



January 2025

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Abbreviations and Acronyms

ACCORD	Action for Community Organisation, Rehabilitation and Development	MAM	Moderate Acute Malnutrition
ACF	Action Against Hunger	MDD-W	Minimum dietary diversity for women of reproductive Age
AHSPR	Annual Health Sector Performance Report	MIYCAN	Maternal, infant, young, child and adolescent Nutrition
ANC	Antenatal care	MIYCN	Maternal, infant and young child nutrition
ANSPR	Annual Nutrition Sector Performance Report	MoH	Ministry of Health
ASF	Animal source foods	MSNA	Multisectoral needs assessment
BMZ	German Federal Ministry of Economic Cooperation and Development	NACS	Integrating Nutrition Assessment Counselling and Support
CAHWS	Community animal health worker	NGO	Non-governmental organization
CAN	Context analysis of nutrition	OPD	Outpatient department
CAO	Chief administrative officer	OPM	Office of the Prime Minister
CDO	Community development officer	OWC	Operation Wealth Creation
CMAM	Community-based Management of Acute Malnutrition	PBW	Pregnant and breastfeeding women
DHIS	District Health Information System	PDM	Parish Development Model
DHO	District Health Office	PEAP	Poverty Eradication Action Plan
DNCC	District Nutrition Coordination Committee	PtIN	Programming towards Improved Nutrition
ECD	Early childhood development	RUTF	Ready to use therapeutic foods
FGD	Focus group discussion	SAM	Severe Acute Malnutrition
FSL	Food security and livelihood	SBC	Social Behaviour Change
FSNA	Food Security and Nutrition Assessment	SD	Standard deviation
GAM	Global Acute Malnutrition	SNCC	Sub-county Nutrition Coordination Committee
GBV	Gender-based violence	SSSF	Solid semi-solid soft foods
HDDS	Household dietary diversity score	TB	Tuberculosis
HF	Health facility	TBA	Traditional birth attendant
HH	Household	TC	Town Council
HIV	Human immuno-deficiency virus	U5MR	Under-five mortality rate
IDA	Iron deficiency anemia	UDHS	Uganda Demographic and Health Survey
IEC	Information, education and communication	UFNP	Uganda Food and Nutrition Policy
IFA	Iron and folic acid	UGIFT	Uganda Intergovernmental Fiscal Transfers
IMAM	Integrated Management of Acute Malnutrition	UNAP	Uganda Nutrition Action Plan
IPC	Integrated Food Security Phase Classification	UNICEF	United Nations Children's Fund
ITC	Inpatient therapeutic care	UNPHCS	Uganda National Population Housing Census
ITNs	Insecticide treated nets	UTI	Urinary tract infection
IYCF	Infant and young child feeding	VAS	Vitamin A supplementation
KII	Key informant interview		
LC	Local Council		

Glossary of Terms

Term	Definition
Diet	Kind of food and drink that an individual usually consumes
Adolescent	According to MoH, an adolescent as a young person from 10 years to 19 years of age
Health	According to WHO, health is a complete state of physical, mental, and social well-being and not merely the absence of disease or infirmity
Women empowerment	Women's own power of self-determination and decision-making including aspects of women control of assets, income, time, labor, and knowledge
Care practices	An individual's/ caretaker's typical practices for feeding and caring for infants, young children, mothers, themselves, and other family members
Anaemia	A condition characterized by reduction in hemoglobin levels or red blood cells, which impairs the ability to supply oxygen to the body's tissues.
Complementary Feeding	The feeding of a child from 6 months of age using of age-appropriate, adequate and safe solid, semi-solid or liquid food in addition to breast milk or a breast milk substitute.
Young Child	MoH defines a young child as a child from the age of 12 months up to 59 months of age.
Infant	Infant MoH defines an infant as a baby from birth to 12
Pre-lacteal feeds	Fluids other than prescribed medicine that are given to children before the initiation of breastfeeding.

Acknowledgments

This Contextual Analysis of Nutrition (CAN) report is a success because of dedicated contributions and efforts by various people right from inception to finalization. The assessment was funded by private donation (The Conrad Stiftung) under the UGA 1127 project.

Sincere appreciation also to the stakeholders and partners of Moroto, Napak and Nakapiripirit local governments especially the sectors of health, WASH, Education, agriculture and production, community services, subcounty authorities and health facilities) for their well wishes, time and thoughtful opinions into the assessment.

We are also grateful to Moroto regional referral hospital-nutrition unit, the implementing partners, the UN agencies for their astute views and for sharing their assessment reports on nutrition.

Thanks to the WHH assessment team (the consultant for the expertise to analyse and triangulate the data, the Regional Nutrition Advisor for technical support, the logistics and finance team, the enumerators for the efforts rendered during the entire duration of the assessment. Your cooperation, flexibility and professional conduct was so impressive.

Special credit to local authorities in the villages who, together with the WHH Karamoja Field teams of nutrition, WASH and FSL mobilized the different respondents in the different project locations while keeping the atmosphere orderly, secure during the focus group discussions.

Finally, thanks to the community members who generously gave us their time amidst their busy schedules and shared honest opinions during focus group discussions.

Thank you all!

Nutrition Coordinator- Welthungerhilfe Karamoja

Executive Summary

Introduction

The Karamoja sub-region located in Northeastern Uganda scores low on most of the socioeconomic, health, and nutrition indicators compared to the average national values. Despite the enormous investment from government, donors and implementing partners, high rates of malnutrition have persisted in the region. Key drivers include persistent household food insecurity, unfavorable climatic conditions, poor sanitation practices, suboptimal Infant and young child feeding practices and sporadic security incidents. Nonetheless, Karamoja emerged top in a few selected indicators like low prevalence of overweight or obesity, and coverage of antenatal care for pregnant women. Additionally, based on the nutrition indicators assessed through the annual nutrition sector performance report, Karamoja was ranked first of the 15 regions.

As emphasized in the Uganda Nutrition Action Plan, a multisectoral approach is necessary to address the underlying drivers of malnutrition and sustain the programmatic gains observed in Karamoja. This suggests the need to design contextualized, coordinated and multisectoral programs that incorporate nutrition-specific, nutrition-sensitive and governance components based on evidence. The purpose of conducting the Contextualised Analysis of Nutrition (CAN) assessment was to examine in depth the nutrition situation and multiple drivers of malnutrition in three Karamoja districts and recommend suitable actions that address the identified programmatic gaps.

Methods

The CAN approach collates both qualitative and secondary data to identify key programmatic gaps at outcome level and drivers that need to be addressed to improve nutrition outcomes using a set of key guiding questions. WHH conducted the CAN in selected villages of three districts in Karamoja; Napak, Nakapiripirit and Moroto. A total of 63 segmented focus group discussions (FGDs) were conducted among participants comprising pregnant women, breastfeeding mothers with children below 2 years, adolescents aged 10-17 years, grandmothers and fathers of children below five years. Twenty key informant interviews were conducted at regional and subregional levels with district departmental heads, UN agencies, implementing partners, political leaders, health unit in-charges and representatives from the subcounty headquarters office.

Secondary data was gathered from national household surveys, mainly the Uganda Demographic and Health Survey (UDHS) and regional nutrition assessments mainly the Food Security and Nutrition Assessment (FSNA) in Karamoja, Integrated Food Security Phase Classification (IPC) reports and reports from other partner-supported assessments. The national policy guidelines and legislative literature were also reviewed alongside annual sector performance reports for health and nutrition. Data was gathered by trained local enumerators with prior experience in collecting and transcribing qualitative information. Data collection tools included KII and FGD guides with consent forms and a summary sheet for secondary data.

To examine the nutrition situation and explore the drivers in-depth, data was gathered on eight themes namely; trends of malnutrition; perceptions about malnutrition (definition, causes and signs and); maternal and child health; maternal and child nutrition, adolescent health and nutrition; food security and livelihoods; water, sanitation and hygiene and gender. Triangulation was done between primary and secondary data sources to check areas of convergence and discordance. A validation workshop was held with stakeholders to discuss strategies to utilize findings and recommendations from the CAN.

As the most updated multisectoral quantitative data source in Karamoja, FSNA results from all nine districts were presented alongside the related CAN topics for triangulation and to provide a comprehensive understanding of the situation in the CAN areas and the entire region. It is worth noting that the CAN

assessment did not involve primary data collection of any quantitative information. Therefore, the inconsistencies identified between qualitative and quantitative information were not known to the CAN team and were not explained in the report.

Findings

The nutrition situation

Unlike the decreasing malnutrition trend observed at the national level, both chronic and acute malnutrition in Karamoja remained high between 2012 and 2023 with minimal reductions that were not sustained within the decade. Consistent with the trends analysis, majority of the key informants described the nutrition situation as deteriorating, attributing it to unfavorable weather characterized by drought and floods, the COVID-19 aftermath, insecurity and withdrawal of partner support due to dwindling funds, which a few key informants found beneficial for sustainability. Key informants further identified hot spots for malnutrition as the dry belts with minimal rainfall, low-lying areas affected by floods, the active towns with busy caregivers, border districts where the sale of home-grown food was rampant and deep rural areas with heightened poverty and limited access to essential services. Children below five years, pregnant and breastfeeding women (PBWs) and the elderly were the main vulnerable groups mentioned by CAN participants. Adolescents, children above 5 years and people with chronic illnesses were also mentioned. In some instances, the hot spot areas and vulnerable groups mentioned by CAN participants contradicted the information reported from nutrition assessments and programs suggesting the need for a comprehensive risk mapping in Karamoja.

Perceptions about malnutrition

Majority of the FGD participants associated malnutrition with hunger or lack of food when asked for the definition and causes of malnutrition. Household food insecurity, poor childcare practices resulting from busy caregivers and excessive consumption of alcohol were emphasized as significant contributors to malnutrition in the region. When asked about the signs of malnutrition, the most mentioned was weight loss; a few participants identified signs of micronutrient deficiencies and stunting as forms of malnutrition. Amongst all FGD segments, adolescents provided the most accurate perceptions about malnutrition.

Maternal Child Health

The health facility and Village Health Teams were the most popular source of health care and related information. A few respondents sought services from traditional healers and traditional birth attendants. Most participants reported that pregnant women attended their first ANC within the first trimester and attended monthly until date of delivery. This is consistent with UDHS findings, which suggest relatively good ANC coverage in Karamoja compared to other regions. Fathers reported the obligation to accompany their wives for ANC, although most didn't consider it a priority when compared with their income generation responsibilities. Most pregnant women gave birth in the health facility with their mothers and the preferred caretaker.

Maternal Child Nutrition

Consistent with FSNA findings, FGD participants reported suboptimal dietary practices for both pregnant and breastfeeding women (PBWs) and children 6-23 months. Meals reported to be consumed by PBWs and children had low diversity, mainly grains (maize and sorghum) and beans with very low consumption of animal source foods especially milk and eggs. Severe deterioration in meal frequency, quality and portions was reported in the lean season. The actions taken to provide diverse foods for PBWs and children include engaging in casual labour or starting a business to earn money, buying or producing diverse foods, sale of part of the harvest and participation in Village Savings and Loans Association (VSLA) or Parish Development Model (PDM).

The majority of the participants reported the initiation of breastfeeding within one hour and a few mothers who delayed attributed it to the delayed production of breastmilk. For the latter, prelacteal feeds given were goat's milk and glucose water. Despite demonstrating extensive knowledge about complementary feeding and breastfeeding recommendations, participants mentioned introducing solid, semi solid soft (SSSF) before 6 months or as late as 12 months and timing was determined by the amount of breastmilk the mother had. The conception of a new baby while another was still breastfeeding was common, and it was the main barrier impeding continued breastfeeding. Despite this, 2023 FSNA findings indicate that the prevalence of continued breastfeeding in Karamoja (82%) was higher than the national average (30%). Enablers for exclusive breastfeeding were having adequate breastmilk, reduced workload, and delayed conception of the next child.

Adolescent health and nutrition

Most interviewed adolescents were in school, and they confirmed having a school garden. The most consumed food was maize and beans which was occasionally alternated with rice and greens. Most parents didn't pack snacks for their children and very few gave them money to buy snacks while at school. The school garden contributed to the food supplies in the school and was a place to grow new food varieties like orange-fleshed sweet potatoes (OFSPs), learn modern farming skills and vegetables growing in the dry spell. Adolescents reported learning key concepts on health and nutrition during the science class and they also received reproductive health services like promotion of good menstrual hygiene by health workers and implementing partners.

Food security and livelihoods

Majority of the FGD participants reported owning kitchen gardens, which contradicts the low proportion reported in the FSNA. Causal labor and small businesses were the main sources of income. The findings suggest increased enrollment in VSLA groups and the use of saved income to purchase food. Most food was obtained from the main field and the most common foods grown were maize, sorghum, beans and assorted vegetable varieties. Fruits were not mentioned among the crops commonly grown. Market potential, maturity period, cultural importance and soil type were the main determinants of the crops grown. Seasonality determined the meal quality, frequency and amount of food consumed by the household. During the post-harvest period, more diverse fresh foods were consumed up to 4 times a day with unrestricted food consumption for vulnerable groups like PBWs and children. In contrast, meal frequency dropped to once, portions reduced and reliance on alcohol brew and wild food was common in the lean season. The strategies used to cope with food shortage include borrowing food, reliance of food aid, migration of part or entire household and sale of productive household assets. The main food preservation method used was drying and stored food lasted 4-24 months depending on the amount harvested and the household size. Several food restrictions targeting women and young children were mentioned and most noticeable were reduced portions of meat and chicken and the total denial or limited consumption of organ meats, the rich sources of bioavailable iron.

Water sanitation and hygiene

Similar to the FSNA 2023 and other WASH assessments conducted in the region, the borehole was the main source of drinking water reported by FGD participants in the CAN areas. Most participants didn't treat borehole water because they considered it safe for drinking. Almost all FGD participants reported covering leftover food and warming it in the morning before consumption. Although participants were familiar with the handwashing techniques, they lacked clarity on the critical times of handwashing and few owned handwashing stations. Responses suggest very low latrine ownership and high complacency with open defecation. The reported reasons for not constructing latrines include loose or swampy soil types, lack of money to buy strong building materials, lack of energy, cultural barriers and fear of falling inside the latrine. These reasons were disputed by some key informants and FGD participants, urging that dedicated community members addressed the above challenges and constructed latrines.

Gender

Within Moroto and Nakapiripirit, most households were male-headed while female-headed households were commonly reported in Napak. Participants acknowledged men as household heads because they were breadwinners, decision-makers and it aligned with society norms in addition to being commanded by God. The gender roles for men and women were typical of any society setting, for example, men performed outdoor activities where they provided and protected the family while women concentrated on indoor activities including childcare. There was a general observation that the gender roles mentioned aligned with typical traditional roles even though submissions from other topics emphasized that women were overworked performing all roles including those expected from men. Participants acknowledged that exceptional men who supported their pregnant or breastfeeding wives with domestic chores existed but were faced with societal barriers and criticism that they had to overcome. Family nurturing, exposure to other cultures, education and having money were some of the enablers for supportive men. Decision-making dynamics were similar with other traditional settings with men being the overall decision-makers and women making decisions related to meal planning.

Challenges

The challenges reported through FGDs and KIIs include uncoordinated and unsustainable programming, funding gaps, limited political support, alcoholism, community complacency with unhealthy practices, unfavorable weather, low food production and storage, and insecurity.

Recommendations

The following multisectoral recommendations were proposed to implement partners, government agencies and the donor community to improve nutrition outcomes in the CAN areas.

1. Strengthen multisectoral social and behavior change initiatives to inspire sustained adoption of recommended practices such as the increased consumption of animal-source foods by women and young children.
2. Concerted efforts are required by the political and technical partners to jointly support the regulation of excessive consumption of alcohol and mitigate its impact on childcare.
3. Promote existing food security interventions while engaging the community to develop small but doable, high-impact actions at household level for example preservation and storage of adequate food from the harvest.
4. Scale up water, sanitation and hygiene interventions through mixed approaches including enforcement of recommended hygiene practices such as latrine use across all community levels.
5. Promote gender equity initiatives such as utilization of model men at the community and household level to improve childcare practices.
6. Embrace education as a vehicle for sustainable change at household level.
7. Promote sustainable programming to address the widespread dependency habits and complacency with poor food security and nutrition outcomes.
8. Re-activate and strengthen nutrition governance structures and coordination mechanisms, especially at the sub county and parish levels.
9. Increase funding for nutrition activities to promote better coverage and improve quality of interventions in Karamoja
10. Promote security in the region by collaborating with concerned stakeholders to adjust the settlement patterns and address the drivers of recurrent raids in Karamoja
11. Promote the utilization of findings and recommendations through strategic dissemination and monitoring the implementation of action plans developed by stakeholders during the CAN validation workshop.

1. Introduction

1.1 National and regional context

Karamoja is one of the fifteen sub-regions of Uganda. It is located in the northeast and shares an international border with Kenya in the East and South Sudan in the North. The Ugandan regions bordering Karamoja include Acholi, Lango, Teso and Elgon, as shown in the map provided in Annex 1B. According to the Uganda National Population and Housing Census (UNPHC)¹ conducted in 2024, Karamoja has a total population of about 1.4M people spread across nine districts of Kotido, Kaabong, Napak, Amudat, Abim, Nabilatuk, Nakapiripirit, Karenga and Moroto, in order from the most to the least populated. Karamoja contributes 3.2% of Uganda's total population and it is the least populated of all the 15 sub-regions.

According to the 2022 Uganda Demographic and Health Survey (UDHS) report, Karamoja had the lowest values for most of the socio-economic indicators compared to other regions and the national average. With 82.7% of the population lying in the lowest wealth quantile, poverty is widespread in the region, which is the main driver for low development indicators. About two-thirds of the population has not attained any form of education; the total fertility rate is 6.7 children per woman compared to the national average of 5.2.

Excessive consumption of alcohol is widespread with 62.4% of women and 71.7% of men consuming at least one alcoholic drink in the month preceding UDHS. With a national alcohol consumption prevalence of 11.3 % for women and 33.8% for men, alcohol consumption in Karamoja is six times higher among women and about twice for men. Alcoholism has been reported to trigger domestic violence, negatively affect childcare practices, and is directly linked to diseases including malnutrition. More of the socio-demographic indicators of Karamoja region compared to the national values are provided in Annex 2.

The population in Karamoja faces multiple shocks including drought, occasional floods, unreliable rainfall patterns, crop pests, animal diseases, high morbidity, insecurity, and fluctuating food prices, which individually or jointly contribute to food and nutrition insecurity.

Despite the above constraints, Karamoja region has registered significant progress in nutrition programming over the years. For example, according to the 2022/2023 Nutrition Annual Sector Performance Report, Karamoja was ranked number one of all 15 regions scoring the highest values across all nutrition indicators such as nutrition screening, Maternal Infant and Young Child Nutrition (MIYCN) counseling, and management of nutrition supplies. The nutrition situation of Karamoja is further described in section 4.1.

1.2 Background of Welthungerhilfe (WHH) in Uganda

Welthungerhilfe has been providing multisectoral interventions in Uganda since 1980 with the goal of fighting hunger and malnutrition of all its forms both in emergency and development contexts. WHH collaborates with the government and other non-government stakeholders to provide interventions in food security and nutrition (FSN), water, sanitation and hygiene (WASH), natural resource and environment management, youth skills strengthening, education, and infrastructure

¹ <https://www.ubos.org/wp-content/uploads/publications/National-Population-and-Housing-Census-2024-Preliminary-Report.pdf>

development in the West Nile, Central, Rwenzori, Teso, and Karamoja regions of Uganda. The design and approach of WHH programs is rooted in understanding the context, including community needs and the participatory search for solutions. With the Programming towards Improved Nutrition (PtIN) initiative as a cornerstone of interventions, WHH conducts in-depth analyses of the context, specifically the legislative environment, coordination mechanisms, nutrition situation, its drivers, causal pathways, coping strategies, challenges, and solicits recommendations from the affected population to develop sustainable and customized nutrition interventions.

1.3. Overview of WHH program in Karamoja

WHH has been operational in Karamoja region since 2009 implementing development and emergency interventions in WASH, food security/livelihoods, nutrition, education, gender, infrastructure development, natural resources and environmental protection in five districts of Moroto, Napak, Nakapiripirit, Nabilatuk and Amudat.

Karamoja region is generally considered the most disadvantaged region in Uganda due to high malnutrition rates, widespread poverty and low levels of education. Welthungerhilfe's program thus targets the vulnerable populations characterized by food insecurity, malnutrition, poverty and social exclusion. In Karamoja, WHH projects have received funding from diverse donors including the German Federal Ministry for Economic Cooperation and Development (BMZ), Viva Con Agua (VCA), Charity Water (C:W), SHARE, the German Agency for International Cooperation (GIZ) and private donors like Mr. Aichele & Friends, Bodo Schäfer, Gesine C, Holler Stiftung and Konrad Stiftung.

1.4. Objectives of the CAN and key guiding questions

The overall objective was to conduct an in-depth contextual analysis of nutrition in Moroto, Napak and Nakapiripirit districts in the WHH areas of intervention. The CAN was conducted to understand the nutrition situation including outcomes, drivers and supportive structures in the target areas to align WHH's interventions with prevailing community needs. The specific objectives indicated in the TOR (Annex 13) were formulated to provide responses to the eight key guiding questions below covering all the relevant thematic areas required to understand the nutrition context.

1. What is the nutrition situation and the trends, at national level and in Karamoja?
2. What is the nutrition situation in the project area covering, but not limited to, insights into feeding and consumption patterns, food security and seasonality, gender dynamics in relation to nutrition, WASH & health practices about nutrition, and insights into other aspects related to immediate, underlying and basic causes of malnutrition?
3. Who are the vulnerable groups mostly affected by and at risk of malnutrition, describe them in detail, and describe where they are located?
4. What are communities already doing to overcome a challenging nutrition situation?
5. Who are the key projects and stakeholders involved in nutrition programming across the project area, broadly at regional and national level?
6. What are the nutrition coordination mechanisms and structures at different levels?
7. What is the policy and strategy level nutrition landscape of the country, including national legislation related to the human right to adequate food?
8. What are the recommendation(s) for sustainable nutrition programming in the target area?

2. Methodology

2.1. The CAN design

The CAN is a nutrition assessment design hinged on WHH's mandatory and strategic approach, "Programming towards Improved Nutrition" (PtIN) whose aim is to contribute to sustainable food and nutrition security through addressing malnutrition, hunger and poverty. The CAN utilizes a tailored approach to conduct an in-depth exploration of the nutrition context of selected program areas.

The CAN uses qualitative data collection methods to interact with multiple categories of the targeted population including pregnant and breastfeeding women (PBWs), fathers, adolescents and grandmothers and caregivers of children under 5 years to listen to their opinions about diverse topics that contribute to malnutrition. This primary qualitative data is triangulated with secondary information to identify areas of convergence or discordance in effort to design balanced and contextualized interventions. CAN aligns different sectors owing to the manifold and interrelated causes of malnutrition that vary from one context to another.

The CAN in Karamoja was conducted in three districts of Moroto, Napak, and Nakapiripirit, which are covered by ongoing interventions supported by WHH. The CAN was a cross-sectional qualitative assessment that involved primary data collection through conducting interviews with key informants and focus group discussions (FGDs) in selected villages of the three districts. Respondents were further asked to share the challenges and recommendations to improve the nutrition situation. These themes responded to the key guiding questions in section 1.4.

Additionally, secondary data review was done to triangulate information and understand the comprehensive nutrition situation of the Karamoja region beyond the three districts. The themes covered in the CAN were as follows:

- Understanding the nutrition situation including trends; perceived definitions, signs and causes
- Nutrition governance including funding, policies and coordination mechanisms
- Maternal and child health
- Maternal and child nutrition
- Adolescent health and nutrition
- Water, sanitation and hygiene
- Food security and livelihoods
- Gender

The CAN was conducted by WHH team with support from a national consultant who provided further technical assistance during the exercise. The following sections describe in detail the methods used and steps taken to conduct the CAN in Karamoja.

Context analysis of nutrition (CAN) steps

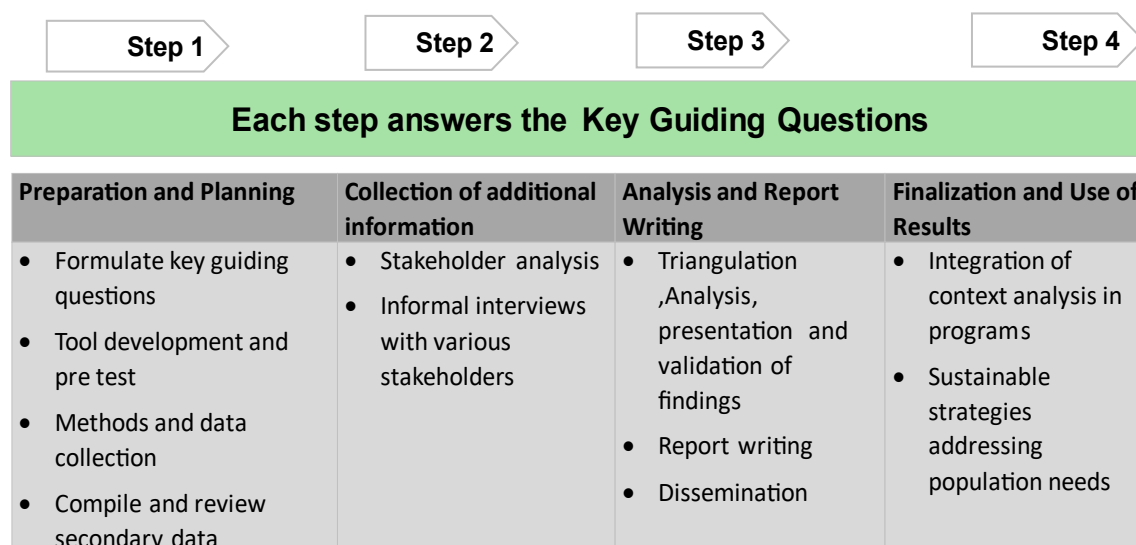


Figure 1: Steps followed to conduct the CAN assessment

2.2. Planning the CAN study

Planning involved conducting inception meetings to mobilize key stakeholders including the government officials from the technical and political wings. The planning state also involved the development and review of data collection tools, recruitment of enumerators, mobilization of community participants, and development of CAN workplan. A total of 12 enumerators with prior experience in conducting qualitative information and were computer literate were hired to support both the primary data collection and transcription.

2.3. Training enumerators



The CAN enumerators were locally recruited from the Karamoja region and were required to be eloquent in the Ngakarimojong language. Enumerators received two days of training to reinforce their skills in qualitative data collection, orient them on the data collection tools, translation of the tools, data transcription and all related procedures. A data collection plan was developed and shared with enumerators to ensure clarity on the allocation of areas and category of target respondents.

Figure 2: Enumerators practicing interviewing skills during the training.

2.4. Data collection

2.4.1. Primary data collection

Primary data was gathered through conducting interviews with key informants and focus groups (FGDs), which were recorded using voice recorder and transcribed by enumerators.

2.4.1.1. Key informant interviews (KIIs)

Key informants comprised people from the technical and governance positions at regional, district, and sub-county level from government, implementing partners, and donor agencies. They were selected purposively based on the roles they played in fostering good nutrition outcomes through planning, coordination, direct implementation, and creating an enabling environment for desired nutrition outcomes to be achieved. A total of 20 key informants were interviewed. The profile of key informants is categorized into three as follows;

Technical personnel: These include individuals within government, partner and donor agencies that provided technical guidance and leadership. These include departmental heads and nutrition staff with oversight or coordination roles at district or regional level.

Political leaders: These hold political positions within the government at district and sub-county level.

Implementers: These include staff at district and sub-county level who directly provide services and regularly interact with communities. For example, health unit in-charges and NGO field staff.

The profile of the various key informants interviewed is provided in Table 1 below.

Table 1: Profile and number of key informants interviewed during the CAN in Karamoja

Administrative level	Profile	Nakapiripirit	Napak	Moroto	Regional	Total
Regional	Technical leadership				1	1
District	Technical leadership	1	2	5		8
	Humanitarian				2	2
Subcounty	Technical leadership	1				1
	Implementers		5			5
	Political leaders	3				3
Total		5	7	8		20

Using the CAN guiding questions, key informants were asked to share opinions about the drivers of malnutrition with emphasis on the overall nutrition situation including perceived trends, the distribution of malnutrition among the population and governance factors that promote better nutrition outcomes. These include malnutrition patterns, coordination mechanisms, causes of malnutrition, nutrition interventions, challenges and recommendations among others as elaborated in the KII guide provided in Annex 3.

2.4.1.2. Focus Group interviews

The purpose of conducting FGDs was to gather diverse opinions about the nutrition situation and its drivers organized as sub-themes expanded from the main themes. These include general understanding of malnutrition including definitions, causes and signs; child health, Infant and Young Child Feeding practices, maternal health, maternal nutrition, adolescent health and nutrition, food security and livelihood, coping mechanisms, water sanitation and hygiene, gender and recommendations to improve nutrition outcomes. These are elaborated in the FGD guide provided in Annex 4.

A total of 63 FGDs were conducted across different population groups in various villages of Moroto (14), Napak (22) and Nakapiripirit (09) as provided in Annex 5. Segmentation of participants was done to provide a safe space with homogeneous groups to freely share their opinions. The segments and number of FGDs conducted in each district are provided in Table 2.

Prior mobilization and sensitization of communities was done in collaboration with village authorities (local councils), enrollment of FGD participants was purposive to align with the above-mentioned segments and it continued within the targeted village until 6-12 participants confirmed attendance. While WHH intervention areas were targeted for the contextual analysis of nutrition, the assessment respondents included both project and non-project participants to gather diverse and unbiased responses during the discussions. Key community resource personnel like VHTs, community nutrition leaders or lead mothers were excluded from the focus group discussions to control social desirability bias.



Respondents were picked from different villages to increase the representativeness of the responses provided about the nutrition perspective. A balance in age was also considered to ensure active participation across all respondent segments. Overall, the respondents comprised an equal number of project and non-project participants selected from 45 villages in the 03 CAN districts.

Figure 3: FGD with adolescent girls in Lomuria village, Kakingol parish, Katikekile S/C Moroto.

Table 2: Number of focus group discussions conducted in each district and across the segments

Segment	Nakapiripirit	Moroto	Napak	Totals
Pregnant mothers	5	4	4	11
Breastfeeding mothers with children below 2 years	5	4	5	12
Adolescent girls	2	2	4	8
Adolescent boys	1	1	1	3
Fathers with children below 2 years	4	4	4	9
Grandmothers with children below 5 years	5	4	4	11
Total	22	19	22	63

2.4.2. Secondary data collection

Secondary data collection was done through a desk review of relevant information from existing data sources at national, regional and subnational levels. Examples of appropriate data sources include reports from the Uganda Demographic Health Survey (UDHS), Food Security and Nutrition Assessment (FSNA), Integrated Food Security Phase Classification Acute Malnutrition and Acute Food Insecurity (IPC-AMN/AFI), Annual Sector Performance reports for health and nutrition and peer-reviewed articles. Unpublished information such as Mass MUAC screening data and performance reports from government and partner agencies were also reviewed. Nutrition policy guidelines and planning documents were also reviewed to understand the nutrition landscape at national and regional level. Secondary data was consolidated in the tool provided in Annex 6 and the list of reviewed documents is provided in Annex 7.

2.5. Data Management

With written and verbal consent, qualitative data and relevant community pictures were collected, transcribed and analyzed using thematic analysis.

Transcripts were examined for similarity in themes or content that answered the CAN objectives.

Both majority and minority opinions were presented in the report. For emphasis, statements warranting attention were identified and reported as quotes.

Qualitative data was examined for consistency and or deviation across segments and districts.

In addition to the qualitative data, respondents from different villages in the target districts were engaged in an exercise to expound on gender roles and responsibilities. Information gaps identified on vital and crosscutting concerns during data analysis were filled through conducting extra interviews or in-depth probing with key informants.

Quantitative secondary data was further analyzed to derive trends and patterns of the food and nutrition situation in Karamoja with emphasis on the trends of acute malnutrition over the past 10 years with the corresponding determinants.

Non-quantitative secondary information from documents such as policies, strategies, and legislation was also collated and reported.

The UDHS and FSNA were the main data sources used to triangulate primary and secondary data given that the multisectoral data they collect aligns with the CAN themes. Convergences and divergencies were identified and reported with explanation, where applicable. While secondary quantitative data was presented alongside the relevant qualitative themes, the CAN team is not liable for any observed inconsistencies reported from secondary quantitative data sources.

2.6. Results validation and dissemination

Upon compiling the first draft report, findings were presented before stakeholders for validation. The validation workshop was attended by over 70 participants representing the technical, political, and implementation bodies, as well as community leaders from all target districts. The main observation from the workshop was that participants' opinions were consistent with the qualitative CAN findings, however, most of their quantitative expectations deviated from the values reported in the 2023 FSNA. Participants reviewed the CAN recommendations and developed work plans to

promote the utilization of findings. The feedback from the validation workshop was incorporated into the final report.

2.7. Limitations

Primary data collection was limited to three of the nine districts in Karamoja where WHH operates. The nutrition context in other parts of the region was examined through secondary data therefore, the views gathered through FGD and KIIs may not be representative of the entire region.

Limited or delayed information sharing of vital district records, such as DHIS-2 and gender data, hindered the analysis and inclusion of some of the required secondary information.

3. General Nutrition Context in Uganda

3.1. Nutrition policies, legislative environment, right to adequate food

The food security and nutrition interventions supported by the government and its partners align with the Constitution of Uganda objective XXII, which recognizes the impact that good nutrition outcomes have on the country's social and economic development and the state's obligation to promote good nutrition, through adequate food production and storage. Uganda's National Development Plan is the cornerstone of nutrition policies, guidelines, and the legal framework that creates a supportive environment to deliver nutrition interventions.

Recent developments have seen the technical, legislative, and executive arms of the government collaborate to advocate for improved nutrition outcomes acknowledging the limitations of individual efforts. For example, in September 2024, the Ugandan Parliament granted a private member permission to present The Food and Nutrition Bill, which aims at holding household heads accountable for ensuring food security at a household level². Such initiatives have the potential to sustainably address the multiple social drivers of malnutrition if implemented.

The 2023 Uganda Food and Nutrition Policy (UNFP) 2003

This draws from the Policy Eradication Action Plan (PEAP), and it portrays malnutrition and poverty as factors with a bi-directional cause-effect relationship- malnutrition limits productivity, thus leading to poverty, in turn, poverty influences or exacerbates the drivers of malnutrition, such as dietary practices.

As a guiding principle, the UNFP recognizes food as a human right, a national resource and a multisectoral concern targeting all government departments and multiple vulnerable groups. Thus, for the UNFP to meet its objective of improving the nutrition status of the population, multisectoral interventions involving structures from the village to the national level are a necessity.

The 2020-2025 Uganda Nutrition Action Plan II (UNAPII)

This is a five-year fundamental roadmap that was developed to actualize the nutrition-related objectives of Uganda's National Development Plan. UNAP II recognizes the multifaced drivers of malnutrition at different levels and thus recommends priority actions to address malnutrition directly and through supportive structures. UNAP II objectives are structured into three to address malnutrition through nutrition-specific, nutrition-sensitive and nutrition governance interventions.

The objectives of UNAP II are;

- To increase access to and utilization of nutrition-specific services by children under 5 years, school-age children, adolescent girls, pregnant and lactating women, and other vulnerable groups.

² <https://parliamentwatch.ug/news-amp-updates/plate-to-policy-parliament-targets-malnutrition-with-new-bill/>

- To increase access and utilization of nutrition-sensitive services by children under 5 years, school-age children, adolescent girls, pregnant and lactating women, and other vulnerable groups.
- To strengthen the enabling environment for scaling up nutrition-specific and nutrition-sensitive services.

The objectives are expanded into 18 strategies and priority actions required to meet the UNAP II goal. Similar to the UNFP, UNAPII emphasizes the necessity to engage and constantly collaborate with multiple stakeholders from the political wing, district administrators, donors, development partners and key line ministries such as education and sports, water and environment, gender, labor and social development, agriculture, animal industry and fisheries among others. At the local government level, UNAP is translated into the District Nutrition Action Plan (DNAP) and the Subcounty Nutrition Action Plan (SNAP), each with coordination structures that are discussed in the next section.

Beyond priority actions, UNAP II provides reference implementation guidelines to ensure a standardized approach is used across partners and geographical areas.

Key technical implementation guidelines associated with UNAP are; the Maternal Infant and Young Child Nutrition³ (MIYCAN) and Integrated Management of Acute Malnutrition⁴ (IMAM), which facilitate the implementation of priority actions under objective one.

