Opportunities for Addressing Malnutrition in Kitgum and Pader Districts in Northern Uganda

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Acronyms and Abbreviations

AIDS	Acquired immune deficiency syndrome
CDO	County development officer
HIV	Human immunodeficiency virus
FAO	Food and Agricultural Organisation of the United Nations
FANTA-2	Food and Nutrition Technical Assistance II Project
FGD	Focus group discussion
GBV	Gender-based violence
IDP	Internally displaced person
IMC	International Medical Corps
KII	Key information interview
LC	Local Council
LRA	Lord's Resistance Army
LWF	Lutheran World Federations
MUAC	Mid-upper arm circumference
NAADS	Uganda National Agricultural Advisory Service
NGO	Nongovernmental organisation
PDC	Parish Development Committee
PRA	Participatory Rural Appraisal
RUTF	Ready-to-use therapeutic food
SACCOS	Savings and Credit Cooperative Scheme
SAM	Severe acute malnutrition
STI	Sexually transmitted infection
TB	Tuberculosis
UDHS	Uganda Demographic and Health Survey
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
VHT	Village Health Team
WFP	World Food Programme

Executive Summary

Approximately two million people, about 90 percent of the population, in Kitgum and Pader districts in northern Uganda were forced into camps for internally displaced persons (IDPs) during the conflict between the Lord's Resistance Army (LRA) and the Ugandan central government. The war distorted normal social and economic relations within households and across the community. Families were congested in the camps, which led to high morbidity and mortality, and close to half of the children were stunted.

The Food and Nutrition Technical Assistance II Project (FANTA-2) and the International Medical Corps (IMC) mapped the key factors that would need to be considered in designing a successful district-wide nutrition project in Kitgum and Pader districts. The objectives of the study were to:

- Identify and define the components of a community-based intervention that would have wide-reaching coverage and reduce acute and chronic malnutrition among vulnerable groups in the two districts
- Identify community-based channels for delivering high impact interventions and communicating key nutrition messages in a sustainable manner
- Specify the main roles of key actors/change agents that could be involved in sustainable food security and nutrition programmes in the region
- Document any risks and challenges likely to be faced in implementing community-based cost-effective nutrition interventions in the two districts

KEY FINDINGS

1. The Acholi sub-region's population continues to experience chronic and transitory food insecurity and malnutrition. Respondents indicated they can recognize severe food insecurity and severe acute malnutrition (SAM) and can characterize food-insecure households. However, households have no clear coping strategies to mitigate the effects of food insecurity.

2. Communities emphasised food insecurity as the cause of malnutrition in the districts and prioritised improved food security as the main means to address malnutrition. For instance, they requested timely provision of farm inputs and techniques to improve food production. There was an understanding that certain foods are essential to good nutrition, but there was little understanding that nutrition benefits do not always accrue from being food secure. Specifically, improved sanitation and hygiene was rarely linked to good health and malnutrition.

3. The underlying factors that increase vulnerability to food insecurity and malnutrition are multifaceted. These factors were social (e.g., gender-based violence [GBV] and breakdown of family cohesion, high alcoholism, teenage and frequent pregnancies), economic (e.g., poverty, few opportunities for earning livelihood, high workload for women) and cultural (e.g., gender roles that entrusted all nurturing and household chores to women while also delegating farm work to them). It is clear that these factors — whether social, economic or cultural — interact within a dynamic environment, but the environment does not provide equal opportunities to everyone. For instance, women were overworked and had become the sole breadwinners in most homes while men still made all key decisions and controlled key productive resources. In addition, most men consumed alcohol excessively and were physically and economically inactive; the youth and single parents had fewer opportunities for livelihood and less access to skills and land resources; those returning to their farms were walking farther distances to get to social services like schools, health facilities, water points and trading centres. These interactions affected different households and household members on how they could claim and use resources (e.g., time, land, money, harvests, social amenities, power) for food security, health and nutrition.

4. Women's time or lack thereof was a major constraint in the women and children's food production and nutrition. The women's increased role in food production in addition to their increasing household chores (e.g., taking care of the sick, decreasing support from extended families) only translated to heavier workload. The heavy workload negatively affected their health as well as the nutrition of their families. Women felt forced to cut back on cooked meals and/or introduce short cuts in food preparation, which was perceived to have a negative impact on their children's nutrition. The high workload will be a large constraint on any nutrition programming.

5. Livelihood opportunities will be a key issue in addressing some of the underlying factors. Agriculture is still recognized to be the main source of livelihood in this area of Uganda, and a shift must be made in the medium-term to commercialise agriculture. There is also agreement, especially among local district leadership and technical groups, that a balance between the commercialisation of agriculture and the availability of household foods is needed for sustained improved nutrition.

6. Generally, discussants were in agreement that programmes should target households and communities and not individuals. Messages should support women and other household members to improve child feeding. Community dialogue on the underlying social, economic and cultural factors (i.e., women's time, gender roles, GBV, teenage and frequent pregnancy, cultural beliefs, food security and livelihood opportunity) and their effects on child care and nutrition will be key for any programme. However, some behaviours considered to be antisocial can only be curbed through local government by-laws. There should also be interventions to maintain the achievements already made in vitamin A supplementation and deworming coverage, probably through social pressure and follow-up/continuous reminders.

7. Many support structures operate in the two districts, both governmental and nongovernmental. Most nongovernmental organisations (NGOs) abruptly withdrew while the local government did not have the necessary human and financial resources to meet the new needs of the communities. The local governments have also not successfully coordinated their own activities with those of the remaining NGOs. Most health and nutrition services were provided by NGOs through community-based services, but only covered a few sub-counties and never the whole district. Local structures like the PDC, schools and churches, though they had a wide coverage, did not explicitly have nutrition activities, though such opportunities existed.

RECOMMENDATIONS

Multiple interventions are needed to address the prevailing food insecurity and malnutrition in Kitgum and Pader districts. No one single sector can sufficiently address this. Intersectoral strategies that go beyond the role of one sector are also needed.

Household food insecurity must be a priority, as it is for the communities. In addition, issues of women's time and workload are key limiting factors to implementing appropriate practices or seeking nutrition services. There is also need to support creating awareness and building local skills on how to deal with other underlying causes of malnutrition in the communities.

The report recommends the use of one or a combination of channels to initiate and create dialogue; communicate key nutrition and food security messages; and create the referrals, follow-up and reminders for action in nutrition. Options include the use of the Parish Development Councils (PDCs) at sub-county levels; schools, as they have a wider coverage than health facilities; religious institutions that also have wide coverage as well as existing and self-sustaining structures; and/or FM radio programmes that have wide coverage but are motivated to a large extend by "business".

1. Introduction

1.1 BACKGROUND

Approximately two million people, about 90 percent of the population, in Kitgum and Pader districts in northern Uganda were forced into camps for internally displaced persons (IDPs) during the conflict between the Lord's Resistance Army (LRA) and the Ugandan central government. The LRA also targeted civilians and children, resulting in cross-cutting devastation and a breakdown of the social fabric and physical infrastructure. Prior to the war, most of the population lived in homesteads and relied on agricultural production (i.e., rearing livestock, cultivating various foods) for economic survival and livelihood. However, the war altered normal social and economic relations within households and across the community. Families were congested in the camps, which led to high morbidity and mortality, and close to half of the children were stunted. There was a collapse in independent livelihoods and an almost universal reliance on food aid and other humanitarian assistance. The capacity to pursue productive livelihood options, either through employment or self-sufficient crop production, no longer existed. Health structures and schools lost staff and were adversely affected.

Twenty years later, peace and security has returned to the north. Families are being supported and mobilised to leave the IDP camps and return to their land. A number of aid agencies are transitioning from emergency operations to a framework of recovery and development. However, the transition in Kitgum and Pader districts is slow and complicated by the fact that a large part of the population still lives in the IDP camps or other "satellite camps" and commute between their gardens and the camps. Production is still constrained by the small size of land being cultivated and lack of adequate technologies to control weeds. In the emerging post war phase, petty trading in firewood and charcoal during the dry season, gathering (wild) vegetables and fruits during the rainy season, brewing local beer, and stone quarrying have become livelihood options. A number of nongovernmental organisations (NGOs) and the local government are supporting the population's resettlement, but lessons so far indicate that success in the process will need a combination of household labour capacity, land access, relentless hard work, and access to schools and health services, in addition to familial cooperation and cohesion.

The main challenge in this post conflict phase is to design health and nutrition interventions that can improve the health and nutritional status of the vulnerable community members in a short period of time. Specifically for nutrition, the strategies must be cost-effective, have wide coverage and be anchored on local structures for sustainability. To identify the components of such an intervention, the Food and Nutrition Technical Assistance II Project (FANTA-2) and the International Medical Corps (IMC) extensively mapped the key factors that would need to be considered when designing a successful district-wide nutrition project in Kitgum and Pader districts in northern Uganda.

1.2 DISTRICTS WHERE THE ASSESSMENT WAS CONDUCTED

The mapping exercise was conducted in the districts of Kitgum and Pader. Until recently, Kitgum and Pader were a single district (Kitgum) and thus share much in common. They are comprised of a similar culture and people. The main languages are Luo and Acholi. The most common economic activity is agriculture, emphasising food crops such as millet, sweet potatoes, beans, tomatoes and vegetables such as cabbage and onions. Cash crops include simsim, sunflower and cotton. Some services still extend across the two district's boundaries, such as Christian religious affiliations.

At the time of the formative research, Kitgum was divided into two counties, Lamwo and Chua, which were divided into 19 sub-counties, 97 parishes and 1,294 villages. The total population is estimated to be 353,200 with an annual growth rate of about 3.6 percent. Pader is comprised of two counties, Agago and Avu,

and subdivided into 18 sub-counties and 74 parishes. The district population is over 293,680 people. All land in both districts is cultivable, and the vegetation is savannah-type on a predominantly flat, fertile land with a gentle slope, becoming more-hilly only towards the Sudanese border. The Northern region has a unimodal rainfall system, with one rainy season between May and November whilst from December to April is the dry season.

malnutrition levels among children and women are being sought.

A critical aspect of interest is to establish or scale-up existing cost-effective approaches that have delivered high impact nutrition interventions with the aim of reaching the large coverage (district-wide if possible) of vulnerable groups, like women and infants and young children, in a sustainable manner.

Table 1. Numbers of health and school facilities in Kitgum and Pader districts

STRUCTURES	KITGUM	PADER	TOTAL
Schools			
Primary	186	196	382
Secondary	22	15	37
Tertiary	11	1	12
Health facilities			
Hospitals	2[a]	1[b]	3
HC IV	2	1	3
HC III	11	20	31
HC II	21	27	48

1.3 RATIONALE FOR THE FORMATIVE ASSESSMENT

Achieving Uganda's overarching goal to eradicate poverty and hunger requires a healthy and productive workforce. Yet according to the 2006 Uganda Demographic and Health Survey (UDHS), four of every 10 children under 5 years of age are stunted, and micronutrient deficiencies are prevalent. The highest rates of malnutrition are reported in the northern region of Uganda, but also in southwest and some parts of eastern regions. The causes of the malnutrition are multifaceted; therefore, multiple approaches to address these problems are needed. However, current activities to address malnutrition have been based in health facilities and are primarily curative in nature. Preventive nutrition interventions are few, of inconsistent quality and low in coverage. The current nutrition programme in-country has had minimal impact on the overall nutrition indicators in the last 15 years, as depicted by the continuously high levels of malnutrition. Alternative approaches to address the persistent high

1.4 OBJECTIVES OF THE COMMUNITY MAPPING EXERCISE

The study was carried out to identify structures and strategies needed to design a district-wide community-based maternal and child nutrition programme.

The specific objectives were to:

- Identify and define the components of a community-based intervention that are more likely to reach wide coverage and reduce acute and chronic malnutrition among vulnerable groups in Kitgum and Pader districts
- Identify community-based channels for delivering high impact interventions and communicating key nutrition messages in a sustainable manner
- Specify the main roles of key actors/change agents that could be involved in sustainable food security and nutrition programmes in the region
- Document any risks and challenges likely to be faced in implementing community-based cost-effect nutrition interventions in Kitgum and Pader districts

2. The Mapping Process/Methodology

2.1 SCOPE OF THE MAPPING PROCESS

A multilevel approach to social and resource mapping that would in-turn result in a multilevel situational analysis was proposed to map out the settings that would impact and inform nutrition and food security programming.

The mapping process was conducted between August 1 and September 18, 2009, in a total of eight purposively selected sub-counties: Omiya Nyima, Palebek Kal, Madiope, Agoro-Potika, Awere, Lukole, Pajule and Patongo. Data collection tools were developed for and research assistants trained on the qualitative methods to be used.

2.2 DEVELOPING DATA COLLECTION TOOLS

Data collection tools were designed to obtain information from different levels. Key informant interview (KII), focus group discussion (FGD), observation and literature review guides were developed prior to the field visit. The KII guides sought to understand the current nutrition situation, food security and livelihood activities, NGO activities, policy considerations, strategies at all levels, structures in place, and opportunities available for exploitation. FGDs gathered broader food security perspectives and trends, changing patterns, structures for mobilisation, and possible strategies to improve nutrition in the communities. Intra-household aspects, inter-household factors, community dynamics and policy influences were explored. An observation checklist collected ongoing food security and nutrition activities; role sharing in families; and structures for service delivery and mobilisation, such as schools, churches, microcredit institutions, health facilities and ongoing community activities addressing nutrition. The literature review, available maps and documents showing structures of operation were located and reviewed.

2.3 TRAINING RESEARCH ASSISTANTS

Seven research assistants were recruited and trained for five days; the in-house training lasted three days. Criteria for research assistant selection included excellent knowledge of the local dialect (Acholi/Luo), a university-level education, fluency in spoken English, some background in field oriented research and good computer skills. The research team included representatives from the local governments of the two districts, university students and two consultants who acted as field supervisors. During the training, the team was introduced to the principles of qualitative data collection methods: FGDs, KIIs, semi-structured interviews and observations. The team then reviewed the content of the various questionnaires and role-played using the data collection tools. Each research assistant was assigned a section of the data collection tool that he or she reviewed and presented to the rest of the team. To further familiarise the team on the use of qualitative data collection methods and in using the data collection tools in the local language, a pre-test was conducted in a nearby community in Akwang sub-county, Kitgum district. The team then discussed their experiences and modified the tools as necessary to facilitate understanding and harmonise the processes of information collection among the research assistants.

