the Integrated Management of Childhood Illness at first level health facilities and at the referral level, and initiating such activities where they do not exist”.

Numerous countries have been integrating IYCF support into CMAM or are planning to do so, e.g. **Nepal, Zambia, Afghanistan and Nigeria**. Linking IYCF with CMAM in Nigeria has been a response to the high level of relapses seen in CMAM.¹⁰² The following activities are typically integrated.

- Screening with MUAC is shared among interventions in all five case study countries
- Monitoring of weight is shared with MCH interventions
- CMAM guidelines are merged with IMCI and IYCF in some countries (**Nepal, Kenya**) or plans are being made to do so (e.g in **Ethiopia**). In **Nepal**, the national IMCI technical committee integrated CMAM with IMCI by including the three diagnostic criteria of SAM in the IMCI protocol: weight/height ratio <-3 SD, MUAC less than 115 mm and bilateral pitting oedema.
- Counselling and community sensitization is partially merged.

¹⁰⁰ Mates E: **Integrating OTP into routine health services. Concern's experiences.** *Field Exchange*, 2011, **39**: 41-45.

<http://fex.ennonline.net/40/integrating.aspx>

¹⁰¹ WHO, WFP, UN/SCN, UNICEF: **Joint Statement. Community-based management of severe acute malnutrition.** Jun. 2007.

¹⁰² ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. p 49.

Although merging or integrating CMAM with other interventions such as IYCF and IMCI is increasing, survey respondents cited this as a major challenge. For example in **Nepal**, the plethora of interventions has led to overlap and duplication of services and opportunities had been missed to integrate them due to different modes of scale up and lack of a unified scale up strategy.

“CMAM must be linked to the other programmes, it promotes a different process and it needs to be scaled up along with the others, for example, the Community-Based New-born Care Package (CBNC), which is going to reach 75 districts (total coverage). One must look closely at how CMAM is designed and build linkages into the model”. Implementing Partner, Nepal.

Resources are duplicated, including time and effort from central to community level in terms of, for example, planning and training.¹⁰³ Some issues mentioned include absenteeism at health service centres due to multiple trainings, some with overlapping themes; the logistical inputs to support activities are expensive and time consuming; health and nutrition messages can vary regarding the same concept; there were different messages given at different periods of contact, and sometimes no reinforcing of messages.

To promote efficiency, interventions should be integrated insofar as possible. For those countries starting up CMAM or for scale up to other districts, using entry points through other interventions for CMAM, or vice versa, may avoid a stand-alone approach for CMAM. There are numerous examples of successful integration of public health interventions. In **Malawi**, HIV/AIDS voluntary counselling and testing (VCT) for children with SAM was introduced as part of CMAM protocols. In **Mozambique**, Growth Monitoring and Promotion (GMP) was the initial entry point for identification of SAM. In **Sierra Leone**, outpatient care for SAM has been linked closely from the start with other health services (antenatal care (ANC), IYCF, EPI, GMP) as entry points for identifying cases and as points of referral of children with SAM for complementary services. This is attributed to good MoH leadership and ownership from the beginning.¹⁰⁴

High Impact Nutrition Interventions (HINI) in Kenya

Kenya has been implementing 11 High Impact Nutrition Interventions (HINI) since 2010 which are being progressively and sustainably integrated into the national health system. The HINI were first extensively discussed in the Lancet (January 2008) five part series on nutrition as effective in preventing malnutrition and mortality in children (26% of deaths prevented). The HINI package has been endorsed by a large group of partners including the European Commission in the “Scaling Up Nutrition (SUN) - A Framework for Action”.¹⁰⁵

The HINI interventions in Kenya include: breast-feeding promotion, complementary feeding for infants after the age of six months, improved hygiene practices including hand washing, vitamin A supplementation, zinc supplementation for diarrhoea management, de-worming, iron-folic acid supplementation for pregnant women, salt iodization, and iron fortification of staple foods, prevention of moderate acute malnutrition, and treatment of severe acute malnutrition. Exclusive breastfeeding (EBF) has been prioritized as one of the HINI interventions and a main intervention for the Nutrition Action Plan 2012-2017 strategic objective number 2: *To improve the nutritional status of children under 5 years of age.*

Importantly, the High Impact Nutrition Interventions have the potential of covering underlying causes of malnutrition such as poor pre-natal and maternal nutrition, weak infant feeding practices, and insufficient coverage of childhood disease prevention. Preliminary results indicate increased positive behaviour changes in the 22 districts (of 47) where HINI is implemented.¹⁰⁶ Funding for the HINI and promoting its wider coverage is critical to the prevention of wasting, stunting and underweight. Although the HINI is implemented through the national health system, there is still heavy reliance on the donor community to provide resources and on IPs to support the government staff.

¹⁰³ Core Group for Child Health Review and Planning. **An Integrated Programme Approach for New-born, Child Health, and Nutrition.** A presentation, Nepal, 2011.

ENN: Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons. *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. p 31.

¹⁰⁵ The SUN has been supported by over 100 international development agencies, including UNICEF and WFP. The SUN Movement is focused on implementing evidence-based nutrition interventions and integrating nutrition goals across sectors – including health, social protection, poverty alleviation, national development and agriculture. The GoK launched the SUN in Kenya at a National Nutrition Symposium on 5 November, 2012. SUN website

¹⁰⁶ UNICEF: **Improvements in Infant and Young Child Nutrition in HINI supported districts.** PowerPoint presentation, UNICEF, Oct. 2011.

5.3 Chapter Summary

National ownership of CMAM and national efforts to address malnutrition are improving; at the district level where CMAM is largely implemented, ownership is increased through national guidelines, a national nutrition policy with CMAM included, and national leadership for coordination. While global estimates of wasting indicate improvement in the past two decades, the five case study countries have seen little improvement in wasting thus more work is needed to promote national commitment of funds and coordination among interventions.

Generally, **national guidelines** effectively describe standardized treatment protocols and have been developed into training materials and courses, however, guidelines require expansion to discuss planning, information and monitoring, equity, and integration, as well as to clarify screening, admissions and referral procedures. Merging CMAM guidelines with those of other interventions is needed the most to improve efficiency. The appropriateness of the Sphere minimum humanitarian standards as performance indicators should be reviewed among national and global stakeholders.

Critical interconnected components of **nutrition governance** to support CMAM were seen to be: 1) nutrition authority and leadership; 2) nutrition policy and strategies; and, 3) dedicated financial support for nutrition interventions. All case study countries require strengthening of **national nutrition authority** with appropriate capacity and decision making power to manage the various nutrition interventions and advocate for greater resources including for CMAM services. Although many relevant government policies support nutrition interventions, not all countries have a **nationally owned overarching strategy for nutrition** which is important to support CMAM's potential for long term impact. Nutrition inter-linkages should be highlighted with international activities such as the SUN and REACH initiatives, and the UN Comprehensive Framework for Action for Global Food Security and Climate Change Mitigation. Joint efforts are needed to ensure that nutrition strategies have funding for their implementation.

Funding parameters among emergency and development interventions are a major constraint to sustainable CMAM. **Government contributions to CMAM** have generally increased particularly through scaling up within the national health systems; strong advocacy is required to demonstrate the efficacy of increased investment in solutions for malnutrition. Governments, partners and donors need to work with stakeholders to identify accessible sources of funding such as through SUN, REACH, private funds, and initiatives for HIV and AIDS, MDGs, Disaster Risk Reduction, among others, to gain support for long term CMAM, and work toward finding alternative frameworks to combat reliance on emergency funds.

The formation of **central and local coordination** groups including nutrition technical forums have supported development of policy and strategy; more attention is needed to strengthening district and community coordination groups and evaluating their outcomes. Promotion of greater **intersectoral coordination** is a key concern for tackling acute malnutrition; planning intersectoral collaboration is constrained by funding requirements from different donors. Good practices in intersectoral coordination need to be more widely shared.

There are no global standards for **integration of CMAM management and services into the national health systems** and most countries do not have a national strategy for integration. UNICEF has piloted a Global CMAM Mapping framework which can provide guidance. Sustainable integration has been minimally or partially achieved in the five case study countries, but health staff are burdened with multiple interventions and reporting formats as well as roles and responsibilities that are not harmonized. Implementing partners (IPs) are contributing more fully to integration through effective MoUs and indicators; more work is needed to define their roles in integration, including sharing capacity assessments and exit strategies.

Numerous countries have been **integrating other interventions (e.g. IYCF or IMCI)** or some activities with CMAM or are planning to do so, however the process presents a challenge in terms of different modes of scale up and lack of a unified scale up strategy. The result has been inefficiencies in training and over burdening of staff. There are numerous examples of well-functioning integrated interventions such as the adoption of 11 High Impact Nutrition Interventions (HINI) in Kenya. Good practices and lessons should be widely shared and global and regional guidance strategies developed.

Lessons Learned: Progress and Issues in National Ownership

National Guidelines: *National guidelines need to be broadened or opportunities will be lost to consult with and train staff on important aspects of CMAM, including assessment, planning, monitoring, integration and equity. Among reasons that community outreach is not reaching potential is the need for more detailed guidance on activities and agreement on screening, referrals and admissions procedures to support the roles of CHWs and other health workers.*

National Nutrition Authority: *If nutrition authority is not strong enough at central and district levels - that is supported with needed status, experience and funding - efforts to advocate for resources and collaboration with other stakeholders may be limited in results. Cultivating nutrition expertise among health professionals and future national nutrition leadership and authority through academic and public channels is an effective way to build national nutrition authority.*

National Nutrition Strategy: *The presence of strategies for interventions interrelated with nutrition do not ensure that nutrition is also a priority and nutrition outcomes cannot be assumed; nutrition indicators must be tracked to show evidence of outcomes, and funding devoted to realizing these outcomes.*

National Leadership for Nutrition Coordination: *Central nutrition coordination groups need to continuously work toward greater national ownership at all levels. This means that both the central level and the “sub-clusters” must help to develop capacity in districts and other smaller administrative units - the structure, functioning and outputs of coordination and nutrition support groups in districts and communities should be evaluated and strengthened.*

National Leadership for Intersectoral Coordination: *The sectoral funding parameters restrict greater collaboration on strategies and interventions and lead to sector silo planning; government and donors need to work together to remove funding and planning constraints and advocate for cross sector planning and funding.*

National Financial Commitment to Nutrition Goals: *Without figures on governments’ contribution to CMAM through the national health system, it is difficult to demonstrate the level of commitment to scaling up and integration. This information can be combined with strong advocacy for commitment of national budgets to address malnutrition.*

Integration of CMAM into the National Health System: *Integration of CMAM needs to be well structured or progress will be difficult to monitor and steer. This includes being led by a national strategy jointly developed among government and its partners with indicators for integration in results based plans, and through MoUs stipulating what roles partners have in integration, all together in a process that is well informed by good practices and global or regional guidance.*

Integration of CMAM with other interventions: *Due to inefficiencies that result from CMAM as a stand-alone intervention, integrating CMAM activities and guidelines as much as possible with other interventions from start-up is advisable, drawing on examples of well-functioning integrated interventions.*

6 Cost Efficiency, Supply and Delivery of RUTF, and Increasing Access to CMAM Services

This chapter covers cost efficiency and technical assistance, sustainability of CMAM, and challenges for scaling up (expanding) services to provide access to more children in need. First the chapter presents a cost analysis of CMAM across the five countries, illustrating cost sharing arrangements and cost per beneficiary. This is followed by a discussion of the use of RUTF and basic medicines and supply and delivery systems. Quality and effectiveness of technical assistance by government, UNICEF and Implementing Partners (IPs) is then examined, as well as capacity development and coordination of technical assistance. The chapter concludes with a review of facilitating factors and constraints to increasing access to treatment.

6.1 CMAM Cost Analysis

In each of the five case study countries, an analysis was conducted of CMAM costs. (See the methodology section for information on data collection and analysis.) The cost analysis is in three parts which present: 1) a picture of how total, capital and recurrent costs are shared between the major contributors, the government, UNICEF, IPs and WFP; 2) costs per recovered child; and 3) comparisons between modes of delivery, NGO-supported and government health service.

In the case study countries, the government contributions to CMAM mainly through health system support costs are presumed to be substantial but underestimated as government capital investment costs such as buildings and medical equipment, and recurrent costs such as gas and water were generally not available. The importance of calculating the government contribution to CMAM is discussed in Chapter 5, especially in regard to drawing funding to long term CMAM based on confidence in sustainable and increasing government investment.

6.1.1 Estimated Sharing of CMAM's Total Costs, Capital Costs and Recurrent Costs¹⁰⁷

The following are summaries by country looking at the contribution of the main partners for CMAM. It is noted that many donors contribute to these partners and there are other donations outside these calculations. IP contributions were not available in all countries. Comparison is limited by the available data. Complete WFP data was only available in Kenya so Kenya has the most complete costing of the four CMAM components where MAM management includes supplementary feeding. The WHO has contributed to upgrading a number of inpatient facilities in some countries but cost data was not available.

In **Nepal's** five district pilot project where there was no supplementary food distribution, UNICEF (53.2%) and the government (46.8%) each bore close to half the total costs. While UNICEF supported more than half the capital costs (84.9%, compared to government's 15.1%), the government supported more of the recurrent costs (55.6% compared to UNICEF's 44.5%). In **Nepal** there is a high correlation between the number of outpatient treatment services and percentage share of capital cost of the government. Increase in the number of outpatient treatment facilities increased the cost to government and also implicitly increased the quality of services and coverage. In Nepal, most CMAM sites were administered for a greater length of time by the district health offices rather than UNICEF-supported IPs, which has reduced UNICEF's contribution.

In **Pakistan's KP province**, estimates were based on 45 CMAM sites. UNICEF contributed 95% of the total cost whereas 5% was contributed by the IPs. The GoP makes a significant contribution to CMAM's capital costs through provision of health facilities but these costs were not available for the analysis. In terms of capital costs, UNICEF's contribution was 82% while IPs contributed 18%. Salary top-offs for health staff comprised 20% of UNICEF's share. For recurrent costs, UNICEF contributed 96% and IPs 4%. Government support for health staff and utilities comprises an estimated 7% of recurrent costs.

¹⁰⁷ *Capital cost*: vehicles, equipment, buildings, spaces, hospital rehabilitation, storage facilities, capacity building training, and guidelines development; *Recurrent cost*: budget allocated for salaries of staff, Top-ups salary to the government staff, allowances, monitoring and supervision, refresher training, petrol, utilities, budget allocated for provision of drugs, medicines, food supplements and RUTF; The cost per beneficiary is based on the total cost which include both the capital and recurrent cost.

WFP's contribution of Fortified Blended Food (FBF) constituted the highest recurrent cost at 21% of the total recurrent budget.

In **Ethiopia**, data was drawn from 15 woredas (districts) in five regions, only the total costs were estimated. UNICEF contributed an estimated 75%; the government's contribution was approximately 25%. The average cost breakdowns by category per woreda are depicted on the chart below and show the RUTF as the major expenditure.

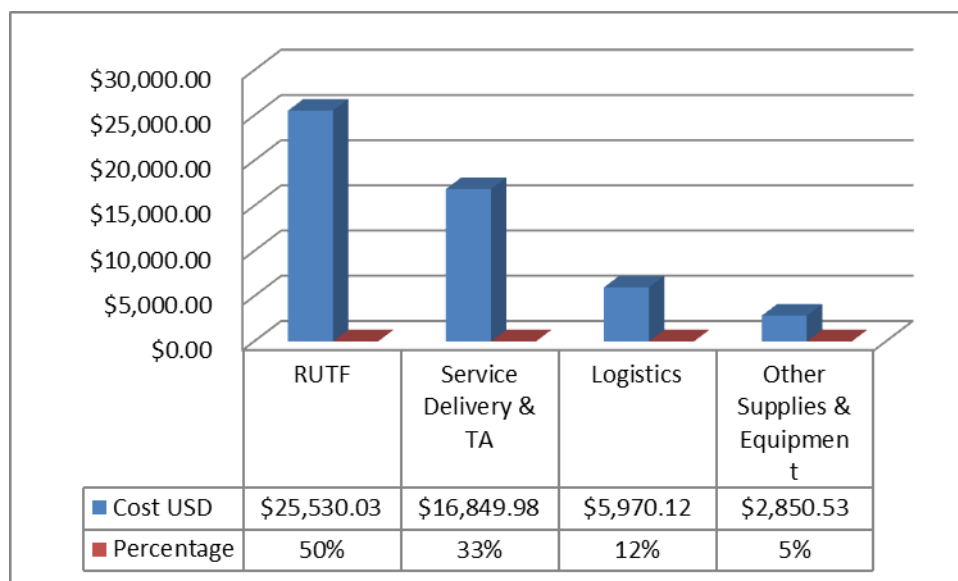


Figure 6.1: Percentage Share of Total Cost Among CMAM Components per Woreda.

In **Chad**, the 11 regions supported by UNICEF were included in the analysis. UNICEF contributed 94.6% and the government supported 5.4% of total costs. UNICEF supported the entire capital costs of CMAM (outside of government support for basic infrastructure), while government support for recurrent costs was 6%.

In **Kenya**, all CMAM sites were included in the analysis. UNICEF's contribution to the total cost accounts for 54% and WFP's 30%, while the government contributes 16%. The government contributed 3% to the capital expenses, mainly in the form of computers, while the remainder of capital costs supported by government were not available. Recurrent costs were more equally distributed between government (16.5%), UNICEF, (52.7%) and WFP (30.8%). Combined, UNICEF and WFP spent 52% of recurrent expenditures on RUSF and RUTF.

Among the five countries, the RUTF products were the major recurrent costs in Kenya (24%) and in Pakistan's KP (33%) where RUSF costs were included in the total recurrent calculation. The RUTF was the major recurrent cost in Nepal (50% of total recurrent costs), Ethiopia (50%) and Chad (59.1%) where RUSF was not factored in. (See discussion on RUTF in the next section.)

