

THE FOOD SECURITY AND AGRICULTURAL LIVELIHOODS (FSAL) CLUSTER

Mid season Food Security Assessment Report Karamoja sub-region



EUROPEAN COMMISSION



Humanitarian Aid



August 2009

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Food and Agriculture Organization (FAO) of the United Nations
On behalf of the Food Security and Agricultural Livelihoods Cluster*

Table of contents

	Table of contents	1
	Acronyms and abbreviations	3
	Executive summary	4
1.1	Background	5
1.2	Objectives of the assessment	6
2.0	Methodology	6
2.1	Sources of information/Data collection tools	6
2.2	Assessment team	6
2.3	Sample selection	6
2.4	Data processing and analysis	7
3.0	Results of the assessment	8
3.1	Agricultural activity calendar	8
3.2	Rainfall performance	8
3.3	Where is he affected population	9
3.4	Crop production during the season	11
3.4.1	Cultivation method	11
3.4.2	Planting performance	11
3.4.3	Germination performance	12
3.4.4	Crop performance and condition	12
3.4.5	Expected and current harvest	14
3.5	Affected population	16
3.6	Causes of poor crop performance and harvests	16
3.7	Food consumption	17
3.8	Coping strategies	18
3.9	Livestock production	18
3.9.1	Livestock ownership	18
3.9.2	Access to animal products	19
3.9.3	General constraints to livestock production	20
3.9.4	Animal body and pasture conditions	21
3.9.5	Availability of water for crop and livestock production	22
3.10	Income sources and expenditure	23
3.11	Market information for major crop staples and livestock products	24
3.11.1	Prices trends	24
4.0	Recommendations	25
4.1	Short term responses	25
4.2	Intermediate responses	25
4.3	Long term responses	25
5.0	Conclusions and Recommendations	26

	List of figures	
Fig.1	Karamoja production zone	7
2	Rainfall performance for districts within Karamoja sub-region	9
3	Map showing location of most affected districts	10
4	Germination performance of planted seeds of major crops	12
5	Growth stage by major crops cultivated in current season	13
6	Growth condition by major crop cultivated in current season	13
7	Plant condition by major crop cultivated in current season	14
8	Comparison of expected/current harvest of the 2009 and 2008 by crop	14
9	Perception of farmers on level of harvest by district	15
10	Perceptions on the level of harvest by crop	16
11	Food sources by district	18
12	Number of meals consumed per day	18
13	Causes of livestock loss	20
14	Frequency of accessing livestock products by district	21
15	General constraints to livestock production	22
16	Constraints to accessing pasture	22
17	Water sources	23
19	Constraints to water use	24
	List of tables	
Table 1	The most affected sub-counties in Karamoja	10
2	Acreage cultivated and relative importance of crop	11
3	Estimated numbers of affected households	16
4	Livestock owned	19
5	Change in livestock products consumption by households	21
6	Prices of livestock products	25

ACRONYMS AND ABBREVIATIONS

APFS	Agro-Pastoralist Field School
CBPP	Contagious Bovine Pleuro Pneumonia
CfW / CFW	Cash-for-Work
DAO	District Agricultural Office
DDPRC	District Disaster Preparedness and Risks Coordination offices
ECHO	European Commission's Humanitarian Aid Office
EVI	Extremely Vulnerable Individuals
FAO	Food and Agricultural Organisation of the United Nations
FFW	Food for Work
FSAL	Food Security and Agricultural Livelihood
GFD	General Food Distribution
GoU	Government of the Republic of Uganda
IDP	Internally Displaced Persons
LTM	Long Term Mean
MAAIF	Ministry of Agriculture, Animals, Irrigation and Forestry
NGO	Non Government Organisation
OPM	Office of the Prime Minister
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office for Coordination of Humanitarian Affairs
WFP	World Food Program

Executive summary

Following the poor performance of the rains in the first season 2009, food crisis risk has been reported in many parts of the country, especially in the north and north-eastern Uganda. The Food Security and Agricultural Livelihood (FSAL) cluster members and the district local government, with coordination support from FAO, conducted a mid-season food Security assessment in Karamoja. The purpose of the assessment was to provide an update on the situation and, based on the results, recommend an appropriate emergency response.

The results of the assessment revealed that the causes of the recent food crisis were, first, the inability of the population to sustain itself through cultivation because of the failed previous harvests, which generated a complete reliance on external food aid as well as a virtual absence of seed stocks; the low acreages opened for cultivation of crops; pest and diseases attacks on crops and the recent increase in food prices which forced the households to sell assets –mostly cattle- in order to buy food and other imperative purchases.

The prolonged dry spell from April to June this year forced the farmers to delay planting. The rains resumed in late June but only for a brief period of time, exacerbating the dry spell effects during crop development stages. Pests and diseases also took an additional toll on the crops and eventually lead to massive crop failure and a poor harvest.

The most affected areas were the eastern parts of Kaabong, Kotido, Moroto, Abim districts and the northern part of Nakapiripirit district, but it has also been estimated that the whole rural population of the sub-region has been severely affected by the poor performance of the season.

Since Global Food Distribution (GFD) resumed in 2008 for almost 90% of the population, the situation could be worse and concern is urgent about the food security situation for the months to come (October to December 2009), as it appears that the harvest (July/August 2009) will probably not produce more than 50 percent of a normal harvest. The immediate responses suggested by the affected communities include immediate provision of food aid, provision of seeds and planting material for early-maturing crops and provision of farm tools to increase the opening of land.

Preliminary assessment results were presented to the FSAL cluster on August, 11, 2009. Immediate responses suggested by the FSAL cluster included the continuation of the provision of targeted food aid from October to December; provision of early maturing and drought tolerant crop varieties, strategic restocking, especially with small ruminants and cash for work activities in labour based rehabilitation projects. For the longer term, all interventions should ideally be embedded in management solutions that take into account sustainable soil and water management, afforestation and livestock.

1.0 Background

Karamoja is a subregion in eastern Uganda with an estimated population of 1.3 million. The sub-region is divided into five administrative districts: Nakapiripirit, Moroto, Kotido, Kaabong and Abim. The sub-region borders Kapchorwa and Kumi districts in the south, Katakwi and Lira districts in the southwest, Pader and Kitgum districts in the northwest, Sudan in the north and Kenya to the northeast. Except for Abim district, most of Karamoja is semi-arid with the majority of the population leading a pastoral or agropastoral lifestyle.

The sub-region suffers the highest poverty levels of the country, with 80% of the total population living below the poverty line. Besides acute poverty, Karamoja is characterized by a combination of vulnerability to drought, poor infrastructure and basic social services delivery, limited marketing opportunities especially for the livestock, natural resources degradation, social and cultural marginalisation, long-standing dependency on external aid and most importantly chronic insecurity.

Overall, the security situation has greatly improved in the entire region and humanitarian access is now largely unhindered, though pockets of instability remain. Since 2008, the Ugandan army and police have deployed forces in Karamoja that patrol the region permanently while herders have been aggregated in *kraals* and provided with protection by military detachments. However, insecurity and the restrictions to the movement of cattle have exacerbated the food insecurity of the region by not allowing the herds to make use of the abundant pasture.

Unlike the rest of the country, with two rainy seasons and two planting seasons, Karamoja has only one cropping season which begins in April and ends in October, split by a dry spell in June to July. From 2001, there has been an intensification of extreme weather patterns (climate variability/changes) in the sub-region resulting in extended dry spells every second year (2002 and 2004) and also during the last three years (2006 to 2008).

Animal and crop diseases have ravaged the region over the past three years, killing up to 17 percent of small ruminants and 7 percent of cattle and blighting the 2007 sorghum crop. Throughout the final quarter of 2008, the basic living conditions and welfare of populations across much of the Karamoja region continued to deteriorate, as rains came late and light, leading to a third consecutive year of harvest failure, worsening the already precarious health of livestock – the population's main livelihood – and thus further jeopardizing food, nutritional and livelihood security throughout the region.

The general agricultural constraints in Karamoja include the declining land fertility due to monoculture and poor agricultural practices, poor pre and post harvest technology, rudimentary tools and manual labour, low quality seeds, lack of drought resistant varieties of crops, insecurity, human disease, low coverage of agricultural extension services and poor infrastructure, particularly the lack of adequate access to markets. Unreliable and insufficient rain patterns make it difficult for farmers to know when to plant seeds. Cyclical droughts and erratic rainfall have affected crop production and pasture for livestock in the subregion, thereby having a direct negative effect on the livelihoods of the population. The extended dry spells exert pressure on water availability in most parts of the subregion, with average distance to water for livestock at four kilometres. Inadequate water for humans and livestock, as well as gender imbalance in labour for cultivation, also result in sub-optimal production.

Against the backdrop of two missed harvests (2006 and 2007), targeted food distributions had resumed in Karamoja in February 2008, followed by a GFD targeting over 707,000 people beginning in March 2008. Under the GFD, beneficiaries received a one-month ration with some 400,000 Karimojong in acute food and livelihood crisis given 50 percent rations and 300,000 in humanitarian emergency given 70 percent rations, as per the Integrated Phase Classification exercise carried out by WFP and partners. However, as the prolonged dry spell continued in 2008, resulting in late and reduced planting and a growing toll of animal loss due to disease, the GFD resumed in October/November 2008. In April 2009, the number of WFP beneficiaries for the five Karamoja districts exceeded 1,125,000 individuals (source: WFP, 2009).

