COVERAGE ASSESSMENT
» SEMI-QUANTITATIVE EVALUATION OF ACCESS & COVERAGE

FRENCH RED CROSS CMAM PROGRAM TANOUT DISTRICT, NIGER REPUBLIC JULY 2014

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COMMUNITY MOBILIZATION ASSESSMENT REPORT

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ABBREVIATIONS

CMAM: COMMUNITY BASED MANAGEMENT OF ACUTE MALNUTRITION

CS: CENTRE DE SANTE– EQUIVALENT TO PRIMARY HEALTH POST

CSI: CENTRES DE SANTE INTEGRES– EQUIVALENT TO PRIMARY HEALTH CENTRE

DHO: DISTRICT HEALTH OFFICE

ECHO: EUROPEAN COMMISSION'S HUMANITARIAN AID AND CIVIL PROTECTION DEPARTMENT

FRC: FRENCH RED CROSS SOCIETY

HAI: HUMAN APPEAL INTERNATIONAL

NRC: NIGERIEN RED CROSS SOCIETY

OTP: OUTPATIENT THERAPEUTIC PROGRAM

RUTF: READY-TO USE THERAPEUTIC FOOD

SAM: SEVERE ACUTE MALNUTRITION

TFC: THERAPEUTICS FEEDING CENTERS

EXECUTIVE SUMMARY

The French Red Cross (FRC) has been implementing a CMAM program in Tanout District since 2005. FRC is currently supporting the district health office (DHO) and 31 Centres de santé intégrés (CSIs) to provide SAM treatment to needy community.

The community mobilization assessment was carried out in Tanout district in Zinder region of Niger in July 2014 to assess the coverage and the community mobilization components of the French Red Cross ECHO funded CMAM project. It aimed to build capacity of the partners' staffs in undertaking community mobilization assessment and planning a comprehensive community mobilization strategy for the CMAM program. This assessment employed a comprehensive mixed-method approach, including primary data collection via key-informants, focus group discussions, observations, and semi-structured interviews.

Frequent stock out of RUTF, far distance to CSI, misuse of RUTF, and inadequate quality of SAM treatment services are on list of top barriers to access CMAM services. Besides, the assessment showed that the CMAM program profoundly depend on health facility based service and quarterly mass screening for malnutrition. The community mobilization lags far behind from health facility based SAM service.

The assessment provided insight about key community figures, formal and informal communication channels, and community health seeking practices and perceptions, and barriers and boosters to access SAM service in the district. It revealed the existence of suitable local structures and community resources, which the program needs to maximize the use to reinforce the community mobilization efforts.

Every barrier affecting the community access and uptake of SAM treatment service, from frequent stock out and misuse of RUTF to far distance to CSI, require community participation and mobilization to resolve it. Since CMAM program is a long term program integrated into local health system, the program need to follow a sustainable and an opportunistic approach for community mobilization. It also needs to reinforce the local health system so that it can take over the ownership of the program. Reinvigorating and using existing DHO partners' health coordination meeting and village health committee meeting for community mobilization coordination will revitalize the community participation and mobilization effort in a sustainable and efficient way.

OBJECTIVES

The main objective of the assessment was to understand the context and communities covered by the severe acute malnutrition (SAM) treatment program in order to design a comprehensive community mobilization strategy to improve access and uptake of the CMAM services.

The specific objectives were to:

- Identify community gatekeepers, potential community groups and networks of volunteer for CMAM
- Assess formal and informal communications channels
- Identify key stakeholders in the community and their relationship within the socio-political, spiritual, religious, economic and health sectors
- Assess community health seeking behaviors and competing behaviors for SAM treatment
- Understand community perception about malnutrition and SAM treatment
- Assess contextual barriers and boosters to accessing SAM treatment services
- Assess the strengths and weaknesses of the current community mobilization activities

INTRODUCTION

Niger, officially the Republic of Niger, is a landlocked country in Western Africa. The Sahara desert covers over 80 percent of its land area. The population of over 17 million, predominantly Muslim and clustered in the far south and west of the country.

As part of the French Red Cross's ECHO funded Community based Management of Acute Malnutrition (CMAM) Program Coverage Assessment, A Community Mobilization Assessment was carried Out in Tanout District using the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) in July 2014

HEALTH AND NUTRITION SERVICES:

Tanout district has a well-decentralized primary health care system. The district health office provides health and nutrition services through one district hospital, 31 CSIs and around 69 centers de santé (CS). The CMAM program is the longest running program since 2005 in Tanout district. In 2005, the French Red Cross (FRC) supported the district health office (DHO) to start up SAM treatment services in 8 CSIs then slowly scaling up to the current 31 CSIs. The Outpatient Therapeutic Program (OTP) services are integrated into the management of childhood illness at the CSI level. Children with severe acute malnutrition with medical complications are referred to the therapeutics feeding centers (TFC) at the district hospital using four ambulances. The admission criteria for SAM are Mid Upper Arm Circumference (MUAC) less than 115mm, or Weight for Height less than -3 SD or bilateral edema.

FRC and the Nigerien Red Cross (NRC), in partnership with World Food Program, support 21 out of the 31 CSIs to provide treatment of moderate acute malnutrition (MAM). Gage, a local NGO, supports the remaining 10 CSIs for the delivery of MAM treatment program. FRC provides technical and logistical support to DHO, and finances the salaries of 27 nurses on the DHO staff, as well as ten nutrition assistants, five cleaners, two cooks, and 119 volunteers at the CSIs. In addition, UNICEF supplies Ready-to Use Therapeutic Food (RUTF) via the Ministry of Health (MOH) and also funds FRC to implement the Essential Family Health Practices project in 13 CSIs catchment areas. The Essential Family Care program is a behavior change communication program on key family health message at community level. The key messages include exclusive breastfeeding for the first six months of a child's life, sleeping under a mosquito net, providing children with oral rehydration solution in case of diarrhea, washing hands with soap, introducing other nutritious foods to children after six months, providing children with preventive health care, and bringing children to a health post at the first sign of illness.

FRC has one Nutrition Project Coordinator and one Nutrition Assistant based in Zinder town who provide technical support to the DHO and coordinate FRC nutrition program in

Tanout district. FRC has one National Health and Nutrition Coordinator based in Niamey who supports the program.

A SMART nutrition survey was never carried out in Tanout District. The May/June 2013 Niger Health and Demographic survey for Zinder region shows that the prevalence of global and severe acute malnutrition among under five year children was 14.9% and 3.5% respectively.

INVESTIGATION PROCESS

The assessment team employed a comprehensive mixed-method approach, including secondary data analysis of the routine SAM treatment program, and primary data collection via key-informants, focus groups, observations, and semi-structured interviews.

