FOOD AND NUTRITION TECHNICAL ASSISTANCE

NIGER

REVIEW OF INTEGRATION OF COMMUNITY-BASED MANAGEMENT OF ACUTE MALNUTRITION SERVICES

June 5 - 22, 2007

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This report is made possible by the generous support of the American people though the support of the Office of U.S. Foreign Disaster Assistance (OFDA) of the Bureau for Democracy, Conflict and Humanitarian Assistance and the Office of Health, Infectious Disease, and Nutrition, Bureau for Global Health, United States Agency for International Development (USAID), under terms of Cooperative Agreement No. HRN-A-00-98-00046-00, through the Food and Nutrition Technical Assistance (FANTA) Project, operated by the Academy for Educational Development (AED). The contents are the responsibility of AED and do not necessarily reflect the views of USAID or the United States Government.

ACRONYMS

AED	Academy for Educational Development
CMAM	Community-based Management of Acute Malnutrition
CTC	Community-based Therapeutic Care
DHS	Demographic and Health Survey
FANTA	Food and Nutrition Technical Assistance Project
GON	Government of Niger
KAP	Knowledge, Attitudes, and Practices
MAM	Moderate Acute Malnutrition
MICS	Multiple Indicator Cluster Survey
MOH	Ministry of Health
RUTF	Ready to Use Therapeutic Food
SAM	Severe Acute Malnutrition
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

TRANSLATIONS

Agent de Santé Communautaire	Community Health Worker
Case de Santé	Health Post
Cellule des Crises Alimentaires	Food Crises Cell
Centre de Récupération Nutritionelle (CREN)	Nutrition Rehabilitation Center
Centre de Santé Intégré (CSI)	Health Center
CRENAM (CREN Ambulatoire - Malnutrition Modérée)	Program for moderate acute malnutrition
CRENAS (CREN Ambulatoire - Malnutrition Sévère)	Outpatient care for SAM
CRENI (CREN Intensive)	Inpatient care for SAM
Médecin Chef	District Health Director
Matrone nouvelle	Traditional Birth Attendant
Système d'Alerte Précoce	Early Warning System

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I. INTRODUCTION

Severe acute malnutrition (SAM) remains a major killer of children under five years of age in developing countries, including in countries not recently affected by an emergency. Levels of global acute malnutrition in some countries not categorized as being in an emergency are as high as 15 percent during lean seasons (e.g., Burkina Faso, Niger, and Malawi).

Community-based management of acute malnutrition (CMAM) could prevent the deaths of many children in emergency and development settings. The community-based approach for the management of acute malnutrition involves timely detection and referral of cases with SAM in the community, outpatient treatment of those without medical complications, and inpatient treatment of those without appetite or with medical complications. It is intended to provide services that are closer to and less disruptive for communities and families by making services available at decentralized treatment points and through community outreach and mobilization. Moreover, it can promote participation and behavior change for long-term solutions to inappropriate care and feeding habits, food insecurity, and other threats to public health.

While the evidence base for the nutritional impact of CMAM - also referred to as Community-based Therapeutic Care (CTC) - has been well established in programs run by relief agencies during emergencies, there is a need for greater documentation of the experience in integrating these services into national health systems in the post-emergency period. Moreover, developing countries coping with high levels of acute malnutrition are in need of information on good practices for introducing CMAM services into the basic package of health services. For this purpose, the FANTA project organized visits to three countries to:

- Assess integration of severe acute malnutrition services into health services,
- Document lessons learned, and
- Provide recommendations for improved integration.

This report presents the main observations from the Niger country visit, and is accompanied by similar reports from visits to Ethiopia and Malawi. A CMAM Review Synthesis report will present a broader review of integrating CMAM services into existing health services and community structures, assessing programmatic and policy approaches associated with successful harmonization and integration of CMAM at the national and local levels, and discussing issues to be taken into account to successfully integrate CMAM services in other countries.

The visit to Niger was conducted from June 5 to 22, 2007. This report first provides an overview of the environment in which CMAM services are delivered in Niger. Next, the current situation of CMAM services is described and the capacity of the Nigerien health system is discussed. This discussion is organized around five elements: the enabling environment; access to services; access to supplies; quality of services; and competencies. The next section covers challenges for integration and summarizes the specific lessons learned from reviewing CMAM programs in Niger. The report ends by highlighting the

conclusions and provides some Niger-specific recommendations for improved integration of CMAM.

This report, like the trip to Niger, does not intend to be exhaustive but rather to highlight issues that are relevant for CMAM integration in Niger. It intends to inform the analysis and discussion on CMAM integration in the Synthesis Report and to provide feedback to the numerous partners that shared their experiences and programs, providing the FANTA team with a better understanding of CMAM services on the ground and addressing acute malnutrition in Niger. To all of them, we express our sincere appreciation and thanks.

II. METHOD

Information was collected through document review; field visits with direct observation of CMAM services; semi-structured interviews with key informants at national, regional, district and community levels; and discussions with health workers, community health workers, community volunteers, beneficiaries and non-beneficiaries.

The FANTA team met with representatives of all relevant stakeholders, including the Government of Niger (GON), nongovernmental organizations (NGOs), the UN, community-based organizations, community members, and CMAM beneficiaries and non-beneficiaries.

A framework that was used in the review process is in Annex 1. The itinerary of the country visit and a contacts list are provided in Annexes 2 and 3, respectively. Annex 4 provides a list of documents consulted. Annex 5 provides a map of the country, indicating the CMAM sites visited by the FANTA review team. Annex 6 provides information on the local production of RUTF. Whenever possible, information from interviews, observations and documents was triangulated.

III. THE NIGER CONTEXT

1. Health and nutrition profile

Niger, a country of 12.6 million people, of which 2.3 million are children under five years of age, is located on the arid lands of the Sahel. It is among the poorest countries in the world, with great scarcity of resources and infrastructure. Eighty percent of its inhabitants live in rural areas, and 63 percent are classified as living below the poverty line. In the 2006 Human Development Index, Niger ranks 177 out of 177 countries.

Levels of child mortality and malnutrition are high, even in normal (i.e., non-emergency) years. Stunting increased from 40 to 50 percent between 2000 and 2006. The 2006 Demographic and Health Survey (DHS) shows rates of wasting to be highest in the regions of Diffa and Dosso and uniformly above 10 percent in all regions but Niamey and Tillabéri. Table 1 presents a summary of key health and nutrition indicators.

Table 1: Niger: key demographic and health indicators

Total population	12.6 million
Under five population	2.3 million (18.2 %)
Life expectancy at birth (M/F)	42 / 41 years
Infant mortality	81/1000
Under-five mortality	198/1000
Maternal mortality	652/100,000 births
Total fertility	7.1 children born per woman
HIV positive (15 – 49 yrs)	0.7%
Access to health care	54%
Access to safe drinking water	59%
Access to sanitation	20% (5 % in rural areas)
Children exclusively breastfed (< 6 mo)	14%
Children vaccinated (DPT3) (12-24 mo)	29%
Vitamin A supplementation coverage	70%

Malnutrition rates:	2000 MICS	2006 DHS
Stunting (<-2 height for age z score)	39.8%	50.0%
Underweight (<-2 weight for age z score)	39.6%	44.4%
Moderate and severe wasting (<-2 weight for height z score)	14.1%	10.3%
Severe wasting (<-3 weight for height z score)	3.2%	1.5%

Sources: MICS 2000 and DHS 2006

2. Recent history of emergencies

Niger is subject to recurrent droughts, frequent food insecurity, high incidence of communicable diseases, and high population pressure, particularly in the south. Niger suffered major food crises in 1973 and 1984 resulting from drought, significant food production deficit and lack of food availability in markets. The consequences at that time, in addition to excess malnutrition and death, were destitution and massive migration, mainly to Nigeria. The humanitarian response consisted of food distribution through the national system and international aid. No specific programs for the treatment of acute malnutrition are known to have been set up at that time.

The 2005 humanitarian crisis was multi-causal, triggered by a locust infestation and food production deficit. Results of nutrition surveys in several districts warned of an early start of the seasonal malnutrition peak, and higher than usual levels of malnutrition. In August 2005, Doctors Without Borders - France published[1] global acute malnutrition rates ranging from 18.6 to 19.3 percent and daily under-five mortality rates of 2.2 to 4.1 per 10,000 in Maradi and Zinder, attracting global media attention and helping to spark a major humanitarian response. There is no consensus yet on the causes of the 2005 and 2006 acute malnutrition peaks; causes are likely to include inadequate household food security, both food production and food access components; inadequate care and feeding practices, particularly weaning

[1] United Nations Standing Committee on Nutrition, Nutrition Information in Crisis Situations Report VII, August 2005.

practices; high prevalence of communicable diseases; poor healthcare access; and poor hygiene. Food distributions to the general population started in August 2005, and international NGOs established programs addressing acute malnutrition and food insecurity. Most of these interventions continued through 2007 with some adaptations.

3. Nutrition and food security institutions

The GON has several units dedicated to the monitoring, prevention, and control of nutrition and food security crises. The Food Crises Cell (Cellule des Crises Alimentaires) and the Early Warning System (Système d'Alerte Précoce), based in the office of the Prime Minister, monitor food crises, recommend governmental declarations of a crisis, and participate and coordinate the national and international humanitarian response[2]. In addition, the Food Crises Cell operates a national food buffer stock of 110,000 tons of cereal. It also manages a common donor fund to support vulnerable populations through food for work, cash transfers, and subsidized sales, among other interventions. This system, based on funding from 12 countries and the UN, finances activities implemented by international and national government and nongovernmental organizations.

The Ministry of Agricultural Development and the Ministry of the Environment and the Fight against Desertification have activities related to food security and livelihoods, including reforestation, promotion of specific crops, and education. At the district level, the list of initiatives is extensive, ranging from approaches concerned with all aspects of the population's livelihood in a district, to distributions of seeds and tools to specific vulnerable households.