In June 2009, crop assessments were conducted by FAO in the whole region. They concluded that the most drought tolerant staple crop, sorghum, suffered from the extended June dry spell but could recover with the rain which resumed during the last week of June. Most drought prone crops like maize, beans and groundnuts had already been severely affected by the dry spell and losses were high. In fact, poor performance of the July rains led to further poor crop performance and increased the losses for all crops, especially in Moroto district.

In July 2009, following the presentation of Rapid Assessment results for Acholi and Teso and repeated press reports of a probable incoming food crisis in Karamoja, the district FSAL clusters, in conjunction with the District Agriculture Offices (DAO) with support from FAO, conducted a mid-season food security assessment in the region.

1.2 Objectives of the assessment

The objectives of the assessment were to:

- Establish the current food security situation in Karamoja to guide decision making and interventions
- Assess the performance of the 1st season, 2009 in terms of production from crops and livestock.

2.0 METHODOLOGY

2.1 Sources of information/Data collection tools

Both primary and secondary data sources were used to compile the report. Primary data was collected using structured interview tools that included a household questionnaire, focus group questionnaires and key informant interviews at district and subcounty level for the agriculture officers, veterinary and health officers. Field observations were also carried out by the assessment team.

2.2 Assessment team

The assessment team comprised FAO staff, district agricultural staff of the five districts in the region, WFP, UNOCHA, World Vision, CESVI, ACF Mercy corps, Oxfam GB, Samaritan's Purse, IRC and Uganda Red Cross. The overall coordination of the assessment was done by FAO in conjunction with the District Agricultural Offices of the respective districts.

2.3 Sample selection

It was recognized that Karamoja is generally made up of 3 major agro-ecological or production zones which are the agricultural, agropastoral and pastoral zones.

3.0 Results of the assessment

3.1 Agricultural activity calendar for affected districts

Year	Parameter	January	February	March	April	May	June	July	August	September	October	November	December
Normal	Season	Dry		Rainy			Dry		Wet				Dry
2009		Dry		Wet	Dry	Wet	Dry		Wet				
Normal	Agric activities				planting	Crop development		Harvesting					
2009						planting	Limited crop development		Harvesting				
Normal	Food stocks	Good		Declining				Increasing					
2009		Declining				Exhausted			little or no food stocks				

The calendar above considers the agricultural season as it was dictated by the distribution of seeds by OPM, FAO/ECHO and other NGO or donor agencies. Few farmers had seeds before these mass distributions of late April-May (OPM) and first half of May (FAO). Because of the high volumes donated compared to the very limited local resources available, the individual agricultural practices are considered negligible and are not taken into account in the calendar.

Farmers started to open land and plant at the time of the distributions, since mid-April in the green belt (OPM seeds), since the beginning of May in other areas (FAO seeds). The work on lands and planting accelerated in the second half of May, when steady rains fell. When the dry spell set in in early June, most farmers had planted, those who had not were still opening their land and eventually did not plant, waiting for the rains.

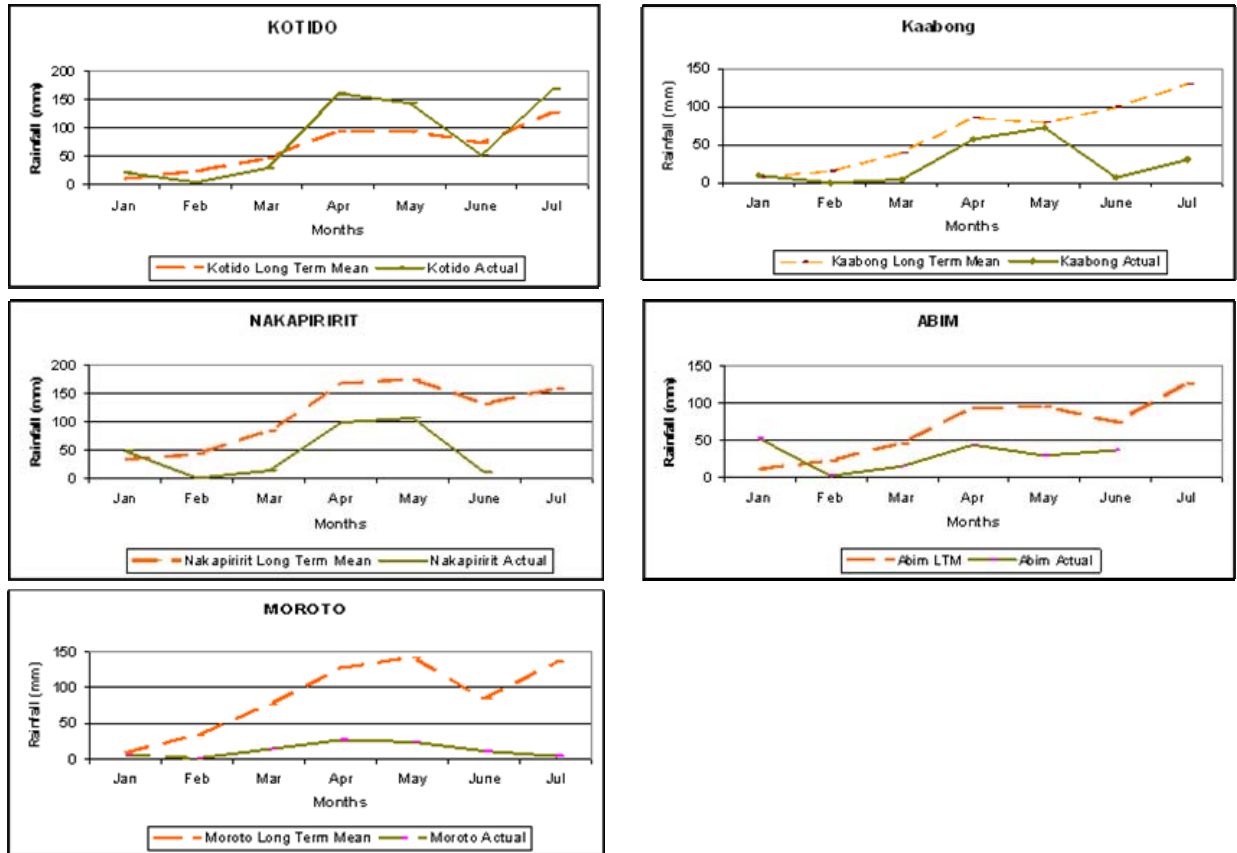
During June, heat and lack of rainfall caused the crops to develop poorly. In the last days of June, some consecutive days of rain gave the farmers the wrong impression that the dry spell was over and farmers were observed ploughing and planting all over the region (FAO field reports). Instead, July was dry, particularly in Kotido and Moroto district, so the condition of the planted crops further deteriorated and the period of harvesting in August shown on the calendar represents not a normal harvest but the harvesting of the surviving plants.

The poor performance of the previous seasons has meant that households have had to be highly dependent on food aid. The little harvest that households were able to realize in the last season 2008 could only take them to about April 2009, but even this was supplemented with food aid. Stocks at household level were exhausted by May and the situation, although expected to improve with the harvest of July, was eventually that food shortages have resulted from widespread crop failure and poor harvests.

3.2 Rainfall performance

Figure 2 compares the rainfall data for the January to June period of 2009 to the Long Term Mean (LTM) for each district in the Karamoja subregion.

Figure 2: Rainfall performance for districts within Karamoja sub-region

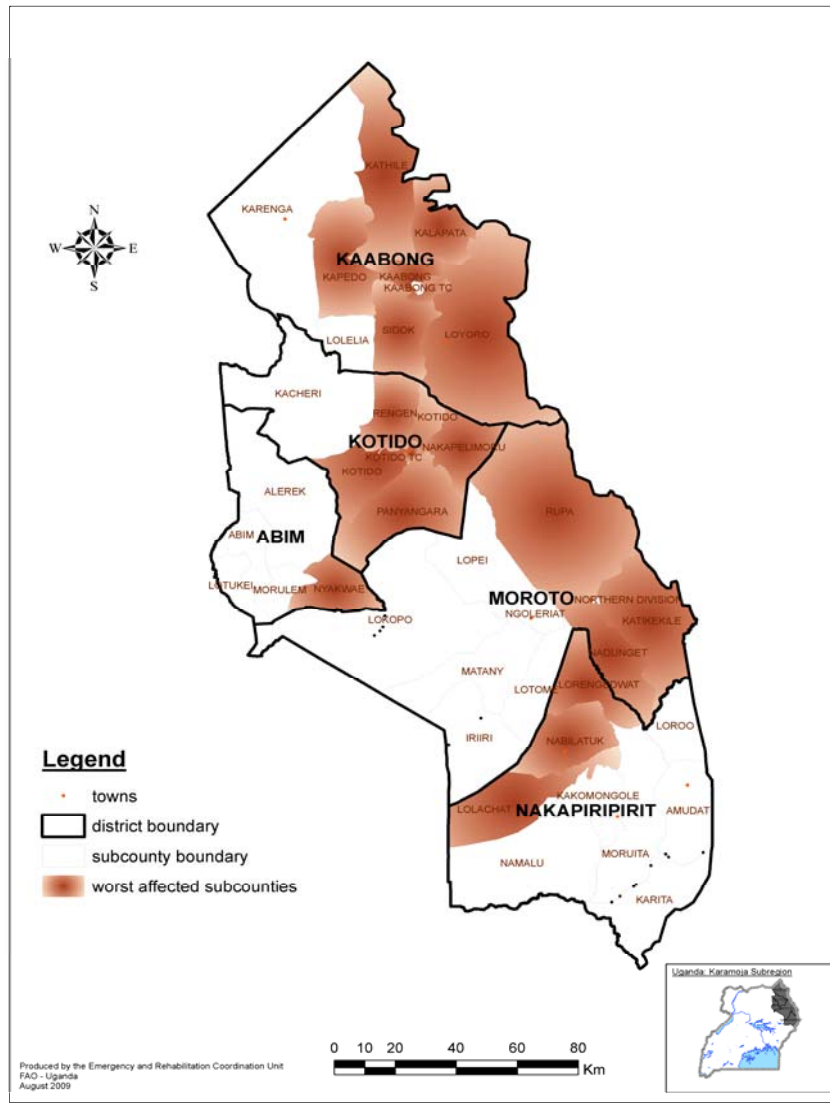


For all districts in the region, little or no rains characterised the months of January to February. The rains started in March but for most of the districts the rain peaks came in early April and late May, then rainfalls declined abruptly in early June. With the exception of Kotido district, all the other districts in the subregion received actual rainfall amounts below the LTM from February to June. The apparent high rainfall amounts received in Kotido hide a poor distribution of the rains which were concentrated just over a few consecutive days.