3.2. Nutrition coordination

Coordination of nutrition interventions is vital across all stages of the program cycle. It fosters integration, promotes effective targeting and prioritization, reduces duplication of efforts, promotes sustainability, and maximizes programmatic investments, including time, funds, and human resources, ultimately increasing the impact of nutrition interventions. Moreover, effective coordination strengthens community engagement by reducing the time spent attending parallel program activities and the impact of unharmonized messaging. Coordination is particularly essential in resource-limited settings such as Uganda, where funding for nutrition interventions remains extremely inadequate.

Acknowledging the multisectoral approach required to reduce all forms of malnutrition, Uganda's nutrition coordination strategy includes a diverse portfolio of stakeholders, each assigned specific roles aligned to their mandate.

The UNAP recommends standard governance structures at the subnational level, which are replicated across all districts. Nonetheless, alternative coordination approaches such as technical working groups complement these structures. This section describes the standard nutrition governance structures (Fig 4) as outlined in the UNAP.

3

[https://www.unicef.org/uganda/media/12161/file/Guidelines%20on%20maternal,%20infant,%20young%20child%20and%20adolescent%20nutrition%20\(MIYCAN\)_2021.pdf](https://www.unicef.org/uganda/media/12161/file/Guidelines%20on%20maternal,%20infant,%20young%20child%20and%20adolescent%20nutrition%20(MIYCAN)_2021.pdf)

⁴ https://library.health.go.ug/sites/default/files/resources/IMAM_Guidelines-for-Uganda-Jan-2016-FINAL-LORES2-2.pdf

Starting at the village level, local leaders and community structures such as the village health teams (VHTs), farmer groups, and care groups are the first points of contact for community members with nutrition needs and recommendations to improve interventions.

At the parish level, the Parish Development Committees (PDCs) engage with community structures and village local leaders to incorporate community contributions and needs during the planning and implementation of nutrition interventions. The PDCs are overseen by the Subcounty Nutrition Coordination Committee (SNCCs) or Town Council Nutrition Coordination Committees, which comprise health center III in-charges, health inspectors and sectoral representatives from production, education, community services and finance. SNCCs have sub-county nutrition action plans (SNAPs) that guide the coordination and implementation of nutrition interventions in the sub-county.

At the district level, nutrition is coordinated through the District Nutrition Coordination Committees (DNCC), which is chaired by the chief administrative officer (CAO) and comprises various district departmental heads, nutrition focal personnel, and civil society organizations as observers. The UNAP is translated into a district nutrition action plan (DNAP), which reflects the contextualized nutrition situation, supporting partners, interventions, and a monitoring and evaluation framework.

While DNAPs administratively fall under the local government's oversight, general regional coordination is under the central government. The regional principal nutritionist plays a vital role in linking the local and central government initiatives at the subnational level.

The Office of the Prime Minister (OPM) oversees national nutrition governance structures involved in the implementation of UNAP. National nutrition coordination bodies have terms of reference outlining membership composition, roles, leadership, and frequency of meetings. Experts from line ministries, academia, development partners, UN agencies, media, Civil Society Organizations (CSO) and the private sector, form the national coordination structures.

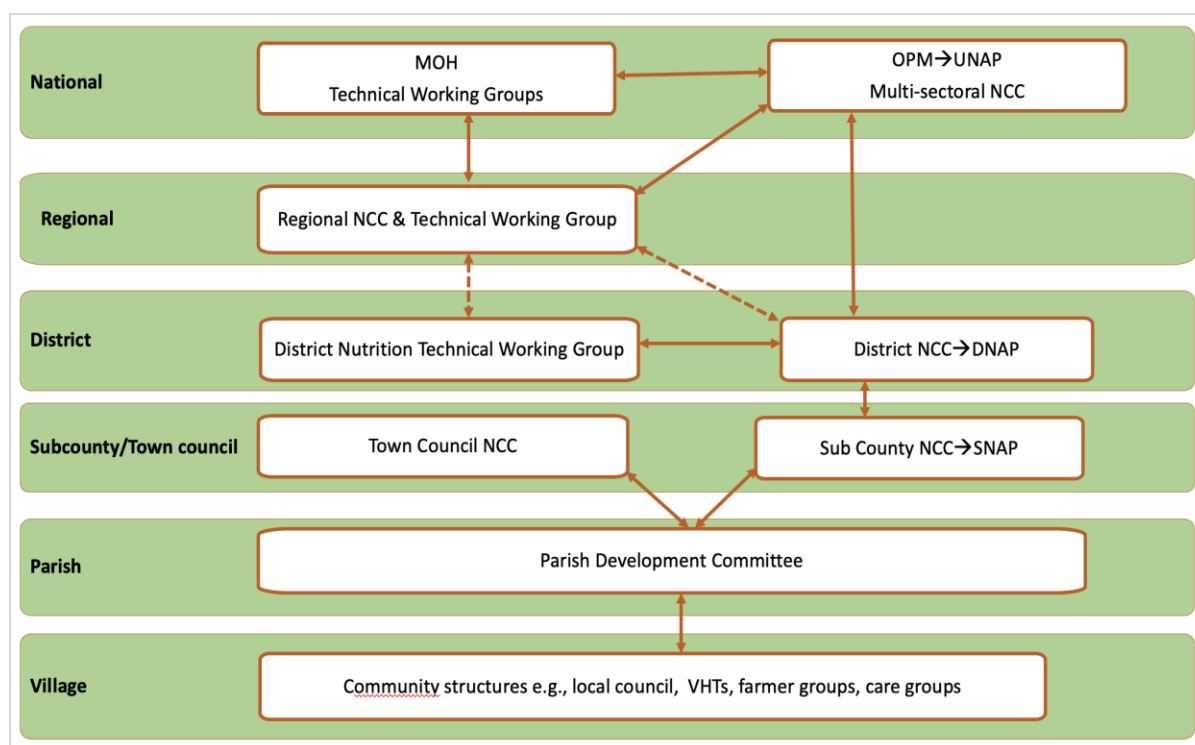


Figure 4: Nutrition coordination structures of Uganda at national and sub-national level

3.3. National Nutrition Overview

3.3.1. Chronic And Acute Malnutrition Among Children 6-59months

Over the past two decades, Uganda registered steady declines in the national prevalence values for both chronic and acute malnutrition among children. According to the UDHS, wasting reduced from 5% in 2001 to 3% in 2022, underweight from 18% to 10 %, and stunting from 45% to 26%. (Figure 5). This was attributed to the continued improvement in the nutrition service delivery and engagement with multiple sectors to address drivers of malnutrition. Several initiatives have been introduced including the revision of the IMAM guidelines, integrating nutrition assessment, counseling, and support into health service delivery (NACS), the rollout of the VHT strategy, the launch of the MIYCAN guidelines among other supportive multisectoral interventions implemented by government and partners, especially in the hot spot regions with high rates of malnutrition.

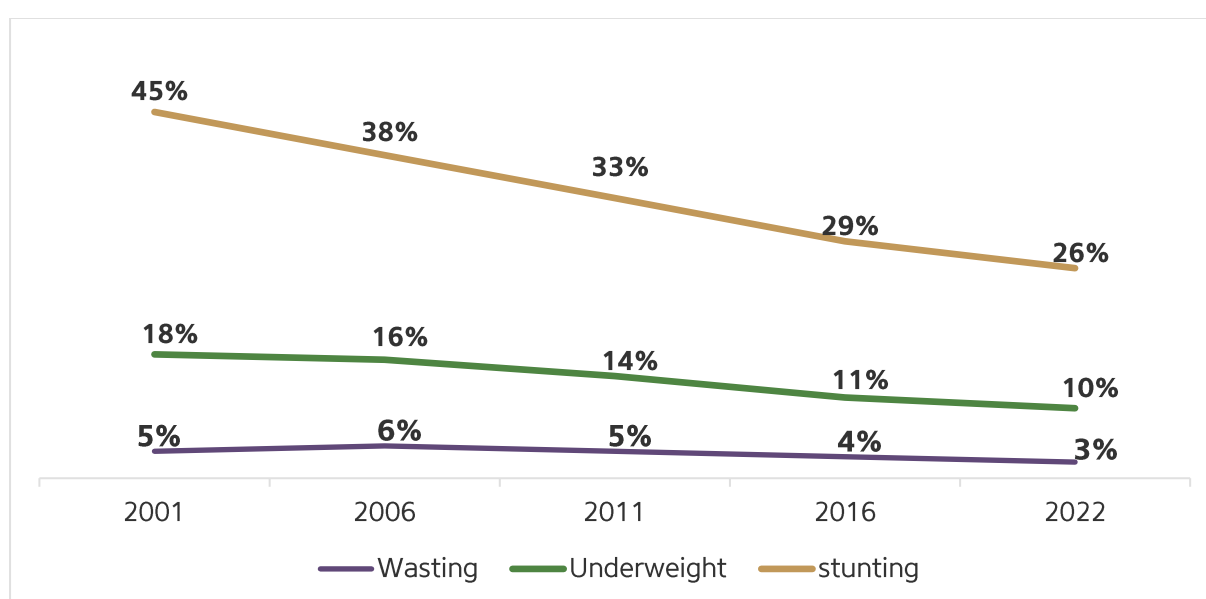


Figure 5: Trend of undernutrition among children aged 6-59 months in Uganda (UDHS 2001-2022)

3.3.2. Micronutrient Deficiencies and Overnutrition

Despite the gains registered in reducing chronic and acute malnutrition among children, the prevalence of iron deficiency anemia (IDA) among women and children remains static. The increasing rates of overnutrition coupled with non-communicable diseases are a growing concern. The 2022 UDHS report does not indicate the current national anemia prevalence. However, the 2011 and 2016 reports suggested increased IDA among children 6-59 months, from 49% in 2011 to 53% in 2016. Similarly, among Women of Reproductive Age (WRA), IDA prevalence increased from 23% to 32%. This suggests urgent scale-up of anemia reduction strategies, of which some, like micronutrient supplementation among children and iron supplementation among pregnant women, need to be optimized.

Overnutrition nutrition is steadily rising across all population groups, with WRA being the most affected. According to the 2022 UDHS report, the prevalence of overweight or obesity among men was 10.7%, while it was 26.4% among women. Between 2006 and 2022, there was a 10% increase in overweight and obesity among WRA (Figure 6).

Nutrition interventions in the past focused on addressing undernutrition, paying less attention to overnutrition along with its potential consequences like cancer, diabetes, high Blood pressure, coronary heart diseases, stroke, and other non-communicable diseases, which claim over 40 million lives globally each year⁵.

3.3.3. Maternal, Infant and Young Child Nutrition (MIYCN)

Maternal, infant, and young child nutrition practices remain low, specifically those related to diet quality. A recent study revealed that only 8.8% of Uganda's WRA meet the Minimum Dietary Diversity⁶ (MDD-W) of consuming food from at least five of ten food groups, with age, education level, and household size being the main drivers. Similarly, the proportion of children 6-23 months who consume meals that meet the minimum acceptable diet is only 7.3% with only 10% meeting the minimum dietary diversity standards (UDHS, 2022). Breastfeeding indicators seemed to have improved, with exclusive breastfeeding rising to 90%, initiation of breastfeeding within one hour at 81.5%, and continued breastfeeding at one year at 30.4%. The unexplainable fluctuation in IYCF indicator values, like exclusive breastfeeding, limits objective comparison over the years. This could be due to variations in the method of assessment and analysis of IYCF data.

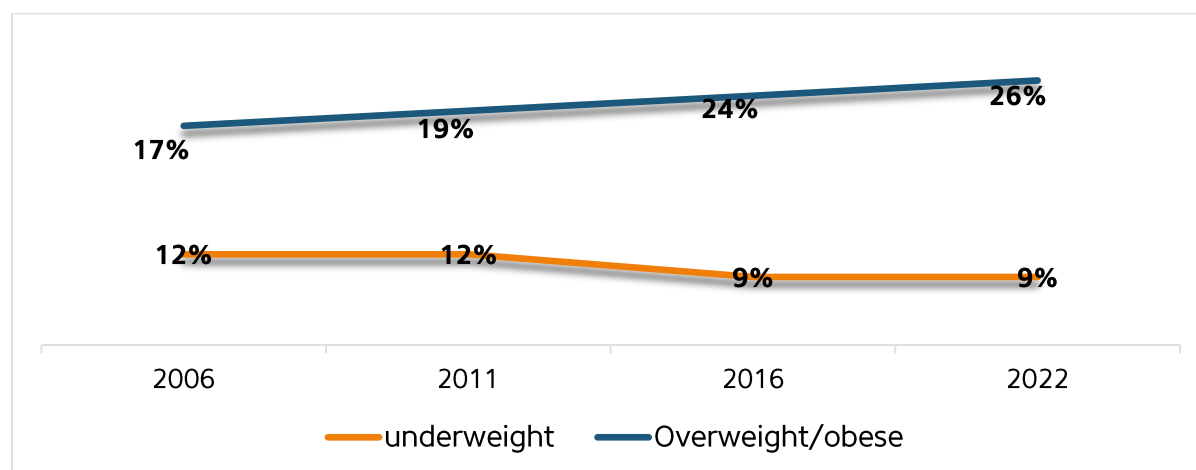


Figure 6: Trend of underweight and overweight among women 15-49 years between 2006-2022, UDHS report

3.3.4. Management of Nutrition Information

The integration of nutrition indicators in the District Health Information System (DHIS) was a significant milestone in data management and monitoring the quality and progress of nutrition program interventions. The indicators include the number of individuals receiving MIYCN counseling, the number of children, adolescents, and women screened and referred, standard IMAM program indicators, and indicators related to supplies management.

The data from DHIS-2 feeds the Nutrition Annual Sector Performance Report (NASPR) and enables performance evaluation for nutrition programs each financial year. The 2022/23 ANSPR revealed that 45% of health facilities in Uganda provide IMAM services, the national cure rate in OTP was 68.7%, and RUTF availability was 70%. The report also provides results on the level of nutrition

⁵ <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

⁶ <https://pubmed.ncbi.nlm.nih.gov/38429646/>

screening in the OPD, in the community, across different population groups, and among clients on ART treatment. Indicators on MIYCN counseling for pregnant women and caregivers with children 0-23 months are also captured in the report. Readily available and accessible nutrition information presents an opportunity for evidence-based decision-making, fundraising, and continued performance improvement.

4. Findings

4.1. The Nutrition Situation in Karamoja Region

4.1.1. The current prevalence and trends of acute and chronic malnutrition

Acute and chronic malnutrition prevalence in Karamoja is above national values, with severe acute malnutrition (SAM), global acute malnutrition (GAM), and underweight rates about three times higher. The prevalence of SAM is higher among boys (2.5%, 95% CI: 1.9 – 3.3) compared to girls (1.7%, 95% CI: 1.2 – 2.3). This pattern is consistent with national values and global trends.

The GAM prevalence across Karamoja districts is shown in Table 3, with the highest rates reported in Kaabong and the lowest in Abim. Malnutrition rates have persistently been high in Kaabong and Kotido and the increasing rates of malnutrition in Amudat warrant further investigation as the district had lower rates in the past years. Acknowledging differences in data collection approaches, Mass MUAC screening conducted in 2024 indicates a similar pattern with an overall proxy GAM prevalence of 17% and hot spot districts maintained as Kotido (24.7%), Kaabong (22.1%), Nabilatuk (23.0%), and Amudat (15.8%). Abim (4.1%), Napak (9.1%), Nakapiripirit (11.7%), and Karenga (13.7%) maintained lower rates.

Generally, underweight and stunting follow a similar trend as acute malnutrition, with the same districts being affected. Underweight and stunting were highest in Kotido and lowest in Abim. Despite having relatively lower rates of wasting, Napak and Karenga had very high rates of stunting.

Table 3: Prevalence of acute and chronic malnutrition among children 6-59 months in Karamoja.

Sex and district	severe acute malnutrition (WHZ < -3SD and or edema)	global acute malnutrition (WHZ <- 2 SD and or edema)	underweight (Weight for age <-2 SD)	stunting (height for age <-2 SD)
Sex				
Male	2.5% (1.9 – 3.3)	12.6% (11.2 – 14.3)	31.8% (29.5 – 34.3)	42.7% (40.3 – 45.2)
Female	1.7% (1.2 – 2.3)	10.2% (8.8 – 11.7)	27.4% (25.3 – 29.5)	38.4% (36.2 – 40.6)
District				
Abim	1.6% (0.7 - 3.5)	6.2% (4.5 - 8.6)	19.0% (14.6 - 24.4)	33.0% (27.4 - 39.2)
Amudat	1.7% (0.8 - 3.5)	12.9% (10.1 - 16.3)	27.2% (22.6 - 32.2)	33.3% (28.8 - 38.1)
Kaabong	3.4% (2.3 - 5.1)	18.0% (14.3 - 22.4)	34.3% (30.0 - 38.8)	38.5% (34.6 - 42.6)
Karenga	1.6% (0.8 - 3.3)	8.9% (6.1 - 12.8)	33.6% (29.3 - 38.3)	46.6% (42.4 - 50.8)
Kotido	2.3% (1.2 - 4.1)	13.8% (10.6 - 17.7)	37.1% (32.0 - 42.5)	51.0% (46.9 - 55.0)
Moroto	1.5% (0.6 - 3.7)	10.8% (7.5 - 15.4)	35.1% (28.8 - 41.8)	45.3% (38.2 - 52.7)
Nabilatuk	2.4% (1.2 - 4.7)	10.1% (7.4 - 13.6)	24.2% (20.5 - 28.3)	37.8% (32.9 - 43.0)

Nakapiripirit	1.9% (0.9 - 3.8)	10.3% (7.8 - 13.6)	25.6% (22.0 - 29.6)	34.7% (29.8 - 40.0)
Napak	1.9% (1.0 - 3.6)	9.4% (6.8 - 12.7)	28.2% (23.0 - 33.9)	42.4% (37.6 - 47.4)
Karamoja	2.1% (1.7 - 2.6)	11.3% (10.3 - 12.5)	29.5% (27.8 - 31.2)	40.4% (38.7 - 42.2)
National	1.0	3.2	9.7	24.4

Source: 2023 FSNA for Karamoja values and 2022 UDHS for national values

Acute Malnutrition prevalence in Karamoja has consistently been classified as serious (10-14%) from 2012 until 2023, with slight reductions observed in 2016 and 2020 (Figure 7). The peak in 2022 is presumed to be a manifestation of depleted HH resources from the COVID-19 shock coupled with heightened insecurity. The 2023 FSNA indicates a reduction in the rates following the stabilization in the security situation.

The prevalence in districts like Kaabong and Kotido occasionally shot beyond the emergency threshold of 15%, while Abim consistently remained within the “Alert” classification (5-9%). Patterns of malnutrition in Karamoja typically follow and are influenced by the security situation and climatic changes that affect food production. Drivers like disease burden and poverty remain important contributors, as described in section 4.2.3. of this report.

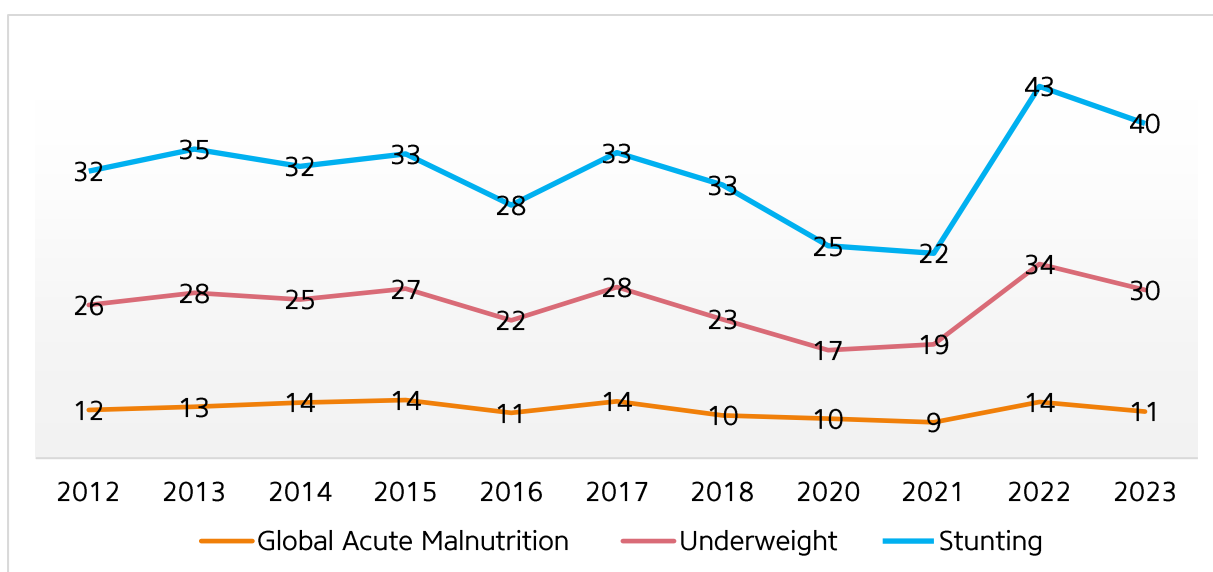


Figure 7: Trends of acute and chronic malnutrition in Karamoja region from 2012-2023.

Source: Multiple nutrition surveillance systems in Karamoja

Key informants from Moroto, Napak, and Nakapiripirit shared mixed views about the trends of malnutrition in Karamoja, with a few noting improvements, some observing no change, and the majority perceiving the trend as worsening. Key informants that observed an improvement attributed it to the increased program support from both partners and the government and intensified community awareness about malnutrition over the years.

“We seem to be doing a lot in imparting knowledge and skills to mothers or parents to take care of their children because partners have engaged us in carrying what is called community wagons where communities come up with their own situations like malnutrition, and we can

sensitize, educate them through drama shows, songs and follow-ups to those families with malnutrition.”

Key Informant, Nakapiripirit district

Other key informants reasoned that the improvement was due to the exit of nutrition programs that promoted dependency through the regular distribution of food rations to households with malnourished individuals.

“A food distribution agency (name withheld) gradually pulled out and mothers started to realize the need to provide for their children”.

Key Informant, Napak district

“There has been a great change in the community ever since the supplementary feeding stopped. For instance, these mothers used to give the children salt and detergents like OMO, such that the children remain malnourished so that they keep getting supplementary feeds like the paste and this soya flour. Since they stopped it, the situation of children is a bit fair”

Key Informant, Nakapiripirit district

They further explained that the past years had been affected by insecurity that led to internal displacement and limited farming activities. As security improved, better crop yield was reported.

“This year, there is a little better harvest compared to previous due to the good yield seen from crops like the sunflower and cucumber”

Key Informant, Nakapiripirit

Key informants in Moroto unanimously reported a worsening nutrition situation in comparison to previous years. This was backed by evidence generated from SAM admission trends and reports from recent IPC analysis. For example, a key informant mentioned that in 2024, up to 500 cumulative SAM cases had been admitted to the stabilization center, which was the highest ever recorded. It was further noted that 50% of Karamoja had been classified as food insecure compared to 45% last year. He attributed this increase to the spillover effect from the previous years of the prolonged dry spell, total crop failure, and insecurity.

Other key informants from the district concurred with this explanation and elaborated further that the nutrition situation worsened due to the withdrawal of key interventions like NUSAF2, which had strong food security and livelihood components.

Another key informant noted that the lower admissions observed in selected areas were not a sign of an improved situation but the impact of reduced funding, which limited active case-finding initiatives.

“Admissions are slightly lower compared to last year not because of improved situation but reduced funding, which limited initiatives like active case findings, door to door screening to only four of nine districts”.

Key Informant, Moroto.

Key informant views were inclined towards the trend and management of acute and chronic malnutrition. Secondary literature suggests a high burden of micronutrient deficiencies with iron deficiency anemia among children 6-59 months and women of reproductive health being a major public health concern. According to FSNA reports, the anemia prevalence across all nine districts has remained above 20 percent, which is beyond the WHO-acceptable threshold.

4.1.2. Distribution of malnutrition

Areas perceived to have high malnutrition rates

At the regional level, certain districts are more affected than others depending on their agricultural potential, location, and vulnerability to insecurity. Agricultural yield is lower in dry districts like Kaabong, Kotido, Nabilatuk, and Moroto, while crop failure due to floods affects the low-lying areas like Nakapiripirit. Districts bordering other regions, like Napak for Teso and Nakapiripirit for Elgon, are vulnerable to food insecurity as there is the unregulated sale of agricultural produce and export of labor to the closest major town.

Based on the information provided by key informants, hot spot areas have the following key attributes. Areas with more than one attribute remain more vulnerable to increased malnutrition rates as a result of the multiple risk factors.

Dry belts: These are along the dry belt where rainfall is erratic and drought-related crop failure is common. In Napak district, Ngoleriet, Lokopo, Lopeei, and Lotome are hot spots because they lie in the dry belt. Villages like Lomoruchubai and Nabotha host migrants from Lotome who come in search of greener pastures.

“The people from Lotome stand out, they are dirty and malnourished, unlike those from resettled areas”
Key Informant, Napak

In Moroto, sub-counties of Rupa, Nadunget, Loputuk, and Lotisan are hot spots, besides having active trade centers, they are also dry areas and have chronically experienced massive crop failure.

Urban areas or active trading centers: Despite having better access to diverse food and essential health services, urban centers have a high population with increased domestic demands and a high standard of living. Caregivers in these areas are preoccupied with businesses and casual labor and do not prioritize childcare. Alcoholism is also more practiced in the active trading centers compared to the rural areas. In Napak, Matany and Lokiteded are hot spots due to their location in a major town. In Nakapiripirit, Namalu, Nakayot and Kakomongole are active trading centers.

Boarder areas or those along the highway to regional towns: Frequent movement of both people and goods across the border promotes the unregulated sale of agricultural produce to the urbanized regional towns like Mbale for Nakapiripirit and Soroti for Napak. Secondly, the productive community migrates beyond the borders of the district, leaving behind the elderly who can't cultivate and perform childcare roles.

In Nakapiripirit, Natrabisha & Naturobinya villages in Naminit share a border with Nabilatuk, the movement of families across the borders increased default rates in OTP with children returning with worsened conditions. Namalu is along the way to Mbale so the produce including the good harvest within the sub-country is consumed by communities outside Karamoja.

Deep rural areas: These are often inhabited by the poorest of the poor with no HH assets or income and rely on poor diets. They also have limited access to health services as some are in the hard-to-reach areas

Low-lying areas: These are prone to floods that destroy crops and lead to poor harvests. They are also prone to seasonal diseases like diarrhea and malaria.

Mining areas: Areas identified with specific income generation ventures, such as gold mining and stone quarrying, are also prone to malnutrition because caregivers concentrate on these activities and do not prioritize childcare. In Moroto, Rupa is a hot spot because of gold mining.

Areas perceived to have lower malnutrition rates

In Napak district, Kaithalem, Kokilonyo, Namada, Kakipura, and Lombok villages have lower rates because they have resettled people from Kampala, Jinja, Busia, and Masindi, who adopted better childcare practices. Apeitolim, Poron, Nabwal, Lorengechora, Irriri sub-counties and Napak TC have lower rates as they lie in the greener belt of the district

In Moroto, malnutrition rates seem to be spread across all sub-counties except Tapac, which is reported to have a lower burden.

In Nakapiripirit, Kaiku, Nabore, Lokatapan, and Moruita have few malnourished cases. Moruita is occupied by a mix of Pokot and Pian, who are known to practice optimum childcare practices like breastfeeding. They are also reportedly more knowledgeable about good nutrition practices and don't engage in alcoholism. Despite living in a relatively dry area, Pokot children are perceived to be healthy.

“The population [in Moruita] are mainly Pokots and most of them really take care of their children’s nutritional needs. They preserve milk that can be used for the entire year and their children remain well nourished”.

Key Informant, Nakapiripirit

Convergence between hotspots identified by FSNA and CAN

The hot spot sub-counties identified by KII and FSNA are the same for Moroto (except Tapac subcounty) and Napak but divergent for Nakapiripirit. Key informants identified Namalu as a hot spot, which FSNA didn't. Key informants identified Moruita as an area with low prevalence, yet FSNA found it a hot spot (Table 4). Considering that both FSNA and key informant interviews are nonconclusive approaches to the identification of hotspots, further investigation is required to examine the relative risk of malnutrition across the sub-counties in Nakapiripirit.

Table 4: Areas with high rates of acute malnutrition as reported by the 2023 FSNA.

District	Sub counties	Parishes	Villages
Moroto	Rupa, Nadunget, Lotisan, Tapac and Loputuk	Komaret, Nachele, Lokeriaut	Nangomit, Lokeurumon
Nakapiripirit	Loreng, Loregae, Kakomongole & Moruita	Kobeyon and Loreng	Achelel, Loreng, Lokibuyo and Awoyalira
Napak	Lotome, Iriiri, Lopeei, Nabwal, Ngoleriet, Lokopo and Matany	Moruongor, Nariamaregae, Kalulegel east and Kalulegel West	Lotet, Nakale, Longaroi

4.1.3. Nutrition and related interventions supported by partners and government

Key informants were asked to discuss perceptions about partner interventions in the three districts and their contributions towards the reduction of malnutrition. Interventions were provided through government, local and international agencies, or their subgrantees. Financial resources and supplies were from the government and UN agencies like UNICEF, WFP, WHO, and UNFPA. In some districts,

support came through filling human resources gaps like the Nutritionists seconded by UNICEF for Napak, Moroto and Nakapiripirit districts, as these did not receive adequate financial support.

Key informants from the humanitarian sector shared that the current financial crisis is characterized by dwindling resources, which has led to the gradual withdrawal of some agencies and reduced program coverage in the region.

Management of acute malnutrition

Among the interventions mentioned was the management of moderate and severe cases of malnutrition supported by partners and government facilities, respectively. WHH supported ITC patients in MRRH with food rations to ensure caregivers remained in the unit until treatment was completed. There was an indication that certain supplementary feeding partners were phasing out their support across the region. Following the handover of SAM management from partners to the government, health unit staff seemed conversant with the nutrition treatment protocols and the intervention, including related nutrition supplies. IMAM appears to have been fully integrated into the health system. For example, in Napak, all health units except 403 brigaded provided full IMAM services with the management of SAM, MAM, and community outreaches, and the district ran an ITC at Matany Hospital.

Key informants reported that health assistants mobilized VHTs and LC chairpersons to do screening and referral of malnourished children. Partners were also reported to support Mass MUAC screening activities.

Across the region, there is inadequate coverage of IMAM interventions, which plays a key role in the recurrent and worsening of the situation in the region. According to the recent FSNA (2023), eight out of ten children suffering from acute malnutrition cannot access any of the available treatment/feeding programs in the region. The region coverage for IMAM/CMAN is only 16.4 percent.

Maternal, infant and young child nutrition (MIYCN)

Key informants mentioned that health workers and partners supported counseling on MIYCN in accordance with the MIYCAN guidelines, which address nutrition needs throughout the lifecycle. Representatives of UN agencies highlighted the strategic transition and emphasis on prevention activities like the scale-up of SBC interventions and increasing access to diverse nutritious foods.

In Napak, there was an ongoing study about complementary feed (feeding bowl), and results are envisaged to shape interventions on meal quality and quantity for children 6-23 months. In response to the high micronutrient deficiencies, specifically anemia, supplementation with micronutrient powders was being done.

Community mobilization and sensitization

Key informants from both government and humanitarian agencies indicated that whenever there was an opportunity to interface with the community, they emphasized key messages on common concerns like hygiene and sanitation, child feeding practices, and alcoholism. The dangers of early marriage were also discussed, and girls were encouraged to resume education. Community dialogues on nutrition were also held.

Health services

Under the leadership of the District Health Office, health workers provided primary health care services for women, children, and the general population both at the health facility and in the community through outreach. Moroto Regional Hospital provided technical oversight across all nine districts, representing the central government. The interventions were channeled through the government health structure, following the referral pathways from the VHT to the highest level when necessary. Health partners supported the health structure and used the same channel to deliver interventions. The critical services of concern to the CAN, like treatment of child illness, management of acute malnutrition, antenatal care (ANC), deliveries, and postnatal care (PNC), were all provided at the health unit. Key informants reported cross referrals between the government and partner interventions, singling out the numerous referrals of malnourished children from mass MUAC screening conducted by partners to the health unit.

The role of VHTs was echoed during FGDs, and their support included nutrition screening and referral of malnourished children, treating uncomplicated child illnesses and providing information on food security, diet diversity using locally available food, immunization, deworming, and Vitamin A supplementation.

Though not emphasized in the key informant interviews review of secondary data revealed that UN agencies like WFP, UNICEF, UNFPA and WHO delivered their support through the government health system and implementing partners.

Food security and livelihoods programs

This was one of the sectors that seemed to have several government initiatives and partner activities running jointly and parallel in some instances. It was common for key informants to refer to recent government initiatives like the Parish Development Model (PDM) and Operation Wealth Creation (OWC), which were designed to cover a wider area and introduce novel sources of livelihood in the region. For example, OPM's goat project distributed five goats per HH for income generation to promote milk production and consumption at the HH level. Through OWC, communities were encouraged to rear animals, small ruminants and poultry.

“Through OWC, last time I encouraged them to at least rear pigs in Rupa, which are multiplying now... and the community can at least access some money”.

Key Informant, Moroto

Food Security and Livelihood support in terms of cash transfers, food vouchers/food rations, strengthening technical capacity and providing farming inputs like seeds, tools seemed to come from both partners and the government. For example, in Moroto, the agriculture and production department, OPM, and partners provided maize and cowpeas seeds to farmers as well as food rations to vulnerable households, with each agency covering designated areas. Similarly, partners trained communities to grow diverse nutritious foods like Orange Fleshed Sweet Potatoes, groundnuts, cassava, and mushrooms as the agriculture officer at the subcounty trained communities on kitchen gardening. The Parish Development Model (PDM) supported livelihood initiatives across all districts and partners used cash-based transfers to support vulnerable households. Key informants noted the multiple cashflows to the community and emphasized the need to exploit the opportunity for sustainable development.

“It is once, once you get you will not get again, we were telling them that once you get money from PDM and Give Direct and you don't develop then you need to forget about development”

Key Informant, Nakapiripirit district.

The government, through MAAIF's UGIFT project, set up irrigation schemes in Tapac and Katikékile. Other small-scale irrigation projects with demonstration sites existed, for example in Namanatu Primary School, where communities learned about vegetable growing. Partners supported farmer groups or individual farmers to plant crops through block farming or demonstration plots.

Key informants also mentioned that both government and partner staff educated communities about seasonality, post-harvest handling practices and the dangers of selling homegrown produce. Agricultural technical support to local farmers was done through extension workers at the government level and partners who supported farmer field schools with some incorporating climate-smart agriculture.

Multi-sectoral programs

Key informants mentioned that there were partners who provided multisectoral programs like the Presidential Malaria Initiatives, which provided prevention packages, including support with childcare and improving feeding habits. Partners provided integrated packages with health, education, food security, nutrition, and gender. SBC was incorporated in some activities such as nutrition screenings, food demonstrations, and behavior change approaches with model mothers and male champions were reported in Nadunget, Rupa, Loputuk, Lotisan, and Katikékile.

Local partners supported food security interventions like providing training in farmer schools, vegetable growing through the production department, post-harvest handling and value chain additions like processing sunflower to increase its financial value on the market.

Private sector agencies in some districts were reported to support humanitarian activities like giving food (beans and maize) to Napedo and Tepeth sub-counties in Moroto district.

Water Sanitation and Hygiene (WASH)

The WASH sector was supported by partners who trained communities on latrine construction, promoting proper hygiene, and securing proper shelter across the three CAN districts. In Moroto, a USAID-funded nutrition-sensitive activity named Water for Resilience was ongoing.

Adolescent health and school support programs

The focus on improved adolescent nutrition was evident from the interventions stationed at the school, which involved both pupils and their parents. Key informants shared that schools that received seeds were encouraged to establish demonstration gardens with vegetables and other nutritious foods like OFSPs, and others fed their children meat, milk, and eggs. Although none of the FGD participants we interviewed mentioned the inclusion of animal-source foods on the school menu. School farming was supported by the government and multiple agencies and support with food rations in schools including Early Childhood and Development centres (ECD) seemed to come through multiple channels including WFP.

Besides food and agricultural support, schools received sexual and reproductive health (SRH) services specifically focusing on menstrual hygiene, caregiver counseling on childcare in the ECD, scholastic materials, and education sponsorship.

4.1.4. Nutrition coordination in Karamoja

As indicated in section 3.2, Karamoja region coordination structures align with the national nutrition coordination structure i.e., DNCCs at the district, SNCCs at the subcounty, and PDCs at the parish level.