The assessment team selected nine CSIs purposely, which cover sedentary and pastoralist communities and different topographic areas of the district. The team also identified five remote villages and four near villages in the 9 CSIs catchment area. The team selected key community figures from these villages for assessment.

The team recruited enumerators to collect data and provided them with a two-day training on qualitative data collection methods, facilitation of key informant interviews, focus group discussions, and guiding interview questions – see table 1 below for the list of participants and data collection methods. The team closely supervised the data collection to ensure the quality of the data. Then the qualitative data findings were categorized and summarized by thematic areas.

Table 1: List of Participants and Qualitative Data Collection Methods

Level	Focus Group Discussion (FGD)	Key informant Interview	Semi-structured interview
District level		-Nutrition focal person and community mobilization officer from district Health office -FRC Nutrition coordinator and supervisor	
Community level	-9 FGD with fathers of Under 5 children - 9 FGD with mothers of under 5 children	- 9 villages chiefs - 5 Imams - 1 Rich Men -3 Women leaders, - 3 Traditional healers, - 2 mayors - 5 Traditional birth attendant - 9 OTP staffs - 9 OTP volunteers	
Beneficiary	-9 FGD with OTP-mothers		61 caregivers of children with SAM who are not in a OTP program

This assessment was conducted by the Community Mobilization Advisor from the Coverage Monitoring Network (CMN) in collaboration with the FRC and its partners in July 2014. The French Red Cross facilitated and provided administration and logistic support in the field.

I. UNDERSTANDING THE POPULATION AND CONTEXT

1.1. GEOGRAPHICAL AND PHYSICAL LAYOUT

Tanout district is located just south of the Sahara desert in Zinder region of Niger. Its administrative seat is in Tanout town. The district is divided into six communes. It is further divided administratively into over 597 villages. The villages are formed along marital links, ethnic groups, livelihood, and water sources. The population is estimated at 528,361[1].

Most of the population has settled in semi-arid areas in the southern part of the district in villages composed of a clustering of houses. Some pastoralist camps are scattered in other parts of the district, generally near water sources. These areas have come to form centers, and often have a health clinic. The pastoralist communities move to the centers during the brief rainy season (June–Oct), and move on in search of water for animals during the dry season.

1.2. ETHNIC GROUPS AND DISTRIBUTION

There are four ethnic groups in the district: Hausa, Beriberi, Tuareg and Fulani. Hausa is the largest ethnic group in the district and in the country at large, followed by the Beriberi. The Fulani and Tuareg ethnic groups are minority nomadic communities. A small portion of the Hausa and Beriberi also follow a nomadic lifestyle. Each tribe speaks their own language, although the Hausa language is generally spoken among all persons in the region. Over 99 percent of the communities follow Islam and significant of them practice polygamy; whereby one man can marry up to four wives. Related families form one big combined family and live together in one compound or in houses close each other in the village. According to their culture, the elder women in the community and/or first wife make important decisions including medical care and feeding.

1.3. LIVELIHOODS/OCCUPATIONS

The livelihood of the Hausa and Beriberi depend on subsistence agriculture, producing millet and sorghum. Moringa cultivation is also common in some villages. The Fulani and Tuareg are nomadic and completely depend on livestock for their livelihood (see annex I: list ethnic groups, settlement pattern, livelihood and market days). There are no

[1] French Red Cross Society-Niger office working figures for the Tanout project

employment opportunities in the public or private sector. Most of the men travel to neighboring countries (Libya, Algeria, Nigeria, Togo, and Benin) in search of work. They leave their wives and kids behind with grandparents. During the assessment, women reported that their husband rarely send money back to family and often marry again in different countries. Divorce in absentee has also been a common phenomenon.

1.4. KEY COMMUNITY FIGURES

At the district level, authority is spread over political, traditional and religious leadership systems. The political leaders gain their position through official elections or are assigned by the government. The district has a governor, each commune has a mayor, and there are no governmentally post at the village level. The key community figures, and their role and interaction with community presented below and summarized in table in annex III.

CHIEF OF THE VILLAGE

The traditional leadership is decentralized and comes from the same tribe and community. Each village has a village chief who is a very influential and is in everyday contact with the community. The chief also represents the community at the commune level and discusses community issues with the government representative. The chief is responsible for the safety and security of the community, providing advice and managing disputes. Outsiders need to get the go ahead from the chief before any activities can be implemented in the villages. The chief usually has good relationships with the Imams and women leaders.

RELIGIOUS LEADERS

The Imam is the top religious leader and is highly respected by the community. Imams lead the worship at mosques and make important announcements after prayer time. They are in direct contact with the men in these communities five times a day at prayer time and can also reach men with various public service messages, on topics such as health and nutrition. They not linked with politicians in most of the villages, and may have greater authority than the village chief in some villages.

THE FAMILY

As in many communities, women are the main childcare providers and handle the day-to-day family activities and needs. Mothers are responsible for bringing a child to a health facility for medical care. Since most men travel to neighboring countries for work, the women with young boys are also responsible for farming.

Men handle almost all issues outside of the home including farming, income generation, and providing for the needs of the family. In Tanout district, men generally have key responsibility for making decisions on family issues including seeking out or transporting a sick child to the CSI for medical care.

In Tanout, the community lives in combined families (grandmother, her sons and their wives and families) in one compound or houses next to each other. The grandmother is

involved in childcare and welfare. The grandmother also plays a major role in decision-making, including child medical care regardless of the presence of the father. This role significantly increases when men are absent due to work. Mothers often leave their children with the grandmother when they are busy handling the family day-to-day activities or are at work.

WOMEN LEADERS

Most of the villages have women leaders who are elected by the community and endorsed by the village chief to mobilize and lead the women in the community. The women leaders generally disseminated messages to other women on behalf of the chief and Imam, and engage in mobilizing women for work and campaigns in the villages such as immunization. They can act as a role model for positive change in their communities and it is important to engage them in CMAM as well as outreach efforts in the community.

WEALTHY COMMUNITY MEMBERS

Wealthy community members, known as rich men, are traders, have properties, and are better off than most in the villages. They contribute to decision-making in the community and may provide material donations to health facilities. At times, they can be more powerful than village chiefs in some of communities. As they tend to be buyers and sellers of RUTF in the villages, their support for CMAM programming is necessary.

TRADITIONAL HEALER

Traditional healers are highly respected by the community. They are believed to have the spiritual power to cure any illness. They are the first point of contact for most families who seek treatment for their sick child. Their practice is often in competition with SAM treatment and can be conflicting. For example, one the traditional healer reported he provided cattle stools as treatment for malnutrition that led the child to suffer from a severe diarrheal diseases.

TRADITIONAL BIRTH ATTENDANTS

Traditional birth attendants are the first point of contact for most women of reproductive age and have frequent contact with women and children in the villages. They have influence on the community, particularly on women of reproductive age. Two traditional birth attendants indicated that they supported birth during night and refer mothers and newborns to health facility at day time.