Conclusions from the cost sharing analysis

While expectations of cost sharing over time cannot be completely generalized, these were observations in some of the countries.

- Due to heavy investment by UNICEF for capacity building, CMAM protocol development and equipment procurement in starting up CMAM, UNICEF's contribution is initially higher through one time and limited contributions and is reduced over time.
- As interventions such as IYCF and IMCI are merged with CMAM costs should be reduced.

- As CMAM gets older the percentage share of total cost (capital + recurrent cost) of government tends to increase, when the government participates in cost sharing through integration of CMAM into the health system.
- Comparisons among districts in some countries (**Nepal, Kenya**) revealed that some performed better than others (more recovered children per money spent), but reasons were often difficult to confirm, in some cases greater investment in community outreach paid off in more admissions and recovery and in some, older CMAMs performed more efficiently.
- In **Nepal** both the highest capital costs for UNICEF and the highest cost per beneficiary occurred in the most remote mountain districts which were also in the highest need, thus planning needs to factor in these costs.
- Factors of lower costs in **Pakistan and Ethiopia** are population densities (higher density is less costly), camps versus non-camps (camps are more expensive) and the remoteness of districts (central services are less expensive).
- In **Pakistan's KP**, government health workers in clinics received salary top-offs by IPs to perform CMAM duties, which may be the case in other countries and a practice noted to be expensive and unsustainable, unless government assumes this burden.

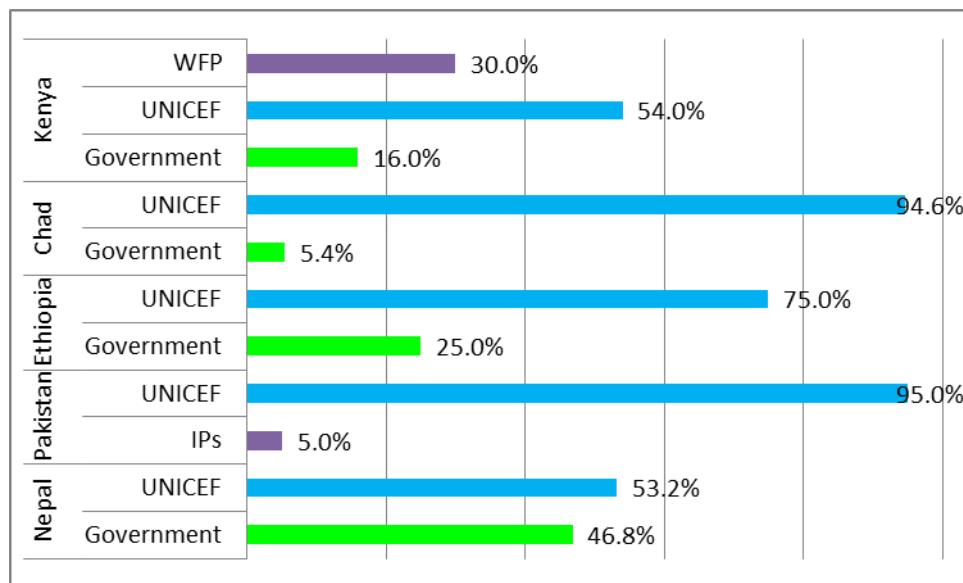


Figure 6.2: Share of total CMAM total costs between UNICEF, WFP, government and IPs

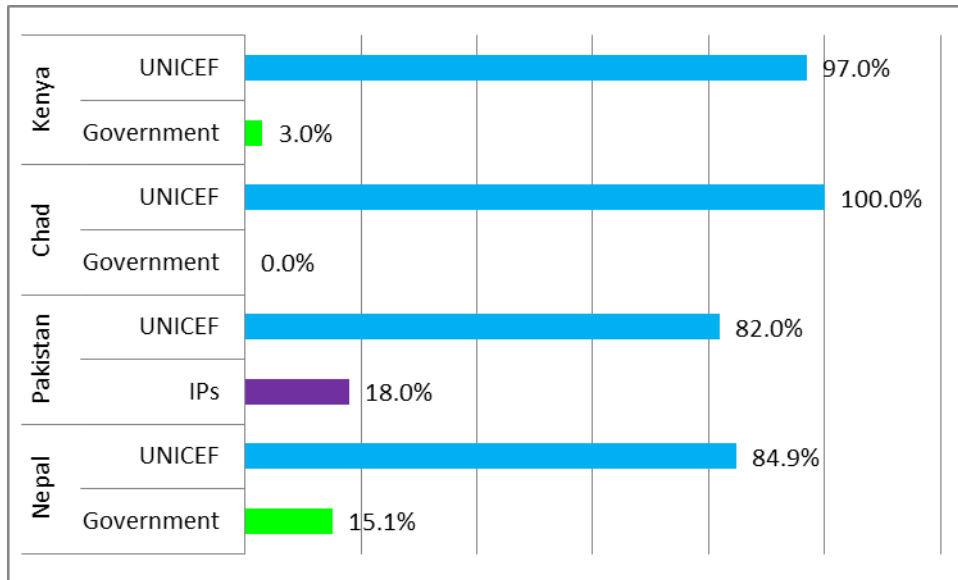


Figure 6.3: Share of capital costs between UNICEF, government and IPs in Nepal, Pakistan, Chad and Kenya

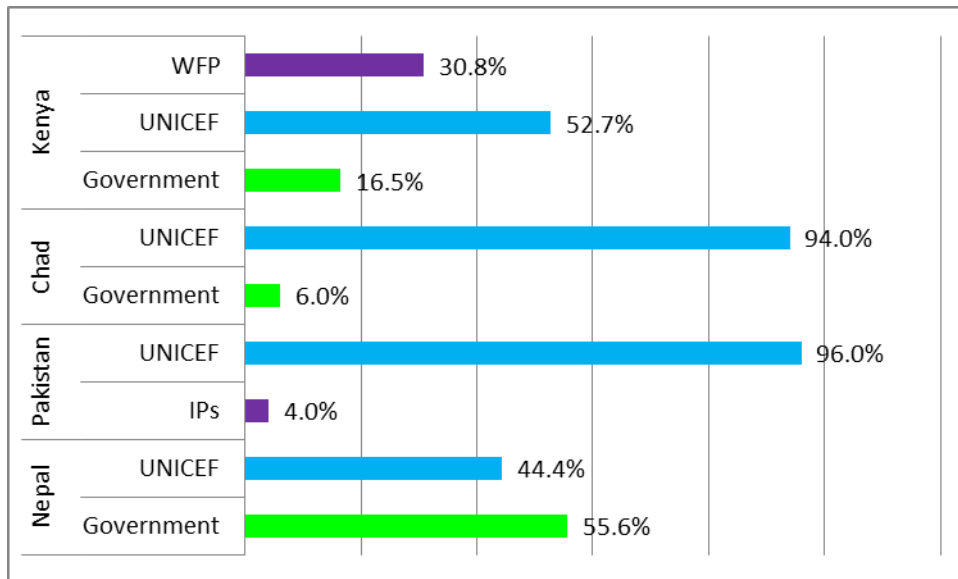


Figure 6.4: Share of recurrent costs between UNICEF, WFP, government and IPs in Nepal, Pakistan, Chad and Kenya

6.1.2 Cost Per Beneficiary

Table 6.1 shows that on average, it costs \$3 per admitted child in Nepal and Pakistan's KP for community outreach/screening (data was not available for the other countries). For inpatient treatment services, it costs \$230/per child in Pakistan's KP, while it costs \$85 per child in Kenya. This dramatic difference is due to salary top offs for nurses and honoraria for paediatricians in Pakistan's KP. In addition, the cost for establishing the inpatient services is included in the cost computation in Pakistan, whereas this data were not available in Kenya.

Outpatient treatment for a child with SAM costs an average of \$145 in Pakistan's KP, whereas it costs \$94 in Kenya and \$77 in Nepal. The cost is higher in Pakistan as compared to the other countries because government health workers receive salary top-offs

Combined inpatient and outpatient treatment costs \$196 in Chad and \$110 in Ethiopia. Cost data were merged in these two countries, and could not be disaggregated. The lower cost in Ethiopia is attributed to more involvement of the MoH in the transportation of RUTF from districts to the health facilities, thus more sharing of the recurrent costs. If Ethiopia changes from the current SAM admission cut off point of <11 cm MUAC to the 2006 global standard of <11.5 cm (weight for height <3 SD of WHO standards) to reach more children, the cost per child will decrease but cost per woreda (district) will increase significantly by as much as 100%.

In regard to MAM management, it is more expensive to manage a MAM case in Kenya (\$57) than in Pakistan (\$21) and Nepal (\$7). The low cost in Nepal is due to the absence of supplementary feeding and counselling inputs only. In Pakistan's KP and Kenya, children with MAM receive supplementary foods. The higher cost in Kenya as compared to Pakistan is related to the costs of the supplementary foods; in Kenya, children receive the Corn Soya Blend or local supplementary flour, which are heavier thus more expensive to transport than the packaged RUSF distributed in Pakistan.

In all countries, the cost per child decreases from high to less severity of cases, that is from SAM to MAM status, thereby showing out the importance of investing in prevention of SAM. The cost per child also increases from less to more remote districts, because of scattered catchment areas and long distances to transport the supplies.

Table 6.1: Comparison of cost per child in US \$ among countries

	Community outreach	Inpatient treatment of SAM	Outpatient treatment of SAM	MAM management
Nepal	3	-	76.8	7.2
Pakistan	3	230	145	21
Ethiopia	-	-	110	-
Chad	-	-	196	-
Kenya	-	84.54	93.79	56.51

Notes:

- The community outreach component has been excluded from the analysis in Ethiopia, Chad and Kenya, because of lack of screening data.
- In Nepal, due to limited information available on use of medicines to treat SAM cases with complications it was difficult to estimate the costs of SAM management in inpatient treatment services.
- MAM cost management was not analysed in Ethiopia and Chad. MAM component was not part of the CMAM evaluation design in Ethiopia.

Implementation modality. In the five case study countries, CMAM is generally implemented through three implementation modalities: a) providing funds to international NGOs (INGOs) that in turn support the MoH for implementing the activities in the districts; b) direct support to the government by UNICEF which provides technical assistance to the MoH; and c) providing funds to local NGOs for supporting the government in implementing the intervention. In **Nepal** the second modality (direct support to the government by UNICEF) is the most cost-efficient because of stronger ownership of the government. In **Pakistan's KP** implementing through local NGOs proves to be more cost-efficient than through INGOs, because of lower cost of human resources.

Disbursement of funds. The rate of disbursement of funds is generally good in all countries. The common challenge is the timely approval of project documents and signing of memorandum of understanding. As per the interviewees, this takes relatively long in Kenya. Co-financed interventions also take too long to kick off because of delays to disburse funds by the co-donors simultaneously. In Pakistan, interviewees complained about short term agreements of three to six months between UNICEF and IPs which adversely affect the performance of their staff. The limited PCAs are reflective of lack of commitment to long term funding and planning.

6.2 Use and Supply of RUTF and Essential Medicines

*RUTF lies at the centre of the CMAM approach. It represents about half of the total costs for implementation (for SAM treatment), is a heavy and 'high value' product and a constant supply is required.*¹⁰⁸

In the five case study countries, RUTF is perceived as an effective treatment for SAM because it promotes rapid weight gain. Parents are pleased with their children's acceptance of RUTF as they become used to it. RUTF is also appreciated by health staff as it is quick to dispense and there is no need for preparation as in the case of therapeutic milks. While it is heavy, it is not bulky, and it is sealed, thus requiring less transport and storage space than foods of equivalent value. The use of the product has helped countries to move closer to attaining MDG4 goals and bringing children out of SAM. At the same time, interviewees note that it is the cost of RUTF that makes the CMAM intervention for treatment of SAM less likely to be sustainable.

Usage, production, and supply of the RUTF have to become more efficient in light of needs to scale up CMAM to reach more malnourished children in a sustainable manner and in view of the funding constraints and heavy reliance on emergency funds. There are several main means to do this: 1) promote efficiency among users and dispensers; 2) increase sustainability of storage and delivery systems; and, 3) develop national supplies through local production systems which meet international standards.

6.2.1 Promoting Efficiency of RUTF Usage

There are a number of user/dispenser challenges which if addressed will increase efficiency. Overall these measures could help to reduce supply outages which may discourage caretakers from further participation in the services. (All of the case study countries reported that outages of RUTF occurred at times, although in all countries supply efficiency was improving.) The main challenge is sharing of RUTF among siblings. This might explain longer lengths of stay (LOS) in some countries. As with the supplementary foods, some RUTF is being sold as a source of income, and some RUTF is being used to manage MAM. Addressing these issues would imply linking other members of the affected households to general food distributions, other programs to improve food security, or interventions such as IYCF for sensitization and counselling. Improvement of storage facilities and storage management can contribute to reduction of losses. In **Nepal**, plans were being made for supply managers in the districts to receive training for more efficient stock management from the national health system central supply managers.

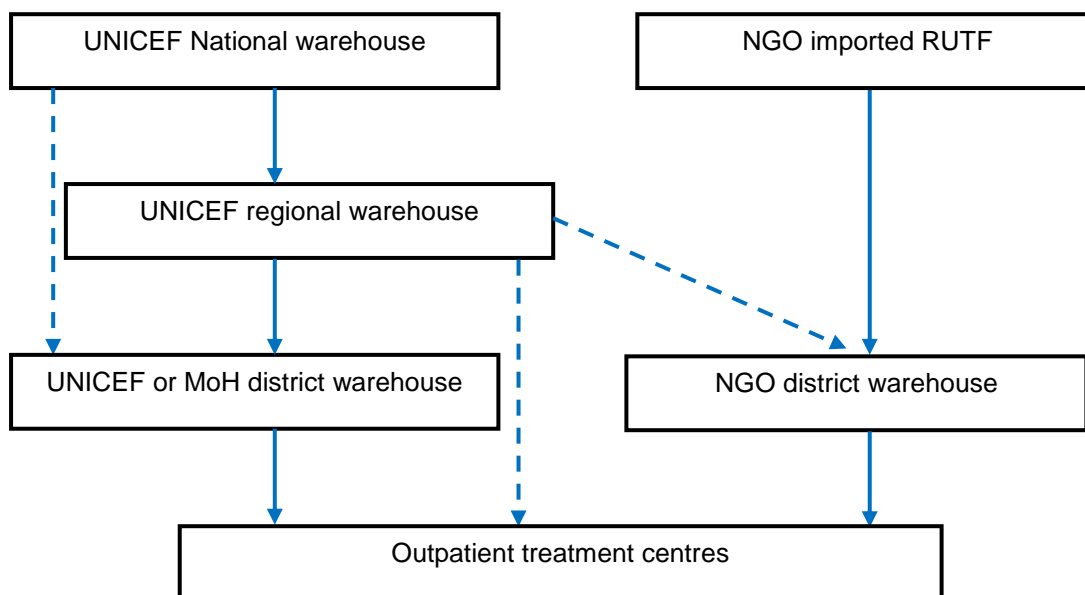
Improvement in health staff counselling of caretakers on RUTF administration is also needed. The **Kenya** "National Guideline for Integrated Management of Acute Malnutrition" (2009, pages 102-103) offers guidance to be provided to caretakers for efficient administration of RUTF, stressing the therapeutic properties and monitoring of RUTF usage. The roles should be highlighted of CHWs in making home visits and checking on caretaker's knowledge and practice for administration of RUTF.

6.2.2 Increasing Sustainability of Storage and Delivery Systems

Investments in improving the efficiency of the national supply and delivery chains may help to open up more areas to expansion of CMAM and reduce the need for unsustainable largely parallel systems currently in place in most of the case study countries. It is noted that partly due to weak confidence in national supply chains and insufficient dedication of government funds for purchase and transport of RUTF, UNICEF, WFP and IPs manage all or part of the supply management and delivery. In **Ethiopia**, the supply management system used for CMAM is implemented for the most part outside the national

¹⁰⁸ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. p 41-45.

health system logistics by UNICEF and IPs, except for use of FMoH warehouses in district hospitals. In **Pakistan's KP**, UNICEF coordinates and supplies all the IPs, while in other countries, each IP independently imports RUTF, using multi-donor funds. Figure 3.5 presents the RUTF delivery mechanism in the case study countries (this figure is adapted from the Ethiopia RUTF delivery system).



If CMAM is to be sustainable, supply and logistics should be integrated into the national supply chain management system. This requires exploring the challenges and opportunities to work through the national logistics system and developing a transitional plan for strengthening this capacity while at the same time ensuring availability of RUTF at facility level through other mechanisms. The externally supported system can progressively strengthen the national capacity to anticipate orders, ensure contingency stock and prevent shortages. According to the *2012 Global CMAM Synthesis Survey*, the three factors that are likely to promote supply chain efficiency for CMAM through the national supply and logistics system would be a) stronger planning and forecasting, b) assessment of national supply chain weakness and c) usage of the national system by IPs (See Figure 6.5).

All case study countries reported pipeline breaks in the past but forecasting and ordering improve with the age of CMAM. The CMAM in **Nepal** which is small by comparison (five districts) is largely integrated with the national health system delivery mechanisms and has significantly improved communications regarding demand from districts. In most countries, orders are anticipated and most health facilities are supplied on a regular basis. The main constraints to timely delivery of RUTF to the hands of caretakers are the poor road networks, especially during rainy seasons, and the inadequate storage spaces. To address storage and seasonal demand issues, IPs assist by procuring containers in some districts in **Kenya**, and in **Chad** UNICEF pre-positions RUTF in the districts and the MoH delivers critical quantities to the health facilities (if there is enough space) before the occurrence of the rainy season.

Outages are a more common issue with regard to essential drugs in the five case study countries. The fact that RUTF and some of the routine drugs used in CMAM are not registered as essential drugs in the countries has not facilitated the importation process in some countries. CMAM commodities and supplies should be included in the essential drug/commodity list. Evaluations in **Ethiopia and Kenya** have made recommendations to this effect.

