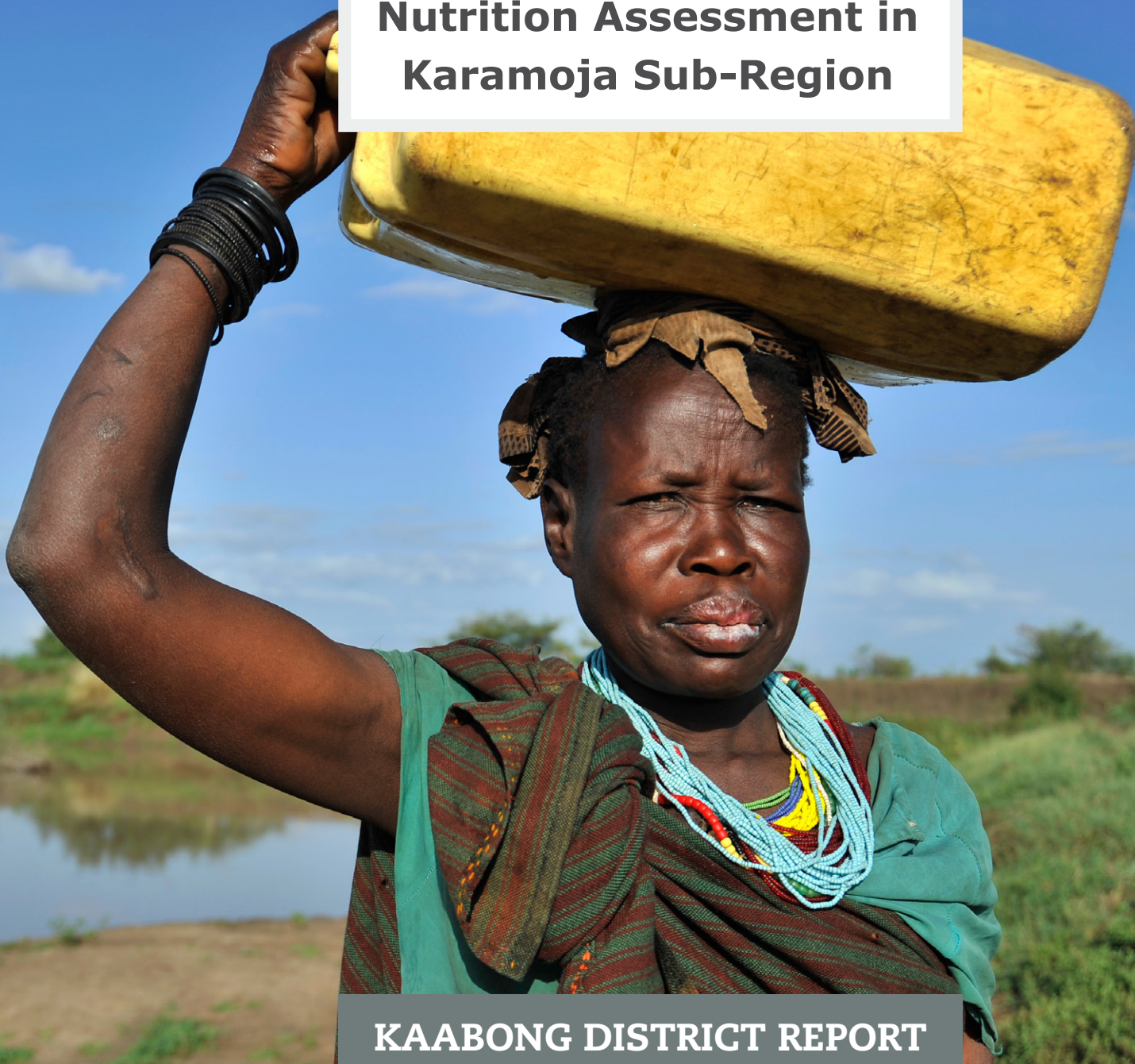




Food Security and Nutrition Assessment in Karamoja Sub-Region



KAABONG DISTRICT REPORT





Department
for International
Development



IBFAN Uganda

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Abbreviations

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

Table of Contents

Acknowledgements	iii	4. Food Utilization	8
Abbreviations	iv	4.1: Food Consumption Score	8
Executive Summary	v1	4.2: Dietary Diversity	8
1. Household Demographic & Related Factors	1	4.3: Complementary Feeding Practices	9
1.1: Household Demographics	1	4.4: Disease Prevalence	9
1.2: Mothers' Level of Education	1	4.5: Immunization	10
1.3: School Attendance	2	4.6: Vitamin A Supplementation and Deworming	10
2. Food Availability	3	4.7: Household Water	11
2.1: Access to Land	3	4.8: Household Sanitation and Hygiene	12
2.2: Livestock Ownership	3	5. Stability	13
2.3: Cropping Practices	4	5.1: Main Household Shocks	13
2.4: Household Food Stocks	4	5.2: Livelihood Coping Strategies	13
2.5: Food and Humanitarian Assistance	5	6. Food Security and Nutrition Outcomes	14
3. Access to Food	6	6.1: Nutritional Status of Women and Children	14
3.1: Income Earners and Sources	6	6.2: Food Security Classification	16
3.2: Household Debt	6	7. Recommendations	17
3.3: Dependence on Markets for Food	7	8. Attendance at Abim FSNA Validation Workshop	21
3.4: Food Expenditure Share	7		

Executive Summary

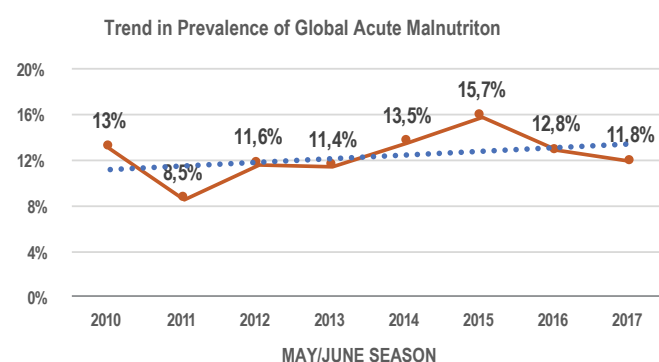
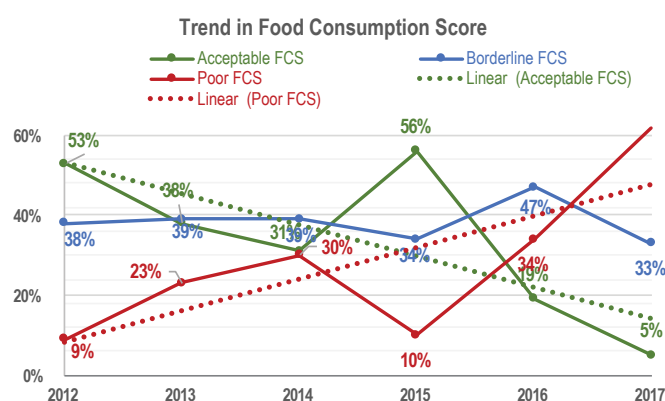
Executive Summary

Kaabong 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 8 sub-counties of Kaabong T/C, Kaabong East, Kaabong West, Kamion, Kapedo, Kathile, Kathile, Lobalangit, Lodiko, Lolelia, Loyoro, Karenga, Kalapata, and Sidok reaching 700 households, 936 children below 5 years and 676 women of child bearing age.

