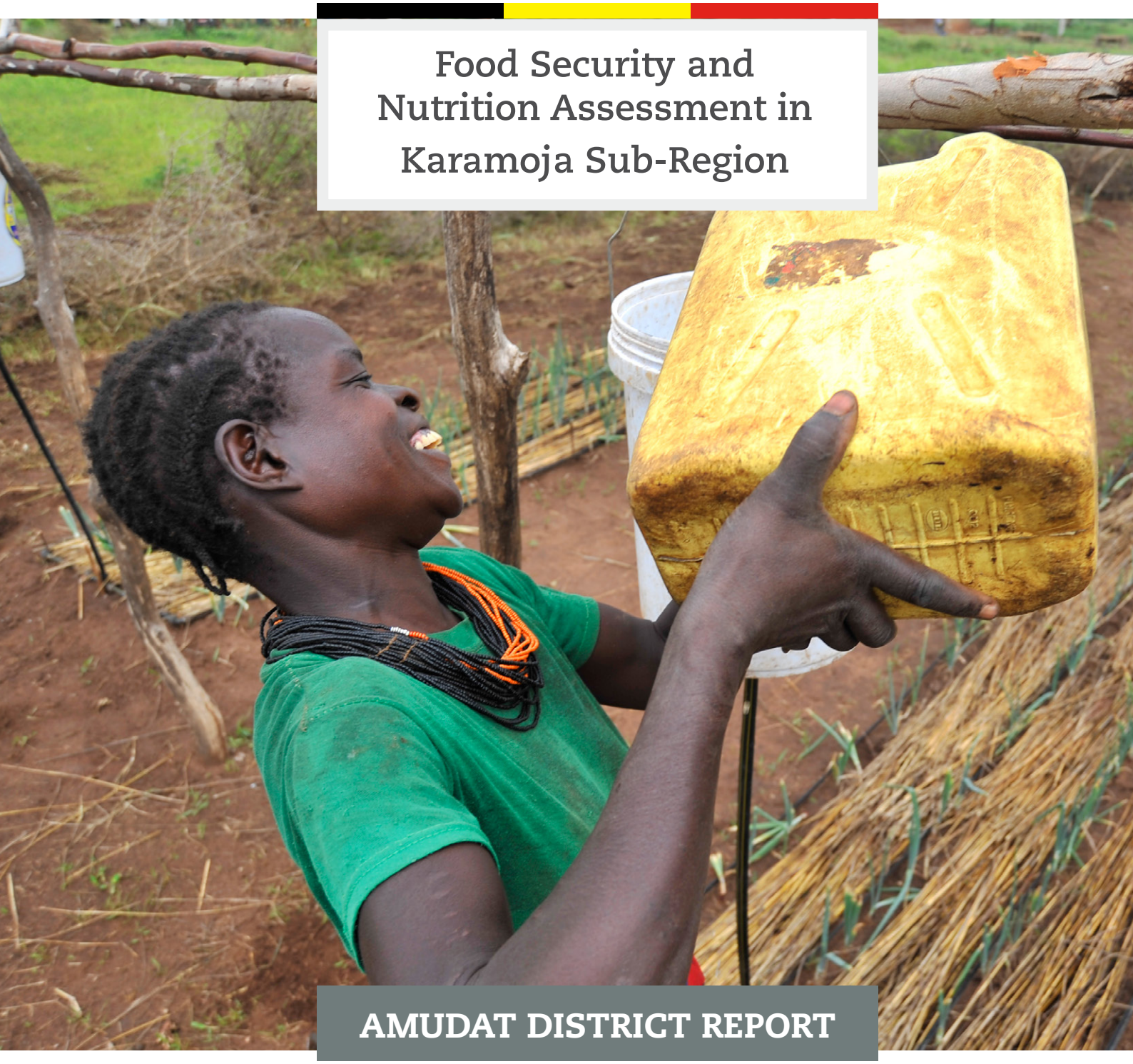
Food Security and Nutrition Assessment in Karamoja Sub-Region



AMUDAT DISTRICT REPORT

unicef

FAO FIAT PANIS

WFP

wfp.org

Department for International Development

IBFAN Uganda

Acknowledgements

This report is the outcome of a collaborative process and would not have been possible without the contribution of many individuals:

WFP & UNICEF are grateful to the Government of Uganda and the people of Karamoja for the support provided during the entire exercise, especially during data collection across all the Karamoja districts.

Appreciation is also extended to the Ministry of Health and the District Health Offices of Abim, Amudat, Kaabong, Kotido, Moroto, Nakapiripirit and Napak for supporting the assessment exercise and, as well, to the senior district leadership that provided initial guidance for the analysis of the report.

Appreciation also goes to the International Baby Food Action Network (IBFAN) that was responsible for the overall field data collection, analysis and report writing for this round of the FSNA.

Last but not least, thanks goes to colleagues from WFP field offices in Karamoja and the Regional Bureau; the team of supervisors and Enumerators; community leaders and village health teams who worked tirelessly to assure quality for the whole exercise.

For more information related to analysis, data collection, tools and analysis software, please contact the AME Unit, World Food Programme Uganda, or IBFAN Uganda

Siddharth Krishnaswamy	Head, AME Unit	siddharth.krishnaswamy@wfp.org
Cecil De Bustos	Nutrition Manager, UNICEF	cdebustos@unicef.org
Edgar Wabyona	Programme Officer, AME	edgar.wabyona@wfp.org
Saul Onyango	Principal Investigator	sonyango@gmail.com
Barbara Nalubanga	Co-Investigator	barbaranalubanga@gmail.com
Gerald Onyango	M&E Manager, IBFAN Uganda	gponyango@gmail.com

For other information, please contact

WFP Uganda, Country Director, Elkhidir DALOUM	elkhidir.daloum@wfp.org
UNICEF Uganda, Country Representative, Aida GIRMA	agirma@unicef.org

Abbreviations

ADHO	Assistant District Health Officer
ADRA	Adventist Development Relief Agency
CAFH	Community Action for Health
CAO	Chief Administrative Officer
CDO	Community Development Officer
cIYCF	Community Infant and Young Child Feeding
DCDO	District Community Development Officer
DEO	District Education Officer
DEWS	District Early Warning System
DHI	District Health Inspector
DLG	District Local Government
DPMO	District Production and Marketing Officer
DPT	Diphtheria
FCS	Food Consumption Score
GAM	Global Acute Malnutrition
HDDS	Household Dietary Diversity Score
HIV	Human Immune Virus
HOF	Head of Finance
IAS	International Aid Services
IBFAN	International Baby Food Action Network
ITC	In-patient Therapeutic Care
IYCF	Infant and Young Child Feeding
LC	Local Council
MA	Monitoring Assistant
MAD	Minimum Acceptable Diet
MCHN	Maternal Child Health Nutrition
MDD	Minimum Dietary Diversity
MMF	Minimum Meal frequency
NAADS	National Agriculture Advisory Services
NUSAF	Northern Uganda Social Action Fund
OTC	Out-patient Therapeutic Care
SAM	Severe Acute Malnutrition
SC	Sub County
SCDO	Subcounty Community Development Officer
TA	Technical Assistance
TLU	Tropical Livestock Unit
UGX	Uganda Shillings
UNICEF	United Nations Children's Fund
UNWFP	United Nations World Food Programme
WHO	World Health Organization

Table of Contents

Table of Contents

Executive Summary

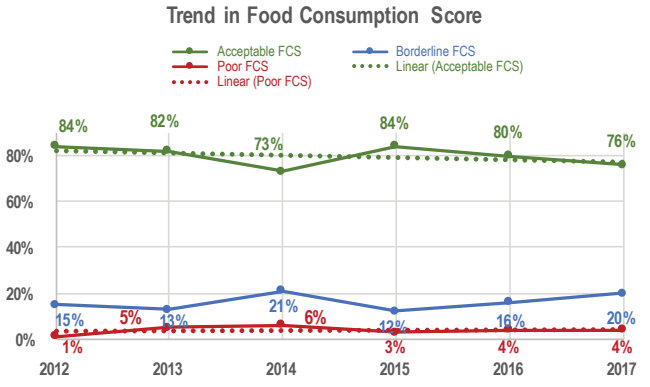
Amudat is one of the districts in the Karamoja sub-region faced with chronic food insecurity coupled with high levels of malnutrition that are of public health concern. The Food Security and Nutrition assessment was conducted in June 2017 covering all the 6 sub-counties of Amudat TC, Amudat, Karita and Loroo reaching 696 households, 991 children below 5 years and 662 women of child bearing age.