2.4 DATA COLLECTION PROCESS

A multilevel approach to data collection was employed with the proceeding stages being informed earlier ones, i.e., information collected in the one stage was built on or triangulated by information from the next level. The IMC and district local leaders helped in mobilizing community- and district-level respondents for the exercise. Interviews and discussions were conducted in the respondent's usual place of work or in the community to enable the researchers to experience the context of respondent's environment. Consent was sought

from respondents. KIIs and FGDs were conducted at district, sub-county and community levels in both districts in the local dialects and translated into English if necessary. Three teams of three research assistants each collected the data. Whereas as the research assistants administered the questions and took notes during the data collection exercise, all FGDs and KIIs were recorded using a digital voice recorder to ensure data quality. Two qualitative research methodology experts from a local university were responsible for data quality and ensuring that all key issues were addressed adequately in the interviews, recorded and transcribed.

Key informant interviews

Nine KIIs were conducted in each district. KII respondents were selected purposively based on their perceived involvement and roles in addressing food security and nutrition in the districts. At the district level, District Education Officers, District Agricultural Officers, District Health Officers, the District Secretary of Health and Education, and representatives of major NGOs addressing nutrition and food security and livelihood activities were interviewed. At the sub-county level, sub-county chiefs, facility-based health caregivers, school head teachers and religious leaders were interviewed. The informants at the district level helped identify the sub-counties and communities to visit. KIIs were generally administered at the workplace and were conducted in English and/or Acholi/Luo.

Focus group discussions

Eight community dialogue sessions targeting mothers of children under 2 years of age, fathers and grandmothers over 50 years of age were held in each district. All FGDs had about 10 respondents to ensure efficient management of group dynamics. FGDs were conducted in a shed within the villages or in a classroom block at the local primary school. All FGD questionnaires were administered in the local dialect.

Observation

The team carried out observations using a checklist to examine structures that inform food security, such as farms, gardens, demonstrations and granaries. The team looked out for gaps in service delivery as well as promising practices.

Information quality and management

At the end of each field day, the research assistants had a debriefing session with the consultants to discuss impressions and key themes. Also during the mapping process, three randomly selected days were used to discuss progress made and allow the research assistants to discuss the field notes among themselves and with the consultants and to type them up.

2.5 DATA TRANSCRIPTION, CODING AND ANALYSIS

Data transcription and cleaning

Experienced transcribers continuously transcribed the information from the digital tapes as the data collection went on. Information from the tapes was then copied into the computer, and a master copy was kept by the researchers. The transcribers would listen to the tapes first and get clarifications from the field research assistants before they released the tapes. The information transcription and cleaning took five days.

Coding

Discussion on the qualitative data was ongoing throughout the research process; resulting emerging themes were used to inform the coding process. A team of FANTA-2 and IMC staff randomly selected and reviewed KII and FGD scripts upon which the mapping exercise themes were derived and defined. Codes were created to fit the data, and care was taken to ensure that coding was not done without a thorough understanding of the data. The transcribed responses were categorised and coded using ATLAS.ti electronic software. The coding process involved systematic sorting of the data and labelling ideas as they appeared and reappeared in the scripts. To ensure triangulation, the various team members coded separately and then compared their work.

Data reduction

Following the coding process, the data was reduced using the ATLAS.ti retrieval process under which particular themes were extracted. The objectives of the mapping guided the thematic analysis.

Data analysis

A team of three was involved in the data analysis process to avoid selective perception and verify themes and patterns. The qualitative data was analyzed using thematic analysis looking for important patterns of response. Attention was given to contrasting information. Data interpretation involved making decisions and drawing conclusions about the organised data. A team approach was employed for thoroughness and validity. The findings were also discussed with selected people from the districts to contextualise interpretations.

2.6 LIMITATIONS IN THE INTERPRETATION OF THE STUDY FINDINGS

The findings represent the prevailing situation post–conflict, when many households were transitioning from IDP camps to their farms, and the time just before food harvests. There is a possibility that the structures and strategies observed at the time of the study could evolve in the near future as the population and NGOs transition as resources and situations on the ground change. A longitudinal approach follow-up of the mapping process is recommended in order to inform continuity of relevant interventions.

3. Findings and Analysis

The findings and analysis are presented in thematic tittles based on the analysis results and study objectives:

- The food security situation in the districts
- The malnutrition conditions in the districts
- Structures for supporting food security and nutrition programmes in the districts
- Possible support channels and change agents
- Major challenges likely to seen in programming in the districts

3.1 FOOD SECURITY SITUATION IN THE DISTRICTS

Defining food security

Most households in the two districts, especially in Kitgum, were considered food insecure; very few were considered food secure. The term "food security" had to be described, since respondents did not have a local term for it. The words that came up most often were "confidence", "availability" and "production". The respondents described food security in terms of "availability of food in the farms or stores/granaries: The confidence that people or a home would have enough food in the house for their meals whether from their farms, remittance, or procured". The availability of or access to staple foods, especially cassava and millet/sorghum, were most important.

Households were evidently food secure if the young children were active and healthy, two or more meals were served in the home, the household did not borrow food from neighbours/relatives, ate foods other than cassava, and the household held celebrations. A community was food secure if school attendance did not drop among the younger children and minimal food thefts were reported. Food-insecure households were those headed by the young/youth, with sick parents and with many children. These households frequently begged for food.

'The existence or availability of food can be observed in children; they look happy, healthy and play around in the compound'. – Head Teacher, Agoro Primary School, Kitgum district

'In the villages there is high school dropout; those who attend classes attend only for half day. There is generally no food in the households completely; mothers will not have enough breast milk because of not feeding well. Children will be [exposed] to increased risk of getting malaria and other diseases if they don't eat well'. –Local Council (LC) V Secretary, Kitgum district

'When people were in the camp, they used to eat like twice or even three times in a day. Now people eat only once a day because most of the time parents are in the garden. They eat only once in the evening and if there is any leftover food [it] is given to the children during the next day when their parents are away in the farms. Many times this is not even enough'. –Health worker, Pajule Health Centre, Pader district

'Insufficient food this year has led to high school dropout. You know there is poor feeding when you move around and you see many cases of malnourished children in the community'. –Head Teacher, Agoro Primary School, Kitgum district

'I can say production this year is zero because people had no harvest of those crops which should have been harvested by now. Many people have resulted to stealing and we have taken a number to police because of theft. Some women and youth were caught stealing cassava from someone else's garden. This shows that there is a problem'. –Palabek kal sub county chief, Kitgum district.

'Just look around. There is no sign of food in many households: no granaries. People store food in sacs not granaries as before. Many people eat once a day'. –Palabek kal sub-county chief, Kitgum district

Respondents indicated that "food scarcity was common during the same period just after the rains, and coincided with a time when labour demands were highest". At this time, food stocks were at their lowest, and food intake was mainly composed of only cassava and green leafy vegetables.

Factors causing food insecurity

In both Kitgum and Pader districts, food security and nutrition have deteriorated compared to before the conflict, first because of the prolonged period of conflict and encampment away from food production, then by the unpredictable weather changes. Prolonged conflict and drought have left most of the households' food insecure and are seen as the main obstacle to sustainable livelihood.

Five factors of food security were identified in the responses: land quality and size farmed; ownership of livestock; availability of farm inputs, including labour; food storage and sales after harvest; and types of foods available to the community. **Table 2** shows how these factors are viewed as having changed over time.

Table 2. Changes in the key factors in household food security in Kitgum and Pader districts

	Before the conflict	***When living in the IDP camps***	***Post conflict period***
Land	▪ Families lived in their homes and farmed on ancestral land	▪ Families left their land and farmed on borrowed land near the camps. ▪ Familial lands were located far from satellite camps. ▪ Few families farmed on hired land near the camps.	▪ Settling back into their homes, but there are feuds on boundaries and ownership. ▪ There is land clearing, but the technology to remove the many weeds is lacking. ▪ Families fear returning to the land for fear of possible attack by bandits, Karamoja raiders and thieves.
Livestock	▪ Cattle and goats provided milk to feed children and to sell for money.	▪ Livestock were stolen, killed or sold. ▪ Families relied on powdered milk provided by the World Food Programme (WFP) or bought.	▪ The Uganda National Agricultural Advisory Service (NAADS) and other NGOs provided restocking support. ▪ Families had fears of rustlers, diseases, and thieves. ▪ Arguments resulted from crop destruction by livestock.
Labour and farm inputs	▪ These were shared between men, women and children.	▪ Families were encamped away from production for a long time, and many young people have never farmed. ▪ Child-headed households emerged. ▪ Reliance on food assistance induced a culture of inactivity and dependence.	▪ Labour is mainly conducted by women, thus increasing their workload. ▪ Men consume more alcohol and idle in the trading centres. ▪ People fear landmines and wild animals. ▪ There are serious illnesses, like HIV and tuberculosis (TB).
Storage and sale of food immediately after harvest	▪ Food was stored in granaries.	▪ There was no general storage, but food aid was stored at home. Most foods were donated or bought.	▪ Food is stored at home for fear of thieves. ▪ There is an increase in reported theft cases. ▪ Selling to neighbouring markets, especially Southern Sudan has increased.
Kinds/types of foods	▪ Most houses ate simsim, groundnuts, meat (there were many goats, cattle and fish) and honey.	▪ Food assistance was persistent. ▪ Non-traditional food types (e.g., beans, sweet potatoes) were introduced.	▪ There is sporadic food assistance. ▪ Drought resistant crops like cassava are planted. ▪ Intercropping is practiced.

Weather

Respondents indicated that the long drought spell was the main factor in poor household food production at the time of the assessment. Though most families worked hard, most were unable to predict the start of the rains and when to start planting. They indicated that in good years (when rain is sufficient), food insecurity is a localised problem. In the bad years, only the few families with farms near the few water sources harvested some food.

> *'Nutrition and food security would not be a problem if there was rain. Our community depends on what they get from the garden. When there is no rain each and almost all homes have the problem of food shortage'.* –District Secretary for Health and Education, Kitgum district

> *'People worked hard this year but rain ruined all their effort, crops got burnt by the prolonged sunshine, some strong [crops] like sorghum are recovering from the effect of sunshine but others like ground nut are completely destroyed by sunshine'* – Palabek kal sub-county chief, Kitgum district

> *'The people who cultivated along the swampy areas were able to get good harvests and they sell the food to others who did not get anything at a fairly cheap price during market days. The general food and nutrition condition was not good because of the dry spell and the nutrition status was not okay 2-3 months ago although it is fair now'.* –Health assistant, Awere sub-county, Kitgum district

Access to land and livestock

Access to land was also identified as a major factor in food production. Large tracts of ancestral land are available to most families, however, tracing the boundaries and dividing land among living relatives has created disputes in the villages. Some also claim their land was sold by relatives or neighbours during the long insecurity years. Furthermore, the child-headed households resulting from the insurgency face challenges locating their ancestral land. Most of these children have remained in IDP camps. Some have the challenge of accessing their land for cultivation due to thick vegetation and distance from the camps. Those with farms farthest from the IDP camps fear insecurity and remoteness. Clearing the land requires a lot of labour, and many families have managed to clear only small portions.

> *'Some of these changes have worsened the relationship and the interaction among people. For example there are several land related [disputes] that were not there before the conflict and displacement. As people returned home, there came land conflict among the people and hatred between many people. People have become selfish in such a way that people no longer assist one another with property free of charge. All they do is to mind of themselves only and their families'.* –Community leader, Lagoro, Pader district

Many people kept livestock (cattle, goats, chicken and sheep) before the war. Some had beehives. As people resettle, the Uganda National Agricultural Advisory Service (NAADS) and other NGOs are supporting restocking. Though there are fears of raiders from neighbouring communities and animal disease, a number of people think it is a good move and hope to have a few animals for themselves. They see livestock as means of livelihood.

> *'People who have animals like cattle but they fear the Karimojong raiders; like last week they raided about 50 cattle in the sub-county!'* –Sub-county chief, Madi Opei, Kitgum district

Labour and agricultural inputs

For those returning to their farms, the ability to "open the gardens" is limited because they rely on simple traditional implements, like the hand hoe and axe, and the process is slow and labour intensive. Families without access to oxen/ploughs were identified as the most at risk of not producing enough staple food. These households were mainly female headed, further disadvantaged by the cultural expectation "that women can't plough", forcing the women-headed households to hire the oxen/plough and the labour to plough their fields. Traditional

labour support systems are non-functional; as one leader puts it: “The group or cooperative efforts of assisting one another are not functional at the moment and people will need more time to trust each [other when] forming such groups”.

> *‘One big challenge is that the families are still disorganised and do not assist each other; probably because each rushed to do whatever they could before the rains. Famers disagreed and could not form groups and preferred to work as individuals in their own gardens; yet it is very difficult to dig or open enough land given the tools they have’.* –Pader district Records Officer

> *‘I could also say that the ability of people to open their garden is also still limited; they rely on the hand hoe that needs a lot of man power. Since the rains do not last long, farmers have to [work] against time so as to be able to cultivate enough land before the rains stop. There are people who manage to open large pieces of land but do not have the seeds to plant. They feel their effort has gone to waste’.* –Kitgum District Veterinary and Production Officer

In addition, the long encampment raised a generation of young men and women who are not as hard working as previous generations, are used to and dependent on relief aid, and are reliant on support for most things. The household routines and physical work culture have changed. Instead of working, youth spend time on ventures like watching war and soccer videos. There was a sense that most were idle and spend their little income drinking alcohol. Farm work had, to a large extent, been left to women; most men were not providing the labour support or had left the villages in search of livelihood. Also, a large population (young people and relatives of the women) were reluctant to go to the villages/farms to dig.

> *‘The problem of food shortage is because there is no rain. Probably if there were enough rains people would be encouraged to farm and we would be having food everywhere. Unfortunately, many people are used to food handout and they developed laziness they don’t want to go back home and dig. Yet they do not have money or the means of making money, especially if they don’t get good harvests. Therefore most families are starving’.* –Palabek kal sub-county chief, Kitgum district

> *‘Currently, you can note breakdown in family roles: in the morning, the time when people are supposed to be in the garden, you find some men in the camp and in the shopping areas doing nothing, yet women are in the garden. There is change in the roles of women and men regarding food provision in [the] household. Men are leaving the central role in food provision to women. You find men drinking as early as 9 am at a time when most women are in the garden digging. This never used to be the case, but it is disturbing’.* –District Production Officer, Pader district

A large number of young people were born in the camps or were encamped at a young age. Therefore, they never learned farming skills nor did any manual labour. Many idled in the villages and excessively drank alcohol. Many had no incentive to work, were dependent on relief and donations, and did not contribute to household chores or provide labour assistance to the family.

The long periods spent in the camps also brought other forms of vulnerability to the communities that suffered from a lack of farm labour. Lack of adequate labour was associated with hopelessness and the possibility of “mental disturbance or depression” among many families. There was a breakdown of family structures, such as couples separating and polygamy, that lead to a reduction in the capacity to handle livelihood challenges at the family level. Men left their families in search of livelihoods outside their communities and the number of disabled and sick had increased, all of which forced women to take on all farm and household work. Most respondents indicated that this was troublesome and felt that government intervention was needed to address the problem.