1.5. SOCIAL SUPPORT MECHANISMS

The community supports each other during good and difficult times. The support includes helping and engaging with each other in farming, during holidays and social ceremonies, and visiting family when someone is sick or when there is a death in the family. The

community also contributes money to the families in need of support. There is a culture of communally raising funds to honor an important guest visiting the village.

1.6. COMMUNITY GROUPS AND ORGANIZATION

The assessment explored the potential community actors and their community outreach workers can be used for community participation and mobilization for CMAM program. The assessment identified only one community local faith-based organization that have a network of volunteers who work in the community and are engaged in raising awareness about hygiene and health related topics.

The district health office has also volunteers called "Relais Communautaires". These volunteers are active only during campaigns particularly vaccination campaigns. There are between 1-2 "Relais Communautaires" in each village. The French Red Cross and Nigerian Red Cross have also volunteers for WASH and Reproductive health programs. These volunteers are irregularly involved in malnutrition screening.

Gage, a local NGO implementing MAM treatment program in some of the villages, reported they have community volunteers who help health workers at CSI by taking weight of children, distribution of Corn Soya Blend.

1.7. FORMAL AND INFORMAL CHANNELS OF COMMUNICATION

The common methods of disseminating information to the community and their perceived relative effectiveness were assessed as follow.

COMMUNICATION AMONG MEN

The village chief generally conveys important messages through announcements over megaphones. Announcers travel house to house disseminating the messages to the community effectively reaching the community as houses are located close to each other, and there are generally no more than 50 households in a village.

During prayer times at the mosque, the Imam passes on important information from the village chief or other sources. In addition, formal meetings between the village chiefs and community members are an important forum for information exchange and decision-making.

Informal communication takes place when men gather and sit under trees or at central location for tea and food in the village. They exchange information and discuss community issues. Other informal communication venues include farming and social events like weddings, funerals, and market days.

COMMUNICATION AMONG WOMEN INCLUDING CMAM TARGET WOMEN

Women leaders disseminate messages from village chiefs and also have announcers that go from home to home to inform women in the community. The women also get information from the chief's announcer when they pass around and their husbands who get information at the mosque or social gatherings. The women leaders also call for meetings and formal discussions with other women when there are important issues to discuss in the community. The women also exchange information and hold discussions when farming, grinding the millet, in the market, at water wells, and at social gathering events. The women reported that the main source of information about malnutrition and CMAM has come from volunteers, CMAM beneficiaries, and health workers.

COMMUNICATION BETWEEN HEALTH FACILITY AND COMMUNITY

In principle OTP staff or the health facility manager contacts the village chiefs to disseminate key message on health and nutrition service related to the community. However, it was reported that there is still limited communication between the community and the health facility. The health workers also visit the villages for monthly outreach immunization services and disseminate information on key essential family health practices and other health and nutrition related information.

MASS MEDIA

Access to radio is available but significantly limited by the lack of electricity in the district. Most of the community listens to British Broadcasting Corporation (BBC), Voice of America (VOA) and Deutsche Welle (DW) or Germany's international broadcaster program in Hausa language. Radio programs are accessible in remote areas and are provided in the majority languages in the country. The TV and Radio programs transmit from Zinder town but have poor coverage in the remote location.

Two functional community radio stations owned and managed by the community exist in Tanout district. The stations are located at Gangara and BelBeji villages and broadcast for only six hours per day due to limited electricity. The district health office and partners use the stations to disseminate health message, particularly about immunization during EPI campaigns. Use of this radio stations to sensitize the population about the CMAM services have not been well explored.

MOBILE TECHNOLOGY

The mobile network coverage is significant and covers most of the district. The use of mobile phones is common, and most of the men who participated in focus group discussion have mobile phone. The prevalence of mobile use is also significant among women as husbands who leave the country in search for work often buy their spouses mobile phones

to keep in touch. Access to electric power to charge the phone is a challenge. Some traders have generators and charge 100-franc CFA to charge one mobile per day.

There is mobile network coverage in the location of the 24 out 31 CSIs. The FRC has provided phones and covers the telephone costs for 14 CSIs. The FRC also helped 7 CSIs with access to radio communication. The CSI manager uses the mobile communication to request ambulances, refer SAM cases from the OTP to Tanout district hospital, and request supply.

1.8. COMMUNITY EVENTS

The main community events are weddings, naming, Ramadan, Tabaski/Eid holiday, and burial ceremonies. These events were used by FRC to disseminate information about the SAM program in some of the villages in 2014.

II. PERCEPTION, BOOSTERS AND BARRIERS

2.1. COMMUNITY PERCEPTIONS ABOUT MALNUTRITION AND CMAM

The majority of community participants expressed their understanding and agreement that malnutrition is a problem in their community. They mentioned the causes of malnutrition as a result of famine/drought, lack of food, poor production of breast milk and poor feeding of the child. Most of them also associated the causes of malnutrition with diseases such as malaria, diarrhea, pneumonia, and teething among babies. Half of the traditional healers interviewed reported that they had not encountered cases of malnutrition, while the other half had referred children to health facilities after their traditional treatment had failed.

Key community figures were familiar with different forms of malnutrition, such as edema, reddish discoloration of hair, big stomach, and wasting. When asked where the community sought treatment for malnutrition, almost half of the participants stated that they first seek treatment from traditional healers and pay around 1,000 CFA for treatment. Mostly the pastoralist community also reported that they use homemade herbal medicines, using roots and leaves for malnutrition treatment. Most of community participants reported that they know about the availability of SAM treatment, that it is free of charge, and the method of treatment and referral system. Most of the community members stated that they appreciated the SAM treatment and recognized the positive changes in children who had received treatment. In most villages, there is stigma attached to malnutrition. The mother of a malnourished child feels shame as she is seen as too lazy to feed and take care of her child. The local terminologies for malnutrition and SAM treatment services were explored and is attached in annex 3.

2.2. BARRIERS TO ACCESS SAM TREATMENT

STOCK OUT OF READY-TO-USE THERAPEUTIC FOOD (RUTF)

Frequent shortages of RUTF is a top barrier to access SAM treatment as show in table 2 below. Women in villages reported that on numerous occasions, they walk for several hours in very harsh and hot weather conditions or paid for transport to OTP site only to be told by the health workers that there was no RUTF. This negatively affects the program and creates frustration among the OTP clients.

Recently, the health facilities received a supply of RUTF from the district health office. However, it was a lower quantity than requested and the district health office reported that they often receive less quantity than what they request from the Ministry of Health and UNICEF. There are no logistic problems in delivering the RUTF to the health facilities from

district health office; the French Red Cross can distribute the supply to 31 health facilities within three days.