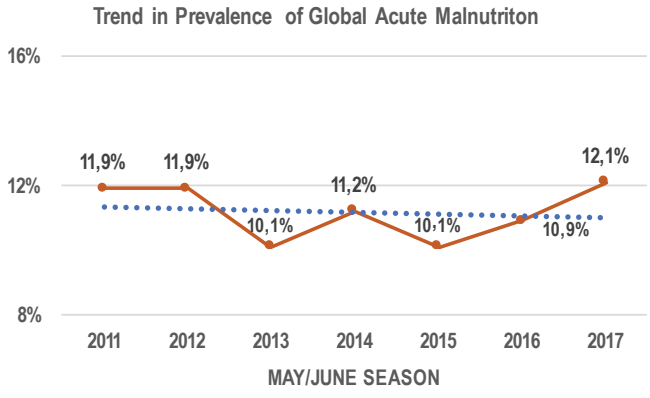
Key findings

- Regular school attendance by 57% boys and 53% girls;
- Most households had access to land (84%) and all households (84%), reported having cultivated food;
- Only one-third (36%) of households were registered under one or more Development Assistance Programmes; of which 64% in MCHN; 8%, Food Aid; and 4%, School Feeding;
- Almost all households (84%) had access to relatively safe water sources such as boreholes, piped water through taps, protected wells and springs;
- Measles and DPT3 Immunization, Vitamin A supplementation and Deworming coverages were high at 94%, 92%, 67% and 59% respectively following the national protocols/schedules; however, Child Health Card retention was found to be a problem.

Only one-third (34%) of households were food insecure. The adjacent figure shows Food Consumption Score over the 6-year period indicating stability in the trend of the acceptable FCS. The linear trend [adjacent figure] depicts stabilization within the range of 84% and 76% over the years.

The prevalence of Global Acute Malnutrition (GAM) was 12.1% in 2017 which according to WHO threshold is 'serious/high'.





The linear trend [adjacent figure] depicts stabilization within the range of 11.9% and 12.1% over the years but remains high.

According to analysis, the slow pace in improvement of food security and nutrition situation in the district could be attributed to:

- Diminished food availability as only 2% of households had food stocks;
- Low access to food as households had limited incomes amidst increasing food prices that had prompted high prevalence of debt (15%) borrowed primarily to buy food (47%);
- Poor Infant and Young Child Feeding (IYCF) practices with only 3% of children meeting the Minimum Acceptable Diet coupled with high prevalence of illnesses (62%) among children, affecting their ability to effectively utilize the food consumed;
- Poor water and sanitation practices with 84% of households having no toilet facilities and only 12% using water at the recommended rate of 15 litres per person per day, all of which rendered gains in nutrition fragile; and
- The high proportion of low levels of formal education (81%) among mothers were among the key underlying factors to the continued high levels of malnutrition.

The sub-counties worst affected by malnutrition (both women and children) included **Amudat TC and Loroo** while food insecurity was mainly observed in **Amudat and Loroo**.

Table of Contents

Recommendations

Agriculture:

Introduction of perennial crops; promote mixed farming; and mobilize and sensitize communities to change their mind set about cassava production/planting; and promote post-harvest handling practices at the household level; and

Climate change:

Promote sustainable land management practices, such as water and soil conservation technologies.

Association between Nutrition and Household Food Security Indicators

Category	Indicator	Wasting	Stunting	Underweight
Household and social demographics	Gender of household head	✓	✓	✓
	Mother's education level	✓	✓	✓
	Mother's nutritional status by MUAC	✓	✓	✓
	Disability or chronic illness of household head	×	×	×
	Extremely Vulnerable Household	×	✓	✓
Illness and health environment	Illness in the child	✓	✓	✓
	Fever/malaria in the child	✓	×	✓
	Diarrhoea in the child	✓	✓	✓
	ARI/ cough in the child	×	×	×
	Quantity of water per person per day	✓	✓	✓
	Access to toilets by the household	✓	✓	✓
Household Food Security	Household Food Consumption patterns	✓	×	✓
	Household Dietary Diversity score	×	×	×
	Livestock ownership	✓	✓	✓
	Food Expenditure Share	×	×	✓
	Household dependence on the market	×	×	×
	Household Coping Strategy Index	✓	✓	✓
	Household Food Security situation	✓	×	✓

1. Household Demographic & Related Factors

1.1: Household Demographics

Overall, based on the selected demographic factors in Figure 1, there were 7% female headed households, only 7% extremely vulnerable households and 6% constituted by persons living with disability and those with chronic illnesses. Only one in five households were polygamous and 5% were registered under the Northern Uganda Social Action Fund (NUSAF). Amudat district households had lower proportions for most factors than the Karamoja sub-region's average apart from Polygamy.

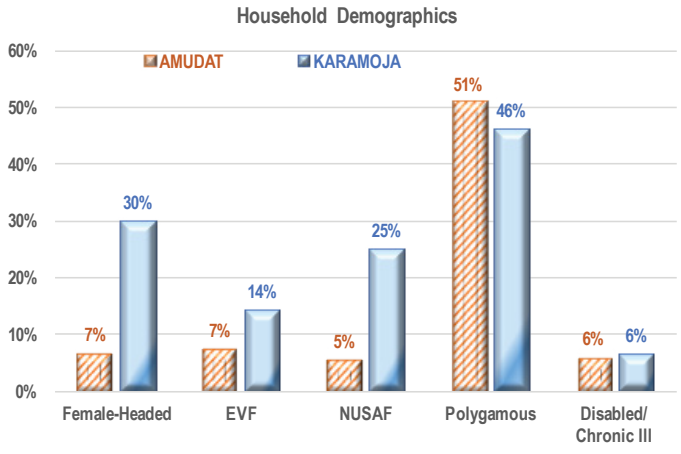


Figure 1: Household Demographics, Amudat District, June 2017

1.2: Mothers' Level of Education

There is an association between level of education and household income, which could in-turn influence the household food security, thus positive nutrition outcomes. There is also a significant relationship between the highest education level attained by the mother and household malnutrition. As shown in Figure 2, 81% of mothers in Amudat had no formal education, 13% had attained primary level and 5% had secondary level education. The proportions in Amudat were lower than the average for the sub-region, with exception of secondary and tertiary level education.

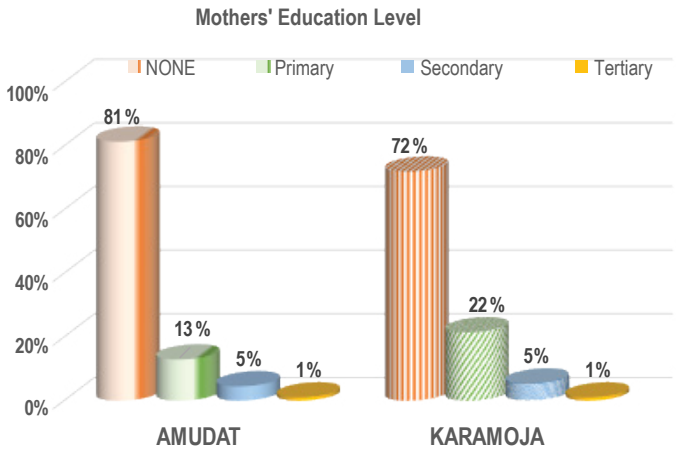


Figure 2: Mothers' Education, Amudat District, June 2017

1.3: School Attendance

There were 444 boys and 490 girls of primary school age selected from Amudat district, with regular school attendance being reported at 57% and 53%, respectively. Regular school attendance in Amudat district among boys was lower than the sub-regional average of 62% and the same for girls at 53%. Figure 3 shows that lack of interest in education and Inability to pay school fees, uniforms, textbooks were cited as main reason for irregular attendance among boys at 35% and 29% respectively whilst for girls, Lack of interest in education and domestic household chores at 27% each, followed by Inability to pay school fees, uniforms, textbooks at 22%. In addition, poor school facilities, absent teacher and poor-quality teaching was cited by 6% and 8% of girls and boys respectively.