Key Findings

- Regular school attendance by 72% boys and 51% girls;
- Most households had access to land (92%) and 91% of these, reported having cultivated food;
- Most (85%) of households were registered under one or more Development Assistance Programmes such as MCHN (55%), Food Aid (40%), NUSAF (54%), WASH (39%) and School Feeding (27%);
- Almost all households (75%) 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 95%, 97%, 95% and 89%

respectively following the national protocols/schedules; however, Child Health Card retention was found to be a problem.



Nearly half (45%) of households were food insecure. The trend in Food Consumption Score (FCS) over the 6-year period showed a drastic decline in the Acceptable FCS. The linear trend [adjacent figure] depicts a decline from 53% to 5% over the years.

The prevalence of Global Acute Malnutrition (GAM) was 11.8% in 2017 which according to WHO threshold is 'serious/high'.

Executive Summary

The linear trend [adjacent figure] shows a drop from 13% in 2010 to 8.5% in 2011, which then steadily increased to 11.8% in 2017.

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 55% of households had food stocks which was to last for only 14 days after the assessment;
- Low access to food as households had limited incomes amidst increasing food prices that had prompted high prevalence of debt (36%) borrowed primarily to buy food (67%);
- Poor Infant and Young Child Feeding (IYCF) practices with only 6% of children meeting the Minimum Acceptable Diet coupled with high prevalence of illnesses (82%) among children, affecting their ability to effectively utilize the food consumed;
- Poor water and sanitation practices with nearly 58% of households having no toilet facilities and only 21% 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 female headed households (34%) coupled with low levels of formal education (22%) 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 Kathile, Kawalakol, Loleila, Kamion, and Kaabong TC while food insecurity was mainly observed in Kamion, Lodiko, Lolelia and Kathile.

Recommendations

Agriculture:

Planting of drought, disease resistant and quick-maturing crops; Invest more in post-harvest handling, storage and value addition; and further support marketing;

Climate change:

Improve management of feeds and water resources;

Livestock:

Increase livestock investment, provide further information about breed improvement and support vector and disease control; and

Health/child care:

Improve immunization and outreach services and increase childcare services.

Executive Summary**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. Household Demographic & Related Factors

1.1: Household Demographics

Overall, based on the selected demographic factors in Figure 1, there were 34% female headed households, only 9% extremely vulnerable households and 5% constituted by persons living with disability and those with chronic illnesses. Almost all households (81%) were polygamous and 47% were registered under the Northern Uganda Social Action Fund (NUSAF). Kaabong district households had higher proportions for most factors than the Karamoja sub-region's average apart from EVH and Disabled/Chronic illnesses.

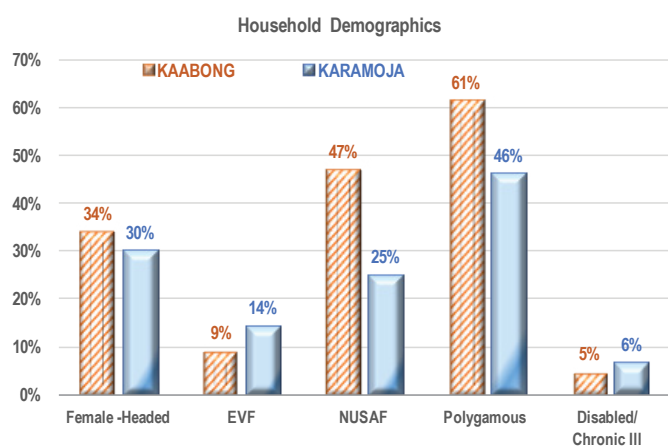


Figure 1: Household Demographics, Kaabong, June 2017

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. Figure 2 shows 78% of mothers in Kaabong had no formal education, 19% had attained primary level and 3% had secondary level education. The proportions in Kaabong were lower than the average for the sub-region, with exception of no formal education.

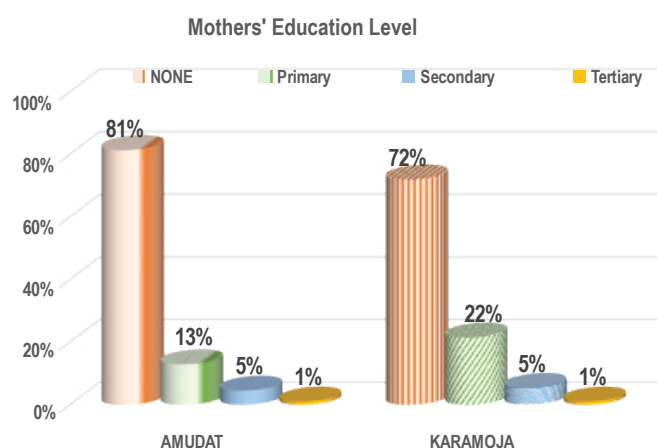


Figure 2: Mothers' Education, Kaabong District, June 2017

1. Household Demographic & Related Factors

1.3: School Attendance

There were 692 boys and 478 girls of primary school age selected from Kaabong district, with regular school attendance being reported at 72% and 51%, respectively. Regular school attendance in Kaabong district among boys was higher than the sub-regional average of 62% but slightly lower for girls at 53%. Figure 3 shows main reasons for irregular attendance among boys and girls: BOYS: Inability to pay school fees (55%) and domestic household chores (21%); and GIRLS: domestic household chores (37%) and Inability to pay school fees (38%).

Reasons for Irregular School Attendance

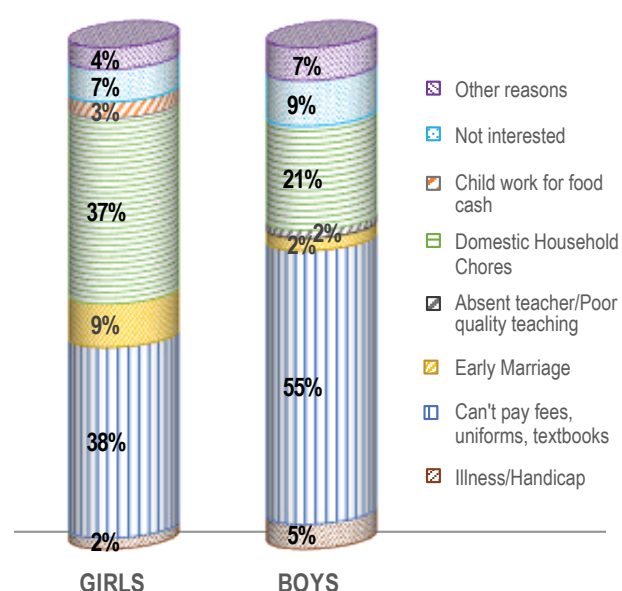


Figure 3: Reasons for Irregular School Attendance

2. Food Availability

2. Food Availability

2.1: Access to Land

Table 1: Access to Agricultural Land

SUB COUNTY	Access to Agricultural Land (%)
Kaabong T/C	92%
Kaabong East	97%
Kaabong West	93%
Kamion	100%
Kapedo	92%
Kathile	85%
Kawalakol	90%
Lobalangit	85%
Lodiko	95%
Lolelia	90%
Loyoro	93%
Karenga	92%
Kalapata	95%
Sidok	94%
KAABONG	92%
KARAMOJA	87%

Most households (92%) reported having access to land for agriculture production. These findings were slightly the regional average of 87%. The sub-counties of Kamion (100%), Kaabong East (97%), Lodiko (95%) Loyoro (93%) and Sidok (94%) recorded the highest proportion of households having access to land above the district average while Kathile and Lobalangit at 85% each had the lowest. For those households owning land, the average size of flat land of 2.34 acres ranging from 1.82

acres in Lobalangit to 3.39 acres in Sidok sub-county. Swampy land although less available in almost all sub-counties, the district average was higher than the sub-regional average of 0.01 acres.