Poor communication between the health facilities and the communities has led to perceptions of shortages of RUTF. For example in one village, it was found that caretakers of 14 out of 15 severely acutely malnourished children, who enrolled in the program, reported that they had not received RUTF for the last three weeks. However, the health facility had received the RUTF two weeks prior but never communicated this information to the community.

MISUSE OF RUTF

The misuse of RUTF is a serious problem in the district. It includes selling, buying and sharing of the Plumpynut at the household. The "rich men"/ traders buy one sachet of Plumpynut for around 100-Franc CFA from the caregiver of children who enrolled in the OTP program then sell it for 125 Franc CFA. Mothers like to give Plumpynut to their children as candy. Other reasons for selling the Plumpynut by the caregivers is to get money to pay for transport to the health facility for OTP appointments, and for buying other household needs such as cereals, meat and soap.

In addition, the OTP staff reported that a significant number of caregivers register and receive Plumpynut in more than one health facility. They stated that some of the caregivers give certain leaves and roots to children to induce diarrhea, illness, and malnutrition to be eligible for the OTP program and RUTF so that they can sell it for income generation. In addition, misperception and misuse of RUTF among adult men is common as they believe that it will make them "strong and active during sex." The misuse of RUTF /Plumpynut significantly contributes to recurrent cases and shortage of Plumpynut.

DISTANCE TO CSI

Distance to CSI is among the top barrier to access SAM treatment. This includes lack of means of transport, lack of money to pay for transport, and difficulty for mothers to walk far distances with malnourished children in harsh weather. Despite the fact that OTP services are available in 31 health facilities, a significant number of villages are still far from the OTP sites and the caregivers need to travel up to three hours to access treatment. Some villages have limited means of transport, such as motor bikes and donkeys, and a round trip fare from the village to the OTP sites can cost between 400-1,000 Franc CFA. As the frequency of OTP follow-up is weekly, the cost of transportation and related challenges are simply not feasible for many people.

MISCONCEPTIONS ABOUT SAM TREATMENT

Despite the fact that SAM treatment service is free of charge, most caregivers believe that they should pay for drugs and medical service fee when a child with SAM is referred to stabilization center at Tanout hospital so most of them refuse to take the child to the hospital. In addition to this, some of the communities perceived that the traditional

medicines is better than SAM treatment and seek it as first line of treatment. This has resulted in some men refusing that their wives take a child to the health facility for SAM treatment.

WRONG DIAGNOSIS, REFERRAL AND ADMISSION

Inadequate quality of SAM treatment service is also among the top barriers for the community to access SAM services in the district. This includes wrong diagnosis, admission and referral of acutely malnourished children from the community to the OTP and TFC level; SAM children referred from OTP to TFC without proper examination and rejected for admission at the hospital; delays in referring OTP cases to TFC or children from MAM programs to OTP; the presence of SAM children in the MAM treatment programs; and delays in case findings and referrals from the community.

2.3. BOOSTERS TO ACCESS SAM TREATMENT

The top five boosters for SAM treatment services include quarterly mass screening of children for malnutrition using MUAC, follow up the CMAM protocol by health workers, follow-up on cases, good awareness within the community about the CMAM program, and integration of CMAM into existing health system. SAM treatment has also been integrated into the management of childhood illness in health facilities. Please see table 2 below for the list of boosters.

Table 2: Barriers and Boosters to Access SAM Treatment in Tanout District, Niger, July 2014

	BARRIER	SCORE		BOOSTER
1	Stock out of RUTF	4.6	5.2	Quarterly mass screening
2	Distance to CSI	4.3	5.1	Good follow up of the CMAM national protocol
3	Misconception about SAM treatment	4.2	4.8	Awareness of the CMAM program by the community and welcome the care taker at health facilities
4	Misuse of RUTF (sharing, selling and double admission)	4.1	4.8	Ambulance referral service from OTP to TFC
5	Wrong diagnosis/referral/admission	4.1	4.7	Good follow up of defaulters
6	Migration-pastoralist	4.1	4.6	Integration of CMAM activities into existing child care service at facilities
7	Mother sick	4	4.4	Appreciation of the CMAM program
8	Unavailability of OTP staff (holiday, training, traveling, sickness)	4	4.4	Mothers know volunteers roles
9	Stigma	3.8	4.3	Referral feedback
10	High opportunity cost to Mother(farming, household work, engaging social ceremony)	3.8	4.2	Good communication between Health workers and volunteers at CSIs
11	Inadequate communication between the community and health workers: OTP closed, lack of health	3.6	4.2	Regular Supervision of OTP/SC by MOH, FRC/NRC)

	worker)			
12	Waiting for the market day to go to the OTP	3.3	4	mostly receiving supplies and ordering
13	Fear of women(possibility of rape, mad man and animal attack)	3.3	3.9	FRC support for VHF and phone communication to health facilities
14	Epidemics (measles, meningitis)	3.2	3.9	Low defaulter rates
15	Recurrent of cases (relapse)	2.6	3.4	Existing meetings with the chiefs of villages at CSI on health issues
16			2.8	Active participation of Mayors in health center activities

III. COMMUNITY MOBILIZATION STRATEGY

Community participation and mobilization is an influential factor for CMAM program success, efficiency and sustainability. Furthermore, there is robust evidence prioritizing community participation and mobilization help to improve coverage, increase speed of uptake and consequently increase community ownership over the CMAM program. Notably, effective and genuine community participation empowers the community and enables the implementation of more culturally-appropriate CMAM intervention which also minimizes the high opportunity costs to caretakers[2].

3.1. COMMUNITY MOBILIZATION TEAM STRUCTURE

The CMAM program in Tanout depends on the health facility based services and less on community mobilization structure. Presently there is a lack of dedicated focal persons and networks of volunteers at the community level for community mobilization for CMAM program. As well, the DHO has a Community Mobilization Officer, who is responsible for health communication and mobilization, but the incumbent in this position has not been involved in community mobilization activities for the CMAM program.

Under UNICEF funded FRC Initiative for Acceleration of MDG (IAOMD) project, FRC with the Nigerien Red Cross society hired, trained and deployed 823 volunteers in 410 villages in 13 CSIs catchment areas. The volunteers were dedicated to behavior change communication on Essential Family Health Practice[3]. FRC and DHO also tasked the volunteers to conduct monthly growth monitoring, screening of under five children using MUAC, and to refer acutely malnourished cases. Likewise, Relais Communautaires, another network of volunteers, provide each village with 1-3 volunteers to function under the coordination of the DHO Community Mobilization Officer during periodic health-related campaigns, e.g., polio vaccination campaign

FRC supported the DHO to hire, train and deploy 2-3 nutrition volunteers per CSI to support the OTP health workers in the health facilities. They participate in the quarterly mass screening and immunization campaign.

