



## **KARENGA DISTRICT LOCAL GOVERNMENT**

**District Vision:** A literate, socio-economically enabled and prosperous district by 2040

**Mission Statement:** To promote socio-economic development through coordinated excellent service delivery in line with national policies.

# **KARENGA DISTRICT MULTI-HAZARD CONTINGENCY PLAN**

**FIVE (5) 2021-2025**

## TABLE OF CONTENTS

LOCATION OF KARENGA DISTRICT IN UGANDA .....	6
MAP OF KARENGA DISTRICT .....	7
Approval Statement .....	8
Acknowledgement .....	9
Executive Summary .....	10
List of acronyms .....	12
GLOSSARY OF KEY WORDS AND TERMINOLOGIES .....	14
CHAPTER 1: INTRODUCTION AND BACKGROUND .....	15
1.1 Background .....	15
1.2 Location .....	16
1.3 Topography .....	16
1.4 Climate .....	16
1.5 Soil.....	16
1.6 Vegetation and protected areas.....	17
1.7 Winds.....	17
1.8 Water Catchment Areas .....	17
1.9 Demographic characteristics .....	18
1.10 Socio-Economic context .....	19
1.11 Tourism Opportunities .....	20
1.12 Technical Services & Works Department .....	21
Roads .....	21
Bridges.....	21
1.13 Natural Resources and Environment .....	22
Status of Environment and Natural Resources in Karenga District: .....	22
Factors for Environmental Degradation .....	23
1.14 Water and Sanitation Sector .....	24
1.15 Health Sector .....	26
Disease Burden .....	26
1.16 Education and Sports Sector .....	27
Distribution and Enrollment of Educational Institutions in the district .....	27
Source: District Education Office .....	28
School Establishment:.....	28
CHAPTER 2 - SITUATIONAL ANALYSIS .....	30
2.1 Situational Analysis of disaster issues .....	30
CHAPTER THREE: VISION, GOAL AND OBJECTIVES OF THE CONTINGENCY PLAN .....	50
3.1. Vision .....	50

3.2 Overall Goal .....	50
3.3 Strategic Objectives .....	50
3.3.1 Strategic Objectives and actions .....	50
Strategic objective 2 .....	50
Strategic objective 3 .....	51
<b>CHAPTER 4: MANAGEMENT AND CO-ORDINATION ARRANGEMENTS .....</b>	<b>52</b>
Stakeholder Analysis .....	52
Karenga District SWOT analysis for Drought .....	55
<b>KARENGA DISTRICT IMPLEMENTATION STRUCTURE OF CONTINGENCY PLAN .....</b>	<b>58</b>
Roles of Disaster Response Teams .....	59
<b>CHAPTER V: CAPACITY PLANNING MATRIX .....</b>	<b>65</b>
<b>ANNEXI: Definition of Hazard Triggers and thresh holds for activation .....</b>	<b>78</b>
<b>Karenga District Local Government Contingency Planning Team .....</b>	<b>88</b>

## LIST OF TABLES

Table 1: Table showing administrative units of Karenga District .....	15
Table 2: Table showing the coverage of protected areas in Karenga District .....	18
Table 3: Table showing District Land Area, Household and Population Density .....	18
Table 4: Table Showing the District Population as of 2020 by Sex and Sub-County .....	19
Table 5: Table showing the Composition of the Road Network in the District and condition .....	21
Table 6: table showing the Condition and Type of Bridges in Karenga District .....	21
Table 7: Table showing the Safe water Points by Type and Sub County in the District ....	24
Table 8: Table showing the Additional Information .....	25
Table 9: Table Showing the Distribution of Health Facilities by levels and Health sub-districts in Karenga District 2020 .....	26
Table 10: Table showing the Top 10 causes of morbidity and Mortality in Karenga district by percentage, 2018/2019 .....	26
Table 11: Table showing the Educational institutions by type and sub-county in the district .....	28
Table 12: Table showing the institution types .....	28
Table 13: Table showing the additional information .....	29
Table 14: Table showing the Risk Assessment .....	30
Table 15: Table Showing Probability of Occurrence in Karenga District .....	31
Table 16: Table showing early warning signs -Problem Animals (Wildlife) .....	33
Table 17: Table Showing Hazard Analysis -Problem Animals (Wildlife) .....	34
Table 18: Table Showing Vulnerability Analysis -Problem Animals (Wildlife) .....	34

Table 19: Table Showing Coping Mechanisms -Problem Animals (Wildlife) .....	35
Table 20: Table Showing Priority Areas for response-Problem Animals (Wildlife) .....	35
Table 21: Table Showing Early Warning Signs- Cattle Raiding/ Rustling: .....	36
Table 22: Table Showing Hazard Analysis- Cattle Raiding/ Rustling .....	36
Table 23: Table Showing Vulnerability Analysis - Cattle Raiding/ Rustling .....	36
Table 24: Table Showing Coping Mechanisms- Cattle Raiding/ Rustling .....	37
Table 25: Table Showing Priority Areas for Response- Cattle Raiding/ Rustling .....	37
Table 26: Table Showing Early warning signs - Environmental degradation .....	37
Table 27: Table Showing Hazard Analysis- Environmental degradation .....	38
Table 28: Table Showing Vulnerability Analysis- Environmental degradation .....	38
Table 29: Table Showing Coping Mechanisms- Environmental degradation.....	38
Table 30: Table Showing Priority Areas for Response- Environmental degradation .....	39
Table 31: Table Showing Early warning signs - Prolonged dry spell/Drought.....	39
Table 32: Table Showing Hazard Analysis- Prolonged dry spell/ Drought .....	40
Table 33: Table Showing VULNERABILITY ANALYSIS- Prolonged dry spell/ Drought spell/Drought.....	41
Table 35: Table Showing Coping Mechanisms- Prolonged dry spell/ Drought t .....	41
Table 36: Table Showing Priority Areas for Response- Prolonged dry spell/ Drought spell/Drought.....	41
Table 37: Table Showing Early warning signs - Human Epidemic .....	42
Table 38: Table Showing Hazard Analysis- Human Epidemic .....	42
Table 39: Table Showing Vulnerability Analysis- Human Epidemic.....	43
Table 40: Table Showing COPING MECHANISMS- Human Epidemic .....	43
Table 41: Table Showing Priority Areas for Response- Human Epidemic .....	43
Table 42: Table Showing Early warning signs - Animal Epidemic .....	44
Table 43: Table showing hazard analysis- Animal Epidemic.....	44
Table 44: Table Showing Vulnerability Analysis- Animal Epidemic.....	45
Table 45: Table Showing Coping Mechanisms- Animal Epidemic .....	45
Table 46: Table Showing Priority Areas for Response- Animal Epidemic.....	45
Table 47: Table Showing Early warning signs - Land Conflicts .....	46
Table 48: Table Showing Hazard Analysis- Land Conflicts .....	46
Table 49: Table Showing Vulnerability Analysis- Land Conflicts .....	46
Table 50: Table Showing Coping Mechanisms- Land Conflicts .....	47
Table 51: Table Showing Priority Areas for Response- Land Conflicts .....	47
Table 52: Table Showing Early warning signs - Crop Epidemic.....	47
Table 53: Table Showing Hazard Analysis- Crop Epidemic.....	48

Table 54: Table Showing Vulnerability Analysis- Crop Epidemic.....	48
Table 55: Table Showing Coping Mechanisms- Crop Epidemic .....	48
Table 56: Table Showing Priority Areas for Response- Crop Epidemic.....	49
Table 57: Table Showing Stakeholders analysis .....	52
Table 58: Table Showing District SWOT Analysis for Drought .....	55
Table 59: SHOWING THE Capacity planning matrix for priority sectors .....	65
Table 60: Table Showing Definition of Hazard Triggers and Thresholds for Activation: ....	80
Table 61: Table showing Hazards cycle and Timeframe in Karenga District Local Government .....	87
Table 62: Table showing the District contingency planning team.....	88

# LOCATION OF KARENKA DISTRICT IN UGANDA

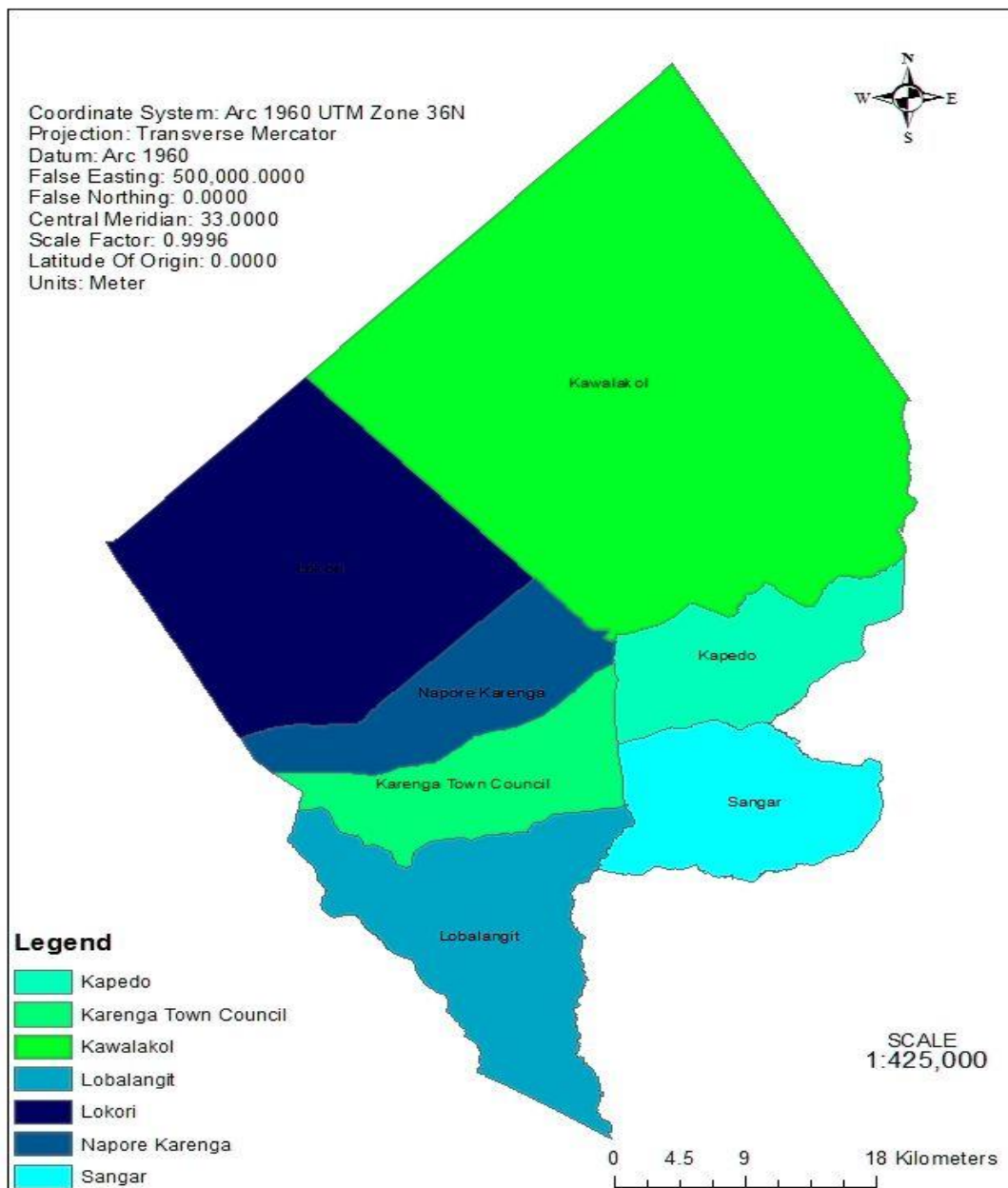


The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.  
 Creation: 12 May 2020 Sources: UBOS Feedback: IM Team Uganda (ugakaimug@unhcr.org) | UNHCR BO KAMPALA



# MAP OF KARENGA DISTRICT

## KARENGA DISTRICT MAP

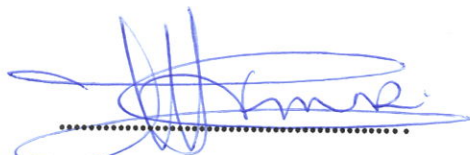


## APPROVAL STATEMENT

Karenga District Local Government recognizes the importance of District Contingency Plan and Disaster Management and Preparedness which is a mandatory requirement under the Ugandan Constitution and the National Policy for Disaster Preparedness and Management, 2011.

The Karenga District Multi-Hazard Contingency Plan provides for a coordinated response to the anticipated potential emergencies to address the humanitarian needs of those adversely affected. In line with the district vision and the mission and in conformity to the National Development Plan (NDPIII), and Vision 2040. District Contingency Plan (DCP) 2020/2021 - 2024/2025 has formulated strategies that aim to integrate disaster and climate issues in the District Development Plan 2020/21 - 2024/25.

This document is for use by all Heads of Departments and partners under the coordination of the Office of ACO, District Early Warning Focal Point Person and District Planning Department. The district Contingency Plan enjoys the support of Karenga District Local Government, Government of Uganda. The implementation and maintenance of the Plan is the responsibility of Karenga District Local Government.



Felix - M. LOCHALE



**Chairperson LCV of Karenga District Local Government**





## ACKNOWLEDGEMENT

On behalf of Karenga District Local Government, I wish to express sincere appreciation to the key stakeholders who provided their valuable inputs and support to this Disaster Management Plan of Karenga District.

I especially extend my sincere thanks to the Heads of Departments, and Section Heads who actively participated in the formulation of this very important document, being the first of a kind in the District.

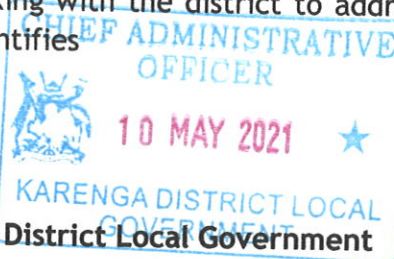
I commend the formulation of this district contingency plan to all development partners especially World Food Programme (WFP) for funding this process. Special appreciation goes to Office of the Prime Minister (OPM) for providing technical guidance during the process of formulating the plan.

In the same spirit, I wish to thank all those who have contributed in one way or the other to the formulation of this plan, but most especially the District Disaster Management Committee (DDMC), District and Sub county Technical staff and political leaders who endeavoured to provide wealthy information that has been put together to formulate this plan.

I further invite them to continue working with the district to address the various measures and actions that the plan identifies

MUKOSE JONATHAN HOSEA.





Chief Administrative Officer, Karenga District Local Government



## EXECUTIVE SUMMARY

This multi hazard contingency plan is in response to the National Policy for Disaster Preparedness and Management, with the purpose to have a prepared district for disaster management by counteracting vulnerability at community and local government levels, reducing the impact of hazards where possible through mitigation, prediction, early warning, preparedness and response. This plan has been prepared in close collaboration and coordination with OPM and support facilitation from WFP and Karenga District Local Government.

**The District Contingency Plan is presented in 6 chapters;**

**Chapter one** has details of the introduction, background literature and location of Karenga District. It explains all the natural resources (topography, climate, vegetation & protected areas, soil, winds wetland & water catchment areas) demographic characteristics and its distribution, socio-economic context, tourism opportunities, technical services, health, water & sanitation, education and sports, environment sectors and the status of environment and natural resources.

**Chapter two** gives an elaborate situational analysis of the hazard issues in district. It gives the assessment of the possible disasters or hazards in the district and the analysis of the top eight. It explains the vulnerability analysis, copying mechanisms and early warning signs of each identified hazards in the district and priority areas for response in the eventuality of the hazards or disasters.

**Chapter three** is basically highlight the vision, goal and general objective of the contingency plan. The chapter also has the strategic objectives, and actions of the plan. The vision of the Plan is “A Disaster prepared and resilient Community of Karenga District”. While the goal is “To strengthen communities, Lower and Local Government structures, Non-governmental organizations engaged in management and response to disaster in Karenga District”.