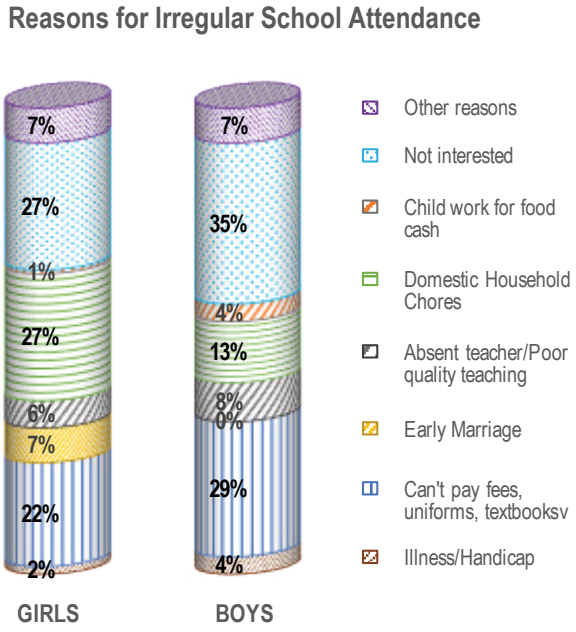


Figure 1: Household Demographics, Amudat District, June 2017

2. Food Availability

2.1: Access to Land

Table 1: Access to Agricultural Land

Sub county	Access to agricultural land (%)
Amudat TC	84%
Amudat	89%
Karita	92%
Loroo	61%
AMUDAT	84%
KARAMOJA	87%

As summarized in Table 1, most households (84%) reported having access to land for agriculture production. These findings are slightly below those of the regional average of 87%. The sub-counties of Amudat (92%), Loroo (89%) and Karita (84%) recorded the highest proportion of households having access to land while Amudat TC (61%) had the lowest, which is expected given its urban status.

2.2: Livestock Ownership

Livestock ownership has been significantly associated with malnutrition levels in the households. As illustrated in Figure 4, most households (85%) in Amudat district owned livestock compared to 54% for the sub-regional average. Livestock ownership was higher in the sub-counties of Karita (90%) and Amudat (91%). The lowest was in Amudat TC (60%) which could be attributed to the urban status of the sub-county. There were more households with TLU greater than 5 in Amudat district (26%) compared to the sub regional average of 9% with the highest proportion observed in the sub counties of Karita (31%) and Loroo (28%) and lowest in Amudat TC (17%) and Amudat (24%).

The main constraint reported by households that owned livestock was parasites/diseases at 73%, higher than the regional average of 66%. This was reported across the 4 sub counties with the highest being Amudat TC (86%), Loroo and Karita, 74% each, and Amudat (67%). Lack of pastures for their animals was also cited in the sub counties of

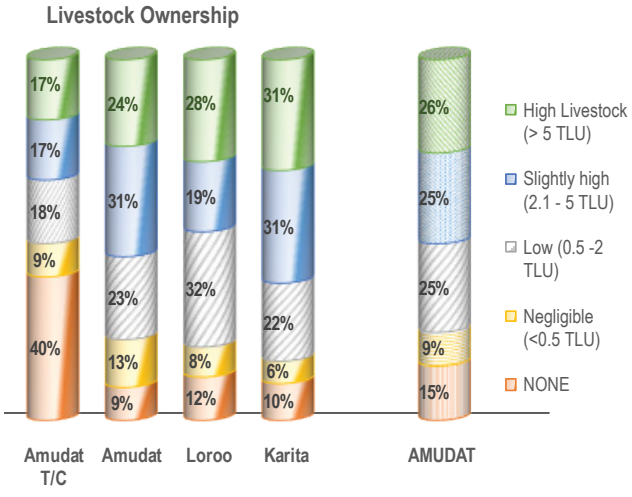


Figure 4: Livestock Ownership, Amudat District, 2017

Amudat (17%), Karita (16%), Loroo (12%) and Amudat TC (11%). Lack of veterinary services was also mentioned in 5% households of Amudat and 6% in Loroo and 4% in Karita.

2.3: Cropping Practices

Overall, 84% of the selected households in Amudat district reported having cultivated legumes and staples. Figure 5 shows that the most commonly cultivated crops were maize (98%) and beans (40%), followed by sorghum at 4%. Maize production was far above the regional average of 57%, while beans were almost at the same proportion at 35%.

Noteworthy, whereas sorghum production was observed to be high in the sub-region at 77%, few households in Amudat cultivated it.

Sub-counties with higher proportion of households cultivating maize above the district average included Amudat and Loroo compared to Amudat TC (96%) and Karita (97%). The findings further revealed that cultivation of crops was higher in Loroo sub-county while the other sub-counties were at the same level. Most crops grown by households occupied 0.5 to 1.5 acres.

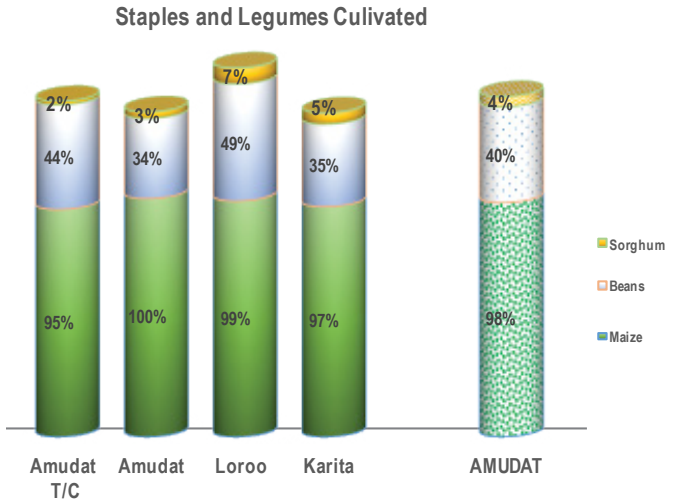


Figure 5: Main Crops Cultivated in Amudat District, June 2017

The main constraint to crop production in the 6 months prior to the assessment was drought/low rainfall, reported in almost all households (90%), ranging from 86% in Amudat TC to 93% in Amudat sub county. Meanwhile, inadequate seeds/ tools were the next cited constraints to crop production at 4%.

2.4: Household Food Stocks

Food stocks in households was reportedly low with only 6% reporting having some in their household. This ranged from 2% in Amudat TC to 9% in Amudat sub-county.

- Food stocks were mainly from Own Production (54%) and Markets (46%). Households depended on own production as the main source of stock;
- Amudat TC and Loroo sub-county had lower food stocks than the other sub-counties, but the mean days of stock were highest at 43 and 38 days respectively;
- More than half the households (59%) had less than 1 bag (50kg) of maize and/or sorghum still available in their stock, followed by those with 1-2bags (23%) and 3-5bags (10%);
- Households with more food stocks in terms of 3-5bags still available were only in Loroo (22%) and Karita (20%) sub-county; and

- Possible reasons for the lower food stocks in the district included the fact that the survey was conducted in the typical lean season and most households relied on animals as the main source of food.

2.5: Food and Humanitarian Assistance

Figure 6 shows that almost two-thirds (36%) of households in Amudat district were registered under one or more Development Programmes that included mainly MCHN (64%) and Food Aid (8%). MCHN reached more households in Amudat TC (67%), Amudat (69%) and Loroo (64%). Food aid on the other hand reached more households in the sub-counties of Amudat TC (19%), Karita (10%) and Amudat (9%). Only 4% of schools in benefitted from school feeding and NUSAF (4%).

On decision-making related to the food aid such as sell, trade, lend or share a portion of it:

- 51% indicated women (Loroo, Amudat, Amudat TC and Karita);
- 47% indicated both women and men (Karita, Amudat TC, Amudat and Loroo); and
- 3% indicated men (Loroo and Karita).

About one-quarter (26%) of households reported having safety problems to, at and from the UNWFP programme sites:

- 7% while going to the site (*Loroo, Amudat, Karita and Amudat TC*);
- 16% at the site (*Loroo 33%, Amudat TC, Amudat and Karita*)]; and
- 1% travelling from the site (*Amudat TC*).