3.3 Where is the most affected population?

Interviews with the key informants helped to isolate the subcounties which were reportedly most affected by food shortages. The results of the interviews were confirmed through field visits and other assessments done by other agencies. Figure 3 shows the most affected subcounties.

Figure 3: Map showing location of most affected sub-counties



Disclaimer: The names and boundaries shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

Table 1: The most affected sub-counties in Karamoja

District	Sub-county
Kaabong	Kalapata
	Loyoro
	Kaabong
	Sidok
	Katile
	Kapedo
Kotido	Panyangara
	Kotido T/C
	Nakapelimolu
	Rengen
Nakapiririt	Lorengedwat
	Lolachat
Moroto	Rupa
	Nadunget
	Katikekile, Lopeei
Abim	Nyakwaye

The most affected areas in Karamoja are on the eastern side of Kaabong, Kotido, Abim, Moroto and the northern part of Nakapiripirit.

3.4 Crop production during the season

3.4.1 Cultivation method

The majority of households (80 percent) use the hand hoe for opening of land followed by the ox-plough (18 percent). On average, households have access to 2-3 hoes. The main source of tools was through purchase as mentioned by 44 percent of the respondents followed by government (37 percent). Other sources mentioned included donations from FAO in selected subcounties, NGOs and the borrowing of tools from other households.

3.4.2 Planting performance

Almost an equal proportion of households grow crops within the village as those who grow outside the village. The growing of crops outside the village was mainly attributed to the lack of enough arable land (74% of the respondents). This is understandable as whole communities have received seeds as a donation and had to plant them at the same time.

Taking importance of the crop by the number of respondents growing the crop, results in table 2 revealed that the eight major crops grown in the region include sorghum, maize, beans, finger millet, ground nuts, cowpeas, sunflower and simsim.

Table 2: Acreage cultivated and relative importance of crop

Crop	Average Acreage	Number of households that grew crop	Ranking of crop by number of households
Sorghum	1.7	751	1
Maize	1.5	422	2
Beans	1.2	271	3
Finger millet	1.1	241	4
Groundnuts	1.2	222	5
Cowpeas	0.9	181	6
Sunflower	1.2	119	7
Simsim	1.8	97	8
Green grams	1.1	32	9
Cassava	1.1	30	10
Cabbages	0.7	26	11
Bulrush millet	1.2	26	12
Sweet potatoes	1.7	18	13
Pigeon peas	0.8	15	14
Bananas	0.8	4	15
Coffee	2.5	1	16
Average	1.4		

On average, 1.4 acres are cultivated per household with bigger acreages being given to sorghum, simsim, maize and sweet potatoes.

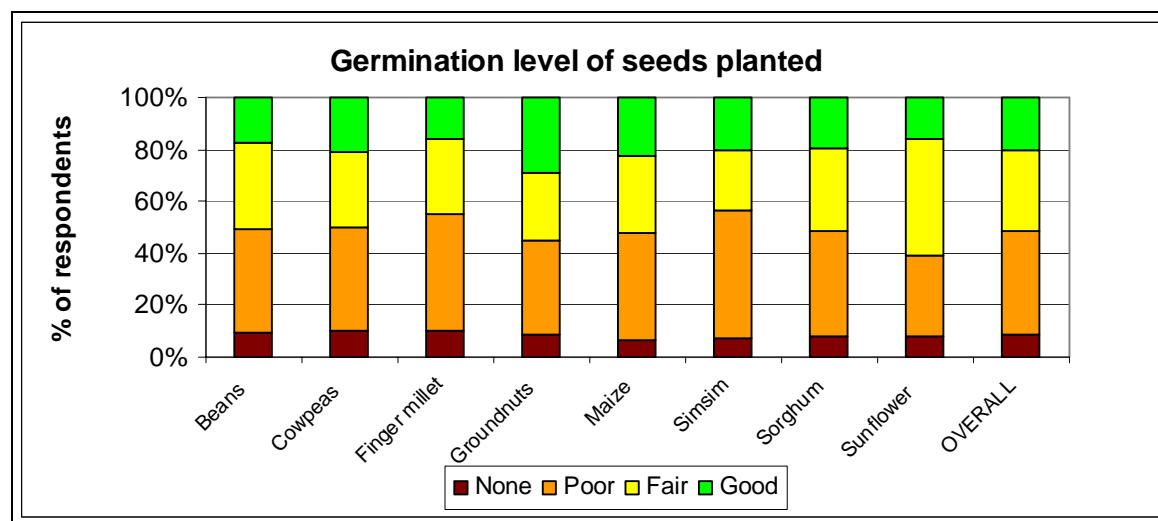
Nearly all the seeds planted for the 2009 season had been donated to the population¹ by governmental institutions and donor agencies, the most important ones being the donations from the Office of the Prime Minister (OPM) and the one from FAO/ECHO which, between them, covered 150,000 households. Another major source of seed was farmers' own seeds, which was reported by 24 percent of respondents while 14 percent purchased seed.

Overall, about 50-60 percent of the seeds received for all crops donated were planted, with the exception of pigeon peas and green grams where less than 30% of the seed received were planted. All millet and rice seeds received were planted when the rains allowed. The major cause for not planting at all was insufficient rain and lateness in time for planting which was attributed to delay in the rains. Other reasons fronted for not planting included the lack of seeds, incapacity to open land, keeping of seeds for the next season and eating the seeds by the households.

3.4.3 Germination performance

One of the early indicators of the performance of a given crop is its germination rate. Assuming that the seeds are of good quality, the major causes for the failure of the germination are the lack of sufficient water, the infertility of the soil and the attacks by pests or diseases.

Figure 4: Germination performance of planted seeds of major crops



Around half of the respondents experienced a fair to good germination level of the seeds, with only about less than 10 percent having no germination at all. The reason put forward by the respondents for poor germination or no germination was the dry spell conditions. According to the DAO of Kotido, crops in the valleys and where there are black soils and good water retention have experienced fair growth.

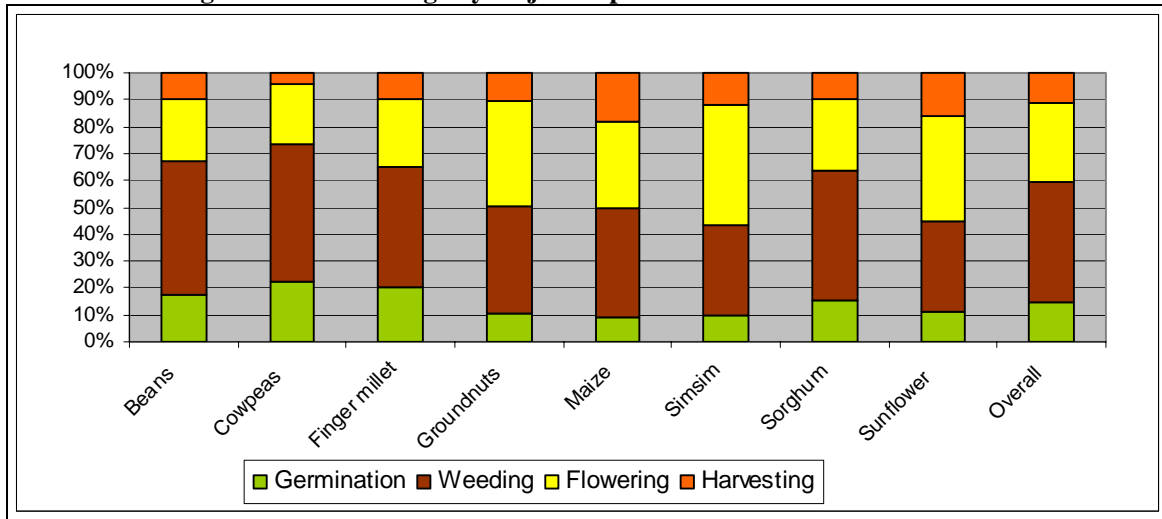
3.4.4 Crop performance and condition

At the time of the assessment (late July to early August 2009), most households (45 percent) reported that their crops were mostly at weeding stage while 30 percent declared that they

¹ FAO Seed Distribution, Post Distribution Monitoring report, 2009.

were at flowering stage. Only 11 percent of the households had started getting a harvest. Details on the growth stages and crop growth condition are revealed in figure 5, 6 and 7.