'*Social life changed while people were in the camps and there was no work and because of that, many people entered into excessive drinking of alcohol especially the youth, men and women'.* –Community leaders, Lagoro

'Large [numbers] of young people became [chronically] ill in the camps. The most vulnerable groups are the disabled, HIV/AIDS cases, TB sick persons, mad heads of households, and child headed families" –District Production Officer, Pader district

'There is a food problem in Agoro, mainly as a result of the long spell but also because there is no leadership and support from men. Men have abandoned their wives and children and the many disabled persons in the homes cannot dig'. –In-charge, Agoro Health Centre, Kitgum district

Kind of crops/foods

The main crops grown were millet, sorghum and cassava. Other crops were maize, beans and groundnuts. Although most families grew millet, the production was very low. Millet and sorghum were more likely to survive the drought than the other crops. Some families also grew rice and simsim because they were easier to sell and fetched more money.

'The community in Madi Opei mainly grows sorghum, few people grow millet. Some grow maize but once grown they dry in the field before they harvest. People are eating only once in a day and only cook once a day'. –District Production Officer, Pader district

NAADS and some NGOs were supporting the communities to improve farming techniques. However, some people/communities were rigid to change and continued to plant the two indigenous food crops, sorghum and millet. New varieties of beans and cassava that were more disease resistant and faster growing had been introduced, but their adoption was slow. "People had not grown them before and feared the abrupt change". Newer methods of cropping, like planting in rows, had also been introduced, but few farmers used them, as they were "labour intensive" or people were "in a hurry to grow their crops when the rains fell". Raising small livestock, beekeeping and promoting the cultivation of leafy vegetables (which could also be a cash crop) were also being promoted as some of the ways to raise the women's and men's incomes and improve family dietary diversity.

'Input is also a problem; you train a farmer on various issues but [they] lack the inputs to use [them]. You say each house should have an acre of cassava and the next issue is the cuttings! Most of these inputs are short lived so there is need for a longer planning more so with development partners who should have sustainable interventions'. –District Agricultural Officer, Kitgum district

'There has been a success e.g. the distribution of cassava stems (Afica 2000Network- cassava cuttings, AVSI-seeds, CARITAS-food and farm implements, Red Cross-livestock)'. –Deputy Head Master, Pajule Primary School, Pader district

Means of livelihood

The majority of the population in these communities are small-scale farmers. Very few families had and sold cattle or cash crops like cotton. Their main source of income was from selling food crops in the local market. Generally, households (especially the men) sold most of the crops immediately after harvests, normally at very low prices. But, during the times of seasonal food deficits, most households bought food from the local markets, got donations from relatives or borrowed. Households needed money to purchase food and other household necessities, like paraffin, salt and cooking oil, or to build/repair houses, as well as meet the health and education needs of family members.

'The income of the people here is still very low because they produce only food crops. The cash crop grown is cotton which most of them are not even growing, so they sell even the food crops. Like for example when they get like three sacks of cassava, they even sell the excess in order to get money'.

–Health worker, Pajule Health Centre IV, Pader district

'Another problem is that by December when there is good harvest people sold most of their produce even with the low prices e.g. sorghum can go at 50 shillings per tumpeco cup and [the whole] sack can cost only 50,000 shillings. If they waited for 4-6 months the cost of sac can be 100,000 shillings'. –District Secretary for Health and Education, Kitgum district

Some community members traded in foods and commodities from outside the districts. Because most commodities came from far away and transport infrastructure was poor, most goods were priced high. The high prices accompanied by the lack of means of earning income were a big limitation to procuring foods.

'You know there is poor food insecurity in the locality when you find many people crossing to neighbouring districts to buy food, even to Southern Sudan. Because of the risks involved and the costs the prices of the foods are high and few can afford them. Some people are killed while crossing to Southern Sudan". –Religious leader, Agoro sub-county, Kitgum district

There were few opportunities for generating income in these communities. Families raised income from various activities shown in **Table 3**. Most employment opportunities were "petty" and favoured men. Even when NGOs trained people to make bricks, repair bicycles, mason or tailor, the demand for the services and goods and payment received for them were low. People indicated that they had to work long hours to earn enough to feed their families. A day's manual labour (e.g., in the farms, lifting heavy goods) was paid between Ush 1500 and 2000 (US$0.8 to 1.2) per day.

'When there is drought or seasonal food problems there are many problems. People do not have money. The nature of our work does not generate enough income. The jobs do not bring in enough money to buy enough food for our large families'. –Kitgum Muslim Leader, Kitgum district

Table 3. Sources of livelihood (other than agriculture) in Kitgum and Pader districts

Livelihood activity	***Who does the activity***	***Issues***
Burning and selling charcoal	Mainly men	▪ This is a common practice as they clear "virgin land" with large trees. Men secure the land by clearing and burning the trees. ▪ Men have the strength to transport the charcoal to the buyers in towns.
Selling firewood in the IDP camps and towns	Mainly women	▪ Only those with enough strength to carry the firewood do this. This is no longer a good business as most people in the camps go to their farms and bring firewood.
Buying and selling foods	Women and few men	▪ Mostly men have the money to buy food items from neighbouring districts and sell the food in the camps/villages. ▪ Women sell vegetables, smoked fish and cooking oil.
Making and selling alcohol	Women (rarely men)	▪ Most customers are men, but women are increasingly filling the stores.
Casual labour (clearing land and weeding)	Men and some women	▪ This is conducted by those with strength enought to farm big pieces of land.
Building houses, making bricks and collecting water	Men and rarely women	▪ As people are settling in their farms they ask for labour (many times people work in groups to help each other). ▪ Bricks are sold to those reconstructing their houses.
Tailoring	Women and men	▪ Many people are trained, but there is little demand for services.
Bicycle repairs	Men	▪ This is mainly done in the trading centres.
Beekeeping	Men and rarely women	▪ This is supported by NAADS through women's groups.
Cash crops (simsim,	Men and	▪ Very few households cultivate these in the communities. They are

sunflower groundnuts, cotton)	women	mainly located in Pader district and supported by NAADS and various NGOs.

Alcoholism

Alcoholism was mentioned as a critical factor in food production, gender-based conflict, increased dependency on relief, school drop-out rates, the breakdown of social support and decreased participation in productive activities. "Whenever people earned some money they spent it on consumption of alcohol". Homes where the adults engaged in heavy alcohol consumption were also said to be the poorest; however, it was not clear whether alcoholism was the cause of poverty or whether poverty and hopelessness push to drink alcohol.

> '*If you walked through the sub-counties, you will find majority of the men seated in areas where they brew local beer. Although some money may still go to the home to procure salt, sugar and oil, the larger portion is spent on alcohol. Unfortunately this affects very young men'.* –District Secretary for Health and Education, Kitgum district

Because men were heavily involved in drinking, they did not contribute much to the household labour needs or to the resources needed to procure other household needs. Most farm and home roles had been left to women.

> *'Nowadays you find women doing the garden work while men are the ones at home or are excessively engaging in alcohol consumption. Men are pulling out while women are taking the central role of food production'.* –Palabek kal sub-county chief, Kitgum district

> *'Men may look for money by burning and selling charcoal, clearing of the fields, cultivation and gathering fire wood, but they use the money earned through these means for alcohol consumption'.* –Catechist, Patongo

> *'People are not able to work hard; a number are heavy [alcoholics] – they start to drink early in the morning. Most of the responsibilities are left to women'.* –In-charge, Pajimo Health Centre III, Pader district

> *'Old people tend to drink the local brew while young men tend to drink the alcohol that is sold in small sachets. These costs 100 UGX each, making them affordable by all but these drinks are dangerous and are wasting our young men'.* –Community leaders, Namokora sub-county, Kitgum district

District and sub-county leaders had proposed placing ordinances restricting the hours of drinking in order to curtail the heavy alcohol consumption in these communities, but this had not been enacted by the time of the research.

> *'There are discussions on controlling the drinking hours. Productive hours are from morning to midday during which the farmer is working in the garden. Too much engagement in alcohol consumption will affect the time one begins farm work and the duration they spend in the farms. So we want to place a restriction on the drinking hours to between five and ten o'clock in the evening'.* –District Agricultural Officer, Kitgum district

Gender-based violence

GBV was reported as a major problem in the communities, although it was moreso in the camps. Idleness, distribution of family tasks and alcoholism were identified as the main causes of gender-based conflict in the communities. Conflicts revolved around unequal sharing of roles and benefits between men and women. Women were increasingly taking on central roles in food provision and spent most of their time in the gardens (some groups reported 16-18 hours spent in the farms or doing household chores) while men spent more hours and money on alcohol or being idle in the villages. GBV was said to be so bad that some women had decided not to work in the family farms or had separated from their husbands. The conflicts were recognizable, with cross-cutting effects on livelihood, childcare and productivity: households became destitute, the children were "unhealthy", and separated women relied on

immoral acts like prostitution for livelihood. Most of these households were those who were registered for food relief.

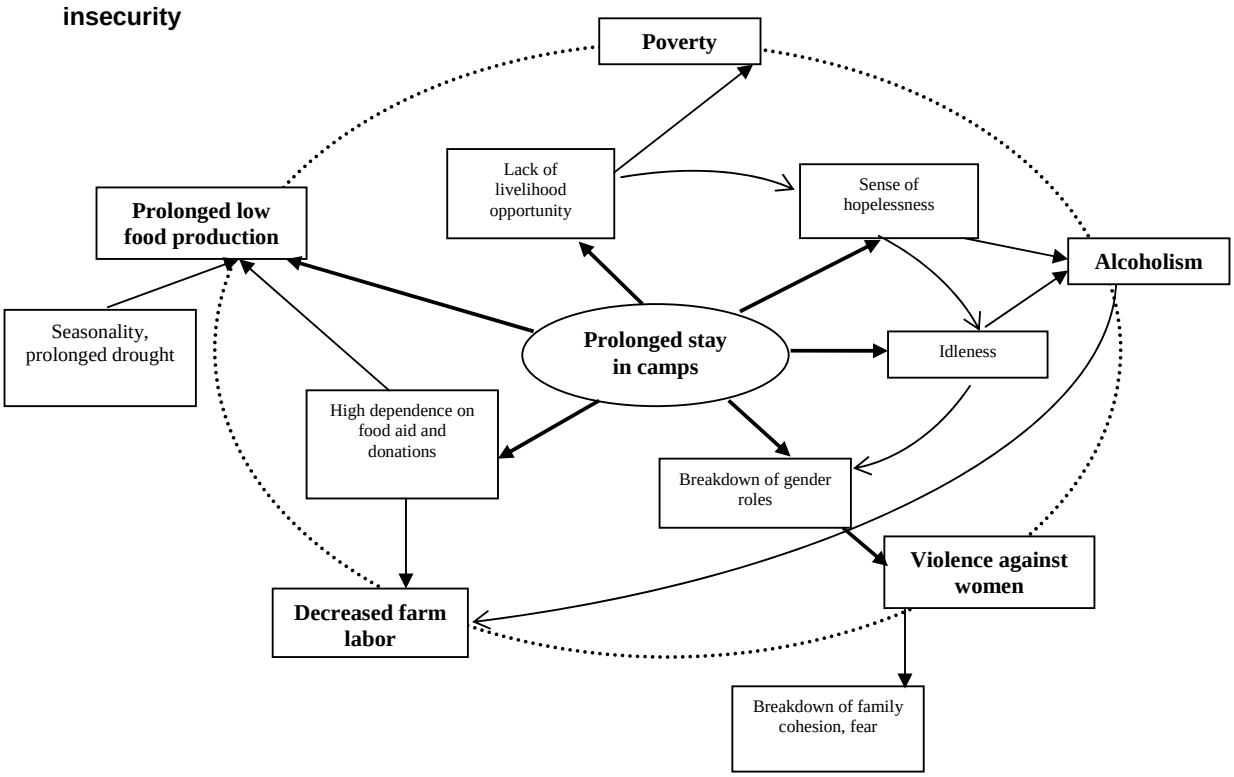
> *'There was a lot of fighting - domestic violence - in the villages and of course it was often blamed on us the men however if one endeavours to understand the root cause, you may discover that it is the bad relationship between the woman and the husband. This is why such fights were very common in camps but now such things are not so common.'* –Father, Omiya Nyima

> *'Men are the heads of the families and control family resources. Unfortunately the women have taken over the roles of men. Women are responsible for care, education and upkeep of children. Yet because they are the head of the family [father] they take the biggest share [of food]. The children are served next and the women serve themselves last'.* –District Health Officer, Pader district

The increase in female-headed households was also associated with malnutrition, as they were the poorest and most vulnerable to malnutrition-related shocks. The number of female-headed households increased because of the separation or breakdown of marital relationships, male partners had been kidnapped or killed in the conflict, many men had died of illnesses, were sick or disabled.

Figure 1 summarises how the factors in household food security identified by respondents in Kitgum and Pader districts are likely to relate to and reinforce each other. Most factors were attributable to the long stay in IDP camps, which resulted in chronic poverty, alcoholism, increased violence against women, decreased labour and inputs for agriculture, and a long period not farming familial lands. Most respondents did not expect their household food insecurity to improve in the near future, as they thought they had been caught in a web of unpredictable weather, economic deprivation and breakdown of social fabrics. But, a few local leaders and technical groups had hope that the interventions they were undertaking (e.g., the distribution of farm inputs including high yielding seeds, education, extension services) would lead to more families adapting the new cultivation techniques and seeds, and then food production would improve.

Figure 1. Relations between the key factors perceived as predisposing household food insecurity



3.2 THE NUTRITION SITUATION IN THE DISTRICTS

Nature of malnutrition

The northern region has one of the highest prevalence of malnutrition in Uganda. Over 31 percent of children were identified to be stunted, 20 percent underweight and 8 percent acutely malnourished in the baseline survey conducted by IMC in the areas of Kitgum and Pader it is working.

Marasmus was locally referred to in various terms; *la two kec* (one who is suffering from hunger sickness), *lapwut*, *two netto* or *two cham* all refer to weakness and thinness. People ranked these conditions as major causes of morbidity among young children. Thinness in adults was mainly associated with diseases such as HIV (known as *la two slim*). However, other than the very severe cases (e.g., of marasmus), other conditions like night blindness or signs of severe anaemia (e.g., dizziness, pallor, weakness) were not associated with poor feeding. Parents admitted they did not recognise other forms of less severe malnutrition and seldom saw the few cases of severe malnutrition as a major contributor to death. Transient diseases like malaria/fever and stomach aches that prevent them from doing their daily chores or are likely to kill their children are more recognised health problems. People easily recognised how different diseases, including severe cases of malnutrition, interacted with seasonal peaks in labour demands and food scarcity in the community.