Regional coordination is led by the principal nutritionist who sits at Moroto Regional Referral Hospital (MRRH) to support the nine DHTs of Karamoja and supervise the six UNICEF-hired Nutritionists. The regional nutritionist's contact with central government is maintained through the Senior Executive Secretary (SEC) who reports to the Assistant Commissioner at the Ministry of Health. Regional coordination is achieved through various activities including weekly meeting, partner mapping to control duplication of efforts, and quality improvement initiatives. The region has a weekly improvement team (WIT) that includes government, NGOs and UN agencies to promote the delivery of quality nutrition services.

Unlike district-level coordination, the regional-level approach is different since it is meant to bridge coordination gaps between the local and central governments. Among all three districts, key informants confirmed the existence of DNCCs with activities aligning with the DNAP, although two of the three districts didn't seem to have a clear contextualized roadmap to achieve strategic outcomes. The Chief Administrative Officer was the chair, and the members included the political wing and departmental heads from health, planning, production, education, water, and community-based services. Partners supporting these departments with a district Memorandum of Understanding were part of the DNCC. Key informants mentioned the CAO often delegated to the deputy CAO, and the secretary took minutes of the meeting as required in the DNAP.

Across all districts, it was common for some key informants to mention that the district health office was in charge of coordinating the DNCC, which suggests either a lack of clarity on the leadership structure of the coordination committees or a common practice for the CAOs to delegate their leadership roles to the DHO.

Meetings were convened quarterly, and an invitation was shared with the stakeholders to attend. In Napak, it was noted that while all sectors and partners were invited, attendance was poor because the district headquarters was distant, and the district lacked residential facilities.

In Moroto, the key informants reported that the district had a road map, the DNCC sits monthly, and its membership is extended to the disaster preparedness sector for floods and drought response. Moroto seemed to have advanced in terms of coordination since it was among the first districts to establish DNCCs, and its strategic administrative location made it a capacity-building ground during the rollout of the UNAP.

Almost all key informants agreed that coordination gaps existed at sub-county and parish levels due to funding gaps. In some instances, SNCCs were functional but not the PDCs. A few partners supported coordination interventions at SNCCs but coverage was limited to a few sub-counties.

"They [SNCCs] exist by name, but their sitting is rare, what they normally do, in case they have a TBC (Technical Budget Operating Committee meeting), that's when they bring aspects of nutrition, yet it would have been handled independently as a committee"

Key Informant, Moroto

At the sub-county level, SNCCs were led by the sub-county chief, and members included the LC3 chairperson, Community Development Officers (CDOs), parish chiefs, Health assistants and

accountants, Health unit in-charges, and representatives from partners. Key informants indicated that the sub-county budget included the 2% from the (Discretionary Development Equalization Grant) DDEG meant to facilitate nutrition coordination activities, specifically organizing the meetings.

Besides underfunding, a key informant shared that the region faces other challenges such as unharmonized salaries for staff paid by different agencies like OPM, government, partners and UN agencies, yet they performed the same duties. He added that opportunities like Parish Development Model (PDM), Operation Wealth Creation (OWC), which were designed to improve livelihood, were not adequately utilized by communities to improve nutrition outcomes at HH level. For example, the key informant shared that the youth perceived PDM as free money from the government and he cited examples where the initiative was translated as the *“people’s drinking money”* in some districts.

The key informant proposed a mindset change among community members and in programming by strategically aligning DNAPs to the seventh pillar of PDM that addresses social inequality to optimize resources for better nutrition outcomes.

4.1.5. Funding for nutrition interventions in Karamoja

“You find that an intervention doesn’t have good coverage; in sub-county, they cover only a few parishes, and in the parishes, only a few villages”

Key Informant, Napak

Across all three districts, key informants unanimously affirmed that funding for nutrition in Karamoja was inadequate to successfully implement nutrition-specific, nutrition-sensitive and governance interventions to scale and sustain impact.

Key informants mentioned that the government contribution toward the UNAP activities was only 2%, which was regarded as extremely low. They added that the local revenue for the district was expected to support multiple activities, and the conditional grants received at the districts came with predetermined budget lines like salaries and development, which did not give room for the reallocation of funds to nutrition. Similarly, donor agencies like the UN agencies mentioned that funding gaps had recently limited their coverage and scope of interventions for example, they could only support Mass MUAC screening in four of nine districts.

Nutrition interventions were mainly supported by partners, who besides being affected by funding gaps, their support was limited to their mandate and project duration. Funding gaps had, in general, limited the coverage and continuity of interventions, especially those that require continuous engagement with grassroots structures like village LC1s. When key informants were asked for solutions or plans to manage funding deficits, they mentioned the following;

- Advocacy, lobbying, and fundraising from partners and government to increase the resource envelope. This includes districts making costed plans and highlighting the unfunded activities, which can be sold to partners as unfunded priorities.
- Further engagement with local government to increase the nutrition funding from 2%.
- Improve coordination and integration of partner activities to ensure efficient use of available resources. This includes aligning the DNAP to the funded government initiatives like PDM.
- Partners to develop and share clear exit plans to ensure financial planning and fundraising for interventions beyond their project duration.

4.2. Understanding of nutrition

4.2.1. Definition of malnutrition

The majority of the FGD participants described malnutrition in relation to its causes, with most associating it with a lack of food, hunger and poor dietary practices (Figure 8). A few participants associated it with poor childcare practices, not breastfeeding, multiple unspaced births, and poor sanitation, among others, at the individual or HH level.



Figure 8: Key words used by FGD participants to describe malnutrition

A few participants were able to articulate that malnutrition is a condition that an individual faces and described the physical appearance of malnourished individuals, such as weight loss, swollen body, hair and skin colour changes, and being sickly. Some participants related malnutrition to stress and domestic violence.

*“Malnutrition is when you have thoughts resulting from lack of food”
Pregnant mother from Okudud village, Nakapiripirit district.*

When defining malnutrition, there was a general perception that the condition is used when referring to children only. Across all segments, the differences in the way FGD participants described malnutrition were minimal, although adolescents seemed to have a more accurate definition that recognizes that malnutrition is a condition of one’s body resulting from inappropriate nutrient intake.

*“It is a condition which occurs when the body lacks certain food nutrients and it results in weight loss, general weakness of the body and the skin looking pale”.
Adolescent girl from Lojom village, Napak district.*

4.2.2. Perceived signs and symptoms of malnutrition

Perceived signs of malnutrition

1. Weight loss/visible bones
2. Swollen stomach/pot belly
3. Hair color changes
4. Skin color changes
5. Swollen legs/hands/face-edema
6. Being sickly
7. Sunken eyes
8. Body weakness/ looking tired
9. Pallor of eyes/skins
10. Stunted growth
11. Lack of appetite
12. Looking older (old man's face)
13. Inability to control muscles-Shaking of hands and feet

The most mentioned signs of malnutrition were related to marasmus, which is due to lack of energy (calories). These include weight loss characterized by a visible ribcage, shoulder, and neck bones, folded skin and a child's clothes becoming loose. Sunken eyes were commonly mentioned, suggesting a confusion between dehydration and malnutrition. Signs of protein deficiency (kwashiorkor) like oedema in the feet and hands, face, pot belly, skin, and hair colour changes were also mentioned. A few participants mentioned the signs of anaemia like pale skin and eyes, and body weakness. Some participants recognized that stunting “eteri” was a form of malnutrition and they associated it with low linear growth, recurrent illnesses, and delayed growth milestones. The perceived signs of malnutrition are listed in Box 1 in order of the most to least mentioned.

Box 1: Perceived causes of malnutrition

“Failure to grow well and stunted development in children are signs of malnutrition; this happens when a child fails to grow tall completely and even fails to walk, you find that this child is ever sick throughout, the food they provide this child doesn't help him/her to grow, he/she develops a retarded growth due to malnutrition.”

Father from Namuse Village, Moroto district

4.2.3. Causes of malnutrition

The perceived causes of malnutrition, as described by FGD participants and key informants, were similar to those illustrated in the UNICEF conceptual framework on the determinants of maternal and child nutrition (Annex 12). The majority of the drivers of malnutrition are interrelated, with a bidirectional cause-effect relationship as described below. Sections 4.3 to 4.8 describe in detail the individual drivers triangulated with secondary data. The following section focuses on the information provided by key informants and FGD participants when asked to share their perceived causes of malnutrition.

A: Immediate causes

Disease burden: Acute diseases like diarrhea and malaria among children and chronic conditions like tuberculosis and HIV/AIDs among adults were reiterated by both key informants and FGD participants as a significant cause of malnutrition. Respondents explained that TB and HIV led to increased body demands yet patients had low appetite or the body was unable to absorb nutrients

Similarly, FSNA findings suggest that the disease burden in Karamoja has remained high, contributing directly and indirectly to the recurrent burden of acute malnutrition. Child morbidity in the past two weeks was 12.3% for malaria and 10% for diarrhea and multiple cases of tuberculosis were reported across all of the nine districts. Across all primary and secondary data sources, diseases remain a critical contributor to malnutrition.

Some FGD participants had misconceptions about breastfeeding and were not familiar with the correct causal pathway linking diseases to malnutrition

“Breastfeeding the child without cleaning the breast after long hours of work in the sunshine later makes the child get diarrhea and become malnourished.”

Breastfeeding mother from Nakuluny village, Nakapiripirit district.

“Even these jiggers, if they infest someone, can drain a child’s blood, and the child gets thin.”

Breastfeeding mother from Lemuria village, Moroto district.

Suboptimal dietary practices: Inadequate feeding practices in Karamoja were characterized by monotonous diets that were high in starch (sorghum and maize), wild vegetables and low on animal-source proteins. In some instances, children survived on local brew residues. FGD participants reported that children were being weaned off breastmilk prematurely for various reasons, including conception of the next baby and the need to resume casual labor.

“Talking about malnutrition in my community, children do not feed on a variety of food not because they don’t want to; it is just that we mostly feed on greens and posho every day so children lose weight,”

Grandmother from Mwanakolong village Nakapiripirit

“Malnutrition is all brought about by bad feeding for example for us here it’s only greens that we eat daily no balanced diet, we feed like animals that eat grass every day”

Grandmother from Losikayit village, Napak district

The 2023 FSNA report indicated that the proportion of children 6-23 months who consumed meals that met the minimum acceptable diet was only 5.9%, with most households consuming a plant-based diet comprising cereals like maize and sorghum, wild vegetables, and beans. This is consistent with the responses from FGD participants.

Poor child care practices: It was common that primary caregivers, specifically mothers, left young children under the custody of grandmothers or elder siblings, who were unable to cook proper meals and feed the children on time.

“Parental negligence is also one of the reasons why most children are malnourished in my community, for example, most women have less time with children, yet spend much time with their friends taking alcohol, and by the time they come back, it is late, and children have slept without eating, this has caused malnutrition among children.”

Breastfeeding mother from Namorotot village, Napak district

“In my community, most children have become malnourished because they are not given proper care by their mothers for example a mother leaves a child with a grandmother most of the time without food, as they move around consuming alcohol by the time they return home they are too drunk to think of even feeding the child so because of this, the child becomes malnourished and this happens every day”

Grandmother from Mwanakolong village, Nakapiripirit district.

B: Underlying causes

Poor sanitation and hygiene practices: Low latrine coverage, limited access to improved water sources, and poor handwashing practices are some of the WASH-related causes of malnutrition mentioned by FGD participants. These have been associated with diseases like diarrhea among children.

Food insecurity: The lack of food (hunger) at the household level was reiterated as the main cause of malnutrition. While FGD participants seemed knowledgeable about diet diversity and what comprises healthy feeding habits, they were limited by low purchasing power, access to markets with diverse foods, and crop failure. Dietary practices worsened in the lean period, which was characterized by reduced meal frequency, quality, and quantity, as described in section 4.7

“In this [lean] season, people eat the posho of sorghum, then they get the balanite seeds, they mix then cook balanite leaves and serve together on the plate”

. “In the evening when there is no food, we serve mainly the posho with the balanite leaves (wild vegetable)”

Fathers from Looreng village, Moroto district.

“For us this season, sometimes we even just take plain warm water before we go to bed just to keep the stomach warm...because we can fail sometimes to get a meal in a day, you may even take firewood for sale and no one buys them so you end up returning home without anything to eat”.

Breastfeeding mother from Kaloi village, Moroto district.

The above responses from participants were consistent with the 2024 IPC findings, which estimated about half of the population in the Karamoja region to be classified as “crisis” for food insecurity.

Access to health services: Key informants based at the health units (in charge) mentioned that some communities were distant from the health units, which limited access to vital health services like immunization and treatment of child illnesses. Service delivery, including outreaches, was constrained by limited resources, lack of transport, and poor roads, especially in the rainy season. This challenge cuts across all districts but was more emphasized in Napak. In some instances, health services were accessible and communities were aware that the health unit was the right choice for medical attention however, they preferred to use home remedies or first seek health care from traditional birth attendants and herbalists.

C: Basic causes

Governance: Key informants indicated that the failure to plan for communities, limited political support, and low funding for nutrition contributed to malnutrition in Karamoja. For example, politicians could not enact or support firm bylaws against drivers such as excessive alcoholism and unregulated sale of agricultural products due to fear of reducing their political popularity.

Insecurity: Livestock, which is the main source of animal protein, is lost through raids. For safety, animals are kept in protected kraals far from HH, limiting the regular access to animal source foods (ASFs).

“Those days when cows were there people could barely eat posho with greens they put milk in the Posho then they sprinkle some butter” Father from Looreng village, Moroto district.

Social causes

The following basic causes were driven by social characteristics or behavior that influenced child care and food consumption

Alcoholism: This topped the social causes of malnutrition. Both FGD participants and key informants decried excess consumption of alcohol by caregivers, which significantly reduced the quality of care provided to children.

*“...our people when they get up in the morning, what they put in the mouth first is alcohol”
Key Informant, Moroto*

*“ ...the crawling baby has to go to the next home where maybe they have squeezed booze and then gets the residues to eat”.
Key Informant, Napak*

Alcohol played multiple roles in the community as a source of income, a stress reliever, and a meal. Consequently, alcohol was an expenditure of scarce HH resources, replaced healthy meals, and as a business, it consumed caregivers' time for childcare.

*“Poor parenting, where parents have concentrated on only drinking and left their children under the custody of grandmothers who have even no energy to do anything to get food for these children. We are so weak to even toil for these children so they end up starving and at the end of the day they get malnourished”
Grandmother from Losikayit village, Napak district.*

The social definitions of alcohol and alcoholism influence the behaviour and thus limit efforts meant to address it. It was ironic that among some key informants, local brew was perceived as a socially acceptable beverage that was safe for daily consumption and its effect on child care was not acknowledged.

*“When we say local brew has no problem believe us because it does nothing to the body other than getting drunk”. “...and with local brew that one is attached to culture you can't celebrate without it”
Key Informant, Nakapiripirit.*

Low literacy levels: While majority of the FGD participants demonstrated good understanding of the basic principles of nutrition, some lacked adequate information about elements like what constitutes a healthy meal. Education also played a role in behavior changes as respondents noted that the model men were more likely to be educated and key informants also observed that it was easier for literate caregivers to receive, comprehend and act on the information provided during health education.

The social status of the household: Respondents observed that malnourished children were common among households that were child-headed due to loss of parents, female-headed due to loss or neglect from husbands, polygamous, and or with adolescent wives. In such households, childcare is compromised as women are overwhelmed with maintaining the household and also performing domestic HH duties. The workload is heavy as they toil from casual labor to small business to earn income

“Yes, they [girls] are married off at 14 to 15 years old and eventually they are left by their husbands and they become frustrated and you can see that the woman wants to leave the child and go elsewhere because of the expenses of medical care, feeding somebody gets stressed up and that’s is why sometimes we get that they just throw away the children”
Key Informant, Nakapiripirit district

“Women in polygamous marriage where the man only loves 2 of 10 women, are prone to have malnourished children. A man can have an average of 4-30 women, In Namalu average is 4-10 women. Most men like adding young wives, they keep adding and neglecting them”.
Key Informant, Nakapiripirit district

Emotional torture of children: Child battering and forced feeding were reported to cause trauma among children, affecting the amount of food consumed during meal time.

“Mothers scolding children while eating causes distress, makes the child lose appetite, and is another cause of malnutrition,”
Father from Namuse village, Moroto district.

Family planning: Respondents noted that unspaced births and the high number of children requiring essential care are factors contributing to malnutrition. They noted that it was common for women to become pregnant when still breastfeeding children as young as six months. This increased responsibility on the women and stretched the scarce HH resources.

Access to land for cultivation: Most households had fragmented pieces of land that could not support large-scale production of food.

Attitude towards nutrition interventions: Some caregivers developed the dependency syndrome and handed over their childcare responsibilities to partners. It was reported that some intentionally starved their children to remain in programs that distributed food or cash. There was also widespread misuse of treatment rations such as the sale or exchange for alcohol.

Chronic stress due to domestic violence/stress: This was common in households where women were overwhelmed with work and with unsupportive partners. Ironically, much as women made a significant contribution to the home, their decision-making power on expenditure and household assets remained low, leaving them vulnerable to domestic abuse.

Unfavorable food restrictions: As indicated in section 4.7, food restrictions were in favor of men, which limited the adequate consumption of animal-source protein by women and children. Iron-rich foods like liver, fleshy parts of meat were restricted among pregnant, breastfeeding women and children, which predisposed them to micronutrient deficiencies.

Poverty: Poor HH income, as reflected in the low purchasing power, poor housing conditions without aeration, and sharing with animals predisposed HH members to diseases. To boost HH income, women spent time doing casual work and small-scale businesses, and the food meant for consumption was sold across the border to neighboring regions of Teso and Mbale.

Environment: Unfavorable weather conditions like erratic and heavy rainfall that led to floods-crop failure in low-lying areas of Nakapiripirit, and prolonged dry spells reported in parts of Moroto and Napak leading to poor yields.

“This is not like the places like in the central region where someone can misuse his money for growing the crops; here there is a lot of sunshine which burns the crops, leading to financial losses,”

Father from Looreng village, Moroto district.

Pests and diseases: In the northern Karamoja districts of Karenga and Kaabong, it was reported that wild animals in the game reserves destroy crops. Wild pests, and diseases, e.g., bollworms and termites, were reported to destroy growing crops, and weevils and rats attacked stored food in the granaries.

“Wild animals are also a problem in these upland areas. They destroy many crops such as maize which makes cultivating in these areas difficult. One only can cultivate these food crops with assurance and support from family members whose main role is to stay in the garden full time to scare away the animals such as monkeys and baboons”.

Grandmothers from Angepuwa village, Napak district

A study conducted about patterns of acute malnutrition⁷ suggests that malnutrition is a seasonal condition mainly driven by seasonal factors such as rainfall, disease, availability of milk, and women’s workload. The non-seasonal drivers of malnutrition identified in the study were alcohol abuse, low education and unspaced births. While the CAN and FSNA findings did not conduct in-depth examination of the relationship between seasons and malnutrition, the findings across the three data sources concur.

4.2.4. Sources of information about nutrition

Most FGD participants received information from health workers like nurses, doctors, and midwives stationed at the health facility. There was a general impression that these were trusted to provide accurate and reliable information about health and nutrition. The sources of information in order of most to least mentioned are provided in Box 2 below.

The second main source of information was the Village Health Team (VHTs), who were perceived as easily accessible, trusted, and fairly knowledgeable about nutrition. Friends, neighbors were also trusted to provide guidance on nutrition-related issues. Information was sought from the household head as a decision-maker and “think tank” for the household.

Reported sources of information about malnutrition

1. Health workers at the health facility
2. VHTs
3. Friend/neighbor
4. Household head
5. NGO staff
6. Lead mothers
7. Fellow mothers with a malnourished child
8. Parents
9. Relatives

Box 2: Sources of information about malnutrition

NGO staff providing nutrition services at the facility and community were also consulted as they were perceived as knowledgeable and influential in providing practical support such as screening and enrollment into nutrition programs. Caregivers with malnourished children consulted their peers (with malnourished) to seek support in overcoming malnutrition.

⁷ <https://pastoralismjournal.springeropen.com/articles/10.1186/s13570-023-00269-5#citeas>

Adolescents demonstrated trust for their parents, their sisters and friends, and a few mentioned teachers as trusted sources of information about malnutrition

*“My father is the first person I talk to when I have an issue or question concerning malnutrition because I have a belief that he only can give me the best information”.
Adolescent girl from Nachocia village, Moroto district.*

4.2.5. Vulnerable groups and reasons

Based on the responses from FGD participants, the perceptions about vulnerability to malnutrition can be categorized into two; based on age or physiological status and social risk factors at household level.

Vulnerable groups based on age or physiological states

Children below five years: This was the most mentioned group, and the reasons for vulnerability were the need to meet nutrient demands required for growth and their dependency on adults for proper care. A key informant noted a recent increase in the number of children below six months, specifically newborns /preterm babies admitted in the stabilization mainly due to inadequate breastmilk production by their mothers.

Pregnant and breastfeeding women: These were perceived as vulnerable due to their increased nutrient demand for themselves and for proper growth of the baby in the womb or being breastfed. Moreover, the appetite and food consumption habits of pregnant women are often driven by cravings and food aversions. Pregnant women in Karamoja also undergo multiple unspaced births, which deplete their nutrient reserves. Both pregnant and breastfeeding women were reported to maintain the heavy workload and domestic chores before and after pregnancy.

The elderly: Men and women beyond 60 years were perceived as vulnerable to malnutrition because they were weak and often neglected by close family members. They lacked income, assets, and food, so they depended on other people to survive. Elderly people who are unable to chew food or who suffer from chronic conditions like hypertension and diabetes have food restrictions that limit their nutrient intake and absorption. Despite their helpless state, the elderly were not prioritized for most interventions, which further predisposed them to malnutrition or death.

*“For us the old men you can even take three days without eating and when a small disease comes you’ll just die and even they [food assistance interventions] serve food according to the families... they say we want the girls, they want the children for us the old people they leave us to die of hunger.
Father from Looreng village, Napak district.*

Adults with chronic diseases like HIV/TB: Immune-compromised individuals often fall sick and have reduced appetite yet undergo daily medication, which requires adequate feeding for better absorption.

Children above five years: Children between 5-10 years were mentioned among the vulnerable groups because they were often not targeted for nutrition interventions. The adolescents were also mentioned by a few FGD participants

“The children between 6-10 years had very high levels [of malnutrition] because I do recall that mass screening in SFP centers, we had some levels reaching 22% just by MUAC. So that

category is there, it's not talked about, but unfortunately, they are also suffering with the same problem”
Key Informant, Moroto district.

The youths: The participants reported that while the youths were physically able to work and generate income, some replaced healthy meals with alcohol, which made them vulnerable to malnutrition.

Children above 5 years and the elderly were referred to as the ‘forgotten yet vulnerable’ group whereas adolescents, youths, and children above 5 years came out as minority views about the groups vulnerable to malnutrition.

Vulnerability based on social risk factors

FGD participants and key informants also indicated that vulnerability may not necessarily be at the individual but at the household level. The following attributes put HH members at risk of malnutrition.

- Families with alcoholic caregivers, specifically mothers, prioritize local brewing over childcare and feed children on residues. Fathers who spend household income on alcohol and are unable to support household responsibilities.
- Orphaned or child-headed families who are unable to provide and take proper care of their younger siblings.
- Households with busy mothers managing multiple casual tasks with minimal care for children and other vulnerable household members
- Families with large household sizes compared to the income or assets specifically those with multiple young children who need critical care.
- Women headed households due to death or divorce from their husbands. Circumstances where the husband’s family takes back all property like land and animals upon divorce or death of a spouse.
- The poorest of the poor HH without food, income, and housing conditions (reed and wattle) that expose family members to diseases. Households involved in polygamous marriages are at risk of food insecurity as husbands were reported to lack resources to support multiple households.
- Households located in areas most affected by natural calamities like floods or drought have extremely low crop yields and can’t sustain both the household members and their livestock.

4.3. Maternal, Infant and Young Child Nutrition Practices (MIYCN)

4.3.1. Maternal Nutrition Overview in Karamoja

Maternal nutrition is essential in promoting child health, preventing intrauterine growth retardation (IUGR), and breaking the cross-generational cycle of undernutrition. Key recommendations to promote proper maternal nutrition include taking iron and folic acid during pregnancy for at least 90 days, adequate dietary practices during pregnancy, and breastfeeding, including meal frequency above three with snacks and consumption of diverse food. Proper nutrition is envisaged to translate into well-nourished women and children free of micronutrient deficiencies like anemia.

Findings from the key maternal nutrition indicators analyzed from FSNA 2023 (table 5) indicate sub-optimal practices across all nine districts in Karamoja. For instance, the highest proportion of pregnant women who took IFA for more than 90 days was in Nakapiripirit (76%), which was lower than the national average (88.2%) reported in the AHSPR 2022/23. Less than a quarter of WRA met the MDD-W across all districts, and anemia prevalence was above the moderate public health significance threshold of 20% across all districts except Napak, which is also at the borderline. Three districts (Karenga, Kotido, and Nakapiripirit) exceeded the severe public health significance threshold of 40%.

Table 5: Maternal nutrition indicator values for districts in Karamoja region, 2023 FSNA

District	Percentage of women who,			
	Took IFA for 90+ days during last pregnancy	Met minimum dietary diversity for women (MDD-W)	were malnourished (MUAC < 23 cm)	Had anemia (hemoglobin less than 11g/dl)
Abim	43.1	20.7	5.6	31.8
Amudat	67.1	6.3	11.3	33.1
Kaabong	13.7	8.4	20.6	39.4
Karenga	33.8	3.9	14.4	47.2
Kotido	31.1	7.7	15.1	46.8
Moroto	59.2	3.4	23.9	29.6
Nabilatuk	52.9	13.0	15.2	36.1
Nakapiripirit	76.0	12.4	27.1	61.4
Napak	59.4	4.6	15.1	19.7
Karamoja	49.8	9.4	16.3	37.3
National	88.2			

Among the three CAN districts, Napak seems to score better nutrition indicators with relatively lower anaemia and acute malnutrition prevalence among women, although its MMD-W is lower than the regional average of 9.4% (Figure 9).

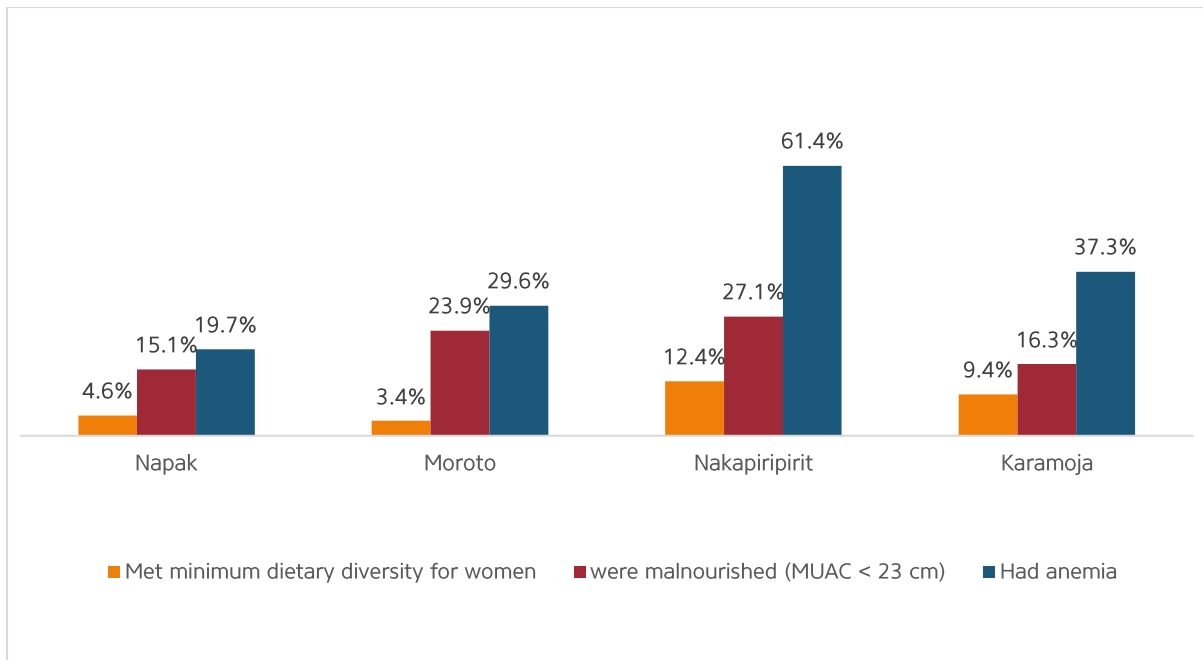


Figure 9: Dietary diversity, acute malnutrition and anemia among WRA in CAN areas, FSNA 2023

4.3.1.1. Meal frequency during pregnancy and breastfeeding

FGD participants shared varied views about meal frequency and types of foods consumed by pregnant and breastfeeding women (PBWs). Majority of the participants indicated that the number of meals pregnant women consumed was dictated by appetite and availability. The main meals mentioned were breakfast, lunch, and supper. Snacks and fluid consumption during pregnancy were also mentioned upon probing.

The least mentioned meal frequency was two during the lean season, and the highest was six during the times of plenty and when the appetite is high “*child keeps demanding.*” Three to four meals were the most mentioned meal frequency for pregnant women.

4.3.1.2. Dietary diversity among pregnant and breastfeeding women

Majority of the participants reiterated that the food cravings and aversions during pregnancy determined the choice of foods that women ate. Participants described the preferred attributes of foods for pregnant women as soft to ease labour, do not trigger nausea, and address cravings. Foods like tamarind, raw mangoes, and lemon were eaten plain or added to porridge to soothe cravings and manage nausea.

Box 3: Examples of reported types of foods consumed by PBWs gives examples of the types of food consumed by pregnant and breastfeeding women. Participants were also knowledgeable about the importance of diverse foods and reasoned that they facilitated proper growth of the child, provided energy to the mother, and helped with adequate weight gain.

*“Pregnant mothers should eat fruits such as mangoes, oranges, pawpaw, as well as wild fruits like 'ngimongo' for the health of the baby”
Breastfeeding mother from Achukul village, Moroto district.*

Breastfeeding women mentioned that they take the following actions to promote breast milk production.

- Eating a balanced diet and regularly feeding, for example, 2-3 meals, specifically taking porridge and eating vegetables like eggplant "*ntula*" to increase milk production
- Maintain good hygiene to avoid sickness for the mother and baby diseases.
- Avoiding alcohol and local brew for the baby to breastfeed well

Carbohydrates: sorghum, posho/maize pumpkin rice, Irish, matooke, porridge

Vegetables: green leafy vegetables, eggplant, amaranthus and avocado

Fruits: bananas, oranges and mangoes

Animal source protein meat, eggs mukene, milk, fish, liver, chicken

Plant protein cowpeas, beans

Box 3: Examples of reported types of foods consumed by PBWs

The following foods were perceived to promote the production and flow of breastmilk; milk, meat, avocado, eggplant matooke, Irish, fish, bongo mixed with porridge.

A study conducted about seasonal malnutrition patterns in Karamoja⁸ suggests differences in diet quality and other factors between healthy and malnourished PBWs. Healthy pregnant women's diets comprised milk, beans, eggs, chicken, local brew (*kwete*), bananas, wild greens, butter, sorghum porridge, Meat (*akiring*), Irish potatoes, onions, tomatoes, and rice. In addition, the women were free of disease.

Conversely, malnourished pregnant women's diet comprised of rice, plain porridge (*Yakima*), millet or sorghum, wild greens, wild tubers, wild fruits (plain), sorghum flour (plain), and local brew. Additionally, malnourished pregnant women from poor families, had no animals, no money to buy quality food, had diseases like malaria, and ate only once or twice a day. A similar trend was observed among healthy and malnourished breastfeeding mothers. This suggests that diet quality is a critical driver of maternal nutrition as healthy pregnant women consumed more diverse meals with ASFs.

4.3.1.3. Water intake among pregnant and breastfeeding women

Beyond quenching thirst, adequate water intake during pregnancy and breastfeeding is essential. A minimum of 8 glasses (at least 1.5l) is recommended to meet maternal needs. Most FGD participants mentioned that 6-12 cups were adequate, and they reasoned that this would be adequate to quench thirst, replace fluids consumed during breastfeeding, promote blood flow, prevent hypertension and UTIs. For most participants, the daily amount of water consumed was thirst-driven and dependent on the weather.

⁸ <https://pastoralismjournal.springeropen.com/articles/10.1186/s13570-023-00269-5#citeas>

A few participants mentioned that 3-5 cups would be required while others indicated that they were unsure of the quantity of water since they did not keep count.

“Now when you ask how many cups we take, here we don’t count or measure water, we can get a jug and drink with it, even a container, and when you come from the bush you can even take a full jug and finish, no one can tell how many cups I have taken. Even the number of jugs is not counted, I just take the time I feel like....so I take water also to get strength”

Breastfeeding mother from Nakiloro village, Moroto district.

4.3.1.4. Advice from FGD participants to pregnant women

When asked to offer advice to pregnant women, participants shared the following views in order of the most to least mentioned

1. Eat the foods the child wants, eat a variety of foods
2. To reduce workload and prevent miscarriage, a pregnant woman should not engage in strenuous work like charcoal burning, tree cutting, or mining gold.
3. Improve personal hygiene to prevent Urinary Tract Infections (UTIs)
4. Attend ANC and other services provided at the health facility
5. Avoid stress to enable proper growth of the baby
6. Sleep under the insecticide-treated mosquito net to prevent malaria
7. Minimize stress for the health of mother and baby, avoid conflicts (“fighting”)
8. Avoid too much sunshine
9. Exercise daily to prevent swollen legs but avoid long walks
10. Avoid alcohol because it affects the unborn baby
11. Take enough rest to rebuild your energy
12. Follow medical advice for example, take the iron and folic acid
13. Plan for the baby's birth in time for example, buy baby clothes
14. Avoid staying too close to the fire when cooking

“What can I say? when a woman is stress-free and happy during pregnancy, she can deliver a healthy, happy baby,”

Pregnant mothers from Kanaitakomol village, Napak district

Given that home conflicts and domestic violence were often mentioned as common occurrences within the family, participants recognized the impact of stress on birth outcomes and cautioned pregnant women against instigating conflicts.

4.4. Infant and Young Child Feeding Practices

Optimal Infant and Young Child Feeding practices significantly contribute to better nutrition outcomes among children below two years and beyond. The MIYCAN guidelines form the framework within which IYCF practices are promoted in Uganda. Interventions are implemented in adherence to Uganda's MIYCAN guidelines, which recommend initiation of breastfeeding within the first one-hour, exclusive breastfeeding for the first six months, and age-appropriate complementary feeding for 6-23 months. This implies giving children diverse foods of the right texture, amount, and frequency depending on age.

Across all districts in Karamoja, the core IYCF indicators are suboptimal and fall below the national values (Table 6). Initiation of breastfeeding within one hour of birth was highest in Nakapiripirit and lowest in Kotido. Exclusive breastfeeding was highest in Abim and lowest in Kotido. Continued breastfeeding in Karamoja was above the national value of 30%; it was highest in Kotido and lowest in Kaabong. The minimum acceptable diet (MAD) was highest in Amudat and lowest in Moroto, Karenga, and Napak. Despite having suboptimal IYCF indicators and a high prevalence of acute malnutrition, timely introduction of Solid and Semi-Solid Soft foods was highest in Kotido (91.4%).

In districts like Kotido and Moroto, the low IYCF indicators correlated with the high prevalence of malnutrition however, it was the reverse for Abim and Napak where relatively poor IYCF indicators correlated with better poor nutrition outcomes compared with other districts. While the multiple factors in the malnutrition casual pathway besides IYCF practices are acknowledged, the reasons for disparities in IYCF and nutrition outcomes in the different districts require further investigation.

Among the three CAN districts, breastfeeding indicators seem similar with Napak scoring slightly higher and Moroto with relatively lower values (Figure 10).