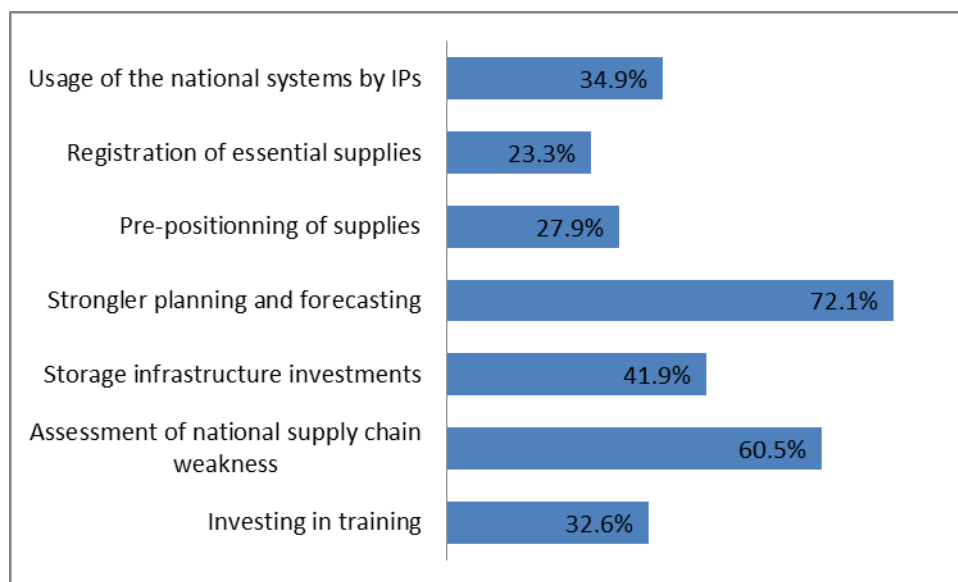


Figure 6.5: Factors most likely to promote supply chain efficiency through the national logistics systems, Global CMAM Synthesis Survey (2012)

6.2.3 Developing National Supplies of RUTF Through Local Production Systems

*It is clear from the case studies that in order for CMAM to gain a footing in a country and begin to expand, a major RUTF benefactor has been required.*¹⁰⁹ UNICEF is the main provider of RUTF and routine medicines in countries implementing CMAM, providing over 80% of RUTF; a significant amount is provided by the Clinton Foundation (CHAI). UNICEF fosters competition among international suppliers and the market has diversified to include suppliers from the Dominican Republic, Ethiopia, France, Haiti, India, Kenya, Madagascar, Malawi, Mozambique, Niger, Norway, Sierra Leone, South Africa, Sudan, Tanzania and USA, in addition to Nutriset in France, the major supplier.¹¹⁰ According to UNICEF, global sales of RUTF have been stable over the past three years, whilst the numbers of SAM cases is far from being reached. A key question, as raised at the CMAM Conference in Addis Ababa (2011), is whether the plateauing of sales of RUTF reflects a lack of global production capacity or a lack of capacity at country level to reach more SAM children with RUTF. If either of these are the case, the follow up question is whether these sales figures indicate a need to do things differently if greater scale up of CMAM is to be achieved?¹¹¹

Most of the RUTF used in the five case study countries is imported and transportation costs are included in its ultimate price. In all five countries, most interviewees were overwhelmingly in favour of more aggressively pursuing and investing in options for increasing or starting local production of RUTF, in order to improve efficiency and contribute to the local economy. Local production of RUTF is increasingly being viewed as the sustainable solution for CMAM in **Nigeria**. Initial support of food technologist to ensure quality assurance at identified factories will be required. Expertise to conduct an evaluation that compares cost-effectiveness of local production versus importation will also be needed. The biggest challenge seems to be raising enough capital for product research and development which can cost millions.

The UNICEF Supply Division works with potential suppliers, providing guidance on setting manufacturing facilities both to country offices as well as to companies that are expressing their interest. The first country authorized to purchase RUTF locally was Niger where RUTF is purchased from local source since 2006. By 2013 there are active local manufacturers in **ten (10)** programmatic countries (Burkina Faso, Ethiopia, Haiti, Kenya, Madagascar, Malawi, Niger, Sierra Leone, Sudan and Tanzania). However “setting manufacturing facility in countries with minimum industrial infrastructure” is not an easy task, and even

¹⁰⁹ Ibid, page 41.

¹¹⁰ UNICEF: **Global SAM Treatment Update**. 2012, p7.

¹¹¹ Ibid, page 41.

after establishing local production its sustainability is not always assured (as witnessed by supplier in DRC and Mozambique which ceased their operation due to financial and logistics constraints). It is also important to underline that local production is viable only once certain level of sustained demand is reached (about 420 MT/year, according to Nutriset).

There is not yet evidence showing that locally manufactured RUTF significantly lowers the prices. However the benefits from local production in areas of smooth supply stream of product (no need to store large quantities of imported product, less transaction time spent on clearance of imported product etc...) are better observed in countries where local production is mature. Access high financing cost and costs of key raw materials, lack of independent laboratories for testing raw materials and finished product in developing countries seems to be a major hurdle for cost containment.

*In addition to the patent (restrictive patent held by Nutriset) the two main limiting factors for the proliferation of local production of RUTF have been the sourcing and cost of ingredients (particularly sourcing of quality peanuts and the costs of milk powder) and the quality control required to ensure an absolutely safe product is supplied to such a vulnerable group.*¹¹²

In **Pakistan's KP**, cultural acceptance of foreign made products was seen to be difficult on the part of health workers and communities, and they would prefer to see "Made in Pakistan" (as the case with Wawa Mum used by WFP for other interventions) which would help in acceptance of the CMAM approach. In **Nepal**, potential producers are willing to embark on the process of local production of alternatives for the RUTF and for addressing MAM through the production of local food supplements, but they need funding commitment from UNICEF and donors.

Ethiopia and Kenya have the capacity to produce and deliver RUTF, but they are not yet able to cover the demand country wide. In **Ethiopia**, approximately 35% of RUTF is produced locally; a local producer, Helina, can cover 100% of the need but lacks enough working capital. According to a World Bank assessment, local suppliers are not investing in RUTF due to lack of access to market information, low access to financing and a weak value chain. Further some ingredients in the RUTF recipes may need to be imported until the local market can provide products up to standard. Therefore, governments should facilitate local production by exempting market-oriented nutritious commercial foods from taxes such as micronutrients and powdered milks that are imported.

In **Kenya**, some private companies started RUTF production, and a local NGO mills and distributes supplementary foods at a reduced cost. However, achieving the quality standards required by UNICEF for RUTF requires strong technical support, for example, because of vulnerability of peanuts to aflatoxin contamination. In addition, efficacy and effectiveness of locally produced supplementary foods have not yet been explored scientifically, although the products are approved by the Kenya Bureau of Standards.

The production of RUTF in **Malawi** is often cited as a good example of successful product development and marketing, where production has exceeded local demand and export is now possible. Some key factors leading to success are: strong government support and funding for purchase of RUTF while developing local supplies, and use of a 'farm to mouth' approach in conjunction with the national association of smallholder farmers of Malawi and other organisations, with the aim of improving the quality of peanuts and providing a guaranteed market for farmers.

For years, UNICEF and numerous other stakeholders have illustrated the means to develop local production including the clearing the hurdles.¹¹³ Lessons have been learned in recent research on linear programming to design local RUTF production systems.¹¹⁴ However, it is unclear whether efforts by the

¹¹² http://www.unicef.org/supply/files/RUTF_Pricing_Data_final.pdf

¹¹³ Jarrett S: **RUTF: Addressing the situation of children in Africa with severe acute malnutrition**. Presentation to PIH/TUFTS Conference, UNICEF, Oct. 2007.

¹¹⁴ Owino V, Irena A, Dibari F, Collins S: **Development and acceptability of a novel milk-free soybean–maize–sorghum ready-to-use therapeutic food (SMS-RUTF) based on industrial extrusion cooking process**. *Maternal & Child Nutrition*, 2012. <http://onlinelibrary.wiley.com/doi/> and Collins S: **Development and acceptability of a novel milk-free soybean–maize–sorghum**

MoH and its partners such as UNICEF and WFP are strong enough to advocate for and to support the work that needs to be done to make local production a reality. Overall, international standards may become more stringent in order to ensure a safe product. Typically, barriers to production were cited by stakeholders more often than facilitating factors, when many conditions are in fact conducive to building up production. The risks concerning promoting investment should be assessed against the risks involved in lack of expansion of CMAM and not reaching a greater number of malnourished children while continuing to support an intervention that is not completely unsustainable.

6.3 Coordination of Technical Assistance: Capacity Development and Partnerships

Global guidance describes what management and coordination entail for CMAM: *“Existing health services and initiatives should be mapped and the programme planned with the relevant authorities and agencies to prevent duplication, build upon and strengthen existing structures and systems, and ensure that referral pathways, roles and responsibilities are clear.”*¹¹⁵ This section describes the quality of support provided by technical assistance from government and partners. It focuses on what contributes to as well as what the challenges are regarding fostering national ownership of CMAM and promoting scaling up in the most efficient manner.

6.3.1 Capacity Development

Intensive training was undertaken in all five case study countries to prepare health workers to implement CMAM. **Nepal** managed to have over 8,500 participants in various trainings; **Ethiopia** reached over 50,000 participants and trained 56% of Health Extension Workers (HEWs). Training has promoted quality of services in assessment, treatment and counselling. Training has resulted in changing attitudes toward nutrition science and has given staff confidence in conducting measurements, weighing, plotting and registration of complicated cases, admission, referral, treatment, and implementing discharge protocols.

In terms of the most efficient mode of training, some countries (e.g. **Kenya**) have invested more in on the job training (OJT) as the main means of KAP transfer. **Nepal** relies on TOT cascade training with positive results. The *2012 Global CMAM Synthesis Survey* found that OJT slightly surpassed TOT as the most effective approach to capacity development, both preferred by the younger CMAMs (See Figure 6.6) Refresher training was requested by all health workers especially CHWs and contributes to motivation as well as sharpening of skills. As discussed earlier, CMAM training should be merged or interfaced with training for other interventions to reduce redundancy, unify messages, and limit staff time away from their work. However, this is currently happening on a very small scale.

ready-to-use therapeutic food (SMS-RUTF) based on industrial extrusion cooking process. *Maternal & Child Nutrition*, 2012. <http://onlinelibrary.wiley.com/doi/>

¹¹⁵ WHO, WFP, UN/SCN, UNICEF: **Joint Statement. Community-based management of severe acute malnutrition**. Jun. 2007.

17. What approaches have worked most effectively in your country to promote capacity development of health workers? (Please name the top two.)

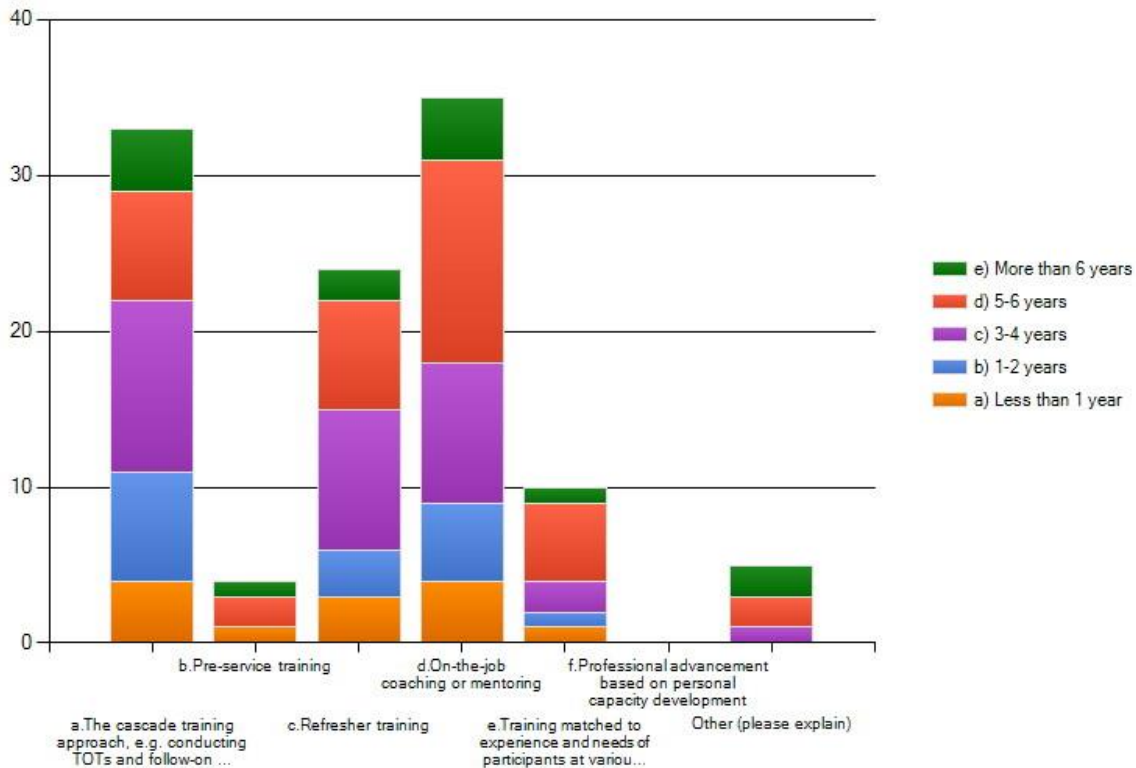


Figure 6.6: Effective Approaches to Capacity Development, Global CMAM Synthesis Survey (2012)

The OJT approach is considered to be cost effective due to retention of skills and continuity of scale-up. Staff are not taken out of facilities and with good planning, this method allows more staff to be trained than the traditional TOT approach. The added value of OJT is that advice between the same cadres of health worker is likely to be most appropriate, as they have a better understanding of the day to day challenges being faced. With either type of training there can be high costs associated with development of the program and accompanying training materials, usually dependent on external support. Furthermore high staff turnover in national health systems limits the outcomes.

At present, increased attention is being devoted to developing pre-service training (PST) strategies to prepare medical staff to carry out nutrition activities. In **Nigeria**, high DSA rates limit the training audience, therefore, a pilot to incorporate CMAM into pre-service curriculum has been undertaken. The source of experts can also promote integration of CMAM into education systems, enhancing national capacity. In **Nepal**, paediatricians from hospitals and medical schools are trained as trainers and also serve to introduce new protocols and policies that could reduce reliance on external support. If PST is strengthened, the role of OJT could be to update staff on the basic skills they already have.

Training needs assessments and evaluative follow-up contribute to efficiency but it was unclear to what degree they were carried out. Training plans should factor in the human resources needed at various levels and what their functions are. In **Pakistan**, training did not always address the large variation in the education and qualification levels of staff; some training was not enough to prepare inexperienced trainees to implement their roles in CMAM. In **Kenya** as in other countries, nurses are the frontline staff for nutrition services, but they receive minimal pre-service training in nutrition. To ensure that training is relevant, CMAM/IMAM needs to be incorporated into job descriptions and reporting in alignment with

health system requirements. Support needed adjacent to training must also be considered and solutions proposed, e.g. to help CHWs reach children in their homes, increasing efficiency by integration of interventions, and consolidating the reporting requirements. Further, training needs to be extended to community members implementing community development strategies and to cover districts or catchment areas that may receive less attention.

6.3.2 Coordination and Cooperation for CMAM Technical Assistance.

CMAM should serve as a unifying force among stakeholders to address acute malnutrition and significant progress has been made to that end. There is substantial evidence that technical support has resulted in significant gains in process, coverage and outcomes.¹¹⁶ Technical support in the case study countries is largely funded externally. Sources of technical assistance to support CMAM include government, IPs, UN agencies, and donors. Their roles are defined in the MoUs and PCAs and other agreements among them. In **Ethiopia**, effective technical oversight is provided by a number of organizations such as the FMOH, ENCU, and MANTF at the federal level and Health and Nutrition Task forces, UN agencies, INGOs, donors and their relevant government counterparts.

Resources for technical assistance. CMAM is evolving from a parallel intervention in emergency prone areas to becoming more preventive and integrated while strengthening the resilience of communities. In accordance, the nutrition coordination system and roles of its members are being effectively developed in most countries to support this evolution. In **Kenya**, the Nutrition Technical Forum (NTF) mandate has been broadened to include a wide range of management oversight functions.¹¹⁷ In **Nepal** where a cluster-type derivative is not present, the MoPH, UNICEF and other stakeholders are expanding partnerships to include the private sector and academic institutions. UNICEF has positioned nutrition cluster leadership centrally and provincially in some countries, such as **Pakistan**. A good practice was the evaluation of the cluster response to the **Pakistan** flood in 2010 which has promoted rapid improvement in cluster reporting and achievement of objectives.

The nutrition coordination forums in whatever forms they exist, have been touted as effective forces for supporting government efforts in both emergency and non-emergency settings. They have helped to develop strategy and policy in the case study countries; they have assembled task forces for integration, capacity building, and urban nutrition (**Kenya**), among others. The *Interagency Standing Committee (IASC) Real Time Evaluation (RTE) – Kenya 2012* stated that “the nutrition sector is functioning well and is a model for other sectors to follow”. Reasons given included strong support for nutrition coordination by the MoPHS and UNICEF and rapid scaling up of resources to address the food security crisis. At the onset of the crisis in 2010, the nutrition sector started its planning well in advance and had a response plan ready by January 2011. More evaluations and reviews are needed to examine the outcomes of nutrition coordination groups and activities in the districts and communities and ensure that central coordination groups are contributing effectively to strengthening them.