**Chapter four** identifies all development partners and programmes in the district, the activities implemented, and giving an understanding of the capacity of the District. This has been done by enlisting the organizations/stakeholders, sector involved in and activities being implemented. They include both local and international stakeholders. This chapter highlight an illustration of the district implementation structure of the contingency plan. It also gives a clear guidance on

how the resilience capacities available will be guided to resist and respond to systematic and sudden shocks the district may suffer. It will guide management and coordination from the OPM down to the Village Disaster Management Committee (VDMC) and vice versa. The Chapter also identifies and explains some key roles and responsibilities of DDMC on district capacity assessment gaps which need addressed in preparation for readiness to manage the emergency humanitarian situations which may arise for an effective disaster management in the district.

**Chapter five** has the capacity planning matrix. It seeks to operationalize the plan, basing on the district's capacity to respond to the possible hazards. It stipulates the strategic objectives, operational objectives, activities, personnel, focal/supporting entities, disaster phase, location, time start, duration and budgets for each of the five key sectors identified (Management and coordination, food security, water and sanitation, health and education).

**Chapter six has the appendices.** This includes the definition of hazards triggers and threshold for activation, it also highlights the hazard cycle and timeframe in the district and district planning team.

## LIST OF ACRONYMS

CAO	Chief Administrative Officer
CBS	Community Based Services
DEC	District Executive Committee
DMC	Disaster Management Committee
DMMC	District Disaster Management Committee
DEWFP	District Early Warning Focal Person
DEO	District Education Officer
DEO	District Environment Officer
DHO	District Health Officer
DIO	District Information Officer
DLG	District Local Government
ECD	Early Childhood Development
FAO	Food and Agricultural Organization
GoU	Government of Uganda
HCS	Health Centre's
HHs	Households
HRV	Multi-hazard, Risk, and Vulnerability
KDDMC	Karenga District Disaster Management Committee
KDLG	Karenga District Local Government
LC	Local Council
LLG	Lower Local Government
MDAs	Ministries, Departments and Agencies
MoH	Ministry of Health
NGO	Non-Government Organization
NFA	National Forestry Authority

OPM Office of the Prime Minister  
PWDs People with Disabilities  
PFO Principal Finance Officer  
RDC Residence District Commissioner  
SCDMC Sub-County Disaster Management Committee  
S/C Sub-County  
SGBV Sexual Gender Based Violence  
SAS Senior Assistant Secretary  
TC Town Clerk  
T/C Town Council  
UNRA Uganda National Roads Authority  
UNICEF United Nations Children’s Fund  
UWA Uganda Wildlife Authority  
UBOS Uganda Bureau of Statistics  
VDMC Village Disaster Management Committee  
VHT Village Health Teams  
WASH Water Sanitation and Hygiene  
WHO World Health Organization  
WFP World Food Programme

## GLOSSARY OF KEY WORDS AND TERMINOLOGIES

1. **Hazard** is a potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.
2. **Risk** is a probability of a hazard occurring or threatening to occur.
3. **Vulnerability** refers to the propensity of exposed elements such as human beings, their livelihoods, and assets to suffer adverse effects when impacted by hazard events.
4. **Climate variability** refers to the climatic parameter of a region varying from its long-term mean. Every year in a specific time period, the climate of a location is different. Some years have below average rainfall, some have average or above average rainfall.
5. **Disaster** is a progressive or sudden widespread or localized, natural or human-caused occurrence which causes or threatens to cause death or injury, damage to property, infrastructure or environment, disruption of life of a community and its magnitude exceeds the ability of those affected to cope using only their own resources.
6. **Disaster management** is a continual and integrated multi-sectorial and multidisciplinary process of planning and implementation of measures aimed at disaster prevention, mitigation, preparedness, response, recovery, and rehabilitation.
7. **Mitigation** means structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation, and technological hazards.
8. **Preparedness** means activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.
9. **Response** means measures taken during or immediately after an incident or a disaster in order to bring relief to affected communities or individuals.

10. **Adaptation** means the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

## CHAPTER 1: INTRODUCTION AND BACKGROUND

### 1.1 BACKGROUND

Karenga district was created out of Kaabong District by an Act of the Ugandan Parliament on 15th June 2019 and became operational in 1<sup>st</sup> July 2019. Karenga district is part of Karamoja sub-region which is found in north eastern Uganda. The district is made up of two Constituencies; Napore West and Dodoth West, three Town Councils of; Karenga, Kapedo and Kidepo Town councils) and seven sub-counties namely Karenga, Lokori, Kakwanga, Lobalangit, Sangar, Kapedo and Kawalakol. 41 Parishes/wards and 242 villages. The district covers a total Land area of 3,193 Sq Km with a population density of 18.57 (*UBOS Projections 2021*)

**Table 1: Table showing administrative units of Karenga District**

Constituency	Sub County	Number of Parishes/wards	Number of villages/cells
Dodoth East	Kapedo T/C	3	26
	Kapedo S/C	3	21
	Kawalakol S/C	6	44
	Sangar S/C	6	34
	Kakwanga S/C	3	15
	Lobalangit S/C	6	36
Napore West	Kidepo T/C	5	17
	Lokori S/C	2	15
	Karenga S/C	3	14
	Karenga TC	4	20
<b>Total</b>		<b>41</b>	<b>242</b>

*Source: Planning Unit, 2020/2021*

## 1.2 LOCATION

The District borders with S. Sudan in the North, Kaabong in the North East, Kotido in south East and Kitgum in the South. The proposed District headquarters is located approximately 12 kilometres by road from Karenga Trading Centre; the coordinates of the district are: 3.56760 N 33.69512 E.

## 1.3 TOPOGRAPHY

The stratum of Karenga District comprises principally of the Pre-Cambrian system. Other groups of rocks from the Mesozoic and Cenozoic eras are associated with volcanic eruptions in the District, producing mountains of Morungole. The altitude of Karenga ranges between 100m to 2500m above sea level with the highest points found on the border with Sudan and Kenya. Most of Karamoja forms part of the plateau comprising a number of levels that represent several stages of transition of structures of the ancient basement rock.

## 1.4 CLIMATE

The rainfall regime in Karenga District is bimodal and highly variable and unreliable, ranging between 500 - 1000mm rainfall per annum on averages with peaks in the month of April and May, a short dry spell between June and July and a second rainy season is from August to September. The main dry season occurs in October-February. The daily temperatures during the rain seasons range from 20°C to 32°C; with relative humidity about 60% between June and July. The dry season is characterized and dominated by very hot and intense North Easterly Monsoon winds which push the temperatures between 35-40°C.

## 1.5 SOIL

Karenga has three major types of soils, namely Ferralitic, vertigos and ferruginous tropical soils. Less common types include litho soils. The genesis of soils in Karenga district has been affected by many factors such as climate, elevation, type of parent rock, vegetation covers, topography, aggravation and erosion processes. The dominant ferruginous soils have been degenerated by weathering processes and have become less productive. Ferralitic soils also occur in small patches in Karenga Sub-County and are in more advanced stages, their productivity depending on favourable rainfall, adequate depth and maintenance of humid top soils which



are unfortunately lacking in this area. Stoney litho soils occur along the up-warped surface on the eastern side of the district. All the soils of Karenga are of low to medium productivity with mono-cropping currently being practiced. Much of the soil has lost its fertility and sheet erosion due to torrential rains and strong winds has carried away top soil leaving the less fertile soil. The soil cover is also deteriorating with over-grazing, exposing it to agents of erosion.

## 1.6 VEGETATION AND PROTECTED AREAS

The vegetation pattern is typically semi-arid with dry tree savannah species dominating grass species. The main vegetation communities in the district include forests at high altitudes (dry montane forests), savannah woodland, semi evergreen thicket around Karenga, deciduous thickets, riparian communities, grass steppes. Forests are found on localized patches of hills and mountains such as Mt Morungole. The natural forests have cassia siamea and eucalyptus. The forest and woodland account for 2,324 km<sup>2</sup> (18%). Of this, 213,726ha are for central government and local forest reserves comprise 41 ha, together about 16.7% of the national total forest cover.

## 1.7 WINDS

Strong winds are a common occurrence in Karenga district in the sub-counties of Kawalakol, Kapedo and Sangar. In 2019, strong winds blew off roofs in Kapedo sub-county. Winds are usually very strong at the onset of the dry season, originating from the East, crossing the mountains of Morungole and lowala and gaining momentum from Kawalakol and Kapedo Sub Counties.

The average hourly wind speed in Karenga experiences significant seasonal variation over the course of the year. The windier part of the year lasts for 3-5 months, from October to March, with average wind speeds of more than 3 miles per hour. The windiest day of the year is March with an average hourly wind speed of 6.4 miles per hour.

## 1.8 WATER CATCHMENT AREAS

The main wetland system in the district is Karenga wetland. It is located at the footstool of Kidepo National Park. The wetland lies in a flat area marked with number of hills with an altitude of between 1000 to 1500 meters above sea level. The wetland drains south west wards following the topography of the area, which

risers from east to west and subsequently several seasonal streams rivers and flow from east to west into the plains of Teso sub region. Some of the dominant vegetation families include *Poaceae*, *Fabaceae* (*Mimosoideae* and *Papilionoideae*) and *Anacardiaceae*. The general species are *Acacia*, *Sporobolus*, *Hyparrhenia*, *Combretum* and *Lannea* while the most abundant species are *Themeda triandra*, *Hyparrhenia filipendula*, *Setaria sphacelata*, *Hyperthelia dissoluta*, *Brachiaria brizantha* and *Lannea humilis*. The wetland enjoys a connection with the Kidepo national park and thus has a variety of small mammals, birds within the wetland.

**Table 2: Table showing the coverage of protected areas in Karenga District**

S/N	Protected Area	Unit Measure	Area Coverage
1	Kidepo Valley National Park	Hectare	144,475
2	Karenga Community Wildlife Management	Hectare	95,600
3	Lwala Forest Reserve	Hectare	5, 884
4	Morungole Forest Reserve	Hectare	15, 063
5	Nyangia-Napore Forest Reserve	Hectare	47,741
<b>Total</b>			<b>287,816</b>

*The source: Natural Resource department, 2020/202*

### 1.9 DEMOGRAPHIC CHARACTERISTICS

The district has a total population of 59,300 people in 2020 (*UBOS projection 2020*). The population comprised of 29,057 men and 30,243 women. The district has 10,404 households as per the UBOS projection 2020. The district comprised of 100% (59,300 people) rural population. The population is growing at 6.2% annually hence it is anticipated that the population would be More than double every after 10 years which is dangerous to the development of the district. As of today, the total population was estimated at 59,300 people. The district has a very high fertility rate of 7.8 children per woman which is far above the rate of investment in service provision like water, health, education.

**Table 3: Table showing District Land Area, Household and Population Density**

S/N	Sub County	Land Area / (Squared Km)	Population Estimates	Population Density
1	Kawalakol S/C	1,114	16,400	14.72

2	Kapedo S/C	102	5,845	57.30
3	Sangar S/C	185.2	6,300	34.02
4	Lobalangit S/C	182.2	7,354	40.36
5	Karenga S/C	328	3,948	12.04
6	Karenga TC	644	5,452	8.47
7	Lokori S/C	342	7,456	21.80
8	Kakwanga S/C	105.6	1,546	14.64
9	Kidepo T/C	132	244	1.85
10	Kapedo T/C	58	4755	81.98
<b>TOTAL</b>		<b>3,193</b>	<b>59,300</b>	<b>18.57</b>

*Source: Planning unit Department 2020/2021*

**Table 4: Table Showing the District Population as of 2020 by Sex and Sub-County**

KARENGA DISTRICT POPULATION ESTIMATES 2021					
S/N	Sub County/Town Council	Males	Females	Total	Households
1	Kapedo S/C	2,864	2,981	5,845	1,025
2	Kawalakol S/C	8,036	8,364	16,400	2,877
3	Sangar S/C	3,087	3,213	6,300	1,105
4	Lokori S/C	3,653	3,803	7,456	1,308
5	Karenga S/C	1,935	2,013	3,948	693
6	Karenga T/C	2,671	2,781	5,452	956
7	Lobalangit S/C	3,603	3,751	7,354	1,290
8	Kakwanga S/C	758	788	1,546	271
9	Kidepo T/C	120	124	244	43
10	Kapedo T/C	2,330	2,425	4,755	834
<b>TOTAL</b>		<b>29,057</b>	<b>30,243</b>	<b>59,300</b>	<b>10,404</b>

*Source: UBOS Projections 2021*

## 1.10 SOCIO-ECONOMIC CONTEXT

Crop production is the backbone of livelihoods of the population in Karenga District with over 80% involved while 20% are typically involved in livestock production. Maize, sorghum, beans and sweet potatoes are the major crops grown in that order of importance; for both food and income of farm households. The average land

holding is three (3) acres per household. Over 95% of the farmers are mainly practicing subsistence farming with some few commercial farmers engaged in cotton production. To ensure production of crops in high quantities and quality to meet institutional and individual goals, the crop sector has to function efficiently in guiding policy and planning; disseminating early warning information; creating awareness and enforcement of crop laws, regulations and standards; responding swiftly to pest and disease outbreaks; guiding stakeholders on sustainable use of land; maintaining a farmers' register; promoting farmer institutional development and, generally; promoting farming as a business.

The livestock majorly reared include cattle, goats, sheep and poultry, mostly in the sub counties of Kawalakol, Kapedo and Sangar. Piggery is also one of the economic activities in the district, most people are involved in piggery project and it's sold locally within and outside the district.

There is also extraction of sand, clay and stones as building materials from wetlands. The boda-boda industry which is fast growing employs most of the youth in the growing centres. There is also a fast-growing informal sector (roadside markets, vendors etc.) that employs many of the residents in the District.

Brick laying is also one of the major economic activity in the district, with over 30% being mostly youth who dropped out of school. The bricks are sold within the district since there is a lot of infrastructural development currently taking place like buildings.

Beekeeping is also practiced as an alternative source of livelihoods in the district. The enterprise is majorly carried out for honey production with minimal value addition on other bees' products such as wax, propolis, venom etc. 70% of the harvested honey is sold locally within the region and the rest sold to other districts in the Country. The bees further assist in pollination of crops in the district for better yields.

### **1.11 TOURISM OPPORTUNITIES**

Kidepo Valley National Game Park, covers around 1,442km<sup>2</sup>, takes about 45% of estimated land in the district. It is one of the major revenue points of the district, most Sub Counties around the Park receive revenue from the Park. The tourism

industry in Kidepo has boosted businesses around the Park especially the restaurant and Hotel businesses. Tourism, one of the fastest growing industries in the country, has the potential to boost economic growth in Karenga district. With a considerable wealth of biodiversity, the district has much to offer in the way of wildlife tourism

## 1.12 TECHNICAL SERVICES & WORKS DEPARTMENT

### ROADS

Good road infrastructure is a key ingredient in stimulating socio-economic development in the district. Road infrastructure supports the mobility of people, goods and promotes efficient agricultural and industrial activities within the district. Karenga district has three categories of roads composed of 27 km of national roads, 196 km of feeder roads and 345.5 km of community access roads.

The general condition of the road network fair for truck roads and poor for district roads and community access roads (CARs). Karenga district lies in the lowest points of Morungole Hills, allowing large volumes of water to flow under gravity. The soils are generally loam and loose thus being washed away by water.

Table 5: Table showing the Composition of the Road Network in the District and condition

Sn	Category	Paved Ne	Unpaved Netw	Total (Km)	Road Condition In %		
					Good	Fair	Poor
1	Urban Roads	0	27	27	77.2	4.7	18.1
2	District Road	0	196	196	32	16	51.9
3	CARs	0	345	345	19.4	23.1	57.4

Source: Works Department 2020/2021

### BRIDGES

Table 6: table showing the Condition and Type of Bridges in Karenga District

No	Name of Bridge	Type of Structure	Road Name	Sub-county	Chainage(Km)	Condition of Structure
01	Nalakas	Girder Bridge	Nalakas	Kapedo	0+36	Good
02	Kalimon	Minin Irish	Kalimon	Sangar	0+9	Poor

03	Nakudongolol	Box Culver	Nakudongolol	Kapedo	0+31	Poor
----	--------------	------------	--------------	--------	------	------

### 1.13 NATURAL RESOURCES AND ENVIRONMENT

Karenga District is endowed with lots of natural resources. These include the vast land, natural trees, wetlands, and many other seasonal streams.