Table 6: Indicator values for IYCF practices in the Karamoja districts, FSNA 2023

District	Proportion of children who,						
	BF within 1 hr of birth	Were exclusively breastfed (0-5mths)	Were Introduced to SSSF 6-8 mths	Continued BF 12-23 mths	Met minimum dietary diversity	Met minimum meal frequency	Met minimum acceptable diet
Abim	72.4	87.1	75.0	78.1	6.7	33.5	4.5
Amudat	52.4	81.8	81.3	68.2	10.2	32.1	6.6
Kaabong	81.8	70.1	72.7	67.2	4.0	27.7	1.5
Karenga	87.0	86.1	85.7	85.4	4.8	41.6	1.1
Kotido	61.1	67.7	91.4	89.3	8.7	20.5	5.4
Moroto	75.6	73.8	47.8	85.4	1.1	12.0	1.1
Nabilatuk	77.6	73.0	64.0	87.6	5.5	28.9	2.0
Nakapiripirit	93.8	72.9	64.3	84.0	7.2	25.7	3.3
Napak	86.0	84.5	75.0	87.5	5.1	22.8	0.0
Karamoja	76.9	76.9	73.9	81.8	6.0	26.0	2.9
National	81.5	94		30.4	10		7.3

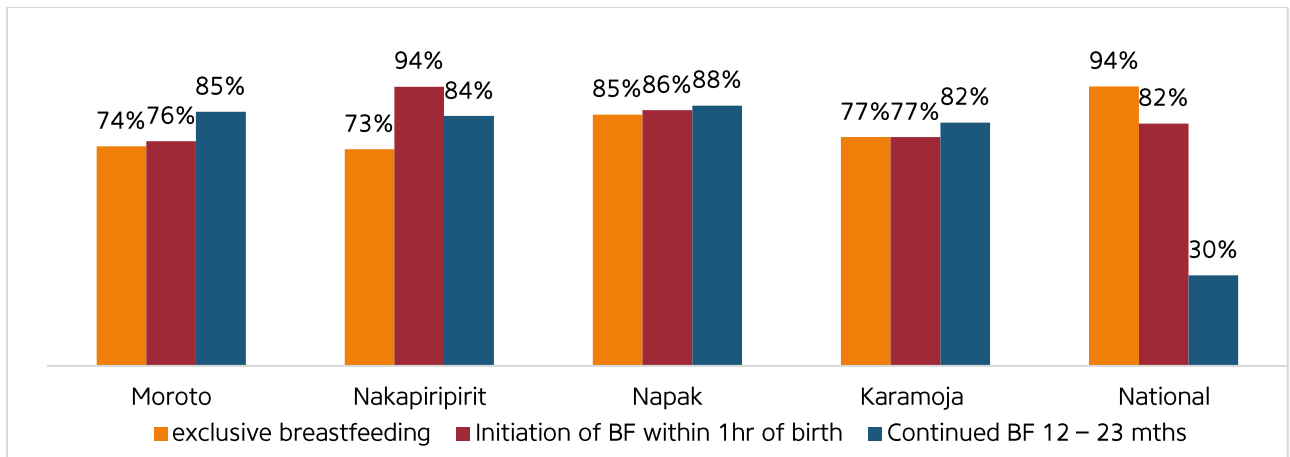


Figure 10: Breastfeeding indicators for children 0-23months in CAN areas, FSNA 2023

4.4.1. Breastfeeding

4.4.1.1. Initiation of Breastfeeding

When asked to share their breastfeeding experiences, FGD participants reported that they generally found it easy to initiate breastfeeding and sustain it through the six months with a few challenges. Participants demonstrated a good understanding of the recommended IYCF principles and were able to recognize when their practices deviated from the ideal. This suggests good comprehension of messages received during counseling and nutrition education and the need to advance to the next level of behavior change, where caregivers translate knowledge into skills.

The majority of the participants, including PBWs and fathers, reported that breastfeeding was initiated immediately after birth. The duration between birth and initiation of breastfeeding ranged from 2 minutes to 50 minutes, with most mothers initiating within 30 minutes.

“I gave birth in the night, and the nurses immediately handed the child to me so that I could breastfeed her I didn’t feel like it was a hard task because it was my child, and breastfeeding is the best experience ever.”

Breastfeeding mother, Namorotot village, Napak

Participants’ views correlate with the relatively high prevalence of initiation of breastfeeding (76.9%) within one hour, as reported in the 2023 FSNA.

A few participants were unable to initiate breastfeeding within one hour due to a lack of breast milk, and complications at birth, which interfered with the timely initiation of breastfeeding. The birth complications reported include an unresponsive child who failed to latch or suckle and prolonged labor. For affected participants, initiation was delayed for 2 hours to 5 days, resulting in the use of pre-lacteal feeds.

The factors that were perceived to facilitate initiation of breastfeeding within one hour include drinking tea during labor, subsided pain after birth and upon breastfeeding, uncomplicated births for baby and mother, counseling and training received from nurses during ANC, giving birth at the health center ensured timely support, counseling from TBAs and relatives about breastfeeding, having a family member present at birth and after to support with household chores, skin-to-skin technique and crying from the baby. Cultural practices were also reported to facilitate the timely initiation of breastfeeding.

“For us immediately a child is born, a woman is to breastfeed so as the child can be given a traditional name”. Mother from Karid village, Napak district.

4.4.1.2. Prelacteal feeds

Consistent with the recommended practices, pre-lacteal feeds were hardly used by mothers as most initiated breastfeeding within one hour of birth. Nonetheless, a few participants mentioned the use of prelacteal feeds for mothers unable to initiate breastfeeding within one of birth. A mixture of warm water with sugar/glucose, diluted goat’s milk, and powdered milk were some of the examples of pre-lacteal feeds mentioned.

*If a mother doesn’t have enough milk, “some families give diluted goat milk to the baby to make the baby assume its breast milk”. “Some people also buy powered milk to give the baby and this milk is put in small bottle that has a nipple like breast”.
Fathers from Namuse village, Moroto district.*

Responses from participants suggested the need for health workers to explain to mothers or their attendants the medicine administered to children at birth. When asked about prelacteal feeding, the majority of the participants described the first oral polio vaccine with clear uncertainty of what it was and why it was being given.

“While giving birth recently I saw a midwife drop something in my child’s mouth”.

“I honestly don’t know why and I have never bothered to ask because I trust the medical people, they know what they are doing”.

*“I think it is just a vitamin,”
Breastfeeding mothers from Nalait B village, Nakapiripirit district*

4.4.1.3. Breastfeeding frequency, exclusive and continued breastfeeding

The majority of the participants reported that their children were breastfed on demand and reasoned that this was to ensure better growth of the child. A few participants mentioned that their children breastfed only 4-6 times, and they acknowledged that this was insufficient, but it was driven by the mother’s busy schedule.

*“Balancing work and breastfeeding is tough, especially with our demanding casual labor jobs. I struggle to find time to breastfeed my baby while working.”
Breastfeeding mother from Rapada village, Napak district.*

There was a general misconception that babies should be breastfed when they cry and mothers should wash their hands before breastfeeding. This is not recommended since crying is considered to be a late sign of hunger.

“...on demand but I wash hands before breastfeeding to avoid diseases”.

*“Any time my child cries I breastfeed her this is a sign that she wants to be fed”
Breastfeeding mothers from Nomorotot village, Napak district.*

Across all FGDs, there was a general agreement that children should be exclusively breastfed for the first six months before introducing complementary foods. Participants shared the factors that facilitate successful exclusive breastfeeding as follows, in order of the most to least mentioned.

Adequate breastmilk production: Mothers with enough breastmilk are likely to meet the baby's demands and thus sustain exclusive breastfeeding for six months.

Mother's diet: Breastfeeding mothers who had physical and financial access to diverse meals and ate more frequently were likely to produce adequate breastmilk for the child.

Support with domestic work: When breastfeeding mothers are supported with household chores, they have ample time to breastfeed their babies. Particularly, mothers mentioned that the availability of their spouses and the support they provide motivates them to breastfeed. Responses from the FGDs conducted with fathers were consistent with this submission.

Limited involvement in income-generating activities: Mothers in Karamoja often engage in casual work and running small businesses to meet the financial needs of the household but at the expense of child care and breastfeeding. If there was limited involvement in casual work, then mothers thought they would have more time to breastfeed children

The health of the child or mother: Mothers felt motivated to continue breastfeeding a healthy child with a good appetite as opposed to a sickly baby. Similarly, the health of a mother promoted breastfeeding; breast infections were reported to interfere with exclusive breastfeeding and sometimes lead to premature weaning.

*“After my wife developed a breast infection that prevented breastfeeding for a week, we relied on a sugar-salt water mix and diluted goat's milk to provide some energy.”
Father from Namuse village, Moroto district.*

Trust in the information given by health workers: Mothers shared that messages about breastfeeding were reiterated by trusted health workers, which triggered practice.

Bond between mother and baby: Mothers shared that once a love bond had been established between a mother and a child, mothers were inspired to breastfeed more and better.

Good mental well-being: Stress was emphasized as a common factor impeding successful childcare practices including breastfeeding

*“Another factor that makes breastfeeding easier is peace of mind. When no issues are stressing me as a mother, nothing can hinder complete breastfeeding. This is different from when you have issues stressing you”.
Breastfeeding mother from Kaurikiakine village, Napak*

Continued breastfeeding: FGD participants shared mixed views about continued breastfeeding beyond six months. The most mentioned age bracket for weaning was 16-24 months, even though a few participants mentioned ages before one year. Conception, low breastmilk production, and infection with HIV/AIDs or other diseases were the main reasons for premature weaning, which happened as early as six up to 12 months. There were also misconceptions about the cues that the baby was ready for weaning. For example, a father from Looreng in Moroto used the ability of children to respond to playful stimuli as an indication that the children were ready to be weaned, and some mothers thought babies hated the smell of breastmilk beyond one year.

*“Weaning is done at one year because they [babies] feel at this time breast milk smells bad to them.”
Breastfeeding mother, Kaloi village Moroto district.*

The views from both male and female participants suggest that it is the women, not men, who desired to conceive when still breastfeeding another baby however, some fathers stressed that the cultural practices in Karamoja worked in favor of the breastfeeding children and were a natural family planning method

*“In Karamoja, here and when the child is still young you the man is not supposed to sleep with the woman, until the child reaches like 2 years such that the child breastfeeds well.
Father from Looreng village, Moroto district.*

When children were beyond 18 months, mothers shared concerns like baby biting their breasts, voluntary refusal of the breast, and the desire to conceive another baby as the reasons for stopping breastfeeding. A few mothers shared that they breastfeed babies beyond two years, i.e., 22-36 months.

“My baby was removed from breastfeeding completely at the age of 2 years old because my wife was expecting another baby, and we believed it was healthier for both children, that’s why we couldn’t allow our baby to breastfeed another baby’s milk knowing it will affect the child’s health”.

Father from Namuse village, Moroto district.

“Most times when a breastfeeding mother conceives and yet she was breastfeeding it is believed that she needs to stop so that the baby doesn’t finish the vitamin of the unborn child.”

Breastfeeding mother from Nomorotot village, Napak district.

4.4.2. Complementary Feeding

Across all CAN districts, complementary feeding indicators related to meal frequency and diversity were poor, with Moroto having the worst indicators (Figure 11). None of the children 6-23 months met the minimum acceptable diet and the indicator remained low even in other districts.

Timing for complementary feeding

Similar to the other IYCF principles, participants seemed knowledgeable about the correct timing for the introduction of complementary foods to children. Majority acknowledged that children started eating SSSF at six months but provided justifications for starting earlier or later.

Caregivers who gave complementary foods before six months mainly started at 4 months and they explained that it was due to lack of adequate breastmilk; they had twins or had conceived.

Those who delayed complementary feeding started at 7-12 months and reasoned that they had adequate supply of breastmilk to sustain the baby beyond six months.

When asked for reasons why caregivers introduced foods at the mentioned age, they reported cues for readiness to eat food like grabbing food, availability of breastmilk beyond six months, advice from health workers, and resumption of casual work were the main reasons given.

There was a general misconception that the amount of breastmilk production and the cues from the baby determined the timing of complementary feeding, which should be corrected through nutrition education.

A few caregivers mentioned the correct reason for introducing SSSF at six months “foods were required at six months to increase the nutrient intake of the child and that at six months or “the digestive system of the baby was ready for SSSF.”

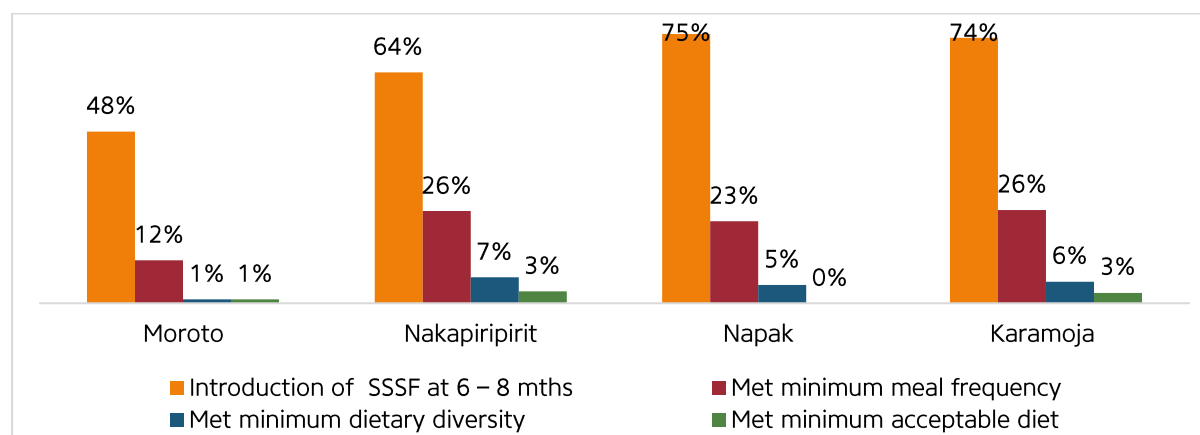


Figure 11: Complementary feeding indicators for children 6-23 months in CAN areas, FSNA 2023.

4.4.2.1. Diversity of children’s diets

The choice of food given to children was determined by availability and the child’s preference. The foods consumed by children did not differ from family foods, but their preparation and service distinguished them from family meals. First foods were fluid-based like milk, soups from beans or meat, and porridge was introduced much later, up to 16 months for some caregivers. Examples of foods consumed are provided in box 4 below.

*“At around eight months, they [children] start with goat milk, then at around 16 months, the child will take other foods like porridge when he starts playing as long as the child is healthy”.
Fathers from Looreng village, Moroto district.*

Food consumed by children 6-23 months

Animal source foods: Milk, silver fish, meat, eggs

Plant protein: Beans

Carbohydrates: Sorghum, millet, maize, rice, Irish potatoes, sweet potatoes, matooke, pumpkin, cassava, spaghetti

Vegetables: Dodo, avocado, tomatoes, okra-slimy texture help baby to swallow

Fruits : Passion fruits, Mangoes, oranges, Bananas

Others foods : Soups, blue band, soda, tea, honey, sugar

Box 4: Examples of reported foods consumed by children between 6-23 months

4.4.2.2. Meal frequency

FGD participants acknowledged that the number of meals children 6-23 months consumed each day was determined by age. However, the majority were uncertain of the correct meal frequency for each age category. The lowest mentioned meal frequency was 3 -4 meals for children 6-24 months. Meal frequencies as high as 6-15 times were mentioned even for children below one year, suggesting a lack of clarity on the definition of a meal. It was also common for participants to

mention that children were given food on demand without predefined feeding schedules therefore, caregivers couldn't quantify meal frequency.

"Counting exact feeding times can be tricky; babies should eat whenever they cry for food or show signs of hunger".

Father from Namuse village, Moroto district.

When the children cried in between meals, it was perceived as a sign of hunger and caregivers offered light snacks like chapati and fluids like soda. Caregivers seemed to do this so often that they lost count of the total meal frequency.

"Okay if the baby cries and you have money, you buy soda you give while he's breastfeeding, can that really be counted?"

"He cries I give chapati by the end of the day it can reach like 5 or even 10 times"

Breastfeeding mothers from Nakiloro village, Moroto district.

Responses also indicated that meal frequency was also determined by the time available to cook and money to purchase food. Meal frequency was reduced from 2-3 times to 1-2 times when caregivers were busy with casual labor or did not have money to buy food.

4.4.2.3. Food preparation for children 6-23 months

Complementary foods were mainly prepared by the mother, and in her absence, the eldest daughter would support her. Participants also mentioned that fathers, grandmothers and neighbours also supported meal preparation in the absence of mothers and the eldest daughter.

Meal preparation procedure: FGD participants articulated a clear food preparation procedure starting with cleaning the kitchen, washing hands, cooking utensils, and the baby's plate. They also indicated that the baby's food was not spiced, it was kept covered and served on a separate plate to prevent competition from other older siblings, who eat much faster. Caretakers ensured that the baby's food was soft by cooking it for longer periods, adding a lot of soup to it, pounding, mashing, or mingling it with a stick. For older children, food was cut into smaller pieces. Caregivers did not prechew food for the children.

"The food is not pre-chewed. I have never witnessed anyone in this community do that. For foods like meat, the food is thoroughly boiled so that it's easier for the baby to eat.

Otherwise, we just mash it, we don't allow pre-chewing"

Breastfeeding mother from Kaurikiane village, Napak district.

4.4.2.4. Responsive feeding for children 6-23 months

In the absence of the mother, the baby was fed by the eldest daughter of the family. In her absence, fathers, neighbors, babysitters, grandmothers, aunties, or mothers-in-law fed the child.

Actions to ensure children consume diverse meals

Considering the high level of food insecurity and low dietary diversity in Karamoja, participants were asked to share strategies to ensure children consume a variety of foods. The following responses were reported in order of the most to least mentioned.

1. Engage in casual labor like working in someone's garden, washing someone's clothes to earn money to buy a variety of foods

2. Start a business like brewing local brew business, selling firewood, construction poles and charcoal burning to earn money
3. Buying diverse foods from the market when cash was available
4. Growing own food in the main field or vegetables in the kitchen garden to feed the family
5. Growing fast-maturing crops and selling them to earn money
6. Sell some of the harvest to purchase the foods required
7. Taking loans from the Village Saving and Loans Association (VSLA)
8. Participation in Parish Development Model to earn money

The growing interest in joining VSLAs demonstrated by respondents suggested improvement in the saving culture in Karamoja over the years. Given that the ultimate goal of saving was to provide food in times of scarcity, it demonstrated that caregivers prioritized proper feeding practices for their children.

“I also get loans from my VSLA group to buy chicken for my children. This is a way to afford more expensive animal foods and give my baby a diverse diet”
Breastfeeding mother from Rapada village, Napak district

“Since we have saving groups and I am a member whenever I want my child to feed well, I just credit some money from the saving group so that I can feed the baby”.
Breastfeeding mother from Namorotot village, Napak district

The choice of food purchased from savings and money earned from casual labor, demonstrated knowledge and commitment to provide diverse foods

“...even someone can ask you to fetch for them water, five jerricans is 1000/=, which can buy enough silver fish”.
Breastfeeding mother from Nakiloro village, Moroto.

4.5. Health

4.5.1. Overview of Child Health

According to AHSPR 2022/23, Uganda has 25.8 health workers per 10,000 population, a total of 6102 health facilities and 74 admissions per 1000 population. Karamoja has a total of 148 health units at various levels spread across the nine districts. The report also indicated that the top five leading causes of admission are malaria, pneumonia, anaemia, cough/cold and septicaemia.

Over the past five years, there has been a steady decline in the under-five mortality rate (U5MR) in Karamoja from 1.05 in 2020 to 0.86/10,000 child population in 2023. The U5MR is below the emergency threshold of 2 deaths/per 10,000 population, an indication of improved service delivery or health-seeking behaviour over the years.

Similarly, other key health indicators like the proportion of low-birth-weight babies and morbidity have reduced over the years, as indicated in Annex 8. Child health indicators in Karamoja were slightly lower than the national average. In general, the child health indicators in Amudat district were higher compared to other districts while Kaabong had the lowest values for most of the indicators (Table 7)

Table 7: Child health indicator values for the districts in Karamoja, FSNA 2023 and UDHS 2022

Percentage of children with,						
District	Birth weight below 2.5kg	Measles vaccination based on card	Vitamin A supplements based on card	Deworming based on card	Illness in past two weeks	
					Diarrhea	Fever
Abim	7.7	73.8	69.7	70.3	10.4	12.8
Amudat	1.2	82.2	83.2	83.1	2.3	2.4
Kaabong	12.1	43.4	34.4	34.4	14.2	9.9
Karenga	6.1	76	72.5	72.3	12	14.9
Kotido	7.5	84	69.3	67.8	16.6	17.2
Moroto	9	74.3	70.1	69.1	12.9	6.8
Nabilatuk	9.6	78.9	77.8	77.6	11.8	10.2
Nakapiripirit	7.2	68.5	66.8	64.3	17	16.5
Napak	8.9	58.2	51.7	52	12.9	9.7
Karamoja	7.5	69	62.9	62.3	12.9	11.5
National	10	76.7	55	63.4	19	23

Health seeking behavior

Most caregivers reported taking sick children to the health facility to ensure that the child got examined and got the right treatment.

“I take my child to the hospital when she is sick because I prefer that tests be carried out so as I am aware of what exactly my child is suffering from and acquire correct medication”.
Father from Lomoruyangai village, Nakapiripirit district.

The VHT member was also mentioned as the first point of contact before proceeding to the health unit. Participants shared that they opted for VHTs because they were closer to them than the health

facility. A few participants opted for traditional healers or witch doctors and home remedies for conditions like dehydration that were perceived to be uncomplicated.

Similarly, the main source of advice about health care was received from health workers at health facilities, followed by VHTs. Witch doctors and traditional healers were still mentioned by a few participants as the source of health information.

Participants reported receiving the following services from the health facility.

1. Immunization to prevent diseases like polio
2. Deworming and vitamin supplementation
3. Treatment following medical examination
4. Growth monitoring
5. Health education on child care, child nutrition, hygiene
6. Receiving items ITNs, soap, basins after birth

4.5.2. Maternal health

Maternal health indicators varied widely across Karamoja without consistent performance in any single district across all indicators (Table 8). The proportion of pregnant mothers who attended ANC at least four times was highest in Abim and lowest in Amudat. The highest proportion of mothers who attended ANC within the first trimester was in Kotido, and the lowest in Amudat. The use of family planning and ITNs was highest in Abim and lowest in Nabilatuk. The lowest value across all regions was the use of family planning, even though more than two-thirds had ever heard of family planning.

Table 8: Maternal health indicators for districts in Karamoja- FSNA 2023 and UDHS 2022

District	Proportion of pregnant women who;					
	Took de-worming medicine	Received ANC from skilled provider	Use a family planning method	Slept under ITN	Attended at least 4 ANC visits	Had the 1 st ANC within 1 st trimester
Abim	68.0	74.5	20.1	98.0	67.1	53.6
Amudat	89.2	82.3	6.1	75.0	33.0	19.3
Kaabong	92.6	66.9	8.5	85.0	65.7	70.2
Karenga	62.9	69.2	14.5	69.0	62.4	54.8
Kotido	71.8	83.8	7.5	90.7	73.8	75.1
Moroto	78.5	80.9	11.6	55.4	77.9	53.3
Nabilatuk	95.7	76.6	4.9	0.0	84.0	63.7
Nakapiripirit	93.8	88.2	8.1	60.0	84.1	53.8
Napak	78.9	88.8	18.8	65.9	69.6	51.8
Karamoja	81.4	79.8	11.0	73.7	68.6	54.7
National			18.4	80.3	67.8	37.1

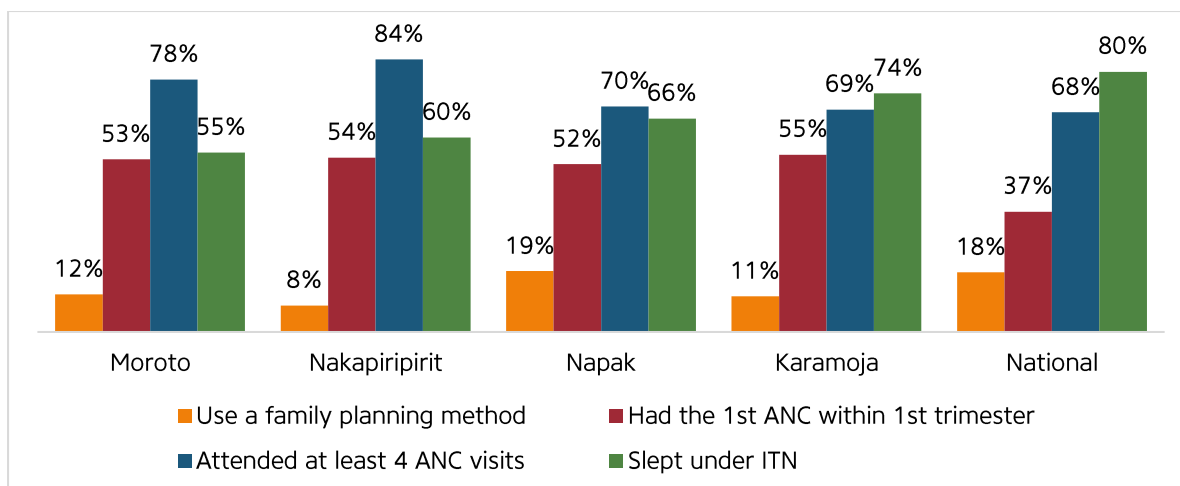


Figure 12: Maternal health indicators for women in CAN areas, FSNA 2023.

All FGD participants, both pregnant and non-pregnant, reported that women saw someone upon suspecting that they had conceived. The reasons for suspecting pregnancy included a missed menstruation period, emotional changes like mood swings, body changes like weight gain or loss, skin color changes (becoming lighter), food cravings or aversions, and becoming sickly with signs like dizziness, pain, nausea, vomiting, and waist pain. Husbands/fathers were also aware of the signs of pregnancy, although some detected it much later- 2-4 months.

“It is very hard to know when my wife is pregnant until she reaches like three months...”
Father from Konyang village, Napak district.

Fathers identified pregnancy through behavioral signs like mood changes/irritability, food aversions, and cravings; physical body changes like becoming lighter and protruding umbilical cord and not discussing menstruation over several months. Some fathers indicated that their wives voluntarily declared the pregnancy to them.

The main people seen were health workers at health facilities, Traditional Birth Attendants (TBAs), VHTs, mothers, elderly ladies in the community, traditional healers in the community, husbands, friends, and sisters of pregnant women. Pregnant women saw these individuals because they perceived them as experts in confirming pregnancies.

A few participants reported using a home test kit to confirm pregnancy. Pregnant women went to the health facility to get a medical examination, receive treatment when sick, know their health status through screening for diseases, especially Sexually Transmitted Infections (STIs), know the date of delivery, the sex of the baby, detect and manage complication for the mother and baby, monitor the health and position of the baby and receive IFA.

4.5.2.1. Gestation age at first ANC

Most participants reported that pregnant women usually attend their first ANC within the first trimester, although first-time adolescents usually went much later, usually from four months. The responses about the usual practice did not differ from the current one, when asked for the month at the first ANC visit for the current pregnancy, most participants still mentioned months in the first trimester (1-3) and a few in the second trimester (4-6).

A few participants had the misconception that pregnant women with multiple births who weren't sick didn't need to go early for ANC. The fathers acknowledged that delays in starting ANC were due to limited information about pregnancy, especially with the first pregnancy.

“Some people who don't want to go for antenatal check-up or are not sickly, choose to go at six months as they prepare to give birth”

Father from Kanaitakomol village, Napak district

4.5.2.2. Frequency of Attending Antenatal Care

Most FGD participants indicated that ANC is attended monthly till the date of delivery. Other participants indicated that ANC is attended over eight times in total or when women felt sick even before the scheduled appointment. A few participants mentioned frequency below eight times, and these indicated 3 to 6 times. The responses from various FGD segments, pregnant women, breastfeeding women, and fathers, were similar.

Most pregnant participants reported that their spouses accompanied them for ANC visits, especially the first one. Participants added that spouses were more vigilant about accompanying their wives for the firstborn child and then became reluctant for subsequent children. Among the fathers' FGD, participants indicated they accompanied their wives for the first ANC, and then the pregnant women would go alone for subsequent visits. Some fathers shared that they did not join their wives for the first pregnancy but attended later visits.

Men who reported diligently accompanying their wives reasoned that it was done for companionship, made wives feel loved, signaled responsibility and earned a man respect. They added that accompanying wives for ANC equipped them with knowledge to support women during pregnancy-related emergencies and they can also remind their wives about taking their medications (IFA) and dates for subsequent appointments.

Other reasons husbands attended ANC with wives include joint screening for HIV/AIDS and other STIs and health workers making joint ANC attendance mandatory.

“I always go with my husband because I cannot go with someone else just to ensure I don't end up with someone HIV positive because by attending the antenatal visit with my husband, I ensure that my partner is also tested for HIV and other STIs, to promote a healthy and trustful relationship”

Pregnant woman from Aleklek village, Napak district.

A few participants indicated going alone or with relatives like mothers, sisters, stepsons, and others with community members like known motorcycle (boda boda) riders.

4.5.2.3. Services and items provided during ANC

The services and items received during ANC visits are listed below, in order of the most to least mentioned.

1. Medication like antimalarial and deworming and IFA
2. Items like ITNs, basins, clothes (kitenges) sugar, food rations, mama kits, and plastic sheets
3. Vaccination (Tetanus Toxoid)

4. Health education and counseling on nutrition, hygiene, disease prevention, newborn care
5. Medical examination to monitor pregnancy progress
6. Managing the identified diseases during pregnancy

Almost all FGD participants affirmed that the items and medicine provided at the health unit were used by pregnant women and not shared because individual portions or dosages were given. Participants had a good understanding of the reasons why they were given the items and medication. This included prevention of child abnormalities and proper growth of the child for IFA, protection from malaria for ITNs, and basins for bathing the baby.

All breastfeeding mothers reported that they did not consume IFA after birth, they emphasized that it was given during pregnancy only. One FGD participant shared that she took IFA for three days after the birth of her first-born child but did not take it again.

4.5.2.4. Use of ITNs

The majority of the participants articulately described the proper use of ITNs. They shared that mosquito nets were first hung under shade to aerate them and remove the chemicals that would otherwise irritate the eyes and skin. The nets were washed and hung properly over the bed to protect against mosquitoes.

Participants were aware that the main use of the net was to protect against malaria, but a few indicated other diseases like pneumonia because they perceived ITNs as items that increase warmth. Participants indicated that besides mosquitoes, ITNs were a shield against crawling animals and insects like bed bugs, flies, and lice. Although a few participants shared that they mended torn mosquito nets, most found alternative uses for old or torn ITNs, e.g., they were used as ropes for goats, sponges for bathing, reused as mattresses, for drying crops, and preparing local brew.

4.5.2.5. The action taken by husbands to ensure a successful pregnancy.

Fathers were asked to mention the actions taken to demonstrate support for pregnant women and they mentioned the following. These are divided into actions that promote good dietary practices, income generation, providing personal needs, promoting good health practices and support with household chores

Promoting healthy dietary practices: Fathers reported that they bought diverse foods to ensure the pregnant women consumed a balanced diet.

Providing personal needs: This included regularly checking on the wife's needs and purchasing items requested by the pregnant mother, such as maternity clothes, umbrellas, shoes, sheets, and bags.

Promoting good health practices. These include providing transport to the health facility, accompanying the wife to the health facility, encouraging the wife to go for hospital checkups instead of relying on traditional birth attendants; reminding the wife to take the medication, promoting hygiene practices by constructing latrines and clearing bushes in the compound and ensuring consistent use of ITNs. One father reported that she brought his pregnant wife closer to the health facility to ensure she attended ANC consistently.

Support with household chores: Fathers supported with chores such as cooking, washing clothes, childcare, and fetching water. These were done to ensure that the wife didn't do heavy work, which was perceived to cause miscarriages.

Income generation: Starting a small business, or doing casual work or saving money in the VSLAs for birth preparedness.

The reason fathers provided this support was to prevent undesirable birth outcomes like miscarriages, which are associated with heavy work and stress. Fathers also described pregnant women as vulnerable and needed to be shown love and support.

Fathers' perceptions about the adherence to the advice provided during ANC

Although fathers acknowledged the relevance of advice received during ANC, including accompanying their wives for visits, most shared challenges impeding the implementation of the advice. These are described below;

Limited income topped the barriers to fulfilling responsibilities as fathers. Fathers used terms like “*stressful*” and “*not easy*” to describe situations where they had pregnant wives and had no money to fulfill their needs.

They also found it difficult to juggle income generation with the requirement to accompany wives during ANC. This suggests that men perceive ANC attendance as an additional role that didn't align with their core priorities.

“Pregnancy makes you happy if there's money”

“It is tough when a man has to look for money when a nurse needs him for ANC”

“Sometimes it becomes difficult, for example, when a man has to look for work and maybe the woman goes to the hospital, they will demand for the man, and she will be sent back home without any treatment”.

Fathers from Katulatiang village, Napak district

As a remedy, Father mentioned that the ability to save money, sell animals, and find income-generating activities boosted the household income and made it easier to provide for pregnant women. Fathers indicated that good communication between spouses, being patient and supportive made adherence to ANC advice easier. They noted that excessive consumption of alcohol led to recurrent conflicts, which destabilized the family.

4.5.2.6. Place of delivery and family support at birth

The majority of the FGD participants mentioned the hospital as the place of delivery and also pointed out certain health units like Iriiri in Napak district, Amaler in Nakapiripirit, and Nabilatuk health center that provided quality and friendly services during birth. The reasons for preference of certain health facilities were the good attitude of staff, proximity to place of residence, and also the ability to manage anticipated birth complications like breech babies and twins.

Mothers preferred the health facility to other places due to fear of post-natal complications, the ability to manage birth complications for the mother and baby, and to receive immediate vaccinations for the baby.

“I delivered from the health, and this is because the old women from my community are fond of delivering mothers from home, most of those mothers don’t make it well, and this always scares me, and I don’t want to be part of the women who have been put through a lot because of giving birth with the help of traditional birth attendants.”

Breastfeeding mother from Nomorotot village, Napak district.

There were mixed responses about the person who accompanied women at birth. Mothers reported that they were accompanied by their mothers, sisters, sister-in-law, husband, friends, stepson, boda-boda men, and neighbors. Mothers were preferred because of the trust and experience they had in baby care; sisters were flexible to help with medical errands, and for husbands, it was perceived as their responsibility. While fathers accompanied their wives to the hospital at birth, there was a general indication they did not have much support to offer, given that the birth procedure was perceived to involve only women. This suggests limited engagement of fathers present at birth by health workers and or family members and that the emotional support fathers provided was not recognized, especially by the fathers themselves.

“I went with my husband, but he said he was not going to do much; my friend later joined me after hearing that I was in hospital”.

Breastfeeding mother from Lomuria village,s Moroto district.

The choice of the other people who accompanied pregnant women for labor was determined by their availability when labor set in or their ability to provide quick transport to the hospital.

4.6. Adolescent Health and Nutrition

4.6.1. Meals eaten at school



Figure 13: Maize and beans meal commonly consumed by school-going adolescents

Participants reported that adolescents mainly consumed maize porridge for breakfast and maize meal (posho) with beans or maize mixed with beans (enyoyo) for lunch. Children in boarding school also had the same meal but occasionally alternated beans with greens and posho with rice.

Most adolescents reported that the diet was monotonous and hardly changed within the term. Changes in the school meals were dependent on when parents could support the school and the availability of a school garden.

Adolescents also reported the tendency for portion sizes to reduce towards the closure of the school term.

“Yes, they prepare meals like breakfast, lunch and in the evening but sometimes when the term is coming to an end, they reduce on the meals eaten in a day because of the shortage of food at school during that time”.

Adolescent girl, Kokuwam, Napak district.

Most parents did not pack meals or snacks for school-going adolescents because they didn't have the money. Parents mentioned preparing breakfast from porridge and leftovers from the previous dinner for children to eat before going to school. The parents who packed for children gave snacks like juice, soda, mandazi, samosa, cassava chips, groundnuts, and cookies. Some parents gave children money ranging from 200-2000/= to buy preferred snacks at school.

“Only if I have some money, I give my child like 500/= so that he can buy something from school to eat”.

Grandmothers from Kwamong village, Moroto district.

Children in the boarding schools received items like sugar to add to their porridge or money to buy preferred snacks at school. Occasionally, parents also contributed to school meals by bringing sunflower and sorghum flour at the beginning of the term.

There was an indication that out-of-school adolescent boys didn't eat adequate meals as it was reported that they were out of home attending to outdoor tasks or looking for money through works like charcoal burning and cutting poles for construction.

“Some of us eat once a day because of our work attributes...the nature of work does not permit us men to stay home at that time of day”.

Adolescent boy in Kidepo village, Moroto district.

4.6.2. Participation in school gardening

The majority of the adolescents confirmed participating in school gardening and supporting activities like clearing, cultivation, weeding, and harvesting. A few participants shared that schools where their children went did not have a garden. Both school staff and pupils participated in school gardening, and some parents also confirmed participation, especially in the wet season for Napak. However, in other districts, some parents didn't participate in school gardening.

The main crops grown in the school garden were maize, sorghum, sweet potatoes, beans, groundnuts, simsim and vegetables like eggplants, onions, tomatoes, malakwang, Kale (sukuma wiki), cowpeas leaves (boo). The grown crops were mainly consumed by pupils and if in surplus, stored or sold in the market to meet other school requirements.

