



## Summary of the Nutrition and Health Assessment in Karamoja Region (February 2008)

### Background

Karamoja is a semi-arid area covering approximately 27,200 square kilometers. It borders Kapchorwa and Kumi districts to the south; Katakwi and Lira districts to the south-west; Pader District to the West; and Kitgum District to the North-west. It also borders Sudan to the North and Kenya to the East and North. Karamoja has a total population of 955,245,<sup>1</sup> comprising of eleven different social groupings with largely similar dialects with the exception of a few that are quite distinct.

According to the Health and Nutrition Assessment of Karamoja in 2006, GAM level was at 12.9 percent with the prevalence of Malaria at 48.2 percent which could have been attributed to the low mosquito net coverage of 13.9percent. Skin disease which could be attributed to the poor hygiene and sanitary practices was pronounced at 20 percent, access to water had improved compared to the previous years at 75.7percent and access to health centres within 5kms had improved to 76.8 percent. However, the latrine coverage had not improved in the last 3 years which still stands at 12.3 percent. There was an improvement in the levels of GAM from 22 percent in 2003 to 12.9 percent in 2006. This could partly be attributed to the various interventions put in place by Government and partners. However in August 2007, the region was faced with floods and this affected the health and Nutrition situation through inadequate access to health facilities coupled with inadequate access and availability of food to the communities. Furthermore, floods affected the water and sanitation situation as well as the health care seeking behaviors due to the broken bridges and impassable roads.

The Ministry of Health in collaboration with International Baby Food Action Network (IBFAN) Uganda with support from UN World Food Programme and United Nations Children's Fund conducted the Assessment in the month of February 2008 with the aim of monitoring the trends of malnutrition in order to devise and/or strengthen appropriate interventions. The general objective of the Health and Nutrition Assessment was to assess impact of the various health and nutrition interventions put in place in Karamoja Region with specific focus on the nutritional status of children 6 to 59 months of age and women in the reproductive age group (15 - 49 years). The Survey also assessed the impact of the floods on the health and nutrition situation of the population.

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<sup>1</sup>. According to the final results of the September 2002 National Population and Housing Census, Kotido District has a population of 605,322 (302,206 males and 303,116 females). Moroto District has a population of 194,773 (98,145 males and 96,628 females). Nakapiripirit has a population of 155,150 (78,284 males and 76,866 females) (See <http://www.ubos.org/preliminaryfullreport.pdf>).



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Methodology

Sampling was done according to Standardized Monitoring and Assessment of Relief and Transition (SMART) Nutrition survey Guidelines. Two stage cluster sampling method was adopted. There were 33 clusters (villages) selected in each district with relatively accurate and reliable population estimates that were up to the parish level. These were used as geographical units in SMART Emergency Nutrition Assessment (ENA) software. The sample sizes were computed basing on the expected overall prevalence of (GAM) and Crude mortality rates of 2006 survey results<sup>2</sup> for the individual districts with a 95% confidence interval, design effect of 2 and precision of 4 percent. The sample sizes of households using crude mortality were used since they were relatively higher than those using GAM rates. All women (15-49 years) and children (6-59 months) in the selected households were included in the assessment until the target sample was attained.

Results

The prevalence of malnutrition in Karamoja region was highest in the districts of Moroto (15.6 percent), Nakapiripit (15.1 percent) and Kaabong (9.1 percent). The lowest rates of malnutrition in the region were 8.3 percent in Abim and 6.3 percent in Kotido districts. The overall prevalence of Global Acute Malnutrition of 10.9percent and severe malnutrition rate of 1.7percent for children 6-59 months of age is alarming. Kaabong however had the highest prevalence of Severe Acute Malnutrition of 2.6 percent followed by Nakapiripit (2.2 percent) and Moroto (2percent). The acceptable prevalence of SAM should be below 1 percent. The summary of the findings are shown in Table 1 below:

Table 1: Summary of the Results of the Nutrition and Health Assessment in Karamoja Region, 2008

Table with 7 columns: INDICATORS, ABIM, KAABONG, KOTIDO, MOROTO, NAKAPIRIPIT, TOTAL. Rows include Demography and Household, Nutrition Indices, Morbidity, and Access to Water.

<sup>2</sup> Ministry of Health (October 2006) Health and Nutrition Survey in Karamoja Region.