#### STATUS OF ENVIRONMENT AND NATURAL RESOURCES IN KARENGA DISTRICT:

The majority of the populations in the district, 90 %, depends on the environment and natural resources for their livelihood, 100% are involved in agriculture (Crop and livestock production). This means that the state of the environment has a huge implication for poverty alleviation.

Poverty and environmental degradation are linked in a vicious circle in which people cannot afford to take proper care of the environment. Poverty has remained a major cause and consequence of environmental degradation and natural resource depletion.

Most if not all of the households in the district depend on wood fuel (firewood and charcoal) for cooking. It, therefore, follows that the degradation of the environment and the natural resources leads to low productivity and consequently low income that contributes to poverty and low standards of living of the people of Karenga District.

The impact of environmental degradation on the poor is twofold, namely poor health problems and low productivity. Poverty in turn affects the environment negatively concerning constrained time horizons and risk strategies. The Poor who struggle at the edge of subsistence levels of consumption and preoccupied with the day to day survival have limited scope to plan and make natural resource investments (such as informing of soil conservation) that gives positive returns only after several years. Secondly, the usage of natural resources by the poor is greatly affected by the fact that there is no other livelihood. Sustainable economic and

social development of Karenga District largely depends on the exploitation of its environmental and natural resources. However, the increasing degradation of these resources coupled with increasing climate variability and climate change is beginning to have a serious negative impact on the Districts social and economic development and the livelihoods of its people.

The ecological contribution to the environment through nutrient acquisition, processing and recycling are significant. Therefore, the sustainable management and use of wetlands are paramount for the sustainable development of the district. Despite the importance of wetlands, they continue to disappear at alarming rates, mainly attributed to their direct consumptive use-value. The effort of the Environment Sub-sector to improve the environmental conditions contributes to productivity and poverty eradication.

Shea trees (*Vitellaria paradoxa*) grows naturally in grasslands and does not need irrigation, fertiliser, or pesticides. It survives in very arid areas and its thick bark protects it from bush fires. Living for 300 years or more, habitats of Shea trees can act as carbon sinks. Shea has significant ecological and economic potential for livelihood improvements; all parts of the tree can be used, including the fruit, roots, leaves and bark; the Shea fruit is of particular importance due to the oil extracted from it, which has enormous nutritional and health benefits besides being a source of income. In Karenga District the fruits are harvested from wild trees between April and September, mainly by women and children. Throughout the Shea belt, which runs west to south-east across Karenga District, Shea fruit is an important nutritional resource as it can be harvested during the annual ‘hungry season’.

## **FACTORS FOR ENVIRONMENTAL DEGRADATION**

Several driving forces have contributed to environmental degradation in Karenga district although the district is endowed with several natural resources. These include:

- High population pressure and the high dependence on the environment and natural resources for livelihood
- Unsustainable harvesting and utilization of natural resources

- High poverty levels
- Low levels of environmental awareness at community levels
- Trade-in natural resources and their products across the district boundaries

#### 1.14 WATER AND SANITATION SECTOR

The water indicators show a gradual decline water access for all the sub counties in the District in the previous 5 years. Karenga District has average safe clean water of about 61 % due to the low underground potential and hilly nature of the district, most settlements are surrounding the hills as a result of insecurity. The option is always used to save the population of Karenga district which is deep Boreholes. Karenga district has 158 functional boreholes & 35 non-functional boreholes, 2 main piped water systems and 5 mini water systems serving a population of 500 - 600, Out of 9 motorized boreholes 4 are functional and 5 are non-functional to provide water to the communities. 6 shallow wells which are non-functional, 1 wind mill which is non-functional. Karenga also has 132 deep wells where 29 are non-functional.

Water Service boards comprising of sub-county leaders and representatives have been formed and trained by NGO's like C & D and Whave Solution and a representative from the Karamoja Umbrella to oversee general management and ownership by water user committees already set in place, these community structures play a big role in community mobilization.

**Table 7: Table showing the Safe water Points by Type and Sub County in the District**

Sources/Sub Counties		Borehole	Tap Stands	Protected Springs	Kiosks	% coverage
Kapedo S/C	Number	4			0	
	No of Population served	1,400				
Kawalakol S/C	Number	25			0	
	No of Population served	6,300				
Sangar S/C	Number	30			0	
	No of	5,950				



	Population served					
Karenga S/C	Number	15			0	
	No of Population served	4,200				
Lokori S/C	Number	20			0	
	No of Population served	4,900				
Karenga T/C	Number	12	300		0	
	No of Population served	5,452				
Lobalangit S/C	Number	30			0	
	No of Population served	8,400				
Kapedo T/C	Number	22	5			
	No of Population served	4,900				
Kakwanga S/C	Number	5				
	No of Population served	1,050				
Kidepo TC	Number	7				
	No of Population served	2,450				
Total District Population served per water point=45,002						

**Table 8: Table showing the Additional Information**

Content	Number
Number of boreholes newly drilled	9
Number of boreholes rehabilitated	21
Number of water samples collecting for testing	200

Percentage of Latrine coverage	35%
Number of function water user committees	200
Percentages of households using handwashing facilities	62%

### 1.15 HEALTH SECTOR

Karenga has 10 health facilities. These include 1 HCIV, 3 HCIIIs and 6 HCIIIs. The District has no hospital, and the only health centre four (HCIV) is located in Karenga Town Council. The population that moves more than five kilometres to access health services is less than 20%. The health facilities are operated and manned by government.

Below shows the number of health facilities and their distributions in Karenga district by level and location.

**Table 9: Table Showing the Distribution of Health Facilities by levels and Health sub-districts in Karenga District 2020**

Facility	Govt	PNFP	PFP	NGO	Total	Sub County	Names
Hospital	0	0	0	0	0	Not available	Not available
HC IV	1	0	0	0	1	Karenga TC	Karenga HCIV
HC III	3	0	0	0	3	Kapedo, Kawalakol, Lobalangit	Kapedo, Kocholo, and Lobalangit HCIIIs
HC II	6	1	0	0	6	Kapedo, Sangar, Lokori, Karenga and Kawalakol.	St. Jude, Lokori, Kidepo, Pire, Kocholo and Kalimon HCIIIs
<b>TOTAL</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>		

Source: District Health Office

### DISEASE BURDEN

The biggest burden of disease in Karenga district is attributable to preventable and communicable diseases. Table 10 lists the commonest causes of morbidity and mortality in Karenga district.

**Table 10: Table showing the Top 10 causes of morbidity and Mortality in Karenga district by percentage, 2018/2019**

Rank	Disease	Diagnoses	Percentage
1	OPD malaria (total)	40065	49%

2.	Respiratory tract infection other than Pneumonia	13562	17%
3.	Diarrhea	4743	6%
4.	Skin diseases	3391	4%
5.	Moderate acute malnutrition	3346	4%
6.	Pneumonia	2849	3%
7	Urinary Tract infection	2390	3%
8.	Other eye infection	2170	3%
9.	Intestinal worms	1622	2%
10.	Malaria in pregnancy	1288	2%

In general, there is a significant reduction in death cases due to improved health care services provision and community sensitization on quality of life in the past year in Karenga District.

Malaria is still the leading cause of morbidity and mortality in the district as observed in the table above. This is followed by numbers of Respiratory tract infection, Diarrhoea, Skin disease, cough or cold, and intestinal worms respectively. Most of these causes are preventable, thus the need to focus on preventive measures is very high.

Also, a number of the conditions like intestinal worms, gastrointestinal disorders and other eye conditions are attributed to poor sanitation including inadequate safe water for use and consumption in homesteads. This is because Karenga District is a water-stressed area. To tackle these diseases, there is an urgent need to improve safe water coverage in the district.

### 1.16 EDUCATION AND SPORTS SECTOR

Education and Sports department is mandated to coordinate education and sports services in the district through provision of primary and secondary education which are offered by government-aided and community institutions at all levels in the district.

#### DISTRIBUTION AND ENROLLMENT OF EDUCATIONAL INSTITUTIONS IN THE DISTRICT

Karenga district currently has seven (7) sub-counties and three (3) Town Councils, 33 Parishes and 288 villages. The District has 58 ECD Centers, 04 Community Primary Schools, 21 Government aided Primary schools and 01 government-aided secondary schools.

The table below shows the distribution of Primary, as well as community primary and Secondary schools, by Sub Counties in Karenga district.

**Table 11: Table showing the Educational institutions by type and sub-county in the district**

SN	Sub county	ECD	Primary	Secondary	Tertiary	Community Primary
1	Kapedo S/C	3	1	0	0	0
2	Kapedo TC	6	2	0	0	0
3	Kidepo TC	0	1	0	0	0
4	Kawalakol S/C	11	3	0	0	0
5	Sangar S/C	7	4	0	0	1
6	Lokori S/C	5	1	0	0	1
7	Karenga S/C	6	2	0	0	1
8	Karenga TC	8	3	1	0	0
9	Kakwanga s/c	4	1	0	0	0
10	Lobalangit	8	4	1	0	1
TOTAL		58	22	2	0	4

**SOURCE: DISTRICT EDUCATION OFFICE**

#### SCHOOL ESTABLISHMENT:

The education department has 333 out of 367 positions filled. This makes 90.7 %. Most positions are vacant in primary schools as well as in secondary Education, with 58.8% and 41.2 % respectively

**Table 12: Table showing the institution types**

S/No	Institution Type	Establishment	Filled	Vacant	Annual Pay
1	Primary	331	311	20 (6.1%)	93.9%
2	Secondary	36	22	14 (38%)	61.1%

TOTAL	367	333	34(9.3%)	90.7%
-------	-----	-----	----------	-------

**Table 13: Table showing the additional information**

Content	Numbers
Average years of schooling from	16
School Enrolment	18,411
School dropout rate	37%
School completion rate	3%
Literacy rates	70%
PLE, UCE & UACE Results	45%
Pupil classroom ratios	1:67
Pupil-teacher ratios	1:70
Pupil stance ratios	1:64
Pupil textbook ratios	1:8
No of schools with substantive head teachers	21
No of schools with sufficient teacher accommodation	00
No of vocational schools in the district	00
No of teachers recruited (Primary, secondary & tertiary)	333
No of ECDs	58

## CHAPTER 2 - SITUATIONAL ANALYSIS

### 2.1 SITUATIONAL ANALYSIS OF DISASTER ISSUES

#### 1. Hazard identification for each district

1. Problem animals
2. Cattle Raids
3. Prolonged dry spell/Drought
4. Human Epidemic
5. Animal Epidemic
6. Crop Epidemic
7. Environmental degradation
8. Land conflicts

**Table 14: Table showing the Risk Assessment**

Hazard	Likelihood	Severity of Impacts	Relative Risk	Vulnerable Sub- Counties
	Relative likelihood this will occur	Overall Impact (Average)	likelihood x Impact Severity	
	1 = Not occur 2 = Doubtful 3 = Possible 4 = Probable 5 = Inevitable	1= Very Low	<b>1-10 = Low</b>	
		2= Low	11-20 =Moderate	
		3= Moderate	21-25 = High	
		4 = High		
		5= Very High		

Prolonged dry spell	5	5	25	Lokori, Karenga, Karenga T/C, Lobalangit, Kakwanga Sangar, Kapedo, Kapedo T/C, and Kawalakol
Problem animals	5	4	20	Lokori, Karenga, Karenga T/C, Lobalangit, Kakwanga s/c, Kapedo T/C, Sangar, Kapedo s/c Kawalakol s/c
Environmental degradation	4	4	16	Kapedo s/c, Kapedo T/C Kawalakol, Sangar, Karenga s/c
Animal Epidemics	5	5	25	Lokori, Karenga s/c, Karenga T/C, Lobalangit, Kakwanga, Sangar, Kapedo s/c, Kapedo T/C, Kawalakol
Crop pests and diseases	3	4	12	Lokori, Lobalangit, Kakwanga, Sangar, Kawalakol, Kapedo T/C, and Kapedo s/c
Epidemics (Human)	5	3	15	Lokori, Karenga, Karenga T/C, Lobalangit, Sangar, Kapedo, Kawalakol
Cattle raids	5	5	25	Lokori, Karenga s/c, Karenga T/C, Lobalangit, Sangar, Kapedo, Kawalakol
Land conflicts	3	3	9	Lokori, Karenga s/c, Karenga T/C, Lobalangit, Sangar, Kapedo, Kawalakol

### Key for Relative Risk

	High
	Moderate
	Low

**Table 15: Table Showing Probability of Occurrence in Karenga District**

No.	Hazard	Areas prone to specific	Effects of the hazards	Number of affected
-----	--------	-------------------------	------------------------	--------------------

		hazards		population/areas
1	Prolonged dry spell	Lokori, karenga s/c, karenga tc, lobalangit, sangar, kapedo, kawalakol	<ul style="list-style-type: none"> <li>• Deterioration of livestock body condition and death</li> <li>• Crop withering and low yield</li> <li>• Quality &amp; quantity of water decrease</li> </ul>	District population 68,500 (Male= 34,800, Female=33, 700)
2	Problem animals (Wildlife)	Lokori, karenga s/c, karenga tc, lobalangit, sangar, kapedo, kawalakol	<ul style="list-style-type: none"> <li>• Death of people resulting from the animal attack</li> <li>• Pressure on land for settlement and agriculture</li> <li>• Food insecurity</li> <li>• Accidents</li> <li>• Zoonotic Diseases</li> </ul>	District population 68,500 (Male= 34,800, Female=33, 700)
3	Environmental degradation (bush burning, deforestation, quarrying, over grazing,)	Kapedo, Kawalakol, Sangar, Karenga s/c	<ul style="list-style-type: none"> <li>• Interference with water patterns</li> <li>• Reduction in productivity</li> <li>• Conflict due to competition over remaining environmental resources such as trees for fuel</li> <li>• Energy scarcity</li> <li>• Water scarcity</li> <li>• Drought</li> <li>• Land degradation</li> <li>• famine</li> </ul>	District population 68,500 (Male= 34,800, Female=33, 700))
4	Human and Animal Epidemic	Lokori, karenga s/c, karenga tc, lobalangit, sangar, kapedo,	<ul style="list-style-type: none"> <li>• Increased household expenditures on health</li> <li>• Loss of production time</li> <li>• Loss of lives</li> <li>• Malnutrition</li> <li>• Loss of income</li> </ul>	District population 68,500 (Male= 34,800, Female=33, 700))



		kawalakol	<ul style="list-style-type: none"> <li>• Famine</li> </ul>	
5	Cattle raids	Lokori, karenga s/c, karenga tc, lolangit, sangar, kapedo, kawalakol	<ul style="list-style-type: none"> <li>• Loss of lives</li> <li>• Destruction of property</li> <li>• Interruption of economic activities</li> <li>• Reduced household income</li> <li>• Loss of animals</li> <li>• School dropouts</li> </ul>	District population 68,500 (Male=34,800, Female=33,700)
6	Land conflicts	Lokori, karenga s/c, karenga tc, lolangit, sangar, kapedo, kawalakol	<ul style="list-style-type: none"> <li>• Insecurity</li> <li>• Death</li> <li>• Fights</li> <li>• Low productivity</li> <li>• Eviction</li> </ul>	District population 68,500 (Male=34,800, Female=33,700)
7	Crop Epidemics	Lokori, lolangit, sangar, kawalakol, Kapedo	<ul style="list-style-type: none"> <li>• Low yield and productivity</li> <li>• Poor harvest</li> <li>• Food insecurity</li> </ul>	

## KARENGA DISTRICT HAZARD, RISK AND VULNERABILITY ANALYSIS

### 4.1 PROBLEM-ANIMALS (WILDLIFE)

**Table 16: Table showing early warning signs -Problem Animals (Wildlife)**

Early warning signs
Migration of Wild animals from park
Drying off of the existing water bodies in the park
When crop harvest is ready (Elephants and buffalos)
Flooding within the park (Narus valley)
Lack of wild fruits for the animals (Baboons)
Bush burning within the park

## HAZARD ANALYSIS

### 4.2 HAZARD ANALYSIS - PROBLEM ANIMALS (WILDLIFE)

Table 17: Table Showing Hazard Analysis -Problem Animals (Wildlife)

Geographical area	Intensity	Seasonality	Likelihood 2020/2021	Secondary effect
Sangar, Lokori, Kapedo, Kawalakol, and Karenga	High	During crop harvesting and wet periods	High	<ul style="list-style-type: none"> <li>• Famine</li> <li>• Loss of lives (Death)</li> <li>• Destruction of crops and animals</li> <li>• Displacement of people</li> <li>• Loss of Agricultural land</li> </ul>

### 4.3 Vulnerability Analysis - Problem Animals (Wildlife)

Table 18: Table Showing Vulnerability Analysis -Problem Animals (Wildlife)

Assets at Risk(e.g livestock, human water, infrastructure, crop, vegetation, range land, wild life)	Why or How at Risk?
Crops	The gardens are located along the animal pathways (corridor) hence the crops are eaten and destroyed by wildlife (Elephants, Buffalos).
Livestock	The proximity of grazing areas to the national park
Human	The proximity of the park to the human population hence causing loss of lives (death) and displacement from fertile agricultural lands
Water Bodies (Valley tanks)	Over consumption of water by wildlife hence silting of water bodies.