2.2: Livestock Ownership

Livestock ownership has been significantly associated with malnutrition levels in the households. As illustrated in Figure 4, just more than half the households (58%) in Kaabong district owned livestock which is comparable to the sub-regional average of 54%. Livestock ownership was higher in Kaabong East (84%), Kalapata (72%), Loyoro (67%) and Lodiko (65%). Only 8% of households had Tropical Livestock Unit (TLU) greater than 5 in Kaabong district which is equated to the sub regional average of 9% with the highest proportion

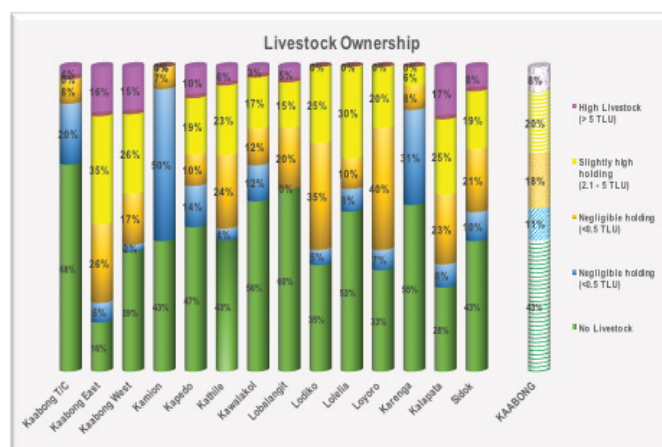


Figure 4: Livestock Ownership, Kaabong District, June 2017

2. Food Availability

observed in the sub counties of Kalapata (17%), Kaabong East (15%) and Kaabong West (14%) but lowest in Karenga, Loyoro, Loleila and Lodiko.

The main constraint reported by households that owned livestock was parasites/diseases at 83%, higher than the regional average of 66%. This was reported across the 14 sub counties with the highest being Kaabong TC and Lobalangit at 100% each, to the lowest in Lodiko at 69%. Lack of veterinary services was mentioned as the second main challenge in 8% households mainly in Kamion and Lodiko.

Sub-counties with higher proportion of households cultivating crops above the district average included Kaabong East, Kalapata, Kaabong West, Kamion, Kawalakol, and Loleila. Surprisingly, whereas Karenga used to be the food basket of Kaabong district, this time round it was observed as one of the sub-counties with fewer households that cultivated staples and legumes. Most crops grown by households occupied 0.5 to 1.5 acres (76%), followed by 1.6 to 3acres at 21% with households mainly in Kamion (50%), Kapedo (31%) and Kalapata and Loyoro (25%).

2.3: Cropping Practices

Overall, 91% of the selected households in Kaabong district reported having cultivated legumes and staples. Figure 6 shows that the most commonly cultivated crops were sorghum (95%) and maize (82%), followed by beans at 40%. Sorghum, maize and beans cultivated were far above the regional average at 77%, 57% and 35%, respectively.

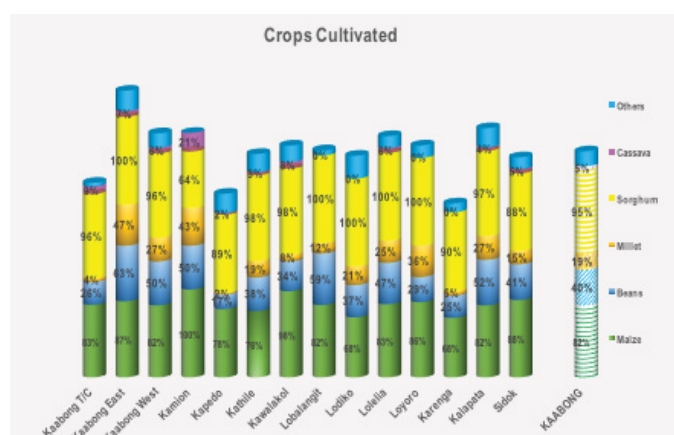


Figure 5: Staples and Legumes Cultivated, Kaabong District, June 2017

The main constraint to crop production in the 6 months prior to the assessment was drought/low rainfall, reported in majority of households (83%), ranging from 71% in Karenga to 94% in Loleila sub county. Inadequate seeds/tools were the next cited constraints to crop production at 8%.

2.4: Household Food Stocks

- More than half of the households (55%) reported having food stocks in their household, with range from 40% in Kaabong TC to 80% in Lobalangit sub-county;
- The source of food stocks was equally distributed between Own Production (46%) and Markets (45%), whilst only 8% reported obtaining from UNWFP/Partner food distribution;
- The mean days of food stock was 14, highest in Kapedo sub-county and lowest in Lodiko and Sidok sub-counties (8 days);

2. Food Availability

- Most households (64%) had less than 1 bag (50kg) of maize and/or sorghum still available in their stock, followed by those with 1-2 bags (30%) and 3-5 bags (5%). Households with more food stocks in terms of 3-5 bags were in Kapedo (27%) and Loyoro (10%) sub-county.

2.5: Food and Humanitarian Assistance

Overall, 85% of households in Kaabong district were registered under one or more Development Programmes with Kamion (100%), Loleila (98%), Sidok (97%) and Karenga (91%) sub-counties having comparatively more households that did receive such assistance. The main programmes in the district included NUSAF (54%), WASH (39%), Food Aid (40%) and MCHN (55%). Overall, the sub-counties with high coverage of development programmes included Kaabong East, Kaabong West, Kathile, Loleila and Kalapata, whilst Lobalangit had the lowest. The distribution was as follows: NUSAF [Loleila (93%), Kamion (86%), Kaabong West (63%), and Kalapata (63%]; WASH [Kaabong East (55%), Kamion (50%), Sidok (51%) and Kapedo (44%]; Food Aid [Loleila (65%), Kaabong West (57%), Sidok (46%) and Kaabong East (45%]; and MCHN [Kalapata (67%), Kathile (66%), Kaabong East (64%) and Loyoro (60%)

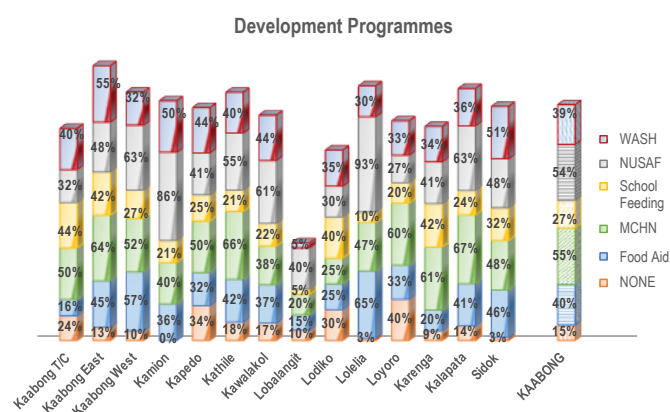


Figure 6: Development Assistance Programmes, Kaabong District, June 2017

The decision related to handling of the food aid was mainly made by women at 49% of households, both men and women at 43% and by men alone at 9% of households. Decisions on the cash/ vouchers in the 5 sub-counties was by both men and women (91%). On the other hand, 27% of households reported safety problems to, at and from the WFP programme sites: 11% while going to the site, 12% at the site and 4% while travelling from the site.