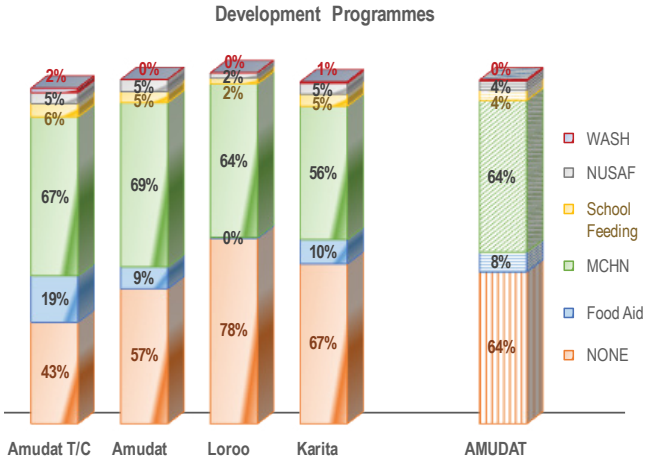


Figure 6: Development Assistance Programmes, June 2017

3. Food Accessibility

3.1: Income Earners and Sources

Figure 7 illustrates that almost all households (90%) in Amudat district had at least one income earner, followed by those that did not have any income earners (10%).The percentage of households with ONE (1) income earner was higher than regional average of 48%. The sub-counties of Amudat (94%) and Karita (93%) had the highest proportion of households with one income earner whilst Amudat TC and Loroo had the highest households with no income earner at 21% and 12%, respectively. Compared to the sub-regional average, findings suggest relatively higher economic access to food in the district. The predominant income sources for all sub counties are as shown in Table 3.

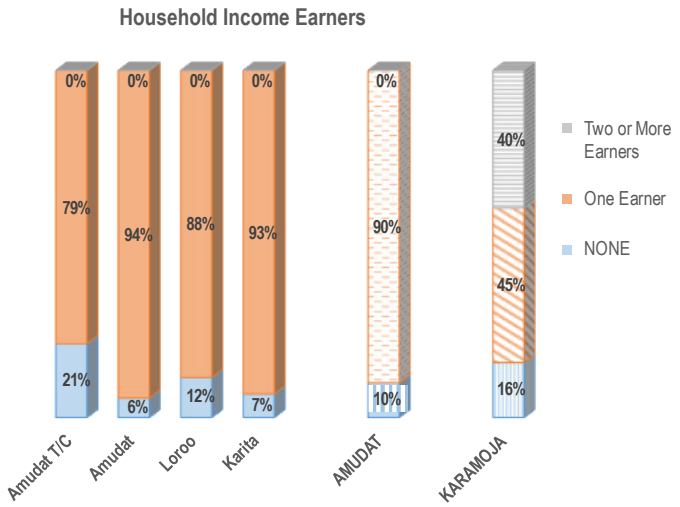


Figure 7: Household Income earners, Amudat District, June 2017

Table 2: Most Important Income Sources in June 2017

Predominant Income Source	Sub counties
Sale of livestock/ animal products (31%)	Loroo, Karita, Amudat
Petty Trade (17%)	Amudat, Karita
Agriculture wage labour (12%)	Amudat, Loroo
Food Crop Production 11%)	Loroo, Amudat
Sale of firewood/ charcoal (10%)	Amudat, Loroo

Sale of livestock or animal products, Petty Trade and Agriculture wage labour were the main sources of income in Amudat district. The main sub-counties with households reporting having obtained income from such sources included Amudat, followed by Loroo and Karita.

3.2: Household Debt

Overall, 15% of households in Amudat district reported having debt and of these, 11% of the households had to pay interest on the current loan:

- Debt was mainly reported in the sub-counties of Amudat and Loroo (14%), followed by Karita and Amudat TC (16%); and

- Interest was mainly reported in the sub-counties of - Amudat TC (27%), followed by Karita 12%, Loroo (9%), and Amudat (3%).

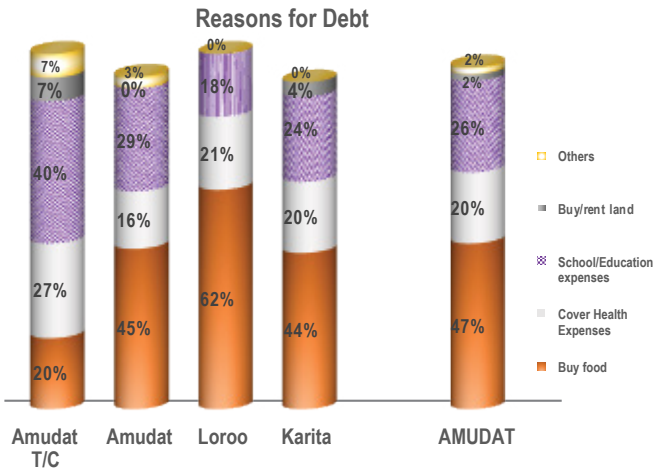


Figure 8: Reasons for Debt, Amudat District, June 2017

As illustrated in Figure 8, almost half of the debt in households (47%) was borrowed for purposes of buying food, 20% to cover health expenses, and 26% for the school and educational costs.

- Loroo sub-county registered the highest percentage of households that borrowed to buy food (44%), followed by Amudat (45%) and Karita (44%);
- High proportion of households obtaining a debt to buy food reflects the stress associated with acquisition of food for consumption;
- Borrowing to cover health expenses was almost the same across the 4 sub-counties ranging from 16% in Amudat to 27% in Amudat TC;
- About three in ten (26%) debts were related to school and education costs mainly in Amudat TC; and
- No debts were related to agricultural inputs and business investment.

3.3: Dependence on Markets for Food

High dependence on markets[1] for food implies high vulnerability to food insecurity due to exposure to price fluctuations that are typically high during the lean season and the limited incomes as well as earning potential among the households.

As illustrated in Figure 9, overall, 85% of households were heavily dependent upon markets, especially those from Amudat TC (91%) and Karita sub-county (88%). Dependence on markets for food was comparatively lower in Loroo sub-county (61%).

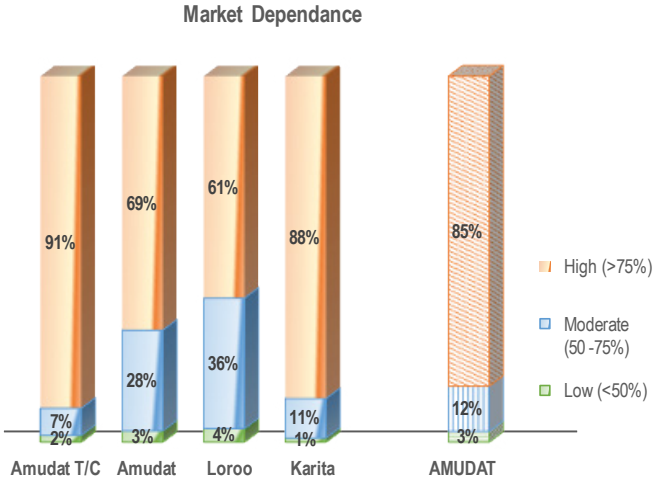


Figure 9: Dependence on Markets for Food Amudat, June 2017

1 When the household derive over 75% of food consumed from markets

3.4: Food Expenditure Share

As illustrated in Figure 10, one out of every five households in Amudat district (21%) spent more than 75% of their expenditure on food, categorizing such households as being severely food insecure.

- Only 10% of households were regarded as moderately food insecure [*spent more than 65% but less than 75% of their expenditure on food*]

- Food secure households [*Spent less than 50% of their expenditure on food*] were more common in Amudat sub-county.

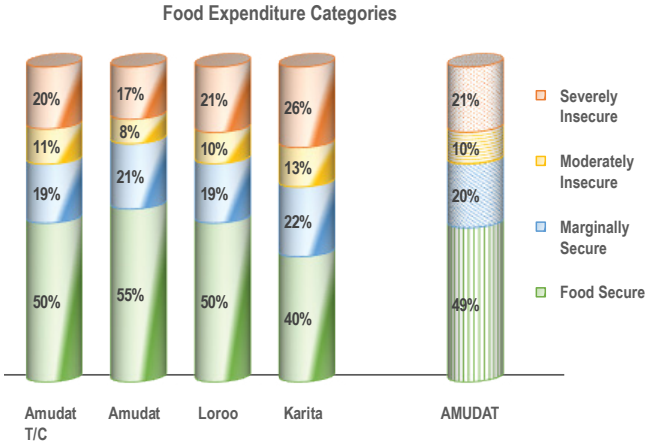


Figure 10: Food Expenditure Shares, Amudat District, June 2017

4. Food Utilization

4.1: Food Consumption

As illustrated in Figure 11, 76% of households in the district of Amudat had acceptable Food Consumption Score (FCS), 20% borderline and only 4% poor. The subcounty of Karita (90%) and Amudat TC (79%) had the highest proportion of households with acceptable food consumption score. Loroo on the other hand, had the highest proportion of households with poor food consumption score above the sub-regional average. Interestingly, almost all households in Karita had acceptable FSC.