Green Environment	Overgrazing by buffalos and destruction of trees by elephants

#### 4.4 COPING MECHANISMS - PROBLEM ANIMAL (WILDLIFE)

**Table 19: Table Showing Coping Mechanisms -Problem Animals (Wildlife)**

General Community	Individual
Deployment of community wildlife scouts	Use of scarecrows
Planting of non-palatable crops like Simsim	Planting of non-palatable crops
Planting of Red papers along animal corridors	Internal Migration
Timely planting of early maturing and long maturing crops	Borrowing from relatives and friends
Internal migration within the district	

#### 4.5 PRIORITY AREA OF RESPONSE

**Table 20: Table Showing Priority Areas for response-Problem Animals (Wildlife)**

Cluster / Sector	Priority Area/s For Response
Production	<ul style="list-style-type: none"> <li>• Draw early warning and response plans</li> <li>• Introduction of early maturing crops</li> <li>• Planting of Non-palatable crops</li> </ul>
Community Based Services	<ul style="list-style-type: none"> <li>• Developing ordinance and by-laws</li> <li>• Community sensitization</li> <li>• Strengthen and hasten compensation mechanism for victims of problem animals</li> </ul>
Natural Resources	<ul style="list-style-type: none"> <li>• Implementing buffer zone, trenching along the boundaries of the park</li> </ul>

	<ul style="list-style-type: none"> <li>Advocating for animal repellent trees to be planted along the corridors of the parks</li> </ul>
--	--

#### 4.6 CATTLE RAIDING/RUSTLING

**Table 21: Table Showing Early Warning Signs- Cattle Raiding/ Rustling:**

Early warning signs
Information from neighboring communities
Onset of the dry season
During periods of food scarcity
During periods of high cattle prices

#### HAZARD ANALYSIS

#### 4.7 HAZARD ANALYSIS - CATTLE RAIDS

**Table 22: Table Showing Hazard Analysis- Cattle Raiding/ Rustling**

Geographical area	Intensity	Seasonality	Likelihood in 2020/2021	Secondary effect
Sangar, Lokori, Kapedo, Kawalakol, and Karenga	High	During dry season	High	<ul style="list-style-type: none"> <li>Loss of livestock</li> <li>Loss of lives/Death/injuries</li> <li>Famine</li> <li>High school drop out</li> </ul>

#### 4.8 VULNERABILITY ANALYSIS - CATTLE RAIDS

**Table 23: Table Showing Vulnerability Analysis - Cattle Raiding/ Rustling**

Assets at Risk (example of <i>livestock, human water, infrastructure, crop, vegetation, range land, wild life</i> )	Why or How at Risk?
Livestock	Livestock raided and driven away from the owners

<b>Human Resource</b>	Death as a result of raids loss of income as a result of livestock raided
-----------------------	--

#### 4.9 COPING MECHANISMS - CATTLE RAIDS

**Table 24: Table Showing Coping Mechanisms- Cattle Raiding/ Rustling**

General Community	Individual
Information sharing with relevant stakeholders (Security personnel)	Taking animals to the protected Kraals
Gathering Livestock in protected kraals	Selling some of the livestock
Creation of more water sources for both human and animals	Creation of alternative income generating activities
Recruiting of home guards	

#### 4.10 PRIORITY AREAS OF FOCUS - CATTLE RAIDS

**Table 25: Table Showing Priority Areas for Response- Cattle Raiding/ Rustling**

Cluster / Sector	Priority Area/s For Response
Security Department (Army representative, DPC, RDC)	<ul style="list-style-type: none"> <li>• Community dialogue</li> <li>• Security meetings</li> <li>• Community peace initiatives by leaders.</li> <li>• Deployment and disarmament</li> </ul>
<b>Community Based Services</b>	<ul style="list-style-type: none"> <li>• Community mobilization and sensitization on the response to the conflict.</li> <li>• Setting bye laws and ordinance</li> <li>• Forming security committees</li> <li>• Engage the community on alternative IGA</li> </ul>
<b>Production Department</b>	<ul style="list-style-type: none"> <li>• Restocking.</li> <li>• Increasing livestock access to water</li> <li>• Alternative livelihoods such as piggery and poultry</li> </ul>

#### 4.11 ENVIRONMENTAL DEGRADATION

**Table 26: Table Showing Early warning signs - Environmental degradation**

<b>Early warning signs</b>
----------------------------

Increased population settlements along natural reserves
NDVI (Normalized Difference in Vegetation Index)
Increased demand and commercialization for wood energy
Increased agricultural lands along the natural forest
Poor farming methods

#### HAZARD ANALYSIS

#### 4.12 HAZARD ANALYSIS - ENVIRONMENTAL DEGRADATION

**Table 27: Table Showing Hazard Analysis- Environmental degradation**

Geographical area	Intensity	Seasonality	Likelihoods in 2020/2021	Secondary effect
Sangar, Kapedo, Kawalakol, Karenga, Lokori and Lobalangit	Moderate	Dry season	Moderate	<ul style="list-style-type: none"> <li>• Drought</li> <li>• Famine</li> <li>• Poverty</li> <li>• Loss of soil fertility</li> </ul>

#### 4.13 VULNERABILITY ANALYSIS - ENVIRONMENTAL DEGRADATION

**Table 28: Table Showing Vulnerability Analysis- Environmental degradation**

Assets at Risk	Why or How at Risk?
Livestock	Limited water and pasture
Human resource	Increase in morbidity and mortality
Water	Drying of water sources, Decrease in the recharge of aquifers.
Vegetation	Limited precipitation
Crop	Crop failure due to limited water and effects of drought resistant weeds
Wildlife	Limited pasture and water

#### 4.14 COPING MECHANISMS - ENVIRONMENTAL DEGRADATION

**Table 29: Table Showing Coping Mechanisms- Environmental degradation**

General Community	Individual
Migration to alternative sites/location	Migration to alternative sites/location
Bylaws/ordinances at community level to regulate use of natural resources	Family planning (having affordable number of children)
Afforestation/Establishment of woodlots	Alternative income generating activities that put less pressure on the environment
Alternative income generating activities that put less pressure on the environment	Alternative Livelihood household projects
Use of energy saving technology	Afforestation/ Establishment of woodlots
Preservation of cultural sites	Use of energy saving technology

#### 4.15 PRIORITY AREAS OF FOCUS - ENVIRONMENTAL DEGRADATION

**Table 30: Table Showing Priority Areas for Response- Environmental degradation**

Cluster / Sector	Priority Area/s For Response
Natural resources	<ul style="list-style-type: none"> <li>• Put in place mechanism to monitor early warning signs taking advantage of spatial monitoring tools</li> <li>• Community sensitization and dialogues on natural resources conservation</li> <li>• Strengthen local environmental committees</li> <li>• Formulation and enforcement of ordinances and bylaws</li> </ul>
Water and Environment	<ul style="list-style-type: none"> <li>• Capacity building of community structures on water and environment management</li> <li>• Promote life-saving species of trees</li> <li>• Formation of water user committees and boards</li> <li>• Development of urban waste management plan</li> </ul>
Production	<ul style="list-style-type: none"> <li>• Promotion of alternative income generating activities which is environmentally friendly</li> <li>• Recruitment of extension workers to promote climate smart agricultural practices</li> <li>• Agriculture zoning</li> </ul>

#### 4.16 PROLONGED DRY SPELL/DROUGHT

**Table 31: Table Showing Early warning signs - Prolonged dry spell/Drought**

<b>Early warning signs</b>
Rainfall patterns and performance
A lot of coldness in the morning and evening
Seasonal weather forecast/ information
Normalized Difference Water Index (NDWI)
Traditional early warning signs (Winds blowing from the west to the east, tilted colored moon to the north)
Temperature (Coldness during the day and night)
Normalized Difference Vegetation Index (NDVI)

**HAZARD ANALYSIS**

**4.17 HAZARD ANALYSIS - PROLONGED DRY SPELL/ DROUGHT**

**Table 32: Table Showing Hazard Analysis- Prolonged dry spell/ Drought**

Geographical area	Intensity	Seasonality	Likelihood in 2020/2021	Secondary effect
Sangar, Kapedo, Kawalakol, Karenga, Lokori and Lobalangit	High	Unpredictable	High	<ul style="list-style-type: none"> <li>• Food, Nutrition and income Insecurity</li> <li>• Increase in price of food</li> <li>• Low productivity of livestock</li> <li>• Seasonal internal migration</li> <li>• Gathering and hunting</li> <li>• High dependence syndrome</li> <li>• Conflicts over resource sharing</li> </ul>



#### 4.18 VULNERABILITY ANALYSIS - PROLONGED DRY SPELL/DROUGHT

**Table 33: Table Showing VULNERABILITY ANALYSIS- Prolonged dry spell/ Drought spell**

Assets at Risk) (e.g livestock, human water, infrastructure, crop, vegetation, range land, wild life)	Why or How at Risk?
Livestock	Limited water and pasture.
Human resource	Poor crop performance
Water	Drying of water sources Decrease recharge of aquifers Poor quality of water
Vegetation	Limited precipitation
Crop	Crop failure due to limited water and effects of drought resistant weeds
Wildlife (Animal and Plants)	Limited pasture and water

#### 4.19 COPING MECHANISMS - PROLONGED DRY SPELL/DROUGHT

**Table 34: Table Showing Coping Mechanisms- Prolonged dry spell/ Drought**

General Community	Individual
Introduction of early maturing plants	Dependence on relatives
Casual labour	Commercialization of charcoal burning as a source of income
Seasonal internal migration	Reduced frequency of meals
Food gathering and hunting	Borrowing and begging
Bush burning for fresh pasture	Harvesting and sale of bamboo and thatching grasses
	Making and sale of hand crafts

#### PRIORITY AREAS OF FOCUS - PROLONGED DRY SPELL/ DROUGHT

**Table 35: Table Showing Priority Areas for Response- Prolonged dry spell/ Drought**

Cluster / Sector	Priority Area/s For Response
Natural Resources	<ul style="list-style-type: none"> <li>• Draw early warning and response plans</li> <li>• Introduction of early maturing plants</li> <li>• Activating natural resource management committees</li> <li>• Capacity building and tooling</li> </ul>
Production	<ul style="list-style-type: none"> <li>• Small scale irrigation systems e.g solar powered systems</li> <li>• Promote early maturing, drought resistant crops and tree varieties</li> <li>• Kitchen gardening</li> <li>• Encourage post-harvest practices</li> </ul>
Water	<ul style="list-style-type: none"> <li>• Water Harvesting facilities for domestic use</li> <li>• Water for production (earth dams and valley tanks)</li> <li>• Protection of existing water sources</li> </ul>
Health	<ul style="list-style-type: none"> <li>• Promotion of nutrition specific activities</li> <li>• Public health talk shows</li> <li>• Preparedness for water borne diseases</li> </ul>
Community Based Services and Commercial services	<ul style="list-style-type: none"> <li>• Community mobilization and sensitization</li> <li>• Formation of VSLA and SACCOs</li> <li>• Promotion of alternative income generating activities</li> </ul>

#### 4.5 HUMAN EPIDEMIC

**Table 36: Table Showing Early warning signs - Human Epidemic**

Early warning signs
Change in weather patterns
Increased Population Movements
HMIS Data (Immunization coverage, disease prevalence)
Retrogressive cultural practices (Open defecation)
Information from neighboring communities

#### HAZARD ANALYSIS

#### HAZARD ANALYSIS - HUMAN EPIDEMIC

**Table 37: Table Showing Hazard Analysis- Human Epidemic**

Geographical area	Intensity	Seasonality	Likelihood in 2020/2021	Secondary effect
Sangar, Kapedo, Kawalakol, Karenga, Lokori and Lobalangit	moderate	Unpredictable	High	<ul style="list-style-type: none"> <li>Poverty</li> <li>Depopulation</li> </ul>

#### VULNERABILITY ANALYSIS - HUMAN EPIDEMIC

**Table 38: Table Showing Vulnerability Analysis- Human Epidemic**

Assets at Risk )(e.g livestock, human water, infrastructure, crop, vegetation, range land, wild life)	Why or How at Risk?
<b>Human Resources</b>	Death, incapacitation, low productivity, low income, increased expenses on health, restricted movement. Susceptible to infections, easy human to Human transfer
<b>Health</b>	Pressure on existing health systems
<b>Livestock and wild life</b>	Transfer of zoonotic diseases

#### COPING MECHANISMS - HUMAN EPIDEMIC

**Table 39: Table Showing COPING MECHANISMS- Human Epidemic**

General Community	Individual
Social Cultural Behavior changes	Personal Hygiene
Increased health care seeking behavior	Migrations
Increased intra community collaboration	Suspend social interaction
Temporary Isolation	Increased health care seeking behavior
Shutdown of public places	

#### PRIORITY AREAS OF FOCUS - HUMAN EPIDEMIC

**Table 40: Table Showing Priority Areas for Response- Human Epidemic**

Cluster / Sector	Priority Area/s For Response
------------------	------------------------------

<b>Production</b>	<ul style="list-style-type: none"> <li>• Institute quarantine for possible zoonotic diseases</li> </ul>
<b>Health</b>	<ul style="list-style-type: none"> <li>• Integrated health response plan</li> <li>• Stock up medical supplies</li> <li>• Establish isolation units</li> <li>• Risk communication and community engagement</li> <li>• Training of community structures on community-based disease surveillance</li> <li>• IEC for community messaging</li> <li>• Activate epidemic/endemic response team</li> </ul>
<b>Community Based Services</b>	<ul style="list-style-type: none"> <li>• Community mobilization and sensitization</li> <li>• Psychosocial support activation through community structures</li> <li>• Community dialogue</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>• Provision of clean and safe water</li> <li>• Construction of sanitation facilities</li> <li>• Provision of emergency water systems</li> </ul>

#### 4.5 ANIMAL EPIDEMIC

**Table 41: Table Showing Early warning signs - Animal Epidemic**

<b>Early warning signs</b>
Change in weather patterns
Information from neighboring communities
Traditional early warning