4. Health services system

At the national level, the Ministry of Public Health (MOH) is organized into different departments related to health care and disease control, pharmacy and laboratory services, information systems, and administration and finance. The Nutrition Division falls under the Maternal-Child Health direction of the Reproductive Health department. Three national hospitals in the country serve as the highest referral facilities.

Niger is decentralized administratively into regions and departments. Each of the seven regions has a regional hospital, a Regional Health Director, with a Head of Reproductive Health in charge of nutrition activities, and a Regional Health Information Service. Regions are divided into administrative departments, each of which contains a health district, representing the operational level of the health system. In each district, there is a district hospital managed by the District Health Director (Médecin Chef), who is supported by the District Support Team. Each district has an Epidemiological Surveillance Center where statistics from health facilities and the population are collated, analyzed and distributed to higher levels.

[2] Both are supported by the USAID Famine Early Warning System Network

The system of primary health care is based on a network of health centers (Centre de Santé Intégré, CSI) in each district. Each health center is directed by a head nurse and may have one or more other nurses in addition to support staff. Some health centers contain maternity wards, while others do not. All have a basic package of activities, which includes outpatient treatment of common diseases, maternal-child health services, primary healthcare, vaccination, and referral. Health centers do not have inpatient facilities. Every health center has a village health committee, which oversees health center activities and manages health center receipts. The actual nutrition activities at the community level depend greatly on the presence of an NGO and the type of programs being implemented in a given district or area.

A recent initiative by the President of Niger to increase access to health services has seen the development of a further level of care, the health post (Case de Santé). Health posts are staffed by a community health worker (Agent de Santé Communautaire), who has received a six-month training, primarily in preventive health services and referral for curative care. The health post depends directly on the health center for supervision and supplies. This initiative is being scaled up, and coverage is not yet national.

Niger implements the Bamako Initiative, with a cost-recovery scheme. However, in the last year, the President decreed free primary health services for children under five years of age and pregnant women. Under this new system, the cost of the consultations for these groups is reimbursed by the GON. Non-pregnant adults and children over five years of age will continue to pay for consultations, time spent in hospital, and medications used.

Each region and district develops a five-year health development plan that is translated into annual action plans with respective budgets. These budgets include aid received directly at the district level in cash or in kind (e.g., NGO activities), estimated amounts that will be collected through the payment of consultations, and other recurrent costs like maintenance of buildings, ancillary staff salaries, etc. Salaries of government staff are paid from the central level independently of these budgets.

5. Nutrition policies and initiatives

The MOH 2006 National Policy on Food and Nutrition Supplies outlines a comprehensive approach of preventive, curative and cross-cutting strategic axes, which are translated into eight programs. The programs are diversification of food production, prevention and treatment of nutritional deficiencies, promotion of infant and young child feeding, food safety, surveillance, coordination, training, and research. The policy is operationalized in the National Food and Nutrition Plan, which includes a budget. Furthermore, the Plan proposes the creation of an Inter-Ministerial Nutrition Committee to oversee implementation, with services dedicated to training, research, administration and finance, a technical commission, and similar structures at the regional and district level, with international partners involved at all levels. Table 2 presents a summary of the policy.

Table 2: Niger National Policy on Food and Nutrition Supplies, MOH 2006

Preventive strategy

- Household food security and promotion of the production of nutrient-rich foods (including crop diversification, agricultural and animal production, access to health services for children, promotion of cash activities for women, and development of cereal banks)
- Nutritional surveillance
- School feeding
- Essential Nutrition Actions package
- Use of enriched food products for feeding children at home
- Food fortification (including salt iodization and fortification of cereals and oil)

Curative strategy

- Improvement in access to nutritional and medical management of children with moderate or severe malnutrition (including the possibility to develop local production of therapeutic foods)
- Control of the interaction between HIV and nutrition through partnerships between those in charge of the control and treatment of HIV and those in the nutrition sector
- Management of emerging nutrition-related diseases (including diabetes, obesity, hypertension and cardiovascular disease)

Cross cutting activities strategy

- Development of a global approach to nutritional problems (including over- and under-nutrition)
- Development of a nutrition communication system
- Reduction of poverty and reinforcement of the status of women
- Coordination of the activities of nutrition and human resource development
- Reinforcement of national capacity for the management and prevention of malnutrition (including developing and increasing staff capacity and partnerships with international NGOs)
- Community participation

The Nutrition Rehabilitation Center (Centre de Récupération Nutritionelle) was created in the 1990s, with protocols aimed more at food distribution to targeted populations than at case management of acute malnutrition. Since 2001, the World Health Organization (WHO) protocol for the management of SAM has been introduced and endorsed in Niger. During the 2005 crisis, national guidelines for CMAM were developed and approved. These guidelines defined the three principal institutions for treating acute malnutrition: the CRENI (Centre de Récupération Nutritionelle Intensive) for inpatient care for the management of SAM with complications, the CRENAS (Centre de Récupération Nutritionelle Ambulatoire - Malnutrition Sévère) for outpatient care for the management of SAM without complications, and the CRENAM (Centre de Récupération Nutritionelle Ambulatoire – Malnutrition Modérée) for the management of moderate acute malnutrition (MAM).

The presence of international NGOs has favored the implementation of these guidelines in most districts in the south of the country. The NGO-led nutrition programs most often run in parallel to MOH structures, often completely disconnected from the health system. In 2007, the MOH developed a national directive regarding integration of acute malnutrition treatment services into the national health system. Plans are under way to define the modalities of this integration and to translate it at the district and national levels.

IV. ELEMENTS OF CMAM: CURRENT STATUS IN NIGER

1. Enabling environment for CMAM

1.1 Leadership, roles, and responsibilities for CMAM

The MOH Nutrition Division focuses on policy. Its staff of nine is comprised primarily of recent nutrition graduates. While the head of the division is experienced and capable, the division suffers from a lack of institutional support from within the MOH and from the outside. Hence, the MOH Nutrition Division lacks the capacity to provide adequate leadership of CMAM activities and therefore the management of SAM is left to the regional and district level.

UNICEF plays an important role in supporting CMAM policies and plans focused primarily at the national level, but has not yet transitioned the leadership role to the MOH (at the national, regional, or district levels), nor has it built the capacity of the MOH to take on this role. Moreover, it does not bring CMAM implementing partners together. Hence, NGOs in different geographic areas operate in relative isolation and conduct and support CMAM programs with widely varying degrees of MOH involvement. Moreover, there is no specific NGO or consortium serving as a leader in providing technical assistance, setting standards of good practices, sharing information, or documenting lessons learned. In addition, some NGOs, by so strongly advocating for nutrition interventions and food distributions in the past crisis, have generated a strained working environment with the GON.

1.2 National health and nutrition policies reflecting CMAM

National nutrition policies and plans are in place and include addressing SAM. In the National Policy on Food and Nutrition Supplies, CMAM is included in the suggested strategies and rightly shares its place with other essential preventative and curative nutrition interventions.

However, the same national policy casts doubt on the importance of the role of CMAM services by: 1) suggesting the replacement of curative nutrition services with strategies to introduce traditional nutrient-dense products at the household level; and 2) stating that management of moderate and severe malnutrition, “cannot be expected to work in the long term.” Thus, the MOH does not provide a vision for providing sustainable CMAM services.

The National Policy on Food and Nutrition Supplies explicitly details the responsibilities of MOH personnel and of organizational partners, including the role of NGOs. In general, it is expected that the NGOs continue funding and implementing health and nutrition activities at the district level. NGOs are asked to abide by the national guidelines and work in coordination and collaboration with MOH staff at the different levels. Thus, the implementation of national MOH nutrition policies, particularly of CMAM, relies heavily on the NGO community to provide services.

1.3 National CMAM guidelines

National guidelines for CMAM were developed during the 2005 emergency and updated in 2007. The guidelines have been disseminated and MOH staff has established a training team of MOH physicians and nurses that are currently conducting workshops to train district MOH

staff in the updated SAM treatment protocol. Training is provided upon request and with funding from the NGO active in CMAM in the particular geographic area.

In practice, there is variability in adherence to the national guidelines. NGOs implement their own protocols, follow the national guidelines, or use elements of both. Moreover, the new CMAM guidelines have not been incorporated into the pre-service curricula for physicians, nurses, or community health workers.

1.4 Stakeholder participation in CMAM

Other than health workers that have been trained on the guidelines, there have been no national-level efforts to orient national and regional MOH staff on CMAM among the various international and national stakeholders.

No specific activity has been organized to orient Regional and District Health Directors and their teams on introducing CMAM into their annual action plans. The only written document is the June 2007 MOH Directive on Integrating CMAM Services into the Health Services. This document has not been widely disseminated, nor is it clear if it has been officially approved by the MOH. At the district level, integration has been translated into various approaches.

At the community level, village health committees are involved in community mobilization for health campaigns and in the management of the health facility. The involvement of community leaders and members in committees depends a lot on the presence of an NGO, and on the NGO's approach to providing services and developing participatory networks. MOH-implemented CMAM services do not reach the community systems beyond health facilities. CMAM community outreach systems, when set up by NGOs, show a wide variation in community involvement.

No national training institutions, such as the Public Health Institute, are involved in CMAM. Private sector involvement is limited to one local producer of ready to use therapeutic food (RUTF).

1.5 Coordination of CMAM activities

CMAM coordination meetings, organized by UNICEF at the national level, were initiated to coordinate the nutrition activities in 2005 and 2006 and were replicated by the NGO implementers at the regional and district levels. These meetings have gradually been conducted less frequently and are used mainly to share statistics on the numbers of patients and program performance indicators, rather than acting as a forum for information sharing, capacity building, or empowerment of partners. The presence of three UNICEF regional coordinators was mentioned by only one of the partners, indicating a lack of awareness of the positions, and the coordinators not taking a coordinating or leadership role.