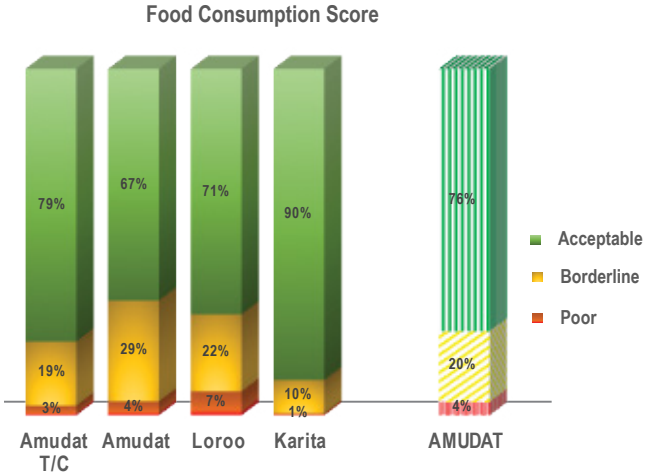


Figure 11: Food Consumption Scores, Amudat District, June 2017

4.2: Dietary Diversity

Figure 12 shows that only 5% of selected households in Amudat district were within the category of High Dietary Diversity Score (HDDS) above 6, especially within Amudat TC sub-county (15%). In the Medium category of above 4.5, were 38% of the households, with more from Amudat TC and Karita sub-counties. There was more diversity in the diets of households in Amudat TC and Karita sub-counties, probably because they are both semi-urban areas and had households with high incomes.

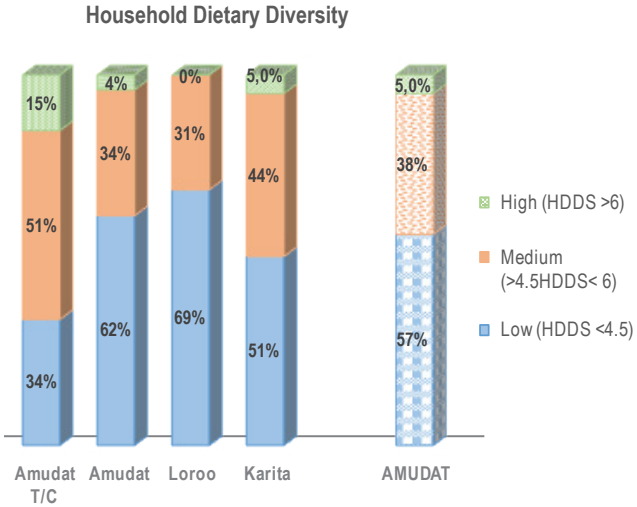


Figure 12: Household Dietary Diversity, Amudat District, June 2017

4.3: Complementary Feeding Practices

Around the age of 6 months, an infant's need for energy and nutrients starts to exceed what is provided by breast milk. Complementary foods are necessary to meet energy and nutrient requirements to promote adequate growth.

Overall, only 57% of infants 6–8 months of age received solid, semi-solid or soft foods during the day prior to the assessment. These findings are however lower than the sub-regional average of 74%. Figure 13 illustrates that generally, feeding of infants and young children aged 6-23months was far below the recommended IYCF practices. The findings also show that feeding practices for children 6-11 months were much better than those aged 12-17 and 18-23 months:

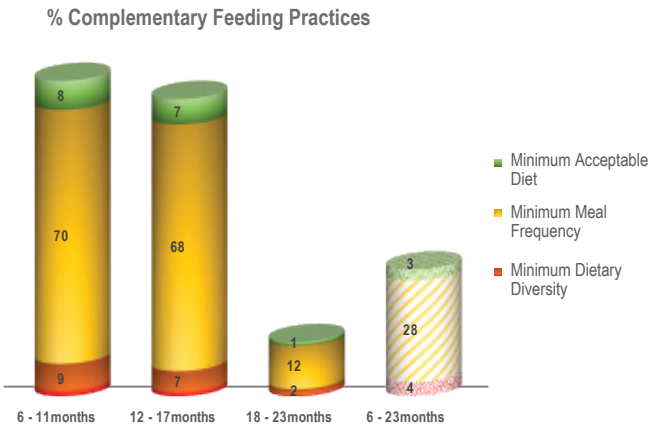


Figure 13: Complementary Feeding Practices, Amudat District

- Only 4% of children 6 – 23 months met the Minimum Dietary Diversity[2] (MDD), higher in the age category 6-11 months;
- Only 28% of children 6-23 months met the Minimum Meal Frequency[3] (MMF), higher in the age categories 6-11 months and 12-17 months; and
- Only 3% of children met the Minimum Acceptable Diet[4] (MAD), higher in the age categories 6-11months and 12-17 months.

4.4: Disease Prevalence

Overall, about 4 in ten households (62%) in Amudat district reported that their children were sick in the 2 weeks prior to the survey. Figure 14 illustrates that households in Amudat and Amudat TC sub-counties had the highest prevalence of illnesses whilst Karita sub-county had the lowest. Fever/ malaria was relatively more prevalent in Amudat TC (50%) and Amudat (48%) while ARI/ cough, diarrhea, and skin disease were the same across all sub-counties.

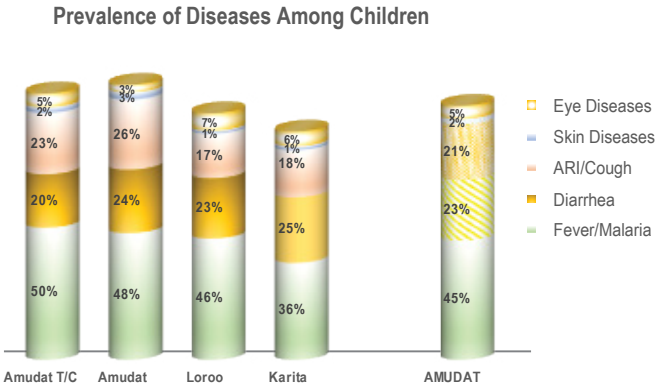


Figure 14: Prevalence of Disease, Amudat District, June 2017

2 Dietary diversity is a proxy for adequate micronutrient-density of foods.

3 Number of meals an infant or young child ate in a day

4 Indicator combines standards of dietary diversity and feeding frequency by breastfeeding status

4.5: Immunization

The third dose of Pentavalent/ DPT vaccine is given at 14 weeks of age and its coverage reflects effectiveness of the immunization programme. As summarized in Figure 15, overall **94%** of the children in Amudat district had received DPT3 with verifiable evidence from the Child Health Card available for 67% but for 27% being based on the mother's or caretaker's report. The highest proportion of children was in Amudat sub-county (95%) while sub-counties below the district average Amudat TC at 91%.

Measles vaccination is carried out at 9 months of age and overall **92%** of children in the district had been immunised, 55% of them with verifiable evidence on the Child Health cards and 37% based on the mother's or caretaker's report. The range was from 92% in Amudat TC and Karita sub-counties to 93% in Loroo and Amudat sub-counties. Amudat district was however below the sub-regional coverage of 96%. The proportion of children without evidence from Child Health Cards was higher in Amudat TC sub-county but the same in Amudat, Loroo and Karita sub-counties.

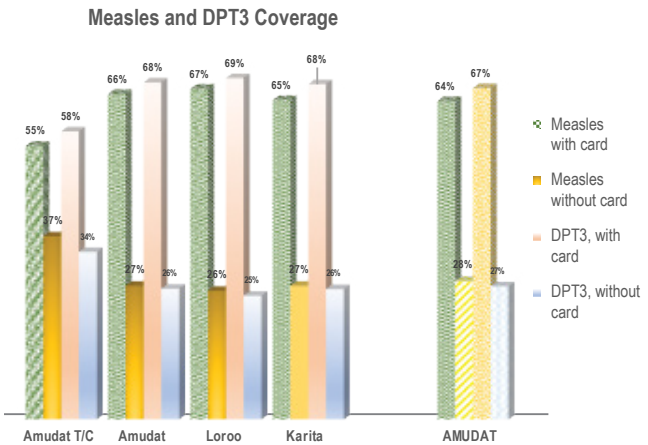


Figure 15: Measles and DPT3 Immunisation Coverage, June 2017

4.6: Supplementation and De-worming

Vitamin A supplements is provided every 6 months to children between the age of 6 and 59 months. Out of the selected households, **67%** of the children aged 6 to 59 months had received vitamin A supplements within the previous six months, 45% had Child Health Cards for verification while 22% was based on mother's or caretaker's report (Figure %%). All the sub-counties had almost the same coverage ranging from 64% in Amudat TC to 68% in Loroo and Karita sub-counties.