#### HAZARD ANALYSIS

#### HAZARD ANALYSIS - ANIMAL EPIDEMIC

**Table 42: Table showing hazard analysis- Animal Epidemic**

Geographical area	Intensity	Seasonality	Likelihood in 2020/2021	Secondary effect
Sangar, Kapedo, Kawalakol, Karenga, Lokori and Lobalangit	moderate	Unpredictable	High	<ul style="list-style-type: none"> <li>• Poverty</li> <li>• Limited marriages</li> <li>• Depopulation of livestock</li> <li>• Limited payment of school fees and high</li> </ul>

				dropout rates
--	--	--	--	---------------

## Vulnerability Analysis - Animal Epidemic

**Table 43: Table Showing Vulnerability Analysis- Animal Epidemic**

Assets at Risk (e.g livestock, human water, infrastructure, crop, vegetation, range land, wild life)	Why or How at Risk?
Human	Loss of income, transfer of zoonotic diseases, malnutrition, strenuous community social functions
Livestock and wild life	Death

## COPING MECHANISMS - ANIMAL EPIDEMIC

**Table 44: Table Showing Coping Mechanisms- Animal Epidemic**

General Community	Individual
Mass vaccination of livestock	Sell off sick animals
Quarantine of animals	Consumption of sick animals
	Seeking veterinary services

## PRIORITY AREAS OF FOCUS - ANIMAL EPIDEMIC

**Table 45: Table Showing Priority Areas for Response- Animal Epidemic**

Cluster / Sector	Priority Area/s For Response
Production	<ul style="list-style-type: none"> <li>• Stock up veterinary supplies</li> <li>• Ensure restriction to mitigate the spread of disease (quarantine)</li> <li>• Conduct disease surveillance</li> <li>• Animal vaccination and treatment</li> <li>• Support the development of Information, Education and Communication (IEC) materials</li> </ul>
Health	<ul style="list-style-type: none"> <li>• Integrated health response plan</li> <li>• Stock up medical supplies</li> <li>• Establish isolation units</li> <li>• Risk communication and community engagement</li> <li>• Training of community structures on community-based disease surveillance</li> </ul>

	<ul style="list-style-type: none"> <li>• IEC for community messaging</li> <li>• Activate epidemic/endemic response team</li> </ul>
<b>Community Based Services</b>	<ul style="list-style-type: none"> <li>• Community mobilization and sensitization</li> <li>• Psychosocial support activation through community structures</li> <li>• Community dialogue</li> </ul>

#### 4.5 LAND CONFLICTS

**Table 46: Table Showing Early warning signs - Land Conflicts**

Early warning signs
<ul style="list-style-type: none"> <li>• Increased land sale</li> </ul>
<ul style="list-style-type: none"> <li>• Inter clan meetings over land</li> </ul>
<ul style="list-style-type: none"> <li>• Land fragmentation</li> </ul>
<ul style="list-style-type: none"> <li>• Land boundary wrangles.</li> </ul>
<ul style="list-style-type: none"> <li>• Rapid population growth/ immigration</li> </ul>

#### HAZARD ANALYSIS

#### HAZARD ANALYSIS - LAND CONFLICTS

**Table 47: Table Showing Hazard Analysis- Land Conflicts**

Geographical area	Intensity	Seasonality	Likelihood in 2020/2021	Secondary effect
Karenga, Lokori, Sangar, Kapedo and Karenga Tc	High	Start of rainy season	High	Family conflicts. Delayed crop production Injury and death Increase in litigation and court expenses

#### VULNERABILITY ANALYSIS - LAND CONFLICTS

**Table 48: Table Showing Vulnerability Analysis- Land Conflicts**

Assets at Risk (e.g livestock, human water, infrastructure, crop,	Why or How at Risk?
---	---------------------

<i>vegetation, range land, wild life)</i>	
<b>Human Resources</b>	Displacement of people, death, domestic violence
<b>Lands</b>	Land fragmentation
<b>Livestock and wild life</b>	Loss of community grazing areas, destruction of eco system

#### COPING MECHANISMS - LAND CONFLICTS

**Table 49: Table Showing Coping Mechanisms- Land Conflicts**

General Community	Individual
Use of area land committees	Dispute resolution by family members of the two conflicting individuals.
Use of elders to resolve the land conflicts	Sell of land
	Migration
	Land sharing

#### PRIORITY AREAS OF FOCUS - LAND CONFLICTS

**Table 50: Table Showing Priority Areas for Response- Land Conflicts**

Cluster / Sector	Priority Area/s For Response
<b>Natural Resources (Lands)</b>	<ul style="list-style-type: none"> <li>• Community sensitization on land laws and tenure.</li> <li>• Land zoning and inventory.</li> <li>• Land registration (Land titling).</li> <li>• Creating buffer zones in conservation areas.</li> <li>• Strengthening area land committees and land tribunals.</li> </ul>
<b>Community Based Services</b>	<ul style="list-style-type: none"> <li>• Sensitization of communities.</li> <li>• Community dialogues.</li> </ul>

#### 4.5 CROP EPIDEMIC

**Table 51: Table Showing Early warning signs - Crop Epidemic**

<b>Early warning signs</b>
----------------------------

Change in weather patterns
Reports from neighboring communities
Tradition early warning

HAZARD ANALYSIS  
HAZARD ANALYSIS - CROP EPIDEMIC

**Table 52: Table Showing Hazard Analysis- Crop Epidemic**

Geographical area	Intensity	Seasonality	Likelihood in 2020/2021	Secondary effect
Lokori, lolangit, sangar, kawalakol, Kapedo	moderate	Unpredictable	low	<ul style="list-style-type: none"> <li>• Poverty</li> <li>• Food insecurity</li> <li>• Malnutrition</li> <li>• Immigration</li> </ul>

VULNERABILITY ANALYSIS -CROP EPIDEMIC

**Table 53: Table Showing Vulnerability Analysis- Crop Epidemic**

Assets at Risk )(e.g livestock, human water, infrastructure, crop, vegetation, range land, wild life)	Why or How at Risk?
Human resources	Malnutrition, sickness, food insecurity, loss of income.
Water	Contamination of water sources due to spraying of crops
Livestock	Chemical related poisoning

COPING MECHANISMS - CROP EPIDEMIC

**Table 54: Table Showing Coping Mechanisms- Crop Epidemic**



General Community	Individual
Disease resistant crops	Application of fertilizers
Mass distribution of pesticides	Spraying
Extension services	Seek extension services
	Disposal of the affected crop

PRIORITY AREAS OF FOCUS - CROP EPIDEMIC

**Table 55: Table Showing Priority Areas for Response- Crop Epidemic**

Cluster / Sector	Priority Area/s For Response
<b>Production</b>	<ul style="list-style-type: none"> <li>• Stock up spray chemical supplies</li> <li>• Conduct surveillance</li> <li>• Promote spraying of affected farms</li> <li>• Support the development of Information, Education and Communication (IEC) materials</li> </ul>
<b>Community Based Services</b>	<ul style="list-style-type: none"> <li>• Community mobilization and sensitization</li> </ul>

## CHAPTER THREE: VISION, GOAL AND OBJECTIVES OF THE CONTINGENCY PLAN

### 3.1. VISION

A Disaster prepared and resilient Community of Karenga District

### 3.2 OVERALL GOAL

To strengthen communities, Lower and Local Government structures, Non-governmental organizations engaged in management and response to disaster in Karenga District.

### 3.3 STRATEGIC OBJECTIVES

1. To strengthen Disaster Management and coordination structures at Local Government levels to fasten response to disaster occurrences.
2. To build the capacities of communities to cope up with and effectively respond to the disasters whenever they occur in their localities.
3. To reduce impact of disasters on social, economic, and infrastructural resources through post disaster recovery programs

#### 3.3.1 STRATEGIC OBJECTIVES AND ACTIONS

##### Strategic Objectives 1

To strengthen Disaster Management and coordination structures at Local Government levels to fasten response to disaster occurrences.

##### Actions

1. Map partners within district dealing with Disasters.
2. Conduct a capacity needs assessment, and develop capacity building plans for disaster preparedness and response
3. Conduct joint coordination meetings involving district and partners to enforce preparedness

#### STRATEGIC OBJECTIVE 2

To enhance the capacity of communities to cope and effectively respond to disasters in their localities.

##### Actions

1. Mobilize and sensitize communities on disaster preparedness through radio programs, dialogue meetings etc.
2. Formulate community task forces to sustain disaster response

### STRATEGIC OBJECTIVE 3

To reduce impact of disasters on social, economic, and infrastructural resources

#### Actions

1. Mobilize and provide relief food and non-food items
2. Provide cash transfer
3. Provide the seeds for drought tolerant varieties and early growing crops
4. Engage in alternatives for safe livelihoods
5. Provide timely information

## CHAPTER 4: MANAGEMENT AND CO-ORDINATION ARRANGEMENTS

### 4.1 Development Partner Projects/NGO implemented activities/other government programs

#### STAKEHOLDER ANALYSIS

**Table 56: Table Showing Stakeholders analysis**

Government/NGO/Agencies in the District	Sector	Activity
Care International	Production	Trainings on Community VSLA.
	Commercial	Market linkages for farmers
	Community Based	Training and giving support to Traders.
		Conduct exposure visits to the business communities.
		Community sensitization
Save the Children	Works	Training of water user committees
	Education	Follow up of triggered villages on hygiene & sanitation
	Health	Provision of tools for latrine construction
		Community sensitization
Mercy corps	Works	Capacity building of local government staff
	Health	MCHN
	Production	Support to farmers with farm inputs
		Community sensitization
World Vision	Education	Community sensitization on COVID-19
	Community Based Services	Child protection
		Support school going children with scholastic materials
		Training of the SMCs & PTAs on School management concepts
UN/WFP	Education	School feeding program
	Health	Training focal point persons
	Community	MCHN

	Natural Resource	Capacity building on Disaster management
		Sensitization on child protection
		Sensitization on GBV
		Agriculture and market support (AMS)
		Funding cooperating partners
MADA	Community Service Base	Promote grassroots peace between the border of Uganda and South Sudan
	Natural Resources	Community sensitization on COVID-19
	Production	Provision of inputs to the farmers in Karenga
	Education	Cash Assistance to selected GBV vulnerable communities of Karenga.
	Peace & Justice	Enhancing social services such as education, food security and water & sanitation.
		Promotion of good governance, democracy and human rights
		Sensitize community
		Enhancing environment and wildlife conservation
		Emergency preparedness
Sasakawa	Production	Market linkages
	Commercial Services	Support to farmers on IGA
	Community Based Services	Support farmers with improved seeds
		Community sensitization on agronomic based practices
		Value addition services
DADO	Natural Resource	Livelihoods

	CBS	Peace building
	Production	NRM
Intra Health	Health	Reproductive health
		MCHN
		Voluntary Counselling and testing
African Wildlife Foundation (AWF)	Natural Resource	Environmental Conservation
	CBS	Livelihoods
	Commercial	Water catchment and conservation
	Education	Conservation Agriculture
		Schools Infrastructural development
		Promotion of Community Wild life conservations
UNICEF	Health	Monitoring of IPs
	Education	Funding IPs
	Works	WASH
	Community Based	Child protection
		School enrolment
		Provision of treated mosquito nets to HHs
		Support to mother care groups to conduct nutritional food demonstration
VSF Belgium	Production	Animal Health
	Water	Hygiene and sanitation
	Natural Resources	Natural Resource Management
Whave solution	Works/Water	Training of WUCs & Water boards
		Rehabilitation of water sources
		Support to hand pump mechanics
C & D	Education	Training of WUCs & Water boards in Schools
	Works/Water	Rehabilitation of water sources
		Support to hand pump mechanics

AFI	Health	Provision of supplementary feeding to children under 5 years, pregnant and lactating mothers
		Training VHTs, MCG and Health staff on nutrition practices
CARITAS Kotido	CBS	Youth skilling
	Education	Livelihoods support to the community
	Production	Youth skilling
	Works/Water	Capacity building
Whiteker	CBS	Youth skilling
		Peace building and conflict resolution
SORUDA	Production	Provide seeds to farmers
IIRR	Natural Resource	Tree planting
	Production	Water shed restoration
		Water and soil conservation
		Provision of energy saving stoves

#### KARENGA DISTRICT SWOT ANALYSIS FOR DROUGHT

**Table 57: Table Showing District SWOT Analysis for Drought**

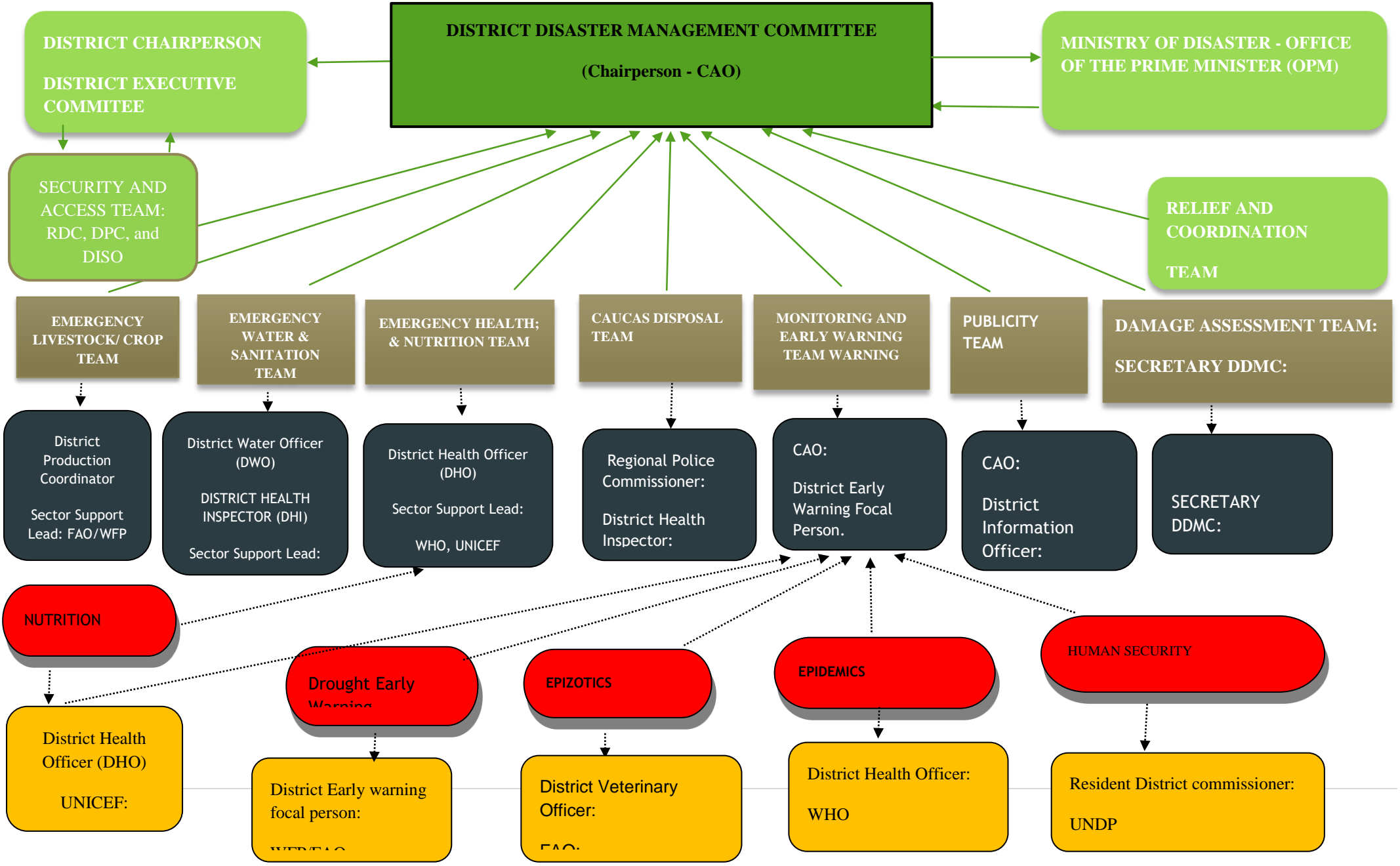
Sector priority Risks e.g. Drought			
	Development	Humanitarian	Strategy