Coordination meetings at the regional and district levels seem to depend on the motivation and interest of the individuals in the local MOH and NGO, and are not institutionalized. Moreover, in each district, a different relationship is present between the CMAM partners, ranging from a virtual lack of contact to good cooperation.

1.6 Information, documentation and research for CMAM

Besides the occasional coordination meetings, there is no organized collection, documentation, and dissemination of CMAM information and good practices. The UNICEF Annual Report provides summary statistical information, but does not cover lessons learned. When the FANTA team shared information and lessons that were learned during the visits to different programs, partners were usually unaware of what was taking place within neighboring districts or even within the same district.

Large- and small-scale operations research initiatives have been ongoing in Niger for several years. Some of the research has been published internationally, but has not necessarily disseminated within the country. Moreover, lessons learned from operational research or specific study initiatives have not been translated into practical lessons or context-specific good practices.

1.7 Funding availability for CMAM services and supplies

At the time of the FANTA visit, the system of free consultations for children under five years of age and pregnant women was in its first month of implementation. This policy is said to have translated into an increase in the number of consultations by children and pregnant women at the health centers. However, no payments had yet arrived from the central government to the health centers visited by the FANTA team. Some partners were concerned that, if those payments were delayed for several months, this could result in cash shortages, which would translate into shortages of drugs and therefore endanger the ability of the health centers to fulfill their duties, potentially resulting in a loss of confidence by the population.

Funding of CMAM services and supplies is limited, relying entirely on bilateral donor, UNICEF and NGO program support. CMAM services run by international NGOs as emergency interventions have funding for limited time periods, usually for less than one year. Many CMAM partners were struggling with funding gaps and were at risk of having to close programs.

A few NGOs conduct long-term, comprehensive development work in limited geographic areas, including the strengthening of primary health services. These NGOs have introduced CMAM services as part of their health strategy and intend to provide long-term CMAM support through these development programs.

At present, there is no donor identified in Niger to support nationwide scaling up of CMAM activities or to ensure long-term sustainable integration of CMAM into the health services system. UNICEF and several other donors are currently providing for RUTF and other CMAM supplies. However, this support has no long-term commitment. Even the MOH training team, which conducts trainings on national SAM guidelines, depends upon funding from the NGO active in the area.

2. Access to CMAM services

2.1 Inpatient and outpatient care

CMAM services are found in all seven regions and the capital of Niger. Inpatient care and outpatient care are either directly implemented by international NGOs or strongly supported and resourced with NGO staff, supplies, training, and/or supervision. Accordingly, CMAM services are limited to districts with NGO presence, which tend to be those districts most affected by the 2005 humanitarian crisis.

According to UNICEF's 2006 Annual Report, 24 organizations are currently involved in providing CMAM services in Niger through 949 active nutrition treatment sites: 330 for treating SAM and 619 for treating MAM. None of these treatment sites is entirely managed by the MOH.

Inpatient care services provided at MOH regional or district hospitals receiving minimal NGO monitoring and logistical support are based in small units in the pediatric wards and function relatively well but have very limited capacity. Inpatient sites visited by the FANTA team were treating fewer than 10 patients. Few of these inpatient sites (only one observed by the FANTA team) are linked with outpatient care services.

At the time of the FANTA team visit, there were four large-scale, completely NGO-run inpatient care centers with capacities of 250 beds or more; they are based in Maradi, Madaoua, Zinder and Magaria. These centers are run as classical therapeutic feeding centers: admission of SAM with and without complications and hardly any early discharge of cases to outpatient care after complications have been resolved, and with poorly developed community outreach.

There were three large-scale NGO-run inpatient care centers in Tahoua, Mayahi, and Keita, admitting only cases of SAM with complications and discharging to outpatient care after stabilization, with variable community outreach. Most of these centers were not located on MOH hospital grounds.

All outpatient care services are organized or supported by NGOs and most services run in parallel to the MOH health system. While most outpatient care sites may be physically located in the health center compound, their activities are run and staffed independent of the health center with little interaction. Temporary shelters have often been constructed for these NGOs' outpatient care facilities. Referral of children between the two structures - outpatient care service and the health center - does not always happen, even when located in close proximity, and greatly depends on the NGO's relationship with the health center staff and district MOH.

In several of the above-mentioned towns, the regional or district hospitals that run small-scale inpatient care services at their pediatric ward did not have formal links with the inpatient and outpatient care services of the CMAM programs within the same town.

MOH community health workers, based at health centers and health posts, focus on preventive efforts and offer limited curative services. Their ability to provide anything more than acute malnutrition screening using mid-upper arm circumference and weight-for-height or being involved in treatment for acute malnutrition is therefore limited. Two NGO CMAM programs visited by the FANTA team are supporting community health workers to provide

outpatient care services, while another was in the process of training them in acute malnutrition screening and referral. In general, it was seen that community health workers, based at the health centers or the health posts, remain the most important driving forces for providing CMAM services, as they are in charge of all activities except for the medical checks and drugs provision that are done by the clinician.

In areas where health centers provide outpatient care, a significant proportion of the population cannot access it due to long distance. Most CMAM beneficiaries, in fact, live in relatively close proximity to the health centers, with few coming from more than a two-hour walk away. The use of health posts for supplementary feeding solves the problem only partially, as the posts are still scattered, some are not operational, and most are not equipped with staff and other resources to run those nutrition programs. User fees for health services also serve as a barrier to services; the actual system of free care for children under five years of age is not at present financially viable, and consequently not practiced by, many health facilities.

2.2 Community outreach

Overall, the community health outreach system is weak in most of the country, except when strong efforts and inputs of resources are invested by NGOs. Within the MOH structure, outreach is in the hands of health post-based community health workers who are hampered by lack of transportation, difficulty of movement across the harsh environment, and populations spread over great distances. Health centers seldom have the staff or time to conduct outreach activities beyond occasional vaccination campaigns.

Different types of community volunteer structures and systems exist, including child and animal vaccination volunteers, nutrition volunteers, and several types of community committees. Village health committees concentrate on management of the health centers and the revolving funds, and are involved in identification of volunteers.

Despite the systems that are in place, there seems to be a rather weak sense of community ownership of health services in general and of CMAM in particular. Therefore, many of the NGOs involved in CMAM often have put into place large volunteer systems, supported with a strong supervisory structure of international expertise in community outreach. Other NGOs, with a long-term presence and significant experience in community development, have a stronger and more sustainable community outreach system in place.

When present, outreach activities often concentrate on screening, referral and follow-up of patients. Nutrition education and behavior change communication are limited, if at all conducted. One example of successful community screening and follow-up was an NGO implementing a mother-to-mother “peer system” that sent messages to children who were expected to attend on a CMAM service day but did not show up. This was facilitated by the fact that all children receiving CMAM services from a particular village come on the same day of the week. This system, which does not depend on extra resources or community volunteers, is effective at determining the fate of missing patients before they default and at emphasizing the importance of weekly visits to outpatient care. In some areas, NGO-trained volunteers conduct community screening, and some also assist with anthropometric measurements at the center.

Other formal and informal community outreach systems that are insufficiently involved in CMAM include village leaders, religious leaders (marabous), traditional healers and herbalists (charlatans), and child and animal vaccination services, among others.

2.3 Health and nutrition staff for CMAM

The MOH has limited capacity for staffing district hospitals, health centers and health posts countrywide. Often a position has been planned for but not filled. When positions are filled, nurses are regularly absent for training, supervision, or personal reasons. While health centers should have a minimum of two nurses, most often this is not the case. Hence, the availability of services at the health centers is routinely jeopardized. Moreover, a high turnover of health professionals is common in remote areas (e.g., Diffa), particularly among clinicians and community health workers. The few inpatient and outpatient care sites run exclusively by local hospital and health center staff are doing relatively well, albeit with very small caseloads. In contrast, the major NGO-run programs, particularly those run independently of the health system, are overstaffed.

2.4 Referral system and transportation of referred cases

Overall, in Niger the MOH referral system to secondary health services is weak, partly because of distance. This results in the absence of referrals between facilities, and, in some cases, SAM cases (including those without complications) receive inpatient care exclusively. In other cases, SAM cases (including those in need of inpatient stabilization) receive outpatient care only.

In most CMAM programs, there is an almost-complete disconnect between the inpatient care and the outpatient care. This is particularly the case when each service is supported by a different NGO partner. It is also the case when NGO support is limited to financial or supervision support only. Moreover, SAM cases with complications, when referred to inpatient care, frequently remain inpatients for the full length of treatment (stabilization and rehabilitation), without being referred back to outpatient care, even though this is a part of the national guidelines. In some cases, it was noted that there were more children in inpatient care than in outpatient care, possibly as a result of inappropriate referral. This was revealed by visits to several centers on the same day, with partner organizations unaware of the problem.

The lack of cross-checking of information from the two services makes this problem invisible. One NGO supported regular “referral counter-referral” meetings to improve screening and referral links and practices among facilities it supports.

A number of inpatient care centers do not accept infants under six months of age because it is not a part of their particular protocol. In such a case, infants with SAM could not be referred to any services because they would be refused entry. At the time this was noted by the FANTA team, their mothers, suffering from insufficient breast milk production for unknown reasons, did not have access to supplementary feeding because they were not malnourished or because the services were not available. The mothers also were not referred to or given breastfeeding support. The issue was discussed with the staff and a temporary solution was identified. Infants with SAM were sent to the neighboring district’s inpatient care treatment

site. In the meantime, another NGO partner started-up inpatient care services in the vicinity that accepted infants.