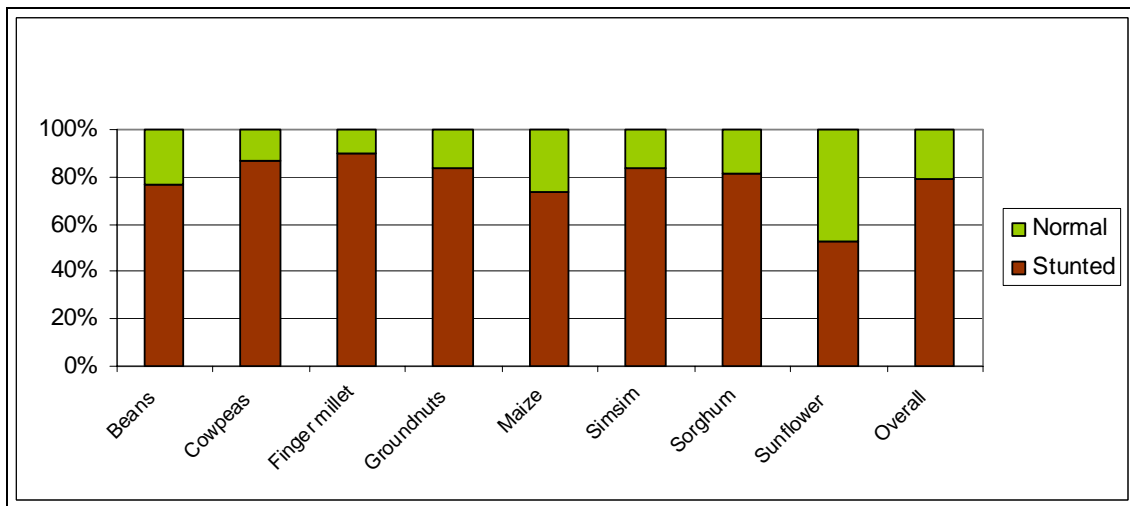
Figure 5: Growth stage by major crops cultivated in current season



Verification through field observations made by the survey team, as well as focus group discussions, confirmed that the general condition of the crops in the region was bad.

Farmers were asked if and how the plants grew. Figure 6 shows the growth condition by major crops cultivated in the current season.

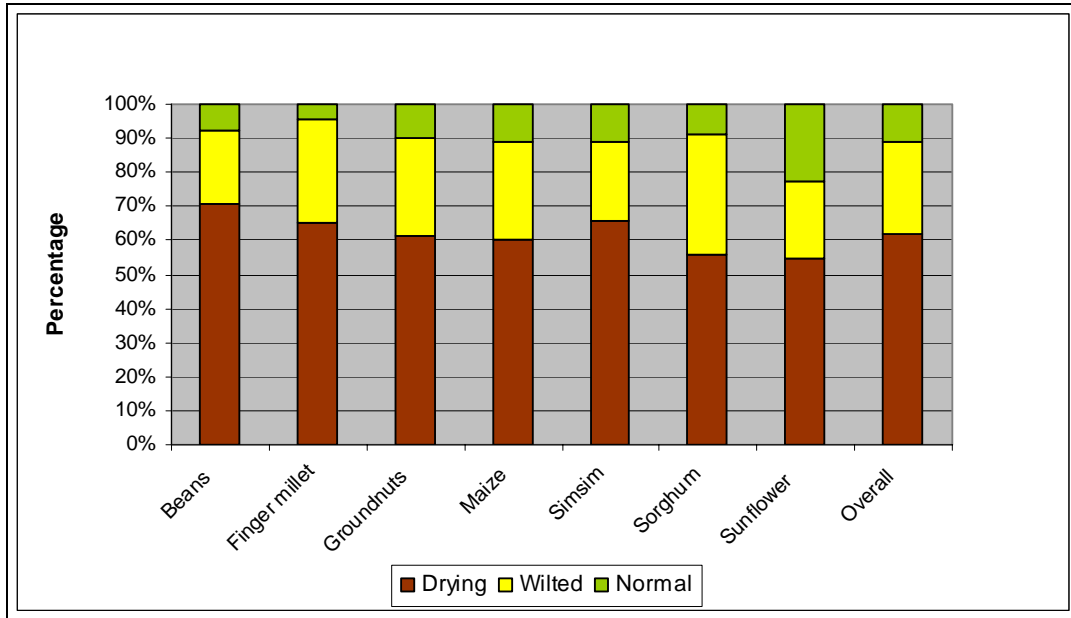
Figure 6: Growth condition by major crop cultivated in current season



For the major crops grown by the sampled households in the current season, 80 percent reported that their crop was stunted with only 20 percent normal. The stunting effect was worst for finger millet, simsim, ground nuts and cowpeas. In the dry areas, most of the cereal crop at the time of the assessment was knee high and wilting. In the wetter belt, the cereal crop was reported to be waist high. The stunting was mainly attributed to the erratic rain pattern.

In a second stage, farmers were asked about the condition of the crops which had grown.

Figure 7: Plant condition by major crop cultivated in current season



Overall more than 85 percent of households reported that their crop was drying up or wilted. Only about 11 percent had normal crop and these were in the wet belt areas.

3.4.5 Expected and current harvest

In order to find out how the different crops had performed under the prevailing weather conditions, farmers were asked to give their perceptions on how the current harvest or expected harvest for each crop, compares with the harvest of 2008. Figure 8 shows how farmers in Karamoja responded, for each of the crops cultivated. The harvests of 2009 started coming in July with the peak expected in August and are to continue until October.

Figure 8: Comparison of Expected/Current harvest of the 2009 and 2008 by crop

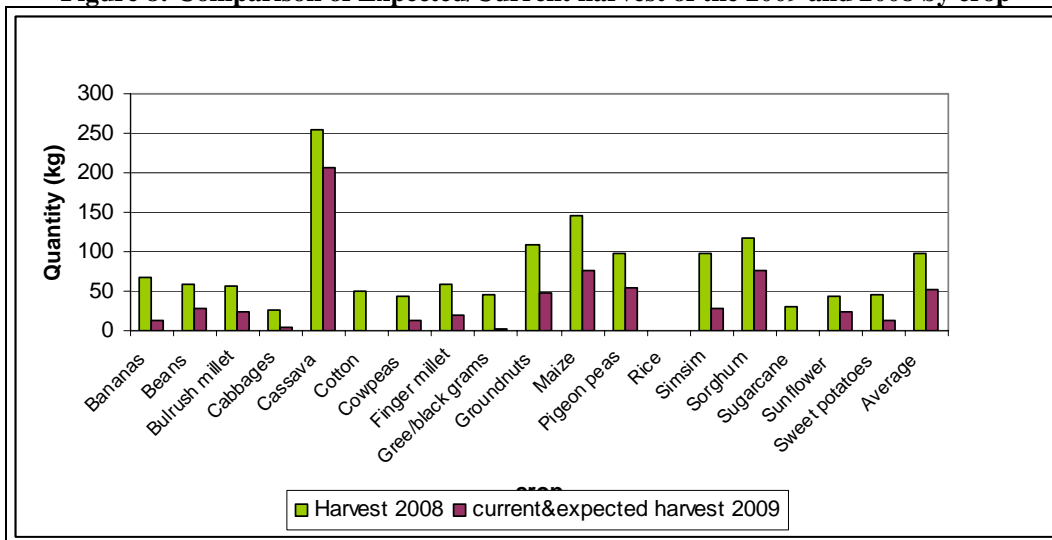
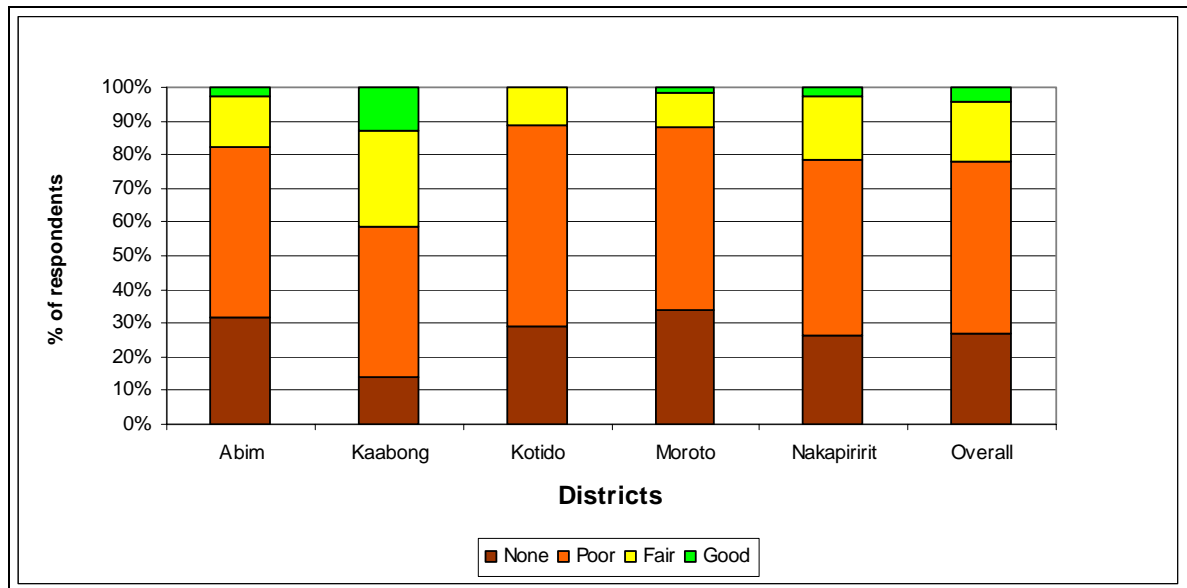


Figure 8 shows that, for all crops, the current or expected harvest this year is lower than what was got in 2008 and farmers expect that the current year will be even worse than 2008. A comparison between the 2009 and 2008 data confirmed that farmers will on average get a 50 percent lower harvest than they got last year.