3.2. COMMUNITY MOBILIZATION COORDINATION

Coordination mechanisms explicitly for community mobilization for the CMAM program do not presently exist. However, the DHO and the health and nutrition partners who work in the district hold a monthly partners coordination meeting which focuses on general health and nutrition program coordination and partner activities in the district. CSIs are meant to

[2] Saul Guerrero & Tanya Khara (Valid International), Community Participation and Mobilization in CTC (Special Supplement 2); Field Exchange Issue 102, November 2004.http://fex.ennonline.net/102/5-1-2
[3] http://www.unicef.org/infobycountry/niger_57530.html

host monthly village health committee meetings with community members, such as the village chiefs. However, according to the DHO, these meetings do not happen regularly and usually the community members focus on immunization, drugs and service fee related issues. Partners need to reinvigorate and reinforce these meetings and set up village health committees to promote community mobilization coordination for and community participation in the CMAM program.

3.3. ONGOING SENSITIZATION

Partners conduct sensitization about the SAM treatment and malnutrition during quarterly mass screenings, and monthly outreach programs in 13 out 31 CSIs. However, the volunteers and staff do not have enough time to devote to sensitization because they are engaged in screening activities during the mass screening campaign.

In 2014, FRC identified and trained Imams, village chiefs and community leaders from 210 villages over three days on Essential Family Health Practices and their role in supporting volunteers in the communities. Trained volunteers and Imams sensitized the community about SAM treatment during social ceremonies and after Friday Prayers at the community level. The OTP staff also conducted sensitization about the program at CSI level.

3.4. CASE FINDING

MASS SCREENING

Quarterly mass screening is conducted by FRC in collaboration with the DHO, health facilities, and NRC. During the recent mass screening activities in March and June 2014, malnourished children were referred to OTP and SC as appropriate where they were rescreened using WFH and MUAC and admitted to the program. Routine immunization services were also provided for children during the mass screening campaign. The mass screening activity usually takes up to ten days for each CSI catchment area as the mass screening team only includes three individuals: a nutrition volunteer, an OTP staff from the CSI, and nutrition program supervisor from FRC. The ownership of the mass screening by the DHO and community is not yet fully achieved, and quarterly mass screening currently depend on the availability of funding through FRC. Village chiefs help to inform and encourage the community to attend the mass screening. In addition, monthly screening of children using MUAC by volunteers at community level is carried out in some villages located in catchment area for 13 out 31 CSIs where the volunteer are available at the community level.

ACTIVE CASE FINDING

Active case finding helps to identify severely acute malnourished cases as early as possible for timely treatment. The volunteers who work in the 13 CSI catchment area were trained on to conduct nutrition screening of children under five using MUAC. They conduct screenings during social events and the monthly outreach program. Home to home visits for

active case finding by volunteers has not been initiated yet at the community level which poses a challenge in identifying malnourished cases as early as possible.

PASSIVE CASE FINDING

All OTP staff (health worker and facility based nutrition volunteers) from 31 CSIs were trained on CMAM and MUAC screening in 2012. The OTP service is part of the integrated management of childhood illnesses in CSIs. Children who visit the sick baby clinic are screened using MUAC and treated for acute malnutrition and other medical conditions as required. Some families who have heard about the OTP service and believe their children are malnourished bring their children to the facility for screening.

3.5. FOLLOW-UP OF SAM CASES

According to Nigerien CMAM protocol, home visits should be conducted when a child is absent for one or two times from the program, for defaulters and non-respondent to the treatment. If a child misses one or two OTP visits, the OTP staff contact the village chief to inform the caregiver to return to the program. But if a child misses three appointments or default from the program, the OTP team then visits the family in the village to advise the caregiver to return to CSI. The assessment team found, through secondary data analysis from 31 CSIs over one year period, that the defaulter rate was less than 5 percent which is within the acceptable SPHERE standard (15%). However, follow-up of cases need to include investigation of the reasons for defaulting and poor response to treatment for eligible cases.

IV. DISCUSSION AND RECOMMENDATIONS

The lack of dedicated community mobilization focal persons, coordination mechanisms and network of volunteers has led inadequate community mobilization efforts for CMAM program in Tanout district. Appointing dedicated staff members from the local health system at all levels to coordinate community mobilization activities along with their other duties will enhance the success of all CMAM services. It will also increase community and DHO ownership over the CMAM program in long term. FRC and DHO should reinvigorate and use the existing DHO health coordination and village health meetings for community mobilization coordination. This will revitalize the community mobilization effort in a sustainable and efficient way.

The assessment team found that existing local structures and community resources, including effective traditional and religious leadership systems and communication channels, need to be better employed to reinforce community mobilization efforts. As the community figures are influential and trusted by the community, they can help to sensitize the community, identify and follow-up malnutrition cases, provide referrals, and address the problem of caregivers at the community level.

In the long term, self–referral cases should represent the bulk of admissions. This will only be possible through community sensitization and information sharing. However, self-referral needs to be supplemented with volunteers conducting timely and active community case-finding where prevalence of acute malnutrition is high. The community volunteer structure needs restructuring in order to cover all villages with at least one volunteer per village. As the current monetary based volunteerism is not sustainable, the program needs to follow a more sustainable and opportunistic approach for community mobilization activities. This includes training and equipping different cadres of volunteers, including Relais Communautaires and volunteers from local Faith based NGO in sensitization and opportunistic case finding. As well, strengthening the monthly CSI outreach program and strengthen active case finding and sensitization about the program in all 31 CSI catchment areas will be useful to strength the community mobilization for CMAM program.

On-going sensitization about availability of the CMAM program, target groups, admission and discharge criteria through identified effective communication channels will promote the proper use of RUTF and help reduce attracting the wrong groups (healthy children, families that expect a general ration). Employing culturally appropriate street plays, drama and community conversation at social events and market days (as showed in annex 1) for sensitization activities will boost the community mobilization effort. Detailed recommendations are provided in the joint plan action (FRC, NRC and DHO) for community mobilization in table 3 below.