The most affected

Generally, it was agreed that infants and young children were most affected by malnutrition and poor health in the communities. In the camps, most women were not as busy, water and health care were nearby, there was less farm work, and women had more time to breastfeed and care for their children. In the transition phase, mothers have found it difficult to cope with their multiple care roles and the high workload in the fields. Young children are especially becoming more vulnerable to malnutrition and poor health.

> *'The most vulnerable and worst affected groups are the children, the old, sick and the very poor in our communities. Women are worried about their children when there is not enough food; they leave the food for the children and they "chew raw cassava to [fill] their stomachs". The other people who are also affected are the elderly who do not have attendants to care for them and those people who have remained in the camp because they do not have land. Some of the children were left in the camps so that they can attend school.'* –Vice chairperson, LC III, Awere sub-county, Kitgum district

Other vulnerable groups are the elderly, the disabled, those with chronic illnesses and those abandoned in the camps by the returning families. Homes that are headed by older children and disabled people are likely to be malnourished. Most saw access to food as the underlying factor of the nutritional status of children, the elderly and the sick.

> *'The most vulnerable groups are HIV/AIDS and TB patients, the elderly and the children'.* –District Health Officer, Pader district

> *'The most vulnerable groups are the sick, old and the children. Other people who are mostly affected are those people who have moved back deep to their villages because they are still trying to re-settle (they are re-constructing their homes). Most do not have food and are far from schools and health facilities'.* –Head Teacher, Lajokokaya Primary School, Pader district

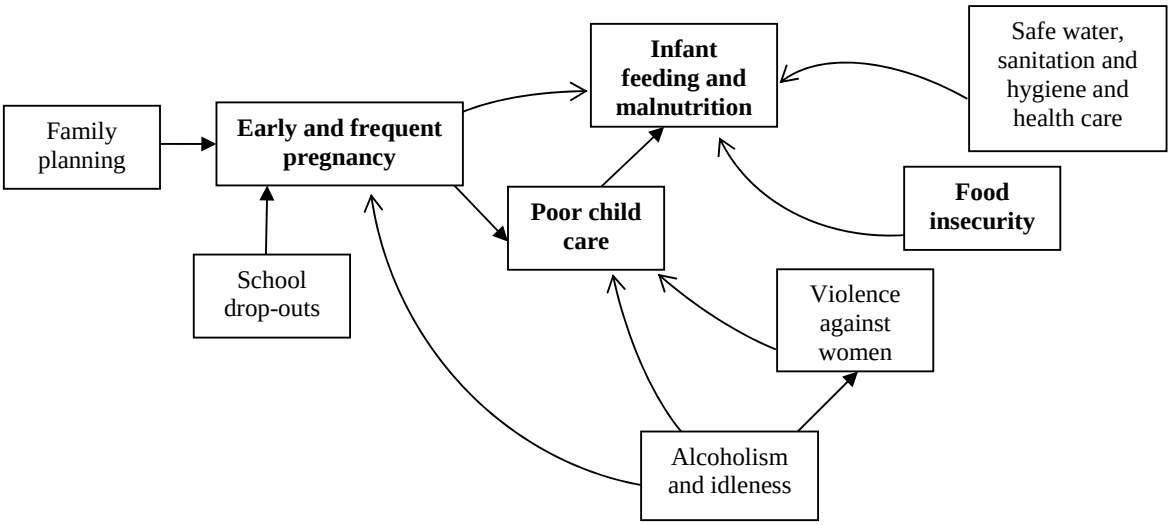
Surprisingly, other than health workers, other respondents did not frequently refer to pregnant or lactating women as a group vulnerable malnutrition. However, people recognised that women make "eating sacrifices" for their children and husbands in times of food scarcity (as their nurturing role) and do not have "enough breast milk" because of poor feeding. Though many women indicated they felt weak and were in poor health, this was mainly

associated with the "heavy workload" and not poor feeding.

Reasons for malnutrition in children and women

Malnutrition in women and children was often equated to food unavailability in the house and poor feeding of children and women, including the inability to have a "balanced diet". Respondents seemed to understand the concept of a balanced diet (i.e., eating from the different food groups each day) and the need to provide good foods to children. Though illnesses related mainly to sanitation and hygiene were referred to as a cause of malnutrition, this was not expressed with the same vigour as food availability and child feeding; respondents were more passionate in discussing the underlying factors of poor feeding and child/female care. Although the factors discussed here were raised by each group, the passion and interest in the issues raised were different among the groups of respondents. Most community members, but especially men, dwelled on food insecurity and lacking the means to livelihood (and hence poverty) as the cause of poor feeding of children and women. Other issues raised, but mainly by women, dealt with women's workload (and time) and breakdown of social structures, mainly attributed to GBV and alcoholism. Professionals saw teenage pregnancy and frequent pregnancies (blamed mainly on increased alcoholism and school drop outs), family separations (blamed on alcoholism), and local traditions and beliefs as main causes of malnutrition. The relationships between these key perceived causes of malnutrition are presented in **Figure 2** and discussed in more detail below.

Figure 2. **Relationships between the key factors perceived as affecting malnutrition in the community**



Food availability and poverty

Lack of adequate food at home throughout the year was seen as a main factor in poor feeding of children in the community. If there was no food in the household, the child was likely to not eat enough food because most children were fed whatever food other family members ate. Respondents believed consumption of balanced foods was impossible under the context of their environment, levels of productivity and poverty. What food households can acquire makes the meal. The aim of eating is to have "full stomachs" – having enough food to remove hunger – and that is the priority of livelihood earners (mainly women). People rely mainly on the few "cultivated foods" and what is grown. The number of food sources as well as amount of land cultivated has changed over the years (see **Section 3.1** on food security).

Common foods found in the meals of most households include the three main staples: sorghum, maize and millet. Cassava was eaten,

both as a snack and as a meal. Beans, simsim and vegetables are also common. These staples were mainly home grown and rarely purchased, and their availability was highly affected by seasonality. The periods of food scarcity were followed by high levels of malnutrition and more reliance of food relief. Respondents saw purchased food as the main source of improving food quality (diversity) and palatability, and according to most respondents, only households with money could have a "balanced diet". Other households would increase variety by bartering some foods (e.g., relief food, cassava, millet) for others like beans or simsim, although it was difficult to find someone willing to exchange. Very poor households had monotonous diets since they could not afford to increase diversity by including purchased foods in their diets. The poorest families ate cassava and vegetables (including wild vegetables) most of the time. And most households had only one meal a day.

One discussion group categorised community members by how they ate. Categorisation was highly dependent on the wellbeing of the families (see **Table 4**).

Table 4. Characteristics of families in the study communities, the kinds of activities they partake in for food, and their feeding and nutrition patterns

Definition/ grouping	***Who they are***	***What they do***	***Feeding and nutrition***
Better-off families (about 25-30% of the population)	▪ Those with employed family members (around or outside the community) ▪ Those with land near the camps, along the roads or along water sources (rivers, lakes) ▪ Those with homes near trading centres ▪ Mostly community leaders (e.g., teachers, religious leaders, local government leaders)	▪ Can procure food when they have deficits or rely on remittances ▪ Can construct granaries to store food ▪ Lend farm inputs (seeds, oxen/ploughs) to others ▪ Use bought labour for land clearing, planting, weeding and harvesting from other groups ▪ Attend most community meetings and organise themselves in "productive" groups that work with most agencies	▪ Eat a more varied diet because of purchased sources, like sugar, oil and animal products ▪ Eat more than twice a day ▪ Have a cleaner environment ▪ Use the health facilities
The poor families (about 50% of the population)	▪ Single female-headed households (especially by teenage mothers and from separated homes) ▪ Families of alcoholics and substance abusers ▪ Those with land in insecure areas or areas likely to be attacked by pastoralists (the Karamajong)—mainly areas very far from the camps ▪ Uneducated ▪ Large families	▪ Inconsistent in community activities ▪ Harvest little and sell most immediately after harvest ▪ Depend on food relief only during severe prolonged food deficits caused by drought or floods (but sometimes sell the food relief) ▪ Sell labour to the "better off homes" and borrow/purchase/lease farm implements from the poor ▪ Work in groups to support each other with labour ▪ Tend to use illegitimate methods to keep getting relief food (dependent on relief food), e.g., keep children hungry to get relief food ▪ Partake in survival activities to get money (e.g., sex for money)	▪ Women too busy for adequate feeding of children ▪ Men not supportive ▪ Most children are malnourished ▪ Eat more varied diet (mainly carbohydrates) ▪ Eat one or two meal(s) a day ▪ Rarely fry their foods or use sugar (eat boiled foods with salt)
The very poor families (about 20-25% of the population)	▪ The disabled ▪ The chronically sick (TB, HIV, cancer, madness) ▪ Elderly widows with large families	▪ Dependent on food relief throughout and most is used in the house ▪ Sell labour (the landless do, but most sick cannot work)	▪ Women too busy to care for babies ▪ Poor hygiene and sanitation ▪ Eat very monotonous foods (relief foods and/or cassava and

	▪ Elderly-headed households ▪ Orphaned children (25% of the children) and child-headed households (about 10% of the households) ▪ Landless with large families ▪ Families of alcoholics (both women and men in the house)	▪ Sell farm implements when given to them ▪ May eat the seeds given to them ▪ Partake in survival activities, like sex for money, land/farm inputs	green vegetables) ▪ Have one meal a day

The poorest in the communities were identified as most at risk of malnutrition. Poor households were forced to "borrow" grain or money during the lean seasons from "better-off households". They borrowed seeds and hired farm implements or labour on credit. Many of these poor household were forced to sell at low price immediately after harvest to pay their debts. Some may have had food in their farms, but it was not theirs. Sometimes because of so many needs and the lack of food, the households even "cooked the seeds, especially if the seeds were distributed too early; or they sold the farm implements to buy food—although some men sold them to buy alcohol" (FGD Mothers, Orom sub-county, Kitgum district). Hence, as noted earlier, lack of means of livelihood implied that the food available to them (whether donated, relief or produced themselves) may actually not have translated to entitlement for consumption by household members. But there was agreement that even in food scarcity, "self drive and motivation" were essential, as there were some poor homes that did not experience malnutrition or hunger. The older generation expressed disappointment that people relied less on wild foods and vegetables to improve food palatability and variety and never gathered them for their children.

> *'These days there is no good food, mothers complain [they] don't have enough breast milk … all parents used to strain porridge and mixed it with millet/sorghum paste; children used to feed very well, they were also [healthy]. These days they are weak because they don't feed well'.* –Hospital matron, Kitgum Mission

> *'There [are] no balanced [diets]. People eat only the main meals i.e. millet/maize bread and beans or green vegetables. There is limited access to animal protein because it is very expensive'.* –District Production Officer, Pader district

> *'In those days there were chicken and cattle, which gave us eggs and milk for our children…but nowadays children rely on only breast milk'.* –Grandmother, Omiya anyima, Kitgum district

> *'Balanced diets can be got from the food they buy from the market, i.e. the small fish (Lacede) [and] vegetables (cabbage): there are no eggs, no meat and no milk in the villages"* –Catechist, Patongo, Kitgum district

Respondents indicated that for most single women and girls, they survived on "sex-for-food" while in the camps, a habit they continued. Most were poor and did not have land to farm or other means of livelihood, but still had to feed their children. This had exposed most to infections like sexually transmitted infections (STIs) and HIV.

At the height of the conflict, over 80 percent of the population was dependent on food relief. At the time of the study, only 15 to 20 percent of the population depended on food relief, and mainly during the lean periods. Programmes distributing relief foods use acute malnutrition as the criteria for getting relief food during times of food scarcity. Respondents referred to some households that tended to keep their children hungry or had many babies (the woman is always pregnant) as a strategy to continue getting relief food. It was unfortunate that for some families, food relief was the only means of survival, as it contributed highly to the food in the home, and the caretakers had to use unconventional means to continue getting food. There was some objection that receiving food

relief for a long period had created dependency in the community.

For some, food relief was seen as the only means of survival. For instance, though there were many orphaned children in the community, there were no systems to support them, and for them a delay in food distribution would expedite malnutrition and hunger. Although NGOs had tried to support, the numbers reached were still few and extended family support was still the main means of livelihood for these children.

> *'There are no community participatory approaches to support those in need. We have very many destitute (widows, orphaned children, and disabled people) in the villages that NGOs have not reached. They are just too many but no community mechanism to help them. Sometimes you find these children when they are without anything to eat and there is no one to help them'.* –Health worker, Pajule, Pader district

Traditions and belief habits

Local traditions and beliefs affect health seeking behaviour, infant and maternal feeding, support systems and control of resources essential for good nutrition. Successful Acholi traditions may have become dysfunctional during the long encampment. For instance, the traditions and social structures that influence and regulate sex and the role of men/fathers as suppliers of household welfare collapsed because of encampment. But gender roles are traditionally defined and sometimes overburden one gender or deny bargaining power to some groups in the family. In addition, there are traditional systems that advise the younger women on what to do to feed their families and how to take care of their children. Older women are normally involved in child care through advice.

> *'It was the responsibility of the woman to ensure that food is available in the household. But as the head of the family, the man was to make certain that his family has enough land to till. The man was normally the one to open the land and to till with ploughs. However, women prepared the land for planting, put the seeds in the ground, weeded and cared for the crops, harvested and prepared the food. She still had to do all other household chores'.* Mother, Omiya nyima, Kitgum.

> *'In preparation [for] marriage my mother told me I should respect my husband and be hard working. She also told me that my mother in law will provide the food for our house during the first few weeks, after which I would oversee all the household chores including providing food for my new family. Men are not accountable for the food eaten in the household, it is the women: therefore I have to work hard so that my family does not go hungry or beg from others. It will be a sign of poor upbringing and thus an embarrassment to my mother if that happened'.* Mother, Omiya nyima, Kitgum.

In rural Acholi, young couples lived in the same homestead as the man's parents. The mother-in-law oversaw the meals, would ask questions on what is cooked and sometimes served the meals, even if it was cooked by the young wife. This was to ensure that young women did not eat certain foods or parts of foods that are not consumed by young women and especially if they were pregnant without her permission. But it was also to instil order and respect.

There were efforts to ensure that breastfeeding was initiated immediately. This normally happened, but for those having their first child, initiation of breastfeeding was delayed if older women sensed milk flow problems and they performed the "thorn removal ritual" that lasts one to two hours. In addition, during the ritual, the first milk (colostrums) is often shed off.