3. Access to Food

3. Access to Food

3.1: Income Earners and Sources

Figure 7 shows about one third (31%) of households in Kaabong district had no income while 69% had at least one income source. The sub-counties with no income included Kathile (40%), Lodiko (55%), Loyoro (47%) and Kalapata (33%). Sub-counties with at least 1 to 4 income earners above district average and in order of importance included Kaabong TC, Lobalangit, Loleila, Kaabong East, Sidok, Karenga, Kawalakol, Kamion, and Kaabong West. Compared to the sub-regional average, findings suggest relatively higher economic access to food in the district.

Agriculture wage labour, Brewing, Sale of firewood/charcoal and Food Crop production were the main sources of income in Kaabong district. The main sub-counties with households reporting having obtained income from such sources included Kathile, Kaabong West, Kalapata and Karenga.

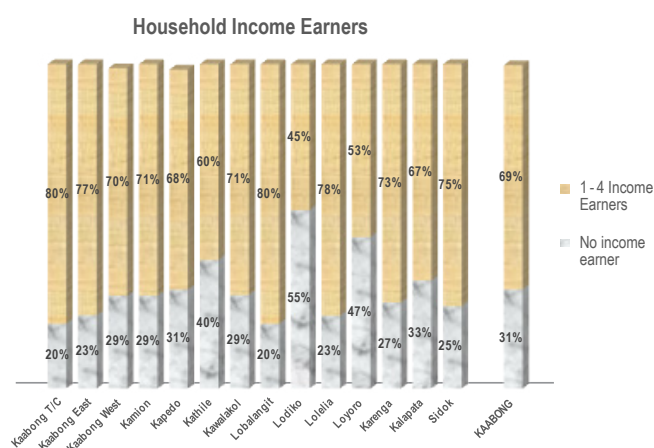


Figure 7: Household Income earners, Kaabong District, June 2017

3.2: Household Debt

Overall, 36% of households in Kaabong district reported having debt and of these, 33% had to pay interest on the current loan. Debts were mainly observed in Kaabong TC, Kaabong East, Lodiko, Lobalangit, Kawalakol and Kapado sub-counties. Interest was mainly owed in Kaabong TC, Kaabong East, Kapado, Karenga and Sidok. In general, there were slightly more households in Kaabong district having debt but fewer expected to pay interest on such debts compared to their sub-regional counterparts at 34% and 48% respectively.

Whereas debt is viewed as not necessarily bad for households, it is indicative of stress when used to meet essential household needs, such as purchase of food. As illustrated in Figure 9, two thirds of debts in households (67%) was borrowed for purposes of buying food, 10% for agricultural inputs, 8% to cover health expenses, and 7% for the school and educational costs. Kaabong East sub-county registered the highest percentage of households that

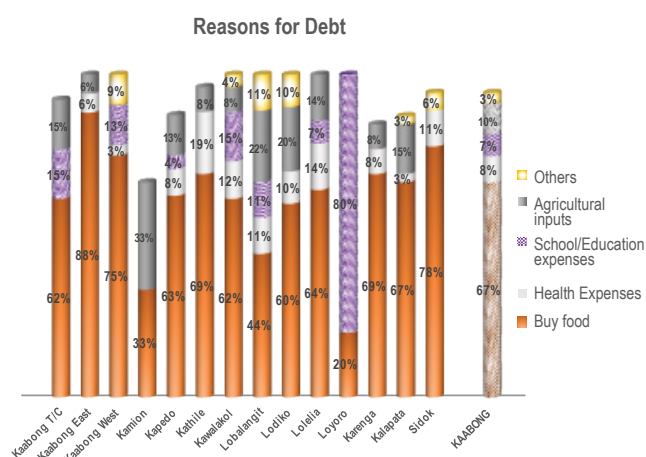


Figure 8: Main Reasons for Debt, Kaabong District, June 2017

3. Access to Food

borrowed to buy food (88%), followed by Sidok (78%), Kaabong West (75%), Karenga (69%), and Kalapata (67%). The high proportion of households obtaining a debt to buy food reflects the stress associated with acquisition of food for household consumption. Borrowing to cover health expenses was mainly in Kathile, Loleila, Lodiko Sidok and Lobalangit. Noteworthy, 80% of debts in Loyoro sub-county was mainly for School/Education expenses.

The findings imply high vulnerability to food insecurity due to exposure to food price fluctuations that are typically high during the lean season, given the limited incomes and earning potential among the households.

3.4: Food Expenditure Share

The Food Expenditure Share refers to the percentage of total household expenditure that is allocated to food. The higher the percentage of total expenditure allocated by the household to food, the greater the food insecurity. For instance, households that spent <50% of total household expenditure on food were regarded as food secure; 50 - <65% as marginally food secure; 65 - <75% as moderately food insecure; and >75% as severely food insecure. Figure 10 shows 29% of households in Kaabong district spent more than 75% of their expenditure on food, categorizing such households as being food insecure. This was particularly marked in Karenga, Lodiko and Kathile sub-counties.

The highest proportion of households comparatively food secure were from Loyoro, Kamion, Kaabong East and Lolelia sub-counties.

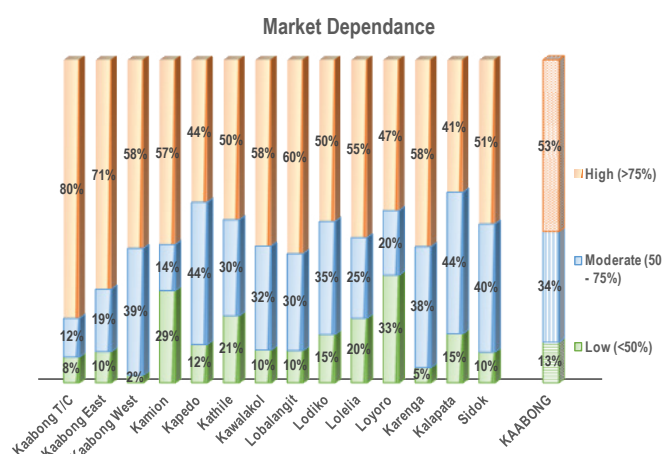


Figure 9: Dependence on Markets for Food in Kaabong District, June 2017

3.3: Dependence on Markets for Food

High dependence on markets for food imply high vulnerability to food insecurity due to exposure to price fluctuations that are typically high during the lean season, given the limited incomes and earning potential among the households. Figure 9 shows 53% of households relied heavily on markets compared to average of 65% within the sub-region. This was mainly observed in Kaabong TC (80%), Kaabong East (71%), and Lobalangit (60%). Only 13% of households in the district were categorized under “low dependence” and mainly from Loyoro, Kamion, Kathile and Lolelia sub-counties.