4.6.2.1. Lessons and perceptions about school gardening

Adolescents reported receiving the following skills from school gardening;

- Proper farming skills for crop care, better yield and conservation of soil fertility.
- The spirit of teamwork since farming was done in groups
- Cultivating new food varieties that are not usually grown in Karamoja. Moreover, some adolescents reported transferring skills to their colleagues in the village

"I have learned how to cultivate sweet potatoes; during holidays, I call my colleagues in the villages and demonstrate to them how sweet potato heaps are dug and how they are planted".

Adolescent boy from Kidepo village, Moroto

Similarly, parents who participated in school gardening reported gaining valuable skills in vegetable growing and irrigation.

"I have learned that vegetables can grow almost anywhere, as long as they receive enough water. Even in the dry season, with consistent watering, they can survive and provide income during the lean season"

"I also learned that there is another way of keeping water throughout the season for your plants when rains have disappeared..., ensuring consistent growth".

Fathers from Namuse village, Moroto district.

Both school-going adolescents and their parents had a positive attitude towards school gardening. Pupils found it enjoyable because it was done in groups and they made friends during the activity, who helped with classwork. Parents mentioned that they enjoyed being model farmers and it motivated children to do crop production. Parents also shared that school gardening reduced the cost of school food and hunger among pupils.

A few adolescents shared that they didn't enjoy school gardening because it was associated with negative objectives such as punishments.

"No, I didn't enjoy it [school gardening] because most times we used to do garden work as a form of punishment".

Adolescent girl from Nachocia village, Moroto district.

4.6.3. Health and nutrition services provided at school

The majority of the participants mentioned learning health and nutrition-related topics during the science class.

“Our teacher taught us in class that good nutrition is very important and foods like eggs, chicken are proteins that build the body”.

Adolescent girl from Nochocia village, Moroto district.

Participants shared that there was a female staff assigned to discuss with children reproductive concerns like menstrual hygiene. Participants reported that health workers conducted outreaches to schools and partners like Straight Talk and WHH also supported menstrual hygiene through conducting menstrual education, distributing pads or teaching students to make local pads.

“When Welthungerhilfe comes to school, they give services like hygiene and sanitation and distribute underwear and sanitary pads to adolescent girls”.

Adolescent girl from Naturumrum village, Moroto district.

Other mentioned partners offered services like food distribution, provision of scholastic materials and health education done by health workers during outreach to schools. Below is the summary of the health and nutrition-related topics reported to be taught to adolescents in schools.

- Good hygiene and sanitation
- Components of a balanced diet
- How to prevent malnutrition
- Nutrition for women and children
- Menstrual hygiene and how to make local pads
- Dangers of smoking
- Use of ITNs
- Gender roles in schools

Most adolescents in Nakapiripirit had never heard of adolescent health services, suggesting low numbers of adolescents in school or the need to increase the uptake of school-based adolescent health services in the district. Similarly, parents of some adolescents were not aware of the content being taught at school but acknowledged that their children’s knowledge had improved.

“I don’t know what they teach them from school, it’s those who are studying who come to teach us those things”

Mothers from Nakambi Village, Moroto district.

4.7. Food Security and Livelihoods

4.7.1. Overview of the Food security situation in Karamoja

According to the FSNA conducted between 2020 and 2023, the food security situation in Karamoja generally deteriorated. For example, the proportion of HHs that own livestock reduced from 50% to 34%, HHs with food stock reduced from 65% to 34%, the proportion of food insecure HHs increased from 27% to 83.8%, HHs with acceptable Food Consumption Scores reduced from 58.% % to 34.6%, and HHs with at least one income earner reduced from 86.2% to 75.5%. Although the proportion of HHs with kitchen gardens increased from 18.7% to 35.4%, and HHs with high HDDS increased from 5.7% to 56.5. Annex 8 shows the trends of the FSL indicators from 2022 to 2023 while Table 9 below shows the current FSL situation.

Generally, food security indicators varied widely across Karamoja, with none of the districts consistently scoring well across all indicators. The proportion of food-secure households was extremely low, with Nakapiripirit having the highest and Nabilatuk and Amudat having the least. Ownership of kitchen gardens, livestock, and food stocks was highest in Moroto, Amudat, and Karenga, respectively. Household dietary diversity was highest in Amudat and lowest in Napak and Nabilatuk. Kaabong had the highest reduced coping strategy index based on CARI approach⁹, which suggests that compared to other districts, the population in Kaabong was using more extreme measures to cope with food shortage.

Table 9: Food security and livelihood indicators in Karamoja, FSNA 2023

District	Percentage of HHs that;						
	Were food secure	Had a kitchen garden	Had no livestock	Had food stock	Had food stock for > 4 months	Had high HDDS (>6)	High rCSI (>28)
Abim	6.1	46.1	51.3	41.8	12.9	11.9	11.6
Amudat	1.7	2.2	9.2	38.8	6.3	23.1	2
Kaabong	2.0	39.3	79.9	36.3	0	4.2	26.7
Karenga	4.3	46.7	65.8	85.7	10.2	9.3	1.2
Kotido	2.3	29.9	67.9	26.5	0.8	4.7	25.7
Moroto	2.8	55.3	82.2	31.5	3.8	4.5	11.4
Nabilatuk	1.6	7.4	59.1	35.1	15.3	7	1.1
Nakapiripirit	8.4	15.8	64.2	18.7	6.7	10.7	1.9
Napak	4.1	45.9	75.9	26.5	2	7	5
Karamoja	3.9	35.4	65.4	34.5	6.3	8.2	11.7

⁹ <https://docs.wfp.org/api/documents/WFP-0000134704/download/>

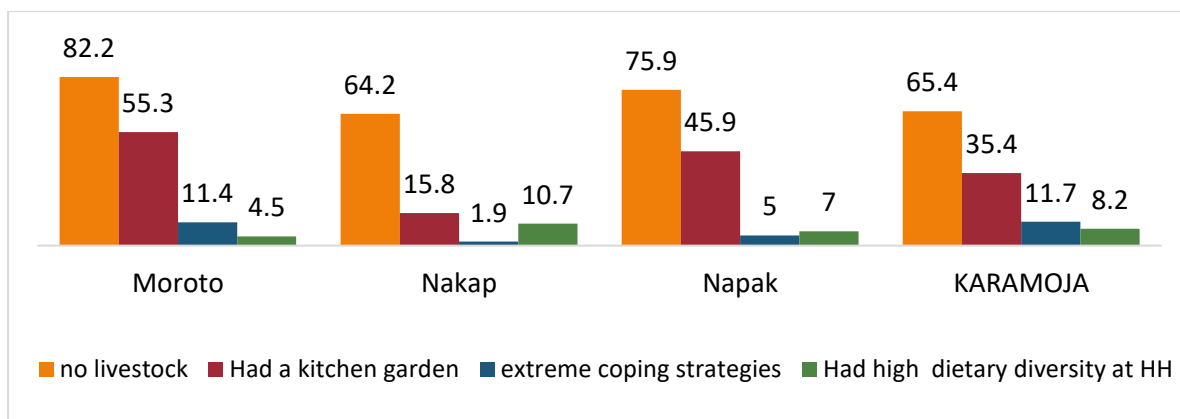


Figure 14: Selected food security indicators in CAN areas, FSNA 2023

The 2024 Integrated Food Security Phase Classification for Acute Food Insecurity (AFI) and Acute Malnutrition (AMN) conducted in 2024 indicates that 45% (600,000) of HHs in Karamoja are food insecure (IPC AFI phase 3+) although this is projected to reduce to 401,000 people between August 2024 and Feb 2025.

Kaabong and Amudat were the worst-hit districts, with their IPC AMN classified as “critical” (IPC4), Moroto, Kotido, and Karenga were classified as “serious” (IPCAMN 3), while Abim, Napak, Nabilatuk and Nakapiripirit were under “alert” (IPCAMN 2). Figure 15 below summarizes the IPC AMN classifications for the nine districts in Karamoja.

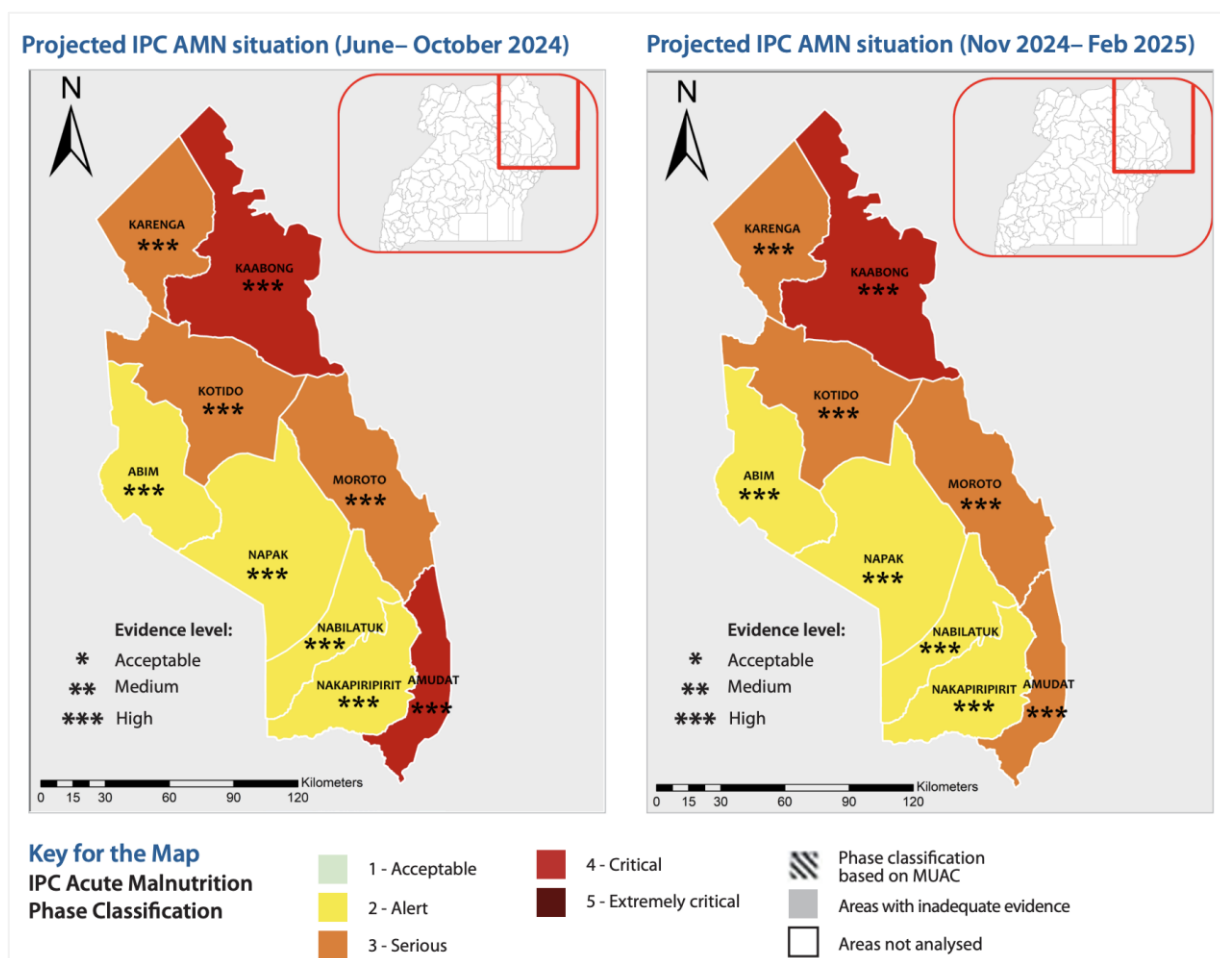


Figure 15: Excerpts from the report showing the IPC AMN current and projected situation¹⁰

Conflict, drought, food price shocks, crop and animal disease were reported drivers from the IPC analysis. Amudat, Kaabong, Kotido, and Moroto were identified as hot spot districts since their IPC AFI and IPC AMN phases overlapped Figure 16.

AFI Phases	5	AFI hotspots (9 areas)		AFI-AMN hotspot (5 areas)		
	4	Abim, Amudat, Kaabong, Karenga, Kotido, Nabilatuk, Moroto, Nakakapiripirit and Napak		Amudat, Kaabong, Karenga, Kotido and Moroto		
	3					
	2					
	1			AMN hotspots (5 areas)		
				Amudat, Kaabong, Karenga, Kotido, Moroto		
		1	2	3	4	5
		AMN Phases				

Figure 16: Karamoja districts with overlapping IPC AMN and IPC AFI phases

¹⁰

https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_Uganda_Acute_Food_Insecurity_Malnutrition_Mar_2024_Feb_2025_Report.pdf

4.7.2. Main Income Source for the Household

The main sources of income shared by FGD participants are provided in Box 5 in order of the most to least mentioned. These cut across all three districts although Nakapiripirit and some parts of Napak relied more on farming and their casual labour was more agricultural related compared to Moroto.

The findings are similar to FSNA and MSNA conducted by WHH in May 2023¹¹, which identified agriculture (sale of produce) as the main source of income across all districts except Moroto, where it was casual labour. The growing interest in savings through VSLA in Karamoja suggests a critical transformation in financial practices among the population over the past decade.

Income generating activities mentioned by FGD participants

1. Casual labor like working in someone's garden, gold mining, stone quarrying, building and plastering houses, fetching water, washing clothes and casual work with NGOs.
2. Small businesses like selling charcoal, food, firewood, building poles, local brewing
3. Farming and sell of agricultural produce like crops
4. Saving and borrowing from VSLA

Box 5: Income-generating activities mentioned by FGD participants

4.7.3. Sources of food

The majority of the FGD participants mentioned that the production of food from the main field and kitchen gardens was the main source of food. Purchase from markets was done for crops like matooke, Irish, and tomatoes that were not usually cultivated. Participants elaborated that the diversity of food was also dependent on the season. In the dry season, when cultivation was not possible, wild vegetables and fruits were gathered from the bush to make family meals.

Participants also obtained food from reserves stored in the previous harvest, exchange of casual labor for food, non-repayable assistance from neighbors, friends/relatives and food assistance from humanitarian agencies like WFP.

Other sources of food included earning money to buy food. These include casual labor in the mines and stone quarries, borrowing money from VSLAs, remittance from external relatives, small businesses like cutting trees for firewood, selling charcoal, and local brewing.

4.7.4. Types of crops grown

The main crops grown in the main field were sorghum, maize, pumpkin, and sweet potatoes as the carbohydrates; beans, green grams, simsim, and sunflower for legumes and seeds; and vegetables like sukuma wiki, cucumbers, and cowpeas leaves. The top three mentioned foods grown were sorghum, maize, and beans, which is consistent with the FSNA 2023 findings. Legumes like ground nuts and soya beans were mentioned by a few participants. Participants explained reasons for the choice of crops grown in the main field as follows.

¹¹ https://www.welthungerhilfe.org/fileadmin/pictures/publications/en/studies_analysis/2023-whh-uganda-karamoja-needs_assessment_report.pdf

Yield potential: Beans and maize were perceived to have good yields; they could be eaten by households and are in demand on the market since they are commonly consumed. This rationale is consistent with the fact it is the most consumed meal in schools.

Multipurpose foods: Sorghum is a staple that is largely consumed throughout Karamoja. Sorghum is drought resistant and serves multiple purposes including sale for traditional ceremonies and is the main ingredient for local brewing. This rationale is also consistent with the fact that most HHs consume sorghum, it is used for traditional weddings for local brew, which is a common income-generating activity in Karamoja.

Fast maturity: Other crops like vegetables were grown for their fast-maturing potential so they could be sold to address a financial crisis at home. Participants also indicated that some crops were grown for their potential to improve soil fertility without giving examples.

Crops supported by the soil type in Karamoja: Participants shared that certain crops grew better in the soil type of Karamoja and survived the harsh weather than others. For example, they thought beans and sorghum were able to survive the seasonal changes and unreliable rainfall.

“It’s advantageous to cultivate in the lowland because the soils in this area support the cultivation of crops such as sorghum”.

Grandmother from Angepuwa village, Napak district

Labor intensive: Participants avoided crops that were labor intensive and required a considerable amount of effort to yield. When asked why groundnuts were not commonly grown, participants mentioned that besides being unsuitable for the soil, they were labor intensive.

“Our soil does not want groundnuts, or even if it wants, we fear the work of groundnuts; we are told it’s a lot of work involved, it’s like for sweet potatoes.”

Breastfeeding mother from Nakiloro village, Moroto.

Participants used the following methods to get the foods that they couldn’t produce

- Buying the desired food from the local market
- Food donations from the government and NGOs
- Borrowing food from friends and relatives
- Barter and exchange foods with neighbors.
- Sell excess garden produce to get foods like sweet potatoes
- Sell chickens to buy food
- Providing labor in exchange for food

Informal systems of trade were commonly mentioned by participants for example, they exchanged sorghum for maize, sorghum for local brew, and vegetables for beans. Generally, the exchanges mentioned did not intend to improve the quality of diets as they did not seem to add diversity to HH meals, for example, participants exchanged within the same food groups (maize for sorghum) and sometimes for a food with less nutritional value (sorghum for local brew)

4.7.5. Ownership of kitchen gardens

Almost all FGD participants reported owning kitchen gardens, which is inconsistent with the FSNA findings that indicated that only one-third of HH (35%) in Karamoja own kitchen gardens. Participants felt kitchen gardens were easy to manage, especially with nearby boreholes for watering even in the dry season.

There was no major variation in the types of crops grown in the kitchen garden and the main field except that more vegetables were mentioned for the kitchen garden. Examples of vegetables grown in the kitchen garden were eggplants, dodo and kale (sukuma wiki), cabbage, tomatoes onions green pepper and spinach. Trained farmers grew more vegetable varieties compared to the rest of the community members.

“My neighbor grows everything, and he is one of the agricultural-trained farmers so they know everything concerning agriculture, he has tomatoes, cabbages, onions sukuma wiki, and even carrots”

Pregnant mother from Mwanakolong village, Nakapiripirit district.

Participants reported that most of the produce from the kitchen garden was consumed at the household level and if the harvest was plenty, it was sold, dried and stored, shared with friends or seeds kept for the next season.

The main source of seeds used for the kitchen garden was purchased from the market, from the previous harvest, borrowed from neighbors, or through barter exchange like a sunflower for sorghum seeds. Participants also reported receiving seed donations from the sub-county, OPM and humanitarian organizations. These mainly supplied maize and sorghum, which could explain why these comprise the main crops grown in Karamoja.

4.7.6. Ownership of domestic animals

Poultry like chickens, ducks, doves, and turkeys topped the list of animals kept by FGD participants. Smaller animals like goats, sheep, and pigs were also kept around the HH. However, participants mentioned that cows were kept in the kraals. Goats, sheep, cows and camels were preferred for easy breeding, milk production and ceremonial use.

Participants reported slaughtering sheep and goats for sale during extended periods of food shortage as a coping mechanism. Chickens were reared for egg production; however, it was unclear if eggs were consumed or sold. Chickens were also preferred to goats and sheep because they were not attractive to raiders.

The main limitations to raising more animals were disease and insecurity due to recurrent raids. This is consistent with the 2023 IPC report, which identified animal diseases as a key driver for food insecurity in Karamoja.

“For sure, I don't have either an animal or a bird that I rear; even the ones I had, cholera killed all, and the rest the thieves took them all.” “I had everything ranging from birds to animals and farming tools but when the raiders came, they took everything I had”.

Pregnant mothers from Lomunyenkirion village, Moroto district.

Note: Newcastle disease in poultry is commonly known as “cholera” amongst the population in Karamoja.

“I also had pigs...but when their disease came it wiped them off”

Breastfeeding mothers from Nakiloro village, Moroto district.

It is worth noting that contrary to the common belief about the high livestock ownership in Karamojong, more than two-thirds of the HHs do not own any form of livestock. Ownership of livestock in Karamoja gradually reduced over the years due to insecurity and increasing animal

diseases. The FSNA report indicated that between 2020 and 2023, there was about 20% reduction in livestock ownership.

4.7.7. Caring for small animals

FGD participants shared ways they cared for small animals. Among these was the construction of an animal shelter like a small kraal to keep them safe and avoid sharing with HH members, which increased the risk of diseases. A few participants mentioned sharing shelter with their animals like chickens that were hatching, or in places where animal theft was rampant.

“If it is a layer and hatching, it can stay in my house, but the flies...!”

“I also had ducks... the bad guys came last time and killed all of them, they just come and take your things because you can’t sleep with them in one house”.

Breastfeeding mothers from Nakiloro village, Moroto district.

Most chickens slept on the trees or in the kitchen, goats were tied to the veranda. Cows and some goats were kept in the kraals under the watch of soldiers due to insecurity.

Other animal care practices mentioned were feeding them, giving them water, cleaning their shelter daily, spraying animal houses to kill germs and ticks, treating them when sick or calling the Community Animal Health Workers (CAHWs).

“We also provide medicine like injectable treatments to protect livestock from diseases transmitted by mosquitoes, such as West Nile Virus, which affect both humans and animals”.

Adolescent girl from Lotikokini village, Napak district.

4.7.8. Food storage methods

Majority of the FGP participants stored their harvested food in granaries. A few participants use old mosquito nets, sacks, pots, buckets and jerrycan. One participant in Napak shared that she used a refrigerator to store her vegetables and meat but this was a minority view.

Participants elaborated that the type of food determined the storage methods for example, ghee was stored in bucket/jerrycan, and dried vegetables and meat were hung inside the house. Participants also shared methods used to treat food or storage facilities to deter pests from destroying the food or prolonging shelf life. For example, boiling and cooling before storage was perceived to prolong shelf life of food. Methods used to control storage pests include keeping food on logs with pesticides, sealing containers/pots with mud, covering with grass and creating a smoke rack to repel termites.

Once stored, participants shared that the duration of harvested food was dependent on the size of harvest and family size, and infiltration of storage pests. Majority mentioned that food lasted 4-8 months for average harvest and consumption rates and up to 1-2 years if harvest was abundant and consumption was low.

“Mine [food] lasts for a year because I like to brew local alcoholic drinks, such as sorghum beer, (kwete) using the harvest. The brewed product can last for long periods and serve as both a food product and a source of income, sustaining the household throughout the year”

Pregnant mother from Aleklek Napak district.

4.7.9. Food availability and access

Participants indicated that food availability was not as problematic as access. They mentioned that food was available in the market even in the lean season but the high prices was the main challenge. They reported that prices increased during the lean and planting season and then dropped drastically during harvest. To manage price fluctuations, some participants did market surveillance to identify vendors with the lowest prices, and then purchased from those.

*“During the lean season prices go high for example sorghum can go from 4,000/= during post-harvest season to 8,000/= during lean season so we experience hard times”, “Beans from 500/= a small cup to 1,000/=”, “Maize from 3,500/= to 8,000/=. So we experience seasonal changes in prices which makes getting food difficult”.
Grandmothers from Lomusiya village, Napak district.*

In addition to the high food prices, the cost involved in accessing diverse foods from distant markets, limited consumption.

“The market is far, we have to board a motor bike costing about 10,000/=:, which is expensive”. Breastfeeding mother from Lomuria village, Moroto

4.7.10. Meal frequency and diet diversity at the household level

Seasonality was a major determinant of the frequency and quality of meals. During the post-harvest period, FGD participants had 3-4 meals a day, which was reduced to 1-2 meals in the lean season.

Main meals comprised breakfast, lunch and dinner in the harvest period and only an evening meal, which occasionally doubled as breakfast for the following day, in the lean season. The meal quality and frequency in the lean and post-harvest period that was described by FGD participants are summarized in Table 10 below.

Participants reiterated the difficulties in accessing food during the lean season and used phrases like “everything changes during the dry season”, “life becomes hard”, “there is nowhere to get good” to describe the situation in the lean season.

*Sometimes when we have less food at home, we just only have one meal per day, that is dinner. Of course, in the morning, we eat the leftovers of food as breakfast, and not every family member eats it; they basically give it only children because it is not enough”.
Adolescent girl from Okudud, Nakapiripirit district.*

According to the participants, the lean season was characterized by starvation and increased consumption of wild foods, local brew or its residues to cope with food scarcity and the associated distress. Examples of wild vegetables and fruits consumed were; *Balamite (ekorete), Ekadelwai, Eliaro, Akiliton, Othuguru, and Acimidi.*

Preserved (dried) vegetables like cowpeas leaves (boo) and (dried local/sambar cucumber) *Ngakobokob* and wild tubers were cooked to make family meals.

*“Just like the way the previous people spoke...for us supper time we eat wild sweet potatoes that are found on top of mountains called “ngaboche”.
Grandmother from Naro village, Moroto district.*

During times of food shortage, adult family members prioritized children and PBWs for an extra meal and may sometimes forego their meal for the day. However, a few participants indicated equal treatment was given to all household members despite physiological needs even during food shortages.

*“In our family everyone is treated the same..., when there is less food, every household member only has one meal irrespective of the situation they are in”.
Pregnant mother from Okudud village, Nakapiripirit district.*

Table 10: Changes in meal frequency and quality between post-harvest and lean season

Diet parameter	Post-harvest		Lean season	
Meal frequency	3-4 times More frequent for vulnerable groups		1-2 meals, breakfast eaten if leftover from dinner is available	
Meal portions	Enough		reduced	
Meals	Breakfast	Lunch or dinner	Breakfast	dinner
Food choices	Porridge/tea Boiled/roasted fresh maize Posho + sour milk Boiled pumpkin Boiled s/potatoes Fried rice Cucumber seeds Mandazi	Variety as available Sorghum meal, s/potatoes, fresh maize, cassava, maize meal, beans, silverfish, cabbage, meat, okra, cowpeas leaves Pawpaw pasted with sunflower Pounded melon seeds + beans Pumpkin leaves	Leftover from dinner (if available) Local brew	Beans + maize/sorghum meal Wild tubers Wild vegetables Preserved vegetables Brew residues Local brew
Prioritization of HH members	Children, PBWs have more frequent meals and snacks	Children prioritized for second meal or leftovers	children prioritized	Children and PBWs prioritized

4.7.11. Preparation for and coping with food shortage

Given that over two-thirds of the Karamoja population is food insecure (FSNA 2023), the majority of the HHs have strategies to manage recurrent food shortages. These strategies are similar to those reported during WHH’s MSNA conducted in May 2023. The report indicated that over 40% of the HHs used extreme coping mechanisms to address food shortage.

The section below describes the methods employed by CAN participants to prepare for or cope with food insecurity and they are summarized in Figure 17 below.

A. Strategies used by participants to prepare for food shortage

Food preservation and storage of harvest: This includes the use of preservation techniques like drying, smoking, salting food and storage in granaries or other facilities. Households also used food sparingly to save it for anticipated food shortages. Some participants strategically purchased and stored food in bulk during the post-harvest period, when food prices were relatively lower.

“I take advantage of cheap food prices during the post-harvest season to stock up for periods of scarcity to ensure my family has a steady supply of food even when it's hard”

Breastfeeding mother from Achukul village, Moroto district.

Participants mentioned that they learned to apply effective post-harvest handling practices and stored food in preparation for food shortages.

“With the help of some NGOs, we have been trained to preserve food and that has helped us in storing quality food”.

Father from Konyang Village, Napak district

Income generation and saving: These include selling surplus harvest and starting up businesses like selling local brew, charcoal, cut grass, and firewood. Income generation also includes engaging in casual labor like stone quarrying, bricklaying, and fetching firewood. Income is also saved through VSLAs in preparation for food shortages and new members join the saving groups.

Accruing agricultural assets: This includes buying animals and chicken which will be sold in times of food shortage. It also includes engaging in crop production like establishing kitchen gardens from which food will be obtained in the lean season. Organizations support the preparation of food shortages by distributing seeds for crop production.

B. Coping with food shortage

FGD participants used the following methods to cope with the initial phases of food shortage

- Borrow food from friends or ask relatives to donate food
- Withdraw savings to purchase food from the market or other neighboring communities like the Kumam
- Sell off HH items/assets like chickens, goats to buy food
- Reduce food portions to ensure all HH members are able to eat.
- Engaging in hard casual labor like working on farms of “rich” people, washing clothes, and making quick sales like gathering and selling firewood or grass for roofing.

C. Coping with extreme food shortage

When the food shortage persisted, the FGD participants used the following methods to cope;

- Borrow food from friends or neighbors/relatives.
- Alert humanitarian agencies and the government offices like Office of the Prime Minister (OPM) to provide food assistance.
- Sell major household assets like land or cattle
- Change in dietary habits: This includes skipping meals, resorting to less preferred foods like residue from local brew, taking plain sorghum and adding salt. Some participants also reported that it was common to exchange these low-quality foods with casual labor.

The most reported dietary change was the reliance on wild fruits and vegetables like *ngimongo* and *ekorete*, hunting rats and wild animals to make family meals.

“At this point, it’s when people sacrifice to sell animals and also, we depend on wild fruits”
Grandmother from Losikayit village, Napak district.

- Migrations involving part or the entire household: This involved relocating the HH close to the kraals for milk, sending children to neighboring districts to work as maids or do casual

labor or sending children to relatives. It also involves caregivers moving to other districts like Teso for greener pastures leaving children behind.

*“I go to exile and leave the children with their father”
Pregnant mother from Lokachikit village, Napak district.*

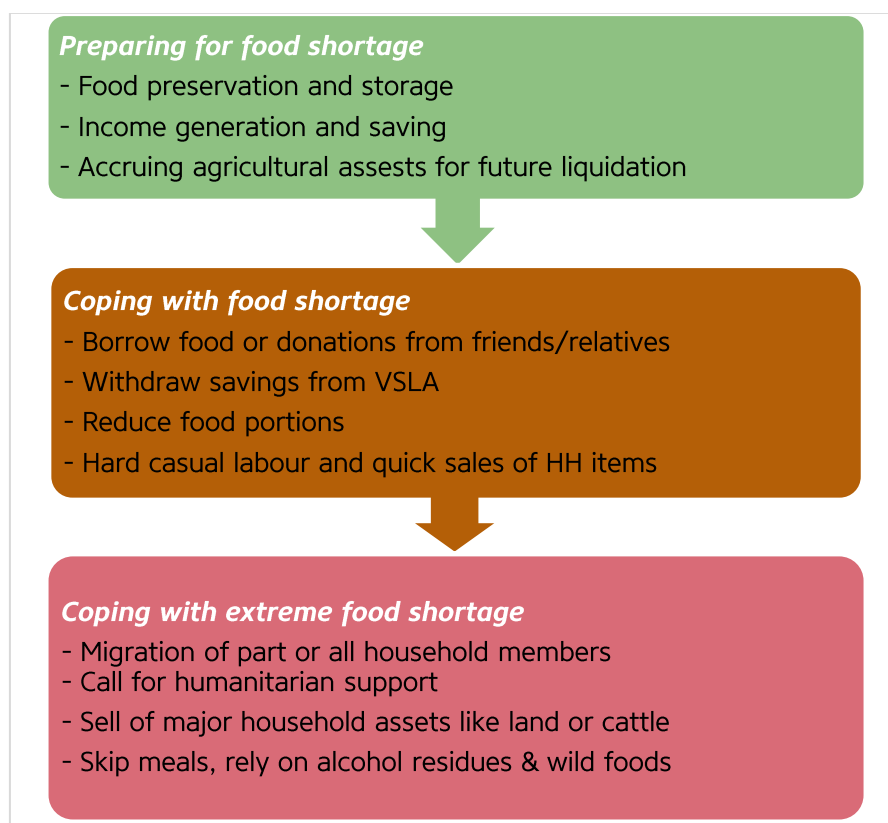


Figure 17: Planning for and coping with food shortage

4.7.12. Cultural beliefs related to food.

Cultural beliefs that impede the consumption of nutrient-dense foods such as animal-source foods among women and children can be a barrier to improved nutrition outcomes, if not addressed.

FGD participants shared multiple cultural beliefs and social perceptions, which were categorized according to their likelihood to impact nutrition outcomes. Similar beliefs were reported across all three districts, indicating the similarity in culture among Karamojong communities

As indicated in Table 11 below, most of the food-related taboos involved women and children and negatively impacted nutrition outcomes. Additionally, participants emphasized the common practice of giving fathers the bigger fleshy parts of poultry like the drum sticks and breasts and more meat pieces, while adolescent girls, women, and children ate the less flesh parts of poultry like the back, wings, and neck and few pieces of meat.

Participants seemed complacent about these practices and urged that it was done out of respect for the household head and it provided the energy required to perform the hard tasks. Participants seemed aware that the practices compromised meal quality for vulnerable groups and indicated that in the absence of men, food was served equally amongst HH members.

Some of the cultural practices shared were neutral and did not have direct nutrition consequences except creating a social class among society groups. For example; If a breastfeeding mother conceived, the older child had to step in her delivery blood to prevent him from death and disease; a pregnant woman was not to share food with her breastfeeding co-wife, and an unmarried pregnant woman was not to eat food from traditionally married women.

Of concern was the perceived requirement for breastfeeding mothers who conceived to stop breastfeeding. This misconception requires urgent demystification through nutrition education.

When asked for views about food-related cultural beliefs, FGD participants shared mixed opinions, with some supporting their existence and others not. Participants who thought the beliefs should be adhered to urged that they were a sign of respect to the elders and culture and taught children the social hierarchy in the household and community. Communities also feared facing the consequences associated with non-compliance like death and disease.

Participants who urged that the cultural beliefs should be abolished reasoned that they limited food choices for women and children and deprived them of healthy foods, contributed to hunger, were against Christian beliefs, created social classes and discrimination in the community.

Responses from some participants reflected a sense of helplessness when participants recognized that cultural beliefs could not be abolished because they were part of a tradition that had been normalized.

There was a general agreement among participants that cultural beliefs were gradually fading with increased social awareness about the nutrition benefits of consuming nutritious foods like eggs, liver and other organ meats.

Table 11: Food-related cultural beliefs influencing nutrition outcomes for different categories of individuals

Individuals involved	Improve nutrition outcomes	Affect nutrition outcome
Pregnant women		<ul style="list-style-type: none"> Eating wild vegetables like “<i>ekiliton</i>” and “<i>ngimug</i>” cause bad luck during delivery and make the unborn baby not intelligent. Eating wild meat affects the unborn baby’s skin. eating offals, tongues and liver from sheep and goat; and white ants causes birth complications. Using a toilet causes birth complications Eating pumpkin causes jaundice for the unborn child. Taking blood causes anaemia
Breastfeeding mothers	Eating dead domestic animal meat makes the child sick	<ul style="list-style-type: none"> There is a type of pumpkin that causes eye disease and running nose when eaten. Eating offals of goats makes the breastfeeding child get diarrhea. Eating liver makes the breastfed child defecate in the house.
Children 0-5 years		<ul style="list-style-type: none"> Breastfeeding during pregnancy causes malnutrition. Breastfeeding twins is a burden and makes a mother mum malnourished. Breastfeeding till 6months makes women thin. Eating liver and intestines causes breastfeeding babies to defecate in the house **
All women and children	If dowry is paid for a woman, they only eat fleshy not bony meat	<ul style="list-style-type: none"> Goat lungs, offals and liver are not eaten by women. Eating food eaten by cultural elders causes bad luck for women. Eating the tongue, causes muteness (dumb) among women, and the tail causes waist pain
Adolescent girls	Eating leftovers from husband makes adolescent brides malnourished	<ul style="list-style-type: none"> Eating offals makes girls promiscuous. Eating roasted cucumber makes girls unsuitable for marriage.
Both boys and girls		<ul style="list-style-type: none"> Eating the blanket part of offals “<i>akenyekeny</i>” makes adolescents promiscuous** Boys and girls not initiated to adulthood should not eat ritual meat otherwise they die Eating the back of chicken causes disobedience. Eating the wild animal “<i>apupu</i>” (hedgehog) makes adolescents unattractive for marriage.
Elderly		<ul style="list-style-type: none"> Avoid cow liver and lungs. Unmarried elderly men and women cannot eat cow thighs

4.8. Water, Sanitation and Hygiene (WASH)

Although access to improved water sources increased from 82.5% in 2020 to 92% in 2023, inadequate sanitary practices have persisted in Karamoja, as reflected in the limited handwashing practices and very low latrine use. The use of improved water sources is over 90% across all districts, with more than half of the HHs able to access water within 30 minutes. Open defecation is disproportionately distributed, with districts like Amudat and Napak, Nakapiripirit, Moroto and Kotido having more than two-thirds of the households without latrines. Open defecation was significantly lower in Abim, Karenga and Kaabong compared to other districts. Majority of the HHs did not use soap and water to wash hands, except in Kaabong.