<p><b>Strengths</b></p>	<ul style="list-style-type: none"> <li>✓ Establish and strengthen DDMC</li> <li>✓ Sectoral contingency response plans</li> <li>✓ Integration of the Disaster issues into the DDP</li> <li>✓ Establish the weather focus stations</li> <li>✓ Availability of technical and political human resources</li> </ul>	<ul style="list-style-type: none"> <li>✓ Existence of technical staffs</li> <li>✓ Availability of the sectoral response plans</li> <li>✓ Availability of the contingency plans</li> <li>✓ Availability of the contingency plans</li> <li>✓ Availability of the contingency plans</li> <li>✓ Availability of weather focus stations</li> <li>✓ Availability of development fund</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen Disaster Management Committees at the Sub County level</li> <li>• Continuous update of the sectoral response plan</li> <li>• Scale up integration of DRR strategy in to other sectoral plans</li> <li>• Regular update and monitoring of the weather stations.</li> <li>• Promote indigenous knowledge within the community to adopt and cope with drought.</li> <li>• Facilitating communities to come up with contingency response plans</li> </ul>
	<ul style="list-style-type: none"> <li>✓ Weak coordination mechanism among the DDMC membership</li> <li>✓ Inadequate dissemination of the Disaster Policy</li> <li>✓ Lack of awareness of Disaster policy</li> </ul>	<ul style="list-style-type: none"> <li>✓ Limited funding</li> <li>✓ Weak communication strategy.</li> <li>✓ Non-prioritization at the district level</li> <li>✓ Low level of coordination and awareness among institutions</li> </ul>	<ul style="list-style-type: none"> <li>✓ Enforce application of communication strategy</li> <li>✓ Mobilization of resources for DRR</li> <li>✓ Lobby and advocate for DRR prioritization</li> <li>✓ Strengthen coordination mechanisms</li> </ul>
	<ul style="list-style-type: none"> <li>✓ Existence of National coordination offices</li> <li>✓ Presence of Development partners</li> </ul>	<ul style="list-style-type: none"> <li>✓ Availability of contingency funds</li> <li>✓ Presence of humanitarian partners</li> <li>✓ Calls for</li> </ul>	<ul style="list-style-type: none"> <li>✓ Strengthen accountability mechanisms at all levels</li> <li>✓ Establish mutual networking among all the stakeholders</li> </ul>



		proposals by the aid agencies ✓ Existence of qualified technical human resource and a political will.	
<b>Threats</b>	✓ Unreliable weather patterns ✓ Unreliable weather forecasting ✓ Climate Change ✓ Inadequate access to weather information.	✓ Reduction in donor funding. ✓ Community continuous losses through disasters ✓ Low level of coordination and awareness among partners	✓ Strengthen accountability mechanisms at all levels ✓ Establish mutual networking among all the stakeholders ✓ Lobby and advocate for more funding.

**KARENGA DISTRICT IMPLEMENTATION STRUCTURE OF CONTINGENCY PLAN**



## ROLES OF DISASTER RESPONSE TEAMS

ROLES OF DISASTER RESPONSE TEAMS	
Pre- Disaster	During Post/Disaster
<b>DISTRICT DISASTER MANAGEMENT COMMITTEE ( DDMC )</b>	
Pre- Disaster	During /Post Disaster
<ul style="list-style-type: none"> <li>➤ The analysis of the implications of the early warning signs and ensuring that early warning signs for vulnerable groups are passed and communicated immediately</li> <li>➤ Activation of the taskforces and the responsibility of each taskforce clearly spelt out as per contingency plan</li> <li>➤ DDMC activated and made functional within 24 hours and maintenance of registers</li> <li>➤ The members of emergency response teams equipped with knowledge and informed of their roles and responsibilities as in disaster management plan</li> <li>➤ Conducting monthly DDMC review meetings with line departments in regard to disaster preparedness and mitigation activities</li> <li>➤ Review of disaster management plans before disaster season and actual disaster periods.</li> <li>➤ Update the District contingency plan on annual basis</li> <li>➤ Mainstream and integrate the DCP actions into the District Development Plan and work plan</li> </ul>	<ul style="list-style-type: none"> <li>➤ Coordinate and monitor all preparedness/response activities as per contingency plan</li> <li>➤ Policy recommendations to the central government, development partners, district political leadership, lower local government and sectoral emergency response teams according to assessment findings</li> <li>➤ Recommend for relief and rehabilitation needs</li> <li>➤ Continuous planning and implementation of plans for providing sustainable means of livelihood to most vulnerable communities.</li> <li>➤ Lobby and advocate for integration of disaster prevention, mitigation and preparedness measure into development plans</li> <li>➤ Lobby and advocate for integration of disaster prevention, mitigation and preparedness measure into development plans</li> </ul>
<b>MONITORING AND EARLY WARNING TEAM</b>	
Pre- Disaster	During Post/Disaster
<ul style="list-style-type: none"> <li>➤ Disseminate drought warning alerts to all relevant stakeholders and local communities</li> <li>➤ Map and visit the most disaster affected areas and classify the areas according to vulnerability</li> <li>➤ Continuous updating of the map if there are some changes in classification of areas.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Close supervision and monitoring of disaster progress</li> <li>➤ The information should flow from the DDMC to the communities</li> <li>➤ Monitor weather situation</li> <li>➤ Compile and disseminate drought trend for future reference and planning</li> </ul>

<ul style="list-style-type: none"> <li>➤ The monitoring team should analyze the early warning signs and in case of declined drought signs, information should be shared immediately with relevant stakeholders and local communities</li> </ul>	
<b>PUBLICITY TEAM</b>	
<b>Pre- Disaster</b>	<b>During Post /Disaster</b>
<ul style="list-style-type: none"> <li>➤ Maintain close liaison with the local press and all media heads stationed in the district.</li> <li>➤ Visit disaster affected areas to assess publicity requirement of the affected areas depending on extent of vulnerability in the district</li> <li>➤ Make a list of publicity requirement and mobilize all required logistics for publicity works.</li> <li>➤ Keep close liaison with district administration and all concerned heads of departments, sector working groups and the DDMC for giving advance publicity.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Immediately visit drought affected areas and ascertain publicity requirements.</li> <li>➤ Restore equipment and tools.</li> <li>➤ Arrange for publicity materials in consultation with concerned departments on necessary post disaster publicity needs.</li> <li>➤ Documentation/ dissemination of lessons learnt to support future planning.</li> <li>➤ Alert all relevant stakeholders on the warning and maintain close contact with district administration.</li> <li>➤ Deploy fully equipped publicity units in affected areas.</li> <li>➤ Issue press messages by all available means, timely and regularly.</li> </ul> <p>Frequently visit drought affected areas to ensure effectiveness of publicity means.</p>
<b>RELIEF AND COORDINATION TEAM</b>	
<b>Pre- Disaster</b>	<b>During and Post Disaster</b>
<ul style="list-style-type: none"> <li>➤ Coordination meeting of stockiest is held every quarter and levels of emergency supplies by each stockiest (relief food, water, medicines, vaccines) are updated in the data base.</li> <li>➤ Plan awareness campaign strategy before the disaster season in terms of warning dissemination procedures, individual household safety tips.</li> <li>➤ Issue warning to the sectoral emergency focal points to check their response mechanisms, materials and equipment as per checklist and in accordance with disaster management plan.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Regular review meetings with line departments and emergency response teams/ taskforces.</li> <li>➤ Inter sectoral coordination/ coordination as well as ensure that coordination with NGOs is complete and each NGO is aware of their areas of operations and level of participation.</li> <li>➤ Ensure continuous flow of information and national authorities/ DDMC / emergency response teams are kept informed of latest details.</li> </ul>

<ul style="list-style-type: none"> <li>➤ Meeting with emergency team focal points to review mitigation/ response requirements and minimum resources/ logistics required for each sectoral response.</li> <li>➤ Mobilization of relevant stakeholders and stocking of resources for relief programmes.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Compilation and dissemination of a multi sectoral post disaster reports starting from disaster and post disaster period bring out all aspects of preparedness, response, restoration, rehabilitation , detailed causes of damages, casualties and deficiencies to support in future planning.</li> </ul>	
<b>SECURITY AND ACCESS TEAM</b>		
<b>Pre- Disaster</b>	<b>During / Post Disaster</b>	
<ul style="list-style-type: none"> <li>➤ Instruct all stations to remain on alert.</li> <li>➤ Collect all intelligence information of all important matter pertaining to the drought warning and pass correct information to the DDMC chair.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Keep watch over the disaster situation</li> <li>➤ Keep in readiness available personnel to meet emergency duty. Provisions to be made to dispatch force personnel as and when required.</li> <li>➤ Detail security personnel for guarding relief materials and at the time of distribution of relief items.</li> <li>➤ Supervising officer to keep liaison with district administration and the DDMC</li> </ul>	
<b>DAMAGE ASSESSMENT TEAM</b>		
<b>Pre- Disaster</b>	<b>During /Post Disaster</b>	
<ul style="list-style-type: none"> <li>➤ Reconstitution/ activation of the team</li> <li>➤ Training of team members on assessment modalities.</li> <li>➤ In collaboration with line departments, develop an appropriate assessment tool that should be presented to the DDMC for approval.</li> <li>➤ Draft an assessment work plan.</li> <li>➤ Mobilize all necessary assessment resources/ logistics.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Carry out initial rapid assessments/draft assessment report within 24 hours.</li> <li>➤ Present assessment report to the DDMC clearly highlighting extent of damage, required responses.</li> <li>➤ Arrange / conduct multi sectoral detailed assessments of damages, casualties, resource shortfalls.</li> <li>➤ Arrange/ carry out multi sectoral post disaster assessments.</li> </ul>	
<b>EMERGENCY HEALTH TEAM</b>		
<b>Pre- Disaster</b>	<b>During Disaster</b>	<b>Post Disaster</b>
<b>HEALTH</b>		
<ul style="list-style-type: none"> <li>➤ Prepare a list of health facilities located in the disaster affected area</li> <li>➤ Visit the generally drought affected areas on</li> </ul>	<ul style="list-style-type: none"> <li>➤ Alert all doctors and paramedical staff on receipt of warning.</li> <li>➤ Check personnel, equipment and</li> </ul>	

<p>the basis of vulnerability</p> <ul style="list-style-type: none"> <li>➤ Prepare a list and contacts of medical personnel/ paramedics already available in the area and the projected number of additional personnel of each category that may be required in each of the areas in case of acute drought conditions.</li> <li>➤ Prepare a list of medical personnel and paramedical staff of different categories that can be withdrawn from their places of work and their services utilized for emergency relief work.</li> <li>➤ Ensure that adequate stock of medicines, vaccines and disinfectants likely to be necessary are kept at the district and sub health districts headquarters.</li> <li>➤ Keep read materials for establishing an isolation unit for each of the very vulnerable areas.</li> <li>➤ Arrange for mobilizing at short notice medical relief teams.</li> <li>➤ Prepare a detailed plan for utilizing the doctors and staff from other health organization in the district if so required.</li> <li>➤ Take measures for prevention of epidemic and arrange vaccinations against drought prone epidemics.</li> </ul>	<p>medical stores.</p> <ul style="list-style-type: none"> <li>➤ Arrange for necessary vehicles, ambulances in consultation with the district administration/ district health team.</li> <li>➤ Immediately visit the affected areas.</li> <li>➤ Start measures for health relief in the affected area.</li> <li>➤ Make immediate arrangements for temporary/ mobile clinics if necessary.</li> <li>➤ Decide immediately on isolation of certain patients, if necessary and arrange for isolation wards.</li> <li>➤ Frequently visit the drought affected areas and ensure effectiveness of health measures.</li> <li>➤ Arrange for disposal of utilized medicines and disinfectants</li> <li>➤ Repair or replace damaged equipment.</li> <li>➤ Restore equipment and stores.</li> </ul>
<b>NUTRITION</b>	
<b>Pre- disaster</b>	<b>During/ Post Disaster</b>
<ul style="list-style-type: none"> <li>➤ Operationalize and activate nutrition surveillance systems.</li> <li>➤ Make arrangements for mobile units for maternal and child welfare centers in vulnerable areas if r necessary.</li> <li>➤ Draw up nutrition programme for children under 6 years and expectant/ nursing mothers in drought prone areas. <ul style="list-style-type: none"> <li>• Assess requirements and make arrangements for supplementary feeding / TF</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>➤ Alert personnel on receipt of drought warning and keep constant touch with DHT/ FSAL sector.</li> <li>➤ Ensure that vulnerable groups received at supplementary / TFC centers are properly taken care of.</li> <li>➤ Ensure adequate supplies for nutrition programmes.</li> </ul>
<b>EMERGENCY WATER , HYGIENE AND SANITATION TEAM</b>	
<b>Pre- Disaster</b>	<b>During Post Disaster</b>

<ul style="list-style-type: none"> <li>➤ Visit the generally drought affected areas.</li> <li>➤ Assess measures likely to be required for safe water supply in those areas.</li> <li>➤ Prepare list of WASH personnel already available and the number of additional personnel that may be required in each area.</li> <li>➤ Prepare list of WASH personnel that may be withdrawn from other areas to be used for relief work.</li> <li>➤ Put arrangements in place for deployment of public health education teams at district headquarters for emergency relief work.</li> <li>➤ Ensure adequate stock of equipment and materials for emergency response/ preposition in appropriate places.</li> <li>➤ Draw up tentative programme of action.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Alert lower local government authorities on receipt of drought warning.</li> <li>➤ Conduct a needs assessment of the affected areas immediately along with public health education team.</li> <li>➤ Assess extent of water supply measures required and deploy necessary staff.</li> <li>➤ Constantly visit the drought affected areas and ensure adequate safe water supply measures.</li> <li>➤ Other measures as per the Ugandan public health act.</li> <li>➤ Restore tools and equipment</li> <li>➤ Repair or replace damaged tools and equipment.</li> <li>➤ Documentation / dissemination of lessons learnt to support future planning.</li> </ul>
---	--

<b>EMERGENCY CROP/ LIVESTOCK TEAM</b>	
---------------------------------------	--

<b>Pre- Disaster</b>	<b>During /Post Disaster</b>
----------------------	------------------------------

<b>I: Crop</b>	
----------------	--

<ul style="list-style-type: none"> <li>➤ Based on meteorological reports, advice dates after which planting should not be undertaken and advice suitable crop varieties and cropping patterns.</li> <li>➤ Assessment of acreage under crops and number of farmers to be affected in each of the areas.</li> <li>➤ Assessment of requirements of seeds and tools for emergency relief.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Alert all relevant stakeholders / community on receipt of warning.</li> <li>➤ Check stock of seeds and tools and make arrangements for additional supplies if required.</li> <li>➤ Draw a tentative programme for emergency relief work.</li> <li>➤ Arrange distributions of agricultural inputs in consultation with district administration.</li> <li>➤ Render technical guidance farmers for salvage and protection of surviving crops and raising of such varieties of crops as may be suitable during the season/ in the next planting season.</li> <li>➤ Arrange for spraying of pesticides/ livestock vaccinations if necessary.</li> <li>➤ Constantly visit the affected areas to ensure effectiveness if agricultural relief and rehabilitation measures.</li> <li>➤ Documentation / dissemination of lessons learnt to support future planning</li> </ul>
--	--

	<ul style="list-style-type: none"> <li>➤ Disposal of undistributed agricultural relief supplies that cannot be used beyond that particular period.</li> <li>➤ Implementation of agricultural livelihood restorative activities.</li> <li>➤ Implementation of agricultural livelihood restorative activities.</li> </ul>
--	---