TABLE 3: JOINT PLAN OF ACTION (FRC, DHO AND NRC) ON COMMUNITY MOBILIZATION AND SAM TREATMENT, AUGUST 2014 –DEC 2015

	Recommendation/Activities	Barriers	Boosters	Responsible	Performance Indicators	Target	Timeline	Resource
I	Community Mobilization for CMAM							
1	Strength Community Participation And Mobilization Coordination							
1.1	Assign DHO's community mobilization officer as focal person for community mobilization for CMAM at district level	Inadequate communication between the community and health workers	-Active participation of Mayors in health centres activities, existing meetings between partners, village chief at CSI	FRC and DHO	Presence of active focal person for Community mobilization for CMAM	1	14-Aug	
1.2	Identify and assign OTP staff or CSI manager as focal person for community mobilization at CSI level	Inadequate communication between the community and health workers, Waiting to the market day to go to OTP	-Active participation of Mayors in health centres activities, existing meetings between partners, village chief at CSI	FRC and DHO	% of CSI with active focal person for Community mobilization	31	14-Nov	
1.3	Hold monthly community mobilization coordination meeting at district level	Inadequate communication between the community and health workers	Regular Supervision of OTP/SC by MOH, FRC/NRC)	FRC, NRC, DHO, Gage, HAI,	# Community mobilization meeting held at district	12 per year	14-Aug	
1.4	strengthen village health committee (chief of villages, women leaders) and involve them in the CMAM program to address community problem	Inadequate communication between the community and health workers, Waiting to the market day to go to OTP, Fear of women to travel to OTP site	Existing meetings with the village chief at CSI on health topics	DHO, CSI, FRC, community leaders	# of village health committee (COGES) meeting	12 per CSI per year	14-Sep	
					% CSI with regular COGES meeting	100%		
					% CSI report minutes of COGES meeting	100%		
1.5	Support CSI and village health committee to develop action plan on community mobilization for their CSI's catchment area	Inadequate communication between the community and health workers, Waiting to the market day to go to OTP, Fear of women to travel to OTP site	existing meetings with the village chief at CSI on health topics	DHO, FRC, NRC, Gage	% CSIs have Community mobilization action plan developed by village health committee	100%	Jan-15	
					% CSIs roll out Community mobilization action plan	100%		

	Recommendation /Activities	Barriers	Boosters	Responsible	Performance Indicators	Target	Timeline	Resource
1.6	Facilitate the village health committee to address target women problem to use SAM treatment service	Inadequate communication between the community and health workers, Waiting for the market day to go to OTP, Fear of women to travel to OTP site	existing meetings with the village chief at CSI on health topics	DHO,NRC, FRC, CSI	% COGES involved addressing community problem	100%	Mar-15	
1.7	Conduct community mobilization program performance review meeting at district and CSI level		Regular Supervision of OTP/SC by MOH, FRC/NRC)	DHO, NRC, FRC, Gage, HAI, CSIs	# of review meeting	4 per year	Dec-14, Mar, June, Oct-15	
1.8	Retrain volunteers and OTP staffs on community mobilization	Wrong diagnosis/referral/ admission	Mothers knows volunteers roles, existing of good referral system	FRC, DHO, NRC, CSI	# OTP staffs(focal person for Community mobilization) trained Community mobilization	31	15-Apr	
					% volunteers trained	75	April-Dec 2015	
1.9	Train FRC, NRC and DHO program staffs(including Community mobilization officer) on community mobilization by out sourcing trainer	Inadequate Community mobilization capacity	Regular Supervision of OTP/SC by MOH, FRC/NRC)	FRC	# program staffs trained on Community mobilization	12	Feb-15	
1.1	Restructure volunteer networks to cover all 31 CSI catchment area and promote non-monetary volunteerism , integration and MOH's contribution	Only 13 CSI catchment area covered by volunteers at community level	exist other volunteer at community	DHO, FRC, NRC, Gage	# CSI with at least one volunteer per village	31	Mar-15	
					% of volunteers provided by community figures and work without non- cash incentive	25	TBA	
					% of volunteers under DHO	25%	TBA	
2	Strengthen Ongoing Sensitization About CMAM Program (Availability, Target Group and Clear Description and Address Misunderstanding)							
2.1	Adapt , test and print standard sensitization message about SAM treatment (short but comprehensive using local terminology from each ethnic group) as reference for volunteers and community figures	Misperception about CMAM services and malnutrition ,Misuse RUTF, Stigma, Mother sick, High opportunity cost, women fear	Awareness of the CMAM program b, Appreciation of the CMAM program, participation of Mayor, existing meetings with the village chief at CSI on health topics	FRC	# languages used to print sensitization message	4	Mar-15	
					% volunteers and community figures received printed message in their languages	100	May-15	

	Recommendation /Activities	Barriers	Boosters	Responsible	Performance Indicators	Target	Timeline	Resource
2.2	Build capacity of key community figures (chief of villages, Imam, women leaders, traditional practitioners , women announcers and "Rich man") by 1 day orientation session to cover 31 CSI catchment area from 13 catchment area	Misperception about CMAM services and malnutrition ,Misuse RUTF, Stigma, Mother sick, High opportunity cost, women fear	Awareness of the CMAM program b, Appreciation of the CMAM program, participation of Mayor, existing meetings with the village chief at CSI on health topics	DHO, FRC, NRC	# of community figures received one day orientation	5,000	Apr-15	
2.3	Disseminate key message about CMAM program to community using key community figures at community and mosques in all 31 CSI catchment areas based on lesson learned from 13 CSI area			Community figures	# of community reached to promote use of CMAM by community figures	10,000	Sept 2014-dec 2015	
2.4	Engage the trader to stop buying and selling the Plumpynut and involve the community leaders to address misuse of RUTF			DHO, FRC, community leaders	# if traders reached to promote proper of use RUTF	TBD	Sept 2014-dec 2015	
2.5	Use model families (mother or father of child received OTP and recovered from SAM) to communicate the effect of RUTF on sick child to their neighbor and encourage their attendance			Model families	# of model women recruited and disseminate information about CMAM	500	Sept 2014-dec 2015	
2.6	Train nutrition volunteers (836), WASH and Reproductive health volunteers , and MOH "Relais Communautaires" on sensitization and communication and equip with anthropometric measurement and IEC materials			DHO, FRC, NRC	# volunteers trained on sensitization	2000	Sept 2014-dec 2015	
					% of volunteers who have IEC materials &MUAC tapes	100		
2.7	Organize dram, street play using community members and community conversation facilitated by volunteers on CMAM and malnutrition –scale up in phase			Community figure, DHO, FRC/NRC	# dram team established & supported by FRC & DHO	31	Sept 2014-dec 2015	
					# dram and street play conducted at villages	100	Sept 2014-dec 2015	
					# of community conversation facilitated by women leaders& volunteers	1000	Sept 2014-dec 2015	
2.8	Support and use the two local Community Radio stations to disseminate information about CMAM program			DHO and FRC	# radio station supported	2	Jan- dec-15	
					# episodes transmitted via radio on CMAM	150		