Transportation between and to CMAM services varies, primarily based on the level of NGO involvement. When NGOs screen children themselves, they are more likely to transport children with SAM. When the screening and services are primarily conducted by MOH staff, there are no means of transportation. This frequently results in numerous cases referred for inpatient care never arriving, likely due to long distance, mistrust of hospitals, fear of being away from home, etc.

2.5 Links with informal health systems

In Niger, a wide range of traditional feeding practices and taboos exist. These practices and taboos are usually mentioned as being among the causes of malnutrition, and affect the use of MOH health services and acceptance of medical treatment. “Marabous” and “charlatans” are usually the first choice for advice, diagnosis and treatment for most illnesses, including malnutrition.

Very few NGOs involved in CMAM work with traditional healers, though some do successful work with traditional birth attendants. Two NGOs had developed strong links with the informal health system, in particular with traditional birth attendants (“matrone nouvelle”) and were successfully involving them in community outreach activities.

2.6 Links with health and nutrition programs

Overall, doctors in hospital pediatric wards have been sensitized to assess and treat children with signs and symptoms of SAM. One health center successfully used a common waiting and registration line for all children coming for maternal and child health consultations to facilitate screening and referral of children to the appropriate services, including to outpatient care. However, this did not happen in consultations for curative care.

One NGO has incorporated acute malnutrition screening and treatment into its training of MOH healthcare workers in Emergency Triage, Assessment, and Treatment of common child illnesses.

A government program for social assistance of abandoned children employs a social assistant at hospitals and health centers to provide support, including food assistance on some occasions.

2.7 Links with food security and livelihoods programs

Food security and livelihoods programs and the way they relate to CMAM services change from district to district, depending on the NGO that is present. Some NGOs have development programs addressing livelihoods, food security, health, water and sanitation, and education in defined impact areas. In these cases, the links with nutrition interventions are well-established and functional. Other NGOs have recognized the need to strengthen the health system or to initiate food security initiatives and have plans to address these needs. In these cases, the programs are designed to be built upon the existing nutrition program. In other NGOs, community outreach activities are run by the same team regardless of its affiliation with nutrition or food security programs.

Links between MOH health and nutrition services and Ministry of Agricultural Development agriculture and livelihoods activities are absent. There is an effort in Diffa to develop a "mobile strategy" for accessing nomadic populations, including possibly incorporating acute malnutrition screening into animal vaccination services.

3. Access to CMAM supplies

3.1 Supply system

The Pharmacy and Laboratory department of the MOH is in charge of the provision of essential drugs to government health facilities through a central pharmacy, and is currently in transition to allowing direct purchase from pharmacies around the country through a competitive system. Health facilities purchase supplies themselves from the pharmacy using receipts from consultations.

The MOH supply system is currently minimally involved in CMAM services. UNICEF finances, purchases and supplies drugs for systematic treatment and therapeutic foods (e.g., . F75, F100, RUTF/Plumpy'nut®, and combined mineral and vitamin mix) for all partners countrywide, except for those that fund their own supplies. No therapeutic milks or RUTF are included in the essential drugs list. As in other countries, this possibility is being considered by some international agencies, and is currently being debated.

WFP supplies supplementary foods (e.g., corn-soy blend, sugar, and oil) for supplementary feeding beneficiaries, for caretakers of inpatients, and for all CMAM patients being discharged (although the discharge ration is frequently absent from many program protocols despite being a part of the national guidelines).

In addition, in 2006 the Coopération Française funded the MOH to purchase approximately 15 percent of the annual RUTF needs locally. This experience suffered several setbacks, including lack of funding for the transportation of the RUTF and production delays at the local manufacturer due to mechanical problems, which resulted in inadequate stock of RUTF during a two-month period. Stock outs at the programming level were averted through the use of NGO stocks.

3.2 Supply transportation and management

The MOH has a stock of drugs and medical supplies in each region except Tillabéri, which was recently designated a region and still lacks some of the basic health system infrastructure of the other regions. The CMAM supply system operates outside of the MOH system, organized by UNICEF and/or the NGO. UNICEF runs a central storage system for CMAM supplies in Niamey, while peripheral storage in the regions and districts is managed by the NGOs. Therapeutic products are delivered directly to the NGO at their Niamey or regional base, rather than to the MOH health district. NGOs then deliver the CMAM supplies directly to the hospitals, health centers, and health posts it supports using their own transportation systems. Health facilities that are not supported by NGOs do not have access to CMAM supplies.

During the visit, the FANTA team observed one instance of expired F75 being used and most of the F100 was due to expire in the coming weeks. No action appeared to have been taken at the peripheral level nor was staff aware of the problem. Overall CMAM stock management varied widely based on the level of NGO support. NGO programs with high inputs generally had better stock storage and management practices (e.g., first in-first out), while those programs with lower NGO inputs frequently had weaker stock management practices.

According to many partners, some F100 and F75 milk powder changes color before the expiration date. None had sought advice on whether this milk could be used or what to do if it could not. On the other hand, stock outs of therapeutic milks were rare, except in Tillabéri, where stock outs happen two to three times per year and had been ongoing over the previous month.

Problems with the application of SAM treatment protocols (e.g., incorrect food being used, such as corn-soy blend for treatment of SAM and RUTF for treatment of MAM) may have an impact on the calculation of supply needs, requests and the ordering system, as the consumption calculations and the number of beneficiaries treated will not always correspond.

3.3 Local production of RUTF

Societé de Transformation Alimentaire is a food manufacturer franchised by Nutriset for local production of RUTF since 2005 (see Annex 6). The RUTF produced in Niger is more expensive than Plumpy'nut® imported from France. The reasons, as stated by the local manufacturer, are the higher price of the raw materials in Africa, the insufficient production quantity to achieve economies of scale, and the need to upgrade manufacturing equipment. Nutriset and the local manufacturer are considering plans to export RUTF to other countries to increase production size and lower the price.

4. Quality of CMAM services

4.1 Adherence to CMAM treatment protocol

Each NGO has introduced variations in the manner in which it implements CMAM as well as in how it adheres to the national CMAM guidelines. Some NGOs interpret and apply components of the national treatment protocol differently, notably regarding the criteria for referral for inpatient care. Others follow aspects of the national protocol as well as aspects of their own organizational protocol. For example, one NGO treatment protocol was more specific on the treatment of complications and on the advice given to mothers. Other NGOs have decided not to apply certain aspects of the national protocol (e.g., treatment of pregnant and lactating women and children under six months of age). Finally, still other NGOs utilize their own treatment protocol without any adherence to the national guidelines. This lack of adherence has implications for how children are treated in Niger.

4.2 Implementation of services: organization, supervision, coordination and support

The internal organization of services varies widely from one district to another. No national guidance is provided, leaving the partner NGO to organize this with the local hospital and health center authorities. Variations may include the organization of the flow of patients,

definition of service days, community mobilization set-up, etc. Many NGOs have opened facilities outside of the health system.

The quality of the management system affects the capacity of the staff and the quality of services provided, including the total number of children that can be treated without overwhelming the system. It also affects the level of effort devoted by health center staff to CMAM versus other duties, which may impact the quality of other, non-CMAM health services.

The level of interaction between the health center and the NGO-run outpatient service is usually low, and in many cases, non-existent, as the two are most often run in parallel. The workload of the health center staff is not necessarily influenced by the caseload of the NGO-operated CMAM facilities. This is, however, a missed opportunity to involve the health center staff and build their capacity in CMAM services. The FANTA team observed instances where weak NGO technical and management support translated into poor quality of CMAM services at MOH health facilities. The principal management systems in Niger are summarized in Table 3 below.

Table 3: Niger management systems

- ***High inputs – inpatient care***: Structure built outside of health center, or hospital or in its compound but with separate activities; all inpatient services provided and staffed exclusively by NGOs, including international medical staff and managers.
- ***High inputs – outpatient care***: Ten or more NGO staff and no staff from the health center; permanent or temporary structures with systematic flow of patients through the different service areas: screening, registration, medical evaluation, provision of drugs and RUTF, and education; NGO logistical support and transportation available at all times; international expertise on site.
- ***Low inputs - inpatient and outpatient care:*** Services entirely run by MOH district health staff; NGO involvement limited to capacity development (training and supervision) and logistical support.

CMAM services are systematically being implemented on fixed days, which do not necessarily coincide with other important health center services (e.g., under-five clinics and prenatal care) which also are implemented on fixed days. While this helps to distribute the patient load more evenly throughout the week, it also represents a missed opportunity to combine two potentially complementary services. Services that are often combined on the same day, but which should not be, are outpatient care and supplementary feeding. These two CMAM services can bring such a large number of children and mothers to the center that staff capacity to conduct other services is severely hampered.

The MOH has a nutrition focal point identified at all levels – usually the staff member in charge of maternal-child health programs. However, this person is not involved in CMAM services or supervision. In general, supervision of health services is weak as it requires means of transportation, per diem and transportation allowances, and long travel distances. Hence, almost all supervision of CMAM services is NGO-driven, even when MOH staff runs the services. Supervisory visits seem to be mainly administrative, with little evidence of actual support, improvement of services, or capacity-building of MOH staff in strengthening their

supervisory skills. One NGO has supported the development of quality assurance tools for improving the quality of services, but this is not widespread. Regional UNICEF officers have a potential to strengthen the supervisory capacity of the MOH for CMAM. The FANTA team was not able to meet them in the field and solicit their views.

4.3 Monitoring of cases

Standardized forms for patient registration and monitoring exist in Niger, though many NGOs prefer to use their own forms. NGO-run CMAM services most often have well-developed systems for patient registration and record- keeping, but a large variation of systems is in place. In general, patient monitoring and record-keeping is weak among MOH-run services. No system is in place to record and track children transferred across services (e.g., from inpatient to outpatient care) using a single record/registration number.

4.4 Monitoring of services

Almost all data collection from CMAM services is organized by NGOs. UNICEF collects, compiles and feeds the information back to the NGOs and MOH partners through the quarterly and annual reports, which provide a good summary and overview of national CMAM activities and performance.