Table 12: WASH indicator values for districts in Karamoja region, FSNA 2023

Districts	Proportion of households that;				
	Had improved Source	Got water within 30 minutes	Didn't treat drinking water	Practiced open defecation	Had soap and water for handwashing
Abim	96.3	48.7	94.1	28.4	32.9
Amudat	85.2	21.3	98.5	91.2	34.4
Kaabong	79.9	60.5	85.3	35.5	43.6
Karenga	91.6	28.5	85.1	30	20
Kotido	99.4	57.1	83.5	61.4	27.2
Moroto	93.9	69.7	93.9	64.7	34.9
Nabilatuk	99.8	24.7	73.5	62	19.5
Nakapiripirit	86.4	58.2	91.4	68.7	18
Napak	93.5	53.8	96.5	78.1	19.4
Karamoja	92	46.9	88.9	57.5	30
National	81.7	54.3	55.9	5.4	

Of the three CAN districts, Moroto scored relatively better WASH indicators with lower rates of open defecation and a high proportion of HHs with improved water sources and soap and water for handwashing (Figure 18).

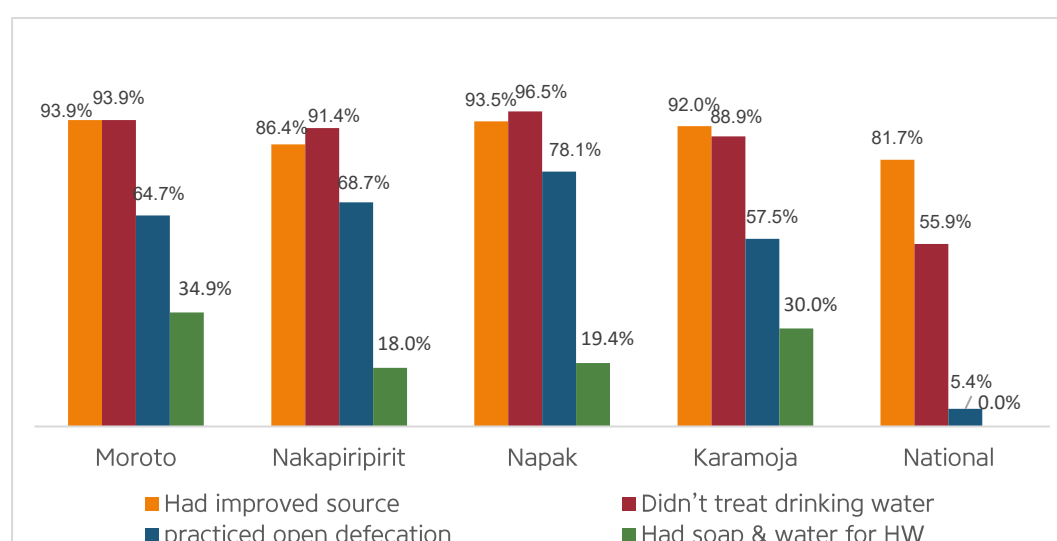


Figure 18: Selected WASH indicators in CAN areas, FSNA 2023

4.8.1. Source of water

Consistent with the 2023 FSNA findings and the WASH inventory assessment conducted by WHH, the main source of water mentioned by FGD participants was the borehole. A few communities used taps, springs, swamps, streams, flowing rivers and wells. The boreholes remained the main source of water in both the dry and wet seasons.

The distance and time it took to collect water was determined by the location of one's residence since interviews were conducted in groups and at centralized locations. Majority of the participants lived 20m-500m away from the water points; some were within 0.5-1km. A few lived more than 1km from the water point.

A key informant from the water department corroborates findings from the MSNA conducted in Karamoja, which suggest close to universal access to domestic water. Water for production was the main challenge as communities reported lack of adequate water for livestock and crop production.

4.8.2. Treatment and storage of drinking water and leftover food

Majority collected and stored drinking water using jerrycans. Communities mentioned that buckets were distributed by agencies like WHH, clean pots and saucepans were also used. Separate containers were used for storing drinking water and water used for other domestic purposes. This was done to reduce the chances of cross-contamination of the drinking water

"For me I fetch water in two jerricans; one is kept safe in the house as drinking water and then the other used for other activities at home".

Adolescent girl from Naturumrum village, Moroto district.

Majority of the participants drank the water without treating it, and there was a general perception that water from the borehole was safe to drink.

"There is a way we trust the water we get from boreholes so we just take it like that"

Breastfeeding mother from Nomorotot village, Napak district.

Those who treated water used boiling, water guard, filtering, decanting and sieving as the preferred method. Some participants urged that storing treated water in dirty containers was not a recommended practice and emphasized the need to store treated water in clean containers.

"If you boil and put in a dirty jerrycan, that water will not be safe, the best is first cleaning the pot or jerrycan"

Grandmother from Loporokocho village, Napak district.

Storage of leftover food: There was unanimous confirmation from almost all FGD participants that leftover food was kept in a covered container, saucepan or food flask and warmed in the morning before consumption. Some participants elaborated on food hygiene practices such as not storing food that has been partially eaten if intended to be kept overnight and keeping leftover food in a designated safe corner in the house, far from the fire, rats, and insects, to avoid spoilage.

4.8.3. Handwashing practices

Majority of the FGD participants were aware of the importance of handwashing and clearly stated that it was meant to kill germs and prevent diseases. They were also aware that hands should be washed regularly however majority were not clear about the critical times of handwashing.

The mentioned critical times of handwashing were: after visiting the toilet, after cleaning the baby's bottom, before eating or feeding the baby, and before preparing and serving food.

The other handwashing moments mentioned were before breastfeeding, upon waking up in the morning, upon return from market/garden, after greeting many people, after handling animal products, before and after milking cows, after sweeping compound and before washing utensils. A few participants also mentioned that hands should be washed for as long as they looked dirty. There was a common misconception that hands should be washed before breastfeeding, suggesting the need to clarify this belief during nutrition education or health promotion sessions.

Participants mentioned that soap and flowing water were used to wash their hands. Detergent powder, ash and herbs were alternatives for soap.

“Most people prefer wild leaves that act like soap for washing hands and these leaves are ngaram-tokeni, ekaliye, cham-cham, and lokorikor, they all produce soap-like foam and act as a detergent for washing clothes as well.”

Breastfeeding mother from Achukul village, Moroto district.

Most participants were knowledgeable about the handwashing techniques and they emphasized the critical areas like nail beds, where germs hide. They mentioned that hands should be washed well with soap and running water, concentrating on the nail beds and in between fingers.

“When washing hands, use soap and water and concentrate on the fingernails in and between the fingers these areas mostly is where the germs hide”.

Pregnant mother from Kainatakomol village, Nakapiripirit district.

Ownership of handwashing stations was very low among the FGD participants. Rather than hands-free (hanging) handwashing items, some participants improvised with small jerrycans, basins, cups and dishes. Participants reported that most had constructed tippy taps but they had been stolen by thieves, destroyed by children or taken during raids. Participants seemed reluctant to construct new ones as they anticipated they would be destroyed or stolen again.

4.8.4. Latrine coverage

Consistent with the FSNA 2023 findings, FGD participants affirmed that latrine ownership was low and majority of the participants practiced open defecation in the bush or along the river beds. For the children's faces, participants mentioned that they dug a hole and buried it. Very few participants reported using latrines, which most didn't belong to them, for example, a participant shared that they used the school latrine since the husband was a teacher in that school. It is worth noting the complacency of open defecation among participants, especially the grandmothers, who openly shared their experience of using the bush.

“If my child is around, she takes me to bush; otherwise, I do it wherever it finds me, I am weak,”

Grandmother from Nabooore village, Moroto district.

“Me I will go and I will step the grass down and then I defecate there. This place is the bush I pull the grass for cleaning”. “For the feces there is no time when it gets you from the mountain there’s no time of keeping feces you just go behind the rock and use the stone for cleaning”

Grandmothers from Loporokocho, Nakapiripirit district.

The reasons given for not constructing latrines include the soil profile of their areas, which was loose, prone to flooding, swampy or rocky, it was labor intensive, and high costs involved in latrine construction.

“Poverty and lack of strength to dig the latrine or construct, we have to toil for what to eat so much than to construct a pit latrine, we can always have an option of going to the bush for defecation as long as at least we have something to eat, a pit latrine is optional”.

Grandmother from Losikayit village, Napak district.

In the rainy season, latrines were reported to flood and get destroyed thus abandoned, and becoming habitats for snakes. Other reasons include lack of construction materials and need to address priority HH needs like food compared to latrine construction. Cultural beliefs also hindered latrines use for example, pregnant women were not expected to use latrines as it was perceived to cause birth complications. Participants also reported that some people feared that the latrines would collapse and they would fall inside.

“I have built very many latrines, I have dug even ones with cement but now the problem is some people fear to use the latrines because they say if you use, you will stop producing or you will enter inside, it is in the bush where the majority now go to defecate”.

Father from Looreng village Moroto.

“Some people have the fear that the latrine is deep and if they enter to ease themselves, they may enter inside. In fact, even just setting a foot on that slab will require a battalion of soldiers to drive them there”.

Adolescent boy from Kidepo Moroto.

The type of construction materials used for latrines determined the strength of a latrine. Participants reported that untreated poles were eaten by termites, which led to the collapse of latrines, frustrating the community. Participants explained that they couldn't afford stronger building materials like metal, bricks and iron sheets. However, a key informant from the district disregarded the lack of building material as a justification for not constructing latrines, citing incidents when free slabs were provided to the community but weren't used, and added that committed individuals went the extra mile to purchase strong materials from the market. He also explained that the community preferred getting weak materials that were close by as opposed to the recommended stronger logs deeper in the bush. The key informant expressed the dilemma that while communities were encouraged to use local materials for latrine construction, environmental degradation was a growing concern in Karamoja, given that the cut trees were not replanted.

In Namuse village of Moroto, fathers explained that when a community member lived on rented space, they were not allowed to modify that piece of land, therefore they could not construct latrines.

In Naro village of Moroto, not a single latrine was observed, and visible fecal matter lay on the ground. The participants mentioned that people in the village had given up on latrine construction but hoped that certain community members would construct for the rest.

“Even if you build a pit latrine it becomes a public one so it’s better to leave and we all use the bush”.

Grandmothers from Naro village, Moroto district.

The FGD responses suggest that overcoming open defecation in Karamoja required commitment and sacrifice to construct, use and maintain a latrine.

4.9. Gender

Karamoja is a patrilineal community; gender dynamics shape health and nutrition decisions made by the population. The key concerns of gender include household leadership, decision-making power, gender roles, and male engagement in health and nutrition programming, which were studied through FGDs in the CAN. Over the past five years, the proportion of women reporting gender-based (GBV) violence, which is defined as any form of emotional, physical, and sexual abuse between males and females, has remained constant in Karamoja. About four in ten women experience emotional violence, a quarter experience physical violence and one in ten women face sexual violence.

According to UDHS, 20.5% and 18% of women and men respectively in Karamoja agree that a husband is justified to beat his wife when she doesn't act as expected, this is lower compared to the national values of 32.8% and 29% for women and men, respectively.

4.9.1. Household leadership

Although about three-quarters of the HHs in Karamoja are male-headed, it is worth noting that about half of the HHs in Napak and Kotido are female-headed (Table 13). Consistent with 2023 FSNA and 2022 UDHS findings, majority of the FGD participants mentioned that men were the household heads, urging that they were the key decision makers, and breadwinners, it aligned with God's expectations and normal society norms.

"No one will ever become the head of the family as long as the man is alive...in case a man dies then the woman will take over but when she remarries the new man will again become the household head"

Pregnant woman from Mwanakolong village in Nakapiripirit district.

Table 13: Sex of household head, FSNA 2023

District	Sex of HH (%)	
	Male	Female
Abim	77	23
Amudat	83.8	16.2
Kaabong	82.4	17.6
Karenga	72.1	27.9
Kotido	52.3	47.7
Moroto	80.3	19.7
Nabilatuk	69.6	30.4
Nakapiripirit	79.4	20.6
Napak	56.6	43.4
Karamoja	70.9	29.1

A few participants, especially in Napak district, reported that women headed some households because they made the actual decisions on most HH issues, this is consistent with trends reported in the 2023 FSNA.

"They [women] make the decisions on most HH issues"
Pregnant woman from Kalochikit village, Napak district.

"A woman is a final decision maker once she has decided a man has to obey".

Grandmother from Kwamong village, Moroto district.

4.9.2. Gender roles

FGD participants were asked to share the distribution of household roles and responsibilities between men and women.

In general, men assumed outdoor activities while women were assigned indoor roles including those surrounding the household, as listed in table 14 below.

Exceptions existed where men supported women's tasks like childcare, bathing and babysitting.

While income generation was not mentioned as a role for women, FGD discussions from other CAN themes like food security revealed that women were significant breadwinners doing casual labor and starting small businesses to ensure the families obtained adequate meals. This is an indication that participants mentioned the typical roles of men and women as depicted in society without considering the realistic and recent shift in gender roles.

A few participants acknowledged the changing roles where women do almost everything in the HH.

"For men who are lazy just remain sleeping under trees all day long and it's the woman who play a pivotal role in running the family."

Grandmother from Kwamong village, Moroto district.

Similarly, when participants were asked to share the activities performed on a typical day from morning to sunset, including leisure time, both men and women seemed occupied with tasks that aligned with their gender roles in Table 14. Moreover, men seemed to take on more domestic roles, especially with child care, compared to those provided in table 14. Both men and women had their free time filled with both leisure activities and household tasks, such as cleaning the kitchen house and planting the kitchen garden for men, fetching firewood, and cleaning the house for women. Annex 9 provides the list of activities for fathers and women in the CAN areas.

When asked why roles were distributed by gender, participants explained that it was as commanded by God; men had the energy to perform hard outdoor tasks, while women's energy matched their lighter indoor tasks. They also indicated that culturally, it was a social abomination for women to perform roles like grazing cattle.

Table 14: Typical gender roles and responsibilities reported by FGD participants

Roles of men	Roles of women
<ul style="list-style-type: none">• Outdoor physical activities e.g. grazing animals, cutting big logs for home and kraal fencing, digging pit latrine, slashing the compound• Intellectual roles like decision making, allocation of HH resources, sale of assets like land and livestock.• Income generation and provision like acquiring food, buying clothes for children and wife, in charge of medicals, love• Guidance and leadership like disciplining children and grooming boys• Protection and care for all family members• Farming men plant, and harvest take oxen to garden.• Educating children paying fees and providing scholastic materials.	<ul style="list-style-type: none">• Indoor activities e.g. cooking, mopping, smearing houses, wash clothes and utensils manage/organise homes, clean home• Childcare: bathing and feeding children• Pregnancy and breastfeeding• Gathering firewood and grass for thatching house and supporting house construction• Garden work like weeding• Deciding the meals for the family.• Hospitality: Receiving visitors like in-laws and family friends.

The roles of boys and girls aligned with men and women respectively. Participants mentioned that teenage children did not have specific roles but their parents provided guidance and assigned them tasks according to their gender.

“For young teenagers, they do not have any specific roles but they take up the roles or instructions from their fathers but in most cases, those that are in line with the roles of men and the same applies to girls”

Grandmother from Lolimo village, Napak district.

Girls supported indoor activities like cleaning and organizing the house, childcare and cooking, fetching water and firewood. They also supported garden activities like weeding.

Boys supported outdoor activities that prepared them to be fathers like grazing goats fetching water, and cultivation. A distinct role among teenage boys was to support the courtship process.

There seemed to be an overlap between girl and boy roles like gardening, taking care of younger siblings and running HH errands such as fetching water and firewood.

Participants also noted the critical adolescence age that made young boys and girls disobedient and failed to perform any tasks assigned to them late alone adhering to the gender differentiation of roles.

“They [adolescents] are stubborn and just do what they want”

Grandmother from Lolimo village, Napak district.

When asked how male roles were executed for HHs without men/boys, participants referred to such houses as “dark families”. They elaborated that such HHs were associated with disorder due to poor decision-making and were despised and not recognized during traditional ceremonies. They also faced social crisis during marriage of girls when no one would be eligible to receive dowry.

In HHs without males, women and the elder daughter performed all tasks while traditional roles were delegated to paternal uncles or sons-in-law.

“If one of the girls is married the husband takes the responsibility of protecting such a family from any harm”.

Father from Konyang village Napak district.

4.9.3. Men’s support to women

When asked about the specific roles fathers played in supporting pregnant and breastfeeding mothers, they mentioned buying food, and clothes, help with domestic chores like cooking and fetching;

provision of nutritious foods and childcare when the mother is not available. The support provided by fathers to PBWs is elaborated in section 4.3 and 4.4 (maternal health and nutrition). Participants provided reasons for the limited support men provided to their wives as follows;

Alcoholism: Among the unsupportive men were the alcoholics who left all responsibilities to women in addition to constant GBV.

Social attitude: The community perceptions that domestic tasks cannot be performed by men, which was worsened by limited knowledge on the importance of supporting women.

Peer pressure: There was a negative influence from peers when men supported their wives as they felt mocked

Attitude of men; Some men were identified as proud and couldn't cook, fetch water

"Most times our cultures restrict men from doing some tasks for example a man who cooks in a home is considered a greedy man in the community. Men as well when they see certain men cooking tend to consider them weak and cannot contribute during meetings in the community"

Pregnant mother from Karwataluk, Nakapiripirit.

FGD participants affirmed that amidst the unsupportive husbands, there were exceptional model men who overcame societal barriers and supported their wives. Participants urged that these were shaped by their inherent personality, upbringings, level of exposure, education, and having an adequate income.

"It depends on how the man grew up from their family if he knows the poverty at their home you will see what to do at least for his wife. He takes care of her very well".

Nankambi village, Moroto.

Examples of model men mentioned were community leaders like kraal leaders (ngikatukok angatuk) the exposed men like the educated and businessmen who travel and copy the culture of other places.

Some participants highlighted that the type of relationship between wife and husband determined the support they provided each other with those in harmonious relationship able to work better together. A participant observed that in some instances disrespect from women led to limited support from husbands.

Sometimes it also depends on how a woman talks and addresses the man, if a woman is disrespectful a man becomes violent [unresponsive to requests]".

Grandmother from Kwamong village, Moroto.

4.9.4. Decision-making in the household

While the majority of the participants acknowledged that the man was the main decision-maker in a home, there was an indication that women were part of the decision-making process. Men were perceived as the "chief planners" and hence allowed to make decisions on behalf of the entire household. When participants mentioned that decisions were made jointly it was not clear whether they meant being consulted, active decision-making that involved sharing opinions and negotiation or being updated when the action had already been taken by the man.

" Decisions are made by husbands but mostly they first share ideas with their wives"

Lolimo village, Napak

Women and elderly HH members were the main decision-makers in HHs without men. Participants urged that joint decision-making between husbands and wives was preferred in order to avoid family conflicts, it was perceived as a sign of mutual respect and it set a good example for the children.

Making decisions together avoids children seeing a conflicting house because they will also follow and become bad people".

Pregnant woman from Kadilakeny village, Moroto district.

Contrary to the majority view that women decided when to seek health care for the child, there was an indication that men were first consulted and women only implemented the final decision.

“When children fall sick, before my wife takes them to the hospital, she first has to inform me basing on the fact that am the head of the household so I decide whether to take to the health facility or not”

Father from Konyang village, Napak

The decisions made by women and men are illustrated in Figure 19 below. Since there were mixed views on all items, the figure illustrates unanimous agreements (all), the majority and minority views (few), and fair agreements (some). Overall, as observed in a typical society, majority of the critical decisions involving assets acquisition or liquidation and income were made by men, leaving women to solely decide on three food-related items; food to buy, food to cook and whether to sell stored food.

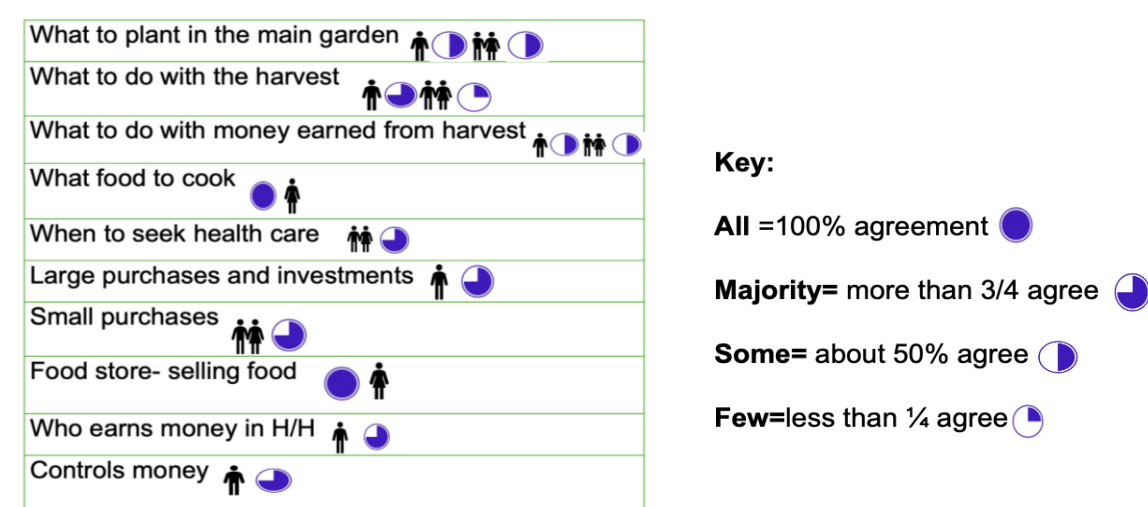


Figure 19: Distribution of decision-making power between men and women as reported by FGD participants

5.0. Challenges and what is working well

5.1. Challenges to effective nutrition programming

The challenges faced and mentioned by communities, government, and partners were collated and categorized into eight main topics described below.

Unsustainable programming, inadequate coordination and collaboration among stakeholders reduce the impact of interventions

The excessive use of incentives to attract program acceptance and participation was reported by most key informants. They elaborated that partners had incentivized programs transferring the ownership and responsibility for child health from the caregivers to the program implementers, which disempowered the community and limited sustainable development. Giving direct unconditional cash, food and non-food items were some of the examples that key informants thought to increase the dependency syndrome in Karamoja.

“We need sustainability, and parents should get empowered so that they know that malnutrition is not a health worker’s issue but a parent’s”.

Key Informant, Nakapiripirit

Key Informants decried the uncoordinated efforts at the district and community level, which reduced the impact of nutrition interventions. They mentioned that some partners working in the subcounty did not avail information about their activities, target population, coverage and other updates necessary for comprehensive planning. The differences in mandates and project timelines amongst implementing partners and government initiatives allegedly frustrated the coordination efforts and platforms in place.

At the community level, key information mentioned the low cooperation as reflected in the low participation in community meetings or events organized by NGOs, even when facilitation is provided.

Community complacency with unhealthy practices and nutrition outcomes frustrates programmatic interventions.

Key informants and FGD participants noted the complacency, dependency syndrome, and lack of program ownership depicted by the communities in Karamoja. They reiterated the need to change or modify behavior and transform mindset of the community to take responsibility and cooperate to address the causes of malnutrition with sustainable and effective approaches. The words and phrases used to describe complacency were “laziness” “used to handouts” “I don’t care attitude”. This mindset was reported to affect participation in large-scale food production and storage. This attitude resulted in the sharing and or sale of rations used to treat malnutrition.

Key informants in the health education section reported lack of contextualized SBC approaches including effective IEC materials to trigger behavior change.

Desperate measures taken by caregivers to get their children enrolled and maintained in nutrition programs were also reported. An example was given where mothers gave detergent (“omo”) so that the child got diarrhea and remained enrolled in the nutrition program. Another common practice reported was to induce vomiting.

“When they take the child to the health center, they measure the child and when they get that she’s healthy they just send them back and that’s why they give children omo so that they can lose weight”.

Key Informant, Nakapiripirit

“These very plumpy nuts they put in the porridge of a man, he takes it in the calabash, of course when I say it becomes the family food, the children are the ones to suffer “.

Key Informant, Napak

On the other hand, key informants reported uncooperative caregivers who escaped from the admission ward in the ITC and returned later with a severe and more complicated episode of malnutrition.

Additionally, FGD participants freely spoke about open defecation like it was an acceptable community practice. Although they acknowledged previous efforts by the government and NGOs to promote sanitation and were aware of the consequences of improper faecal disposal, they seemed reluctant to construct latrines and had normalized open defecation.

“... we have to toil for what to eat so much than to construct a pit latrine, we can always have an option of going to the bush for defecation as long as at least we have something to eat, a pit latrine is optional”.

Grandmothers from Losikayit village, Napak district

WASH indicators in Karamoja have stagnated due to community complacency with undesirable behaviours like open defecation. A key informant decried the widespread acceptance of open defecation that had frustrated partner efforts over time. He cited examples like the recurrent regression of villages previously declared open defecation-free upon the exit of implementing partners and low uptake of partner initiatives like sanitation marketing. This was worsened by the politicians and government officials who didn’t practice the desired practices and often appeared on the shame list for people without latrines, prompting communities to directly confront hygiene promoters - *“clean the towns first before coming to us in the villages”*.

Unfavorable weather, low food production and storage practices exacerbate food insecurity

Karamoja is unable to exploit its agricultural potential due to harsh weather conditions characterized by intermittent drought and floods. While the green belts have the potential to produce, subsistence farming, low storage, and unregulated sale of products within the region and across regional borders limit food access and availability. Large-scale production is limited by unfavorable land ownership policies, with most households owning small pieces of land, limited use of mechanized agriculture and modern farming practices for areas with access to adequate land, and low knowledge on seasonality timing, and value addition to expanding agricultural businesses.

Recently, crop and animal pests and diseases have infested the region further reducing food production. Respondents mentioned that pests and wild animals attacked their crops on the farm, and rats and weevils attacked stored food in the granaries.

Climatic conditions are expected to worsen given that most households continue to rely on income generation activities that destroy the vulnerable environment. These involve deforestation like cutting building poles, fetching firewood and charcoal burning; informal gold mining and stone quarrying.

Insecurity leads to loss of household assets, interferes with income generation and limits access to health and nutrition services

The security situation in Karamoja appears unstable with peaks over the years and hotspots across the region. During raids, respondents reported losing household assets like livestock, small ruminants, poultry and crops, which form the main source of livelihood in the region. Moreover, it interfered with income-generating activities, including casual labor and running businesses, as people and goods were unable to move freely. Additionally, insecurity limited access to vital health and nutrition services like vaccination, nutrition screening and treatment, and treatment of diseases as both health workers and communities are unable to reach each other.

Funding gaps limit effective health and nutrition programming.

All interviewed key informants shared that the funding for nutrition activities was insufficient to sustainably improve nutrition outcomes in the region. They attribute the limited funds to the small budget (2%) allocated to fund DNAP activities and the competing priorities like humanitarian crises in Ukraine, Gaza, and Somalia, and diseases like Mpox and cholera, which diverted resources to other countries and or sectors.

“The money is not all that much so when implementing activities, we don’t implement directly as nutrition activities, we integrate with other activities when possible”

Key Informant, Moroto district.

Funding affected access to health services due to transportation challenges that limited access to distant communities, especially those with poor road networks like Dwol and Lomoruchubai. Additionally, health workers, especially in Napak, felt overwhelmed serving communities outside their catchment areas due to proximity.

Key informants further elaborated that field-level activities with high impact, like SBC initiatives, door-to-door nutrition screening, establishing demonstration gardens or learning sites, and training agricultural field workers, were underfunded.

Besides health nutrition, a key informant also reported severe funding gaps for sanitation, explaining that the 14.8m given annually could not cover interventions in the entire district, including WASH campaigns during the sanitation week.

Capacity gaps limited the provision of quality nutrition services on a scale.

Capacity gaps manifested in two forms: the lack of qualified nutritionists in the region and limited nutrition skills transferred to non-nutrition staff at community and health facilities to facilitate integration. While the UNAP emphasizes nutrition-specific outcomes that require Nutritionist or nutrition-trained health workers to achieve, efforts to recruit these have stagnated for years. Apart from Abim, all other districts had multifunctional nutrition-focal people who in addition to their core responsibilities, had other tasks to accomplish alongside nutrition. Health units also continue to struggle with understaffing as they integrate the management of acute malnutrition within the health system. Technical capacity gaps negatively impact the nutrition program quality from planning through implementation to the evaluation of interventions. The nutrition-sensitive outcomes that require close collaboration between nutrition and other sectors also require basic training on nutrition to foster the desired integration. This has not been achieved in most areas. Key informants identified entry points like the para social workers who are government recruits trained to implement child protection interventions at parish level, with basic nutrition training, these could promote the delivery of integrated packages.

Limited political support for nutrition programs affected the enforcing recommended practices.

Key informants noted some undesirable community practices that required political support to address. Key informants thought areas like nutrition financing, regulating sell of agricultural produce, improving household food production, preventing the misuse of nutrition rations and widespread open defecation were some of the areas where political influence would support nutrition outcomes, but they did not receive this support.

On the other hand, a retrospection among key informants revealed that it was within their mandate to provide timely and strategic updates about programs to the political wing to trigger their support, which the technical wings did not do effectively.

Alcoholism affects childcare practices, dietary patterns, instigates family conflicts, contributes to wastage of food and household income.

The increasing consumption of alcohol among men and women, children and youth in Karamoja is alarming. Alcoholism seems to be acceptable and justified even among the key informants, local brew is perceived as non-harmful beverage that accompanies meals or even replaces meals in times of food shortage. Acknowledging its income generation potential, both key informants and FGD participants emphasized the poor childcare practices resulting from the excessive consumption of alcohol and running local brewing businesses. Mothers left their young children with grandmothers or elder siblings and returned late in the evening drunk and unable to provide proper childcare, children were also fed on the residues of local brew with no nutritional value predisposing them to malnutrition. Household heads spent the HH income on purchasing local brew and preferred to spend their leisure time in the drinking points returning home in the evening to cause conflicts. Sorghum, a commonly grown staple, is the main ingredient for local brewing. Rather than store sorghum for the lean season, it was converted into local brew and in some instances, nutritious food and casual labor were exchanged for local brew.

5.2. What is working well?

Amidst the numerous programmatic challenges met by service providers, key informants identified the following best practices that need to be implemented to scale to improve nutrition outcomes.

Active case identification through activities like mass MUAC screening (MMS): These initiatives are mainly supported by UNICEF, the health department, and implementing partners. MMS promoted the timely identification and referral of malnourished children, who would otherwise be missed with routine nutrition assessment practices.

School feeding program and school gardening: This was reported to promote enrollment of ECD and primary school children thus contributing to improved literacy levels in the region. Additionally, school gardening promoted the growth of diverse crops like OFSPs. In some districts, sub-county leaders initiated crop production with minimal input like seeds and tools from partners, which resulted in sustainable outcomes.

“We told sub-county leaders to plant beans so that they can have enough food, and the school took it up; they have amazed us! [with the produce]”.
Key Informant, Moroto

Farmer schools: The establishment of farmer schools with extension support promoted the use of advanced food production technologies, equipping farmers with practical skills for diversified livelihood beyond sorghum growing and livestock.

Elevation of prevention initiatives that inspire behavior change: Given the observed practice of caregivers deliberately keeping children malnourished due to the perceived benefits, a key informant shared a new initiative being piloted that aims at recognizing the efforts of caregivers who ensured their children remained healthy despite living within the same circumstances as mothers with malnourished children.

“...this time, we also want to factor in the child that is not malnourished; we also want to learn from caregivers who have children who are not malnourished. They also feel involved and they act like role models to those mothers who have children who are malnourished”.

Key Informant, Moroto

6.0. Recommendations

The recommendations below mainly comprise actions envisaged to modify nutrition programming and increase impact based on the perspectives of the CAN participants. Quotes are included in the recommendations section to highlight proposed solutions to chronic bottlenecks in Karamoja region.

REC 01: Strengthen multisectoral Social and Behavior Change (SBC) initiatives to inspire the adoption and maintenance of recommended practices

- i Strategic and participatory contextualization of SBC materials to trigger and maintain desired behavior, especially for practices like open defecation that regress following successful adoption.
- ii Focus SBC initiatives on the critical gaps identified, such as demystifying misconceptions about breastfeeding, demystifying myths about latrine use, clarity about the definition and signs of malnutrition, correcting the inadequate childcare practices among women with local brewing businesses, controlling undesirable behaviors like the excessive consumption of alcohol, unregulated sell of home produce for the towns along the highway, limited ownership and use of sanitary facilities like latrines and handwashing facilities especially in the swampy or rocky areas.
- iii SBC initiatives need to engage all influential family and community members like the husband, elder daughter, adolescent boys, grandmothers, LC 1 chairperson and kraal leaders as these have been identified as key determinants of maternal and child health practices
- iv Beyond messaging, SBC interventions should include an inbuilt follow-up strategy to facilitate behavior change. Sustainable structures like those within government structures such as VHTs and health workers should be prioritized and their skills to effectively support the behavior change process need to be reinforced.
- v Households with school-going pupils need to utilize the wealth of knowledge and skills at their disposal. Adolescents need to be encouraged to transfer skills learned from school like gardening, concepts on dietary diversity, personal and environmental hygiene, to their HH members.
- vi Mental health interventions need to be integrated into routine programs to address the reported psychosocial concerns like stress among caregivers of children.

REC 02: Concerted efforts are required by the political, technical and implementing partners to support the regulation of excessive consumption of alcohol

- i Effective mass sensitization through campaigns about the health, social and economic consequences of alcoholism. Campaigns need to clarify that excessive consumption of all forms of alcohol, including local brew, is harmful, as it was evidence that the majority of the respondents, including KIIs, didn't perceive local brew as alcohol. Communities need to be engaged to suggest safer alternatives to the traditional role played by local brew.
- ii Influential leaders at all levels of the community should support the campaign through leading by example.

- iii Collaboration with sub-county authorities to enact by-laws and involve community leaders at different levels during the reinforcement.
- iv Further participatory research is required to gain an in-depth understanding of alcoholism in Karamoja, its drivers and strategies to address it.

REC 03: Promote existing food security interventions while engaging the community to develop or intensify small but doable, high-impact actions at the household level.

“They [government] should pass a policy prohibiting the misuse of food, these people sell, they get sunflower, they get simsim, green gram but they take to Soroti, if only they could pass a law”... “The milk, they sell it instead of giving their babies, the eggs- they sell, the chicken- they sell, so what will remain for these children?, nothing”.

Key Informants, Napak

- i Regulate the sale of agricultural produce by enacting and enforcing by-laws prohibiting excessive sell of produce within and out of the region.
- ii Expand training on post-harvest handling and storage emphasizing animal source foods like milk and meat, at the household level through available community structures.
- iii Government and stakeholders need to work with the community to establish large food storage facilities in the village that can provide diverse foods during the lean period. Unlike previous approaches where external support was sought to initiate and implement interventions, communities need to build, stock, manage and maintain the food storage facilities, taking advantage of the post-harvest period when food is in plenty and participants are more productive.
- iv Promote the production of diverse nutritious crops like groundnuts and tubers to improve the dietary diversity at HH level. Encourage communities to plant fruit trees as they offer multiple benefits such as improving dietary diversity and controlling the effects of environmental degradation.
- v Promote large-scale production through supporting local farmers in groups or as individuals to plough adequate land, timely provision of sufficient drought-resistant seeds and adopt feasible but large-scale irrigation mechanisms.
- vi Key messages on food security need to focus on identifying and addressing seasonal weather changes, planting diverse foods and limiting the sale of produce
- vii Environmental degradation through widespread deforestation to get construction materials and firewood needs to be regulated, and communities are encouraged to plant trees, with fruit trees being the priority as they have dietary and environmental benefits.
- viii Mitigate crop failure in flood-prone areas by timely planting, practicing uphill planting, and terracing.
- ix Engage the private sectors, small and medium business enterprises to address excessive price fluctuation through price fixing for essential food commodities within the region.
- x Value additions including the processing of food and non-food items to yield high-value products on the market like leather, meat, milk, and fortified cereals, needs to be promoted to scale.

- xi Scale up support towards VSLA initiatives and contingency planning at the HH level to enable community members to address food shortages and other family emergencies without employing extreme coping mechanisms such as selling productive assets.

REC 04: Scale up water, sanitation and hygiene interventions through mixed approaches including enforcement of recommended hygiene practices across all levels of the community

WASH is one sector with a cyclic crisis characterized by frequent regression of sanitation gains especially when a project or supporting partner exits the communities. Communities are complacent with the limited ownership and use of latrines, which cuts across all districts in Karamoja regardless of efforts and resources invested. The following could be considered to sustainably motivate community members to adopt good sanitation and hygiene practices.