Nutrition technical advisors are generally in short supply. Nutrition technical support within the Ministries of Health and in its district offices may require strengthening to promote greater nutrition advocacy within communities where it is most needed. Nutritionists are spread thinly, at the most one per district, and medical staff do not generally have in depth training in nutrition science. UNICEF needs to ensure that its Country Offices and IPs have adequate nutrition staff to monitor nutrition interventions and promote strategic planning for scaling up CMAM. UNICEF has supported additional nutrition staff in the **Pakistan** CO and developed a nutrition unit in the **Nepal** CO.

Coordination and Cooperation among UN agencies for CMAM. The role of UNICEF in coordination with WHO and WFP is mentioned in the joint statement on CMAM and includes mobilizing resources, facilitating local production of RUTF, supporting nutrition protocols, working with the government, the private sector, and NGOs, conducting operational research to refine protocols and jointly implementing

¹¹⁶ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network, CMAM Conference, Addis Ababa, 2011. Jan 2012.*

¹¹⁷ <http://ochaonline.un.org/kenya/SectoralWorkingGroups/NutritionWG/tabid/4444/language/en-US/Default.aspx>

CMAM in emergency and non-emergency situations.¹¹⁸ Good cooperation has been evident in emergency response. As the Cluster Lead Agency in **Pakistan**, UNICEF acted as a provider of last resort including coordination of the FANS, provision of necessary RUF products when WFP was unable to, as well as availability of human resources. Among the actors, UNICEF, WFP and WHO's thematic approach stood out as a good practice; these agencies also demonstrated more integration with national services due to pre-existing partnerships with line ministries.¹¹⁹ In **Kenya**, UNICEF and WFP have been assisting the GoK in reducing financial barriers to healthcare access and greater food security through, for example, the cash transfer programs, voucher schemes and results-based financing.

In all five case study countries, CMAM's leaders and major contributors of technical assistance, the Ministries of Health, UNICEF, WHO and WFP are seen to have varying approaches to addressing malnutrition, illustrated in the management of CMAM. Operationally, there is some degree of isolation of roles which has weakened the efficacy of CMAM. As described in Chapter 3, glitches in the CMAM model are seen at junctions where SAM treatment strategies and plans are dependent on results of MAM management (MoH, UNICEF and WFP), where referrals to and from inpatient care are weak (MoH, WHO and UNICEF), in the health system as the foundation for delivery of CMAM services (MoH, WHO), and intersections with food security (all actors). Accountability on performance indicators frequently depends on external agency pressure to collect the data: WHO for inpatient, UNICEF for outpatient, and WFP for MAM.

A key example of disjointedness occurs with **MAM management** in all five case study countries, where evidence is weak or lacking regarding the outcomes. Although dialog has taken place over the mode of addressing MAM mainly in emergencies¹²⁰, to avoid separation as CMAM is scaled up and in many countries proceeds to regular status, further discussion is needed. Donors and other stakeholders are looking for a "chorus of voices", that is a solid force of advocacy behind promotion of CMAM as an effective model. Stakeholders in **Pakistan** have suggested joint harmonization activities such as workshops that promote a stronger joint capacity to achieve the goals of CMAM. In **Ethiopia**, it was recommended that all partners work on unifying SAM and MAM in a consolidated set of guidelines and integrating them with other nutrition interventions. In **Nepal**, where supplementary foods are not used for MAM management, an opportunity exists to study the impact of counselling and other inputs on behaviour changes and feeding practices.

Support for Nutrition Services/Coordination among Implementing Partners – Among IPs, tremendous spirit and vision exists for promoting CMAM and progressively moving roles and responsibilities to the national health system and communities. Still, among IPs, the principles which the coordination forums are advocating for, integration with national systems and among the sectors, had not fully taken root as evidenced by lack of common indicators and resistance of agencies to integrate their own planning with others. The symptoms are separate approaches and fragmented assessments and evaluations, but sharing of experiences and transparency is increasing. In **Kenya**, UNICEF and IPs have been working in close collaboration with District MoHs regarding issues such as setting up community units, recruitment of community health workers, incentives, training and implementation in order to ensure that any externally supported interventions are easily integrated into the national strategy once NGO partners exit.

Support for Nutrition Services/Coordination within UNICEF - UNICEF has effectively coordinated resources within the organization to support nutrition interventions including CMAM. In the **Pakistan** nutrition response to the 2010 flood crisis, UNICEF was able to mobilize a significant proportion of needed funds by July 2011 and the HQ and the ROSA (Regional Office in South Asia) helped to provide surge capacity and technical support, for example, to start the Nutrition Information System (NIS) and support the nutrition cluster nationally and provincially. The **Nepal** CO wishes to continue to receive good

¹¹⁸ WHO, WFP, UN/SCN, UNICEF: **Joint Statement. Community-based management of severe acute malnutrition**. Jun. 2007.

¹¹⁹ GNC: **Nutrition Cluster Evaluation, Pakistan Flood Response, Interagency team: MOH, NGO's**. *Global Nutrition Cluster*, Sept. 2011, p5.

¹²⁰ WHO, UNICEF, WFP and UNHCR: **Informal Consultation on the Dietary Management of Moderate Malnutrition in Under-5 Children**. 30th Sept. to 3rd Oct. 2008; and WHO, UNICEF, WFP, UNHCR: **Consultation on the Programmatic Aspects of the Management of Moderate Malnutrition in Under-5 Children**. Dec. 2nd to 4th, 2009.

support from the Asia Pacific Shared Service Centre in Bangkok through experts or multidisciplinary teams to help with mobilizing funds, implementation, scale up, and improving information flow, and management and analysis of data. In **Ethiopia and Chad**, UNICEF successfully mobilized resources to finance most of the costs of the scaling up process, and provided effective capacity support for developing monitoring tools, guidelines and training packages.

The *2012 Global CMAM Synthesis Survey* collected suggestions regarding the roles of HQ, Regional Offices, and Country Offices for increasing the effectiveness of and scaling up CMAM. The bulk of responses upheld HQ and RO roles for resource mobilization, advocacy, and sharing/dissemination of lessons. A Global Fund for Nutrition is suggested. Among all topics, stronger technical support is requested most often for guideline development, including guidelines for integration into national health systems, especially in finance and supply chain integration, and guidelines for rolling out/scaling up CMAM. A global guideline on integrated management of acute malnutrition is suggested. Globally more clarification is needed of WHO's guidelines for inpatient care and advocating with WHO to revise the WHO essential drugs list to include CMAM supplies (e.g. RUTF, F100, F75, and Resomal). UNICEF should consider alternatives such as distance/computer based training for health staff to accelerate human resource skills and use of SMS technology for transmitting data and other CMAM communications.

More technical support for designing monitoring plans and tools is requested, especially from the ROs, and assistance to design checklists. RO assistance is needed to develop training packages and design studies and participative evaluations. It would be particularly useful for countries with similar challenges to participate in exchange forums for lessons learned and staff exchanges between countries. The RO role in promoting local RUTF production needs to be strengthened and sharing technological insights as well as promoting regional RUTF production if possible. Regional stockpiles of RUTF and medicines would also be helpful. Advice is needed in regard to implementing CMAM in lower prevalence areas and where there is a high HIV prevalence. Overall more RO visits to COs by nutrition experts are seen as necessary.

6.3.3 Scaling Up (Expanding) CMAM

Prevention of malnutrition and the rights of children to adequate nutrition form the foundations of humanitarian and developmental programmes and approaches everywhere. While CMAM is effective in building capacity to address SAM and MAM and promoting progress in nutrition strategy and policy, the process of its development has not always taken the most efficient or sustainable routes. Foremost, the need for emergency funds to jumpstart or expand the intervention means that when prevention is inadequate, vulnerable children may fall into MAM or SAM during crises and food shortages and then are treated or managed.

Current trends in nutrition status data indicate the importance of sustaining CMAM and expanding it to needy areas where children continue to suffer from SAM. Further, some vulnerable children are not accessing CMAM services due to prioritization, distance and health system capacity issues; expansion of the program could help to cover these children. This evaluation and other exercises confirm that experience and knowledge gained from implementation of CMAM to date forms a solid basis for helping governments to scale up and to initiate CMAM in their countries, while promoting sustainability and efficiency. Recurrent themes in this synthesis as well as in other evaluative reports are: need for consolidation, collaboration, sustainable integration, and finding means to solidify partnerships and avoid separate goals and objectives which may contribute to inefficiency and lack of clarity.

6.3.4 Issues and Options for Expansion

The speed and mode of scaling up cannot be prescriptive with most countries following their own paths dependent on national priorities for health and nutrition development, available funding, readiness of districts to implement the intervention, and the speed that is reasonable while trying to maintain and promote quality of services.¹²¹ What has been learned is that too rapid of scale up may result in quality

¹²¹ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons.** *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. P 37-39.

issues and below standard rates of recovery. In both **Ethiopia and Pakistan's KP**, greater efforts were needed for capacity development which was difficult in a rapid scale up and resulted in quality issues later.

With current trends in decentralization of health services, districts with successful CMAMs can share experience with others as in **Nepal**, where the initial five pilot districts have been expanded to six additional districts. This deliberate progression of scaling up, although small in relation to national need, facilitates direct support to government with technical assistance and minimal use of external resources. In **Ethiopia and Pakistan's KP**, IPs assist with implementation country-wide and have helped to promote achievement of standards but have also created parallel systems (e.g. supply and delivery, information, management) which are not sustainable. In **Kenya**, IPs support national staff with their roles in capacity development and integration carefully defined. The development of the HINI has aided integration and promoted sustainability of some aspects of CMAM (e.g. district information systems).

Respondents to the *2012 Global CMAM Synthesis Survey* indicated that funding (inadequate government or external funds), human resources (insufficiency of well trained and adequate numbers of health staff), and supply chain management (to ensure timely provision of products and medicines) are the top three concerns for scaling up. These are followed by integration not proceeding fast enough, insufficient government leadership for coordination and insufficient joint planning. These are all issues that require immediate concerted efforts.

Funding: As indicated in the cost analysis above, the CMAM interventions in the five case study countries cannot be sustained without financial support by UNICEF and other agencies. The discontinuation of external support poses a high risk that CMAM is downscaled or lapses as occurred in **Pakistan's KP** after emergency funds ran out in 2011 and the province had difficulty supporting the intervention despite widespread need. Greater government commitment to long term funding is required and has been demonstrated in **Malawi**, while **Kenya** is now making greater investments. The RUTF, mainly imported, remains the main cost driver of CMAM. In **Chad**, CMAM is heavily funded by UNICEF (100% of recurrent costs and 90% of capital costs). Unless alternative production is explored, sustaining the program in its current state or expanding to more areas does not seem feasible without development partners' support.

Long term funds from external sources are currently difficult to secure for CMAM due to the short term nature of most donor funding mechanisms and the expectation of results in limited time frames. This presents challenges to government investment in long term development such as for capacity building in the health system. The external funding coming mainly through UNICEF, WFP and WHO channels carries with it overhead costs and separate reporting and need to piece together funding from different donor sources. Given these realities, advocacy for changes in programmatic mindset needs to continue with a chorus of voices, including government, UN agencies, donors, and NGO partners. Adding voices from civil society, academia, the private sector, and communities is also recommended.

Demonstrating to governments and donors the outcomes and potential impact of CMAM can be effective in influencing them to make greater investments. Governments and donors wish to be ensured of increasing efficiency through reduction of costs and stronger integration of interventions, thus additional efforts should be made in reinforcing the linkages between CMAM and other child survival and development activities such as IMCI and IYCF. In **Nepal**, visits by government officials and donors to districts where national health staff managed CMAM were an effective way to demonstrate integration outcomes. Donors are looking for evidence of long term government commitment to addressing undernutrition, and government coordination of projects and interventions when CMAM is incorporated in nutrition and health policy and strategy. Merely having a strategy document is not sufficient, and the strategy and plan of action need to be backed with financial commitment.

Investment is more likely in successful approaches to solve the problem of malnutrition, thus fortifying data collection to provide evidence of CMAM outcomes and impact is essential, in particular, the approach to manage MAM should be based on evidence of success. Stronger linkages need to be made between the shorter term solutions presented by CMAM and the longer term perspectives of agricultural

development, food security and related programmes such as water, sanitation and hygiene. For example, USAID's Feed the Future programme can be linked to malnutrition issues.

In **Kenya**, emergency donors have moved from supporting acute malnutrition alone to supporting a more comprehensive package that would prevent acute malnutrition and supporting integration of management of acute malnutrition in health and other systems. There are encouraging signs that Paris-Accra (2005) principles of aid-effectiveness, where governments are directly in charge of funds, are being applied for nutrition. While UNICEF's support in nutrition has always been to and through government programmes, other donors, such as USAID, DANIDA, DFID and GTZ are also working with the government through the Health SWAP.¹²² A vibrant professional interest and focus on nutrition is also needed. A nutrition ambassador, Angélique Kidjo, has drawn global attention to the issues surrounding acute malnutrition in Kenya.

In order to secure longer term funding, first, there needs to be joint agreement on targeting through mapping and other means of deciding on priorities for new or expanded areas of CMAM implementation with a plan developed through joint planning for scaling up. Second, the costs of scaling-up should be clarified as there are a number of ways to assess costs. Third, governments need to demonstrate their commitment through illustrating their current and future contributions; technical assistance may be required to help governments proceed through steps 1 to 3. *The case studies illustrate the dramatic lack of consistent and comparable costing data across the board. At the macro level, it is difficult to gauge the magnitude of the required investment to significantly reduce SAM and MAM in a given period of time. Similarly, there are no comparable figures about CMAM coverage or rate of CMAM expansion per country. This lack of data is especially problematic to identify the size of scale up challenges and the strategy to overcome these.*¹²³

Alternative means to gather funds for CMAM and to weave CMAM into operating funding mechanisms have been suggested. These include allocating resources directly to the program, such as through the Millennium Development Goal Pool Fund (MDG PF). A pooled separately managed fund for CMAM might be developed to promote efficient use of external funds as the government assumes more of the financial responsibility and to enable CMAM to serve more children. Means to procure RUTF have included World Bank loans and funds available in provinces, regions and districts. Private industries such as Pepco have also contributed.

Human Resources: Various categories of human resources are needed to implement CMAM including management and technical support staff, but the greatest shortages are among staff in health facilities and the CHWs. In **Pakistan's KP**, medical and nursing staff frequently rotate or transfer and doctors are in short supply. The supplementation of staff by IPs was a solution to the shortage of trained staff and salaries were topped off as a source of motivation, however, CMAM could not be sustained without these conditions. Finding staff to work in difficult and remote conditions as in parts of KP is a challenge facing many health systems. It is important that timely administrative arrangements, such as signing of MoUs and working to issue longer contracts, support IP efforts so that CMAM can respond to crises. Agreements need to include indicators for capacity development and integration and exit strategies.

In **Ethiopia**, there is high attrition of health workers including health extension workers who play key roles in the screening process; staff turnover also necessitates repeat trainings. In order to address this issue, the existing capacity building and supportive supervision activities need to be strengthened and activities associated with various interlinked interventions consolidated. **Ethiopia** also practices task shifting among health workers and giving more responsibility to CHWs to ensure an available cadre to provide services at CMAM sites has contributed to coverage and to reaching the previously unreached SAM children. As discussed above, on the job training (OJT) is efficient when trained district health staff or those who have benefited from pre-service training can train new employees through mentoring and

¹²²Shrimpton R, Saldanha L: **Kenya Nutrition Programme Review**. March 2011. P 5.

¹²³ ENN: **Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons**. *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. P 67-68.

coaching. This training is necessarily integrated insofar as CMAM is integrated into the health system and with other interventions.

Community health workers (CHWs) are likely to be able to, in most countries, take on more responsibilities for monitoring SAM cases and dispensing RUTF closer to the admitted children, thus reducing work burdens on health facility staff. More community based workers for community outreach can be found, for example, among volunteers, the informal health providers, mothers' groups, local NGOs, civil society actors, and the private sector. In order to assess viable options for increasing human resources, the MoH may require technical assistance to help with planning and forecasting.

Supply Chain Management: Issues such as pipeline breaks occur whether there are parallel delivery or national delivery systems but generally become less in incidence as CMAM ages. Progressive integration of parallel systems into national systems require an assessment of weaknesses and then usage of the national system while building its capacity. *Forecasting mistakes have been made as a result of using calculations based on population, SAM prevalence and estimated coverage, all of which are fraught with inaccuracies. The inclusion of stock reporting into CMAM admissions reports, designated minimum stock levels defined on a facility basis, and the use of rapid SMS for RUTF stock reporting and requests have produced positive results.*¹²⁴

As described above, the benefits of producing RUTF locally, include greater acceptance of the products and thus of CMAM, possible reduction in costs due to less transport, ability to communicate in close proximity regarding orders, in addition to stimulation of local markets and support for local industry and farmers. The steps that need to be taken have been well described (development of a national policy on RUTF production; securing an agreement with Nutriset; sourcing and costing of ingredients, and quality control); but lack of capital for investment is a major obstacle, for example, in Ethiopia, Pakistan and other countries. Technical assistance can be helpful to structure the process and seek financial support.

6.3.5 Expanding Prevention in CMAM

A more preventive approach to acute malnutrition is likely to save emergency funds, strengthen the national health system, and improve nutritional status in the countries. Yet as discussed above, different and more stringent mechanisms exist for obtaining longer term funds for preventive approaches. Still prevention may be continually reinforced through IYCF counseling and Mother Child Health (MCH) which are established interventions in many countries. Linking CMAM with these interventions as already underway can highlight prevention as well as cure. The Disaster Risk Reduction (DRR) initiatives have been developed over the past 20 years or more and have taken hold in many government priorities; they include assessment of risk, contingency planning and early response and recovery. Nutrition stakeholders need to insure that nutrition planning, response and recovery are firmly installed in this framework to prevent high incidence of SAM and MAM in crises.