In addition, each NGO compiles and analyzes its own data from the centers it manages. Thus, there is an enormous amount of data being collected; in most cases, however, it cannot be aggregated and analyzed at the national level to examine trends. Partial examination of some of these data at the district level without consideration of similar data from other districts may lead to biased or incorrect conclusions. Moreover, as the inpatient and outpatient services work as separate entities with separate statistics, their data cannot be aggregated at any level. As a consequence, one will never be able to obtain an overall picture of the quality, performance, and impact of the CMAM services.

Surprisingly, UNICEF requests weekly reports on the number of admissions from CMAM programs. This measure was instituted during the height of the nutritional crisis and is no longer justified, as it creates an unnecessary burden to the system.

The lack of sharing of information is problematic, with most NGOs and MOH health officials not aware of the statistics – recovery, default, mortality - of their own programs, let alone those of the neighboring districts. Lack of awareness and lack of sharing of performance data does not facilitate identification and correction of program problems nor dissemination of good practices.

4.5 Surveillance

There is some in-country capacity for conducting nutritional surveys, supported by UNICEF. Several national surveys have been implemented in the past, with national capacity built through the Institute of National Statistics. Otherwise, nutritional surveys are mostly done by NGOs in their geographic areas. Thus, information is patchy. Moreover, the weak coordination and information sharing among the Food Crises Cell, the MOH Nutrition Division, NGOs, and donors does not allow systematic access to nutritional surveillance information.

UNICEF conducted a knowledge, attitudes, and practices (KAP) study on nutrition and maternal and child health in 2006 at the national level, the report of which will be completed in 2007, likely providing important information on nutrition and feeding practices and health-seeking behavior.

Other mostly NGO-driven initiatives on information collection, such as on food security, positive deviant care practices, and cost of diet are ongoing. However, with the lack of an information-sharing body, this important information is likely to remain within the particular NGO and not shared more widely.

4.6 Evaluation of coverage of services

Some NGOs have conducted coverage surveys to evaluate the quality of their program coverage. Despite the many ongoing efforts at strengthening outreach services, the coverage of programs was usually low (around 20 to 30 percent), with the exception of one program, which had coverage greater than 80 percent. High coverage rates are found only in programs where important resources were provided by the NGO to strengthen community outreach: human resources (from an army of volunteers to supervisors to international staff) and transportation. In most programs, coverage is unknown, but is suspected to be very low, based on the low proportion of MAM cases and the high proportion of SAM cases presenting with complications (e.g., presenting late). For instance, in one district the case load of the CMAM services was very high, with up to150 SAM cases per health center, compared to the neighboring district with a similar environment but only 10 cases per health center.

The MOH does not systematically conduct anthropometric or coverage surveys in country beyond supporting MICS, DHS, and UNICEF surveys. MOH health centers have a relatively low number of patients in outpatient consultations, preventive services, and CMAM, which is more of a sign that the services in general are underused and suffering low coverage.

5. Competencies for CMAM

5.1 Pre-service training

CMAM is not included in pre-service curricula of any health workers at any teaching institutions, nor are there any initiatives yet to introduce acute malnutrition into the curricula or to have national training institutions involved in the pre-service CMAM training curriculum. A nutrition degree was recently started in the country, with its first promotion last year. Many of these new nutritionists have been recruited by NGOs for CMAM programs.

No capacity-building system is in place for strengthened planning and supervision for CMAM by health managers and planners.

5.2 In-service training

UNICEF with the support of NGOs has started extensive in-service training programs on the CMAM guidelines and in 2006 alone, 718 health staff and 169 community health workers were trained. Hence, the MOH has a team of trainers available to further train MOH staff at hospitals, health centers and health posts at the request of the supporting NGO. The MOH

training team was conducting in-service CMAM trainings on the updated national guidelines and treatment protocols with funding from UNICEF and NGOs during the FANTA visit. These trainings have been limited only to districts with NGO-supported CMAM services. Until now, each NGO has trained its own staff on CMAM services, only sometimes including MOH health staff of the hospitals and health centers.

In Tillabéri, an in-service training of community health workers by the MOH with NGO support on acute malnutrition screening (weight for height, rather than mid-upper arm circumference), referral, and identification of complications is ongoing. Community health workers integrated into NGO-led CMAM programs benefit from in-service training.

Incorporation of CMAM into other training curricula and courses, such as integrated management of childhood illness, has not happened. One NGO covers inpatient management of SAM in an Emergency Triage, Assessment, and Treatment training it has conducted for hospital-based staff. However, CMAM has not been incorporated into other trainings at the national level.

The FANTA team observed some misapplication of the national guidelines (e.g., application of entry and exit criteria, even following the trainings that had taken place one week prior to the visit). Training does not necessarily translate into changes at the workplace when it is not accompanied by subsequent on-site support, in-service mentoring, or a strong supervisory system.

5.3 Peer information exchange

Exchange of information, knowledge and experience is very weak at all levels in Niger. Most expertise in CMAM is accumulated within NGOs, but even communication among NGOs and other actors is lacking. Regional initiatives at coordination meetings exist, but are more an occasion to provide data instead of sharing experiences or points of view. However, the need for information was felt very strongly by the FANTA team, which on many occasions was confronted by knowledge-hungry MOH and NGO staff. The team continuously took findings and lessons learned at one site visit and shared them at the next site visit.

5.4 Research

There has been a lot of research conducted in Niger on acute malnutrition, including recent research on the use of RUTF for the treatment of MAM. Much of the research is conducted by NGOs with little involvement of local research institutions. While some research has been published internationally, it has not always been disseminated within the country. Moreover, lessons learned from operational research or specific study initiatives have not been translated into practical lessons or good practices.

5.5 Attitudes

In Niger, as well as seen in other countries, the quality of the CMAM services depends enormously on the motivation and interest of the people involved, as there are limited institutional mechanisms to ensure quality. A change in key staff can therefore mean a complete change in the availability and quality of services. Motivation, in turn, depends a lot on the presence of an NGO and the relationship between the NGO and the MOH. The

FANTA team observed health facilities and district health teams that enjoy close relationships with the NGO, benefiting technically from the NGO presence and becoming increasingly involved in CMAM services. Conversely, the FANTA team visited districts where little contact existed between the NGO and the district health team and the communities, completely limiting CMAM services to the NGO.

The FANTA team recognized that motivation depends as well on the perception of the health workers of malnutrition as a medical issue - curable with low case-fatality rates - rather than as an issue of incompetence of the caregiver, which results in blaming mothers and reducing motivation to offer quality services. Ownership of addressing malnutrition as a job responsibility is important, as opposed to considering it the domain of the NGO. Therefore, explicitly including CMAM in the MOH health worker job description will make health workers accountable.

V. CHALLENGES FOR CMAM INTEGRATION IN NIGER

1. Enabling environment for CMAM

The strengths of the enabling environment for CMAM, identified by the FANTA team, reside in two areas. First, at the national level, the MOH with valuable support from UNICEF developed a strong policy basis for nutrition in general and for the management of acute malnutrition in particular. National policies and plans are in place, including CMAM national guidelines and a CMAM guidance note. Second, the 2005 emergency catalyzed the attention of the national and international community on addressing acute malnutrition and hence resources were made available. CMAM came into the spotlight and still is recognized as important, even as funding and national and international interest is fading.

There is a great momentum to collate the country-level information and document lessons learned on good practices based on evidence from the multiple operations research initiatives that have been conducted or are ongoing. A wealth of expertise and information and documentation generated by the current emergency both from academic and NGO sources (i.e., gray literature), represents one of the major untapped resources that could contribute to capacity development of community-based strategies, including CMAM. Large- and small-scale operations research initiatives have been ongoing in Niger over the past years, often without participation of the local academic or research institutions, but contributing to the information and documentation pool.

On the other hand, a number of weaknesses exist. The MOH Nutrition Division is significantly hampered by insufficient leadership at the national and regional levels and lacks the technical expertise to guide and support CMAM programs at the regional and district levels. This is a result of the MOH not having been involved enough with the emergency nutrition interventions to benefit from the capacity-development opportunities. UNICEF and the NGOs did not succeed in involving the MOH at all levels to bridge the gap. Specific technical and political support would have helped build capacity and strengthen the role of the MOH Nutrition Division and staff. Moreover, the position of the division within the Reproductive Health Department makes it difficult to have decision-making power or to

receive support as needed to fulfill its objectives. UNICEF has not played a leadership role in supporting the MOH or in supporting NGOs and their CMAM programs. At the implementation level, job descriptions of both supervisors and service providers do not include CMAM, which, therefore, is not prioritized as a daily task.

It is unfortunate that the national policy casts doubt on the importance of the role of CMAM services. In its written policy, the MOH does not provide a vision for providing sustainable CMAM services. A guidance note to encourage integration of CMAM services has been disseminated but has not yet been translated into a feasible strategy or concrete action plan at the district level. In order for CMAM services to be appreciated by policymakers as well as by health managers and communities, the need for these services, management of acute malnutrition, and program impact must be clearly understood.

It seems to be challenging to collaborate with the MOH Nutrition Division at the national level as well as with the MOH health and nutrition staff at the district level. However, CMAM partners need to recognize and act on every opportunity for making a sustainable change. In Niger, some NGOs involved in CMAM services have succeeded remarkably well in partnering with the MOH to build its capacity as well as in placing emergency CMAM services within a holistic development portfolio of preventive and curative care services for malnutrition. Why then have other partners failed? NGOs that have been successful have had a long-term presence, have employed a development strategy with a holistic approach, have strengthened the health services system as a whole, and have had a close relationship with the communities. These NGOs are not running the high quality CMAM services directly. Rather, they have guided and supported MOH front-line health service providers and have succeeded at integrating CMAM services by adapting protocols to allow for sustainable services provision. Their success has been limited, and there is room for improvement, but their experience is an opportunity from which to learn.