> *'Traditionally, when a child is born the mother was expected to breastfeed immediately. However, if she has problems with milk flow (common occurrence at first birth), the "thorn removal ceremony" is performed. The breasts are massaged with a warm cloth and nipples squeezed to remove the "thorns" (they are black at one end and white on the other). The pores in the breasts "are blocked" in women who have never had children. Breastfeeding commences after this ritual. We do this for majority of births to open the pores. Many*

times this ceremony is done daily whenever the mother takes a bath for about three days. This helps the bones to return to their original position". Grandmother, Orom, Kitgum.

Parents and older women advise their pregnant daughters to breastfeed all the time and force them to carry their babies so that they can breastfeed whenever the baby needs to. There is a belief that "breast milk is from God and if He has given it to you then you have to give it to the baby". If the women do not have breast milk, they are told to drink a lot of millet porridge. Information is also given on proper positioning, especially for women with large breasts, to ensure the baby gets enough milk.

- Mothers are not to breastfeed in a lying position to avoid the baby choking. This may be a major hindrance to breastfeeding the baby during the night.
- During the naming ceremony, four days after delivery for girls and three days for boys, the babies are licked Olel (groundnut or simsim pasted soup), a sign of welcoming the baby into the home.
- When a lactating woman conceives, she should stop breastfeeding immediately because the milk is said to be for the foetus, not the current baby. The current baby then risks becoming malnourished and sick.
- Upon the death of the mother, the grandmother takes over feeding this child. A cultural practice in which her breasts are cut and herbs applied to facilitate the process of milk flow is carried out.
- If a breastfeeding woman is bitten by a snake, she stops breastfeeding and never resumes even if cured.

"Communal eating" (eating together from the same plate) is the traditional form of "having a meal" in the districts, but it favoured men and older boys in the household, with the women having the least quantity and quality of food. The practice is aggravated by the general lack of basic household utensils. There were indications of a decline in communal eating, and increasingly men ate alone from their own plates. However, young children are rarely served in their own plates; they will normally eat with their parents and are fed using fingers.

'*If food is available, people usually eat together as a family. Food is served in one dish and is shared with both children and adults surrounding the dish. So you know the children eat very slowly whereas the adult grab more, this could explain why the malnutrition rate is very high in children than in adults'.* –Health worker, Pajule Health Centre IV, Pader district

'Fathers are served alone. Young boys are served together and mothers eat with young children, girls and other women in the household (the responsibility of feeding children is left entirely to women). The father is always served first and the bigger boys are given bigger portions. Women consider their children and only eat after the children are satisfied, and in times when food is inadequate women will most times not have enough to eat'. –Head teacher, Latolin Primary School

'The head of the household, the man, gets the biggest share, and the children come next. In most cases the women are the last to feed; yet the woman is the one who actually tilled the land and cooked the food, but is the last to eat. As men no longer eat with others they get the best share of the family food and this is really not fair'. – District Health Officer, Pader district

Frequent and teenage pregnancies

Teenage pregnancy and frequent close pregnancies were associated with increased risk of malnutrition in children and women in the study communities. IMC and Lutheran World Federations (LWF) had estimated that 40 percent of children belonged to women under 20 years of age while 35 to 40 percent of pregnant/lactating women in their feeding programmes were also under 20 years. Health workers from the health facilities providing outpatient therapeutic care of severe acutely malnourished children also indicated that close to half of their clients were children of teenage girls. Respondents reported a general increase in the occurrence of pregnancy among young

girls. Long stays in the camps increased "indecency" and idleness among the youth. Early pregnancy was also attributed to early marriages, higher high school drop-out rate, idleness, alcohol consumption, lack of family planning, and the breakdown in the traditional social structures that influence and regulate sex among the unmarried. Young girls were also forced into transactional sex for survival and food. The situation was, however, expected to change with relocation from the camps. Young girls were entirely responsible for their reproductive health as the roles of extended families in sexuality had reduced. There were fears that unmarried girl-mothers were stigmatized in the villages. There was recognition that early pregnancy was a start of a vicious cycle of malnutrition, where underweight mothers had underweight babies who were at risk of suffering from nutritional and educational deprivations.

> '*Girls these days get married early and give birth when they are still very young. Before, [girls] would remain in their parent's house and would marry when slightly older. Since the life in the camps, many girls drop from school and are getting married younger. Because of poverty many girls want someone to support them. Sometimes they are encouraged to marry young by relatives'.* –Father, Omiya Nyima, Kitgum district

> *'The girls have dropped from school and they cannot even take care of themselves, and they are [having] babies. A small girl with a baby; both the baby and the mother need care!! The girls are poor, they are not having enough to eat, and they [have] babies that are unhealthy from birth. They have no milk to feed their babies. They are the ones we bring to the clinic with malnourished babies'*. –Mother, Pajule, Pader district

> *'Almost half of the children with severe malnutrition that come to the clinic here are of very young girls. Girls who have dropped from school get babies when they are very young. They don't know what and how to care and feed the babies. They don't get help on child care and their children end up with severe malnutrition and we have to admit them. Many have lost (died) their babies. It is becoming a major problem'.* – Hospital Matron, Kitgum Mission, Kitgum district

There was clear agreement that many children were at an increased risk for malnutrition. Women understood that frequent pregnancy had negative implications on their health and nutrition and on that of their child(ren). Yet they seemed to have little control over their fertility. Alcoholism among men, broken family relationships, and poor access to quality family and reproductive services were some of the factors identified as affecting fertility in the communities.

> '*Women need to use family planning methods to avoid getting pregnant when the child is still too young. If the husband and wife do not agree, it is difficult to use family planning methods. They become the source of disagreement and women become pregnant again after just one year. Sometimes the [alcoholic] man just wants to make more babies and he cannot supply for them. The one to suffer the consequence is the small child who gets malnourished. Even the child in the womb will get hungry because now the mother has to [get] food for three people at [a time], yet there is not enough food in the home*'. –FGD Mother, Orom sub-county, Kitgum district

> '*I advised my daughter-in-law and she agreed that she should not get pregnant when she has a young child of less than two years that is not yet able to walk. She now knows that another pregnancy disrupts the child's growth and makes the child prone to frequent illness. The child would not have enough breast milk to take'.* –Grandmother, Wol sub-county, Pader district

Most malnutrition was seen among children of female-headed households where wives were separated from their husbands, households with alcoholics and households with children born to young girls.

Women's workload and child care

It was often reported that women were shouldering more responsibility of providing food for the house. Women were exclusively responsible for child care, household chores and food preparation (feeding the family). They process the food, prepare it (having looked for the water and fuel, and many cases also the food) and feed the babies. They took their children and relatives to hospitals and attended clinics in the villages when needed, and took care of the increasing numbers of sick and disabled in their families. It was estimated that women in the farms spent as many as 16 to 18 hours per day doing fieldwork as well as handling all the domestic responsibilities. Men rarely helped, though there were a few examples of men in the village helping with household chores. Women received help only from other women in the household and from older children. However, households were "increasingly becoming individualised" and extended families were less available to help.

> *'It is extremely difficult for us in the farms. We are expected to wake early and [go to] sleep late. Work, work, throughout the day!!! We are expected to cook, fetch water, dig, visit the sick, and attend burials and teaching sessions in the community or in church. Many women are becoming sick and young girls are running away from their husbands'.* –Woman, Wol sub-county, Pader district

Women who had returned to the farms were most constrained by time and did not have time for themselves. In fact, they had more time while in the camps; they "had time to make their hair and visit one another". Women indicated they were too constrained with time to the extent that they had little time for exclusive childcare. Women also indicated that they should not be expected to attend all their "education programmes" as all programmes targeted them. Moreover, women kept asking for programmes to provide them with improved seed varieties, e.g., that require less labour for weeding but produced a lot, access to labour-saving farm implements and access to closer water sources. Women in the poorest households (female-headed households or those with disabled or sick persons) were most constrained with time.

> '*Here in Ladotonen, the problem we have is [a] shortage of water. We have to move and look for the springs to fetch water. We only have one good borehole where all of us in the village go to fetch. There is another one where the water comes out when it is reddish in colour'*. –Mother, Orom sub-county, Kitgum district

> *'There is too much work in the farms that we have very little time available for feeding and proper care. We also have to attend very many meetings; we have to attend the education if you want to get the supplies they give us'.* –Mother, Omiya nyima, Kitgum district

> *'A lot has changed regarding feeding of children. Children used to suckle any time they cried or the mother sensed the child needed the breast. Today, a number of mothers stay away from their children all the day looking for food'.* –Hospital Matron, Kitgum Mission, Kitgum district

Peer pressure had previously been used to support child care in the camps. For instance, while in the camps "women or neighbours easily identified children who were not well cared for. They knew which children were unhealthy or were not being taken to the clinic, or were malnourished and their parents did not go for food for malnourished children". There was fear that with resettlement in the farms they would not be able to do this because of too much work.

> '*Every month they came to weigh the children and those with bad weight were taught how to feed and given food every time the organisation came to the camp. We knew those who had health problems and reminded them to go to the clinic. Now we are in the farms each person will be responsible for their lives unless neighbours visit them'*. –Mother, Pajule, Pader district

Sometimes it was difficult to delineate child care failures due to ignorance, negligence and failure caused by the busy work programmes most women were experiencing. Some respondents

felt that some mothers were not investing enough time for their children, as they consumed alcohol, were idle, did not attend to their children adequately and did not "[invest] their time to look for good food for their children". Whatever the situation, there was agreement that child care needed time and women with many children, a lot of farm work, plus all the household chores they must attend to would find it difficult to provide quality care for their children. Unfortunately, many men in these communities had neglected their children or did not accept they had "family caring" role.

> *'Some women have neglected their families. They can refuse to cook – even when there is food in the house. The women just sit and drink alcohol and not look for foods for their children. The children end up being malnourished. There is food in the wild that they can gather for their children, but they don't like it. They just don't care about the health of their children'.* –Grandmother, Omiya anyima, Kitgum district

> *'In the planting seasons you will find many children aged one or two years left at home without anything to eat. Mothers go to the field and leave the children without any food to eat. The mother leaves at seven and she comes back around three or four in the afternoon and the child has been there hungry. This is sad. But we also know of cases where men have left their wives and children and have gone to live with another woman who has few or no [children]. This must be discouraged and we must protect these children'.* –Palabek kal sub-county chief, Kitgum district

Gender, alcoholism and violence against women

Women were sole breadwinners even in male-headed households. However, the men were still the key decision makers on household resources, and women were generally disempowered. Men were likely to sell household food or other resources that were meant for the family for money to buy alcohol. Most female respondents were disheartened by this condition in the community. The failure of men to provide for the family and the increasing family and farm responsibility on women had increased the breakdown of marital relationships, a major factor in severe malnutrition. In fact, women saw men as a "burden" to the family. "They are a source of illnesses like HIV and [STIs], they have to be fed, their cloths washed, you get water for them to birth, and yet they contributed little [to] the family welfare" (Woman, Omiya nyima, Kitgum district). Most women indicated that if they asked for food every time, the men abandoned them and "eloped" with other women who could provide them with food without asking questions. Some women felt that their situation may be better without the men in the household and wished they would go to urban areas in search of employment.

Alcoholism and violence against women was high in the communities and affected child care and the nutrition of children. Homes of alcoholics, where disposable income was likely to be used to purchase alcohol, were likely to have malnourished and unhealthy children. Alcoholic women were less likely to attend the village clinics and meetings and rarely got support from the community. Single women were likely to engage in transactional sex or in beer brewing. They were also likely to have "sex-for-food".

> *'A sizable number of children with marasmus... will come from these homes of [alcoholic] men and women. Unfortunately now we will not be able to find these children because their parents did not bring them to the clinics and people do not come to report those cases. While in the camps these children were reported and we went to look for them because we were near the camps. Now we need a system of finding these children. The [village health teams (VHTs)] are supposed to do that but it is not been working well because they need facilitation, which we do not have'.* –District Health Secretary, Kitgum district

The family discord many times affected children's health, and especially when the mother left them with the father (that is the culture). The children would go without food or

the care they needed, and most would be malnourished and participate in food relief programmes. Initially, most programmes had targeted men, but changes had been made to target mainly women to reduce the diversion of the programme proceeds (e.g., food) to the market and money gained used to purchase alcohol. But this shift passed the role of raising household food to woman, and men did not have the motivation to work and provide for household welfare.

> *'The children in the house with [alcoholic] parents also get unhappy. Most of the children are malnourished and sickly. Alcohol is the main cause of disharmony [in] homes. Well, when he is not drunk and he has 1000 UGX, he can give 500 UGX to buy sorghum, simsim and vegetables to prepare in the home. But this only happens when he is not drunk'.* –Grandmother, Wol, Pader district

Reducing and preventing malnutrition

Generally, one could notice that the solutions to solve and prevent malnutrition that were given to a large extent concerned increased food production; as food was the cause of the problem, food most likely was the solution to the problem. But there were noticeable differences among women, men and professionals in the suggestions of what should be done to address malnutrition in the districts.

Women wanted solutions to address the increased alcoholism that made men unable to work hard; support the large number of destitute families and the very poor (mainly female-headed) homes in the villages; help reduce their amount of work, especially in the planting and weeding seasons; and address violence against women and children, including setting by-laws in this regard. On the other hand men, wanted food insecurity and malnutrition to be addressed through a reduction in poverty by creating opportunities for earning income; improving/providing security for those returning to their farms; providing farm inputs, like seeds, oxen and ploughs; and providing credit to start businesses or employ them. Programmers (e.g., health workers, agricultural extension) provided solutions that were often based on the technical areas they represented, such as needing to build knowledge on food use, food storage, when to sell after harvests and infant feeding; addressing issues of teenage pregnancies; providing agricultural inputs/technologies and extension services; and addressing alcoholism.

3.3 STRUCTURES FOR SUPPORT OF NUTRITION AND FOOD SECURITY INTERVENTIONS

Local government response

Respondents believed the local government should play a key role in supporting communities to improve the food and nutrition situation. However, many felt that the district had left the responsibility of supporting the communities to international agencies, NGOs and other groups, like religious groups. The local government's role in ensuring food security and good nutrition relative to the roles of international agencies and NGOs had not clearly been defined. Districts indicated that they were constrained in human and financial resources, but respondents felt they still should coordinate the services and activities of international agencies and NGOs, and they could make plans/visions, set and enforce by-laws, and mobilise communities for action. There were feelings that the local leadership had been reactive rather than proactive on issues of food insecurity. The district local government had no emergency preparedness initiatives that people could identify; "Every other year droughts happen but the district leadership do not seem to be prepared for them". Intensive NGO presence, distribution of relief and provision of free support (e.g., with agricultural inputs and implements) was seen as a big limitation to local leaders actively taking leadership in mobilising their communities to use "adaptive strategies".