- i Use of influential or cultural leaders to demystify cultural beliefs associated latrine use
- ii Participatory decision-making on the designs of pit latrines to construct considering the wide variation in social needs and environmental challenges like flooding, loose soils, rocky grounds.
- iii Before introducing sanitation initiatives, stakeholders need to examine the factors impeding the implementation of previous similar interventions and address them with alternative approaches to break the cycle of regression.
- iv Replicate good practices and approaches used in similar regions such as Teso that overcame challenges like open defecation despite having a flood-prone land profile and loose soils.
- v Politicians to support the enforcement of existing by-laws and enact other legislative strategies to control the widespread open defecation.
- vi Increase water for production by promoting community-owned water reserves to address the constraints limiting crop and animal production. Motorized high-yielding wells were also suggested as approaches.

“Increase access to water because primarily all the things you do center around water, people don't have water for production due to seasonal variations”.

Key Informant, Moroto

REC 05: Promote gender equity at the community and household level to improve childcare practices.

- i Mass sensitization about family planning and promote joint and informed decision-making about the number and timing of births to address multiple pregnancies, especially when mothers are still breastfeeding infants.
- ii Promote the male engagement initiative at scale and with a sustainable approach where community members run male engagement activities aimed at positive and collaborative parenting with limited external input.

- iii Discourage child marriages to promote better childcare as it was evident that in addition to having limited knowledge of basic nutrition concepts, young married girls were not supported by their husbands, especially the polygamous men.
- iv Just as MIYCN counseling is emphasized, parenting counseling sessions need to be considered and scaled up to promote good childcare practices. This could include amicable negotiation for parents to make joint decisions about critical concerns like sale of household assets, use of farm produce, proportion of food to store, meal planning, sharing domestic chores.

REC 06: Embrace education as a vehicle for sustainable change at household level.

“If a child learns how to grow vegetables in school, there’s a possibility this child will take the knowledge of growing vegetables to the community “
Key Informant, Napak

- i Parents need to be motivated to enroll both girls and boys in school as it was evident that school-going adolescents were more knowledgeable about the various CAN themes than the rest of the FGD segments.
- ii Adolescents in school had the potential to promote recommended practices within the households by sharing knowledge on menstrual hygiene, balanced diet and transferring skills like gardening and irrigation to the family and the rest of the community

REC 07: Promote sustainable programming to address the widespread dependency habits and complacency with poor food security and nutrition and their drivers.

“All along, partners and the government have been giving fish to the communities. They have eaten enough fish; we have to now go and give them all the hooks to go and catch the fish so that they learn through hard way how to catch the fish”
Key Informant, Moroto

- i Humanitarian interventions, especially those with short project cycles, need to be integrated and complement ongoing government initiatives so that outcomes at the community level are not short-lived and can be sustained.
- ii Interventions from both government and partners need to be jointly designed with the community, engaging the affected stakeholders, including vulnerable groups like PBWs, the elderly, adolescents, and influential decision-makers alike. Community needs to appreciate and own project initiatives such as the PDM and other direct cash transfers to realize change.
- iii General/blanket food distribution needs to be replaced with sustainable agriculture initiatives like large-scale production through cooperative unions.
- iv At the inception of projects, partners and governments need to jointly agree on a comprehensive continuity plan upon the exit of the project.
- v Government initiatives contributing to the UNAP II outcomes need to be aligned and coordinated and evaluated to ensure efficient use of resources.

- vi The capacity of frontline implementers like health workers, and extension workers need to be strengthened to maintain in-kind supplies provided rather than make requests for replenishments. For example, equipping health workers with skills to ensure broken anthropometric equipment can be fixed and batteries can be replaced is part of sustainable development. The same applies to empowering communities to maintain initiatives like solar systems, water points, irrigation schemes and productive use of cash transfers.
- vii The government needs to establish strict measures to ensure food rations are not misused e.g. by-laws to prevent sell of nutrition rations.

“Caregivers sell RUTF and buy alcohol. There is a need to engage government systems to respond and maybe target retailers”.

Key Informant, Moroto

- viii Attaching incentives to poor nutritional outcomes needs to be rethought or reversed and replaced with sustainable income-generating activities at household level. There is also a need to recognize the significant efforts and sacrifices that caregivers with non-malnourished children invest to ensure children remain healthy despite living within the same context.

“Stop giving money to mothers just because child is malnourished, the beneficiary is the husband and woman not child, it is better to promote sustainable business for the family”

Key Informant, Moroto

“Consider management of all children with acute malnutrition within the health system rather than individual partners considering that it is more cost-effective and sustainable. ... If a partner wants to support a particular intervention, it becomes the partner’s work, and yet we know that malnutrition is something that should be embedded in the health system”.

Key Informant, Moroto

REC 08: Re-activate and strengthen nutrition governance structures and coordination mechanisms

- i Similar to the streamlined monitoring and evaluation approaches used for nutrition-specific outcomes of the UNAP II, nutrition-sensitive and governance outcomes require a platform with harmonized monitoring, including an accessible dashboard like DHIS where indicators are displayed to facilitate decision-making and continuous quality improvement as it is done for nutrition-specific outcomes.
- ii A stakeholder mapping matrix for Karamoja region needs to be updated and available to all partners, government and politicians at regional and sub-regional levels to facilitate accountability.

REC 09: Increase the funding for nutrition activities to promote better coverage and improve quality of interventions in Karamoja

“If partners who are doing nutrition-sensitive activities could integrate their activities with the sub county’s and maybe we can be able to do a joint programming, it’s not that we want them to give us the money, but we can see how we can team up “

Key Informant, Napak

- i Continue and scale up the integration of nutrition priority actions within ongoing government initiatives when applicable to ensure efficient use of resources.
- ii As funding limitations affected the achievement of UNAP II objectives at sub-county, parish and village level, there is need to rethink the funding priorities acknowledging the significant role that grassroot structures play in improving nutrition outcomes.
- iii Funding constraints also limit the recruitment of full-time qualified nutritionists at different levels to sustainably oversee nutrition interventions at district and within the health unit and its catchment area.
- iv Strengthen the capacity of nutrition coordination committees through learning tours to replicate good practices
- v Participatory planning through dialogues at community level need to be intensified to ensure transparency, accountability and equitable allocation of resources.
- vi Continued advocacy and fundraising through the strategic marketing of the district's unfunded priorities to donor agencies and other development partners.

REC 10: Stakeholder collaboration is required to promote security in the region by adjusting settlement patterns and addressing the drivers of recurrent raids in Karamoja

Adopt the linear settlement along the main roads as opposed to manyattas to improve security and reduce cattle raiding

REC 11: Promote the utilization of CAN findings and recommendations

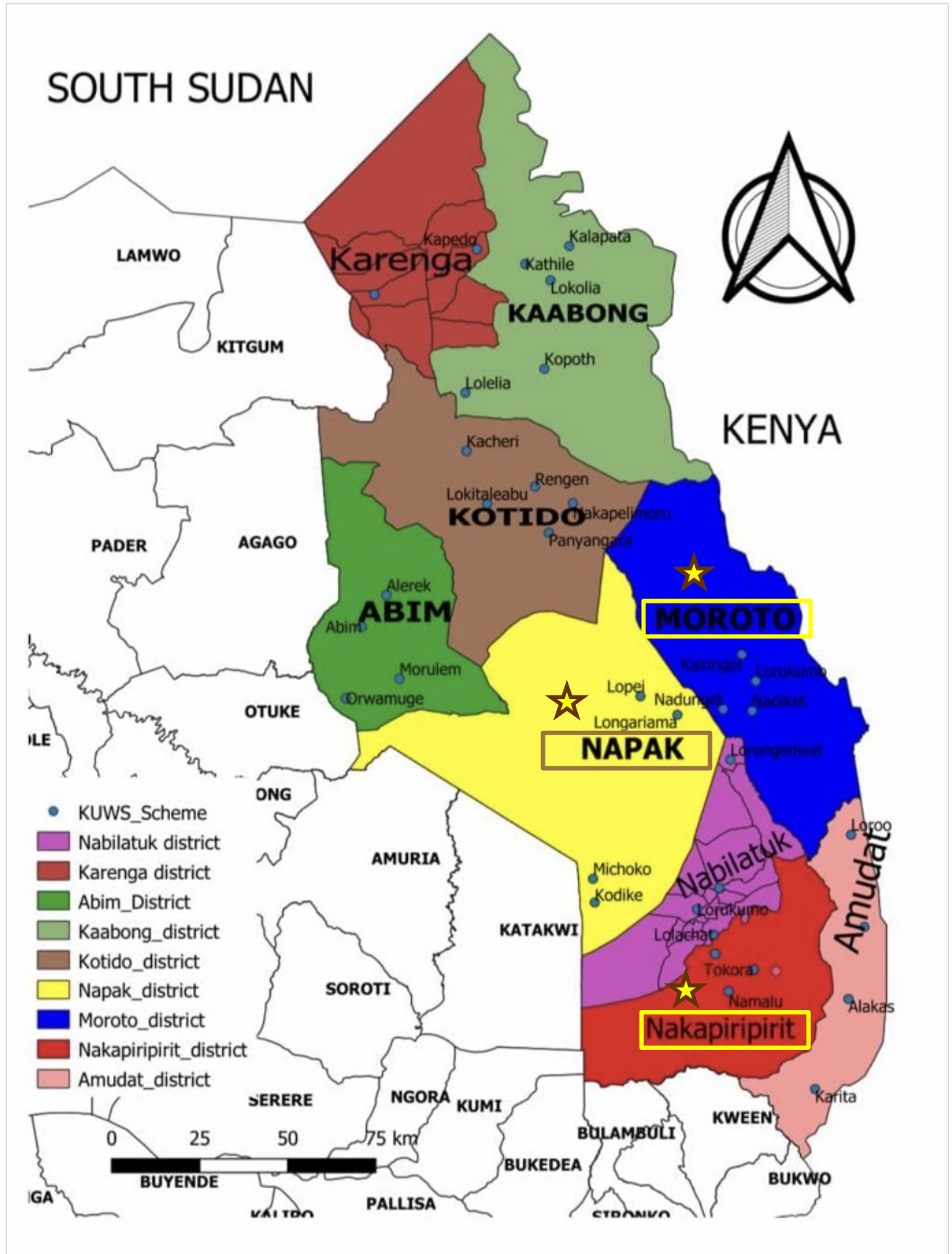
- i District-level discussions are required to further digest the CAN findings and refine the action plans (Annex 11) developed by stakeholders during the validation meeting.
- ii Regular follow-up and support to stakeholders are required to ensure that commitments to implement CAN recommendations are honored.

Annexes

Annex 1: Map of Uganda showing the Karamoja region



Annex 1B: Map showing the location of the CAN districts in Karamoja region



Annex 2: Sociodemographic indicators of Karamoja districts in comparison with national values, FSNA 2023 and UDHS 2022

Sociodemographic Characteristics	Abim	Amudat	Kaabong	Karenga	Kotido	Moroto	Nabiatuk	Nakapiripirit	Napak	Karamoja	National
Sex of HH Head											
Male	77.0	83.8	82.4	72.1	52.3	80.3	69.6	79.4	56.6	70.9	66.9
Female	23.0	16.2	17.6	27.9	47.7	19.7	30.4	20.6	43.4	29.1	33.1
Marital Status of HH Head											
Married	73.0	93.2	86.3	80.7	66.2	77.6	68.5	60.2	63.6	72.8	
Polygamy	24.6	61.1	54.5	49.7	65.6	52.3	48.7	45.7	55.0	50.7	
Mean HH size	5.6	5.4	5.6	5	6.1	5	4.2	5.1	5.2	5.2	4.4
Flooring Material											
Earth / Sand	46.8	30.5	84.9	73.6	54.4	33.6	20.3	77.5	70.3	57.7	44.9
Dung	39.9	62.1	10.9	22.3	39.9	53.9	76.6	19.5	26.9	35.9	16.4
Cement	13.0	7.3	3.3	3.6	5.6	6.2	1.3	2.2	2.5	5.3	25.8
Rooms Used for Sleeping											
One	62.1	48.7	39.2	35.7	39.6	67.6	59.8	67.1	52.4	52.7	42.7
Two	24.4	45.5	40.5	37.7	44.0	27.8	32.7	27.5	37.0	34.9	29.1
Fuel used for cooking											
Wood/Straw/ Shrubs	85.1	97.3	96.1	96.5	89.8	86.2	96.9	93.2	93.7	91.9	72
Charcoal	14.9	2.7	3.9	3.5	10.2	13.1	2.5	6.8	5.5	7.8	24.2
Household assets											
Radio	18.6	9.4	5.6	6.2	5.6	8.9	8.3	9.5	7.2	9.0	53.7
Television	3.1	1.3	0.8	0.5	1.4	3.1	0.2	1.5	0.7	1.5	24.0
Food Store	49.7	63.6	31.7	19.2	67.0	69.2	61.3	31.3	53.6	50.6	
Mobile phone	50.4	44.1	27.3	34.4	26.7	27.7	20.3	37.3	29.2	33.0	79.3
Education											
No formal education for female caregiver	24.2	85.9	73.2	67.9	88.7	80.1	87.1	68.8	72.4	69.9	19.6
Mean Household Economic Capacity per capita - monthly (UGX)	62,706	72,173	29,880	34,970	27,112	40,179	39,758	46,051	30,585	42,861	
Wealth quintiles within Karamoja											
Lowest	0.8	1.7	52.8	14.1	22.3	19.7	40.1	10.1	22.8	21.2	
Highest	50.3	57.4	6.7	16.9	5.7	12.3	5.4	13.2	4.9	17.6	

Annex 3: Key Informant guide used for data collection

1. Kindly describe the general nutrition situation in Karamoja/Your district/National. Do you notice any changes in the past years? What/why? Are there areas in the district/sub-county that have more/less malnutrition? Why?
2. In your opinion, who are the people who are most affected by malnutrition in this area? Can you describe them in terms of socio-economic, family situation or their place of living?
3. What are the key reasons why people are malnourished or at risk of malnutrition in this area? (check by levels of UNICEF Framework)
4. What nutrition activities is your department/ organization carrying out?

For partners: What is the key focus for your organization in the nutrition intervention?

How is your organization supporting the implementation of national/county strategies and action plans *(Probe for the specific role of the organization in the nutrition intervention)*

5. Who are other key actors/ organizations working on nutrition in this area? (name, location, broad type of work)
6. Do you have any district-level or sub-county level nutrition-related strategies?
7. Are there groups that coordinate nutrition actors and activities in the district/ area? Please describe...
Who is coordinating nutrition?
Who are the different sectors that are part of the coordinating body? (or rather focused on one sector?)
Is this structure/ mechanism replicated across the different levels? Since when is it in place? How do organizations join?
8. **For a district department:** how is the Nutrition within the district funded? Is the funding for nutrition adequate for the implementation of the planned activities in the district nutrition action plan? What is the plan to increase funding for nutrition if not adequate?
9. In your view, what are the challenges to implementing effective nutrition interventions?
10. In your view, what should be done to improve nutrition within this district?

(Probe for what is working well that can be built on and, what could have been done differently)

Thank you

Annex 3B: Key Informant consent form

INTERVIEWER'S NAME _____

NOTE TAKER: _____

DATE OF INTERVIEW: _____

TIME STARTED _____ TIME ENDED: _____

Introduction and consent

Good morning/afternoon Sir/Madam, my name is _____

I am from Welthungerhilfe (WHH) and would like to conduct a key informant interview with you to better understand the nutrition situation in this area. WHH would like to hear your opinions and insights and would like to use this information to plan better projects in the future. Participation in this discussion is totally voluntary, therefore, if you choose not to participate, there will be no effect on your future relationship with WHH or any services. I also wish to assure you that if you accept to participate, the information given shall strictly be used for the purpose of this exercise.

Do you consent to continue with the interview? 1=Yes 2=No

Do you have any questions before we begin? 1=Yes 2=No

We would like to record this discussion using a small device or phone (show). It records your voices so that we can remember better later what we discussed about exactly. After we have finished the report, we will delete/destroy the recordings.

Is it okay to use the device for this discussion? 1=Yes 2=No

Can we proceed with this discussion? 1=Yes 2=No

Name: _____ Designation: _____

Signature: _____ Date: _____

Annex 4: Focus Group Discussion Guide used for CAN data collection

General Nutrition Q1-Q4
<p>1. Please tell me what malnutrition means to you.</p> <p>2. How do you know you are, or someone is malnourished?</p> <p>2.1 Follow-up question: are there any other signs to tell someone is malnourished? <i>(listen for signs about acute/ stunting/ micronutrient deficiencies)</i></p> <p>3. In this community, why do people become malnourished?</p> <p>4. When you have a question or issue about malnutrition, who is the person you most trust, go and talk to?</p>
People at Risk Q5-Q6
<p>5. Who are the categories of people who are malnourished or who are at risk of becoming malnourished? Please describe their situation a little to us.</p> <p>6. Why do you think they are at risk of malnutrition?</p>
Food Security/Agriculture/Livelihoods Q7-Q17
<p>7. Usually, what is the source of your food? <i>(listen for growing own food, buying, support by others, food assistance, etc.)</i></p> <p>8. Please tell us the different crops you grow at your main field and why? <i>(listen for own consumption, sale, store)</i></p> <p>9. Who has a kitchen garden?</p> <p>10. What do you grow there?</p> <p>11. How do you use the harvest?</p> <p>12. What is the source of your seeds for the main field and for your kitchen garden?</p> <p>13. Which animals do you raise at home for eating? <i>(domestic animals, cattle, goat, sheep, fish, poultry, insects, etc.)</i></p> <p>14. How do you get food items that you cannot produce? <i>Listen for (and potentially probe):</i></p> <p>14.1 <i>How about availability and access (walking time) to market,</i></p> <p>14.2 <i>Affordability of food items at the market?</i></p> <p>14.3 <i>Any seasonal changes?</i></p> <p>14.4 <i>Any informal system of trading/ selling/ bartering at community level?</i></p> <p>15. How do you store food after harvesting? <i>(listen for staples and vegetables, fruits, animal source foods)</i></p> <p>16. How long does the food you harvested last?</p> <p>17. What is the main (or other) sources of income in your household?</p>
Food Consumption (Diversity and Frequency) Q18-Q20
<p>18. We would like to know the number of meals household members eat every day. <i>(number/times of eating)</i> and how this differs in the lean and post-harvest season.</p> <p>18.1. So, how many meals do you usually eat during the post-harvest season?</p> <p>18.2. How does this change during the lean season?</p> <p>18.3. Is it different for certain household members, e.g., for pregnant women, breastfeeding women, or young children?</p> <p>19. Please think about times where there is enough/ plenty of food:</p> <p>19.1. What is a typical meal eaten in times of plenty in the morning, Please tell us about the different types of food in the meal. <i>(Meal composition.)</i></p> <p>19.2: at mid-day Please tell us about the different types of food in the meal. <i>(Meal composition.)</i></p> <p>19.3 And in the evening/night time? Please tell us about the different types of food in the meal. <i>(Meal composition.)</i></p> <p><i>(Probe for breakfast, lunch, supper, snacks, drinks, alcohol, teas and snacks)</i></p> <p>19.4 How does this change in the lean season?</p> <p>20. Are there certain pieces of meat or poultry that are given to certain person only? Please describe.</p>
Adolescent Nutrition (from adolescents' point of view) Q21-Q26
<p>21. Check if anyone in the group is going to school. If yes: What do you usually eat at school?</p>

- 21. 1 Does this change at different times of the year?
- 21.2. What is the change?
- 22. Does your school prepare any meals?
- 22.1. What do they usually serve you?
- 23. Do you parents usually give you something to take to school for drinking or eating?
- 23.1. What is it that they give you to eat or drink from school?
- 24. Is there any gardening at your school?
- 24.1. Are you involved?
- 24.2 Who is involved?
- 24.3 What do you grow there?
- 24.4. How is the food used that is grown there?
- 24.5. What have you learned from participating in the gardening?
- 24.6. Do you enjoy the activity? Why/not?
- 25. Have any of your teachers talked about good nutrition or how to avoid malnutrition to you at school?
- 25.1. What did they talk about?
- 26. Are there any health or nutrition services by the school or maybe the health facility that are for adolescents?
- 26.1. What are they?
- 26.2. Have you been part of this?
- 26.3. Did you like it?

Adolescent Nutrition (from carers' point of view) Q27-Q30

- 27. For parents: Do you have children at school and what do they eat at school?
- 27.1.Are you giving your children any food or drink when they go to school?
- 28. At the school of your children, is there any gardening activity?
- 28.1. Are you as a parent involved in this?
- 28.2 What do you grow there?
- 28.3 How is the food used that is grown there?
- 28.4 What have you learned from participating in the gardening?
- 28.5 Do you enjoy the activity? Why/not?
- 29. Are there any classes or teachers that talk about nutrition at the school of your children?
- 30. Are there any health or nutrition services by the school or maybe the health facility that are for adolescents?
- 30.1 What are they?
- 30.2 Have your children been part of this?

Pregnancy (from women's point of view) Q31-Q40 (some groups were asked Q38-40 only)

- 31. When did you know that you were pregnant?
- 32. Did anyone check your pregnancy?
- 32. 1 Why? Why not?
- 32.2. Who checked/ confirmed your pregnant? *listen for health facility, TBA/traditional birth attendant, etc.)*
- 32.3 Usually, How many months are you when you go there for the first time?
- 32.4 How many months was your pregnancy when you went for the first antenatal checkup (ANC)?
- 32.5 Who went with you?
- 33. How often did you visit there?
- 34. What are the things and services that you or other mothers in the area can receive from the health facility? *(listen for iron/ folic acid, deworming, TT vaccination, anti-malarial drugs, food rations or other feeding programmes, mosquito nets, mama kit, dignity kit, etc.)*
- 34.1 Did you or other mothers take them?
- 34.1.1. Why?
- 34.1.2. Why not?
- 34.2 Did you or other mothers share them?
- 34.2.1 Why?

34.2.2. Why not?

34.2.3. With who?

35. How do you use your insecticide treated bednet and why/not? (*listen for sleeping but also various uses.*)

36. Describe how you eat/ feed when pregnant and why? (check if answer misses any of the following points, if so then ask)

36.1 How many meals do/ did you eat per day and why?

36.2 How many cups of water or fluids do you take per day, why?

36.3 What foods do/did you or other mothers eat when pregnant and why?

37. What kind of advice related to health and nutrition (feeding) do you give to a woman when she is pregnant? Why?

37.1. What should or should she not do?

38. When a woman is pregnant, does she see anyone who checks her pregnancy?

38.1. Why?

38.2 Why not?

38.3 Who? (*listen for health facility, TBA/traditional birth attendant, etc.*)

38.4 Usually, How many months are women when they go there for the first time?

39. Describe how pregnant women should eat/ feed and why? (check if answer misses any of the following points, if so then ask)

39.1 How many meals do/ did should they eat per day and why?

39.2 How many cups of water or fluids should they take per day, why?

39.3 What foods should they eat when pregnant and why?

40. What kind of advice related to health and nutrition (feeding) do you give to a woman when she is pregnant? Why? What should or should she not do?

Pregnancy (from fathers' point of view) Q41-Q47

41. When did you know that your wife was pregnant?

42. When a woman is pregnant, does she see anyone who checks her pregnancy?

42.1. Why? Why not?

42.2. Who? (*listen for health facility, TBA/traditional birth attendant, etc.*)

42.3 Usually, How many months are women when they go there for the first time?

42.4 How many months was your wife when she went there for the first time?

42.5 Did you join her on the first visit to the health facility? What about other antenatal checkup visits? Why? Why not?

43. How often did she visit there?

44. Do you know the things and services that pregnant women in the area can receive from the health facility? (*listen for iron/ folic acid, deworming, TT vaccination, anti-malarial drugs, food rations or other feeding programmes, mosquito nets, mama kit, dignity kit, etc.*)

45. What were the things you do to support your pregnant wife that you heard from the health facility?

45.1 How easy or difficult was it for you to follow this advice? Please describe.

46. What things do you do to support a pregnant woman in your household? Why/ not?

47. What kind of advice related to health and nutrition (feeding) do you give to a woman when she is pregnant? Why?

47.1 What should or should she not do?

Health & Nutrition During Breastfeeding (Moms of U2 Years) Q48-Q52

48. Where did you deliver your baby, and why?

49. Who accompanied you to deliver your baby and why?

49.1. Did/are you taking any Iron and Folic acid (IFA) when you are breastfeeding (within 3 months after your baby was born)?

50. How do you use your insecticide treated bednet and why/not? (*listen for sleeping but also various uses.*)

51. What are you doing to maintain/ achieve good nutrition levels when you are breastfeeding? (*Note to interviewer: listen again and ask for additional information to 'consumption' section*)

52. How many cups of water or fluids do you take per day, why?
 52.1. Is this different when you are/ are not breastfeeding?

Health and IYCF Practices For Children Under 2 Years (0-23months) Q53-Q65

53. Please tell us about the **breastfeeding** experience of your youngest child right from the time when your baby was born.
- 53.1 How long after birth did you put the baby to the breast?
(listen for 'within one hour' = immediately)
 - 53.2 If not, why not?
 - 53.3 What helped you to breastfeed your baby immediately?
 - 53.4 What are babies usually given before they breastfeed the first time?
 - 53.5 Why given anything? Why not given anything?
 - 53.6 Do you breastfeed your baby every time she/he wants to breastfeed or before she/he cries for breastmilk? If no, why no?
54. When did/will you start giving your baby other foods and drinks on top of breastfeeding or any prescribed medicines (i.e., complementary feeding)? *(listen for the age and refer to this with the follow up question)*
55. Why do you start at this age? *(listen for 'advice by health worker etc.')*
- 55.1 What would make it easier for mothers to give only breastmilk for six months as advised by the health workers?
56. What foods/ liquids did/ do you feed first to your baby/ child? *(do not confuse with foods/liquids given immediately after birth)*
57. How many meals in a day does your baby/ child feed/ breastfeed? *(listen for differences for children aged below or above one year)*
58. Who prepares the food for the child/ baby and how is the food prepared? Is it the same food other HH members eat? Is the food mashed?
59. What kind of food is given to babies/ children?
60. If different foods: What are you doing to ensure that your baby eats different foods?
61. Who feeds the child/ baby when the mother is not feeding it?
62. Does the child/ baby eat from the same or a separate plate from other family members or children?
- 62.1 Is the food pre-chewed? *(listen for other ways to soften baby food like mashing or pounding)*
 - 62.2 In addition to family foods, what special foods are given to babies?
63. When did you completely stop breastfeeding your baby (approximate age of baby) and why?
- 63.1 Probe more for myths/ perceptions related to breastfeeding, breastfeeding during pregnancy, breastfeeding twins, when a mother or child is HIV positive or other diseases.
64. What do you do when your baby is sick and why?
- 64.1 If they mention get help or seek advice, ask from who/ where, do you seek advice and why?
65. Do you take your child regularly to the health facility?
- 65.1. Why?
 - 65.2. Why not?
 - 65.3 What kind of services does your child get there? *(listen for growth monitoring, immunization, vitamin A, deworming, etc.)*

Food restrictions/ food taboos Q66-Q68

66. What food restrictions do/ did you or other people in the community face? Please think about
- 66.1. Pregnant women,
 - 66.2. breastfeeding mothers,
 - 66.3. Young babies and children,
 - 66.4. The elderly,
 - 66.5. Adolescent girls or boys,
 - 66.6. Women in general,
 - 66.7. Men in general?
67. Which of these restrictions still being practiced now? *(listen for: only practiced in the past)*

68. What do you or other people in the community think about these food restrictions?

Gender, Engagement of Men In Nutrition, Decision Making Q69-Q77

69. Who is the head of your household? (Listen for other options than male and probe why)

70. We would like to hear about the roles that men and women have. What roles do men have? What roles do women have in the HH? Why?

71. What about young adults or teenagers, do girls and boys have different roles? What are they? Why?

72. How about in a household without a male (no male adult or teen)

73. After listening to answers, ask: what are the specific tasks that men/ fathers are doing to support in terms of nutrition related to pregnant women, breastfeeding women, babies/ young children, overall household?

Listen for: fetching water/ firewood, carrying heavy items, cooking, cleaning/ laundry, working in kitchen garden, feeding young children, constructing homes/ store. And listen for times WHEN men support (e.g., while a woman is breastfeeding, pregnant...)

73.1 What are the reasons that prevent men from doing certain tasks?

73.2 Are there exceptions (model men)?

73.3. Why are men who are models able to do these tasks?

74. Who makes which decisions and how are they made in your home? And why?

75. If not mentioned, ask for decisions related to the following:

- What to grow on the main field? In the kitchen garden?
- What to do with the harvest? (if sell, store, consume?)
- What to do with the money earned from selling?
- What foods to buy?
- What to cook?
- When to seek health care?
- When making large purchases/ investments or selling? (land, cattle, goats, bicycle, food stock, etc.)
- When making small purchases? (chicken, daily food, soap, etc.)
- What to do with food from the food store?

For one site per Sub-county (we will inform you on the day):

76. Who earns and controls money in the household?

77. Small activity with flipchart: during morning, day and evening/ night, how are women and men spending their time in terms of activities/ leisure time? (use stones and sticks to symbolize and take a picture)

WASH & Environmental Health Q78-Q85

78. Please explain when, how and why do you clean your hands?

79. What do you do for defecation? How and where do you dispose-off faeces?

79.1. If not using the latrine/ toilet, why?

80. Is there a handwashing station/ tippy tap nearby where you live?

81. What is the main source of water for drinking and cooking for your household and

81.1 what is the walking distance (one way)?

81.2 During the wet/ rainy season

81.3 During the dry season

82. How do you store your drinking water? Please describe.

83. Do you do anything with the water to make it safer for drinking?

84. How do you keep any left over, cooked food?

85. How do you keep small animals?

Coping Strategies and Current Practices Q86-Q88

86. We would like to know what are the practices and actions concerning food shortage and malnutrition. We would like to know what you do.

86.1. Let's start with what you do to prepare for times of food shortage, before it happens?

86.2. Before the situation is challenging,

<p>86.3. Then what you do when the situation becomes worse and</p> <p>86.4. also when it is extremely worse.</p> <p>87. Then, what practices are you and other people adopting to cope with food shortage and malnutrition? (Listen for period of scarcity)</p> <p>88. What is it that you and other people do in times of extreme food shortage? <i>(Probe whether they grow food crops, rear animals, or just buy food or others, food storage/ food preservation, food assistance, also borrowing, taking credit for food, gathering wild foods, check if the dietary diversity increases or decreases because of this)</i></p>
Recommendations/Suggestions Q89
89. What are the suggestions you have to overcome malnutrition in your community? <i>(Listen for suggestions focused on malnutrition, not only food sec)</i>
THANK YOU SO MUCH FOR YOUR PARTICIPATION

Annex 4B: Focus Group Discussion Consent form

INTERVIEWER'S NAME _____

NOTE TAKER(S): _____

DATE OF INTERVIEW _____

TIME STARTED _____ TIME ENDED _____

Introduction and consent

Good morning/afternoon, my name is _____ and my colleague is _____. We are from Welthungerhilfe (WHH). We would like to conduct a group discussion to better understand the nutrition situation in this area and we would like to hear your opinions and insights. We would like to use this information to plan better projects in the future. We, therefore, kindly request you to share your honest views on the different issues we will be discussing. Participation in this discussion is totally voluntary, you may leave at any time and your name will not be recorded. Therefore, if you choose not to participate, there will be no effect on your future relationship with WHH and any partner or any services. I also wish to assure all of you that if you accept to participate, the information given shall be kept strictly confidential and will only be used for the purpose of this exercise.

Do you consent to continue with the interview? 1=Yes 2=No

Do you have any questions before we begin? 1=Yes 2=No

Name _____ Signature _____

Additional agreement for children who are minors (Below 18 years):

As a legal representative of the listed minor (s), I herewith declare that I agree on all points of the above agreement.