**II: Livestock**

Pre- Disaster	During /Post Disaster
<ul style="list-style-type: none"> <li>➤ Assess requirements of veterinary measures to be under taken in the affected areas and arrange for required staff, equipment, medicines, vaccines and materials for opening first aid centres and dispensaries.</li> <li>➤ Assessment of / make necessary arrangements for access to refuge grazing areas/ water for livestock.</li> <li>➤ Mobilize veterinary teams at the district level for emergency relief work.</li> <li>➤ Arrange for prevention of wide spread of epizootics.</li> <li>➤ Prepare veterinary map showing veterinary service areas and livestock population covered by each of the institution.</li> <li>➤ Arrange for short/ refresher trainings for veterinary medical care and prevention of epizootics for veterinary staff/ community animal health workers.</li> <li>➤ Arrange for sufficient IEC materials for public awareness.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Alert all relevant stakeholders / pastoralists on receipt of warning.</li> <li>➤ Draw up tentative programme for emergency relief work.</li> <li>➤ Visit drought affected areas immediately with veterinary relief team and start relief measures.</li> <li>➤ Arrange with help of district authorities relocation of livestock to refuge grazing areas.</li> <li>➤ Constantly visit the flood affected areas and ensure effectiveness of relief measures undertaken.</li> <li>➤ Restore tools and equipment/ repair/replace damaged equipment.</li> <li>➤ Arrange for disposal of balance medicines or replenish stock of medicines and stores.</li> <li>➤ Take steps for repair of damaged veterinary facilities.</li> </ul>

**CAUCAS DISPOSAL TEAM**

Pre disaster	During/ post disaster
<ul style="list-style-type: none"> <li>➤ Reconstitution of the caucus disposal team.</li> <li>➤ Training of team members on caucus disposal regulations and procedures.</li> <li>➤ Preparations/ mobilization of necessary resources/ logistics.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Caucus disposal team if necessary are activated.</li> <li>➤ Caucus disposal in accordance with the Ugandan public health act.</li> </ul>



## CHAPTER V: CAPACITY PLANNING MATRIX

Table 58: SHOWING THE Capacity planning matrix for priority sectors

I: COORDINATION AND MANAGEMENT RESPONSE PLAN							
STRATEGIC OBJECTIVE							
To strengthen Disaster Management and coordination structures at lower and local Government levels to fasten response to disaster occurrence							
I: Operational objective							
To improve the Districts' readiness to respond to disasters							
I:Strategic Action Plan							
Problem statement	Priority actions	Personnel/Responsible entity	Responsible entity	Disaster phase	Time frame	Time start	Projected cost
Inadequate coordination with development partners on disaster preparedness.	Map and engage development partners in the district	CAO, DCDO & Early warning Focal Person	Karenga DLG, Development partner	Before	2 Months	May	7,000,000
Ineffective early warning system	Support the Establishment of disaster early warning system	CAO, NRO, DPO, Early Warning Focal Person	Karenga DLG, FAO, OPM	Before	6 Months	May	30,000,000
Limited knowledge of the DDMC on their roles and	Train/orient DDMC and SDMCs on their roles and	CAO & Early Warning Focal Person	Karenga DLG, OPM	Before	2 Months	May	6,000,000

responsibilities	responsibilities to strengthen their operations						
Inadequate coordination meetings on preparedness	Undertake joint coordination meetings involving district and partners to enforce preparedness	CAO, DCDO	Karenga DLG, Development partners	Before	3 Months	May	7,000,000
Sub-Total							50,000,000
<b>EXPECTED OUTPUT</b>							
District Disaster early warning system established,							
DDMC and SCDMC capacities and knowledge enhanced							
<b>II: EDUCATION RESPONSE PLAN</b>							
<b>STRATEGIC OBJECTIVE</b>							
To enhance the capacity of the communities to cope and effectively respond to the disaster in their localities							
<b>I: Operational Objectives</b>							
To Improve access to education for children in disaster affected communities.							
<b>II: Strategic Action Plan</b>							
<b>Problem Statement</b>	<b>Priority Actions</b>	<b>Personnel/Responsible entity</b>	<b>Responsible entity</b>	<b>Disaster phase</b>	<b>Time frame</b>	<b>Time start</b>	<b>Projected cost</b>
<i>Education</i>				Before	6 Months	May	

Inadequate water in Schools	Provision of emergency water to schools that have inadequate safe water for pupils. (Motorized water supply)	DEO, DWO, point	CAO, focal	Ministry of Education Karenga DLG Education Department Water partners (UNICEF, C&D, Save Children and Whave,)	' During			60,000,000
	In collaboration with Water department ensure that there is provision of equipment for maintenance of existing school water facilities/ a system in place for school water quality surveillance.			Water sector				
2.Lack of water in the communities can result into girl child dropping out as they fetch water for their families	Water department and its partners to rehabilitate existing water sources in the communities and drill the new water sources	DWO, and DE	CAO	Water sector Education Department UNICEF, WFP, OPM and NGOs	Before , During	2 Months	May	50,000,000
3. Hunger: Acute shortage of food within the communities / lack	Provision of school meals			DEO, CAO				
	Provision of food aid to vulnerable disaster affected							

of a school feeding programme in place may force children to drop out of school.	households.		UNICEF, WFP, OPM and NGOs				
<b>Sub-Total</b>							<b>210,000,000</b>
<b>EXPECTED OUTPUT</b>							
Reduced number of school drop outs associated with the disaster.							
Safe learning space for children during the emergency.							
<b>III: FOOD SECURITY AND AGRICULTURAL LIVELIHOODS SECTOR RESPONSE PLAN</b>							
<b>STRATEGIC OBJECTIVE</b>							
To build the capacity of communities to cope with and effectively respond to all disasters in the district							
<b>Operational Objectives:</b>							
To prevent acute malnutrition and loss of lives by supporting immediate interventions for the affected families							
To restore agricultural livelihoods by restoring production capacity through provision of inputs and technical support in production of basic grains and livestock							
To minimize the effects of disasters							
<b>III: Strategic Action Plan</b>							
<b>Problem Statement</b>	<b>Priority Actions</b>	<b>Personnel/Responsible entity</b>	<b>Responsible entity</b>	<b>Disaster phase</b>	<b>Time frame</b>	<b>Time start</b>	<b>Projected cost</b>
Food insecurity/	Provision of relief items either directly or by implementing	CAO	Karenga DLG, WFP, OPM, DCDO	During	6 Months	May-21	400,000,000

food shortages within the communities	partners.						
Inadequate seeds/ planting materials and equipment	Provision of improved seeds varieties farm implements to households	CAO, DPO	Karenga DLG, WFP, OPM, DCDO, MAAIF	Before and during	3 Month	May-21	250,000,000
Acute lack of pasture for livestock	Provision of emergency grazing including 'cow-calf camps' or other special arrangements to protect breeding cattle.	CAO, DPO	Karenga DLG, WFP, OPM, DCDO, MAAIF	During	3 month	April 2021	100,000,000
	Negotiation of tenure regimes, and agreement on use patterns for key resources such as water and conflict resolution	CAO, RDC	Karenga DLG, WFP, OPM, DCDO	Before and During	6 month	Feb-21	70,000,000
	Provision of security in refuge grazing area	RDC, DISO, CAO	Karenga DLG Army, LDUs	Before and During	2 Months	Mar-21	15,000,000
Livestock death/ disposal during drought period.	Emergency animal purchase/ or provision of subsidy to transport animals to markets to enable pastoralists realize some cash for their animals before they die/ prices collapse.	DVO, DCO	Karenga DLG and Development Partners	During	3 Months	Mar-21	10,000,000
Shortage of water for production	Maintaining water supply for livestock and or farming.	DPO, CAO, DWO	Karenga DLG, MWE, OPM	During	2 Months	May-21	12,000,000

Livestock health	Identification of particular disease risks in drought refuge grazing areas for all species of livestock.	DPO , CAO	Karenga DLG, VSF Belgium, FAO, WFP	During	2 Months		20,000,000
	Provision for vaccinations at the onset of disasters to prevent losses.	DPO, CAO	Karenga DLG, MAAIF. FAO, WFP	Before	3 Months		35,000,000
	Development and activation of an early warning system to report disease outbreaks and risks.	EW Focal Person	Karenga DLG, MAAIF. FAO, WFP	Before	2 Months		20,000,000
	Development of veterinary infrastructure on key livestock movement routes.	DPO, CAO	Karenga DLG, MAAIF. FAO, WFP	Before	6 months		100,000,000
Restoration of Agricultural Livelihoods	Ensure production of basic grains by providing basic inputs and technical support.			Before and during			
	Support Income generating activities	DCO, DPO	Karenga DLG, MAAIF	Before and during	6 Months		200,000,000
8. Scarcity of fuel wood and rampant cutting of trees	Construction and training in energy saving stoves						
	Tree planting	NRO,	Karenga DLG, Development partners	Before and During	1 year	Apr-21	100,000,000
<b>Sub-Total</b>							<b>1,332,000,000</b>
<b>EXPECTED OUTPUT</b>							
<ul style="list-style-type: none"> <li>Lives saved and acute malnutrition reduced among the vulnerable groups affected by disaster</li> <li>Livelihoods and production means of farmers and pastoralists affected by disasters are restored.</li> </ul>							
<b>IV: HEALTH AND NUTRITION SECTOR RESPONSE PLAN</b>							

**Strategic Objective: To build the capacity of communities to cope with and effectively respond to all disasters in the district**

**Operational Objectives:**

To prevent morbidity and mortality associated with malnutrition in children under five, women in reproductive age, pregnant and lactating mothers,

To prevent morbidity and mortality associated with epidemics/ diseases.

**VI: Strategic Plan of Action**

Problem Statement	Priority Actions	Personnel/Responsible entity	Responsible entity	Disaster phase	Time frame	Time start	projected cost
<b>Nutrition</b>							
Malnutrition and loss of lives	Early detection &/ referral Support therapeutic feeding, Supplementary feeding / targeted feeding for vulnerable groups Provide adequate Micronutrients (iodized salt, folic acid, iron, Vitamins A and C, zinc for diarrhoea in children, etc); Treat underlying medical causes of malnutrition. Promote exclusive breast feeding and young child feeding Management of nutrition using SCOPE Coder data	DHO, CAO	Karenga DLG and Partners - UN agencies (WHO, UNICEF, & WFP), NGOs (AFI, , etc.)	Before and During, After	3 Years	May-21	150,000,000
<b>Health</b>							
Inadequate	Strengthen IDSR	DHO, CAO	Karenga DLG and	Before	6 Month	May-21	

preparedness for outbreak prevention and response	Stock pile essential supplies Conduct pre outbreak response activities Use of sentinel		Partners - UN agencies (WHO, UNICEF, & WFP), NGOs such as AFI	and During			40,000,000
Increased outbreak of communicable diseases	Strengthen disease surveillance and reporting of communicable diseases. Strengthen the cold chain and delivery of immunization services Sensitization of the community to raise level of awareness on prevention of communicable diseases. Strengthen routine immunisation.	DHO, CAO	Karenga DLG and Partners - UN agencies (WHO, UNICEF, & WFP), NGOs (AFC, Concern, etc.)	Before and During	3 years	May-21	20,000,000
<b>Sub-Total</b>							<b>210,000,000</b>
<b>EXPECTED OUTPUT</b>							
<p>Availability of anthropometric equipment for immediate identification of malnutrition cases, inputs for treatment of acute malnutrition with complications in health centres and hospitals and for uncomplicated cases at community level and micronutrient powder to treat vitamin and mineral deficiencies.</p> <p>Organization and training of key community members in identification and reporting cases of acute malnutrition conducted.</p> <p>Active search for identification of malnutrition cases at community level carried out.</p> <p>Monitoring by community members of the acute malnutrition cases identified and being treated to ensure recovery.</p> <p>Implementation of IEC plan emphasizes counselling at community level to identify acute malnutrition danger signs and for promotion of appropriate feeding practices for nutrition recovery.</p>							
<b>V: WATER , HYGIENE AND SANITATION RESPONSE PLAN</b>							



<b>Strategic Objective</b>							
To build the capacity of communities to cope with and effectively respond to all disasters in the district							
<b>Operational Objectives:</b>							
To improve access to safe water and hygienic- sanitary conditions for groups affected by disasters							
To prevent morbidity and mortality caused by unsafe water consumption, inadequate sanitation and low hygiene in the communities.							
<b>V: Strategic Plan of Action</b>							
<b>Problem Statement</b>	<b>Priority Actions</b>	<b>Personnel/Responsible entity</b>	<b>Responsible entity</b>	<b>Disaster phase</b>	<b>Time frame</b>	<b>Time start</b>	<b>projected cost</b>
Acute water shortage	Provide the most vulnerable populations with safe water	DWO, CAO	Karenga DLG, OPM, DHI, UNICEF and WASH Partners	After & During	3 Years	Oct-21	10,000,000
	Construction of new water sources and drilling bore holes	DWO, CAO	Karenga DLG, OPM, DHI, UNICEF and WASH Partners	Before	5 Months	May-21	250,000,000
	Provide chlorine and bleach tablets to purify water as well as other supplies for safe water consumption.	DWO, CAO	Karenga DLG, OPM, DHI, UNICEF and WASH Partners	Before , During & After	3 Years	May-21	10,000,000
	Rehabilitation, cleaning and disinfection of remaining viable water sources in order to reduce risks from communicable	DWO	Karenga DLG, OPM, DHI, UNICEF and WASH Partners	Before , During &	3 Years	May-21	20,000,000

	diseases and to increase access to water by the affected population			After			
	Surveillance system for water quality in place with commitment from local authorities	DWO	Karenga DLG, OPM, DHI, UNICEF and WASH Partners	Before , During & After	3 Years	May-21	20,000,000
Inadequate sanitation and low hygiene within the communities	Delivering key messages to the affected community on hygiene related to use of water and diseases caused by unsafe water use/ excreta	DWO	Karenga DLG, OPM, DHI, UNICEF and WASH Partners	Before , During & After	3 Years		30,000,000
	Support for adequate excreta and solid waste disposal, including instructions and support for latrine construction.	DWO,NRO	Karenga DLG, OPM, DHI, UNICEF and WASH Partners	Before , During & After	3 Years		50,000,000
<b>Sub-Total</b>							<b>390,000,000</b>
<b>EXPECTED OUTPUT</b>							
Reduced risks caused by emerging diseases in the affected communities' population as environmental health problems. Improved access to safe water and hygiene/ sanitary conditions for groups affected by disaster, especially for the vulnerable groups.							

Implementation of a water and sanitation communication plan in mass media/ within the communities.  
 Surveillance system for water quality in place, with commitment for Ministry of water and natural resources and local authorities.

**VI: NATURAL RESOURCES RESPONSE PLAN**

**Strategic Objective:** To build the capacity of communities to cope with and effectively respond to all disasters in the district

**Operational Objectives:**

To establish By-laws for food security and punitive measures to curb human-induced disasters

**VI: Strategic Plan of Action**

Problem Statement	Priority Actions	Personnel/Responsible entity	Responsible entity	Disaster phase	Time frame	Time start	projected cost
Environmental degradation due to human related activities such as poor agricultural practices, charcoal burning overstocking/o vergrazing	Rangelands And land, soil conservation management	DNRO, CAO	Karenga DLG, DDMC, DPO, LECs & partners	Before , After & During	3 Years	Oct-21	30,000,000
	Promote the use of live fencing to address issues of fire and use of interlocking blocks than bricks and wood	DNRO, CAO	Karenga DLG, DDMC, DPO, LECs & partners	Before , After & During	3 Years	Nov-21	24,000,000
	Encourage natural tree regeneration	DNRO, CAO	Karenga DLG, DDMC, DPO, LECs & partners	Before , After & During	3 Years	Dec-21	15,000,000
	Encourage use and training of fuel or energy saving technologies	DNRO, CAO	Karenga DLG, DDMC, DPO, LECs	Before , After	3 Years	Feb-22	20,000,000

			& partners	& During			
	Engage in alternative livelihood options like Apiary	DNRO, CAO	Karenga DLG, DDMC, DPO, LECs & partners	Before , After & During	3 Years	Mar-22	50,000,000
	Advocacy / Provision of security / protection mechanisms to pastoralists and their livestock in refuge grazing areas	DNRO, CAOS	Karenga DLG, DDMC, DPO, LECs & partners	Before , After & During	3 Years	Mar-22	15,000,000
	Sensitization and awareness of communities	DNRO, CAO	Karenga DLG, DDMC, DPO, LECs & partners	Before , After & During	3 Years	Mar-22	30,000,000
	Adopting tree planting, agro forestry and restoration of degraded hot spots	DNRO, CAO	Karenga DLG, DDMC, DPO, LECs & partners	Before , After & During	3 Years	Mar-22	25,000,000
	<b>Sub-Total</b>						<b>209,000,000</b>
	<b>GRAND-TOTAL</b>						<b>2,401,000,000</b>

<b>EXPECTED OUTPUT</b>						
Fragile ecosystems such as wetlands, hills, rangeland and river banks conserved						
Sustainable management of natural resources promoted						
Community sensitization meetings on better management of natural resources conducted						

## ANNEXI: DEFINITION OF HAZARD TRIGGERS AND THRESH HOLDS FOR ACTIVATION

### **1. Drought/ Prolonged dry spell**

Drought is an event of prolonged shortages in the water supply whether atmospheric, surface or ground water. It can last for months or years. It can also be termed as a period of time when the District experiences below to normal precipitation. Therefore, when the period of drier than normal conditions that results in water related problems happen, it is severe and humans and livestock alike suffer. While droughts occur naturally, human activity such as water use and management can exacerbate dry conditions. This lack of insufficiency of rain for an extended period of time causes considerable water stress which mostly happens from November to March in all the parts of the district.