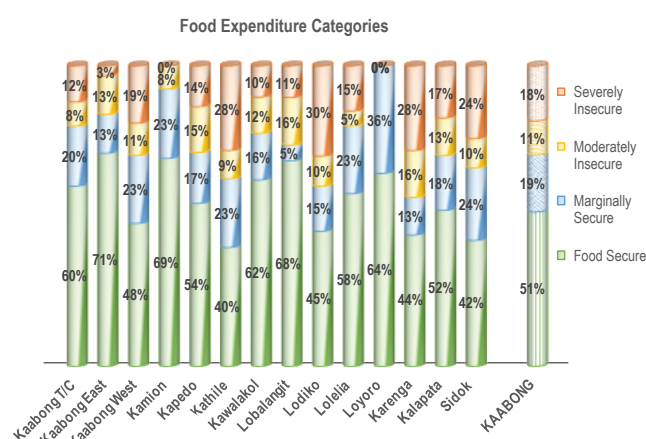


Figure 10: Food Expenditure Share in Kaabong District, June 2017

4. Food Utilization

4. Food Utilization

4.1: Food Consumption

As illustrated in Figure 11, out of the selected households in Kaabong district, only 5% had Food Consumption Score in the 'acceptable' category, with the highest proportion of households in sub-counties of Kamion (29%), Lobalangit and Lodiko (10% each). Most households (62%) were in 'poor' category, especially from Kaabong East, Kaabong TC, Kapedo, Sidok and Kaabong West. Other sub-counties with higher than the district average of 'poor' category included Lobalangit, Lodiko and Kalapata.

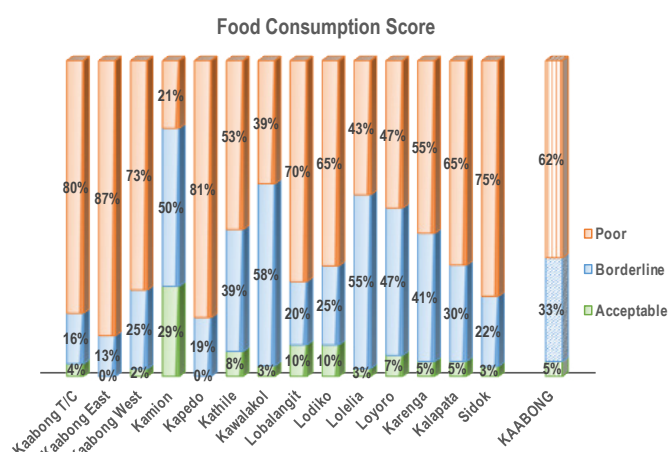


Figure 11: Food Consumption Scores Kaabong, June 2017

4.2: Dietary Diversity

Figure 12 shows the 3 categories of High Dietary Diversity Score (HDDS) that is High, Medium and Low in selected sub-counties in Kaabong district.

The higher the HDDS, the more the diversified diet among households. Sub-counties with households under each of the categories above the district average of 8%, 67% and 24% respectively:

- High (HDDS above 6): [Kaabong TC (32%), Kapedo (20%), Lodiko (20%), Sidok (13%) and Kaabong East (10%) Sub-counties];
- Medium (HDDS above 4.5 but below 6): [Sidok (73%), Kalapata (71%), Karenga (72%), Kapedo (69%), Kaabong West (79%) and Kaabong East (68%)]; and
- Low (HDDS below 4.5): [Kaabong TC (32%), Kapedo (20%), Lodiko (20%), Sidok (13%), Loleila (10%), Lobalangit (10%), and Kaabong East (10%).

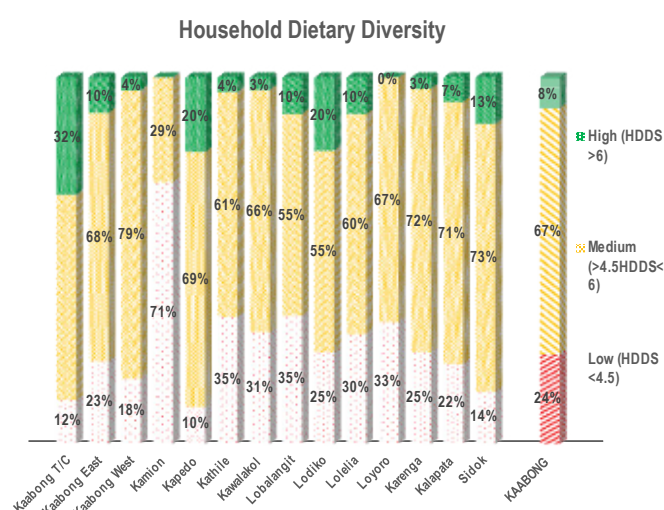


Figure 12: Household Dietary Diversity, Kaabong District, June 2017

4. Food Utilization

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 86% of infants 6–8 months of age received solid, semi-solid or soft foods during the day prior to the assessment. These findings are higher than the sub-regional average of 74%. Figure 13 shows generally, feeding of infants and young children aged 6-23 months 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:

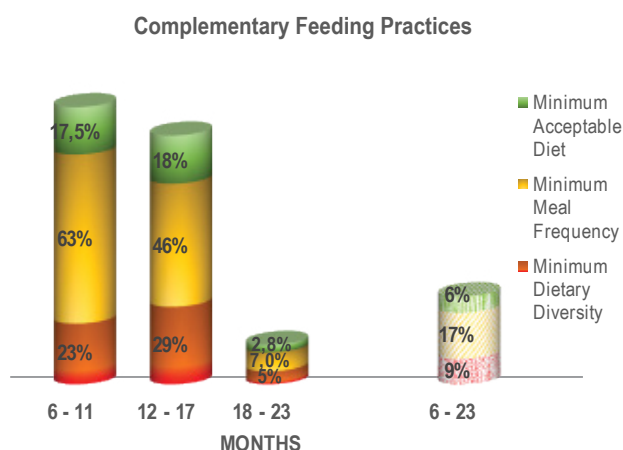


Figure 13: Complementary Feeding Practices, Kaabong District

- Only 9% of children 6 – 23 months met the Minimum Dietary Diversity (MDD), higher in the age category 6-11months;
- Only 17% of children 6-23 months met the Minimum Meal Frequency (MMF), higher in the age categories 6-11months and 12-17 months; and

Only 6% of children met the Minimum Acceptable Diet (MAD), higher in the age categories 6-11 months and 12-17 months.