> *'We actually don't emphasise on food*

security and preparedness in times of scarcity. As such, it is unfortunate that over the years people have just been reactive but not being proactive, but it is also very difficult to mobilise communities that are used to and expectant of free handouts. We have no handouts to give them, and they do not come for our sensation meetings as they go for NGO's.' –District Health Officer, Pader district

'The sub-county leadership is sensitising the community on food production and unnecessary sale of food stuff and not to sell everything. We advise communities during our meetings not to sell all their produce but to store some for the household. The sub-county cannot give inputs to individual farmers; they don't have the resources to do that'. –Chairperson, LC III Awere, Kitgum district

The lack of livelihood left many people idle, leading to alcoholism, substance abuse, GBV, breakdown of marital relationships and poverty. Many could not see how they were getting out of the poverty and social breakdowns. Leaders were seen as beacons of hope that were needed at this stage of settlement. Some sub-county leaders lobbied NGOs for support and held campaigns to encourage the communities to return back to their original homes and cultivate. Others were holding radio talks to motivate the population to return to "development life" and encouraged communities to adopt more productive farming tools/seeds and techniques.

'Local leaders have a challenging task of doing all that. [It] is at their disposal to create hope, assure people peace has returned, and they can produce and sell at good prices. Many young people do not see how this will end. We must protect the communities from robberies in their gardens and we must assure them of providing quality services'. –Member of LC III, Agoro sub-county, Kitgum district

Most respondents felt the district governments needed to be more proactive in the design and implementation of relevant strategies for food and nutrition security in the districts. A number of respondents perceived that some of the detrimental behaviours needed local government intervention, especially to protect vulnerable members of society. To some, this meant not only raising awareness on the social issues but also putting in "place sanctions for behaviours contrary to the set norms". Some of the sanctions identified would be against increased alcoholism, GBV, negligence of young children, absence from school and lack of food production for home use.

'There are social injustices that we must see how to control. Having people drink the whole day, beating your wife because there is no food in the house, neglecting your wife and children by going to stay with another woman, is all injustice and we must protect the weak. In addition, the community should not sell all their food after harvest. The chairman LC III Palabek Kal sub-county has ordered lorries coming from Sudan during harvest months to stop. He and his men are going to erect blockade on the roads leading to the sub-county. People need to be educated but also sometimes supporting them to do the right thing'. Catholic Priest, Palabek, Kitgum district

Kitgum district had started formulating policies, ordinances and bylaws to mitigate the food and nutrition situation. These include a bylaw to have each household cultivate at least one acre of cassava or sweet potatoes, these being crops that can provide households with food for some time; laws to curb bush burning, which burned grannies, huts and crops, and contributed to environmental destruction; and a decree on animal movement so that animals are not left to roam anywhere and destroy crops. The district also planned to introduce a decree regulating alcohol drinking hours, restricting them to after 5 pm, as the district recognised the negative effects of alcohol on productivity and the family. The agriculture department was also trying to find ways to regulate sale of food crops immediately after harvests and thereby revisiting the need to construct granaries. Everyone agreed though that enforcement of the bylaws and ordinances was going to be a major challenge for the local leadership.

Most local government social service structures had collapsed during the conflict period. All nutrition support, which was mainly in the management of acute malnutrition, was provided by NGOs and the United Nations (UN). The government did not have the infrastructure and the human resources to provide nutrition services. Even in the post-conflict period the local government health infrastructure and agriculture are very weak. This study found that a number of health units had been trained in the management of acute malnutrition and were getting ready-to-use-therapeutic food (RUTF) and mid-upper arm circumference (MUAC) tapes from the United Nations Children's Fund (UNICEF). NGOs had also trained many of the health workers in maternal and infant feeding and nutrition. But there were no follow-up and mentorship activities to ensure supplies were timely and nutrition services were provided. Health workers complained that many positions were not filled, so the workload was high for the few health workers. There were also no outreach services, and community-based health and nutrition activities were still being undertaken largely by NGOs.

NGO response to food and nutrition insecurity

There are many NGOs working in the two districts. At the peak of the war, there were over 50 NGOs providing different types of relief and humanitarian support. The government structures had almost collapsed, as most technical staff had resettled to the more secure areas. The humanitarian NGOs coordinated themselves at field level. The human and technical capacities, especially in nutrition, were entirely with the NGOs.

More than half of the NGOs closed their offices and activities during the post-conflict and resettlement phase. Some of the NGOs working in the district on household food security and nutrition at the time of the study are listed in **Table 5**.

Table 5. Nutrition related activities implemented by some NGOs in Northern Uganda

NGO	Nutrition (related) activities supported
CIPA, UFPA, CARITAS and DUNAVAT	▪ Provides farm inputs, e.g., seeds, tractors (and opening roads) ▪ CARITAS gives seeds, provides training and indirect cash through seed fair and provision of cassava stems, distributes food to the poor ▪ DUNAVAT provides cotton seeds and has some limited conditions related to food security
Church of Uganda	▪ Provides seeds to the youth ▪ Saucepans are distributed to a few households
Concern Worldwide	Hygiene education, water and sanitation
Food for the Hungry (FH)	Provides seeds to farmers
IMC/Mercy Corps	▪ Provides information on food security and nutrition, food supplements, nutrition surveys, seeds and other inputs ▪ Works in agriculture, markets and in opening roads
International Rescue Committee (IRC)	Provides nutrition education, water and sanitation, food supplements
Lutheran World Federations (LWF)	Provides cassava stems, seeds for legumes, scholastic materials, food supplementation and education in nutrition , health and sanitation
NRC (Norwegian Relief Council)	Supplies hand hoes, axes and seeds.
OXFAM	Provides food for the disabled
International Committee of the Red Cross (ICRC)	▪ Distributes hand hoes and seeds to the farmers ▪ Provides medicine, soaps during hygiene campaigns, food supplements to malnourished homes, pesticides to farmers, drugs to health facilities
United Nations Population Fund (UNFPA)	Provides support on family planning, alcohol use and GBV
World Vision International (WVI)	Provides support to orphans and vulnerable children (OVC), food supplementation, extension services, agricultural input support

NAADS through the local government structure	Provides oxen, ox ploughs and goats to the community to enhance food production; demonstration farms (six per Parish); beehives and education beekeeping; education on good planting methods (e.g., in rows)
Northern Uganda Social Action Fund (NUSAF)	Provides high yielding and high nutrient seed varieties, agricultural inputs, income-generating activities (bee-keeping, rearing small animals)

There were NGOs working to address the underlying factors in nutrition. For instance, NGOs were supplying inputs such as livestock (goats, oxen, chicken) and seeds and some farm inputs, such as ploughs, hand hoes and axes. They were also sensitising and promoting new technologies, such as in rice cultivation, distribution of cassava stems and potato vines, and high producing cereal seed varieties. Some have provided tractors to open up land. NGOs had also been in the forefront in nutrition and health education in the communities.

> *'The district is sensitising the community to plant cassava and providing cassava stem to the community. The district is also providing seeds (groundnuts, maize and onion). The district through the NAADS programme is now providing oxen, ox ploughs and goats to the community to enhance food production. These will enhance sustainability of food security. People should be encouraged to grow crops like cotton, cabbage, onions, wheat and rice'.* –Religious leader, Agoro sub-county, Kitgum district

> *'Successful programmes in the sub-county include NAADS, although very few people are benefiting from the programme; they gave 80 goats to members of the community. These goats will give birth which will in [the] future be given to other members in the community and hope to cover the [whole] sub-county in a few years'.* –Palabek kal sub-county chief, Kitgum district

> *'Information about food security and nutrition is obtained through NGOs and NAADS. This has however reduced in the recent past. Health facilities have a person to educate in nutrition. IRC also assists in providing nutrition information and the Red Cross provides hand hoes and seeds to the farmers. Red Cross also provides medicine and soaps during hygiene campaigns. The leading providers of information on food security and nutrition are IMC'.* –Religious leader, Agoro sub-county, Kitgum district

NGOs were also working on GBV with the goal of promoting institutional mechanisms and sociocultural practices that promote the rights of boys, girls and women; protect against sexual violence, GBV and other harmful practices; or advance gender equity and equality. The GBV activities of the partner NGOs focused on sexual, physical and psychological abuse between spouses and forced/early marriage. Activities included community dialogue to raise awareness on gender roles and support through radio talk shows. Community leaders, health care givers and other departments (police) were trained on GBV and managing cases. Issues of youth sexuality were also discussed.

Though participants were aware of activities implemented by most NGOs, few were able to define the objectives of the various organisations and could not link their activities with nutrition. This is partly a reflection of the failure of the NGOs and local government at all levels to involve citizens in programme design and policy making.

Three challenges were identified. One was the challenge to facilitate the process of coordinating these NGO partners under the leadership of the local government to support building the government's capacity in working with communities to improve food security and nutrition. Second, there was a need for general agreements on sharing workplans, especially when training community groups and health workers or when NGOs were to distribute provisions, because there was need for targeting appropriately. Third, there were indications that many of those in need had not received some of the services, including implements, especially some very poor members of the community. There were indications that households of the very poor and marginalized groups had not been targeted in

most services and interventions related to food security and nutrition. For instance, there were indications that alcoholics and "those who generally don't participate in community activities" had not received some agricultural inputs. These same households never participated in village health/nutrition clinics and dialogue meetings. Communities also noted that most of the investment was not reaching the beneficiaries; instead it went in provision of services (e.g., big cars, big salaries).

> *'NGOs e.g. NAADS need to scale up [their] activities so that everyone has access to seed, ox ploughs and oxen. There are a number of people, especially the marginalised, who did not receive [these tools]. There are areas that were not reached'.* –Religious leader, Agoro sub-county, Kitgum district

> *'A lot of money goes to providing the service providers rather than directly to the beneficiaries. The service providers and the sub-county should follow-up farmers to assess and see the effectiveness of the money and its outputs'.* –Head teacher, Latolin Primary School, Kitgum district

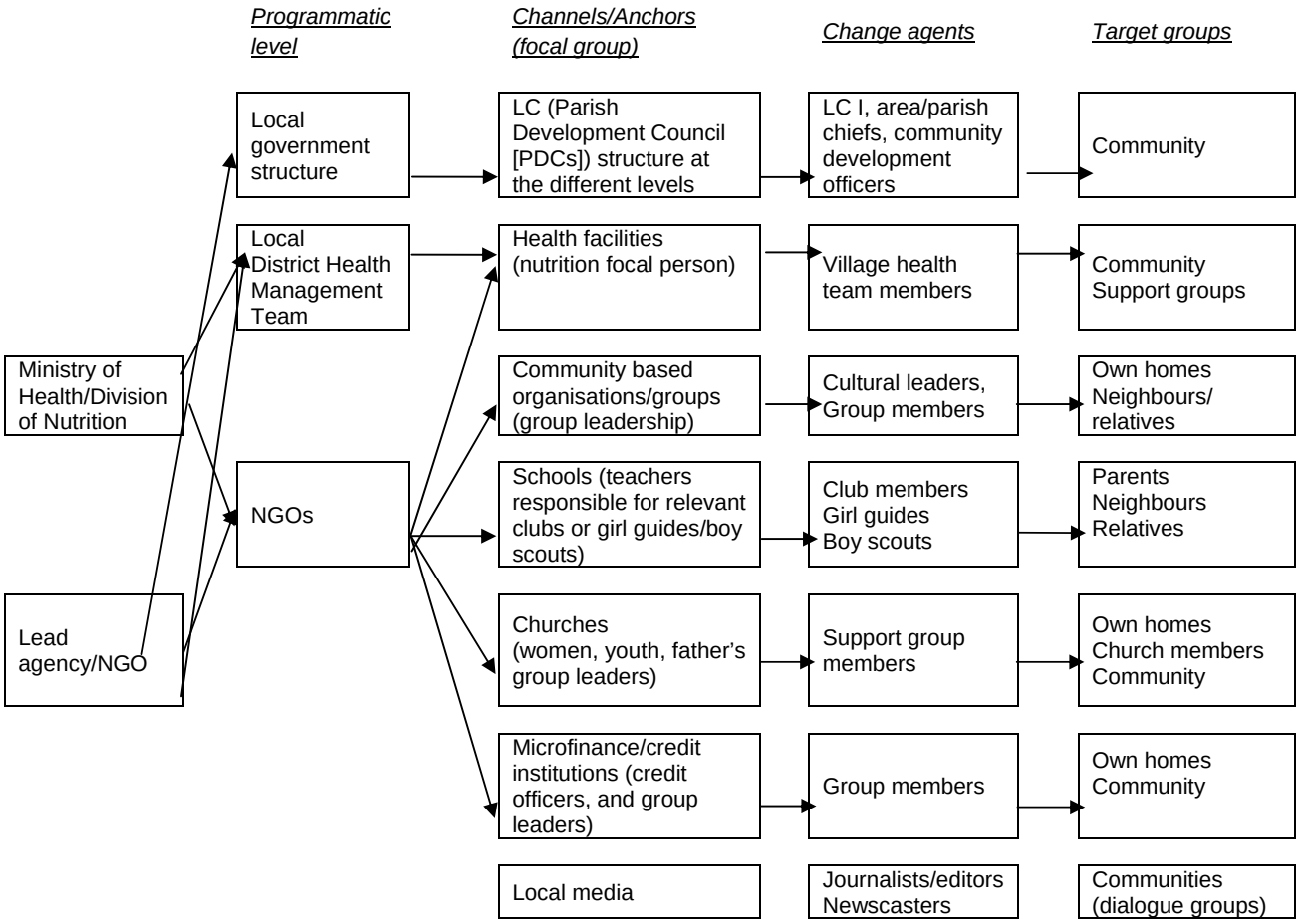
There were fears among NGOs and DHT discussion groups that some of the achievements in nutrition indicators that had been reported in the DHS, for instance, vitamin A supplementation among children and women, deworming of children, and immunisation, were getting lost with the resettlement in the farms.

> *'There it is going to be difficult to achieve those levels of coverage reported in the DHS. We achieved the coverage levels because it was easy to reach children and their mothers in the camps. We also had easy systems to monitor the levels of malnutrition. We could also find defaulters easily and cheaply as active volunteerism was also easier to maintain; many people did not have a lot of work and community volunteer work kept them busy. This is going to change. Many VHT are no longer functional. Keeping VHT active is a very expensive undertaking now. We shall need to think of ways to monitor malnutrition but also to make people come by themselves without being pushed; they have to demand for the services themselves'.* –NGO, Health Coordinator Officer, Kitgum district

3.4 POSSIBLE SUPPORT CHANNELS AND CHANGE AGENTS

Support channels are groups or institutions through which the change agents would be based or would work through. A number of these channels were identified as possible means of institutionalising any community-based food and nutrition initiatives aimed at promoting specific nutrition messages and technologies. Generally, discussion groups preferred getting messages through "channels that were closer to them (e.g., community-based) and those that would allow direct exchange of ideas (i.e., respond to their questions and issues) and were verbal or visual, e.g., drama". The main channels identified in this review also identified people that could be used/act as change agents. There was agreement that no one agent would be adequate, but reinforcement is essential while using community-trusted agents to improve the acceptability of the message. Some plausible change agents identified included mother support groups, village health teams, health facility staff, cultural leaders, credit and loan groups, parish planning committees, school children or teachers, church groups and credit/loan groups. **Figure 3** presents the main channels that were identified, the presumed change agents and the target groups they could effectively reach.