In **Nepal**, the evolving IMAMI intervention targets newborns to 6 months of age in an effort to prevent acute malnutrition as children are weaned and to promote breastfeeding. The use of complementary foods prepared at home were customary practices in many countries for many years. In some such as **Ethiopia**, the production of weaning food has been ongoing for years. In **Nepal**, the use of Sarbottam Pitho, a weaning food, has helped mothers who produced it for sales as well as children who consumed it. Combining interventions as in the HINI in **Kenya**, which emphasizes breastfeeding and protection against disease, is preventive as well as curative.

6.3.6 Sharing Knowledge and Experience

The evolution of CMAM has produced rich experience and knowledge. Numerous academic papers and studies as well as evaluations and syntheses have documented effectiveness and analyzed issues. Workshops in various countries have brought MoH staff together to discuss challenges. In Kenya, The "Towards Innovations and Best Practice in Urban Nutrition" workshop was held in 2010. More frequent reviews and evaluations are needed in order to avoid loss of data and disseminate lessons in a timely

¹²⁴ ENN: Government experiences of scale-up of Community-based Management of Acute Malnutrition (CMAM). A synthesis of lessons. *Emergency Nutrition Network*, CMAM Conference, Addis Ababa, 2011. Jan 2012. P 64-65.

manner. In **Nepal**, the MoHP and UNICEF sponsored annual participatory CMAM reviews with staff from pilot districts which listed numerous needed steering actions and resulted in many improvements.

Many studies and surveys have contributed to the CMAM body of knowledge. In the **Kenya** Nutrition Bulletin published by the division of nutrition in the MoPHS on a quarterly basis, updates are given on nutrition survey results and IMAM which act as a guide on issues that need to be addressed.¹²⁵ More consideration needs to be given to retaining knowledge among community members. In **Pakistan's KP**, development of the Nutrition Support Committees (NSCs) was instrumental in promoting community mobilization and should become a permanent feature of community management. Studies are needed in support for the roles of CHWs; MAM management, knowledge attitudes and practice for child nutrition, integration of CMAM and prevention into the national health systems and with other interventions, and the most sustainable options for addressing acute malnutrition.

6.4 Chapter Summary

In the case study countries, the **government contributions** to CMAM through health system support costs are presumed to be substantial but were underestimated due to insufficient data on recurrent costs. The bulk of capital costs are supported by UNICEF while support of recurrent costs is more balanced between government and UNICEF; there are also WFP, IP, and WHO contributions. Among the five countries, the RUTF products were the major recurrent costs, approximately 50% of costs where cost of RUSF is not included in the calculation.

UNICEF's capital contribution is initially higher through limited contributions and is reduced over time. Cost reductions occur through integration with other interventions, such as IYCF and IMCI, and into the national health system. Costs are higher in areas of low population density and in remote and mountainous regions so planning must factor in these costs. Cost efficiency is lower in camps and when salary top offs are paid for health staff. For MAM management, costs are significantly lower without supplementary feeding; use of packaged denser forms of RUSF reduces transport and storage costs.

Where there is strong government ownership, direct support to the government by UNICEF is the most cost-efficient **delivery modality**. Where government capacity is not adequate, implementing through local NGOs was calculated to be more cost-efficient than through INGOs. Common challenges in funding are lengthy periods for approval of project documents and signing of MoUs which delays implementation; short term agreements of three to six months between UNICEF and IPs adversely affect the performance of staff particularly in monitoring, as they would be expecting to leave the programme in the short term.

Usage, production, and supply of RUTF will have to become more efficient to contribute to sustainable scale up efforts. Various ways to address user/dispenser challenges, sharing of RUTF among siblings, caretaker sales of RUTF, and weak storage management, are through sensitization, referrals to food security interventions, counselling, and training. To reach more SAM cases, **local production of RUTF** which meet international standards is a sustainable solution. The two main limiting factors are the sourcing and cost of ingredients and quality control. It is unclear whether efforts by the MoH and its partners such as UNICEF and WFP are strong enough to advocate for and to support the work that needs to be done to make local production a reality.

Investments in **improving the efficiency of the national supply and delivery chains** may help to open up more areas to expansion. Three factors most likely to promote supply chain efficiency are: a) stronger planning and forecasting; b) assessment of national supply chain weakness; and c) usage of the national system by IPs. Plans with indicators to progressively strengthen national systems must be developed. Outages are a more common issue with regard to essential drugs; CMAM supplies should be included on national essential drug/commodity lists.

Training has significantly promoted quality of services; redundancy in training for related interventions needs to be reduced. On the job training (OJT) surpasses training of trainers (TOT) as the most effective

¹²⁵ Government of Kenya: **Scaling up of High impact Nutrition Interventions (HINI) in Kenya**. Division of Nutrition. Ministry of Public Health and Sanitation. *Kenya nutrition Bulletin*, 2010, 4 (10): 1-4.

approach, followed by refresher training. More attention is needed for pre-service training (PST) strategies to improve efficient delivery of nutrition services. Training needs assessments should examine the human resources needed at various levels and what their functions are. Training should be extended to community members and to cover catchment areas that receive less attention.

Technical support for CMAM has resulted in significant gains in process, coverage and outcomes. The **nutrition coordination** systems are being effectively developed to support the evolution of CMAM. More evaluations are needed to examine the outcomes of nutrition coordination activities in the districts and communities. **Nutrition advisors** to promote greater nutrition advocacy within communities are generally in short supply nationally and in UNICEF. UNICEF has supported additional nutrition staff in some countries; more regional nutrition support will be needed for scaling up.

In support of CMAM, **coordination among UNICEF, WHO and WFP** has been evident in emergency response; however, isolation of roles has weakened the efficacy of CMAM in linkages between inpatient and outpatient care and addressing SAM and MAM. Agencies need to work with the MoH to support sustainable systems for data collection particularly to judge outcomes of MAM management. Joint harmonization activities are needed such as workshops, studies, and unifying SAM and MAM in a consolidated set of guidelines. **Among IPs**, stronger integration of planning and agreement on common indicators could result in more harmonized approaches as well as sharing of exit plans with national actors.

Within UNICEF, there has been effective support for CMAM. Stronger technical support should be directed toward guideline development and advocating with WHO to update inpatient care guidance and revise the essential drugs list. UNICEF should consider distance/computer based training and use of SMS technology. More Regional Office nutrition expertise is needed for designing monitoring plans and tools, studies and participative evaluations and disseminating lessons learned. The RO's role needs to be strengthened in promoting local/regional RUTF production and sharing technological insights.

Scaling up (expanding) CMAM, is critical given the trends in nutrition status, the reliance on emergency funding and inadequate prevention. Knowledge gained will help governments scale up and initiate CMAM while promoting sustainability and efficiency. The speed and mode cannot be prescriptive but too rapid scale up should be avoided to prevent quality issues. Major concerns for scaling up are funding, human resources, and supply chain management.

CMAM cannot be sustained without external **financial support** as government contributions are not adequate but are increasing. The imported RUTF remains the main cost driver of CMAM so alternative production needs to be explored. To promote more funding options, concerted advocacy is needed from stakeholders. Demonstrating the outcomes and potential impact of CMAM can be effective to influence donors and governments to make greater investments; improvements need to be made in integration, data analysis, intersectoral linkages, and government commitment. To secure long term funding, a prioritized plan for development of CMAM is needed, as well as costs and government funding commitments. Alternative means should be explored to gather funds and to weave CMAM into operating funding mechanisms.

The greatest **human resource** shortages are staff in health facilities and the CHWs. IPs can help supplement staff for scaling up but need timely administrative arrangements, indicators for capacity development and integration, and exit strategies. The high attrition of health workers affect CMAM outcomes; capacity building through OJT and PST and supportive supervision activities need to be strengthened. CHWs can take on more responsibilities for monitoring SAM cases and dispensing RUTF, and more community outreach resources should be sought in communities.

A more **preventive approach** to acute malnutrition needs to be pursued in the CMAM model and the linkages to IYCF and MCH among others, highlight prevention as well as cure. Other means include the IMAMI intervention, HINI approach and greater promotion of traditional weaning foods. The evolution of CMAM has produced rich **knowledge** but more work is needed to plan and fund evaluations, studies, disseminate lessons and retain the knowledge and experience accumulated in communities.

Lessons Learned: Cost Efficiency, Supply and Delivery of RUTF, and Increasing Access to CMAM Services

Cost sharing for CMAM: *Contributors to CMAM need to make capital and recurrent costs available for analysis so that inefficiencies and imbalances are addressed; without full cost disclosure, contributions are not properly attributed and the real costs of CMAM are difficult to ascertain which makes calculation of scaling up (expansion) and integration problematic and a possible constraint to funding.*

Cost Reductions: *Cost reductions to external actors will occur through integration with other interventions, such as IYCF and IMCI, and into the national health system including into national supply and delivery systems, as government assumes more fiscal responsibility for CMAM services. Intensifying or starting integration as CMAM is initiated or scaled up (expanded to new areas or new health centres or to admit more children within areas of operation) will help to avoid dependency on parallel systems and redundancies and inefficiencies.*

Cost Efficiency: *Higher costs can be expected for reaching children in need in remote and mountainous areas and in refugee and IDP camps, thus these costs need to be factored into cost projections. Significantly higher costs can be expected where salary top offs (from external sources) for health workers are used to implement CMAM and this practice should be avoided.*

Modalities of fund transfer: *Direct transfer of funds to government can be efficient where there is strong government ownership and use of local NGOs (versus international) which generally have fewer expenses associated with human resources, reduces overall costs when IPs are engaged. Delays in interagency agreement processes (MoUs and PCAs) cause inefficiencies in implementation. Short term PCAs (3-6 months) adversely affect motivation and performance of staff.*

Usage, Production and Supply of RUTF: *Sharing of RUTF among siblings, caretaker sales of RUTF, and weak storage management all contribute to inefficiencies of usage and have to be prevented and addressed through sensitization, counselling, referrals to food security interventions, and training.*

To reach more children with SAM, local production of RUTF is a sustainable solution; thus greater efforts are important on the part of governments, UNICEF and other partners to face the challenges to sourcing and cost of ingredients and quality control, advocating with donors and the private sector for investment capital and use of technological and financial experience in countries such as Malawi that are now producing surpluses of RUTF.

National supply and delivery chains: *Since investments in improving the efficiency of the national supply and delivery chains may help to open up more areas to expansion, UNICEF, IPs and other partners should assist government with assessments of the national supply chain weaknesses at the onset or expansion of CMAM. Development of parallel systems use significant additional resources; thus, if they are needed, it is important to concomitantly help to develop national supply and delivery capacity through a plan with indicators to do so. Stronger planning and forecasting are common challenges and assessments should indicate means to strengthen the system.*

At the onset or expansion of CMAM, governments should include CMAM supplies on the national essential drug/commodity lists to avoid outages and shortages.

Training: *When nutrition and health or WASH interventions have similar training messages, they could be combined to enhance efficiency and reduce repetition and usage of health worker time.*

Use of on the job training (OJT), training of trainers (TOT), and refresher training are effective but more attention is needed for pre-service training (PST) strategies so that medical staff have sufficient knowledge of nutrition science. To avoid poorly targeted training, training needs assessments should examine the human resources needed at various levels and what their functions are, including those for community members and with special attention to catchment areas that are less covered by training.

Technical Support for Nutrition Coordination: *Since technical support has resulted in significant gains for CMAM, it is important to programme timely periodic evaluations to highlight the achievements and pinpoint the challenges, indicating where investment is needed.*

As nutrition coordination is largely successful at central levels, outcomes of nutrition coordination activities in the districts and communities where it is critically needed should be reviewed in order to direct efforts for strengthening them.

Nutrition advisors with background in nutrition science are generally in short supply and/or thinly distributed, therefore, governments, UNICEF and other partners need to ensure support for additional nutrition staff in some countries. Regional nutrition expert support is also important for scaling up and sharing lessons.

If coordination and collaboration among UNICEF, WHO and WFP are not strengthened for CMAM, it will further weaken the efficacy in linkages between inpatient and outpatient care and addressing SAM and MAM. Collaboration needs to aim for greater accountability on performance indicators particularly on the outcomes of MAM management. Among IPs, stronger integration of planning and agreement on common indicators could result in more harmonized approaches including greater collaboration on assessments and evaluations and sharing of exit plans with national actors. Some resources should be programmed for joint harmonization activities such as workshops, studies, and unifying SAM and MAM in a consolidated set of guidelines.

Scaling Up (Expansion) of CMAM

The speed and mode of scaling up cannot be prescriptive and countries need to follow their own strategies dependent on national priorities for health and nutrition development, available funding, readiness of districts to implement the intervention, and the speed that is reasonable while trying to maintain and promote quality of services. Too rapid scale up, before capacity can be adequately developed, may result in low quality interventions and below standard rates of recovery.

Demonstrating the outcomes and potential impact of CMAM can be effective to influence donors and governments to make greater investments; however, continual improvements also need to be demonstrated in integration, data analysis, intersectoral linkages, and government commitment. To secure long term funding, a prioritized plan for development of CMAM should be shown to prospective funding agencies, as well as costs and government funding commitments. Alternative funding means should be explored to gather funds and to weave CMAM into operating funding mechanisms.

Capacity building through OJT and PST and supportive supervision activities need to be strengthened to help thwart the high attrition of health workers which affect CMAM outcomes. To help reduce the burden on health facility-based staff, CHWs can take on more responsibilities for monitoring SAM cases and dispensing RUTF (given more support and incentives) and more community outreach resources should be sought in communities.

To avoid forecasting mistakes and pipeline breaks, more communications with health facilities are needed and stronger stock-keeping to retain minimum levels of stocks. SMT may help to speed communications on stocking needs.

A more preventive approach to acute malnutrition needs to be pursued in the CMAM model and the linkages to IYCF and MCH among others which highlight prevention as well as cure. Other means include the IMAMI intervention, HINI approach and greater promotion of traditional weaning foods. Connecting CMAM to Disaster Risk Reduction (DRR) which promotes prevention, contingency planning, rapid response and recovery, can widen the approach.

The evolution of CMAM has produced rich knowledge, which points to developing effective means to disseminate lessons: studies and evaluations should be on-going to support knowledge management; particularly on community management, integration, MAM management, and sustainable options; it is

critical to document and retain the knowledge and experience accumulated in communities through dedicated efforts to do so.

7 Conclusions and Recommendations

This chapter presents conclusions and offers recommendations to UNICEF Headquarters, ROs and COs for scaling up CMAM.

7.1 Conclusions

The evaluation conclusions are based on the findings detailed in the body of the report, regarding: (1) Relevance of CMAM; (2) CMAM Effectiveness and Quality of Services; (3) Promoting Equity in Access; (4) Progress in National Ownership; (5) Efficiency – Costs, and Supply and Delivery of RUTF; and (6) Sustainability and Scaling Up (Expansion) of CMAM.

1. Relevance of CMAM, Guidance and Technical Assistance

The CMAM approach is appropriate to address acute malnutrition, particularly to the degree that CMAM is being sustainably integrated into the national health system. CMAM interventions are becoming regularized within the national health systems, contributing to greater prevention and geographic coverage. Inputs have resulted in meeting the Sphere standards for recovery from SAM and successful expansion in times of crisis in many. Where integration (e.g. governance, finances, planning, service delivery, monitoring and information, demand) is well planned and based on capacity assessments, efficiency has increased and scale up has been facilitated.

Demand for CMAM services has increased in many countries; efficient use of community resources for prevention and identification and referral of children with MAM and SAM contributes to demand. Efforts to mobilize communities, develop capacity in the health system, and increase ownership in districts and communities have paid off in higher admissions. Demand is effectively increased through facilitating more participation in planning at the district level, providing more support to CHWs, and drawing in informal health care providers and other community members.

National contributions to CMAM are growing but scale up (expansion) is challenged by funding constraints for regular programming and reliance on emergency funds and external sources of assistance. Reliance on stop-start, short term, mainly external emergency funding makes CMAM less likely to achieve preventive and sustainable outcomes. Greater accountability for addressing acute malnutrition is signified by more assumption of the cost burden by governments and reassessment of funding practices and sources by assistance partners.

CMAM's implementation and scale up is enhanced where it is sustainably integrated with other interventions and in the context of strong intersectoral approaches to address acute malnutrition. Unifying or streamlining different modes of administration and bodies of guidance helps to integrate CMAM with other health interventions and sectors addressing causes of undernutrition. The process is facilitated where successful examples of integration and intersectoral coordination among countries are shared.

Global and National Guidelines

Global guidance for SAM treatment has contributed to development of national guidelines which offer high value in promoting district ownership. However, lack of agreement on the best approach to address MAM has contributed to inconsistency among countries for MAM management and concomitantly, prevention of SAM. At national levels, where MAM guidelines have been developed separately from the other three components or are underdeveloped, the preventive linkages among community outreach, MAM and SAM are weakened.

Global and national guidance is generally adequate for treatment protocols but lacking or fragmented regarding: planning and monitoring, integration of CMAM, equity and gender, community assessment and mobilization, and MAM management. At national level, bodies of guidance are strengthened through integration with IYCF and other interventions, and when tailored to

national needs. Some of the Sphere minimum humanitarian standards may no longer be relevant for regularized CMAMs so use of Sphere needs further discussion. Standards and indicators are needed for screening, relapse, re-admissions, referrals and home visits (which Sphere does not cover) to promote more effective steering of the intervention.

Technical Assistance

Within UNICEF, there has been effective support for fund mobilization, emergency nutrition response, and supporting nutrition protocols; expansion of regional roles is important to meet national technical assistance needs. Global and regional technical support was found to be of key importance for guideline development and for designing monitoring plans and tools, studies and participative evaluations and disseminating lessons learned. Greater inputs and roles for technical assistance for CMAM are requested by the majority of COs.

Coordination of technical assistance for CMAM has resulted in significant gains in process, coverage and outcomes. The nutrition coordination systems effectively support the evolution of CMAM through nutrition leadership support centrally and provincially. Regular reviews are helpful to examine the outcomes of nutrition coordination activities in the districts and communities and to determine how central coordination groups can strengthen them.