4.4: Disease Prevalence

Overall, 82% of households in Kaabong district reported that their children were sick in the 2 weeks prior to the survey. As illustrated in Figure 14, the most prevalent diseases/illnesses were Fever/malaria (57%), ARI/Cough (52%), Diarrhea (39%) and Eye disease (33%). Figure 14 shows Kaabong TC, Kaabong West, Kamion, Loleila, and Sidok had the highest prevalence of illnesses. Overall, prevalence of diseases/illnesses was comparatively higher in Kaabong West, Sidok and Kaabong TC. More specifically, sub-counties with highest prevalence included:

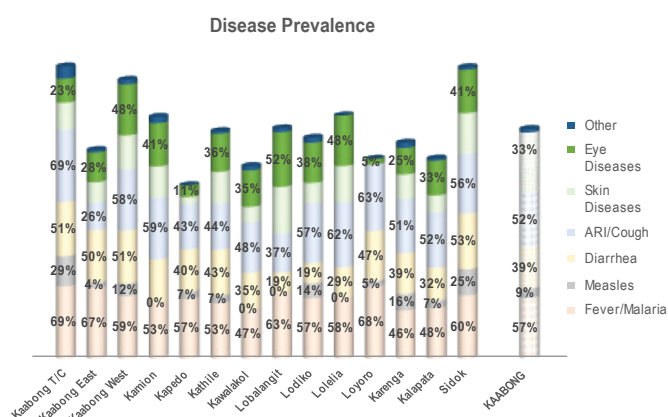


Figure 14: Prevalence of Disease, Kaabong District, June 2017

- Fever/malaria - Kaabong TC, Kaabong West, Kaabong East, Lobalangit, Loyoro, Sidok
- Measles - Kaabong TC, Kaabong West, Lodiko, Karenga, and Sidok

4. Food Utilization

- Diarrhea - Kaabong TC, Kaabong West, Kaabong East, Kamion, Kapedo, Kathile, Loyoro, Sidok
- Skin and Eye disease – Kaabong West, Kamion, Lobalangit, Loleila, Sidok

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 95% of the children in Kaabong district had received DPT3 with verifiable evidence from the Child Health Card available for 46% but for 49% being based on the mother's or caretaker's report. The highest proportion of children was in Kamion, Lodiko and Loyoro at 100% each while sub-counties below the district average Lobalangit (84%), Kaabong West and Kaabong East (93% each), Sidok (91%), Loleila (94%), and Kawalakol (92%).

Measles vaccination is carried out at 9 months of age and overall 97% of children in the district had been immunised, 46% of them with verifiable evidence on the

Child Health cards and 51% based on the mother's or caretaker's report. The range was from 92% in Kamion and Lobalangit sub-counties to 100% in Loleila sub-county. Kaabong district coverage was the same as the sub-regional coverage of 96%. Half of the children in Kaabong district were without evidence from Child Health Cards and this ranged from Kawalakol at 36% to Kathile and Kaabong East at 64%.

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, 95% of the children aged 6 to 59 months had received vitamin A supplements within the previous six months, 47% had Child Health Cards for verification while 48% was based on mother's or caretaker's report (Figure 16). All the sub-counties had almost the same coverage ranging from 76% in Kamion to 100% in Lodiko and Loyoro sub-counties.

Medicines for treatment of intestinal worms is provided every 6 months to children aged between 12 and 59 months.

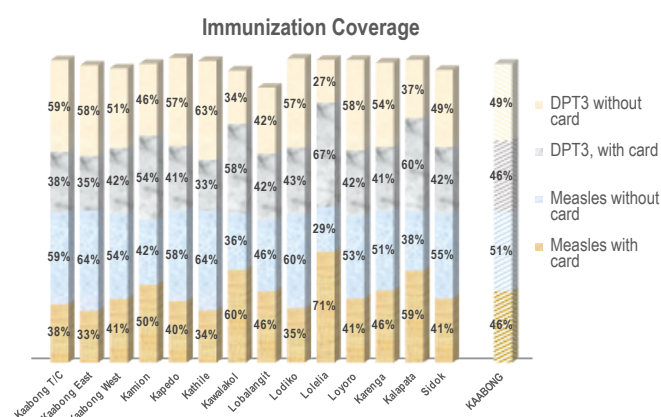


Figure 15: Measles and DPT3 Immunisation Coverage in Kaabong District

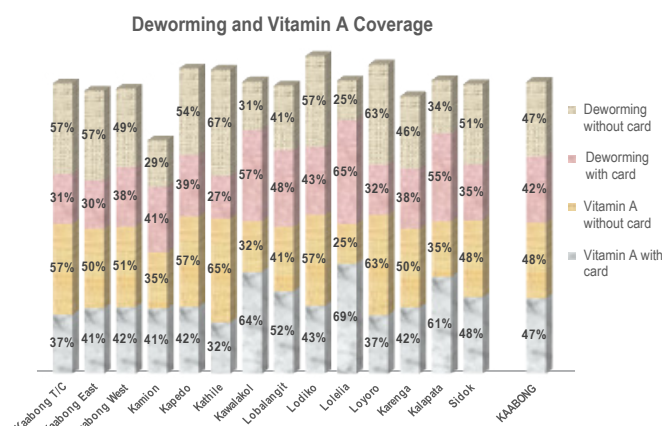


Figure 16: Vitamin A and Deworming Coverage, Kaabong District

4. Food Utilization

Overall, 89% of the sampled children aged 12 to 59 months had received deworming medicines within the 6 months preceding the assessment with verifiable evidence for 42%. All the sub-counties had almost the same coverage ranging from 71% in Kamion to 100% in Lodiko sub-county. Lack of Child Health Cards was most marked in all the sub-counties ranging from 29% in Kamion to 67% in Kathile sub-county.

4.7: Household Water

a) Water Access

Overall, 75% 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 (Figure 17). Lobalangit and Lodiko sub-counties had the largest proportion of households with access to safe water while Kathile, Kawalakol and Sidok 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 12% of

households treated their drinking water with the highest proportion being from Kawalakol and Lobalangit sub-counties and the most commonly used method for treatment was by boiling at 84%.

b) Water Usage

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 (79%) of the selected households in Kaabong district reported use of less than 15 litres of water per person per day, with a range from 55% in Lobalangit to 89% in Kaabong West sub-county. The district had slightly more households using less than 15 litres of water pppd than the regional average of 76%.

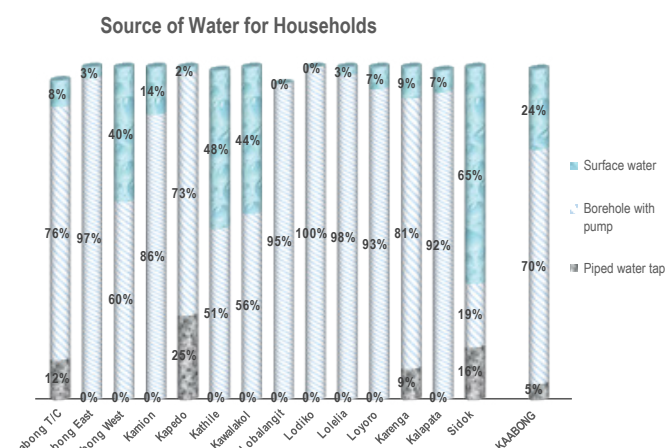


Figure 17: Sources of Household Water, Kaabong District, June 2017

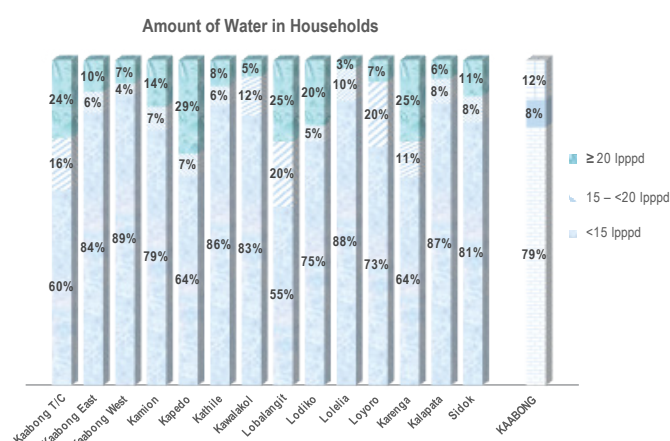


Figure 18: Amount of Water used in Households, Kaabong District, June 2017

4. Food Utilization

4.8: Household Sanitation and Hygiene

Figure 19 illustrates that 42% of selected households in Kaabong district did not have any toilet facilities and out of the 49% that had, 9% shared with other households. The lack of toilet facilities was more common in the sub-counties of Kaabong West (60%), Kapedo (51%), Kathile (62%) and Sidok (49%).