Overall, the majority of farmers (about 80 percent) expect no harvest or will get a poor harvest (Figure 9). The results also show that the situation is worst off in Kotido and Moroto than other districts where about 90% of households expect nothing or a poor harvest (it is even worth remembering that, because of the number of failed harvests during the past 3 years, the perception by the farmers of “fair” may be considered “mediocre” by agronomic standards)

Figure 9: Perception of farmers on level of harvest by district



Further analysis of perceptions on the current and expected harvest of farmers by crop is detailed in figure 10 below.

Figure 10: Perceptions on level of harvest by crop

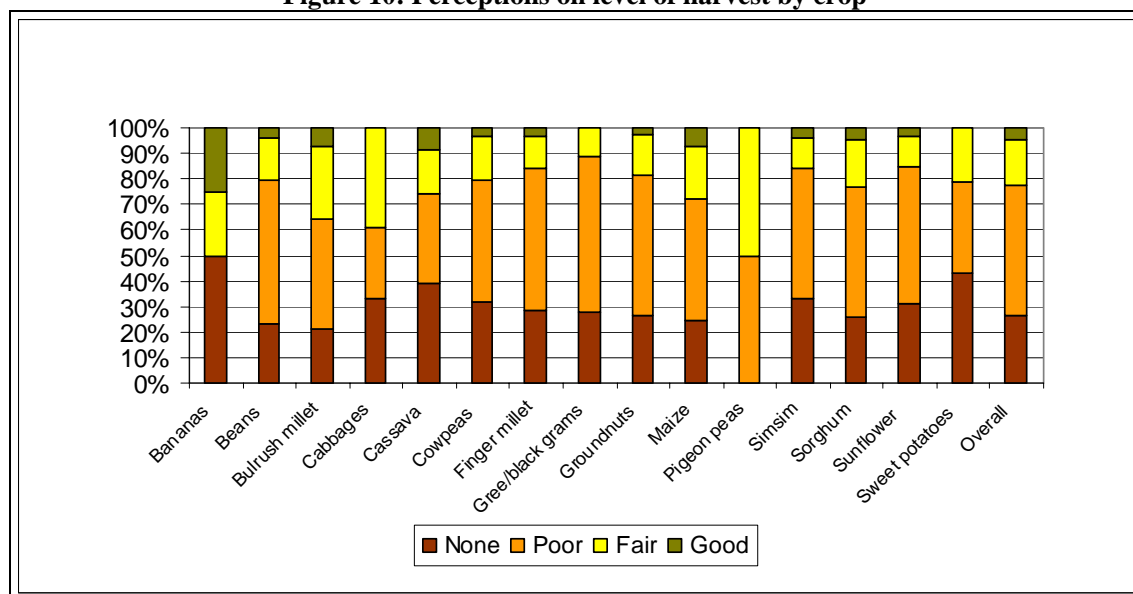


Figure 10 shows that only a small fraction (about 5% at most) expect a good harvest in 2009 with a majority of farmers (about 80%) expecting none to poor harvests. The more optimistic farmers are those located in low laying areas and/or near water channels, where the ground water reservoirs have been replenished during the short periods of rainfall.

3.5 Affected population

The affected population have been identified through their expected level of harvest this year and have been defined as “those expecting none to a poor harvest” were a poor harvest is one were a farmer will get lower than 50 percent of last year’s harvest (refer to figure 9).

Table 3: Estimated numbers of affected households

District	Farmers who will get no or poor harvest	Population affected	Number of households
Abim	82%	44,000	4,889
Kaabong	59%	186,000	20,667
Kotido	89%	167,000	18,556
Moroto	88%	244,000	27,111
Nakapiripirit	78%	178,000	19,778
Overall	78%	819,000	91,000

It is estimated that about 91,000 households are affected and will be in need of food aid up to the next harvest, and thus prevent a further deterioration of their food security situation.

3.6 Causes of poor crop performance and harvests

Through the focus group discussions the communities were asked to rank the production constraints faced in the current season that had also contributed to the poor crop performance of the harvests/expected harvests. The production constraints were ranked as follows:

- Lack of rain (drought conditions)
- Inadequate labour for cultivation and opening of land
- Pests and diseases
- Invasion of gardens by domestic animals

- Invasion of gardens by wild animals
- Hail storms
- Flooding
- Seed availability.

The lack of adequate rain came up as the most important constraint to production. As already mentioned, the rains received this year have been below the long term means for all districts in the region. In addition, these have been erratic and poorly distributed. Seeds were distributed on time for the agricultural season but many farmers did not plant as the rains delayed. This has affected both agricultural and animal production as it has led to wilting and drying up of crops and the lack of water for animals.

The lack of labour (manpower) was ranked as the second constraint. In a region where there is only one agricultural season, it is extremely important that farmers prepare land and plant on time, because missing that very season means that a household will not have any food or seed stock to take them through to the next harvest. Planting late means loss or reduction in yields as young crops either wilt or dry up if they are found in the field when the dry season sets in. The third factor affecting performance was pest and diseases. Sorghum, the main staple crop, has been affected by sorghum ridge (especially the late planted crop), stalk borers and smut while groundnuts and cowpeas have been affected by die heart, leaf curl and groundnut rosette. Cassava brown streak and the elegant grasshopper have attacked crops like cassava.

Seed availability was ranked as the least important constraint to production. This is understandable as massive aid efforts had been set in place by Government and different agencies to distribute seeds to the households for the season. The combined distributions by Government of Uganda (OPM) and FAO/ECHO alone covered nearly the whole population of Karamoja.

3.7 Food consumption

In normal years, the farmers' own production was the main source of food, but other sources have become important due to persistent droughts. Food aid is being distributed to more than 1,125,000 people by WFP, what can be considered a blanket coverage of the rural population. The important crops grown and consumed by households, in terms of acreage planted include: Sorghum, cow peas, finger millet, maize, groundnuts, beans, cassava, simsim and sunflower. Figure 11 shows the contribution of the different food sources to the household food basket.

Figure11: Food sources by district

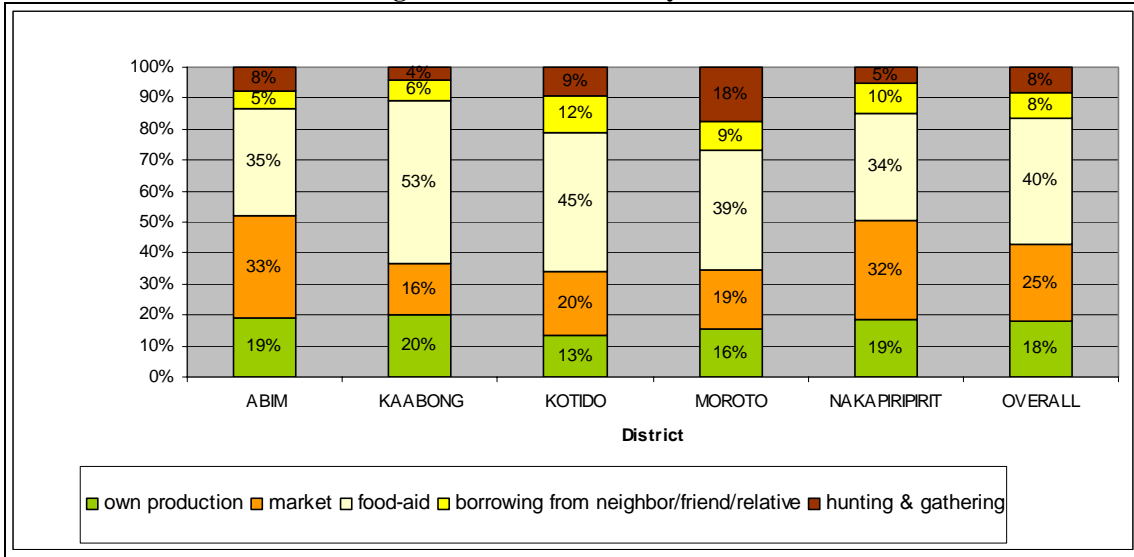
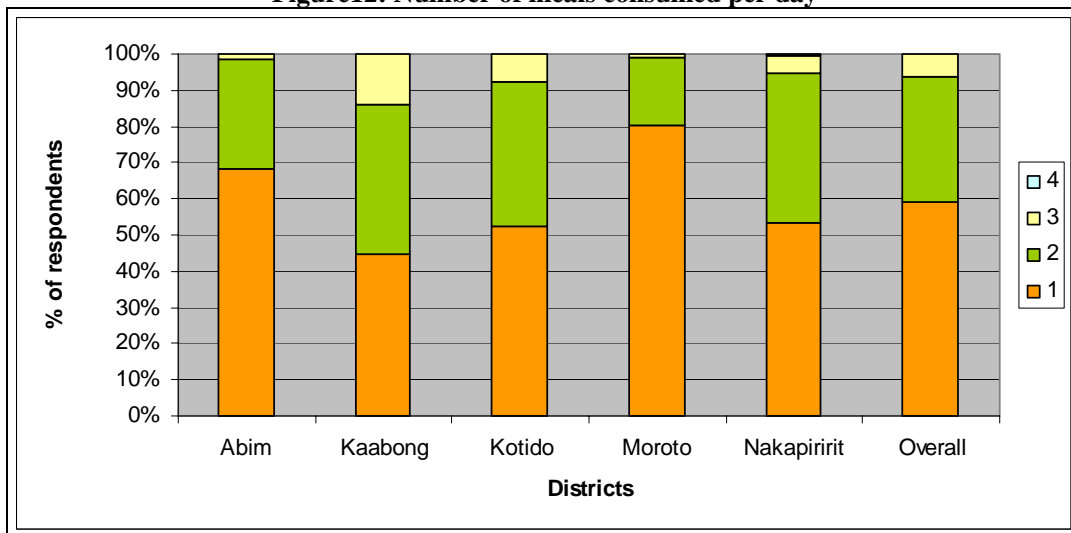


Figure11 shows that the own production makes up only 18% on average of the household food basket. Food aid contributes the biggest proportion (40%) followed by market purchases (25%). A comparison across districts shows that there is more reliance on food aid in Kaabong and Kotido where food aid makes up 53% and 45% respectively of the household food basket. Other food sources include borrowing, hunting and gathering. It is worth noting that hunting and gathering makes up a bigger proportion of the household food basket in Moroto than even own production.