Capacity development has significantly promoted quality of services; there is however some redundancy in training among related interventions. On the job training (OJT) surpasses training of trainers (TOT) as the most effective approach. Devoting more resources to pre-service training (PST) has improved nutrition knowledge among medical staff. Training needs assessments did not always examine staff functions; training of community members was found to be very limited and coverage of catchment areas often uneven, with some areas receiving less attention.

Technical support for nutrition and monitoring has helped to guide health staff and regularize monitoring visits; nutritionists positioned centrally and in districts have promoted prevention and recovery but are generally in short supply. When evaluations and monitoring activities are planned and budgeted well in advance, they can help to address many CMAM challenges. Joint monitoring among government and technical assistance providers is effective when undertaken. CMAM works best where nutrition support staff are positioned according to need and not spread too thinly.

CMAM Effectiveness and Quality of Services

Overall, CMAM has been effective in helping children to recover from SAM and promoting prevention through community outreach and MAM management. CMAM has been less successful in preventing (rather than treating) SAM. The Sphere standards were met for recovery for MAM management where data was available; and for recovery, death and default in outpatient and inpatient treatment for SAM in the five case study countries. Geographic coverage has improved markedly and CMAM services have successfully responded to crises. Community members and health workers have affirmed higher levels of knowledge regarding the impact of nutrition on childhood development. Nutrition coordination and advocacy around CMAM have helped nutrition rise on the policy agenda.

Sensitizing the community on acute malnutrition along with active case finding has critically improved admissions to services; the potential of community outreach is constrained by insufficient assessment, planning and funding for mobilization of community resources, weak monitoring, and inadequate support for CHWs. Home visit follow-ups are weak because CHWs require more support in the form of transport and other means to facilitate their access to households. Community sensitization and mobilization have been found to improve where frequent community assessments were carried out and where resources were allocated to support outreach strategies as well as providing incentives for CHWs.

Outpatient treatment services, whether implemented through fixed health facilities, mobile clinics or in refugee camps, are effective in most CMAM intervention areas in the case study countries in treating SAM without complications. Training, supervision and well equipped facilities contributed to success. Greater consistency in usage and standards was found to make anthropometric measurements

more effective. Sufficient infrastructure to accommodate children and their caretakers and adequate WASH inputs particularly in provision of water taps and acceptable latrines improved quality of services.

The CMAM inputs for inpatient treatment services were found to be only moderately effective due to weak coordination around referrals between inpatient and outpatient care, and weaknesses in staffing, psychosocial support, and data collection. Gaps in round the clock staff support as well as in strengthening of health staff capacity for providing nutrition services and for data collection and analysis has constrained assessment of effectiveness. Similarly, many facilities lacked sufficient beds for high occupancy times and play areas and toys to provide psychosocial stimulation.

Evidence is insufficient on outputs and outcomes for MAM management. The absence of surveys to measure behaviour changes and lack of reliable data on all MAM performance indicators make it difficult to ascertain effectiveness of the MAM intervention, whether implemented through counselling, provision of supplementary foods, or both. There is not enough data on relapse to provide evidence on linkages between interventions to address SAM and MAM.

Information systems for CMAM developed in parallel to national systems were found to be unsustainable; there was lack of consensus on practical reporting requirements. Parallel information systems have improved reporting but generally require external support and lack strong connection to national M&E processes. Where undertaken, simplification of data collection and analysis was found to enhance effectiveness. There are important data gaps with regard to relapse, means of detection by type/place of screening; repeat screenings; reasons for default; and effectiveness of counselling.

3. Promoting Equity in Access

Identification of children who might be missed and developing strategies to reach them are top challenges in improving access. Stronger case identification, community assessments and mapping of vulnerability are key tools to improve access. There are important gaps in coverage regarding children and areas both within and outside geographically targeted areas.

Planning for CMAM among government, assistance partners and communities is often disjointed which hampers the promotion of equity and coverage. Integrated planning frameworks and use of community assessments were found to help avoid implementation and equity issues, improve coverage and effectiveness and offer health staff greater direction. Where planning exercises included district level government and community stakeholders and made good use of information provided through vulnerability mapping programmes to map and prioritize CMAM target areas, more equitable access was achieved.

Awareness of challenges in estimating geographic and treatment coverage in order to promote more effective strategies for increasing access was often weak. Coverage of children with SAM or MAM is far below the global and well below most national levels of need; geographic coverage has improved particularly where CMAM is more fully integrated into the national health system. Insufficient data on population, lack of agreement on calculations, and weak estimates of incidence affect geographic coverage estimates. The importance of treatment coverage surveys is now more widely recognized, however, they often lack funding and reliable data.

CMAM-related guidance and documents fail to devote needed attention to gender and equity issues. Global recommendations for gender analysis of data are not always adhered to for CMAM implying need for stricter enforcement. Although there is no evidence of gender discrimination in CMAM, there is greater participation of fathers and other male caretakers in sensitization, discussions and support groups.

The most successful strategies for expanding outpatient treatment include adding satellite or sub-post outpatient treatment, and defining roles of CHWs to manage RUTF. Successful support to improving access to inpatient treatment included transport of children and their families, opening more inpatient

treatment centres, and improving procedures among inpatient and outpatient treatment to transfer and track children with complications.

4. Progress and Issues related to National Ownership

A strong nutrition authority and nationally owned overarching strategy for nutrition was found to be important to support CMAM's potential for long-term impact. Although nutrition services are gaining strength, the nutrition authorities often lack appropriate status within ministries and expertise to manage various nutrition interventions and advocate for greater resources for CMAM. Nutritionists positioned centrally and in districts have been found to have effectively promoted prevention and recovery but are generally in short supply. Inter-linkages with international activities such as the SUN and REACH initiatives, the UN Comprehensive Framework for Action for Global Food Security and Climate Change Mitigation are sometimes blurred and funding for nutrition strategies is often insufficient.

Progress has been made on intersectoral coordination toward nutrition goals; remaining major obstacles include different donor preferences and administration for various sectors. Areas targeted for CMAM do not always intersect completely with food aid or WASH. Donors are rarely the same for WASH and nutrition; each donor targets different regions. Where governments with support of donors and assistance agencies facilitated removing constraints to cross-sector planning and funding, national ownership was enhanced.

Agreement on global standards for integration of CMAM management and services into the national health systems is lacking but critical to guide government, UN agencies, IPs and health system staff. Guidance by global standards has effectively steered the development of national strategies; thus a global effort is needed to agree on guidelines for integration which will steer efforts to address capacity issues in the national health system. UNICEF has piloted a Global CMAM Mapping framework which can provide guidance and this can be finalized or revised.

Where CMAM was not integrated with other interventions, health workers often felt overburdened and reported efficiency losses due to duplication and repetition. Insufficient numbers of well-trained health workers were found to be a major constraint for scaling up. Technical assistance was found to contribute to strategies that help to train, motivate and retain trained staff. Although numerous countries have integrated other interventions (e.g. IYCF or IMCI) with CMAM or are planning to do so, effective means to address the challenges presented in terms of different modes of scale up and lack of a unified scale up strategy among interventions have not been widely shared.

5. Efficiency - Costs, Supply and Delivery of RUTF

The government contributions to CMAM through health system support costs are not currently systematically made available as indication of government commitment. Government costs for CMAM are presumed to be substantial but underestimated due to insufficient data on recurrent costs. There is heavy dependency on UNICEF to support the bulk of capital costs on start-up but these diminish over time and governments tend to absorb more of recurrent costs.

Cost savings through addressing user/dispenser challenges and promoting local production of RUTF products have not been fully pursued. The cost of RUTF comprises approximately 50% of recurrent costs where cost of RUSF is not included in calculations, thus cost saving in RUTF production is essential. The main limiting factors to local production are quality control in order to meet stringent standards, the need for capital investment, and the sourcing and cost of ingredients. Sharing of RUTF among siblings, caretaker sales of RUTF, and weak storage management were successfully addressed in some cases through strengthening sensitization, referrals to food security interventions, counselling, and training.

For scaling up and promoting local production of RUTF, quality assurance remains a major problem. The main limiting factors to local production are quality control in order to meet stringent

standards, the need for capital investment, and the sourcing and cost of ingredients. Further research is needed to explore alternative RUTF formulas for local production and use.

Under certain circumstances, investments in improving the efficiency of the national supply and delivery chains were found to help open up more areas to expansion. UNICEF, WFP and IPs currently manage all or part of supply and delivery of supplies in parallel systems which were found to be unsustainable. The three factors most likely to promote supply chain efficiency were: a) stronger planning and forecasting; b) assessment of national supply chain weakness; and c) usage of the national system by IPs with concurrent capacity development. Plans with indicators to progressively strengthen national systems have rarely been developed. Outages are a common issue with regard to essential drugs; CMAM supplies are not always included on national essential drug/commodity lists.

CMAM costs are higher in remote or difficult to access areas such as mountainous or arid lands, where the need is often high. Cost efficiency is lower in camps and when salary top offs are paid for health staff.

The efficiency of delivery modalities depends on the strength of government commitment. When government commitment is strong, direct support to the government by UNICEF is the most cost-efficient delivery modality because of strong government ownership. Implementing through local NGOs proved to be more cost-efficient than through INGOs.

Common challenges in funding are lengthy periods for approval of project documents and signing of Memorandums of Understandings which delay implementation; short term agreements of three to six months between UNICEF and IPs adversely affect the motivation and performance of IP staff.

6. Sustainability and Scaling Up (Expansion of CMAM)

The scale-up and integration of CMAM have been facilitated by partnerships among government, UNICEF, WFP, WHO, UNHCR and implementing and development partners; a cohesive vision for addressing acute malnutrition does not always exist. In support of CMAM, effective coordination among UNICEF, WHO and WFP has been evident in emergency response; however, isolation of agency-specific roles has weakened the efficacy of longer term and regularized CMAM in ensuring linkages between inpatient and outpatient care and addressing SAM and MAM. Joint harmonization activities such as workshops, studies, and unifying SAM and MAM in a consolidated set of guidelines have been insufficient. Among IPs, lack of integration of planning and agreement on common indicators resulted in more disjointed approaches.

Globally and nationally, CMAM has not been found to be sustainable as a stand-alone intervention; integrated health and nutrition packages that include CMAM were more successful in strengthening efficiency, effectiveness, sustainability and prevention. A good practice was for CMAM to align itself to other preventive initiatives such as disaster risk reduction (DRR) and include indicators to that effect. The linkages to IYCF and MCH among others, highlight prevention as well as cure. Other means to augment CMAM outcomes include the IMAMI intervention, the HINI approach and greater promotion of traditional weaning foods.

The start-up or scale-up of CMAM with reliance on emergency funds and parallel systems slows integration and national ownership. Start-up of CMAM is heavily reliant on UNICEF support for equipment and supplies, capacity and guideline development, among others. Currently, CMAM is not sustainable without external support, however, separately managed and funded information systems, supply and delivery, finance and/or management oversight are difficult to effectively assimilate. Exit plans, Memorandums of Understandings, and other agreements are not currently in place describing roles and responsibilities of partners to progressively and efficiently build capacity, assess results and transfer parallel systems into national hands.

There is a need for more systematic planning and investment in evaluations and studies on the CMAM approach and in disseminating lessons and good practice examples. Areas where need for

additional knowledge is evident include optimizing the roles of CHWs, pursuing integration in various contexts, identifying the reasons for defaults and relapses, documenting options for effective MAM management, improving knowledge, attitudes, and practices for child nutrition, and researching the most sustainable options for addressing acute malnutrition.

7.2 Recommendations

A goal of CMAM is to strengthen national capacity to address acute malnutrition with important roles played by central, district, and local/community actors in the spirit of the Paris Declaration (2005). Ownership of CMAM will be evidenced in the degree to which policies create an enabling environment and stakeholders master the concepts driving CMAM and the technical skills needed to implement it. Support of the Ministry of Health (MoH) technical leadership and coordination and the usage of nationally created or recognized guidelines to promote harmonization of services are key elements of success.

Key recommendations are directed toward UNICEF Headquarters (HQ), Regional Offices (ROs) in CMAM priority regions, and to Country Offices (COs) where CMAM is being implemented. Recommendations are expected to be carried out through partnerships with government, UN agencies, IPs and other stakeholders. The recommendations are made in light of forthcoming global guidance (to be contextualized at the national level) on addressing severe acute malnutrition in emergency and non-emergency situations.

Overall, the evaluation recommends that UNICEF continue to promote and support CMAM as a viable approach to preventing and addressing SAM, with an emphasis on prevention through strengthening community outreach and MAM management and integrating CMAM into national health systems and with other interventions.

Ownership and Integration, Strategy and Policy, Guidelines

1. Continue to work with governments, WFP, WHO, IPs, and other stakeholders to secure a common understanding on the most effective means of addressing MAM in order to unify approaches, to strengthen community-based preventive measures, and to prevent SAM and relapses into SAM. UNICEF HQ needs to strengthen dialog with WHO, WFP and other stakeholders to clarify UNICEF's role in MAM management in view of global MoUs, and to make the best use of lessons learned and good practices to address MAM as a chronic problem. UNICEF HQ can call upon ROs and COs to collect input from their regions and countries. This may require global, regional or national workshops, and surveys and studies in various contexts.

2. Establish a guideline or framework for integration of CMAM into the health system and with other interventions that is useful at national level when based on capacity assessments and national health, nutrition and community development strategies. Through the global integration task force and other forums, UNICEF HQ should seek agreement on an integration framework. Using this guidance, UNICEF can offer technical assistance to help governments and partners develop a sustainable integration plan that will determine appropriate levels and types of external technical support.

3. Facilitate coordination and technical support at regional/national level to expand or develop national CMAM guidelines as CMAM is integrated with other interventions such as IYCF. With the MoH as the lead, UNICEF with oversight support from HQ, can provide technical assistance to assess current guidance and ensure that sufficient detail is included while integrating guidelines with other interventions. Guidance should be strengthened with regard to community outreach activities, MAM management, cultural adaptation, gender and equity, performance monitoring and administration of RUTF, among others, and include lessons learned.

Performance and Quality of Services

4. Strengthen community outreach by ensuring adequate investment in CMAM awareness-raising activities and their integration with outreach for other public health interventions. UNICEF COs

should advocate through dialog with government and through health and nutrition coordination forums for more collaborative use of resources from various interventions, including the work of the CHWs. This may include making greater investments in support for CHWs, and in awareness campaigns and joint strategic planning exercises, ensuring participation of community leaders and private health care providers. More connection needs to be made to national nutrition and health strategies; UNICEF ROs could help to link this process to the UNICEF C4D initiatives and with regular reviews of the community outreach strategy.

5. Decentralize nutrition information systems to strengthen data collection and analysis at district level supporting and reinforcing the MoHs' lead role and joint accountability among the MoH and partners for improving quality. UNICEF should take the lead in supporting the development of nutrition information systems capable of collecting qualitative as well as quantitative data and performing analysis of high quality that will promote aggregation of data at national and global levels. UNICEF should provide more technical support with partners such as WFP, WHO, and IPs to streamline data collection and reporting tools to reduce reporting burdens on staff and consider use of SMS technology for data monitoring. Stakeholders should agree on indicators that are critical and practical to collect and reassess the use of Sphere indicators as CMAM evolves to regular programming. Indicators should be developed to assess performance of community outreach activities and relapse; data should be disaggregated by sex.

6. Define a standardized monitoring system to assess the quality of the CMAM services to inform the MoH, UN partners, IPs and other stakeholders where more capacity is needed. UNICEF COs with technical support from ROs and working with government and partners should agree on a tool that will facilitate joint accountability for capacity development and qualitative monitoring which is integrated with other interventions to the degree possible. This can serve to indicate where greater interface with WASH is needed for acceptable water taps and latrines, and for noting other needs such as waiting areas, beds, play spaces and toys. A 3-tiered tool developed in Ethiopia is suggested as a model to be refined and adapted for this purpose.

Equity in Access, Assessment, Coverage, Planning

7. Strengthen planning for CMAM through conducting community assessments, and greater use of joint integrated results-based planning exercises and mapping information to help prioritize areas for scaling up. UNICEF COs should ensure joint planning with district stakeholders and inclusion of CMAM in district development plans. Planning has to accentuate participation of key community actors, demand challenges for CMAM services, possible equity issues and, identification of children who are most likely to be missed and potential strategies to reach them.

8. Improve awareness and capacity for conducting treatment coverage surveys and using the information to analyze trends. UNICEF COs should support capacity development on treatment coverage and ensure funding for technical assistance to conduct treatment coverage surveys, as well as assessing geographic coverage, with subsequent planning to strengthen and extend coverage.

Maintaining and Improving Efficiency

9. Strengthen means to reduce costs and promote national assumption of costs for ready to use therapeutic and supplementary foods. COs with the MoH need to address RUTF user/dispenser challenges such as sharing among siblings, caretaker sales, and weak storage management, through guidelines, sensitization, counselling, and training. COs can advocate to strengthen national supply and delivery services through a joint plan to build capacity, as well as incorporation of CMAM supplies (e.g. RUTF, equipment, medicines) as part of essential care packages to facilitate production and importation.

10. Conduct further operational research to find alternative RUTF formulas to promote feasibility of local production that meets international standards. UNICEF should take the lead to plan and support studies in various contexts working with key actors and providing technical assistance to assess capacity for production using alternatives to peanut-based RUTF. The RO's role needs to be augmented in promoting local/regional RUTF production and sharing technological insights.

Sustainability and Scaling Up (Expansion of CMAM)

11. Strengthen policies and partnerships that sustainably support scale up. UNICEF COs, with advice from ROs, need to ensure that agreements among government, IPs and technical advisors contain exit strategies and benchmarks for capacity building, e.g. for management, supply and delivery and information systems, and avoid unsustainable practices such as salary top offs. MoUs and PCAs should be developed in a timely manner and have sufficient time spans to support longer term goals of the intervention. UNICEF COs need to advocate for sufficient nutrition expertise in the MoH and ensure that its offices and IPs have adequate nutrition staff to coordinate planning and monitoring for scaling up CMAM.