	Recommendation /Activities	Barriers	Boosters	Responsible	Performance Indicators	Target	Timeline	Resources
2.9	Disseminate information about CMAM program and malnutrition to " adult learning program" participants	Misperception about CMAM services and malnutrition ,Misuse RUTF, Stigma, Mother sick, High opportunity cost, women fear	Awareness of the CMAM program, Appreciation of the CMAM program, participation of Mayor, existing meetings with the village chief at CSI on health topics	Volunteers	# adult learner reached to promote CMAM	TBD	Jan- dec 2015	
2.10	Conduct orientation session on CMAM program to " school of husband" members and primary school teachers			DHI, FRC, NRC	#"school of husband" members and teachers reached to promote CMAM	TBD	Jan- dec 2015	
2.11	Disseminate information about CMAM program by volunteers on market day in each villages			Volunteers	# sensitization done in market	264	Jan- dec 2015	
2.12	Assess the feasibility establishing of mother to mother support group (MTMSG) and use women leader to facilitate discussion			FRC and DHO	# MTMSG established and active discussion	TBD	Jan- dec 2015	
3	Promote Sustainable And Systematic Case Finding							
3.1	Retrain the volunteers and OTP staffs practical training on MUAC measurement	Wrong diagnosis/referral/admission , inadequate communication between the community and health workers , -Recurrent of cases	Quarterly mass screening, Low defaulter rates, Mothers knows volunteers roles, Good follow up of defaulters and welcome the care taker at health facilities	DHO and FRC	# of OTP trained # volunteers trained on MUAC practice	TBA	Sep-Dec 2014	
3.2	Explore the feasibility of regular active community case finding by trained volunteers at village level			DHO, FRC, Volunteers	# cases referred by volunteers from community to OTP	875	Jan-dec 2015	
3.3	Promote referral of sick children by traditional practitioners , and peer to peer referral by OTP beneficiaries			DHO, FRC, traditional healers	# of cases referred by traditional practitioners (healers and birth attendants)	100	Jan-dec 2015	
3.4	Strengthen CSI monthly outreach program and maximum the screening of children for malnutrition during campaign, social events by volunteers			DHO,FRC, volunteers	% of CSI conduct regular monthly outreach	31	Jan-dec 2015	
					% of campaign and social events used screening	75	Jan-dec 2015	
3.5	Continue quarterly mass screening by volunteers at community level with better DHO and community involvement till strong and sustainable MOH supported monthly screening in place			DHO, FRC, NRC	# quarterly mass screening done	6	Sept 2014-dec 2015	
				Community figures	% of mass screening MOH fully involved	6		
					# of mass screening the community figure involved	6		
3.6	Strengthen passive case finding at health facility by screening U5 children who visit facilities for sick baby clinic, immunization etc			DHO , FRC	% CSI conduct regular pass screening at facilities	100%	Sept 14-dec 2015	

	Recommendation /Activities	Barriers	Boosters	Responsible	Performance Indicators	Target	Timeline	Resource
4	Improve Follow Up Cases At Community Level							
4.1	Increase the role of community figures to support defaulter and absentees tracing, and address the reasons through the meeting	Recurrent of cases, Misuse RUTF, long distance	Good follow of the CMAM national protocol, Good follow up of defaulters and welcome the care taker at health facilities, existing of good referral system, Appreciation of the CMAM program, Mothers knows volunteers roles, FRC support for VHF and phone communication to health facilities		% of defaulters and absentees traced by community figures	75%	Sept 2014-dec 2015	
					% CSI engaged the community figures	100%		
4.2	Strengthen the link between the OTP staffs and volunteers at community to facilitate defaulter tracing instead of OTP staffs do for tracing			Volunteers at community, CSI Community mobilization focal persons	% of defaulters traced by volunteers at community	75%	Sept 2014-dec 2015	
4.3	Explore the use mobile phone among women to call to OTP mother in case of absentee or defaulter from program			CSI	% of mother of defaulted cases reached by mobile phone	50%	Sept 2014-dec 2015	
					% CSI use mobile to reach caretaker of defaulters	24		
4.4	Strengthen follow up cases to understand reasons for non-responded to treatment and OTP discharged cases by volunteers			Volunteers and CSI staffs	% of non-responded cases investigate to understand reasons	75%	Sept 2014-dec 2015	
5	Strengthen Monitoring Community Mobilization							
5.1	Develop , test and print monthly volunteer's reporting format	Poor Community mobilization monitoring data, inadequate community mobilization activities , minimum attention to community mobilization in coordination meetings	Joint supervision to CSI, joint technical support to CSI, existing meeting between community leaders and CSI, monthly partners coordination meeting on health	DHO	% of volunteers reported monthly	100%	Oct-14	
5.2	Develop and introduce monthly CSI community mobilization reporting system and monitor the progress			DHO	% of CSI reported monthly about Community mobilization	100%	Dec-14	
5.3	Provide close technical support to OTP staffs and volunteers and conduct monitoring on community mobilization			DHO , FRC	# of CSI supervised at least 1 times per quarter	31	Sept 2014-dec 2015	
5.4	Hold monthly meeting between CSI and volunteers			CSI , volunteers	# of meeting held per CSI	12	Jan-Dec 2015	
5.5	Hold quarterly community mobilization performance review meeting between FRC,NRC ,DHO and CSI staffs			DHO, FRC, NRC	# of quarterly performance review meeting done	4	Jan-Dec 2015	

	Recommendation /Activities	Barriers	Boosters	Responsible	Performance Indicators	Target	Timeline	Resource
Ii	Improve the Delivery SAM Treatment							
1	Scale up OTP to selected CS /health posts where the community has less access to CSI based on national CMAM protocol by integrating it into existing health system and train exist MOH staffs from CS/health posts	stock out of RUTF, long distance, high opportunity cost of caregiver, Recurrent of cases, women fear and want to come to OTP on market day, Unavailability OTP staff, Wrong diagnosis/referral /admission	Good follow of the CMAM national protocol, existing of good referral system, Appreciation of the CMAM program, Integration of CMAM activities into health system ,Regular Supervision of OTP/SC by MOH, FRC/NRC, no logistic at district level and timely distribution of RUTF	DHO, FRC	# areas identified for scale up of OTP to CS	TBD	Jan-Dec 2015	
					# of selected CS provide OTP service			
					# MOH staffs from CS trained	TBD		
2	Integrate OTP service into monthly EPI outreach program in selected areas to improve access /far villages from CSI/CS by train exist MOH staffs (first enrolment can be done at CSI/CS)			DHO,FRC	# identified areas who require OTP outreach service	TBD	Jan-Dec 2015	
					# areas covered by integrated OTP and EPI outreach service	TBD		
3	Reduce frequency appointment from 4 to 2 times per month for OTP clients after consultation with MOH and CSI staffs and close follow up cases at community by volunteers			Regional health office, DHO , FRC	% CSI with two weeks schedule for OTP appointment visit	100%	Apr-15	
4	Strength supply chain of RUTF by advocate with UNICEF and MOH, acquiring MOH procured RUTF or procurement RUTF by FRC to fill stock out			DHO, FRC	# stock out per CSI per year	1	Jan-Dec 2015	
5	Retrain OTP staffs on CMAM and promote timely referral between OTP & SC, MAM & OTP			DHO, FRC	# OTP staffs retrained	TBD	Jan-Dec 2015	
6	Retrain volunteers on using MUAC and promote timely referral from community to OTP			DHO	# volunteers trained	TBD	Jan-Dec 2015	
				FRC	# of cases referred from community to OTP			
7	Provide technical support and supervision to OTPs staffs to improve the quality of services			DHO, FRC	%CSI supervised at least 1 times per quarter	100%	Jan-Dec 2015	
8	Identify beneficiaries who want to come on market day and provide the service on their preference day			CSI	% of CSI provide appointment on "market day" for beneficiaries	100%	Jan-Dec 2015	
9	Investigate the reasons for high recurrent cases	Recurrent of cases		DHO, FRC	% recurrent cases investigated	100%	Jan-Dec 2015	