Sharing of toilet facilities was more pronounced in the sub-counties of Lodiko (30%), Kalapata (20%), Loyoro (13%) and Kapedo (19%).

The types of toilets ranged from the open pit without a super structure at 80%. This ranged from 18% in Kaabong TC to 100% in Kamion. Of the households with Pit Latrine with slab/VIP, Kaabong TC (77%), Kapedo (41%) and Karenga (43%) had the highest coverage.

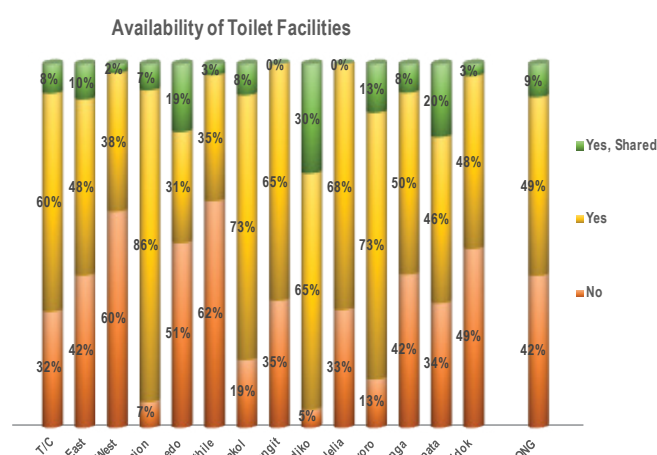


Figure 19: Availability of Toilet Facilities, Kaabong District, June 2017

4. Food Utilization

5. Stability

5.1: Main Shocks to Households Food Security

As illustrated in Figure 20, the main shocks to household food security in Kaabong district included High Food Prices and Floods, Heavy Rains, drought at 28% each, followed by Sickness/Disease at 24%. There were only 2% of households that did not face any difficulty. High food prices was mainly reported in Kaabong TC (44%), Kaabong West (37%), Kathile (30%), Lobalangit (30%), Loleila (38%), and Kalapata (31%).

Sickness/disease was mostly reported in Kaabong East (39%), Kamion (36%), Lobalangit (40%), and Loleila 30%. The proportion of households reporting high food prices and sickness/disease in the district were the same as the regional average of 29% and 25%, respectively.

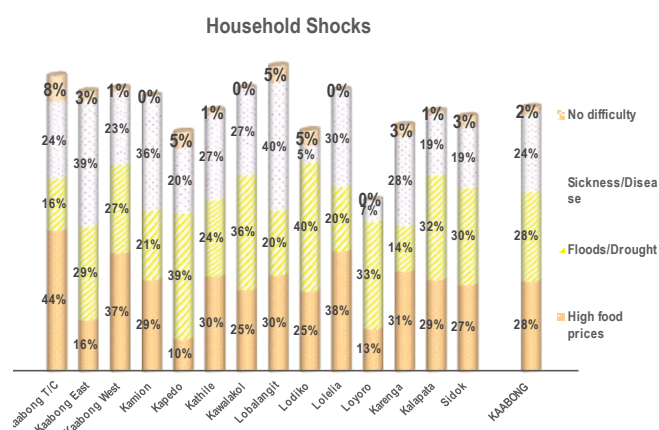


Figure 20: Household Shocks to Food Security, Kaabong District, June 2017

5.2: Livelihood Coping Strategies

Figure 21 illustrates that only 3% of households in Kaabong district did not apply any coping strategies, especially from Kamion sub-county (21%) whilst 80% throughout the district applied emergency coping strategies. Sub-counties that recorded higher proportions of households with emergency coping strategy above the district average included Lodiko (100%), Loyoro (100%), Kapedo (93%), Kalapata (88%) and Kaabong East (81%).

The proportion of households applying emergency coping strategies were far higher than the sub-regional average of 48%.

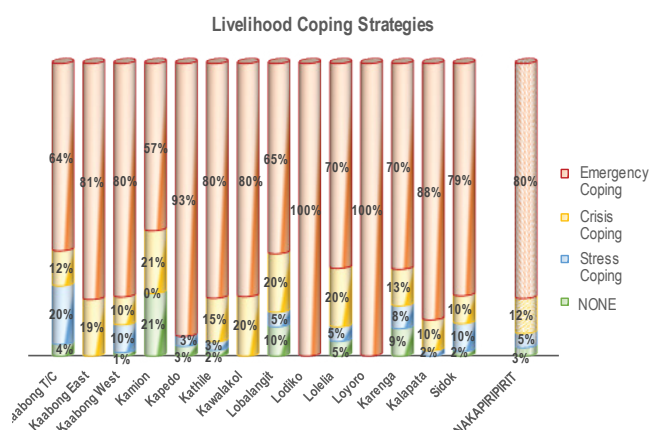


Figure 21: Livelihood Coping Strategies, Kaabong District, June 2017

6. Food Security and Nutrition Outcomes

6. 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 one-third (32%) of sampled women in Kaabong district were underweight, which is lower than the sub-regional average of 39%. Kamion, Lodiko and Kaabong TC sub-counties registered the highest proportions of underweight women (83%, 54%, and 44%, respectively).

The sub-counties of Karenga, Loyoro, Lobalangit, Kaabong East, Sidok, Loleila had the lowest proportion of underweight women. However, on the hand Karenga sub-county registered the highest proportion of overweight and obese women (6%).

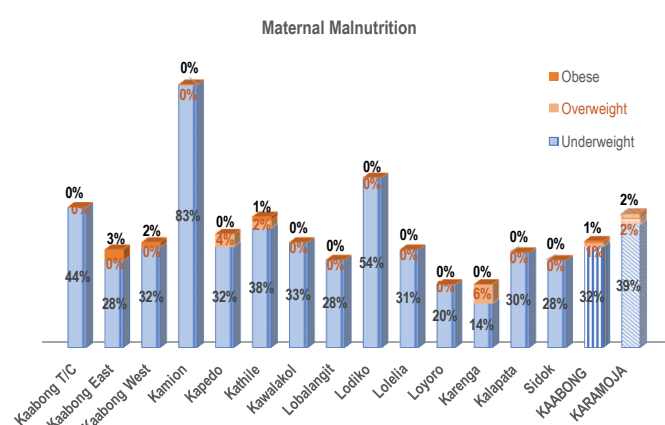


Figure 22: Malnutrition Level among Mothers in Kaabong District, June 2017

b) Under-five Children

The Severe Acute Malnutrition (SAM) outcome for under-five children has been summarized and illustrated in Figure 23, key findings showed that SAM for Kaabong district was at 2.1%, with highest proportion in Loleila sub-county (10.2%) and Kathile sub-county (4.1%). The sub-counties above the critical level of 2% included Karenga, Kathile, Kawalakol, Loleila and Sidok, whilst Kaabong West and Kalapata registered the lowest of 1.1% and 0.7%, respectively.