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INDICATORS	ABIM	KAABONG	KOTIDO	MOROTO	NAKAPIRIPIRIT	TOTAL
<b>Latrine Use</b>						
• Owned latrine	30.7	5.4	9.9	3.9	3.7	10.7
• Bush	57.1	94.7	89.3	94.9	94.6	86.1
<b>Access to Health services</b>						
• Hospital	19.1	23.7	3.2	35.5	9.1	18.1
• Health Center	79.8	73.3	95.3	64.0	72.5	77
• Drug Distributor/CHW	0.2	0.6	0	0	2.5	0.7
<b>Immunization/Supplementation status with CHC</b>	%	%	%	%	%	%
• Measles Immunization	68.2	33.2	49.8	50.2	24.1	45.1
• Vitamin A	66.2	35.7	45.7	44.5	21.5	42.7
• De-worming	67.2	34.1	41.4	44.0	22.2	41.8
• DPT3	71.1	34.5	54.9	55.8	25.9	48.4
Mosquito Net Coverage (%)	41.1	28.7	62.2	26.0	28.3	37.3
Distance to Health Facility (≤5Km) %	57.2	42.8	32.0	57.3	22.9	42.4
Use of Child Health Card (%)	26.6	68.2	34.4	48.6	50.0	45.5
Access to food through Nutrition Interventions (%)	37.3	31.7	43.4	35.7	37.8	37.2
Introduction of solids foods below 6 months of age (%)	62.6	84.1	87.9	42.5	88.4	73.1

Overall, prevalence of malnutrition remains at an unacceptably high level. However, in comparison to the findings from those from previous surveys, it was observed that there is an improvement in the prevalence of Global Acute Malnutrition over the last 5 year period with Kotido showing a decline of about 21points and 7.4 points in Nakapiripirit as shown in Table 2 below. However, there has not been much improvement in the situation in Moroto District. The high rates of malnutrition in Karamoja region could partly be attributed to food insecurity due to drought and recent floods coupled with the chronic insecurity, disarmament and poverty in the region; poor public health system with barriers to health care access; inadequate social and child care environment attributed partly to lack of health and nutrition education leading to poor infant and young child feeding practices

**Table 2: Trends of Malnutrition for Karamoja Region**

District	Indicators	May-03	Aug-04	Nov-05	Oct-06	Feb-08
Abim	GAM (%)	-	-	4.4 (90)	9.8 (924)	8.3 (726)
	SAM (%)	-	-	1.1	2.1	1
Nakapiripirit	GAM (%)	22.5 (882)	18.8 (815)	10.4 (945)	12.7 (911)	15.1 (774)
	SAM (%)	5.5	5.5	2.8	3.5	2.2
Moroto	GAM (%)	16.7 (951)	23.1 (914)	17.9 (915)	16.3 (932)	15.6 (800)
	SAM (%)	5	5	6.4	3.2	2
Kotido	GAM (%)	26.9 (1014)	14.1 (888)	8.1 (892)	11.5 (906)	6.3 (758)
	SAM (%)	8.4	2.5	0.6	2.4	0.2
Kaabong	GAM (%)	-	-	10.1 (565)	14.4 (1099)	9.1 (735)
	SAM (%)	-	-	0.2	4.7	2.6
Overall for Karamoja Region	GAM (%)	22 (2,847)	18.7 (2,617)	12.1(2,752)	12.9 (4,772)	10.9 (3,793)
	SAM (%)	6.3	4.3	3.3	3.2	1.6

The crude mortality rate was 1.12 people per 10,000 per day indicate Humanitarian Emergency Level according to the Integrated Food Security Phase Classification (IPC) Reference Table.



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This high mortality rate was attributed to fever/malaria, food insecurity and the disarmament/cattle rustling.

Abim District had the highest prevalence of diseases followed by Kaabong while Moroto and Nakapiripirit had the lowest prevalence. The prevalence of malaria and diarrhea was high in the region at 25.9 and 16.8 percent respectively. This however is lower than that reported in 2006 survey. The survey findings indicate that the districts with the highest levels of malnutrition had the lowest prevalence of illnesses and/or diseases.

Despite the recommendation of the national Infant and Young Child Feeding policy on the provision of 5 meals a day to children, this was not the case in Karamoja region with most of the children being given 1 (16.1 percent) to 2 (55.4 percent) meals a day with Moroto providing the highest proportion of children 1 taking meal a day at 40 percent. However, the second meal was provided from food left over from the previous night and given to the children as a mid morning snack. Consumption of wild fruits and leaves was a common practice in Moroto and Nakapiripirit. The poor infant feeding practices as assessed in the survey may be mediating a significant impact on child growth and development and the persistently relatively high levels of wasting and stunting.