V. ANNEXES

ANNEX 1: ETHNIC GROUPS, SETTLEMENT PATTERN, LIVELIHOOD AND MARKET DAYS

Name of CSI/OTP sites	# villages	Population (2014)	Population < 5 (2014)	# volunteers at CSI	Ethnicity	Language	Market days	Lifestyle	Main livelihood	Max distance to CSI in Kms
ADJERI	23	18,805	3761	4	Beriberi	Kanouri	Tuesday	Mixed	Agriculture	35
Amazazagan	10	7,482	1496	3	Tuareg	Tamachek	Monday	Sedentary	Agriculture	15
BABOULWA	24	28,308	5662	4	Beriberi	Kanouri	No market	Sedentary	Agriculture	35
BAKIN BIRDJI	24	33,339	6668	5	Hausa	Hausa	Monday	Sedentary	Agriculture	30
BATTE	13	14,760	2952	3	Fulani	Fulani	Thursday	Mixed	Breeding	35
BELBEDJI	23	34,935	6987	5	Tuareg	Tamachek	Saturday	Sedentary	Agriculture	35
Chanyeta	21	7,952	1590	3	Hausa	Hausa	No market	Sedentary	Agriculture	15
CHIRWA	28	22,848	4570	6	Beriberi	Kanouri	Wednesday	Sedentary	Agriculture	30
DANBARKO	24	18,579	3716	5	Hausa	Hausa	Tuesday	Sedentary	Agriculture	20
EGADE	5	4,112	822	2	Tuareg	Tamachek	No market	Pastoralist	Breeding	50
FALENCO	19	18,333	3667	6	Hausa	Hausa	Friday	Sedentary	Agriculture	15
FARAK	8	5,010	1002	2	Tuareg	Tamachek	No market	Pastoralist	Breeding	35
GAGAWA	12	18,174	3635	4	Beriberi	Kanouri	Sunday	Sedentary	Agriculture	20
GANDOU	31	17,544	3509	8	Hausa	Hausa	Wednesday	Sedentary	Agriculture	30
GANGARA	23	19,074	3815	4	Tuareg	Tamachek	Friday	Sedentary	Agriculture	30
GOURBOBO	11	16,423	3285	4	Fulani	ulani	Friday	Mixed	Breeding	40
Guezawa	11	13,187	2637	4	Hausa	Hausa	Wednesday	Sedentary	Breeding	15
Guidan ANGO	14	14,828	2966	4	Hausa	Hausa	Wednesday	Sedentary	Agriculture	25

Gouagourzo	34	8,716	1743	3	Hausa	Hausa	No market	Sedentary	Agriculture	20
INTABANOUT	7	5,145	1029	2	Tuareg	Tamachek	No market	Pastoralist	Breeding	40
JEPTODJI	4	4,561	912	2	Fulani	Fulani	No market	Pastoralist	Breeding	50
KOKARAM	23	19,321	3864	5	Beriberi	Kanouri	Wednesday	Sedentary	Agriculture	35
MAIDIGA	17	10,200	2040	3	Hausa	Hausa	Tuesday	Sedentary	Agriculture	20
OLLELEWA	24	15,009	3002	4	Hausa	Hausa	Saturday	Sedentary	Agriculture	25
SABON KAFI	21	25,436	5087	4	Hausa	Hausa	Friday	Sedentary	Agriculture	25
Takoukou	23	9,525	1905	3	Hausa	Hausa	Monday	Sedentary	Agriculture	25
TANOUT URBAIN	57	57,199	11440	5	Hausa	Hausa	Saturday	Sedentary	Agriculture	30
TENHYA	11	10,895	2179	3	Tuareg	Tamachek	No market	Pastoralist	Breeding	70
TIGAR	5	6,223	1245	2	Tuareg	Tamachek	No market	Pastoralist	Breeding	40
TSAMIA	20	21,971	4394	3	Hausa	Hausa	Thursday	Sedentary	Agriculture	35
YAGAGI	27	20,467	4093	4	Hausa	Hausa	Thursday	Sedentary	Agriculture	20
Total	597	528,361	105672	119						

ANNEX 2: COMMUNITY FIGURES AND THEIR ROLE

Title	Roles in the Community	Communication with the community	Frequency
Village Chief	-Leader at village level -Communication channel between the community and Mayor of commune (Represents village to commune) -Advises the village on issues relating to peace and preservation of the culture	Everyday interaction with the community members and regular meeting	Daily
Women Leader	-Leads and mobilizes women at village level -Communication channel between the village chief and the women	Everyday interaction with the women members of the community and regular meeting	Daily
Imam	Prayer leader Adviser on issuing relating to everyday life, the Koran and disputes.	Everyday interaction with men at pray time	five times per day
Rich man	Trader at village level. Contributes to village decision making.Provides donations sometimes	Everyday interaction with community members during shopping	Daily
Traditional Healer	Treat illness with traditional medicines	Everyday interaction with families who bring sick child	Daily

ANNEX 3: LOCAL TERMINOLOGIES FOR MALNUTRITION AND OTP

	Huasa	Tuareg	Fulani	Beriberi
Malnutrition	Tamowa Kwamasso Jangalagala Maitso Tsoute	Kwamasso Laz Tchiliya	Kwamasso Edolo	Kwamasso Nanderi
Wasting	Iska			
Big stomach	Banban Tchiki			
OTP /SC	-Tamowa May Tsanani -Kwamasso -Tamowa Doka Satti -Djal Madara	-Tamowa May Tsanani -Tamowa Doka Satti -Tamow Mawa –Mawo -Djal Madara	-Tamowa May Tsanani -Tamowa Doka Satti -Tamow Mawa –Mawo -Djal Madara	-Tamowa May Tsanani -Mai Tsanam -Tamowa Doka Satti -Tamow Mawa –Mawo -Djal Madara