As a consequence of the lack of leadership and vision, coordination of CMAM partners, programs and activities is minimal. Coordination meetings are primarily fora for exchanging minimal “statistical” information rather than for bringing stakeholders together to mutually develop capacities. The absence of coordination meetings results in CMAM stakeholders working as fragmented entities, which results in reduced access to information and lessons learned. Many NGO partners are involved in interesting or innovative CMAM programs, studies or operations research but little is shared within Niger amongst the partners.

Coordination meetings could be excellent capacity-building opportunities for the MOH and could enhance its ability to take a lead role and responsibility, if the meetings were organized and chaired by the MOH with support from UNICEF or other partners. All stakeholders need to enhance their capacity-building efforts with the MOH, in terms of human resources and skills development, and in the context of emergency and post-emergency phases. The momentum created by the debate on integration and the rolling out of the new protocol is the opportunity in Niger to shift direction and engage and empower the MOH.

A major threat to the CMAM-enabling efforts is that all NGOs that were visited have too short a time period of funding with no guarantees of renewal. In addition, there is no clear donor commitment to continue funding CMAM activities. This can translate into NGOs

leaving a district before integration of CMAM is at a sufficient stage of development. This also does not facilitate long-term planning. Another significant threat to the health system, and therefore to CMAM services, is that free health services, recently declared by the GON, could lead to the collapse of the health system, if the system of reimbursing health centers does not function.

2. Access to CMAM services

Strengths for CMAM integration include the existence of a well-defined health service system in Niger, with clearly delineated health structures, staff, and management committees at the national, regional, district and community levels, with CMAM services anchored to them. Physicians, nurses, and community health workers have job descriptions with core tasks and responsibilities that are incorporated into national and regional health action plans.

On the other hand, the weaknesses of the system are inherent, structural and multiple. As mentioned above, it is not surprising that CMAM services are more integrated and sustainable when the health services system as a whole is strengthened and supported. In other words, CMAM services only exist and survive in the presence of NGO resources and continuous support. Hence, the withdrawal of NGO support is unthinkable in Niger and would result in the collapse of the entire CMAM services system. In this respect, it is not realistic to even discuss integration of services without continued NGO support, unless the intention would be to stop all CMAM services. What needs to be addressed, regardless of the weaknesses of the health system, is the set-up of NGO operations in parallel to the MOH health system. In the initial phase of an emergency, this might be necessary when caseloads are high and systems are overstretched. However, some NGOs continue to maintain the parallel system in the post-emergency phase, and this is counter-productive to integration or sustainability.

For the majority of CMAM programs, the question of capacity of the health system to run these services has not been posed. This may be mainly due to the fact that most of the CMAM activities are run by NGOs, and will continue to be for at least the short term. Because NGO programs will eventually be handed over to the GON health system, the capacity of the health system to ensure that these activities continue will need to be ensured through: 1) capacity building; and 2) preparation and adaptation of CMAM activities to the health system. Overall, the capacity of the system may be assumed to be low, as it barely manages to fulfill basic primary health care activities (e.g., low vaccination coverage, low coverage of curative consultations, etc.). As a consequence, it is clear that to obtain sustainable CMAM services managed mainly by the MOH at all levels, international agencies, donors and NGOs should support not only nutrition activities, but the entire health service system as well - from management and supplies to delivery of services. Currently, it is those organizations working both in health and nutrition, and therefore embodying the complete health service delivery picture, that are better positioned to support sustainable CMAM services in Niger at the district level.

Regardless of the structural weakness in the GON health services system, there are some missed opportunities to strengthen community outreach services and to improve linkages with existing community services for CMAM. These opportunities are summarized below.

There are many community-based services and community volunteer networks that exist in Niger, such as village health committees, management committees, and community assemblies, which are not involved in CMAM outreach services. With appropriate advice and guidance, community involvement and outreach could be boosted, and with it, the coverage of the CMAM programs. For instance, village health committees concentrate on management of the health centers and the revolving funds, and are involved in identification of volunteers.

The informal health system is another untapped opportunity to improve coverage of CMAM services through religious leaders, traditional healers, and herbalists. Most stakeholders acknowledged the importance of the informal health sector, which is often the entry point to the health system for most families. The UNICEF KAP study should shed more light on health and feeding habits and behaviors that can be addressed by CMAM, specifically with respect to access to the informal sector, and should shed light on how to better involve the informal sector.

The presence of other services developed specifically to reach nomadic groups (e.g., veterinarian services and mobile health strategies) represents an opportunity to develop CMAM services in nomadic areas. Some NGO-supported programs have also supported inclusion of CMAM screening during routine community vaccination campaigns.

3. Access to CMAM supplies

Most of the Nigerien needs in CMAM supplies - therapeutic milks, RUTF, basic drugs, registry and report cards, measurement equipment, etc. - are purchased by UNICEF. Some NGOs have their own donor funds and supply lines. The commitment of UNICEF to provide therapeutic products and drugs has allowed many of the partners with limited resources to afford to implement CMAM services. Hence the access to supplies is not perceived as a challenge for integration of CMAM services in Niger, assuming long-term commitment from UNICEF.

The dependence for supplies on one agency may not be sustainable in the long term, but there is no alternative at this point in time. The length of time of UNICEF and donor commitment to support all partners involved in CMAM is not clear. Without this commitment, the whole system would collapse, as few NGOs would be able to afford to cover the cost of CMAM supplies. Even the hand over of the management of supplies to the GON cannot be recommended at this stage.

4. Quality of CMAM services

At the national level, the MOH, with UNICEF support, has been successful in putting into place national CMAM guidelines with standardized treatment protocols and guidance on strategies, and has made standardized tools available. The presence of NGO expertise enables the putting into place of high quality, state-of-the-art CMAM services and generates a wealth of good practices in Niger.

However, not all CMAM programs are of high quality. In Niger, the dramatic variability in the quality of CMAM programs is obvious and is likely a result of weak leadership, lack of coordination and accountability systems, among other factors.

The general non-adherence to national CMAM guidelines is significant. The lack of application of the standardized protocols leads to confusion and inefficient use of resources. Effective capacity building of MOH staff is hindered by one protocol being applied in one center and a different one at another location. Some aspects of the national guidelines should be reviewed to reduce possible misinterpretation by the user and to better adapt them to the Nigerien context. The document is long and clearly the result of much negotiation, mixing elements of a training manual (with pathophysiology instruction) with guidelines (with treatment protocols). Further work needs to be done to correct inconsistencies and to clarify certain recommendations. Given the number of cases of SAM in children below six months of age, this group should actually be given priority rather than being excluded from programs. The lack of a uniform approach also results in weak links between inpatient and outpatient care, leading to inappropriate referrals between care systems and thus to less effective CMAM programs.

The MOH lacks capacity and staff to supervise CMAM activities, and so far CMAM supervision has not been integrated into the existing supervision schedule. Moreover, it is practically impossible for MOH staff to visit and supervise, or learn from, NGO inpatient care services that operate independently without any links to the national health care system or to other NGOs. It seems to be much easier to get MOH staff involved in supervising outpatient care, for the obvious reason that they are located on health center premises. Lack of access to a means of transportation further hinders supervision capacity.

There is an overall lack of information in the health system, which depends on NGO involvement and transparency, ranging from weak nutrition surveillance, to a lack of coverage surveys, to poor program monitoring and poor coordination and information sharing.

There is considerable variability in coverage among CMAM programs. In general, coverage, either measured directly or assessed with proxy indicators, is below 30 percent. Some NGOs have an extensive outreach system in place and still have not succeeded in improving coverage. One NGO, though, was very successful but not without an enormous amount of expertise and resources. As CMAM is developed further, with expected increases in coverage, there is a great danger of overwhelming the system. And the dilemma between increasing coverage and having a “manageable” caseload will be particularly acute in Niger, because it will directly affect the quality of the treatment and performance of CMAM services.

5. Competencies for CMAM

There is a great degree of technical knowledge, expertise and experiences that have been developed over the past two years among the MOH, NGO and UNICEF staff in Niger with respect to CMAM. National staff is involved in 949 CMAM treatment sites and 24 organizations are implementing CMAM services within Niger currently. Close to 1,000 health workers received pre-service training before implementation and many of those continue practical in-service training in the presence of NGO expertise. This group of skilled staff is an enormous asset currently and in the future. The wide range of CMAM experiences constitutes a great opportunity for learning if these experiences were properly analyzed and shared.

CMAM guidelines and treatment protocols have not yet been incorporated into pre-service curricula of the various health workers. Thus, in order for the CMAM services to be routinely integrated into the practice of healthcare providers, the workers must be trained prior to entering the health service, which is not systematically done. However, UNICEF and NGOs have made major efforts to provide in-service trainings.

At the service level, there is a need for providers of the different CMAM services to see and understand what happens in the other services. At a wider level, staff of different centers and different programs (e.g., from other districts) could benefit from visits as learning experiences. In addition, there is a significant risk of loss of experience and knowledge due to the high turnover of staff, international and national, and due to the fact that these experiences have not been documented (or only at the internal organization level without wider sharing).

Given the instances of poor adherence to the national protocol, even after the training, post-training support and supervision will be important to ensure the correct application of the national protocol. Refresher trainings will continue to be very important in the future to increase and maintain quality levels.

Attitudes can become positive and motivating with improved access to information on what acute malnutrition is, what good practices for the management of acute malnutrition entail, and what the roles and responsibilities of the different stakeholders are. This information empowers those involved at all levels. The process of improving attitudes starts at the higher political levels and trickles down to the service levels at hospitals and health centers, and then down to the communities and the caregivers, and vice versa.