Figure 3. Main channels, change agents and target groups for communicating nutrition messages and delivering nutrition services



Local government structure

Most discussion groups identified the sub-county and/or Local Council (LC) as major channels through which nutrition-specific interventions could be channelled to the communities, and especially those that need community mobilisation, participation, dialogue and enforcement. Specifically, the Parish Development Councils (PDCs) were said to be an important mechanism for planning and delivering services to communities. PDCs were being used under the Parish Approach, an initiative from the Prime Minister's Office, the objective of which was to provide the minimal basic services (backbone services) to IDPs in the satellite camps and in their homes once resettled. PDC members were also to lay the foundations for recovery and development in northern Uganda. PDCs were the lowest organised structures that planed community activities and on which such services could be anchored. PDC members were said to know what was happening in the villages in their parishes and could prioritise activities, mobilise communities and enforce bylaws if needed. They were said to be good for refining (or even developing) strategies intended to solve food and nutrition problems in the communities. However, they would need packages of the key messages and technologies that PDC members could disseminate when convenient for them and according to their own schedules.

At the sub-county level, county development officers (CDOs), sub-county chiefs and health facility-based health assistants were identified to be the most active change agents. CDOs were responsible for planning with communities and identified the priority development issues, which

they passed to the district technical teams. It was reported that many times, nutrition was not mentioned in those community plans, so the issues could not be reflected in the district-level annual development plans.

> 'The *LC I has the mechanism for mobilising communities directly or through cultural/religious leaders. The LC I has access to all other institutions in their jurisdiction including health facilities, churches, other offices and the markets. LC I can also use local Radios (Mega FM 102 and Palwak FM 88.3) to communicate specific information. In many cases the District Government disseminates its information through the LC system'.* –Chairperson, LC III, Awere, Pader district

> *'CDOs, sub-county chiefs and LCs are a reliable source of information that people listen to. These leaders normally move around the village to gather information. They are good mobilisers and well used by politicians. They can also pass key information and enforce any instituted by-laws'.* –Deputy Head Master, Pajule Primary School, Pader district

NGOs had used the LC system and schools to mobilise communities for action in different issues including sanitation, environmental care, forestation and immunisation. Many times they involved other leaders, like the religious, political and cultural leaders, making their message more trustworthy and acceptable to the community.

> *'We have used the LCs in setting meetings with communities. We first call the LCs and speak with them of the needs we have, they then pass the information to the community or they organize for us to meet the community'.* –Head teacher, Dicunyi Primary School, Kitgum district

> *'The sub-county officials have sensitised the communities in the past, for instance, recently they were telling people to store their harvests (food) and not sell all of it'.* –Head teacher, Agoro Primary School, Kitgum district

The challenge of using PDCs and the LC system was that they were few in number, were weak in structure, required intensive logistical support, and were corrupt and biased due to their political affiliations.

Health facilities

There are 36 health facilities in Kitgum district and 49 in Pader district. The health workers were rarely involved in nutrition activities other than nutrition education, growth monitoring, and vitamin A and iron-folic acid supplementation. Some facilities have recently started outpatient management of severe malnutrition. Most activities on nutrition were previously entirely carried out by relief NGOs. Most NGOs were building the capacity of government facilities in handling acute malnutrition but health workers still rarely conducted community-based nutrition activities.

Village health teams (VHTs) were the ones who did community-based services. LC members sometimes doubled as VHT members. Over 80 percent of VHT members had attained only primary school-level education. VHT members were trained to conduct simple nutritional assessment/screening (and referral) using MUAC tapes, nutrition education and distribution of supplies, like dewormers and some micronutrients, in the villages. They were also trained to disseminate health information through support groups (e.g., women groups, youth groups, saving groups). VHT could also initiate "community level dialogue on key issues affecting food and nutrition security".

> *'Health personnel should educate people on child feeding and [the importance] of eating varieties of food, …during harvest people should build granaries for storing food so that foods are not spoiled and people are taught how to use the food for children; people do not even have special foods for children, they eat the same foods as adults'.* –Palabek kal sub-county chief, Kitgum district

> *'The village health team and those who distribute drugs in the villages, they can also teach our women about health and good*

eating'. –Grandmother, Omiya nyima, Kitgum district

The challenge is that the VHTs need continuous motivation or a reward system. Community drug distributors used some of the earnings from the drugs they distributed as a means of motivation. VHT trainings were also identified as incentives to continue activities. However, most VHTs were no longer active even though they enjoyed some of these incentives. Most were also said to be "inadequate models" in the community. There were examples of VHT members who were alcoholics or were separated from their families. In one village, a VHT was mentioned as having a child with severe acute malnutrition (SAM), and another was said to have made a young girl pregnant and taken her as a second wife. "Many VHTs did not practice what they preached".

Schools

There were 186 primary schools and 22 secondary schools in Kitgum district and 196 primary schools and 15 secondary schools in Pader district. In other words, for every one health facility, there were six primary schools in these districts. Schools had a wider reach of the population than health facilities and could play a major role in disseminating nutrition and household food security information or technology. A number of NGO programmes placed behavioural change messages within the school environments.

'In schools we have a number of activities that can be tapped to promote food and nutrition in the communities. There are the Peace Clubs that organise songs and drama and dances that preach peace and harmony in the community. They normally meet once in a fortnight and are supported by AVSI who provided them with musical instruments. There is also [Presidential Initiative on AIDS Strategy for Communicating to Young People (PIASCY)] clubs that also do songs, and dances that create awareness on HIV/AIDS prevention. These clubs are supported by the government. There is Debating Club organised by the school and children can have dialogue on different topics'. –Deputy Head Master, Pajule Primary School, Pader district

NGOs have previously used schools to promote food security and nutrition messages:

- Save the Children supports school clubs but also has a CHANCE school programme that provides education for the destitute children.
- NRC is supporting school farming/gardening clubs in their areas of operation.
- OXFAM promotes child-to-child sanitation and hygiene programmes in the community.

From discussions and observations, schools were well organised entities in themselves as well as through the district structures. Schools had various student clubs, including agricultural clubs, drama clubs, girl guides, boy scouts, first aid clubs, environment care clubs. Most clubs were functional and conducted activities within the schools and outside in the communities. Discussion groups indicated that school children could be trained to provide nutrition services, like community-based growth monitoring, screening for malnutrition (e.g., using MUAC), peer-peer or child-parent nutrition education, or promotion of simple services (e.g., vitamin A supplementation, deworming, immunisation). School children were said to faithfully follow laid out guidelines and normally needed fewer incentives than other community-based health workers like VHTs.

'Pupils have been a source of information in the communities/homes. Pupils report what is happening and the messages they are taught in schools to their parents and neighbours. Pupils have been used to mobilise their parents and neighbours to come to the school for an activity or talk. Children have proved to be very good mobilisers. In the past pupils got information from field trips and radio talks (Luo, Palwak, Mega) or talks by invited guest/councillors, health workers, or agricultural officers and they effectively pass these information to other children or to their parents'. –Deputy Head Master, Agora Primary School, Kitgum district

'In the past we have also used students to pass messages. We supported them to pass seeds to their parents and neighbours, and also passed messages on agriculture, like planting in rows and not burning bushes, and not selling food immediate after harvest. We have also sent them with messages on sanitation and hygiene. We have not done follow-up in the communities but we get feedback that they have been pushing for change in behaviour in their homes and their neighbour's homes'. –Deputy Head Master, Pajule Primary School, Pader district

However, it was indicated that school children should be accessed through their teachers responsible for the various clubs, who would need to be trained and supported in order to build the skills of the pupils/students and monitor their performance. Community mobilisation by local leaders and the schools, through teacher-parent associations would be needed before children do community-based activities.

Religious institutions

During the conflict and thereafter in the resettlement phase, religious institutions played a role in mitigating food insecurity and malnutrition in the study districts. The conventional churches have a higher coverage than health services. Discussion groups indicated that religious leaders were good advocates and carried authority in the communities. Some religious groups, the Catholic Church specifically, had developed functional strategies linked to both health care and relief strategies.

'The Church Office distributed groundnuts, maize, and millet to destitute homes during the conflict. People also make food donations that we distribute to orphaned children and the very sick in the communities. We got donations of maize seeds and tree seedlings and some hand hoes, which we distributed to some of our members in the sub-parish. Since the donations and contributions are small, the number we reach are also few. We have encouraged the mothers' and fathers' unions to work and reach out to their members on [a] number of issues. Women visit each other to encourage each other, the older ones teach the younger ones and they learn from each other. They don't have materials but they make their own programme of what to learn. They sometimes invite guest to come and talk to them'. –Religious leader, Agoro sub-county, Kitgum district

'People get information through the church. The Catechist normally passed information and made announcement concerning activities in the community. Religious leaders also make comments on certain public issues including HIV and health care, like immunisation. They also encouraged people to work hard in their farms. All religious leaders can be a channel to mobilise people'. –Hospital Matron, Kitgum Mission, Kitgum district

'[The] church has done a lot in teaching members on child care and good parenthood. Any activities that we carry out in the community have to be agreed by the church authority (parish priest) otherwise our members may not accept the message'. –Hospital Matron, Kitgum Mission

Religious groups have support groups like youth groups, mothers' guild/union and fathers' union. These were said to have worked effectively in the past in sharing key information and follow-up (visitations) of church members, either to encourage or comfort. For instance, there were discussions of how the mother's union/guild could be used to support younger women in child rearing and feeding, while the Young Christian Society and father's union could be channels to initiate dialogue and disseminate nutrition messages. The challenges are that these religious groups may have agendas beyond food security and nutrition when delivering the messages/services, and may target their members and not those of other denominations or faiths.

Microfinance/credit groups/institutions

Microfinance institutions and credit groups stopped working during the insecurity in the districts because most people did not have money, earning opportunities were few and the risk of involvement is high. A number of programmes are now trying to reestablish the community savings groups. Such groups need trust between peers to function well. Where such groups may, exist they could be used as channels for conveying nutrition messages. The Savings and Credit Cooperative Scheme (SACCOS) exists in the study districts, but more in the neighbouring districts. These groups are formed by the members to promote their economic interests, including providing a means of saving and accessing financial services. The peer pressure from group members was a strong incentive to use these groups, as members would follow-up with each other to ensure they implemented agreed practices. For instance, when there was an outbreak of cholera, SACCOS group members agreed to boil all their drinking water and they monitored (using peer pressure) each other during the meetings.

> *'SACCOSs are being reactivated in the district. The focal person in the district is the commercial officer and an NGO gave each sub-county a motorcycle to coordinate the SACCOS. There are also new microfinance institutions that are upcoming but some have very high interest rates and collateral may also be required. Initially farmers have been scared to join the groups but [with the] sensitisation of farmers and clear benefits, microfinance groups appeal to more people. Yes, they have previously been used to communicate messages on agriculture. We have also conducted demonstrations of farming techniques and use of seeds during SACCOS meetings. They are great places for dialogue and peer pressure'.* –Agricultural Officer, Kitgum district

Most SACCOSs were attended by women, although men also joined the groups. They would be good forums to initiate dialogue on key social issues affecting food security and nutrition. However, it was clear from the discussions that SACCOS members were mainly from the better off in the community, and the very poor and those without means of earning some money every week or biweekly could not join the SACCOSs. Some women also indicated that men refused to give them money if they learned that they were members of SACCOSs and instead demanded money from them. There were statements that "although women are the ones who are involved in family savings (cashbox), men want to control even this income". Examples were given where men took the woman's savings and/or sold items bought with the savings and used the money to buy alcohol. This increased conflict in the household and was a source of some GBV.

> *'We save and have got money from the SACCOS and used it to buy farm implements like seeds and hand hoes, or utensils in the house, like water jerry-cans, cooking pots, and beddings. We sometimes use the money to pay for school fees. But men were convinced that women were selling food items and harvest secretly in order to be able to contribute to the SACCOS. Most women do not want to include their men in planning for the money got from the savings with SACCOS. These SACCOSs have contributed to violence, especially in houses where the men are [idling] in the trading centres and expect the woman to even save for them'.* –FGD with women in Pader district

Media (FM radio programmes and magazines)

Respondents identified the mass media as an effective channel for communicating nutrition messages, initiating and facilitating dialogue on key issues, and mobilising communities for action. Specifically, the radio was pointed out as an important channel to deliver health and nutrition information to most inhabitants in both districts. There are five FM stations that transmitted across both districts using the local dialect. The main stations were PEACE, Luo, Palwak, Mega, MightFire, and Pol FM. "Many people have radios, though they may not always have batteries. A few may not have a radio, but for important issues that interest them, they would find a radio and the time to listen". Talk

shows on different topics were the most preferred radio programmes and were costing between Ushs 250,000 and 300,000 for a 30 minutes programme. And a number of NGOs (UNFPA, IMC, NRC) have used radio to communicate key messages in agriculture, reconciliation and peace, health, and education.

> *'Though not everyone has a radio, they can be used to communicate key health and nutrition information. Pol FM has been used to mobilise people for sanitation, immunisation, HIV and TB'.* –Deputy Head Master, Pajule Primary School; sub-county chief Madi Opei; and Incharge, Agoro Health Centre, Kitgum district

> *'Radio talk shows (Mega and Pol FM) are also sources of information. Radio talk-shows are used to assure the peasants of support from the government. They also encourage peasants to continue cultivating and build granaries'.* –Head teacher, Agoro Primary School, Kitgum district

Mobile phones also came up as an important communication channel. Health workers and teachers thought that mobile phones could be used for updates and reminders. They could also be used for sending data and reporting outbreaks. However, many community people did not have mobile phones, but people indicated that important food and nutrition messages could be sent to leaders (local government, religious, business, teachers) to pass on to the communities.

3.5 MAJOR CHALLENGES IN PROGRAMMING

The design of a community-based nutrition programme with a wide coverage in most of northern Uganda would face the challenges discussed below.

Frequent drought and seasonality

The weather in the north has been unpredictable (the timeliness in the start of the rains or the amounts and their duration). Periods of long drought are common and so are periods of food deficits. There are periods when rural clinics are inaccessible due to floods and impassable roads, therefore the stock of supplies is poor and thus so is the quality of care, and when incidence of diseases like malaria and diarrhea are highest. This is reflected in the seasonal levels of malnutrition and reduced school attendance.