12. Plan and implement exercises which strengthen a joint vision among UNICEF, WFP, WHO, IPs and the MoH on acute malnutrition. UNICEF should, at global, regional and national levels support joint workshops, and joint monitoring and evaluation, for the purpose of developing joint strategies and working toward an updated joint statement on addressing acute malnutrition.

13. Based on training needs assessments, job descriptions and appropriate supervision, scale up on the job training (OJT), training of trainers (TOTs), pre-service training (PST) and refresher training ensuring coverage of districts. CMAM training supported by UNICEF COs and with technical input from ROs should be combined with training for IYCF and other interventions to avoid redundancies and unify messages, through high level consultations with government and national nutrition networks and nutrition coordination mechanisms. The incorporation of nutrition science and CMAM into medical education and training (institutional training for doctors and nurses) needs to be promoted to ensure adequate pre-service training on acute malnutrition.

14. Strengthen prevention of SAM through ensuring that management of acute malnutrition is part of a minimum package of nutrition interventions in all priority countries. With the MoH, UNICEF and other partners through nutrition and health coordination forums need to design and implement a package of nutrition interventions which includes CMAM to manage MAM and SAM delivered as one of the basic health services, and also integrated within a broader intersectoral approach to address the causes of undernutrition. UNICEF HQ, ROs and COs should seek means to align CMAM with preventive interventions such as DRR and include indicators to that effect as well as encouraging countries to use global resources available through SUN and REACH.

15. Strengthen knowledge and lesson dissemination and sharing of successful approaches to integration and scaling up. UNICEF needs to devote more resources to plan and fund evaluations and studies on the CMAM approach in order to disseminate lessons, share good practice examples, and help to retain the knowledge and experience accumulated in communities. UNICEF RO's technical input needs to be strengthened to share regional experiences along with designing integrated monitoring plans and tools. Possible studies include optimizing the roles of CHWs, pursuing integration in various contexts, identifying the reasons for defaults and relapses, documenting options for effective MAM management, improving knowledge, attitudes, and practice for child nutrition, and researching the most sustainable options for addressing acute malnutrition.

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Appendix A: Evaluation Terms of References

UNICEF TERMS OF REFERENCE EVALUATION OF COMMUNITY MANAGEMENT OF ACUTE MALNUTRITION

BACKGROUND AND RATIONALE

Severe acute malnutrition (SAM) threatens the survival of children under five years of age both in emergency and non-emergency settings. Recent estimates covering both emergency and non-emergency settings suggest that SAM affects about 20 million children under 5 years of age globally and contributes to nearly 1 million child death each year. With increased frequency and intensity of natural disasters and economic uncertainties around the globe, it is likely that a larger number of your children will remain affected by SAM in the foreseeable future.

Management of severe acute malnutrition (SAM) has evolved as a major programme intervention over several decades but it had limited reach, as it was tied to lengthy inpatient treatment in health facilities. Scaling up of programmes that addressed SAM was made possible just a few years ago when the advent of a ready to use therapeutic (RUTF) food and an innovative community-based approach made it possible to treat the majority of children in their homes. Large scale implementation of community management of severe acute malnutrition (CMAM) started recently after UN endorsement of the community-based approach in 2005.

CMAM strategy is comprehensive and covers both demand and supply aspects. The enabling environment component encompasses the policies, commitment of funds, coordination and technical support available to MoH and program implementers. Access to services is meant to address both inpatient and outpatient components for treatment and suggests linkages with formal and informal healthcare and community based organizations or systems. Access to CMAM supplies is identified as critical and includes both essential drugs and RUTFs usually requiring long-term donor commitment if beyond the capacity of governments. Service quality includes establishment of adequate guidelines, support and supervision for staff and monitoring and evaluation components. The competencies component is meant to address issues of training and support, as well as on-site monitoring and communication outlets through which practitioners can share experience.

UNICEF has made significant investments in a number of countries to scale up treatment of severe acute malnourished children through CMAM initiatives. Direct country-level support provided by UNICEF over the last 3 years has helped 42 countries to implement community based approach. Ethiopia, Niger, Sudan, Chad, Somalia and Pakistan are among countries where community-based management of acute malnutrition (CMAM) is most advanced. Currently UNICEF procures around 8,000 MT of RUTF which represents an investment in therapeutic feeding of 30 million dollars a year. Field screening methods have been streamlined to allow community health workers to easily identify children who are severely malnourished using anthropometric measurements of mid-upper arm circumference (MUAC).

To consolidate the achievements made and to further enhance and expand CMAM services, there is a need to generate concrete evidence on how well the global as well as country level strategies have worked including their acceptance and ownership in various contexts, appropriateness of investments in capacity development and supply components. Likewise, appropriate methodologies to assess coverage are required as integral part of the planning and result monitoring. Strengthening of regional and local technical capacity both of UNICEF staff and implementing partners has been identified as a key issue that needs to be examined systematically. In addition, the adequacy of information and surveillance systems and their use in progress monitoring and decision-making need to be reviewed systematically to inform programme strengthening and expansion.

In most countries, CMAM is implemented by both government and NGOs with support from UNICEF and a host of other partners. In recent years, several reviews of CMAM have been conducted (AED 2009, AED 2008) however, there is a lack of evaluations which examine all key aspects of CMAM programming and programme effectiveness, efficiency, sustainability and scale up issues comprehensively. The proposed evaluation aims to fill this gap through a comprehensive assessment of CMAM in 3 countries and drawing synthesized lessons and findings for use by national governments, UN agencies, NGOs and other stakeholders.

PURPOSE AND USE

The proposed evaluation aims at strengthening of on-going and future CMAM programmes by systematically generating and disseminating evidence on CMAM experiences from 3 countries through the use of both qualitative and quantitative information related to processes, outputs, outcomes (including adherence to global standards and quality of services), coverage and scaling up options. The lessons and recommendations from the evaluation will be used by national governments, UN agencies, donors, NGOs for strengthening existing programmes as well as for advocating for leveraging resources for effective CMAM strategies and interventions in areas in need. The specific **objectives** of the evaluation are as follows:

- a) To undertake analytical assessment of the progress achieved in implementing CMAM globally with detailed assessment in 3 case study countries to identify key successes, good practices, and gaps / constraints that need to be addressed.
- b) To examine CMAM programme performance in the case study countries using standard OECD / DAC criteria of programme relevance/appropriateness, efficiency and quality of services, effectiveness, impact (potential) and sustainability.
- c) To examine the effectiveness of related cross-cutting issues such as coordination and management; gender and other forms of equity; capacity development; advocacy and policy development; and information/data management.
- d) To document good practices and generate evidence-based lessons and recommendations to strengthen on-going efforts towards expansion of CMAM coverage in countries in need and for strengthening global /regional level guidance and support.

The timing of the evaluation is scheduled to inform UNICEF planning process, to share good practices globally, and to undertake corrective measures and programmatic shifts in various contexts. At the global level, the findings and recommendations will be used for developing new/revised nutrition in emergencies / CMAM policy and technical guidance and for further advocacy and fundraising efforts. At the country level, the country specific recommendations will be used in designing, planning and implementing the most equitable and effective emergency nutrition programmes at the national level.

EVALUATION SCOPE AND FOCUS

The primary focus of the evaluation is to examine overall CMAM programme results and processes at the country level and to generate forward looking lessons and recommendations for strengthening and expanding planning and implementation of CMAM in needy areas. In addition, the evaluation will assess the adequacy of the global guidance and global/regional-level support and identify areas where improved guidance and support are needed. The evaluation will focus on a sample of 3 countries (including situation where CMAM has been implemented in response to a nutritional crises resulting from protracted long-term emergency) where CMAM programming has sufficiently matured to generate lessons that can be applied widely. It will examine processes and results related to all key components of CMAM namely a) community outreach; b) outpatient care for children with SAM without medical complications at decentralised health facilities and at home; c) inpatient care for children with SAM with medical complications or no appetite; and d) services for the management of moderate acute malnutrition (MAM). Given the diversity of country contexts, it may be necessary to have a slightly different TOR for each country, although the evaluation questions included in the general TOR will be common to all 3 countries.

The evaluation will generate evidence on “what works well” and “what does not work” on all key steps of the CMAM programme cycle covering community mobilization/awareness creation, case detection/screening/enrolment, treatment/feeding modality, and follow up processes. The evaluation will

examine policy and programmatic aspects as well as management modalities and make recommendations to strengthen both aspects. More specifically, the evaluation will provide evidence-based analysis to answer the following questions:

Programme relevance /appropriateness

- How well has the overall CMAM programme strategy evolved and to what extent specific strategies/ interventions respond to the local/national context, needs and priorities?
- How appropriate/adequate is the global guidance on CMAM for local/national needs including various aspects related to needs assessment, programme planning/design, management /quality assurance, monitoring and evaluation?
- How adequate is the technical and organisational support that has been provided for planning and implementing CMAM?

Programme effectiveness and coverage

- To what extent have the expected outputs and outcomes been realised through the CMAM programme? If there are shortfalls, what are the contributing factors? What is the estimated coverage of CMAM services against the national level need?
- How developed and successful are the specific CMAM strategies (community outreach and mobilisation, screening/enrolment, feeding, treatment, information management, follow up) and the interventions (as per the programme logic model) in realising overall programme objectives?
- What is the contribution of the programme to national capacity-building among nutrition and health professionals and community workers, to policy and system/institutional development and to the engagement of the private sector and other key stakeholders? What conclusions can be drawn regarding the effectiveness of capacity building efforts?
- What are the key successes in generating new knowledge by the programme? Are these well documented and disseminated within the country and outside? What are the knowledge gaps which still prevent expansion of services through larger investments in CMAM?
- Are there any noteworthy good practices and lessons regarding overall programme effectiveness or the effectiveness of specific strategies, management modalities used?

Programme efficiency and quality of services

How has the management aspect of CMAM evolved over time? How well understood and implemented are the current management mechanism including the roles and responsibilities of various staff and stakeholders?

- How systematically have the funds been allocated / utilised across programme strategies/activities to realise programme objectives? If there are delays/deviations in fund utilisation, how were these justified and what are the implications for attaining programme objectives? What lessons and recommendations can be drawn for the future?
- How operational and effective are the coordination mechanisms at the country level (i.e. coordination by the Government, including different ministries and other implementing partners, stakeholders (other UN agencies, NGOs, donors, etc.)? If noticeable gaps are evident, how can they be addressed?
- How timely and effective was UNCEF RO's and HQ's guidance and support in achieving overall goals and objectives of the programme? How successful was the coordination between NYHQ, RO and COs within UNICEF?
- To what extent does the service delivery meet expected quality standards? What factors have contributed to meeting quality standards? Where quality standards are not met, what are the key bottlenecks/constraints that need to be addressed in order to meet quality standards?
- What are per unit costs of CMAM in various contexts? Can any conclusions be drawn regarding cost-effectiveness / efficiency for treatment according to CMAM program in particular country contexts?

Programme sustainability and scaling (country level)

- The evaluation will examine administrative, institutional, technical and financial sustainability and explore possible opportunities for expansion of effective CMAM interventions (drawing in addition from the other evaluation questions):
- What level of progress has been achieved to build CMAM programme's ownership by the Government and its integration in the national service health delivery system?
- How feasible are the current interventions in terms of the ability to be sustained without direct technical/financial support by UNICEF and other agencies? What factors have supported or inhibited expansion and scale up of CMAM interventions?
- What are the issues and options related to the feasibility (administrative, institutional, technical, and financial) for replication and expansion? What are the risks related to sustainability that are related to discontinuation of external support? What plans/strategies/mechanism exists for programme phase out/closure?

Programme impact (outcomes / potential impact)

- Based on longitudinal data and other type of information, what conclusions can be drawn regarding the extent to which the programme contribute to a long-term improvement in the quality of life of the children treated through CMAM?
- What is the evidence regarding national and sub-national engagement and ownership of the CMAM? To what extent has national ownership of CMAM programme increased? What are the success factors and lessons learned? Where this has not occurred fully, what are the constraints and consequent lessons for the future? Is there any evidence of increased budgetary allocations at the national level?
- How significantly has the programme contributed to either revitalize or place nutrition high on the national policy and developmental agenda?

Cross-cutting issues

- How effective is the vertical and horizontal coordination (involvement of various sectors) in planning and implementing CMAM? How strong is the national /sub-national engagement and ownership of CMAM programme (including national budget allocations)?
- How adequate is the progress achieved in implementing a national policy on CMAM or in integrating CMAM components into existing policies? What more needs to be done? What lessons can be drawn?
- How systematically has institutional capacity development been pursued at all levels for long term sustainability of the programme? What more needs to be done?
- How adequate are the guidelines on various aspects of CMAM programming? To what extent the technical support provided by various agencies is well-coordinated and responds adequately/coherently to various programmatic needs?
- To what extent gender equality existed in CMAM programmes in participation, decision making and access to CMAM services? Are there any issues related to gender, geographic or other form of equity in CMAM service delivery and access that are evident? What measures could be proposed to improve programme targeting?

EVALUATION APPROACH AND METHODS

The evaluation will be conducted in two phases. The first stage will involve an extensive inception phase based on secondary information sources and interviews with a few key staff in each country, and with selected global and regional nutrition advisors/experts. A detailed inception report will be prepared which will detail the evaluation scope and methods based on the information gathered during the first phase. The second phase will involve further investigation and preparation of the evaluation report to be delivered by end September, 2011. The evaluation will be guided by the global CMAM conceptual framework/strategy and the country specific CMAM logic models and results frameworks which will need to be discussed and made explicit in the initial stage of the evaluation. In addition, the evaluation will also need to apply a systems evaluation approach to examining CMAM implementation / management aspects.

Given the multi-dimensional focus of the evaluation, a multitude of methods will be used for information generation combining documentary review, interviews, field observation visits, and surveys as follows.

a) Review of secondary data and documents: A list of relevant documents together with electronic copies of key documents will be shared with the evaluation team during the inception phase. In addition, programme managers will provide data that are readily available from various sources. The data will be reviewed and analysed during the inception phase to determine the need for additional information and finalisation of the detailed evaluation methodology.

b) Interviews with key informants: Interviews will be conducted at several levels and in phases. A few key staff from the countries involved and global/regional advisors/experts will be interviewed during the inception phase. In the following, phase interviews will be conducted with additional experts and staff including local level personnel involved in managing and supporting the CMAM programme. Additional interviews will be conducted with policy makers and programme coordinators in the countries involved including sub-national level staff, UNICEF Representatives and/or deputies, nutrition programme managers and advisors at various levels. Interviews will also be help with staff of other agencies who contribute to and partner in CMAM programmes globally and/or at the national level.

c) Field observation and focus group discussions with nutrition and health staff, participants/beneficiaries in the programme (CMAM service providers, CMAM decision/policy makers/NGOs, parents). When organising field visits and interviews, attention will be given to ensure gender balance, geographic distribution, representation of all population groups and representation of the stakeholders/duty bearers at all levels (policy/service providers/parents/community).

d) Use of baseline information. Each country office will be responsible to provide baseline information on malnutrition and the CMAM programme evolution in the country based on secondary data and information that is readily available.

e) There is no field level survey envisaged unless the inception phase recommends the need for a survey is essential for the evaluation. If a survey is justified, it will be budgeted separately. An internet based survey to assess global level progress, challenges and needs related to CMAM may be necessary.

The evaluation is expected to draw out relevant comparisons where possible. This will require comparing CMAM programmes across various settings both in terms of institutional processes and performance. For such comparisons, the evaluators must be clear of what is to be considered as a “good” standard. Where possible the evaluation should identify good practices that will form the basis for quality design and assessment efforts in future CMAM programming.

EVALUATION MANAGEMENT / STAKEHOLDER PARTICIPATION

The evaluation will be managed as an independent evaluation by UNICEF's Evaluation Office under the leadership of a Senior Evaluation Specialist. An Evaluation Advisory Group (EAG), chaired by a senior staff from PD, NYHQ and members from selected UNICEF CO/RO staff, national government counterparts, Nutrition Section, PD, NYHQ, HIV/AIDS Section and EMOPS will be established to ensure broad-based ownership of and support to the evaluation. The EAG will review and comment on the draft inception report and the draft evaluation reports and provide comments. The EAG will also be involved during the dissemination and management response phase of the evaluation. In the participating countries, evaluation reference group will be established to support the evaluation which will include Government (Ministry of Health in particular) officials.

As the main counterpart/client, Nutrition Section, PD will be responsible for information sharing and arranging meetings of the EAG. UNICEF COs will be responsible for providing relevant information at the regional and country level, providing access to relevant reports/statistics, organizing field visits, logistical support, organizing meeting with different stakeholders at the country level, and interacting with the national evaluation reference group.

EVALUATION TEAM

The evaluation is planned to be conducted by a registered institution or by a team of free-lance consultants. It is proposed that the evaluation team consist of two international evaluation experts (a

leader and a technical expert) one of whom must have significant research/evaluation background in emergency nutrition programming. The exact division of work will be decided by the institution/team, but in general, the team leader will have the responsibility for all negotiations, decisions, and deliverables. The technical work is to be divided between the team leader and the team member. Either the team leader or the member must be a woman. In addition, a third consultant (data processing/information specialist) who would help gather information, undertake data analysis will be involved on a part time basis. For the participating countries, 1-2 national consultants, who will support local data collection and processing, are also envisaged.