VI. CONCLUSIONS

The nutritional emergency in Niger continues. The multiple CMAM services in place conceal the current burden of SAM as the needs are considered as being "addressed." Only one CMAM program had quality community outreach, providing high coverage and revealing the true face of the invisible emergency situation. Caseloads at that NGO's outpatient care sites are more than 10 times higher than in any other health center in the

country. This is not an anomaly in terms of the rate of malnutrition, but the outcome of effective outreach. Hence, the current nutritional situation is not recognized as an emergency and it should be.

The high vulnerability of young children in Niger is recognized and documented. However, not enough is done to prevent young children from slipping into acute malnutrition. Multiple causes, such as inappropriate child caring and feeding practices, a fragile health care system, and limited household food security, in combination with strong food-related and health care-seeking taboos, keep the prevalence rates of SAM at unacceptably high levels. Nutrition education and behavior change messages, along with the development of improved complementary foods, are essential interventions for breaking the malnutrition cycle in the long term, but will not suffice in the short term. On the other hand, an overemphasis on CMAM may risk diverting attention from other essential health, nutrition and livelihood services and actions.

Niger houses a patchwork of quality CMAM services and a multitude of staff with experience. At the peak of the emergency, NGOs in their geographic areas rightfully took the lead role to save lives and protect livelihoods. However, partners from the UN and NGOs implemented top-down strategies and started programs that remained outside of the national health care system. These emergency efforts did not engage the MOH, which instead has remained detached. CMAM partners in the post-emergency era recognize that clear MOH leadership from the outset, and enhanced coordination among different implementing partners, is imperative for successful programs and for enhancing sustainable and integrated services. In a way, NGOs are constrained by the strategy they have put into place themselves, following the emergency paradigm. As a consequence, they face numerous difficulties in adapting their programs so that the CMAM services can be integrated into the GON health systems.

The discussion around the integration of CMAM services in Niger underlines the public health paradoxes of managing health services in emergency versus development contexts and of achieving high coverage through high external resources versus achieving integrated, sustainable services, balancing cost-effectiveness and quality. Today in Niger, many CMAM programs that provide high-quality services and are capable of dealing with high caseloads, struggle with integrating the services into the health system, and are not expected to succeed without major support from the NGO. However, other CMAM programs have been successful in developing CMAM services from the bottom up, within the existing health services, and with limited external support but significantly reduced capacity to handle high caseloads. The experience of these programs is instructive. A key to success of the latter programs is that those programs: 1) require less dependence on assistance from external sources; and 2) have a holistic and long-term approach of strengthening health services, providing essential health and nutrition services and livelihood activities in addition to addressing acute malnutrition. The Niger country visit highlights once more the importance of considering the health system as a whole and not just the malnutrition interventions in isolation.

The recent emergency provided a genuine opportunity for Niger to start up CMAM services and to have a large base of health workers trained and experienced in a short time period.

However, the challenges that the different modalities and quality of CMAM services pose for integration will need strong leadership, judicious planning and capacity building. CMAM partners must engage the MOH, show coherent coordination, and build upon good practices and lessons learned. Integration will need to be a collaborative process of all stakeholders.

VII. RECOMMENDATIONS

Key recommendations for improved integration of CMAM services in Niger are:

1. Provide support for the MOH Nutrition Division to strengthen its CMAM technical leadership role. Establish an MOH CMAM technical support unit, with temporary input from international expertise if necessary, to assess, design, plan, coordinate, manage, monitor and evaluate CMAM-related activities at the national, regional and district levels.

2. Strengthen coordination of CMAM activities at the national and regional levels, including scheduled coordination meetings chaired by the MOH. Strengthen the MOH capacities for chairing and organizing the coordination meetings.

3. Establish CMAM information and documentation systems: collate information and documentation on program performance, case studies, research, pilot studies, etc; develop specific learning fora to share experiences; establish CMAM learning sites and conduct practical learning visits; conduct a national workshop to share CMAM experiences, performance, and lessons learned and to discuss good practices and integration of services; establish a national repository for CMAM data.

Through addressing the above core management support activities, CMAM programs in Niger will improve in quality and effectiveness of CMAM services. Moreover, quality CMAM programs will better highlight the seriousness of the nutritional situation and better address the needs of the country.

Annex 1: Framework for CMAM Services

Elements of CMAM Services

1. **Enabling environment for CMAM**

- 1.1 Leadership, roles, and responsibilities for CMAM
- 1.2 National health and nutrition policies reflecting CMAM
- 1.3 National CMAM guidelines
- 1.4 Stakeholder participation in CMAM
- 1.5 Coordination of CMAM activities
- 1.6 Information, documentation and research for CMAM
- 1.7 Funding availability for CMAM services and supplies

2. Access to CMAM services

- 2.1 Inpatient and outpatient care
- 2.2 Community outreach
- 2.3 Health and nutrition staff for CMAM
- 2.4 Referral system and transportation of referred cases
- 2.5 Links with informal health systems
- 2.6 Links with health and nutrition programs
- 2.7 Links with food security and livelihoods programs

3. Access to CMAM supplies

- 3.1 Supply system
- 3.2 Supply transportation and management
- 3.3 Local production of RUTF

4. Quality of CMAM services

- 4.1 Adherence to CMAM treatment protocol
- 4.2 Implementation of services: organization, supervision, coordination, and support
- 4.3 Monitoring of cases
- 4.4 Monitoring of services
- 4.5 Surveillance
- 4.6 Evaluation of coverage of services

5. Competencies for CMAM

- 5.1 Pre-service training
- 5.2 In-service training
- 5.3 Peer information exchange
- 5.4 Research
- 5.5 Attitudes

Annex 2: Itinerary (June 5 - 22, 2007)

June 5	Arrival Niamey Fred Grant (FG) and Carlos Navarro-Colorado (CN)
June 6	Meeting with University Research Company – Center for Human Services, Dr. Hallarou Mahamane, Mr. Dondi Alagane Meeting with UNICEF, Dr. Noel Zagré Meeting with WFP, Ms. Rachel Fuli
June 7	Meeting with Ministry of Public Health Nutrition division, Dr. Amina Yaya Meeting with Food Crises Cell, Dr. Seydou Bakary
June 8	Meeting with Islamic Relief, Dr. Idrissa Mahamadou Meeting with Helen Keller International, Dr. Pierre Adou; Dr. Aboubacar Mahamadou; Ms. Aïssa Mamadoutailbou Meeting with Save the Children UK, Mr. Steven Rifkin; Mr. Momo Yattara Arrival Niamey Hedwig Deconinck (HD) Meeting with Doctors Without Borders-France, Mr. Thierry Clima & Dr. Susan Shepherd Meeting with Action Against Hunger-Spain, Ms. Elisa Dominguez
June 9	Meeting with Doctors Without Borders-Spain, Ms. Juncal Gonzalez
June 10	Travel to Maradi
June 11	Team 1 (HD):Visit Tessaoua CSI/CRENAS/M, Gazaoua CSI/CRENAS/M and Aguie CSI/CRENAS/M (Save UK); Tessaoua DH/CRENI (University Research Company – Center for Human Services) Team 2 (FG & CNC): Visit Djantoudou CSI/CRENAS/M, Mayahi DH/CRENI (Action Against Hunger - Spain); Mayahi DDSP.
June 12	Team 1 and 2: Visit Maradi CRENI (Doctors Without Borders-France) ; Meet Maradi DRSP Travel to Zinder
June 13	Team 1: Meet Zinder DDSP; Visit Zinder NH/CRENI (University Research Company – Center for Human Services); Meet managers Zinder CRENAS/M (Save UK), Visit Mirriah DH/CRENI and meet DH/MC (District Health Director); Meet Zinder CRENI staff (Doctors Without Borders-Switzerland) Team 2: Travel to Diffa
June 14	Team 1: Visit Zermou CSI/CRENAS/M and second CSI/CRENAS/M (World Vision); Team 2: Visit Nguigmi and Ngléwa CSI/CRENAS/M, Ari Koukouri Health Post CRENAM (Helen Keller International); Nguigmi HD CRENI (Helen Keller International & University Research Company – Center for Human Services); DDSP, staff of Ngourti CSI, and Nguigmi Market
June 15	Team 1: Travel to Maradi. Meet managers CRENAS/M Tessaoua (Save UK) Team 2: Visit Diffa and Bagara CSI/CRENAS/M (Helen Keller International); Diffa HR/CRENI (Helen Keller International & University Research Company – Center for Human Services); DRSP
June 16	Team 1: Travel to Tahoua Team 2: Travel to Maradi
June 17	Team 1: Work in Tahoua Team 2: Visit Doctors Without Borders-Spain in Madaoua. Travel to Tahoua
June 18	Team 1: Visit Nbora Health Post/CRENAS/M; Visit Tahoua CRENI (Concern); Travel to Konni. Team 2: Visit Keita CSI/CRENAS/M and CRENI (Action Against Hunger - Spain). Travel to Madaoua
June 19	Team 1: Visit Dosso Health Post/CRENAS/M (Plan-Niger); Team 2: Visit Madaoua HD CRENI, Sabon Guida CSI/CRENAS/M (Doctors Without Borders-Spain); Travel to Niamey
June 20	Office work in Niamey Visit Tillabéri Urban CSI/CRENAS/M and Tillabéri CRENI (Islamic Relief & University Research Company – Center for Human Services) Meeting with UNICEF, Dr. Noel Zagré
June 21	Follow-up meeting with Helen Keller International, Dr. Pierre Adou; Dr. Aboubacar Mahamadou,

	Mr. Hamani Harouna Briefing on visits, brainstorming, report writing.
June 22	Follow-up meeting with University Research Company – Center for Human Services, Dr. Hallarou Mahamane, Dr. Maina Boucar Report writing Departure from Niger