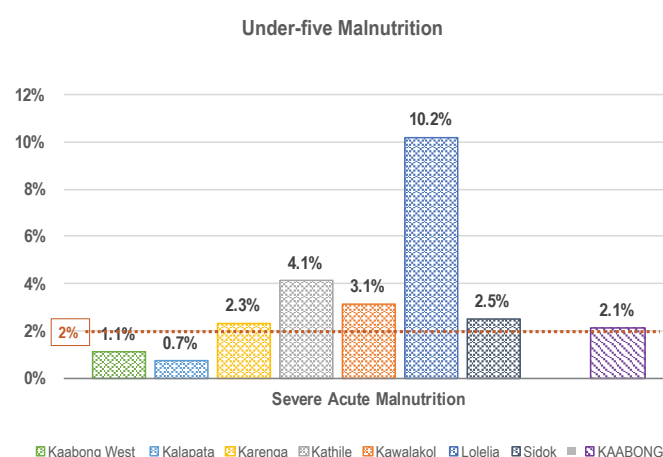


Figure 23: Prevalence of Severe Acute Malnutrition in Kaabong, June 2017

6. Food Security and Nutrition Outcomes

The Global Acute Malnutrition (GAM) outcome for under-five children has been summarized and illustrated in Figure 24 and key findings showed that GAM for Kaabong district was at 11.8%, with highest proportion in **Kamion** sub-county (30.8%) and lowest in Lobalangit sub-county (0.0%). The sub-counties with proportions above the critical level of 10% included: Kaabong East, Kaabong Town Council, Kalapata, Kathile, Kawalakol, Lolelia and Kamion.

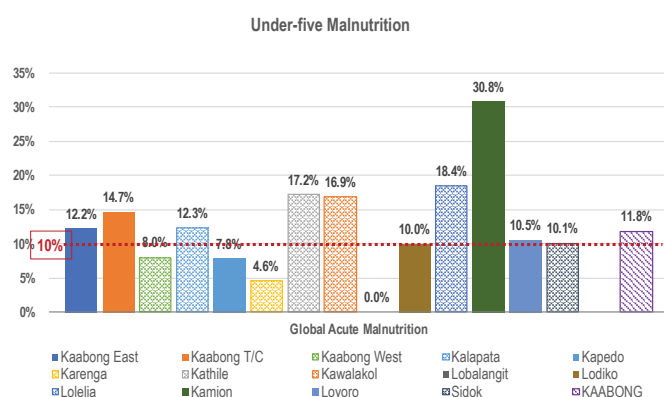


Figure 24: Prevalence of Global Acute Malnutrition in Kaabong, June 2017

The Stunting outcome for under-five children has been summarized and illustrated in Figure 25 and key findings showed that for Kaabong district it was at 40.5%, with the highest proportion in **Kamion** sub-county (53.8%) and lowest in Kaabong East sub-county (26.8%). All the sub-counties of Kaabong district were above the critical level of 30%, with the only exception of Kaabong East.

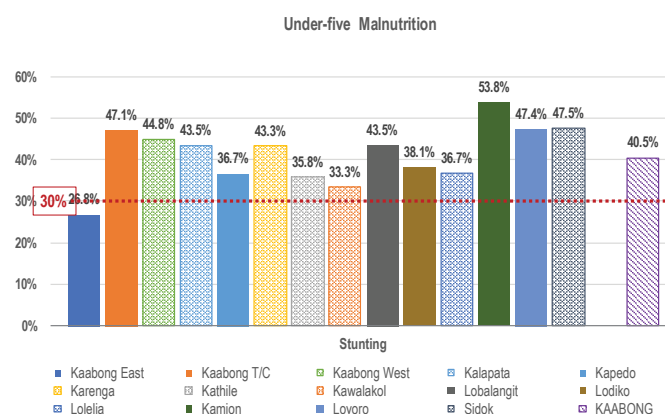


Figure 25: Prevalence of Stunting in Kaabong District, June 2017

The Underweight outcome for under-five children has been summarized and illustrated in Figure 26 and key findings showed that for Kaabong district it was at 30.6%, with the highest proportion in **Kamion** sub-county (46.2%) and lowest in Lolelia sub-county and Kaabong Town Council (14.3% and 14.7%, respectively). The sub-counties above the critical level of 20% included: Kaabong West, Kalapata, Kapedo, Karenga, Kawalakol, Kamion, Loyoro and Sidok.

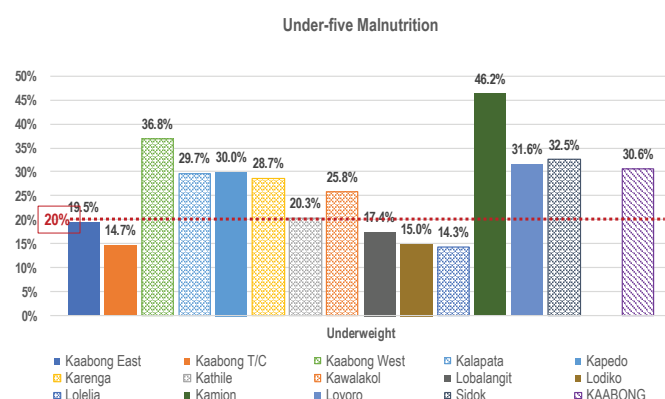


Figure 26: Prevalence of Underweight in Kaabong District, June 2017

6. Food Security and Nutrition Outcomes

6.2: Final Food Security Classification

The Food Security Index that combines the Food Expenditure, Food Consumption Score and Livelihood coping strategies showed that 55% of households in Kaabong district were food secure (Food secure + Marginally food secure categories) whilst 45% were Food Insecure. The findings showed that Kaabong district had much less food insecure households than their counterparts in the sub-region recorded at 57%. There were more food insecure households registered in the sub-counties of Kamion (71%), Lodiko (65%), Kawalakol (63%), Lolelia (61%) and Kathile 58%. On the other hand, lowest proportion of food insecure households were registered in Kaabong East (13%) and KaabongTown Council (20%).

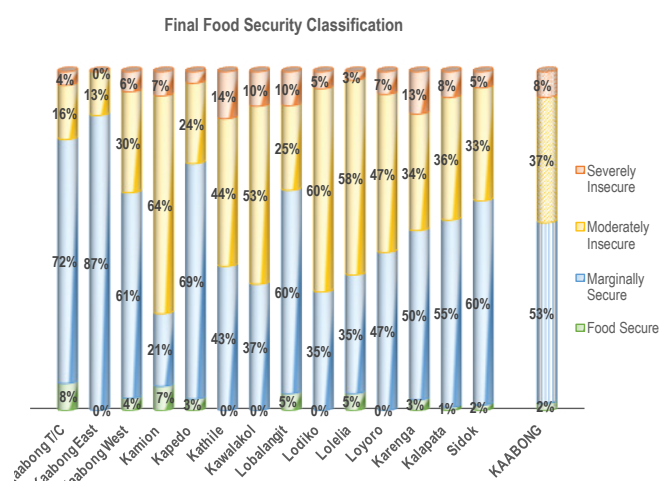


Figure 20: Household Shocks to Food Security, Kaabong District, June 2017

7. Recommendations

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);

7. Recommendations

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;

7. Recommendations

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;

7. Recommendations

- 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

1. 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.

7. Recommendations**Attendance at Kaabong FSNA Validation Workshop**

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