Medicines for treatment of intestinal worms is provided every 6 months to children aged between 12 and 59 months. Overall, **59%** of the sampled children aged 12 to 59 months had received de-worming medicines within the 6 months preceding the assessment with verifiable evidence for 38%. All the sub-counties had almost the same coverage ranging from 58% in Amudat TC and Karita sub-counties to 59% in Amudat sub-county. Lack of Child Health Cards was most marked in all the sub-counties ranging from 18% in Karita to 27% in Amudat TC sub-county.

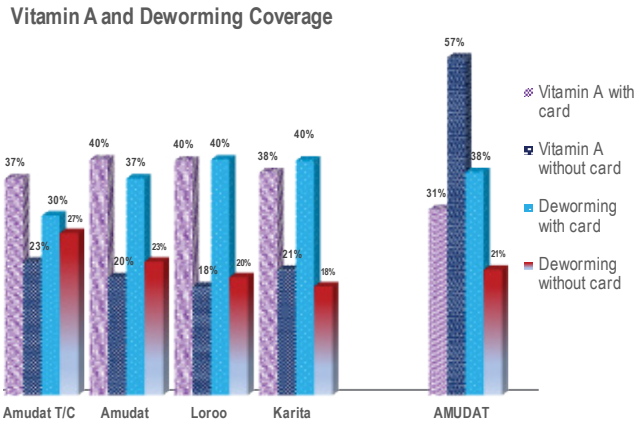


Figure 16: Vitamin A and Deworming Coverage, June 2017

4.7: Household Water

Overall, 84% of selected households in the district accessed water from relatively safe sources such as boreholes fitted with hand pumps, piped water through taps, protected wells and springs.

As illustrated in Figure 17. Karita and Amudat TC sub-counties had the largest proportion of households with access to safe water, while Amudat and Loroo sub-counties had the largest proportion of households that accessed water from relatively unsafe sources such as surface water (from river, dam, run off etc.) and open, un-protected wells or springs. Overall, only 3% of households treated their drinking water with the highest proportion being from Amudat TC (9%) and the most commonly used method for treatment was by boiling at 96%.

Amount of water used was found to be significantly associated with malnutrition levels in the households. The recommended amount of water for basic household hygiene and sanitation is at least 15 litres per person per day. As illustrated in Figure 18, most (88%) of the selected households in Amudat district reported use of less than 15 litres of water per person per day, with a range from 80% in Amudat TC to 94% in Loroo sub-county. The district had more households using less than 15 litres of water pppd than the regional average of 76%.

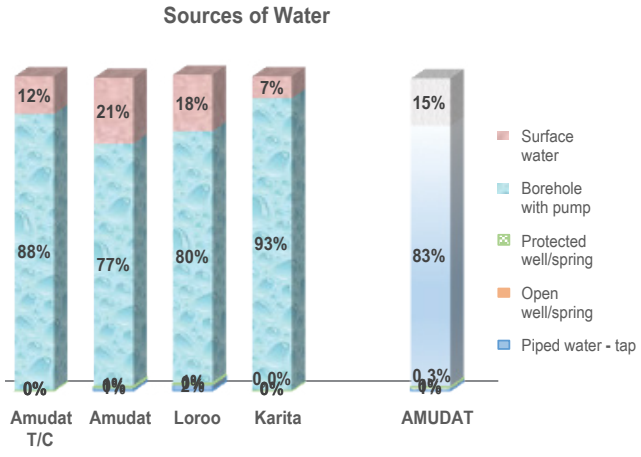


Figure 17: Sources of Household Water, June 2017

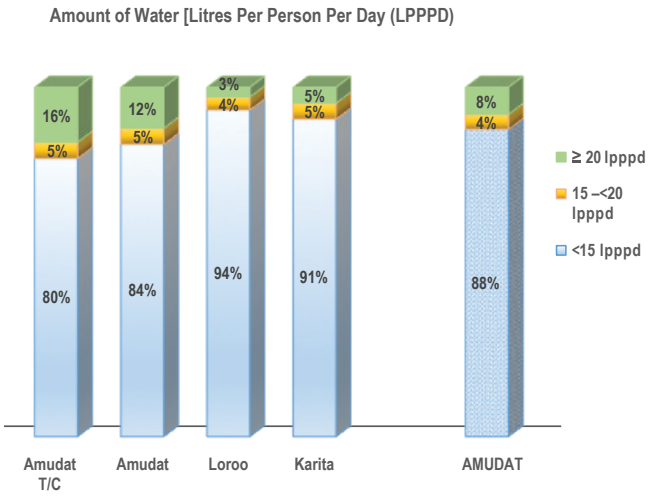


Figure 18: Amount of Water used in Households, June 2017

4.8: Household Sanitation and Hygiene

a) Availability of Toilet Facilities

Figure 19 illustrates that 84% of selected households in Amudat district did not have any toilet facilities and out of the 16% that had, 2% shared with other households. The lack of toilet facilities was more common in Loroo, Amudat and Amudat TC sub counties. Findings further show that one third (32%) of households in Karita had toilet facilities and only 3% shared with other households.

The types of toilets ranged from the open pit without a super structure, which is of a lower quality, constituted the main type of toilet facility for 27% of the selected households in the district using them. This ranged from Amudat TC [12%], Amudat [15%], Loroo and Karita at 36% each. Of the households with Pit Latrine with slab/VIP, Amudat TC and Amudat sub counties at 88% and 85% respectively and lowest in Loroo and Karita with 64% each.

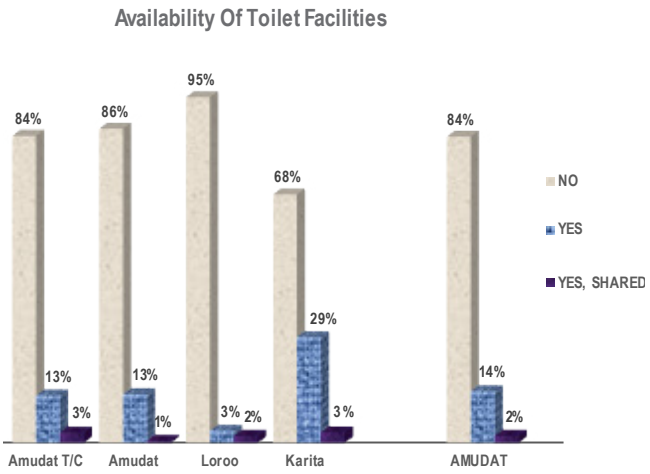


Figure 19: Availability of Toilet Facilities, June 2017

5. Stability

5.1: Main Shocks to Households Food Security

As illustrated in Figure 20, the main shocks to household food security in Amudat district included High Food Prices (35%), Sickness/Disease (28%), and Floods, Heavy Rains, drought (19%). High food prices was mainly reported in Karita (39%), and Loroo (36%) while Sickness/Disease in Loroo (30%) and Amudat TC (40%). The proportion of households reporting high food prices in the district was higher than the regional average of 29%.

5.2: Livelihood Coping Strategies

Approximately one-third only (29%) of households did not apply any coping strategies in Amudat district (Figure 21). The sub-counties that recorded higher proportions of households with no coping strategy above the district average included Amudat TC (42%) and Loroo (30%).

Overall, more than one-third of all households in the district were applying emergency coping strategies. This was most marked in Loroo (41%) and Amudat (35%) while lowest was in Amudat TC (29%).