The qualifications and experience required are as follows:

Team Leader:

- Extensive evaluation expertise and experience (at least 8 years) and a strong commitment to undertake the evaluation
- Knowledgeable of institutional issues related to development programming (including funding, administration, the role of the UN system, partnerships, human rights, sustainable development issues)
- Familiarity with CMAM policy and programme issues either as researcher/evaluator or programme manager
- Team leadership and management, interpersonal/communication skills

Team Member (technical expert):

- Strong evaluation expertise and experience (at least 5 years), including methodological and data collection skills;
- Demonstrated skill in conducting evaluations of CMAM or other health and nutrition programmes
- Team work and inter-personal communication

Team Leader and Member:

- Language proficiency: English (mandatory), French and/or Spanish are an advantage (depending on the country selected for the field visit). Excellent writing skills in English.
- Significant international exposure and experience in working with UN agencies (desirable).
- Advanced university degree in social science, preferably in a topic related to public nutrition or epidemiology.
- Good communication, advocacy and people skills. Ability to communicate with various stakeholders. Ability to express concisely and clearly ideas and concepts in written and oral form.

Appendix B: Partners' Roles in CMAM Implementation in the Five Case Study Countries

	MoH	UNICEF	WFP	WHO	IPs	Main Donors
Nepal	<ul style="list-style-type: none"> -Provides health facilities and staff. -Provides technical and monitoring support to the DoH. -Periodic visits to the CMAM intervention areas -Participates in assessment and planning -Developed national guidelines in coordination with UNICEF and IPs 	<ul style="list-style-type: none"> Appoints consultants and advisors to support the DHO 		<ul style="list-style-type: none"> Provides technical assistance and procures supplies for inpatient treatment services 	<ul style="list-style-type: none"> Provide technical assistance to the DHO based on the consensus between UNICEF and the MoH 	<ul style="list-style-type: none"> -DFID -The Central Emergency Response Fund (CERF) -European Union (EU)
Pakistan	<ul style="list-style-type: none"> -Provides health facilities and staff -Co-chairs the nutrition cluster with UNICEF 	<ul style="list-style-type: none"> -Supports operational costs, therapeutic food, medicines, equipment and capacity building of IPs and national health staff -Developed a Nutrition Information System (NIS) -Undertakes advocacy, awareness and Behavioural Change Communication strategy 	<ul style="list-style-type: none"> -Actively involved in planning and implementation of CMAM -Transports and delivers FBF and RUSF for children with MAM 	<ul style="list-style-type: none"> Agreement with the government and IPs in KP for establishing and strengthening the inpatient treatment centres 	<ul style="list-style-type: none"> Implement the activities through the government health facilities in collaboration with the MoH staff 	<ul style="list-style-type: none"> -DFID -USAID -The World Bank
Ethiopia	<ul style="list-style-type: none"> -Provides health facilities and staff -FMoH coordinates the overall scale up of CMAM with MANTF 	<ul style="list-style-type: none"> -Mobilizes resources by developing an emergency nutrition response plan -Procures CMAM supplies -Provides technical assistance to the FMoH on standardizing protocols, training, quality improvement, supportive supervision and performance review, monitoring, 	<ul style="list-style-type: none"> Transports and delivers FBF and RUSF for children with MAM 		<ul style="list-style-type: none"> Provide technical assistance which includes capacity building, training, establishing outpatient and inpatient treatment services, monitoring, reporting and preparing quality improvement tools, supporting the review and in some areas 	<ul style="list-style-type: none"> -The Humanitarian Response Fund (HRF) -OFDA -Japan Government -ECHO -DFID -CIDA -Spanish MDG-Fund

		reporting, and evaluation			transporting CMAM supplies especially RUTF to health posts	
	MoH	UNICEF	WFP	WHO	Ips	Donors
Chad	<ul style="list-style-type: none"> -Provide health facilities and staff -Co-chair the nutrition cluster with UNICEF 	<ul style="list-style-type: none"> -Lead the nutrition cluster -Supports operational costs, therapeutic food, medicines, equipment and capacity building of national medical staff -Provided supportive supervision, monitoring, reporting, and evaluation 	<ul style="list-style-type: none"> Transports and delivers FBF and RUSF for MAM children 	<ul style="list-style-type: none"> Provides technical assistance and procures supplies for inpatient treatment services 	<ul style="list-style-type: none"> Implement the activities through the government health facilities in collaboration with the MoH staff 	<ul style="list-style-type: none"> -ECHO -French Government
Kenya	<ul style="list-style-type: none"> -Leads the implementation and management of IMAM by providing health facilities and staff -Co-chairs the nutrition cluster with UNICEF -Supports and Ensures ToRs for National, Province and District Nutrition Coordination and Information system are respected. -Ensures dissemination of National Guidelines, OJT tools and other relevant documents to sub-national level in collaboration with partners. -Supports sub-national level capacity building, supervision and mentoring (OJT). -Supports and facilitates community strategy implementation. -Facilitates signing of MoUs between partners and MOH at National level and Agreement /TOR at District level. 	<ul style="list-style-type: none"> -Supports the MoH in capacity building of health workers through on the job training (OJT) -Supports and participates in coordination mechanisms -Directly supports the districts for monitoring and reporting; as well as management and availing nutritional supplies -Indirectly works through NGOs as well, as which involves transfer of resources to the MoH after signing Programme Cooperation Agreements (PCAs) 	<ul style="list-style-type: none"> Engages NGOs to support WFP's joint programming with the MoH 		<ul style="list-style-type: none"> Implement the activities through the government health facilities in collaboration with the MoH staff 	<ul style="list-style-type: none"> -ECHO -The World Bank -USAID -DFID -Central Emergency Response Fund (CERF) -DANIDA

Appendix C: Internet Survey Questionnaire

UNICEF Survey for the Global Evaluation of Community Management of Acute Malnutrition (CMAM)

Introduction

The UNICEF Evaluation Office, NYHQ requests your participation in this survey which is being conducted to gather information for the global evaluation of CMAM evaluation. The survey is aimed at all countries where CMAM is being implemented with UNICEF support. Five country case studies (Nepal, Pakistan, Ethiopia, Chad and Kenya) have been completed and a global team is working on a synthesis report to include perspectives from the other CMAM countries. The survey has been developed to cover gaps in information and to add to the case study findings. The survey complements UNICEF's two recent surveys in UNICEF-CMAM supported countries: the "Global CMAM Mapping Review" (2011) and the 'Global SAM Treatment Update' (2012) although we realise that some of the questions might overlap.

In answering the following survey questions, UNICEF country office staff members are asked to confer with partners to ensure that the country perspective is represented. Responses will help inform the evaluation and provide inputs to future UNICEF and partner investments in CMAM. Survey data will not be attributed to any individual, office, or country in the evaluation report.

The **survey period will close on 2 October, 2012 and all CMAM countries are requested to respond.** We thank you for participating in this important evaluation. If you have questions about the survey please contact Sheila Reed sheilareed@yahoo.com and Eric Kouam erickouam@yahoo.fr (External Evaluation Team).

Background information of the Respondent

Please specify the titles of UNICEF staff and partners who contributed to answering the survey questions

Titles _____

Country _____

1. Please indicate the context in which CMAM is being implemented in your country,

- a) Regular programme
- b) Emergency programme
- c) Emergency and regular programme
- d) Other _____

2. Please indicate the number of years that the CMAM programme has been **implemented** in your country

- a) Less than 1 year
- b) 1-2 years
- c) 3-4 years
- d) 5-6 years
- e) More than 6 years

Progress in Implementation

3. What has worked well in your country to increase access to **outpatient treatment** services for children and their care takers?

- a. Using or expanding satellite or sub health post outpatient treatment centers
- b. Using or expanding mobile outpatient treatment
- c. Defining or expanding roles of community health workers to manage ready to use foods and medicines
- d. Expanding staff and/or opening hours for treatment services in existing facilities
- e. Providing sibling rations (i. e. high energy biscuits)
- f. Other, please explain

4. What has been the most effective means of increasing access to **inpatient treatment** services?

- a. Opening more stabilization centers (SCs) in hospitals
- b. Merging the SC with the other inpatient services in hospitals
- c. Improving procedures among outpatient and inpatient services to transfer and track children with complications
- d. Expanding staff or facilities in existing SCs
- e. Other, please explain

5. What do you consider to be the strongest element of community outreach implementation in your country?

- a. Active case finding/screening and referral for admission and registration
- b. Community sensitization
- c. Referral for and home visits and case follow-up
- d. Other, please explain

6. What has facilitated the strength of community outreach?

- a. Guidance (e.g. guidelines, standards, job aids) for staff
- b. Technical support
- c. Capacity development
- d. Provision of incentives for community health workers (e.g. salary top offs, advancement in professional status)
- e. Provision of incentives for community members (e.g. access to other health or social services)
- f. Community members support
- g. Availability of RUTF and other nutrition supplies
- h. Other, please explain

7. What is the weakest element of community outreach implementation in your country?

- a. Active case finding/screening
- b. Community sensitization
- c. Referral
- d. Home visits and case follow-up

e. Other, please explain

8. Where should more efforts be placed to improve community outreach?

- a. Guidance (e.g. guidelines, standards, job aids)
 - b. Technical support
 - c. Capacity development
 - d. Support from civil society (e.g. local NGOs, special interest groups)
 - e. Support from private business owners (e.g., private health care providers)
 - f. Community awareness raising sessions
 - g. Other, please explain
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9. Which three elements of Moderate Acute Malnutrition (MAM) management require the most strengthening in your country?

- a. Capacity to manage MAM
 - b. Guidelines for MAM management
 - c. Implementation of MAM management through the health delivery system
 - d. Monitoring of performance indicators
 - e. Behaviour modification inputs such as counselling
 - f. Integration of MAM management with other programs such as IYCF
 - g. Collaboration between the government and partners such as WFP, UNICEF and implementing partners
 - h. Inter-sectoral coordination to promote addressing of root causes
 - i. Other, please explain
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10. What are the three greatest challenges to monitoring the effectiveness of MAM management in your country?

- a. Measuring behaviour changes in child feeding practices
 - b. Utilization of supplementary foods by beneficiaries
 - c. Indicators for MAM management
 - d. Human resource availability in the health delivery system
 - e. Community support for MAM management outcomes
 - f. Donor interest in outcomes of MAM management
 - g. Other, please explain
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11. What are the main challenges in improving access to CMAM services for the most vulnerable children or potentially marginalized groups?

- a. Cost effectiveness/too high cost
 - b. Shortages of qualified staff
 - c. Accessibility or logistic difficulties
 - d. Weak identification of the children who might be missed
 - e. Lack of strategy to include them
 - f. Other, please explain
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12. Background to Question #10 using UNICEF agreed definition and calculation: Geographical coverage can be defined as the proportion of primary healthcare facilities in the program area that deliver CMAM services to the total number of primary healthcare facilities in the program area. It is defined in terms of working facility per number of population and measures geographic distribution of facilities and access to services for management of SAM in the program area.

Geographical coverage = PHC facilities delivering CMAM services/total PHC facilities.

What is the **major challenge** in your country to estimating geographic coverage to treat admitted SAM cases in CMAM targeted areas (please select one):

- a. There is no agreed calculation among national-level stakeholders for geographic coverage
 - b. Data on numbers of treatment facilities such as satellite centers and mobile clinics are not available
 - c. The population numbers are difficult to ascertain due to lack of registration of newborns, or other reasons
 - d. Other, please explain
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13. Background to question #11 using UNICEF agreed calculation:

Treatment coverage = cases treated/need
Need = Population 6-59m x [Prevalence + (Prevalence x 1.6)]*

What is the major challenge to conducting **treatment coverage** surveys in CMAM targeted areas:

- a. Treatment coverage surveys are not planned
 - b. Treatment coverage surveys are not funded
 - c. Treatment coverage survey methods require special statistical packages and expertise
 - d. The rates of SAM prevalence are not available or reliable
 - e. Other, please explain
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Ownership and Commitment

Policy and Guidelines

14. What have been the most important factors in your country for increasing national ownership for CMAM at the district level? (Please choose two.)

- a. A national nutrition policy or strategy with CMAM included in it
 - b. A high level national nutrition authority
 - c. An executive or high level steering committee for CMAM
 - d. Leadership of a national/district nutrition cluster or other nutrition sector coordinating mechanism
 - e. National CMAM guidelines
 - f. Integration of CMAM with IYCF and/or IMCI
 - g. Other, please explain
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15. How can development and improvement of standards and guidelines for CMAM best be supported?

- a. Unify the global standards, e.g. the Sphere standards, WHO/UNICEF standards
- b. Develop CMAM standards regionally

- c. Improve national standards
 - d. Unify the standards for CMAM with other early childhood development programs, such as IYCF and IMCI
 - e. Other, please explain
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Human resources

16. What are the three greatest challenges faced by community health workers (e.g. female or male health workers, community outreach workers) in your country in their roles to implement CMAM? (Please choose the top three.)

- a. Roles are not well defined
 - b. More support needed to reach children in their homes
 - c. Too many other programs to implement
 - d. Burdensome reporting requirements
 - e. Insufficient motivation through remuneration or other incentives
 - f. More support is needed from supervisors
 - g. Inadequate training
 - h. Other, please explain
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17. What approaches have worked most effectively in your country to promote capacity development of health workers? (Please name the top two.)

- a. The cascade training approach, e.g. conducting TOTs and follow-on training
 - b. Pre-service training
 - c. Refresher training
 - d. On-the-job coaching or mentoring
 - e. Training matched to experience and needs of participants at various levels
 - f. Professional advancement based on personal capacity development
 - g. Other, please explain
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Integration of CMAM into the National Health Delivery System

18. What are the two main challenges to integration of CMAM into health services in your country?

- a. Definition and indicators for integration
 - b. Strategy for integration
 - c. Health service capacity
 - d. Transfer of skills and resources to the government for CMAM
 - e. Integration of CMAM with other programs (e.g. health, nutrition and early childhood development)
 - f. Other, please explain
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Challenges in Scaling Up

Coordination

19. How would you rate the effectiveness of inter-sectoral coordination in your country for improving the outcomes of CMAM (e.g. among sectors, ministries and assistance organization with programs affecting nutrition outcomes, such as WASH, food security, agriculture, health, etc.)

- Very effective
- Moderately effective
- Not effective

19a. If you selected effective or moderately effective, please provide 1-3 examples of how intersectoral coordination has positively affected nutrition outcomes.

19b. If you selected not effective, please provide 1-3 reasons.

Capacity

20. What are the three greatest challenges in your country relation to national capacity for scaling up CMAM?

- a. Human resources – Insufficiency of well trained and adequate numbers of health staff
- b. Funding – Inadequate government and/or external funds
- c. Integration – Not proceeding fast enough or with enough quality in services
- d. Planning – Joint planning at central and district levels is not strong enough
- e. Coordination – Government does not take a strong enough role in coordination
- f. Supply chain management – to ensure timely provision of products and medicines
- g. Other, please explain

21. What three factors are most likely to promote supply chain efficiency for CMAM through the national supply and logistics systems?

- a. Investment in training
- b. Assessment of national supply chain weaknesses
- c. Storage infrastructure improvements
- d. Stronger planning and forecasting
- e. Pre-positioning of supplies
- f. Registration of essential supplies
- g. Usage of the national systems by implementing partners
- h. Other, please explain

22. What three tools or mechanisms are needed to strengthen efforts to reach the most needy children?

- a. Mapping vulnerability
- b. CMAM targeting guidelines
- c. Community-based assessments for CMAM
- d. Stronger case identification
- e. Training in equity and gender issues
- f. Other, please explain

UNICEF's Role

23. What additional guidance / support should UNICEF Headquarters provide to improve a) effectiveness and efficiency of on-going effort and b) for scaling up CMAM? Please be specific.

a) _____

b) _____

24. What additional support should the UNICEF Regional Office provide to improve a) effectiveness and efficiency of on-going effort and for b) scaling up CMAM?

a) _____

b) _____

25. What additional capacities are needed in the Country Office to improve a) effectiveness and efficiency and for b) scaling up CMAM?

a) _____

b) _____

Thank you for your cooperation!

Appendix D: List of the 51 Respondent Countries to the 2012 Global CMAM Evaluation Synthesis Survey

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|------------------------------|----------------------------------|------------------------|
| 1. Angola | 21. Indonesia | 41. South Sudan |
| 2. Bangladesh | 22. Kenya | 42. Sudan |
| 3. Benin | 23. Laos | 43. Tanzania, Mainland |
| 4. Bhutan | 24. Lesotho | 44. Timor-Leste |
| 5. Botswana | 25. Liberia | 45. Togo |
| 6. Burkina Faso | 26. Malawi | 46. Uganda |
| 7. Burundi | 27. Mali | 47. Vietnam |
| 8. Cambodia | 28. Mauritania | 48. Yemen |
| 9. Cameroon | 29. Mongolia | 49. Zambia |
| 10. Central African Republic | 30. Mozambique | 50. Zanzibar |
| 11. Chad | 31. Nepal | 51. Zimbabwe |
| 12. Cote D'Ivoire | 32. Niger | |
| 13. Djibouti | 33. Nigeria | |
| 14. DR Congo | 34. Philippines | |
| 15. Eritrea | 35. Rwanda | |
| 16. Gambia | 36. Senegal | |
| 17. Ghana | 37. Sierra Leone | |
| 18. Guinea (Conakry) | 38. Somalia | |
| 19. Haiti | 39. Somalia – Central South Zone | |
| 20. India | 40. South Africa | |

Appendix E: Scope and Duration of CMAM Costing Data

Country	Scope	Duration	Remarks
Nepal	The five pilot districts	May 2009 to May 2011	Cost data available for the duration of the intervention
Pakistan (KP province)	45 CMAM projects implemented in 8 districts	January 2010 to November 2011	Cost data available for the duration of the intervention
Ethiopia	15 districts drawn from five regions	January 2010 to December 2012	Districts used as the main unit in order to facilitate comparison between regions
Chad	11 regions supported by UNICEF	January 2010 to December 2012	Data were not disaggregated according to regions
Kenya	All CMAM sites	October 2010 to December 2011	