The majority of the population (59%) declares consuming only one meal per day although, if conditions were normal, the number of meals should be two. The Figure 12 shows the number of meals consumed per day across the region.

Figure12: Number of meals consumed per day



The reasons for the abnormally low number of meals have been the scarcity of food, the extreme poverty and the crop failures due to persistent drought conditions.

There has been a change in people's diet since July 2008, because most foods are lacking or have become unaffordable. The households have registered exhaustion of food stocks and the hunger period is expected to be intense from October to December 2009, however since Karamoja has only one cropping season this could be carried over to the following year. Adding to the persistent drought as the main cause of food scarcity, insecurity, theft and high food prices exacerbate the situation.

3.8 Coping strategies

The population is mainly employing distress coping strategies. These include the selling of livestock to buy food (asset depletion), selling of labour in exchange for food (food for work), selling of natural resources (wood, grass, stones, charcoal, bricks) which is detrimental to the environment.

3.9 Livestock Production

3.9.1 Livestock ownership

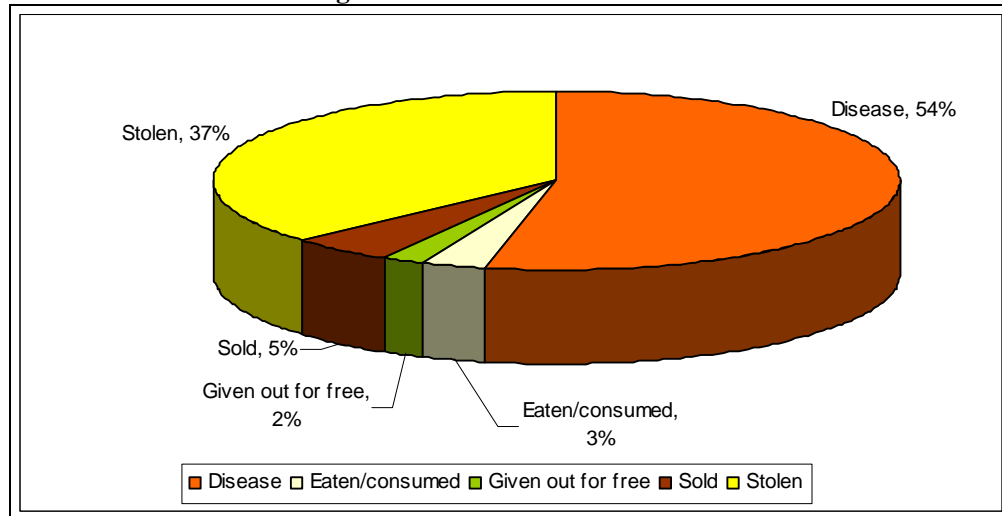
Table 4 shows the number of livestock owned by the households by type. A comparison of livestock numbers owned at the beginning of the year compared to August 2009 showed that there has been a general decline of between 20 to 60 percent in all types of livestock, with the exception of camels.

Table 4: Livestock owned

Livestock Type	Average number of livestock owned	Jan'09	Aug'09	% change
Camels	0.5	0.3	0.3	0
Cattle	17.4	13.6	7.6	-29
Chicken	13.4	10.6	5.5	-23
Donkeys	1.2	1.0	0.4	-3
Ducks	1.5	0.9	1.2	6
Goats	17.7	13.6	8.2	-8
Pigeons	0.1	0.1	0.1	-69
Pigs	3.5	3.1	0.8	-64
Sheep	14.9	11.1	7.7	-23
Turkeys	1.0	0.7	0.6	28

The decline in livestock number has been attributed to a number of causes. Figure 13 shows that the most important ones were diseases and theft.

Figure 13: Causes of livestock loss

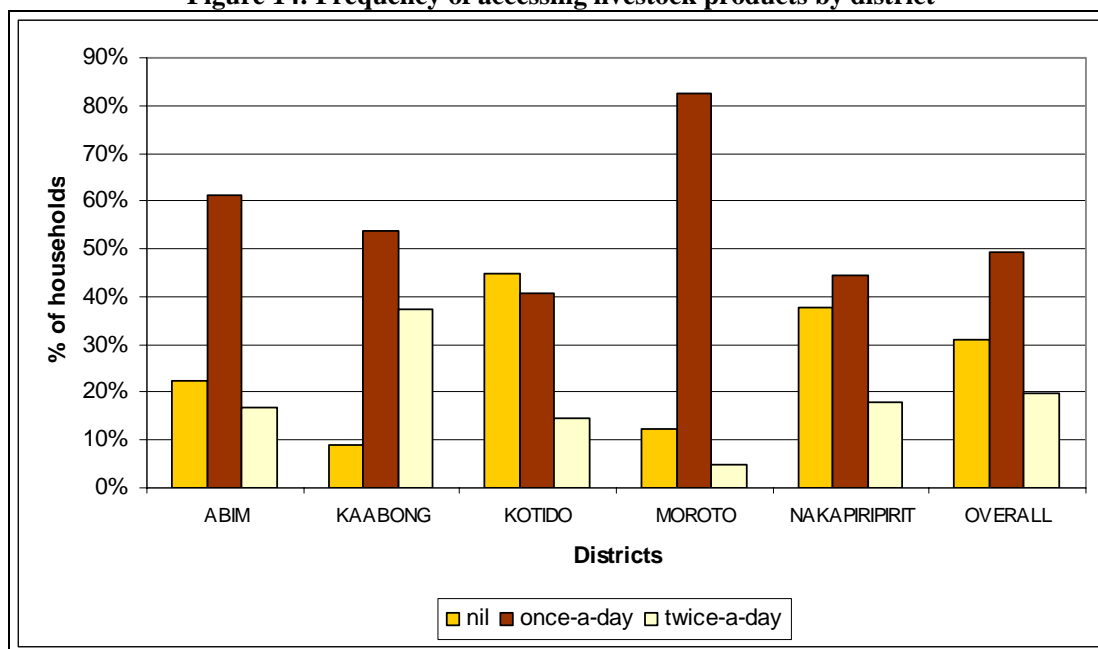


Livestock diseases mentioned through key informant interviews with veterinary officers revealed that the following diseases were common: East Coast Fever, Anaplasmosis, Nagana, Mange, Goat pox and Brucellosis (both in animals and humans). Livestock mortalities due to Peste des Petits Ruminants (PPR), Contagious Bovine Pleuro Pneumonia (CBPP) and Contagious Caprine Pleuro Pneumonia (CCPP) and tick borne infections which are endemic to the region have been low (635 cases for Nakapiripirit and 153 for Moroto). The Newcastle disease in poultry is reported to have killed 1,455 chickens in Moroto district during the past 6 months. Other causes of livestock reduction in numbers include sale, household consumption, gifting to relatives or friends, and as bride price.

3.9.2 Access to animal products

Respondents were asked to indicate the number of times a day when they were able to access livestock products which included milk, meat and blood. Figure 14 shows the number of times households accessed these products in the different districts.

Figure 14: Frequency of accessing livestock products by district



The majority of households accessed on average livestock products once a day, more in Moroto district than in other districts. Households in Kotido had a lower access to livestock products. Though previous studies like the Interagency Rapid Assessment on the impact of protected kraals on agropastoral livelihoods in Kaabong (May 2009) have shown that there has been reduced access to livestock products by households as a result of the kraal system; it was interesting to note that the results of this assessment (table 5) revealed that there has been an increase in the consumption meat and milk of between 22 to 77 percent.