Population fear of the known and the unknown

The discussions noted that people have experienced so much poverty and social problems that they do not see the end to their situation. There were many who were largely dependent on family members, including the disabled, widowed, orphaned and psychologically affected. There was a generation of 15-30 year olds who were encamped from age 10 and even younger and had never received indigenous education or farming skills. They had never gone to school, a health facility or for water farther than a kilometre. This generation of young people could not fit in the farms, and most had lost hope and did not put effort to work hard and earn a living. Instead they were idle in the villages and drank alcohol, and some engaged in drug abuse. The increasing alcoholism (in addition to the already large number of alcoholics), breakdown of the social fabric and teenage pregnancies had increased the fear of the future and created hopelessness.

People also feared possible insurgencies by remnants of the rebels (*boo kec*) that hid in the bushes and of possible attacks either by bandits from Southern Sudan or the Karamoja. They also feared landmines that might have been set in their farms during the war and of people in the community who might own or may come across guns that were left in the bushs. These were also the fears that had slowed the resettlement of families to their lands, and especially those whose farms were remotely based and far from the satellite camps.

People's culture and attitude

The discussion groups also noted that people had developed a culture of not working hard, especially after being in the camps for long. People did not trust one another and feared being exploited by others, thus preferring individualistic operations and making communal efforts difficult.

Like in other parts of the country, the customary system in northern Uganda is reliant on social organisation and stable family units. But there has been a breakdown in known traditional social order. For instance there were a large number of children born out of wedlock, many female- and child-headed households, and many women that were not officially married but were cohabitating. These groups have found it difficult getting customary land in the post-conflict period. Without land, most of these single mothers and youth cannot access credit or other supplies and skills (e.g., extension services) provided to increase food security. These groups that are denied land also happen to be the poorest, the most marginalised and list powerful segment of the communities.

It has been difficult to estimate the actual need in the communities. People generally overestimated the prevalence and severity of poverty, helplessness, food scarcity and desperation. This is because people associated this with the possibility of receiving food relief or other free handouts in future.

Limited human and operational (including supplies) capacity in the government system

Northern Uganda is one of the remote regions in the country. The infrastructure is being reestablished. Getting and maintaining qualified government staff has been a major challenge for the district local governments. For instance, in the Pader district production department, only 50 percent of staffing positions were filled; yet with the ongoing resettlement phase, the amount and complexity of work in agricultural extension was amplified. The resources needed to meet the new needs were also high and were in most cases not able to meet even half of the target beneficiaries in the districts.

> *'The issues we have to address as families resettle need coordination and technical skills that are generally not available in the district. We need qualified people to be here every day of the month. We also need a lot of money to be able to meet the basic production needs. Without the help of NGOs the district alone cannot meet the needs for training and extension. Even if we train a farmer on the key issues, the inputs would not be available. For instance, we set the condition that each home should have an acre of cassava, but we could not provide the extension services or the cuttings needed'.* –District Agricultural Officer, Kitgum district

Remoteness of the areas in most need

The areas that were identified as most in need for support were very remote, with limited livelihood sources, links to markets and employment opportunities. These areas were said to have high poverty levels, and most households were not able to access even the basic needs. The remoteness of the area increased the operational costs; agencies had to pay higher salaries to get and keep staff and pay high transport and monitoring costs, as the infrastructure was poor and distances were far.

4. Discussion and Conclusions

4.1 DISCUSSION

IMC and FANTA-2 conducted a mapping exercise of the opportunities available for designing a sustainable and cost-effective nutrition programme. The specific sub-region was of interest because it contributed highly to the average national malnutrition prevalence, was highly vulnerable to seasonal acute malnutrition, had significant food insecurity and was experiencing post conflict challenges.

The mapping exercise in the two districts examined the food insecurity and malnutrition problems in a broader context rather than treating them as isolated issues. Food insecurity, for instance, was regarded as just one of the range of factors that increased vulnerability to malnutrition in the environment in which people try to make a living. The authors agree that the concerns raised or the priorities identified in the community could have been different if the assessment was carried out at a different time of the year: the mapping exercise was done at a time when the two districts were experiencing food scarcity, the process of resettlement had been ongoing only for less than 18 months and the whole transition from emergency to development was just happening.

1. The population in the Acholi sub-region continues to experience chronic and transitory food insecurity and malnutrition. People can recognise severe food insecurity and SAM in the community and characterise food-insecure households. However, households have no clear coping strategies to mitigate the effects of seasonal food insecurity.

2. Communities emphasised food insecurity as a major cause of malnutrition in the districts. Because of this perception, they prioritised improved food security as the means to address malnutrition. For instance, they requested timely provision of farm inputs and techniques to improve food production. There was an understanding that certain foods are essential to good nutrition, but there was little understanding that nutrition benefits do not always accrue from being food secure. Specifically, improved sanitation and hygiene was rarely linked to poor health and malnutrition.

3. Underlying factors that increase vulnerability to food insecurity and malnutrition are multifaceted. These factors are social (e.g., GBV, breakdown of family cohesion, high alcoholism, teenage and frequent pregnancies), economic (e.g., poverty, few opportunities for earning livelihood, high workload for women) and cultural (e.g., gender roles that entrusted all nurturing and house chores to women while delegating farm work to them as well). It is clear that these factors – whether social, economic or cultural – interact within a dynamic environment, but equal opportunities are not provided to everyone. For instance, women were overworked and had become the sole breadwinners in most homes, while men still made all key decisions and controlled key productive resources. In addition, most men consumed alcohol and were idle; the youth and single parents had fewer opportunities for livelihood and less access to skills and land resources; and those returning to their farms were walking farther distances to get to social services like schools, health facilities, water points and trading centres. These interactions affect different households and household members' ability to claim and use resources (time, land, money, harvests, social amenities, power), food security, health, and nutrition.

4. Women's time is a major constraint to food production and to the nutrition of the children and women. Their increased role in food production in addition to their increasing household chores (e.g., taking care of the sick, decreasing support from extended families) has only translated to heavier workloads. The heavy workload has a negative effect on their health, and also affects the family's nutrition. Women have no choice but to cut back on cooked meals and introduce shortcuts to food preparation, which have a negative impact on children's nutrition. The high workload will be a big

constraint to any nutrition programming.

5. Livelihood opportunities will be a key issue in addressing some of the underlying factors. Agriculture is likely still the main source of livelihood in this area of the country and a shift must be made in the medium-term to commercialise agriculture. There is also recognition among district leadership and technical groups that a balance between the commercialisation of agriculture and household food availability is needed for sustained improved nutrition.

6. Generally, programmes should target households and communities and not individuals. Messages should support women and other household members to improve child feeding. Community dialogue on the underlying social, cultural and economic factors (i.e., women's time, gender roles, GBV, teenage and frequent pregnancy, cultural beliefs, food security, livelihood opportunity) and their effects on child care and nutrition will be key for any programme. But some behaviours considered to be antisocial can only be curbed through local government bylaws. There should also be interventions to maintain the achievements already made in vitamin A supplementation and deworming coverage, probably through social pressure and follow-up/continuous reminders.

7. Many support structures, both governmental and non-governmental, operate in the two districts. Most NGOs abruptly withdrew while the local government did not have the necessary human and financial resources to meet the new needs in the communities. The local governments have not successfully coordinated their own activities with those of NGOs. Most health and nutrition services were provided by NGOs through community-based services, but only covered a few sub-counties and never the whole district. Local structures like the PDA, schools and churches, though they had a wide coverage, did not explicitly have nutrition activities, yet such opportunities existed.

8. Respondents easily identified change agents that had the opportunity to reach large coverage. The VHT (including the community drug distributors) system was a well known structure but lacked coverage, commitment and supervision. LC I and II leaders, religious leaders, school teachers, groups of school children, youth-group and women's-group members, and credit/farmer groups are other options that have not widely been explored. It was clear that new structures are not necessary.

A nutrition programme addressing the above factors would have to have a wide coverage or be easily scalable to at least the district level and for a reasonable cost, use channels with the largest impact on malnutrition and which functionally benefit the health and development of the population, use change agents and channels that are easily sustainable.

4.2 CONCLUSIONS

How programmes can reach wide coverage

- They must be community based and able to reach large numbers of women in their homes at a reasonable cost.
- They must use existing structures that have district-wide coverage and that use change agents with direct contact with households.

Channels that can be used for optimum impact

- Use existing channels that have direct contact with communities, allowing dialogue on key social issues related to nutrition.
- Use channels that can collect and summarise nutritional status data that can be used to trigger community dialogue on key social issues influencing malnutrition.
- Use channels that can benefit in the short and long term by including nutrition as an additional activity to their already ongoing activities.
- The choice of channels should also consider that there are a myriad of complicated social problems in the community and the best interventions will be the ones that address (or contribute to addressing) some of these

problems concurrently.

- Considered channels should be able to vary the standard nutrition package to take into consideration perceptions and contexts in the communities. Some health and nutrition messages may be varied by season and locality. For instance, it would be idealistic to expect women to have “specific child-care time” in context of high workloads in the planting or weeding period. Some services would have to be provided in the homes to families as they did their tasks during some seasons, while in other seasons outreach services in the communities or markets would be more appropriate.

Useful change agents

- Use change agents that have direct continuous contact with households/communities and, if possible, direct contact at the household level (i.e., do not require the target beneficiary to move outside the household); that can bring key messages/services on the control and prevention of malnutrition to the household level; and that can continuously monitor the implementation of desired practices.
- The agents should also consider that behaviours related to nutrition do not change overnight, but may take years to change and need reinforcements and a change in culture and attitudes.
- Use agents with a low default rate but that are also able to reach a large number of target households (e.g., those with pregnant women and/or with children 0-24 months of age) at a low cost per beneficiary, and/or that do not require expensive/costly incentives to induce them to provide the required services.
- Agents should be acceptable to the community, trusted and influential in communicating the intended messages.

5. Recommendations

Multiple interventions are needed to address food insecurity and malnutrition in the study districts. No one single sector can sufficiently address the prevailing food insecurity and malnutrition in these districts. Inter-sectoral strategies that go beyond the role of one sector are needed.

5.1 KEY CHALLENGES/ISSUES TO BE ADDRESSED

Address all forms of malnutrition, not only the severe acute forms of protein-energy malnutrition, but also micronutrient deficiencies and the moderate forms. Also prevent malnutrition.

Household food insecurity

Household food insecurity must be priority, as it is for the communities. Address issues to improve food security such as:

- Providing farming inputs and implements to more people (and especially the poor), but time distribution so that they will not be used as food (in case of seeds) nor sold nor exchanged for other individual (like alcohol) or household needs.
- Support diversifying the kinds of foods produced by the household by balancing high-yielding crops and fast-growing varieties (drought tolerant), widening foods sources (including cereals, roots, tubers, vegetables, fruit trees raising of small livestock), and promoting home storage, processing and preservation, as an interim measure to mitigate seasonal food shortages.
- Initiate a community-based early warning system that advises farmers on timely planting and when to start to sell their harvests.
- Enact district- and/or county-level bylaws to provide a framework for responsible behaviour and mitigate the escalating effects of misconduct, including alcoholism and GBV.
- Provide food support to the absolute poor, chronically sick, child-headed households, households where the parents are alcoholics, those with madness and their children. Also provide food relief during food deficit periods for households with children with SAM. An alternative would be to provide blanket micronutrient supplementation, sprinkles or lipid-based nutrient supplements for all children 6-23 months of age during the food deficit seasons.

Women's time and workload

Issues of women's time and workload must be addressed as they are key limiting factors to implementing appropriate practices or seeking nutrition services.

- Use Participatory Rural Appraisal (PRA) approaches to map daily time use (daily routine diagrams) by women and men and changes in women's influence in decision making at the household level. Use these findings to hold dialogues to persuade men to take more responsibility in some production tasks, like doing more of farm work, fetching firewood or water, or processing food. Dialogues need to happen at different levels and using different channels.
- Support women with improved and appropriate technologies to reduce their workload, including labour saving cereal grinders, energy saving stoves and water tanks.
- Support the community's nutrition services and, if possible, the households' with a built-in mechanism for referral and follow-up and reminders to use key health and nutrition services, like antenatal services for pregnant women, micronutrient supplementation, deworming, immunisation and nutrition education.

Underlying causes of malnutrition

Support communities to create awareness, conduct dialogue and build local skills on how to deal with other underlying causes of malnutrition.

- Conduct PRA and draw impact diagrams on what children, women and men say happens when parents consume too much alcohol; youth, specifically teenage pregnancies; traditions; GBV; and others. Hold discussions on how these issues have affected child care, health and nutrition in the communities and what households commit to do differently.
- Use collected nutrition data to trigger dialogue on some of the key issues and on key messages on nutrition.
- Hold a community dialogue on the link between childhood and maternal malnutrition and health, especially sanitation and hygiene. Talk about safe drinking water, washing hands and breasts before feeding, safe food handling, using toilets, and disposing waste.
- Demonstrate how to make locally available foods more energy and nutrient dense, or how to use multiple-micronutrient sprinkles for complementary feeding.
- Communicate infant and young child feeding messages targeted to the household, especially to fathers, grandmothers and older children.

5.2 KEY CHANNELS AND CHANGE AGENTS TO USE

Use one or a combination of the following channels to initiate and create dialogue; communicate key nutrition and food security messages; and create the referrals, follow-up and reminders for action in nutrition.

- LC members can be used to reach the villages they are responsible for as part of their responsibilities. They can mobilise communities to action in a certain area, enforce bylaws and initiate/facilitate community-based dialogues on specified issues. They can also mobilise NGOs, community-based organisations and other institutions working in their localities for common action on food and nutrition. But for this, use LC members to initiate community dialogue on key issues and enforcement set bylaws.
- Use of schools, as they have a wider coverage than health facilities. School children can be trained and motivated as change agents. They can collect nutrition data for surveillance and as case-finding; communicate key nutrition messages to relatives and neighbours; and provide referrals, follow-up and reminders. School children can also participate in planting fruit trees and keeping a backyard garden in their homes.
- Religious institutions have wide coverage and existing and self–sustaining structures. Women's, men's and youth groups based within religious institutions can be facilitated to create awareness among their members and neighbours, act as support groups, or provide peer pressure. They can also hold key dialogues on the social issues affecting child care and nutrition.
- FM radios have wide coverage, but are motivated to a large extend by "business". They can create awareness and hold debates and dialogue on certain issues.

5.3 NEXT STEPS

Conduct community action planning as a strategy for designing identified strategies with representatives of the identified channels. Then hold a meeting that brings together local leaders; the key sectors of health, agriculture, community development and education; and NGOs to make a presentation of the findings of this exercise. Proposed actions should be presented, discussed and put in place as a team to plan, implement, monitor and evaluate the pilot of the strategies suggested.

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