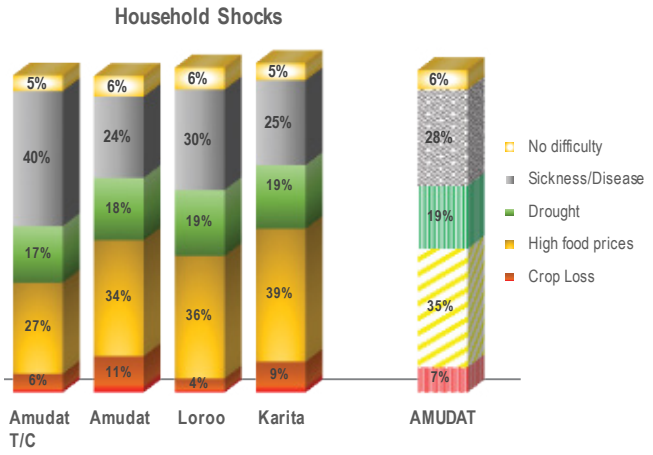


Figure 20: Household Shocks to Food Security, June 2017

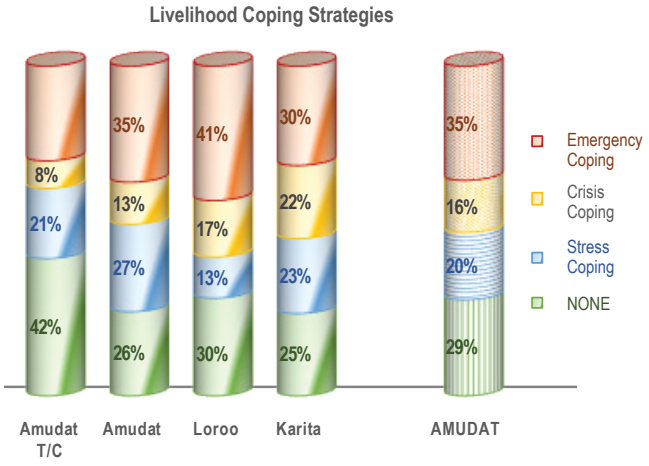


Figure 21: Livelihood Coping Strategies, June 2017

Food Security and Nutrition Outcomes

6.1: Nutritional Status of Women and Children

a) Women of Child-bearing Age

There is an association between malnutrition of the mother and the nutritional status of under-five children. As illustrated in Figure 22, about 38% of sampled women in Amudat district were underweight, the same level with that of the sub-regional average of 39%. **Amudat** sub-county registered the highest proportions of underweight women at 48%.

The sub-counties of Amudat TC, Loroo, and Karita had the lowest proportion of underweight women. However, on the hand **Amudat TC** sub-county registered the highest proportion of overweight and obese women (8%).

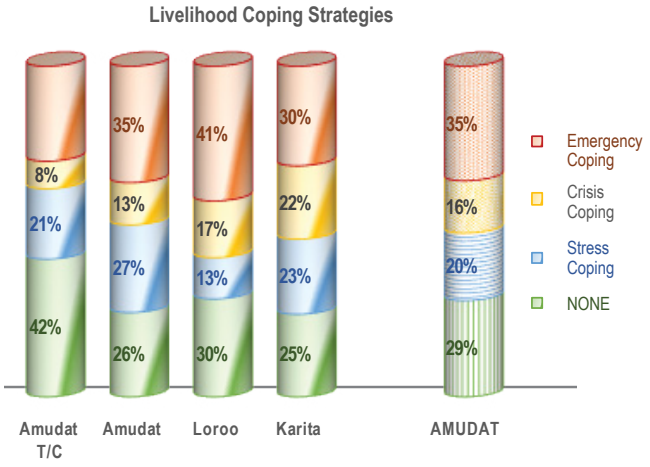


Figure 22: Malnutrition Level among Mothers in Amudat, June 2017

b) *Under-five Children*

The nutrition outcome for under-five children has been summarized and illustrated in Figure 23, key findings were as follows:

- Severe Acute Malnutrition (SAM) for Amudat district was at 4.3%, with highest proportion in **Looro** sub-county (4.4%) but lowest in Amudat sub-county (1.4%). All sub-counties were above the critical level of 2%, only exception being Amudat sub-county;
- Global Acute Malnutrition (GAM) for Amudat district was at 12.1%, with highest proportion in **Amudat** Town Council (13.9%) and lowest in Amudat sub-county (11.3%). All the sub-counties of Amudat district were above the critical level of 10%;
- Stunting for Amudat district was at 26.0%, with the highest proportion in **Amudat Town Council** (30.4%) and lowest in Karita sub-county (19.3%). Only Amudat Town Council with 30.4% was at the critical level of 30%; and
- Underweight for Amudat district was at 20.4%, with the highest proportion in **Amudat** Town Council (26.0%) and lowest in Karita sub-county (16.8%). Only Amudat Town Council was above the critical level of 20%.

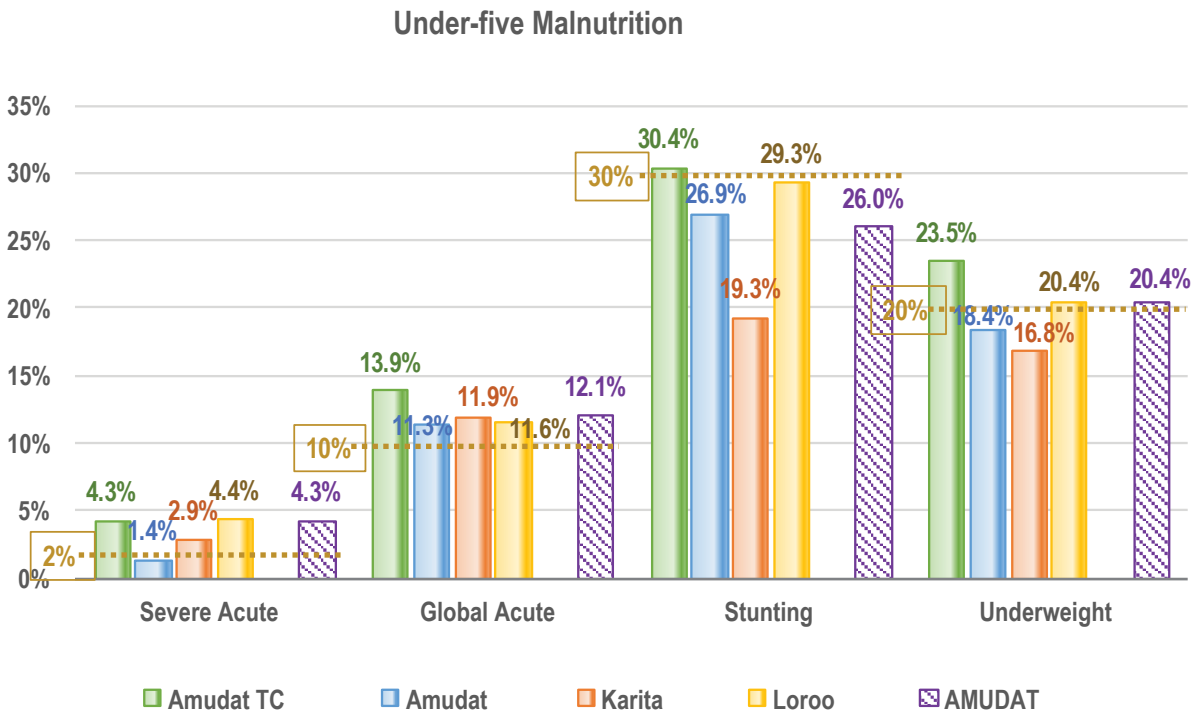


Figure 23: Prevalence of Malnutrition in Amudat District, by Sub-county in June 2017

6.2: Final Classification of Food Security

The Food Security Index that combines the Food Expenditure, Food Consumption Score and Livelihood coping strategies showed that only 76% of households were food secure (Food secure + marginally food secure) whilst 24% were food insecure (Figure 22). These findings show that the district of Amudat had more food secure households than their counterparts in the sub-region recorded at 43%.

The sub-counties that reported highest proportion of food insecure households included: Amudat (28%), and Loroo (29%) while the sub counties with the highest proportion of food secure households were Karita (84%) and Amudat T/C (78%).