Annex 3: List of People Contacted

Organization	Name	Affiliation	Contact Information
Action Against Hunger - Spain	Elisa Dominguez	Nutrition Coordinator	Mob: 96 277 106
	Nahuel Arenas	Head of Base	Mob: 96 408 061
	Esther	Head of Base	
Food Crises Cell	Dr. Seydou Bakary	Director	bakaris@hotmail.com
Concern Worldwide	Nigel Tricks	Country Director	Mob: 96 985 260
	Amanda	Nutrition manager	Mob: 96 524 030
	Dr. Ibrahim	Medical coordinator CRENI	
District and Regional Health Offices	Moussa Gaye Laouali	Reproductive Health Head, Zinder	
		DRSP Deputy, Maradi	
		District Health	
	Dr. Bashir Sabor	Director, NH Zinder	
		Deputy District Health	
	Dr. Soumaylo Himou	Director, DH Miriah	
Helen Keller International	Dr. Pierre Adou	Country Director	padou@hki.org
	Dr. Aboubacar Mahamadou	Diffa Project Coordinator	
	Ms. Aïssa Mamadoutailbou	Sahel Project Coordinator	amadoul@hki.org
	Mr. Hamani Harouna	Nutritionist	
Islamic Relief	Dr. Idrissa Mahamadou	Health Coordinator	Idrissa2_2005@yahoo.fr
Ministry of Public Health Nutrition division	Dr. Amina Yaya	Director Nutrition division	yaya_amina@yahoo.fr
Doctors without Borders – France	Mr. Thierry Clima	Head of Mission	Mob: 96 501 264
	Dr. Susan Shepherd	Medical Coordinator	Mob: 96 535 796
Doctors without Borders – Spain	Juncal Gonzalez	Medical Coordinator	msfe-niamey-medco@barcelona.msf.org
	Sandrine Riousset	Head of Mission	
	Ali Alypendha	Nurse CRENAM/S Madaoua	
	Dr. Tony	Base Coordinator Madaoua	
Doctors without Borders – Switzerland	Benoit	Medical coordinator CRENI Zinder	
		Nurse CRENI Zinder	
Plan – Niger	Hassan	Dosso Coordinator	Mob: 96 898 513
	Kharim	Health Coordinator Dosso	
Save the Children – UK	Mr. Steven Rifkin	Acting Country	Mob: 96 407 691

		Director	
	Mr. Momo Yattara	Health & Nutrition Coordinator	Mob: 96 299 682
	Dr. Kalil	Maradi Coordinator	Mob: 96 280 031
	Rocio	Program Coordinator Maradi	Mob: 96 407 739
	Ibrahim	Nutrition supervisor Maradi	
	Laurent	Program Coordinator Zinder	
	Abdou	Nutrition supervisor Zinder	
	Mr. Djingri Ouoba	Community Program Coordinator	ouoba@yahoo.com
UNICEF	Dr. Noel Zagré	Nutrition Program Administrator	nzagre@unicef.org
University Research Company – Center for Human Services	Dr. Maina Boucar	Program Country Director	paqchs@intnet.ne
	Dr. Hallarou Mahamane	Program coordinator	hallarou@yahoo.fr
	Mr. Dondi Alagane	Regional Administrator	adonid@intnet.ne
World Food Program	Ms. Rachel Fuli	Nutrition Program Officer	Rachel.fuli@wfp.org
World Vision	Hortence Palm	Country Representative	Mob: 96 873 264
	John Sebakwiye	Relief Director	
	Sansan Dimanche	Nutrition Advisor	

Annex 4: List of Documents Consulted

MINISTRY OF PUBLIC HEALTH

1. Directives nationales pour les activités de prise en charge de la malnutrition aiguë (2007).
2. Politique nationale en matiere de alimentation et nutrition (Projet) (November 2006).
3. Plan national d'action pour la nutrition 2007- 2015 (Projet) (November 2006).
4. Protocole national de la prise en charge de la malnutrition aiguë (December 2006), WHO and UNICEF.
5. Redynamisation et intégration des activités de prise en charge de la malnutrition dans les structures sanitaires (working draft, 2007).
6. National nutrition and mortality survey (October 2005).
7. Enquête Démographique et de Santé et à Indicateurs Multiples 2006 (DHS).

UN & NGO

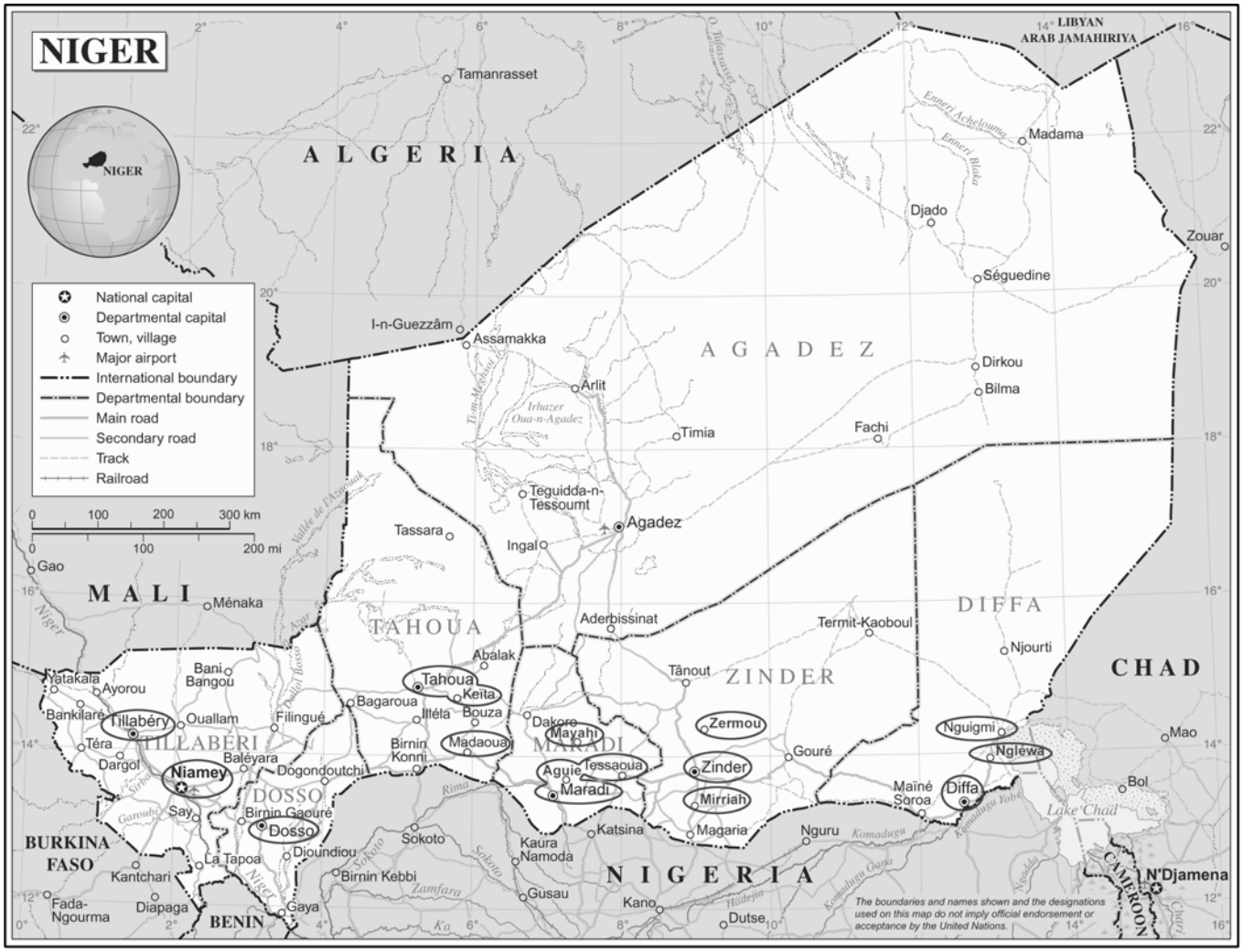
1. Joint independent evaluation of the humanitarian response of CARE, Catholic Relief Services, Save the Children and World Vision to the 2005 food crisis in the Republic of Niger (November 2006).
2. Understanding nutrition data and the causes of malnutrition in Niger. A special report by the Famine Early Warning System Network (USAID) (June 2006).
3. Scaling up the treatment of acute malnutrition. Report on the intervention of Médecins Sans Frontières in Niger 2005 (Doctors Without Borders -France) (March 2006).
4. The cost of being poor: markets, mistrust and malnutrition in southern Niger 2005 – 2006 (Save the Children – UK) (June 2006).
5. Community Mobilisation: Technical support visit to the World Vision CTC Program, Zinder Region, Niger. (Valid International, World Vision) (March 2007).
6. Réponse à la situation nutritionelle des enfants. Bilan Annuel 2006. (UNICEF).

OTHER

1. For each of the NGO programs visited: program proposals and activity reports, Famine Early Warning System Network reports, consultancy and visit reports, nutritional surveys, coverage and KAP surveys, other evaluations, maps and other background information from the country.
2. Various publications on CTC and acute malnutrition published in the international scientific literature.

Annex 5: Map of Niger

Areas visited by the FANTA team are circled.



Annex 6: Local Production of RUTF Information

Société de Transformation Alimentaire, Nutriset franchise

1	Location of plant	Niamey
2	Start date of production	2005
3	Total production capacity	50 metric tons per month (24 hour/day production)
4	Current monthly production capacity	35 metric tons per month
5	Purchasers of RUTF	UNICEF and NGOs
6	Recipe base	Peanut
7	Ingredients purchased locally	Peanuts
8	Ingredients imported	Vitamins and minerals complex, milk powder, oil, and sugar
9	Tax exemptions on imported ingredients?	No
10	Packaging type	Cups
11	Shelf life	6 months
12	UNICEF accreditation	Yes