Table 5: Change in animal product consumption by households

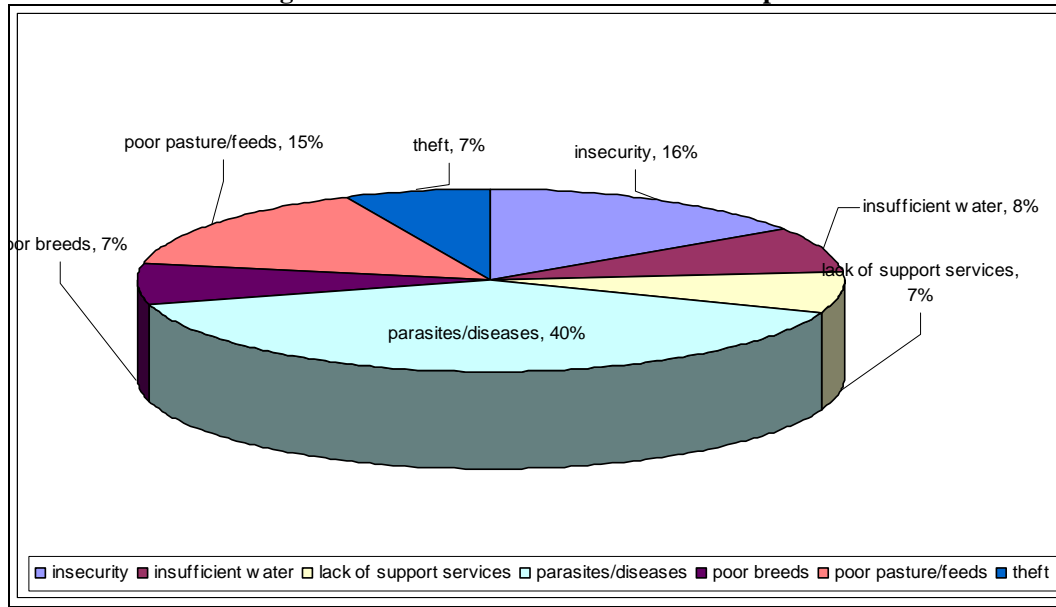
Food item	Qty consumed Aug'09 (nb. of times a day)	Qty consumed Jan'09 (nb. of times a day)	Percentage increase in consumption
Meat	1.5	1.3	22
Milk	1.1	0.7	72

This finding could be attributed to decreased amount of food due to crop failure which has led to a greater reliance on livestock products for bridging the consumption gap; this could be a coping mechanism employed by pastoralists.

3.9.3 General constraints to livestock production

Pests and diseases come up as the number one constraint to livestock production, followed by insecurity (Figure 15).

Figure 15: General constraints to livestock production



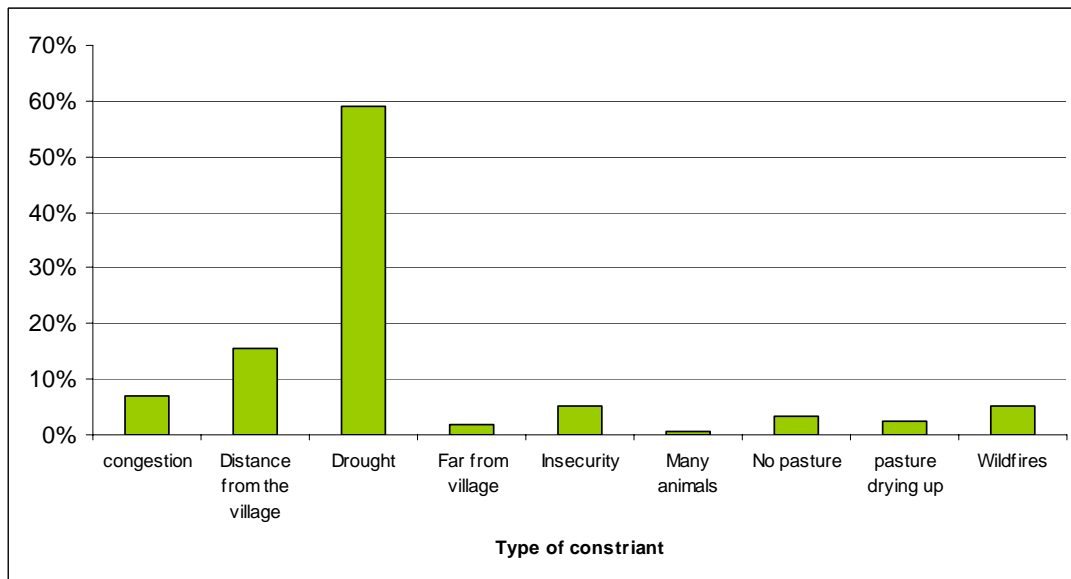
Other constraints include poor pasture//feeds, insufficient water, lack of support services and poor breeds.

3.9.4 Animal body and pasture conditions

General livestock conditions were observed as generally poor. Only in Abim district were livestock conditions observed as fair.

The majority of households access pastures from within the village. The average distance to a pasture source is 12 km with the distance being furthest in Moroto (24 km) and shortest in Abim (2 km). More than 90 percent of households use open grazing or free range method of rearing livestock. Though range land appears to be abundant, there are a number of constraints that affect livestock production, as detailed in Figure 16.

Figure 16: Constraints to accessing pasture

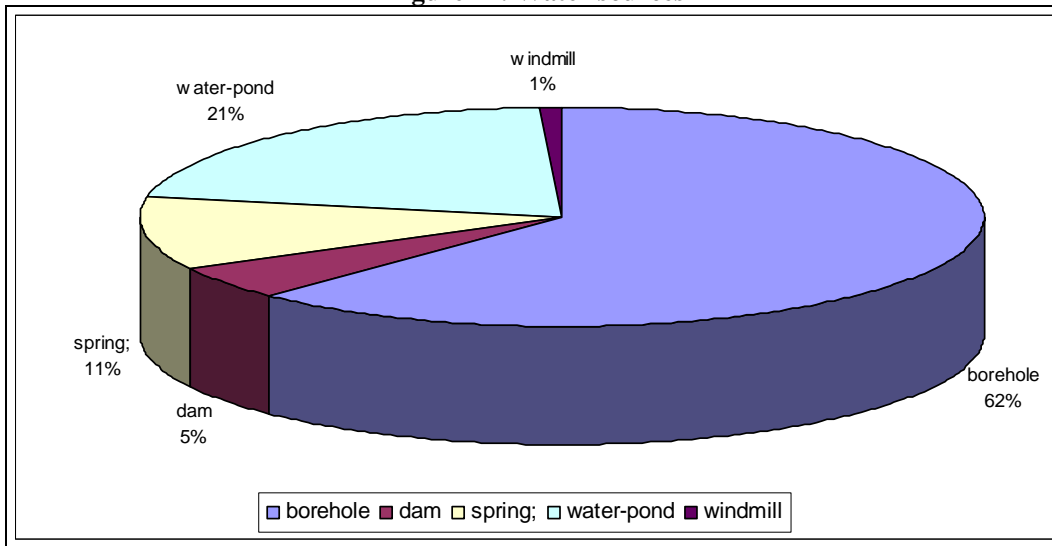


The most important constraints to pasture use are droughts followed by long distances to pasture sources. Other constraints include congestion at pasture sources, insecurity and wildfires.

3.9.5 Availability of water for crop and livestock production

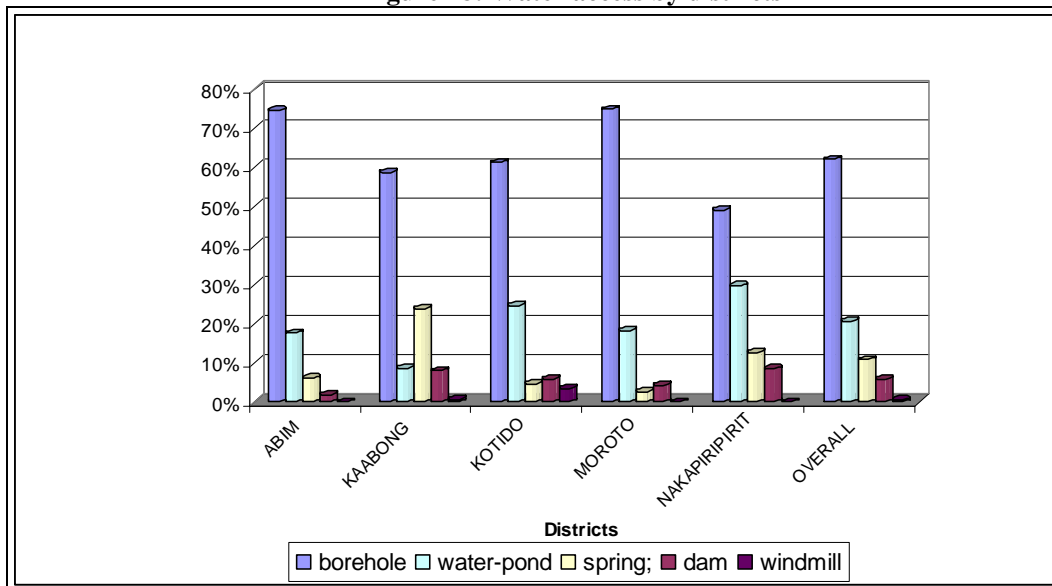
Figure 17 shows that about 62 percent of sampled households access water from boreholes followed by water ponds and springs.

Figure 17: Water sources



Further analysis by district (Figure 18) shows that boreholes are still the most important source of water, followed by water ponds except in Kaabong district where springs are abundant and come second as a water source.