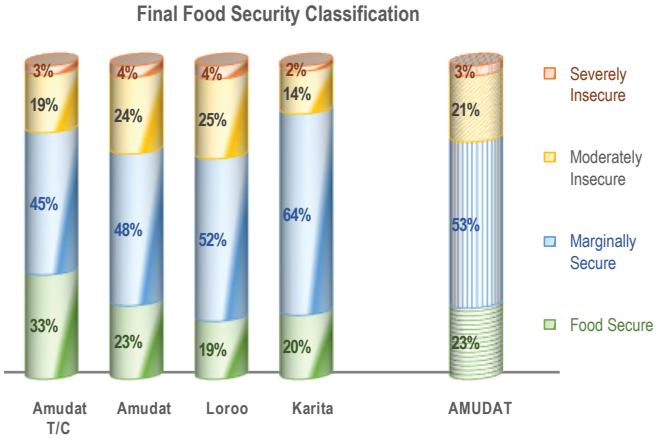


Figure 24: Food Security Status, Amudat District, June 2017

7. Recommendations

Food Availability

1. Strengthen effective extension services to cover all villages in the district that include promotion of two planting seasons in wet belt zones and the following:
    - Improving knowledge and skills among farmers on growing of disease/drought resistant and high yielding crops;
    - Setting up demonstration centres for farmers, supplying genuine farming inputs such as seeds and ensuring quality assessment of the seeds distributed;
    - Diversification of production through mixed farming with focus on legumes, locally available fruits and vegetables;
    - Control of pests and diseases such as army worms;
    - Post-harvest handling practices such as proper use of foods during harvest season, storage technologies and preservation; and
    - Use of more efficient agricultural equipment.
2. Support re-stocking of animals in communities where cultivation has failed, create a data-base for monitoring the re-stocking activities and strengthen veterinary services, including monitoring of animal diseases;
3. Construct water catchment areas in all villages for the households to obtain water for cultivation and feeding their animals especially during the dry seasons, and advocate for establishment or strengthening of irrigation to supplement rainfall;
4. Sensitize the communities and influence their practices on:
    - Growing fast maturing crops such as pumpkins, sweet potatoes and pawpaw;
    - Food storage for future consumption and better storage technologies;
    - Proper use of foods during the harvest season and reduced selling so that some is left to take households through to the next harvest season;
    - Value addition to the commonly grown crops;
    - Role of gender in crop production; and
    - Use of modern family planning methods to reduce the household size and thus contribute towards food security in the households.
5. Promote research to support the district obtain other high yielding crop varieties, educate the communities on climate change and seasons, and strengthen the District

Early Warning Systems (DEWS);

6. Put in place a clear land ownership policy and advocate for dialogue among communities to settle land conflicts;
7. Set up District Land Board to address the challenges related to land ownership, promote dialogue to address the on-going land conflicts and put in place interventions to increase effective land utilization;
8. Educate and support the communities on:
    - Introduction of weather resistant variety of crops and improved seeds with high yields;
    - Good storage methods and post-harvest handling;
    - Group marketing concepts; and
    - Diversification of foods grown and consumed.
9. Advocate for By-laws or ordinances to limit the indiscriminate sale of food;
10. Sensitize and involve men as the land-owners and key decision-makers, on the following:
    - Production and storage of food at the household level;
    - Joint participation in decision-making; and
    - Joint ownership of household assets e.g. land, livestock etc.
11. Advocate for the establishment of granaries at household and silos at community levels to ensure food security and sensitize the communities on their importance, including cereal bulking;
12. Reduce sell of food crops by advocating for introduction of cash crops as alternative crops for sale to generate income; and
13. Advocate for the initiation or strengthening of NAADS pilot project in the district.

Recommendations for Accessibility

1. Advocate to the ministry/department responsible for road construction and maintenance to improve the road networks in the district;
2. Improve food accessibility the following, among others:
    - Establish community markets at each sub-county to support diversification of household incomes;
    - Educate and support communities on Income Generation Activities;
    - Build community level business competence and skills;
    - Advocate for commercialization of agriculture;
    - Introduce Community/ Village Savings and Loans Associations to facilitate agriculture loans for farmers;
    - Scale up the food/cash for work programmes; and
    - Advocate for the formation of cooperatives to support storage and purchase of food at fair prices.
3. Encourage households to have separate gardens of

food and cash crops;

4. Advocate for support from the UNWFP to provide food assistance to persons living with HIV; and
5. Strengthen livelihood programs such as Income Generation Activities at community level and advocate for increased funding to promote agriculture mechanization.

Recommendations for Utilization

1. Encourage health workers to strengthen integrated child days' activities, improve documentation and make use of child health cards for every service provided to children below age of 5 years;
2. Strengthen the functionality of Out Patient Therapeutic Care (OTC) and In-patient Therapeutic Care (ITC) sites so that all malnourished children are efficiently and effectively managed;
3. Mobilize support in the form of grants to establish model sanitation villages such as the initiative started in 2 villages of Loroo sub-county, Amudat district and in addition:
    - Strengthen community sensitization and education on hygiene and toilet usage;
    - Repair all broken-down boreholes to enable access to clean water; and
    - Promote water harvesting during the wet season.
4. Establish By-laws to facilitate reduction on alcohol consumption and strengthen community sensitization and education on the following among others:
    - Different foods and their functions in the body;
    - Proper child caring and health seeking behaviours;
    - Good feeding practices among children and women; and
    - Utilization of safe water in the households.
5. Intensify supervision of the implementing partners as well as strengthen coordination and reporting among development partners like UNICEF, WFP, Save the Children etc. for improved health and nutrition situation;
6. Advocate for support from the district leadership on:
    - Population growth control; and
    - Prevention and control of diseases at community level including those related to HIV.
7. Educate the community and train VHTs as well as peer mothers on nutrition, sanitation and hygiene, dietary diversification and monitoring of the immunization schedules;
8. Strengthen the nutrition programmes e.g. Community Infant and Young Child Feeding (cIYCF) by the District Health Department with support from partners like UNICEF, Save the children and WFP, to specifically address poor feeding habits;
9. Increase access to health and nutrition services through mobile clinics and sustainable integrated outreaches to:

- Improve disease prevention and management;
- Strengthen and scale-up nutrition screening; and
- Improve the Community Based Supplementary Feeding Programme.

10. Advocate for support from the UNWFP to continue the MCHN programme for improved maternal and child nutrition outcomes.

Recommendations on Stability

1. Support the communities to correctly predict the cultivation periods, encourage relocation to more productive areas and put in place rapid response to disasters.
   - Recommendations on Demographic Factors
   - Improve regular school attendance of children by:
     - Advocating for establishment community schools and posting of teachers to such schools;
     - Provide sanitary pads to school girls to reduce of absenteeism;
     - Strengthening the school feeding programmes;
     - Holding dialogue with caregivers at village level to emphasize the importance of education;
     - Development of a tool to track absent pupils and teachers by the District Education department;
     - Strengthening supervision in schools; and
     - Advocating for By-laws on education ordinance.
2. Include nutrition education in the Adult Literacy Classes.

Attendance at Amudat FSNA Validation Workshop

	Name	Title	Contact
1	Atim Moses	DCAO	0782367928
2	Punyon Gabriel	District speaker	0778996488
3	Lotunale. R. Pius	HRO	0774103220
4	Maima David	RO	0775119215
5	Iriama Charlse Lorot	District Planner	0773610806
6	Paul Richard Achia	CPA	0777976513
7	Lochenge John Bosco	HOF	0772326872
8	Lokiru Moses Sylvester	SAS Loroo	0774865551
9	Lokopoi Charlse Okwi	Town clerk	0782329617
10	Cherito. A.Pauline	Probation	0776688965
11	Hon. Wanda Fred. M	Dist Councilor	0773878082
12	Hon. Chepusia Anna	Dist. Councilor	0789637796
13	Marimoi. P. Joseph	pp. Dpo	0773539036
14	Psorich. L.Samuel	DIO	0788320931
15	Nekesa Alice	For CDO	0788846940
16	Lodim David	CDO town council	0775028813
17	Hon. Loruma Raphael	Dist. Council	0783418532
1	Mutuke Martha	DHT	0782349915
19	Otaka Tonny	DWO	0782736152
20	Kimanai Robert Bwayo	DPMO	0772437277
21	Amuron Freda. I	DCDO	0782254269
22	Koryang Moses	SAS Amudat	0772533022
23	Asuba Moses	DHT	0773360564
24	Naluka Betty	DHT	0785402020
25	Lochoro Miriam	SAS Karita	0782013084
26	Elimu Simon	Pp DHO	0785829488
27	Longok Micheal	SPWO	0782756134
28	Cheptumegho Mary	District Councillor	0777395773
29	Chepar Isura	Sec. Production	0782529323
30	Chepurai Asha	District Councillor	0782689686
31	Chepurai Peninah	District youth Councillor	0779246406
32	Lobongon Cassiano	Pp CDO Karita	0779831320
33	Korobe Christine	CDO Amudat s/c	0773360395
34	Rongirokou Peter	Religious leader	0788513405
35	Narisa Vicent	M$E Amudat	0774080612
36	Odong Alfred	District DISO	0775702945
37	Chemutai Alfred	District Nutrition Focal Person	0774427852
38	Kiyonga Veronica	DHT	0779637760
39	Edward Rusoke	IBFAN Uganda	0701522517
40	Nalukomwa Rebecca	IBFAN Uganda	0773820245

For more information related to analysis, data collection, tools and analysis software, please contact:

AME Unit,
World Food Programme Uganda, or IBFAN Uganda