Name of parent/legal representative _____ signature _____ Date _____

We would like to record this discussion using a small device or phone (show). It records your voices so that we can remember better later what we discussed about exactly. After we have finished our report, we will delete/destroy the recordings. The device does not take pictures of the faces of the group or anything else. Is it okay to use the device for this discussion? 1=Yes 2=No

Can we proceed with this discussion? 1=Yes 2=No

Thank you

Annex 5: Distribution of FGD participants across Moroto, Napak and Nakapiripirit districts

District	Subcounty	Parish	Villages	Respondents
Moroto	Katikekile	Musupo	Namuse	Fathers of U5 children (2 groups)
Moroto	Katikekile	Musupo	Lomunyenkirion	Pregnant mothers
Moroto	Katikekile	Kakingol	Lomuria	Breastfeeding mothers of U2 children
Moroto	Katikekile	Kakingol	Naro	Grandmothers of U5 children
Moroto	Katikekile	Kakingol	Nachochia	Adolescent girls 13-17 years
Moroto	Katikekile	Musas	Nakambi	Grandmothers of U5 children
Moroto	Katikekile	Musas	Nalooi	Breastfeeding mothers of U2 children
Moroto	Katikekile	Musas	Achukul	Pregnant mothers
Moroto	Rupa	Rupa	Looreng	Fathers of U5 children (2 groups)
Moroto	Rupa	Rupa	Kadilakeny	Pregnant mothers (2 groups)
Moroto	Rupa	Rupa	Nakiroro	Breastfeeding mothers of U2 children (2 groups)
Moroto	Rupa	Lobuneit	Kidepo	Adolescent boys 13-17 years
Moroto	Rupa	Lobuneit	Naturumurum	Adolescent girls 13-17 years
Moroto	Rupa	Lobuneit	Kwamong	Grandmothers of U5 children (2 groups)
Napak	Iriiri	Iriir	Aleklek	Pregnant mothers
Napak	Iriiri	Iriir	Kaulikiakine	Breastfeeding mothers of U2 children
Napak	Iriiri	Tepeth	Losikayit	Grandmothers of U5 children
Napak	Iriiri	Tepeth	Lojom	Adolescent girls 13-17 years
Napak	Lorengecora	Loret	Kanaitamee	Pregnant mothers
Napak	Lorengecora	Loret	Nabosa	Fathers of U5 children
Napak	Lorengecora	Kakipulat	Rapada	Breastfeeding mothers of U2 children
Napak	Lorengecora	Kakipulat	Katulatiang	Fathers of U5 children
Napak	Nabwal	Amedek	Lokachikit	Pregnant mothers
Napak	Nabwal	Amedek	Arengapuwa	Grandmothers of U5 children
Napak	Nabwal	Nabwal	Namorotot	Breastfeeding mothers U2 children
Napak	Nabwal	Nabwal	Kaarid	Fathers of U5 children
Napak	Nabwal	Kodike	Naboone	Grandmothers of U5 children
Napak	Nabwal	Kodike	Makok	Adolescent boys 13-17 years
Napak	Nabwal	Kodike	Kokuwam	Adolescent girls 13-17 years
Napak	Ngoleriet	Nagule angolol	Nagule angolol	Breastfeeding mothers of U2 children
Napak	Ngoleriet	Nagule angolol	Nakipomia	Adolescent girls 13-17 years
Napak	Ngoleriet	Kautakou	Lomusiya	Breastfeeding mothers
Napak	Ngoleriet	Kautakou	Lotikokin	Adolescent girls 13-17 years
Napak	Ngoleriet	Naoiikoru	Konyanga	Fathers U5 children
Napak	Ngoleriet	Naoiikoru	Lorimo	Grandmothers of U5 children
Napak	Ngoleriet	Naoiikoru	Kalochikit	Pregnant mothers
Nakapiripirit	Namalu SC	Lokatapan	Mwanakolong	Pregnant mothers (2 groups)
Nakapiripirit	Namalu SC	Lokatapan	Mwanakolong	Grandmothers of U5 years children (2 groups)
Nakapiripirit	Namalu SC	Lokatapan	Lomorunyangai	Breastfeeding mothers of U2 years (2 groups)
Nakapiripirit	Namalu SC	Lokatapan	Lomorunyangai	Fathers U5 for 12pm-2pm (2 groups)
Nakapiripirit	Namalu SC	Moru ajore	Loporokocho	Adolescent girls 13-17 years
Nakapiripirit	Namalu SC	Moru ajore	Loporokocho	Grandmothers of U5 children
Nakapiripirit	Namalu SC	Moru ajore	Okudud	Pregnant mothers
Nakapiripirit	Namalu SC	Moru ajore	Okudud	Adolescent girls 13-17 years
Nakapiripirit	Namalu SC	Moru ajore	Karwataluk	Fathers U5 year children

Nakapiripirit	Namalu SC	Moru ajore	Karwataluk	Pregnant mothers
Nakapiripirit	Namalu SC	Loperot	Nalait B	Grandmothers of U5 years children
Nakapiripirit	Namalu SC	Loperot	Nalait B	Breastfeeding mothers
Nakapiripirit	Namalu SC	Loperot	Apeichorait	Breastfeeding mothers of U2 years
Nakapiripirit	Namalu SC	Loperot	Apeichorait	Fathers U5 years children
Nakapiripirit	Namalu SC	Lomorimor	Nakuluny	Adolescent boys 13-17 years
Nakapiripirit	Namalu SC	Lomorimor	Nakuluny	Breastfeeding mothers U2 children
Nakapiripirit	Namalu SC	Lomorimor	Aoyalira	Pregnant mothers
Nakapiripirit	Namalu SC	Lomorimor	Aoyalira	Grandmothers of U5 children

Annex 6: CAN Secondary data collection tool

Indicators	Location				
Nutritional Status (children 0-59mths)	National %	Karamoja Region %	Moroto District %	Nakapiripirit district %	Napak District %
Global Acute Malnutrition (weight-for-height < - 2 SD)	3.2	11.9	10.8	10.3	9.4
Severe Acute Malnutrition (weight-for-height < -3 SD)	1	4.2	1.5	1.9	1.9
Stunting (height for age <-2 SD)	24.4	41.1	45.3	34.7	42.4
Underweight (weight for age <-2 Zscores)	9.7	30.4	35.1	25.6	28.2
Newborns with low birth weight (< 2,500 g)	10	11	5.4	4.7	3.6
Maternal nutrition	National %	Karamoja %	Moroto %	Nakapiripirit %	Napak %
Women (15-49 years of age) with low BMI (< 18.5)	9	27.1	7.8	10.2	5.4
Women (15 - 49 years of age) with very low BMI (<16)			4.9	4.9	2.7
Women (15 - 39 years of age) overweight BMI (25-30)	26.4	3.9			
Women (15 - 39 years of age) obese BMI (>30)	8.4	2.3			
Maternal (15-49 year) Anemia (Hb < 11 g/dL for pregnant women; < 12 g/dL for non-pregnant women)			29.6	61.4	19.7
MUAC below 23cm for Women of Reproductive Age			23.9	27.1	15.1
Women (15-49) took iron supplementations during pregnancy for 90 days	88.2	92.3	59.2	76	59.4
Maternal health	National %	Karamoja %	Moroto %	Nakapiripirit %	Napak %
First ANC in the first trimester	37.1		53.3	53.8	51.8
4 or more ANC complete visits	67.8		77.9	84.1	69.6
Delivered in health facility	73.8	81.8			
ITN use by Pregnantnant woman	80.3	72.6			
IYCF and anaemia	National %	Karamoja %	Moroto %	Nakapiripirit %	Napak %
Child (6-59 months) Anemia			35	79.3	27.9
Timely initiation of breastfeeding (within 1 hour of birth)	81.5%	85.1	76	93.8	86
Exclusively Breastfed (0-5 months)	94		73.8	72.9	84.5
Continued breastfeeding at 12-23 months	30.4		85.4	84	87.5
Minimum dietary diversity (MDD; 5 or more food groups) of children 6-23 mths	10	4.4	1.1	7.2	5.1

Minimum acceptable diet	7.3	4.4	1.1	3.3	0
Minimum Dietary Diversity Women (MDD W)			3.4	12.4	4.6
zero fruit or vegetable consumption			44.8	25.8	32.4
Child Health	National %	Karamoja %	Moroto %	Nakapiripirit %	Napak %
health workers/ 10 000 inhabitants	25.8				
Deworming 12-59 months	63.4		69.1	64.3	52
Prevalence of diarrheal diseases	19		12.9	17	12.9
Prevalence of fever	23		6.8	16.5	9.7
Prevalence of measles (vaccinated by card)	76.7	65.8	74.3	68.5	58.2
All basic vaccination	53.9				
Prevalence of ARI	8		2.7	3.6	2.4
Under 5 child mortality/1000	52				
Crude Mortality Rate, deaths/10000people/day			0.68	0.54	0.28
Under-five Mortality Rate deaths/10000people/day			0.94	0.77	0.31
Deworming 12-59 months			69.1	64.3	52
Maternal mortality /1000	0.32				
Number of Health facilities	6102	148			
Number of admissions per 1000 population	74	70			
WASH	National %	Karamoja %	Moroto %	Nakapiripirit %	Napak %
Access to improved drinking water sources	81.7		93.9	86.4	93.5
Take less than 30mins to collect water	54.3		69.7	58.2	53.8
Use appropriate method to treat drinking water	44.1	5.6	5.5	4.8	2.2
Own improved sanitation facility (toilet/latrine	30.9		17.9	11.5	4.3
Hand washing facility was observed	50.8	23.1			
Handwashing facility/place with water and soap	14	8.7	34.9	18	19.4
Coverage of latrines and toilets		35.3			
Prevalence of open defecation/bucket	5.4	61.6	64.7	68.7	78.1
Care/ Gender	National %	Karamoja %	Moroto %	Nakapiripirit %	Napak %
Female illiteracy rates (atleast primary education)			18	21.7	24.4
(HH head proxy for male)			18.8	30.5	26.8
Women who agree to beating from husband	32.8	20.5			

Men who agree to beat wives	29.8	18			
Alcohol consumption -men	33.8				
Alcohol consumption-women	11.3		76.6	57	54.1
Food Security and livelihood	National %	Karamoja %	Moroto %	Nakapiripirit %	Napak %
Food insecure households			4.6	15.3	10.1
Mildly food insecure households			7.5	19.9	9.8
Moderately food insecure households			18.4	16.8	17
Severely food insecure households			69.5	48	63.1
Access to land for agriculture			90.6	84.6	92.1
Ownership of kitchen gardens			55.3	15.8	45.9
Mean tropical livestock units			2.06	1.63	0.71
HH with food stock			31.5	18.7	26.5
Food stock lasting more than 2 months			7.6	30.1	16.3
Own production as main source of food			17	55.9	27.6
Mean Household Dietary Diversity Score			3.48	4.47	4.11
Livelihood coping strategy index, those without any coping strategy			55.2	44.5	

Annex 7: List of documents reviewed to gather secondary data

1. Catley, A., Arasio, R.L. & Hopkins, C. Using participatory epidemiology to investigate women's knowledge on the seasonality and causes of acute malnutrition in Karamoja, Uganda. *Pastoralism* **13**, 7 (2023). <https://doi.org/10.1186/s13570-023-00269-5>
2. Contextual Analysis of Nutrition in Karamoja 2016
3. IMAM guideline Uganda
https://library.health.go.ug/sites/default/files/resources/IMAM_Guidelines-for-Uganda-Jan-2016-FINAL-LORES2-2.pdf
4. Integrated Food Security Phase Classification Report, Karamoja, 2024
5. MOH, 2023, Uganda Annual Health Sector Performance Report 2022/23
6. MOH, 2023, Nutrition Annual Performance Report 2022/23
7. MOH, The National Essential Health Care Package For Uganda, Aug 2024
8. MOH, Uganda Food and Nutrition Policy, 2003
9. UBOS, 2022, Uganda Demographic and Household Survey report.
10. UBOS, 2024, Uganda National Housing and Population Census
11. MOH, OPM Uganda Nutrition Action Plan <https://scalingupnutrition.org/sites/default/files/2022-06/national-nutrition-plan-uganda.pdf>
12. WFP, OPM, MOH, MAAIF, IBFAN, UBOS, UNICEF, May 2023, Food Security and Nutrition Assessment Report
13. WHH, Moroto District WASH Asset Inventory Report, April 2024. Karamoja Uganda.
14. WHH. 2023 Multisectoral Needs Assessment
https://www.welthungerhilfe.org/fileadmin/pictures/publications/en/studies_analysis/2023-whh-uganda-karamoja-needs_assessment_report.pdf
15. UBOS, 2024, National Population and Housing Census, Preliminary Results
16. MOH, 2021, Maternal, Infant, Young Child, and Adolescent Nutrition (MIYCAN)

Annex 8A: Trends of key indicators for CAN themes in Karamoja Region- excerpt from FSNA 2023 report

Component	Indicator	2020	2021	2022	2023
Household Health, Water and Sanitation	HH with improved source of drinking water	82.5%	87.8%	91.7%	92.0%
	Percentage of HH with improved toilet facilities	14.2%	12.0%	9.7%	12.4%
	HH with handwashing places with soap and water	23.8%	45.3%	31.2%	30.0%
Food Availability	Percentage of HH who owns livestock	50.0%	48.3%	42.3%	34.6%
	Percentage of HH with access to agricultural land	88.5%	85.8%	85.9%	90.5%
	Percentage of HH with food stocks	65.5%	55.6%	35.3%	34.5%
	Percentage of HH who owns kitchen garden	18.7%	16.4%	12.0%	35.4%
Food Access	Percentage of HH with at least 1 income earner	86.2%	87.1%	84.4%	75.5%
	Percentage of HH with poor FCS	9.4%	8.5%	9.9%	19.5%
	Low Household Dietary Diversity Score	50.2%	38.7%	22.1%	8.2%
	Reduced Coping Strategy index (Medium + High)	23.2%	32.3%	35.4%	32.9%
	Percentage of HH Moderately Food Insecure	27.3%	37.3%	51.6%	51.4%
	Percentage of HH Severely Food Insecure	1.7%	9.1%	6.0%	11.5%
Maternal Health and Nutrition	Percentage of women with no formal education	78.4%	78.8%	77.0%	74.7%
	Pregnant women who went for 4+ ANC visits	62.4%	51.3%	66.2%	68.6%
	Percentage of women for first ANC visit at 1st trimester	50.4%	42.1%	52.7%	58.9%
	Percentage of women who took 90+ IFA during pregnancy of last birth	15.4%	20.4%	45.4%	49.8%
	Minimum dietary diversity for women	11.0%	13.4%	18.9%	9.4%
	Percentage of pregnant women aged 15-49 who, the night before the survey, slept under an ITN	53.3%	83.6%	-	69.2%
	Women of reproductive age who are underweight (BMI<18.5)	22.0%	25.1%	25.0%	28.9%
	Women of reproductive age who are anaemic	37.9%	42.5%	24.2%	37.3%
Child Health	Percentage of low birth weight	9.0%	8.2%	9.8%	7.5%
	Measles vaccination coverage	90.0%	86.2%	90.9%	94.6%
	De-worming coverage	87.1%	88.4%	93.2%	90.4%
	Vitamin A supplementation coverage	85.6%	87.4%	91.2%	88.9%
	Prevalence of diarrhoea in children	4.5%	16.3%	4.4%	2.7%
	Early initiation of breastfeeding within 1st hour	65.0%	59.9%	60.7%	76.9%
	Rate of exclusive breastfeeding below age of 6 months	64.0%	51.0%	61.1%	76.9%

Child Nutrition	Introduction of solid, semi-solid or soft foods (6-8 months)	75.0%	81.7%	72.7%	73.9%
	Children 6-23 months who got minimum meal frequency	23.0%	52.8%	28.7%	26.0%
	Children 6-23 months who got minimum dietary diversity	13.0%	8.8%	8.3%	6.0%
	Children 6-23 months who got minimum acceptable diet	5.0%	7.3%	1.8%	2.9%
	Continued breastfeeding at the age of 12 – 23 months	-	-	74.5%	81.8%
	Children under 5 years of age who are stunted	25.3%	22.1%	43.1%	40.4%
	Children under 5 years of age who are wasted	9.6%	8.7%	13.6%	11.3%
	Children under 5 years of age who are underweight	16.6%	18.9%	33.5%	29.5%
	Children under 5 years of age who are anaemic	60.0%	63.8%	38.0%	54.9%
Mortality Rate	Adult Crude Mortality Rate	0.54	0.74	0.72	0.63
	Under 5 Crude Mortality rate	1.05	1.15	0.96	0.86

Annex 8B: Combined (MUAC and or WHZ) prevalence of acute malnutrition, FSNA 2023

Sex and district	Prevalence of combined SAM	Prevalence of combined GAM	Underweight (Weight for age <-2 Z scores)	Stunting (height for age <-2 SD)
Sex				
Male	3.9% (3.2 – 4.9)	16.1% (14.5 – 17.9)	31.8% (29.5 – 34.3)	42.7% (40.3 – 45.2)
Female	3.4% (2.8 – 4.3)	16.6% (15.0 – 18.5)	27.4% (25.3 – 29.5)	38.4% (36.2 – 40.6)
District				
Abim	1.7% (0.8 – 3.7)	9.8% (7.8 – 12.5)	19.0% (14.6 – 24.4)	33.0% (27.4 – 39.2)
Amudat	2.9% (1.8 – 4.7)	14.9% (12.1 – 18.2)	27.2% (22.6 – 32.2)	33.3% (28.8 – 38.1)
Kaabong	4.9% (3.5 – 6.9)	23.5% (19.9 – 28.3)	34.3% (30.0 – 38.8)	38.5% (34.6 – 42.6)
Karenga	3.6% (2.1 – 6.0)	14.0% (10.8 – 18.1)	33.6% (29.3 – 38.3)	46.6% (42.4 – 50.8)
Kotido	3.6% (2.2 – 5.8)	19.9% (15.9 – 24.7)	37.1% (32.0 – 42.5)	51.0% (46.9 – 55.0)
Moroto	4.1% (2.5 – 6.6)	15.0% (10.8 – 20.4)	35.1% (28.8 – 41.8)	45.3% (38.2 – 52.7)
Nabilatuk	4.6% (3.1 – 6.9)	17.8% (14.3 – 22.0)	24.2% (20.5 – 28.3)	37.8% (32.9 – 43.0)
Nakapiripirit	4.4% (2.9 – 6.7)	16.9% (13.9 – 20.4)	25.6% (22.0 – 29.6)	34.7% (29.8 – 40.0)
Napak	3.5% (2.1 – 5.9)	14.2% (10.6 – 18.6)	28.2% (23.0 – 33.9)	42.4% (37.6 – 47.4)
KARAMOJA	3.7% (3.2 – 4.3)	16.4% (15.2 – 17.8)	29.5% (27.8 – 31.2)	40.4% (38.7 – 42.2)
National	1%	3.2%	10%	26%

Annex 8C: Hot spot areas identified during the FSNA 2023

District	Sub counties	Parishes	Villages
ABIM	Nyakwae, Alerek and Abim	Otumpili, Kawang and University	Otumpili central
AMUDAT	Loroo, Karita	Loborokocha, Namosing, Loroo	Loroo, Chukwar, Nabutiakwe
KAABONG	Kakama, Kaabong East, Kakile South, Lolelia and Kalapata	Morulem, Losogdo, Lomonye and Lokolia	Lomonye
KARENGA		Sarachom, Nakelio, Puda and Lobalangit	Nakelio north, Lokapuke, Nakoriamgorok, Nakelio south
KOTIDO		Lokadeli, Lokorein, Mooruitit	Loobore, Kapeelok, Clollaputh, Lokidorio, Nario and Lokadeli
MOROTO	Rupa, Nadunget, Lotisan, Tapach, and Loputuk	Komaret, Nachele, Lokeriaut	Nangomit, Lokeurumon
NABILATUK	Natirae, Kosike, Lolachat, Lorengedwat	Sakale, Lorukumo, Nakin and Lotaruk	Nangamit, Okutot, Nasinyoit B
NAKAPIRIPIT	Loreng, Loregae and Kakomongole, Moruita	Kobeyon and Loreng	Achelel, Loreng, Lokibuyo and Awoyalira
NAPAK	Lotome, Iriri, Loopei and Nabwal, Ngoleriet, Lokopo, Matany	Moruongor, Nariamaregae, Kalulegel east and Kalulegel West	Lotet, Nakale, Longaroi

Annex 9: Activities performed by men and women on a typical day in the three CAN districts.

Activities performed on a typical day by fathers of children in Aleklek, Napak district	
Morning activities	Activities at leisure time
<ul style="list-style-type: none"> • Sweeping the compound • Cooking porridge for the children • Washing utensils • Organizing the household • Cultivating the garden 	<ul style="list-style-type: none"> • Resting in the house after morning work • Visiting friends • Storytelling • Spending time drinking and selling local brew • Strolling for exercise
Afternoon activities	Activities at leisure/free time
<ul style="list-style-type: none"> • Cooking lunch • Gathering vegetables • Fetching firewood • Fetching water • Organising the house 	<ul style="list-style-type: none"> • Bathing • Taking rest • Serving and eating lunch • Visiting friends
Evening/night activities	Activities at leisure time
<ul style="list-style-type: none"> • Sweeping the compound • Washing clothes • Bathing children • Fetching water • Cooking supper • Washing utensils • Weeding the kitchen garden • Clearing the compound 	<ul style="list-style-type: none"> • Spending quality time with family • Making decisions with husbands • Chatting with neighbours • Going to sleep
Activities performed on a typical day by pregnant mothers in Kalochikit village , Naapk district	
Morning activities	Leisure time morning
<ul style="list-style-type: none"> • Sweeping compound. • Fetching water • Milking cows • Setting fire • Taking care of children like washing their faces and brushing teeth. 	<ul style="list-style-type: none"> • Washing clothes. • Fetching firewood. • Cleaning the house. • Resting and bathing.
Day time/ lunching time	Leisure time afternoon
<ul style="list-style-type: none"> • Gathering of green vegetables. • Drying ground nuts, sorghum and sunflower. • House maintenance. • Cooking food. • Washing clothes. 	<ul style="list-style-type: none"> • Resting • Playing with children. • Visiting friends. • Having fun with neighbors around
Evening time	Leisure time evening
<ul style="list-style-type: none"> • Planning and preparing food. • Bathing children and feeding them. • Organizing the bedding. • Grinding sorghum for eating. 	<ul style="list-style-type: none"> • Story telling (sitting around fire). • Discussing home issues with the partner. • Resting /sleeping.
Activities performed on a typical day by fathers with children under 5 years in Namuse village, Moroto district	
Morning activities	Activities at leisure time/free time
<ul style="list-style-type: none"> • Waking up children for school • Sweeping and slashing the compound • Going for gold mining • Cultivating in the garden • Watering vegetables 	<ul style="list-style-type: none"> • Bathing • Cleaning the chicken house and feeding • Visiting friends and relatives • Planting a kitchen garden

<ul style="list-style-type: none"> • Burning charcoal • Sending animals to graze • Engaging in casual labour 	<ul style="list-style-type: none"> • Drinking/sharing local brew as breakfast with friends/family
Afternoon activities	Activities at leisure time afternoon
<ul style="list-style-type: none"> • Hunting wild animals and birds for sale • Assisting women with chores • Cutting poles and grass for house construction 	<ul style="list-style-type: none"> • Checking on animals on the grazing land • Spending time with fellow men while drinking alcohol such as waragi and local brew • Playing games and storytelling with friends • Spending quality time with families • Chatting and relaxing/resting under trees
Evening/night activities	Activities at leisure time evening
<ul style="list-style-type: none"> • Bathing at home • Ensuring family is secured at home • Watering the kitchen garden 	<ul style="list-style-type: none"> • Socializing at drinking joints/groups • Sharing stories and making decisions at home • Eating supper and settling down to sleep

Annex 10: Mapping Matrix compiled from primary and secondary data collection

District	Stakeholder Name	Technical expertise	Geographical coverage
Moroto	CUAMM Doctors with Africa	Health	whole district
	Moroto Catholic Diocese	HIV/AIDS, Livelihood, Alcoholism control	whole district
	Aids Information Centre	SBCC, SRH (FP, Condom use promotion, HIV testing), Adolescent health	whole district
	Uganda AIDS commission	HIV/AIDs	whole district
	Dry Lands Project	HCT, Human resources for health	Nadunget
	KARUNA/Irish Aid	HIV/AIDS, HUMCs	whole district
	UNICEF	MCH, Nutrition, WASH	whole district
	IRC	ICCM, Cold Chain, FP	whole district
	UNFPA	SRH	whole district
	Straight Talk Foundation	SBCC for health	whole district
	WFP	Nutrition, HIV/AIDS	whole district
	C&D	WASH, Nutrition, Food Security	whole district
	Africa Action Health (AAH)	Livelihood for PLHIV	whole district
	CARE International	Nutrition and Food security	
	Mercy Corps	FSL, Nutrition, MCHN, WASH, governance	whole district
	Choose life Home based Care	Livelihood for PLWHA	whole district
	AMICAL, TASO	SBCC for HIV/AIDS	whole district
	Malaria Consortium	Malaria	whole district
	USAID-RHITES-E	HIV/AIDs	whole district
	JHPIEGO	MNCH	whole district
	Save the Children international	Nutrition and Livelihood	
	UNFPA	SRH/GBV	
	Food Rights Alliance	Nutrition and Livelihood	
	URC/FHI360	Family health	
	WHH	Nutrition, Agriculture, Livelihood, Infrastructure, WASH	
Nakapiripirit	CUAMM Doctors with Africa	TB	whole district
	IRC	HIV/AIDS	T/C & Namalu
	AMICCAL		whole district
	KARUNA/Irish Aid	HIV/AIDS	whole district
	BRAC	WASH, ECD, AYFS	T/C
	RADO	SBCC-HIV	T/C
	NAPHOFANO	HIV/AIDS	whole district
	Lady Queen of Justice	HIV/AIDS-psychosocial support	Marita
	C&D	Water	whole district
	AIC	HIV/AIDS	whole district
	CARITAS	Nutrition & WASH	whole district
	CRS-NUYOK	WASH	whole district
	AFI	Nutrition	whole district
	Reach A hand	SBCC-HIV for Youth	whole district
	UNYPA	HIV/AIDS	whole district
	Straight Talk Foundation	Education	whole district
	Obulamu		whole district
	Mercy Corps		Namalu TC

	Good people, Good Hope	General Health	Namalu TC
	Save the Children	WASH, ECD & ABEK	Moruita
	TASO	HIV/AIDS-psychosocial support	whole district
	ANECCA	TB/Leprosy	whole district
	Farm Africa	Livelihood	Moruita & Namalu
	CDFN-UN Women	GBV	Loregae, Namalu & Kakomongole
	Intrahealth	RMNCAH, HIV, Nutrition	whole district
	Malaria Consortium	Malaria	whole district
	UNFPA	SRH/GBV	
	USAID-RHITES-E	Lab services	Tokora lab hub
Napak	CUAMM Doctors with Africa	Health Systems Strengthening, MDR TB, RMNH	All HFs
	IDI	TB control (PACT Project)	Matany Hospital
	TASO	HSS, HIV/AIDS, TB	whole district
	UNICEF	MCH, Nutrition & Health	whole district
	UNFPA	SRH/GBV	whole district
	WFP	Nutrition	whole district
	VSO	ASRH	3/10 S/Cs
	Marie Stopes	FP (RISE Project)	whole district
	CRS/CARITAS	Health through outreach	whole district
	Self Help Africa	Agriculture	
	CARE International	Nutrition & Food security	

Annex 11: CAN Validation workshop action plan

Nakapiripirit district

Recommendation	Doable Actions	Time frame	Persons/sectors/department responsible
General Nutrition situation	<ul style="list-style-type: none"> Community sensitization through the VHTS, DHE, Health assistants, CDOs. Screening at all entry points i.e. U5s, pregnant and lactating Referral of the identified cases. Engagement of stakeholders; parish and sub county levels. Advocating for 2% utilization on nutrition. 	Jan-Mar 2025	CDO'S, DHE, DNFP, H/AS, All SACAOs.
MIYCAN practices	<ul style="list-style-type: none"> Conducting inception meeting with the district stakeholders Training of VHTs and mother care groups. Sensitization of the communities Monitoring and Evaluation 	Jan 2025	DHO, DNFP, ADHO-MCH, VHTs, DEO, DIS
Food security and livelihoods	<ul style="list-style-type: none"> Training of farmers on post-harvest handling and storage. Running of key messages on Radios especially on Early warning system Promote the production of diversified nutritious crops like ground nuts and tubers to improve the dietary diversity at HH level. 	Aug 2025	DPO
WASH	<ul style="list-style-type: none"> Conduct stakeholders engagement on Sanitation promotion. Home improvement campaign. Training of water user committees on operational and maintenance of water sources 	Mar 2025	DHO, DWO
Gender	<ul style="list-style-type: none"> Sensitization of communities on their gender roles and responsibilities. Male engagement on positive parenting. Runnng spot messages on family planning 	Apr-May 2025	DCDO, H/As
Cross cutting issues	<ul style="list-style-type: none"> Gender mainstreaming Environment conservation TB/HIV collaboration Disaster risk 	June-July 2025	DCDO Environment officer HIV/TB Focal persons

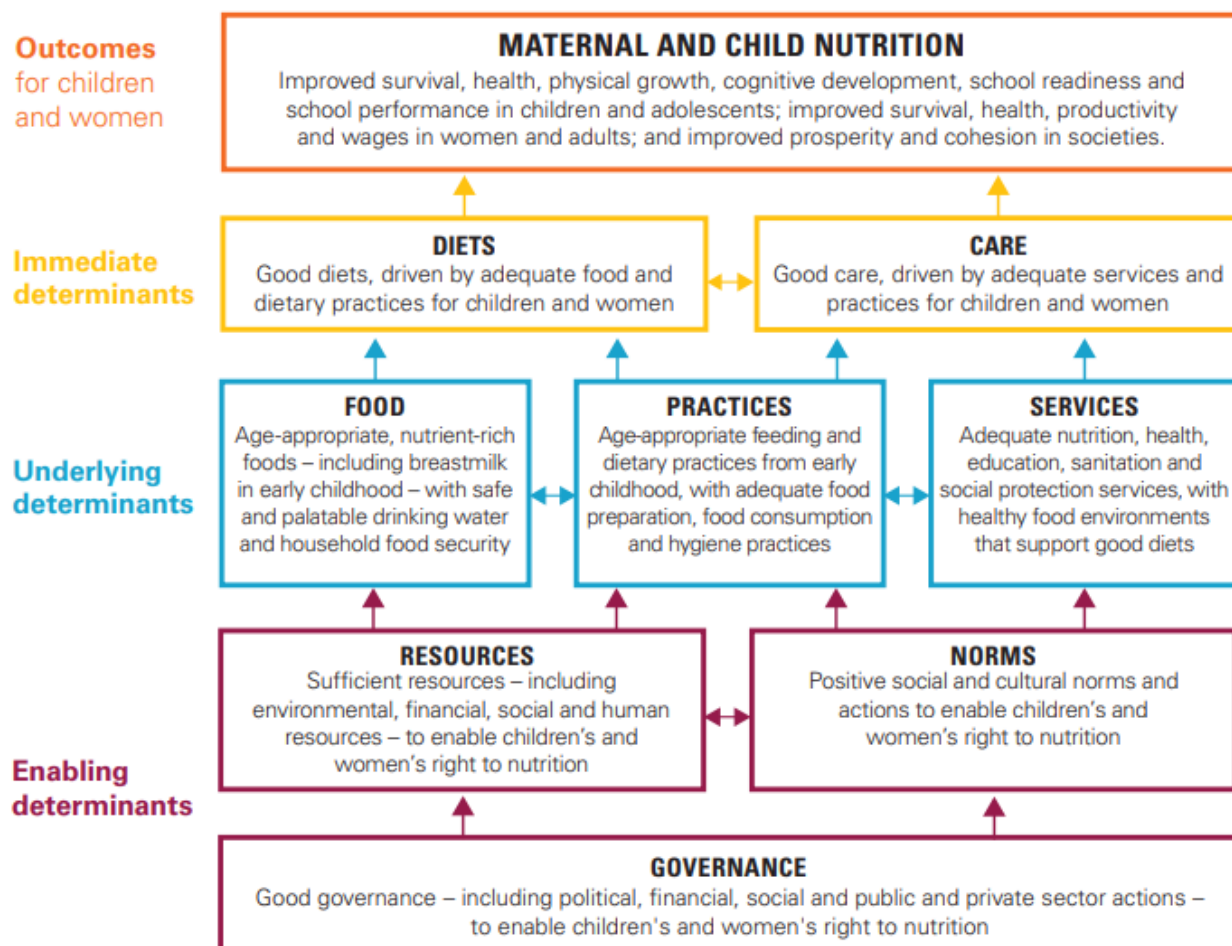
Moroto district

Recommendation	Doable Actions	Time frame	Persons/sectors/department responsible
General Nutrition situation	<ul style="list-style-type: none"> Strengthen coordination for nutrition among stakeholders at all levels. Joint monitoring of nutrition actions. 	Quarterly	Administration
MIYCAN practices	<ul style="list-style-type: none"> Refresher trainings of community health and nutrition structures on MIYCAN. Scale up care group approaches to improve health and nutrition practices. 	Biannual	Health and community-based services
Food security and livelihoods	<ul style="list-style-type: none"> Training on post-harvest handle and storage. Promote production of diverse nutritious crops. Enacting by-laws on sale of produce Scale up support towards VSLA initiatives and contingency planning at HH level 	Quarterly	Production
Alcoholism	<ul style="list-style-type: none"> Integrate sanitization on the dangers of alcoholism to other mass community sanitization drives. Formulation of bylaws and audiencias drives 	Quarterly	Community based services and health
WASH	<ul style="list-style-type: none"> Use of influential leaders/cultural leaders to break cultural beliefs. Do benchmarking on previous interventions to draw learnings and best practices. Improve access to clean and safe water 	Continuous	Water
Gender	<ul style="list-style-type: none"> Promote male engagement initiatives. Discourage child marriages to promote better child care. Promote parental counselling to scale up good child care practices 	Continuous	Community based services and health
Cross cutting issues	<ul style="list-style-type: none"> Design, translate, procure, and popularize IEC materials to improve SBC. Involve the community resource persons to disseminate the SBC messages Refresher training of community structures on SBCC actions 	One off Continuous	Community based services and health
Education	<ul style="list-style-type: none"> Scale up and revitalize school gardens. 	Termly	Education

Napak district

Recommendation	Doable Actions	Time frame	Persons/sectors/department responsible
General Nutrition situation	<ul style="list-style-type: none"> Strengthening nutrition governance structures from district to parish levels. Influential leaders at all levels of the community should support the campaign of WASH and Nutrition Through leading by example. Fast tracking alcohol and WASH ordinances that was sent to solicitor general office (Kampala). 	Jan-Mar 2025 Immediate Continuous	DCDO, SACAOs DNCC (CAO), SNCC (SACAO) PNC (PARISH chiefs) DHO and DHT, LC V, RDC, DPC. CAO, LC V.
MIYCAN practices	<ul style="list-style-type: none"> Conducting Community dialogues on Nutrition and WASH from district to Village level. Capacity building of Health workers, VHTs on Nutrition and WASH Orientation of DNCC/SNCC Formation of NUTRITION and WASH education and community clubs. 	On going	
Food security and livelihoods	<ul style="list-style-type: none"> Expand trainings on PHH and storage with emphasize on animal source foods. Regulate the sale of agricultural produce by enacting and enforcing by-laws prohibiting excessive sale of produce with in and out of the regions. 	Quarterly Immediate and continuous	Agricultural Officers Technical and political leaders at all levels
WASH	<ul style="list-style-type: none"> Conducting meetings to influence cultural and political leaders in sanitation promotion. formation and training of sub county water and sanitation committees. Formation and training of sub county and parish WASH Committees Advocate for independent funding for environmental health 	Quarterly Jan 2025 3 rd quarterly 2024/2025 onwards	Health assistants, inspectors, CDOs, parish Chiefs. Health assistants, CDOs. ADHO-EH.
Gender	<ul style="list-style-type: none"> Community sensitization on joint and informed decision making Promote male involvement in positive parenting Community dialogues on harmful social norms and practices e.g. Child marriages and teenage pregnancies, courtship rape and widow inheritance Dissemination of parenting guidelines or good child care practices Community sensitization on ownership and sustainability of livelihood initiatives like PDM, EMYONGA SEGOP, PWD grants, UWEP. 	Continuous May 2025 Immediate and Continuous	Political leaders at all levels DCDO, P/O and CDOs
Cross cutting issues	<ul style="list-style-type: none"> Collaboration with sub county authorities to enact By-laws and involve community leaders at different levels during the reinforcement. By laws against deforestation Mitigation on climate change. Promote education for all school going age children. 		

Annex 12: UNICEF conceptual framework on the determinants of maternal and child nutrition



UNICEF Conceptual Framework on the Determinants of Maternal and Child Nutrition, 2020.
A framework for the prevention of malnutrition in all its forms.

Terms of Reference

Consultancy for the Context Analysis of Nutrition in Karamoja

Project UGA 1127 B.L 3.1

Background

Welthungerhilfe (WHH) has been operational in Uganda since 1980s implementing a range of multisectoral projects in Food security and livelihoods, WASH, infrastructure and skills in Karamoja, West Nile, Teso, Central and Fort Portal/ Rwenzori regions.

With the WHH's core goal to fight hunger and malnutrition in all its forms, WHH focuses more on understanding the situation and needs of the people it works with on the ground in their specific context to find answers that take their interests into account and adapt to Programming towards Improved Nutrition (PtIN) initiative. PtIN aims to bring effective and sustainable improvements in nutrition among the most vulnerable groups of the local population.

This therefore requires an in-depth understanding of the situation, context and the impacts on nutrition, including causal pathways of hunger and malnutrition, existing local resilience strategies, challenges to overcome the burden of malnutrition and a suitable way to improve nutrition through conducting contextual analysis of nutrition (CAN), which is one central element under PtIN.

Objective of the consultancy

To support the context analysis of nutrition exercise in Karamoja (Moroto, Napak and Nakapiripirit) and write a report on the secondary and primary data with key recommendations for nutrition programming.

Location: Moroto Field Office

Method

The exercise (data review, data collection analysis and report writing) will be in accordance with key thematic areas of the CAN i.e.

- i. General nutrition situation
- ii. Health and IYCF indicators for children under 2 years
- iii. Food consumption (Diversity and frequency)
- iv. Food security and livelihoods
- v. Gender related indicators
- vi. Nutrition status of women of reproductive age
- vii. School nutrition
- viii. WASH and Environmental health
- ix. Nutrition Policies, Legislative Environment, Right to Food
- x. Nutrition Stakeholders and coordination mechanisms

Specific tasks

An experienced and qualified nutrition consultant will work closely with the nutrition coordinator to:

- i. Review secondary data and describe the nutrition situation and trends, at national, regional and district levels (Moroto, Napak and Nakapiripirit), compilation and presentation of the standard nutrition indicators based on secondary data.
- ii. Identify and document the nutrition policies/strategies at national and district level or lower levels.
- iii. Extract, for an overview, the policy and strategy level nutrition landscape of the country, including national legislation related to the human right to adequate food.

- iv. Data analysis and triangulation of primary qualitative data in Karamoja from the 03 districts of Moroto, Napak and Nakapiripirit.
- v. Conduct workshops with the WHH staff and district stakeholders to review and validate the assessment findings.
- vi. Write a CAN report (Revised and finalized) and based on the CAN findings, provide concrete recommendation(s) for sustainable nutrition programming in the target area.
- vii. Presentation of CAN report findings to WHH and to stakeholders.

Activity timelines

The entire exercise will take 30 days.

Assessment Outputs

- i. Populated/ finalised excel dashboard for CAN (Secondary data)
- ii. Data compilation, triangulation and analysis workshop.
- iii. A validation and dissemination workshop.
- iv. Final report of the contextual analysis of nutrition with all findings and recommendations by.
- v. Abridged version of the CAN report/PowerPoint presentation
- vi. Consultancy/activity report of what and how the work was done.

Requirements and qualifications

The consultant should have a first higher degree in nutrition or public health nutrition, Experience of over 5 years in conducting nutrition surveys and assessments or similar tasks.

The consultant will be evaluated based on technical understanding of the assignment, experience, qualifications, consultancy fees and tax compliance)

Timelines and responsible persons

Task	Responsible person
TORs and contract development for consultant and enumerators	Nutrition coordinator
Preparing presentations and inception talks with district and stakeholders in the 3 different districts	RNA and Nut Coordinator
Contracting/hiring the consultant	Logistics, HR, HoP, Nut Coordinator
Briefing consultant on the review exercise	Nutrition Coordinator
Contracting enumerators	Nut Coordinators and MEAL
Selection and mobilising of respondents for FGDs and KIIs	All field support staff and Nut coordinators especially KIIs (VcA, SRAPLEA, Lokere project, Charity water, Emergency project)
Training of enumerators	MEAL, Nut Coordinator
Secondary data review and populating the CAN excel data sheet	Consultant with the Nut Coordinator
Data collection and supervision	Nut Coordinators, WHH staff participating i.e. MEAL
Data compilation, triangulation, and analysis workshop	All project field officers, HoPs facilitated by the Nutrition Coordinator and Consultant
Secondary data review and report writing	Consultant
Preparing PPT presentations for Validation, preliminary findings, and dissemination.	Consultant and Nutrition Coordinators
Submission of reports (CAN report and activity report) from the consultant.	Consultant and final review of the report done by RNA, Regional Manager and Nutrition Coordinator
Payment of consultant and enumerators	Finance and HoPs

We welcome and address complaints

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