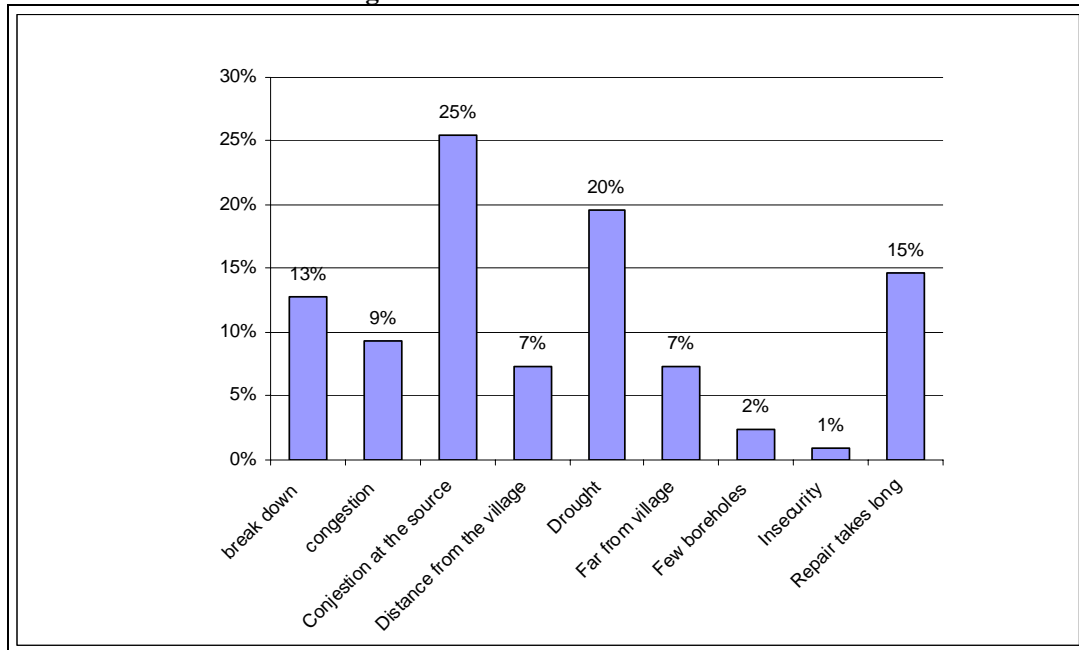
Figure 18: Water access by districts



The households are faced by a number of constraints in accessing water. Figure 19 shows that the leading constraints are the congestion at water sources, followed by drought which caused

water sources to dry up. Other constraints mentioned include breakdown of water sources equipment and long duration between repairs.

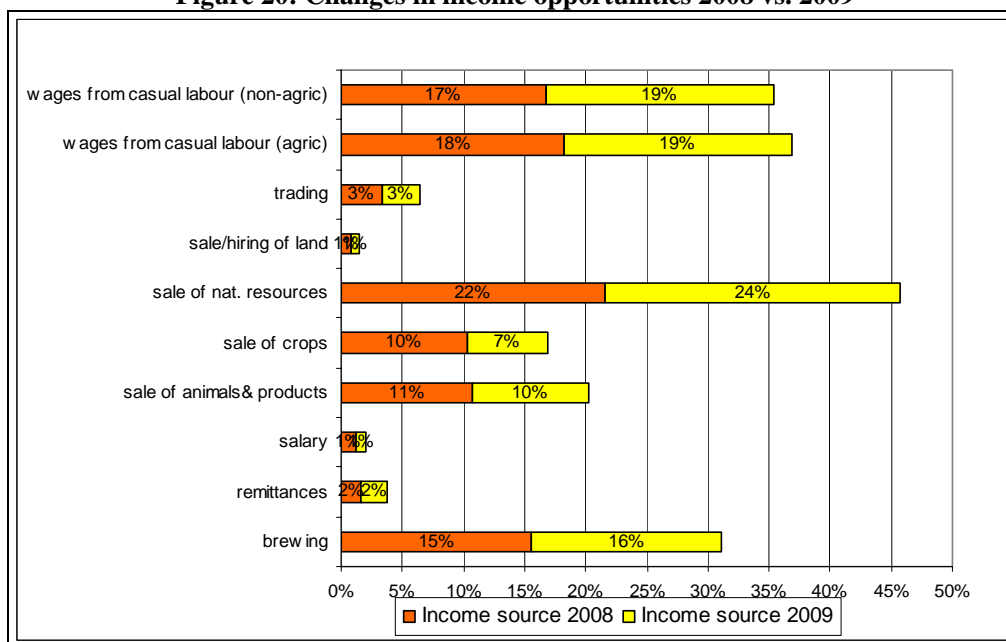
Figure 19: Constraints to water use



3.10 Income sources and expenditure

Major sources of income in the region include wages from casual labour for both agricultural and non-agricultural activities; it is a source of livelihood for 38 percent of the households. This is followed by the sale of natural resources (wood, charcoal, stones, bricks and grass). Brewing comes third with 16 percent of households and sale of animal products by 10 percent of households. Figure 20 endeavours to show the shift in income sources by households between 2008 and 2009.

Figure 20: Changes in income opportunities 2008 vs. 2009



There has generally been little change in income sources when a comparison of income sources for 2009 and 2008 is made. The only sizeable change was observed in the sale of crops where there was a 3 percent decline in the number of households that mentioned it as an important source of income in 2009. The small changes in income sources between 2008 and 2009 could be the result of limited income opportunities and alternative sources of livelihood in the region while the change observed for crop sales was attributed to drought that led to crop failure and a reduction in amounts of crops that could be offered for sale.

3.11 Market information for major crop staples and livestock products

3.11.1 Prices trends

There has been an increase in prices of food items and these prices are expected to remain high, given the current crop failure. There is little food available in the market. The market price trend depicts an overall increase in food commodity prices, with the most popular staples maize and sorghum price increase oscillating between 18 and 21% during the past 6 months.

Table 6 shows that livestock prices have also increased when compared to prices 12 months ago. The increase in prices has been attributed to high demand from Sudan markets.

Table 6: Price of livestock and livestock products

Type of livestock	Current price (UGX)	Price 12 months ago	Percentage change
Cattle	250,000	200,000	25%
Goats	60,000	60,000	0%
Sheep	40,000	30,000	33%
Chicken	8,000	6,000	33%
Livestock products			
Milk	500	300	66%
Meat	3,000	2,500	20%
Poultry	8,000	6,000	33%

The prices of livestock and its sub-products have increased by 20 percent to more than 60 percent except for goats whose price has remained constant. Sheep, goats and bulls were observed to be offered for sale during the current period. A direr situation would enlist the presence and sale of even female cattle on the market. The prices for cattle are increasing because demand is high; prices for goats have remained stable because there is low demand and a constant supply. The prices for livestock may increase further because some harvest is likely, so animal owners will be reluctant to sell their animals, reducing the supply.

The highest price increase has been observed for milk; this could be because of low production leading to scarcity.

4.0 Recommendations

The affected communities and the local authorities, through the focus group discussions, suggested immediate responses to address the hunger situation and these were categorized in short term, intermediate and long term responses. The responses included the following:

4.1 Short term responses:

- Targeted food relief /cash for food in the affected subcounties to continue (October-December)
- Support to communities with early maturing & drought tolerant crop varieties and planting material

4.2 Intermediate Responses:

- Strategic restocking, especially with small ruminants (small ruminants are drought tolerant)
- Cash for work in labour based rehabilitation projects
- Promote Water Harvesting
- Promotion of indigenous tolerant and high yielding crops in the region
- Institute functional Disaster management system (EWS and contingency plan)
- Provide training on post harvest loss reduction and food storage
- Institute community by-laws were each household should plant at least ½ acre of sweet potatoes and cassava.
- Establishment of block farms in fertile areas
- Support communities in income generating projects, especially the vulnerable persons like women, youth and elderly groups
- Provide farm implements like ox-ploughs and tractors for fast land opening and increase in cultivated acreages.

4.3 Long term responses:

- Multiple water harvesting & small scale irrigation projects for high value crops as well as intensive farming
- Support to livestock disease control interventions (vaccination & supportive therapeutic measures)
- Farmer training and capacity building through the establishment of Agro-pastoralist & Junior Farmer field school programmes
- Support establishment of Village Savings and Lending Association schemes
- Interventions to combine Agric – Livestock – Water Harvest Management
- Development of infrastructure for disaster management
- Support Peace building and provision of security.

- Open access roads to allow easy transportation of food to the districts.

5.0 Conclusions and Recommendations

The FSAL cluster estimates that 80 percent of households in Karamoja subregion will be facing serious food shortage as the harvests of July and August will not provide sufficient harvest. Already 80 percent of the farmers have the perception they will harvest less than 50 percent of last year's harvest. With no household food stocks from previous harvests, it is anticipated that the hunger gap will be most intense between October and December. The most affected areas are the eastern side of Kaabong, Kotido, Abim, Moroto and the northern part of Nakapiripirit.

Karamoja is known to have a unimodal agricultural season, meaning one major cropping season. This season has so far performed poorly, being characterized by low rainfall and their poor distribution. El Niño rains have been predicted for the country in the coming months of September and October. For the region, it is anticipated that these rains will be mild and a blessing rather than another curse for Karamoja. Most of the population in the region relies on food aid which, as a result, makes up the biggest proportion of the household food basket. The cluster recognizes that the situation in Karamoja is chronic and that the region has been suffering from persistent droughts for over 3 years, thus interventions should largely aim at addressing the underlying factors, to prevent a perpetual dependence on food aid by the population.

The FSAL cluster recommends the following:

- Provision of food aid from October to December 2009.
- Provision of agricultural production inputs comprising drought tolerant crops and early maturing crops (sorghum, cowpeas, green gram, millet) and tuber crops (cassava and sweet potato).
- Promotion of indigenous high yielding crops like the Tapera beans and the wild traditional sorghum. Emphasis should be placed on promotion of indigenous crops that perform best in Karamoja
- Promotion of animal traction in increase opening of land
- Strategic restocking of small ruminants
- Promotion of cash for work for labour intensive projects
- Promotion of water harvesting and irrigation
- Need to train farmers in crop husbandry to build their capacities in crop cultivation
- Integration of agriculture and livestock practices
- Development of infrastructure for drought disaster preparedness and Early warning.