Measles and DPT3 vaccination as well as Vitamin A Supplementation and de-worming with proof from the child health card were higher in Abim District with 68, 71, 66.2 and 67.2 percent respectively and lowest in Nakapiripirit at 24, 25.9, 21.5 and 22.2 percent respectively. It should be noted that the recommended minimum standard for measles and DPT3 vaccination coverage is 95 percent while Vitamin A supplementation is 85 percent.

The feeding programmes in the region included Maternal Child Health and Nutrition, Supplementary feeding and therapeutic feeding giving coverage of 40.4%. This has however declined from 62.3 percent in 2006.

Access to clean and safe water still remains a challenge in the region. Although most of the households accessed boreholes, distance was one of the major challenges identified by the communities leading to household members using water (8.9lts) which is far below the recommended amount of 11 litres of water per person per day. Use of bush for fecal disposal was still pronounced in the region at 86.1 percent.

## CONCLUSION

The Nutrition situation in Karamoja region is alarming (Above the 10 percent with aggravating factors) coupled with high mortality rate of above 1 person per 10,000 per day. The GAM rate of above the emergency threshold of 15% in the districts of Moroto and Nakapiripirit calls for bold and urgent interventions. Using a holistic approach to address the situation in the



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Karamoja region, interventions should be designed to address the poor living conditions particularly access to water and sanitation facilities, poor maternal and child caring practices, improved access to health services, creating a safe and protective environment for children and adequate access to food in the region.

## RECOMMENDATIONS

### *Improve access to and availability of Food*

The preliminary findings of the Karamoja Assessment were disseminated at the Integrated Food Security Phase Classification (IPC) multi-stakeholder's meeting held in Moroto in February 2008. The findings indicated that there was high level of food insecurity as observed from limited coping abilities and non functional markets in many areas. Members therefore recommended immediate food aid for a period of 6months Kcal for the most affected areas and 3 months in areas of acute food and livelihood crisis.

### *Treatment of Severe Malnutrition*

Karamoja region currently has 2 therapeutic feeding centers in Kaabong and Moroto districts. This is an issue of great concern given the high levels of severe malnutrition found in the survey (1.6 percent). Severe malnutrition carries a high risk of mortality and should be considered a medical emergency. There is need to continue the support to the TFCs in Matany and Kaabong and explore possibilities for establishing a TFC in Amudat hospital and Nabilatuk HC IV to serve the Nakapiririt area and an additional TFC in Moroto Hospital; support creation of Community Therapeutic Care programme to ensure that treatment reaches more children in need

### *Treatment of Moderate Malnutrition*

The GAM of 10.9percent with aggravating factors is considered as a public health problem. The UNWFP should strengthen and/or expand the SFC programme to cover areas where GAM is above 10percent.

### *Nutrition Surveillance/Growth Promotion Monitoring*

Growth promotion and monitoring (GPM) activities as well as Maternal and Child Health Nutrition Interventions need to be reviewed and strengthened as appropriate to cover areas with higher GAM rates. This would enable effective and efficient screening of children to identify those with severe and moderate malnutrition for referral and early treatment.

- Support to districts to strengthen and scale up screening for malnutrition and referral, using the Village Health Team and other community based organizations should be explored
- There is an urgent need to expand the MCHN and also advocate for more partners to step in Karamoja to support service delivery

### *Nutrition Education and Promotion*

A comprehensive social mobilization strategy with an IEC campaign on maternal and infant and young child feeding should be developed and disseminated. The provision of health and nutrition education by community health workers with more emphasis on breastfeeding and





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complementary feeding practices, food preparation, types of nutrient dense foods, hygiene, and sanitation targeting is very crucial.

***Strengthen health care system and improve access to health services***

Strengthening of the Maternal and Child Health programmes should be done to curb down the prevalence of preventable diseases such as diarrhea, ARIs and cough, as well as skin diseases. The distribution of insecticide treated nets (ITNs) and the use of community health workers in the distribution of anti-malarial drugs and identifying the malnourished is recommended. Early treatment of respiratory tract infections, use of ORS with diarrhea episodes and improvements in water and sanitation should be prioritized. The relatively low vaccination coverage found for measles, DPT3 and Vitamin A Supplementation are a major concern. There is need to strengthen the immunization/supplementation activities in the region. The distribution of Child Health or Immunization Cards should be improved to enable effective record keeping and monitoring.

***Improving water and sanitation situation***

A feasibility study should be conducted to provide information on why the Karamojong do not use latrines for fecal disposal. This will enable the districts design strategies for improving and sustaining fecal disposal in the region. Increasing access to and availability of safe water to the communities is crucial

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