### **2. Problem Animals /Crop raiding by wild animal**

Crop raiding comes as a result wild animals moving from their natural habitat (protected area) into community agricultural land to feed on the crops that human grow for their own consumption and trade. As a result of this, Human wildlife conflicts has risen in the district. The most affected sub-counties are Kawalakol, Sangar, Lokori, Kapedo and Karenga, thus resulting into food insecurity

### **3. Crop Epidemic**

The pest and disease problems in plants are often the result of more than one cause. Pests and diseases affect food/cash crops, causing significant loses to farmers and threatening food security e.g Locusts, fall armyworm, fruit flies (*Bactocera spp*) and diseases example of sorghum Smut

### **4. Land Conflict:**

Land conflicts continue to be a common disaster across the district. They result into loss of life, landlessness and loss of property. It is characterised by disputes among families, communities' verses individuals and cross border. This leaves the community vulnerable and living in fear.

### **5. Human Epidemic**

Epidemic disease is an infectious disease that occurs in a particular community affecting a large number of people by spreading within a short period having a high morbidity and mortality.

Outbreak occurs when an anticipated number of cases of an epidemic disease supersede the normal threshold. The distribution of an epidemic disease ranges from locality to locality and may be wide spread covering many districts in a given country; however, when spread worldwide will be termed a pandemic like the current emerging disease COVID 19. An epidemic can occur as a consequence of human interactions, natural disasters, interactions of humans and animals, war and conflicts or people's movement.

## **6. Livestock Epidemic**

These are serious threats given the vast populations of livestock in the District and the semi-nomadic pastoral lifestyle of the majority of the population. The common threats include: Tick Borne diseases; Anaplasmosis, Babesiosis, heart water, East Coast Fever, CBPP (Lung Infection in large animals, CCPP (lung infection in small Ruminants), Helminthosis (internal parasites) farmers do not de-worm their animals, PPR (goat plague), Orf (young stock: goats and sheep), FMD (Threat in neighbouring districts of Kotido and Kaabong), New castle disease (NCD): Viral infection in poultry, Lumpy skin disease.

## **7. Environmental degradation**

This is the deterioration of the environment through the depletion of resources such air, water, soil, the destruction of ecosystem, habitat destruction, the extinction of wildlife and pollution. When natural habitats are destroyed, or natural resources are depleted the environment is degraded. There is a lot of deforestation for charcoal burning, farming/agriculture, livestock temporary/Kraals settlement. This process through which natural environment is compromised in some way which is both a driver and consequence of disasters reducing the capacity of the environment to meet the social and economic needs.

## **8. Cattle Raids/rustling**

A cattle rustling involves members of one community raiding and taking livestock from another community. It is one of the negative traditions that result into deaths, displacement of persons, loss of property and other adverse socio-economic effects. The major causes of conflict shared natural resources such as pasture and water, and cultural beliefs, poverty among others. The conflict almost entire district more especially the agro-pastoral areas of Kawalakol, Kapedo and Sangar sub-counties. The problem also has a cross-border dimension because the Turkana communities in Kenya and Mening & didinga communities in South Sudan involved.

### **Definition of Hazard Triggers and thresh holds for activation**

#### **Definition of Identified Hazards**

- 1. Problem animals**
- 2. Cattle Raids**
- 3. Prolonged dry spell/Drought**

4. Human Epidemic
5. Animal Epidemic
6. Crop Epidemic
7. Environmental degradation
8. Land conflicts

**Definition of Hazard Triggers and thresholds for activation**

**Table 59: Table Showing Definition of Hazard Triggers and Thresholds for Activation:**

Hazard	Impact		
	Low Impact situation	Medium Impact situation	High Impact situation
Prolonged dry spell	<p>2 sub counties out of 7 experience dry spells which will last for two months</p> <p>2000 households affected out of 11,333</p> <p>50 acres of crops affected (maize, sorghum, millets, beans)</p> <p>The numbers of farmers participating in the garden work reducing</p> <p>Water levels in the shallow wells will be reduced</p>	<p>3-4 sub counties out of 7 are affected</p> <p>2000-5000 households affected out of 11,333</p> <p>150 acres of crops affected (maize, sorghum, millets, beans)</p> <p>Some shallow wells and valley tanks begin to dry up</p> <p>The prices of food stuff begin to increase</p>	<p>More than 4 sub counties affected</p> <p>More than 5000 households affected out of 11,333</p> <p>More than 250 acres of crops are affected (maize, sorghum, millets, beans)</p> <p>Most of the valley tanks and shallow wells have dried up</p> <p>Most people are starving and increase in malnutrition cases</p>

**RESPONSE PLAN**

Hazard	Impact
--------	--------



	Low Impact Response	Medium Impact Response	High Impact Response
Prolonged dry spell	<p>Rapid assessment to determine the household suffering</p> <p>Provision of information on alternative livelihood available</p> <p>Provide techniques of managing post-harvest handling</p> <p>Assessment of water situations in the affected communities</p>	<p>Control of commodity prices in the markets.</p> <p>Encouragement of alternative sources of livelihood such as food for work</p> <p>Provision of food items to the most affected families</p> <p>Encourage planting of fast maturing and drought resistant crops</p> <p>Transportation of water to the affected communities</p>	<p>Mass relief food distribution to the community</p> <p>Provision of nutritional supplements to children and mothers</p> <p>Reallocation of funds to meet the emergency</p> <p>Provision of drought resistant both fruits and food crops</p> <p>Provision of mini-irrigation schemes to boost food production</p> <p>Provision of motorized water systems</p>

## TRIGGERS

Hazard	Impact		
	Low Impact situation	Medium Impact situation	High Impact situation
<b>Problem animals</b>	<p>600 Acres of crops affected by problem animals</p> <p>Reports of people being chased/scared by animals in the garden reported</p>	<p>700-1000 acres of crops destroyed by problem animals</p> <p>5 persons reported injured/killed by problem animals in the community</p>	<p>More 1000 acres of crops destroyed by the animals</p> <p>Above 5 persons reported injured by the animals in the community</p>

## RESPONSE PLAN

Hazard	Impact		
	Low Impact Response	Medium Impact Response	High Impact Response

Problem animals	<p>Assess the communities affected</p> <p>Provide information on possible routes of the animals</p> <p>Encourage the community to do timely planting of crops</p> <p>Community sensitisation</p>	<p>Use of community wildlife scouts to control the animals</p> <p>Planting of repellent crops/ compatible crops with wildlife.</p> <p>Provision of scare crows both day and night</p> <p>Compensation of the affected individuals</p>	<p>Compensation of affected individuals.</p> <p>Deployment of rangers to back up community wildlife scouts</p>
-----------------	--	---	--

## TRIGGERS

Hazard	Impact		
	Low Impact situation	Medium Impact situation	High Impact situation
Human disease outbreak	<p>Suspected case of epidemic disease reported (cholera, hepatitis E, ebola, covid-19)</p> <p>One sub county reported the presence of the suspected epidemic disease</p> <p>No death yet reported from the suspected epidemic disease</p>	<p>One to five cases of epidemic disease confirmed and reported (cholera, hepatitis E, Ebola, COVID-19).</p> <p>4 sub counties reported the presence of the confirmed epidemic disease</p> <p>One death of the confirmed case reported</p>	<p>More than five cases of the epidemic disease confirmed and reported (cholera, hepatitis E, ebola,covid-19)</p> <p>All the seven sub counties reported presence of the confirmed epidemic prone disease.</p> <p>More than one death of a confirmed case reported</p> <p>The outbreak has overwhelmed the health staff</p> <p>The bed occupancy ratio is beyond the existing beds in place.</p> <p>All the health facilities are experiencing stockouts of relevant drugs</p>

## RESPONSE PLAN

Hazard	Impact		
	Low Impact Response	Medium Impact Response	High Impact Response
Human disease outbreak	<p>Conduct disease surveillance</p> <p>Encourage the community to seek medical attention</p> <p>Educate the community on preventive measure</p>	<p>Conduct disease surveillance</p> <p>Encourage the community to go for voluntary testing</p> <p>Treatment of affected people</p>	<p>Mass immunization of the community against the diseases</p> <p>Provision of wash supplies to household level</p> <p>Establish a good referral net work</p> <p>Mobilise resources for emergency response</p>

## TRIGGERS

Hazard	Impact		
	Low Impact situation	Medium Impact situation	High Impact situation
Animal and crop pest/ disease outbreak	<p>Report some animals having foot and mouth disease during the month of April-May.</p> <p>When community starts observing the presence of crop pests (army worm);</p> <p>This can be within one village and 1 acre of plantation affected.</p>	<p>Report of many animals having foot and mouth disease during the month of May-June, some animals begin to die.</p> <p>More than one village and up to 10 acres of plantation attacked by pests.</p>	<p>Report of most animals having foot and mouth disease during the month of august-sept and many animals are dying</p> <p>This can happen on a greater extent of more than one sub county and more than 10 acres of land.</p>

## RESPONSE

Hazard	Impact		
	Low Impact response	Medium Impact response	High Impact response
Animal and crop pest/ disease outbreak	<p>Conducting continuous surveillance by the community animal health workers and report to production department</p> <p>Carry out assessment to ascertain the areas affected by the disease/ crop pest</p>	<p>Treatment of the animals affected by foot and mouth disease.</p> <p>Impose quarantine</p> <p>Conducting continuous surveillance and report to production department</p> <p>Carry out mass vaccination of animals and crop spraying</p>	<p>Impose quarantine</p> <p>Conducting continuous surveillance</p> <p>Budget and mobilized resources to respond to emergency</p>

Hazard	Impact		
	Low Impact situation	Medium Impact situation	High Impact situation
Cattle raids	<p>Community notice rampant dog barking at night.</p> <p>Foot marks noticed around the kraals.</p> <p>Reported loss of animals from the neighborhood.</p> <p>Attempted raids occur.</p>	<p>Some few household lost their animals due to raids.</p>	<p>Frequent raids involving many households losing animals.</p> <p>Loss of life and social vices increase.</p>

## RESPONSE

Hazard	Impact		
	Low Impact response	Medium Impact response	High Impact response
Cattle raids	Empower community to report any suspected move towards conducting cattle raids.  Organise the community to establish a protected kraal.	Follow up stolen/raided animals. Deployment of home guards. Impound animals of raiders.	Lobby for restocking of the animals to affected households.  Deployment of soldiers to protect animals in the grazing areas and kraal

## TRIGGERS

Hazard	Impact		
	Low Impact situation	Medium Impact situation	High Impact situation
Land conflict	Population increase compared to land space available.  Increase in conflicts over arable land at family level.	Some people are having misunderstanding due to land issues.  Rampant attacks and conflicts over boundaries reported at village level.  1-5 deaths reported over land conflicts.	Many assault cases as a result of land conflict  Deployment of security forces to quell land conflicts.  More than 5 deaths registered as a result of land conflict.

Hazard	Impact
--------	--------

	Low Impact response	Medium Impact response	High Impact response
Land conflict	<p>Community encouraged to demarcate their land to avoid conflict</p> <p>Conduct community dialogue to resolve land issues together with the elders.</p> <p>Strengthen LC 1 courts.</p>	Empowering the Area Land Committee to resolve land conflict	<p>Use of the courts of law to address land conflicts.</p> <p>Encouraging the community to do titling of the land</p>

## TRIGGERS

Hazard	Impact		
	Low Impact situation	Medium Impact situation	High Impact situation
Environmental degradation	<p>Aggregate encroachment on gazetted areas by 1 acre.</p> <p>Use of hand tools to encroach on gazette lands.</p> <p>1 - 5 workers cutting trees.</p> <p>5 acres of land covered with trees and grasses burnt.</p>	<p>Encroachment on gazetted areas by 2 acres</p> <p>Use of hand saws to encroach on gazetted lands.</p> <p>6 - 10 workers cutting trees.</p> <p>2-5 households settling in gazetted areas.</p> <p>More than five to 10 acres of land covered with grass and trees burnt.</p>	<p>Encroachment on gazetted areas by more than 4 acres.</p> <p>Use of power saws to encroach on gazetted lands.</p> <p>More than 5 household settling in gazetted areas.</p> <p>Above 10 workers cutting trees</p> <p>Above 10 acres of land covered with grasses and trees bunt including crops in the garden.</p>

## RESPONSE

Hazard	Impact		
	Low Impact response	Medium Impact response	High Impact response
Environmental	Community	Mandatory tree	Enforcement of

degradation	<p>Sensitization and engagement.</p> <p>Environmental impact assessment.</p> <p>Continuous monitoring of natural resources using local environmental management committees and spatial technology.</p> <p>Re-demarcation of gazetted natural resources.</p> <p>Community sensitized on the dangers of bush burning.</p>	<p>planting.</p> <p>Passing of ordinances and by laws to conserve the environment.</p> <p>Training community members on controlled bush burning and creating of fire lines to safeguard crops and forest.</p>	<p>ordinances and bylaws.</p> <p>Eviction of encroachers.</p> <p>Aggressive tree planting.</p> <p>Garbage collection and distribution of Garbage skips.</p> <p>Training of community on controlled bush burning and creating fire lines to protect the crops and forest from burning.</p> <p>Request for deployment of environmental police.</p>
-------------	---	---	--

**Table 60: Table showing Hazards cycle and Timeframe in Karenga District Local Government**

No.	Hazard	Period
1	Problem animals	Sept - Oct
2	Human Epidemics	All time Round
3	Crop pests and diseases	April - June
4	Animal epidemics	All through
5	Dry spell/ drought Cattle Raids	Dec- March
6	Land Conflict	June - April
7	Environmental degradation	All through

**Table 61: Table showing the District contingency planning team**

**KARENGA DISTRICT LOCAL GOVERNMENT CONTINGENCY PLANNING TEAM**

S/no	Name	Designation	Organization	Contact
1	MUKOSE JONATHAN HOSEA	Chief Administrative Officer (CAO)	Karenga DLG	0772969029
2	ABALO GRACE	Assistant Secretary-CAO's Office	Karenga DLG	0783840084
3	ITEO JOHN BOSCO	District Environment Officer/Early warning System Point Focal person	Karenga DLG	0394876813
4	OPUL ALFRED	Senior Agriculture Officer	Karenga DLG	0782367804
5	NANGOLE JANE FRANCES	Information Officer	Karenga DLG	0789422082
6	MALLO P. LOKIRU	Biostatistician/ Caretaker District Planner	Karenga DLG	0777303445
7	OKELLO MARCHEAL	Economist	Karenga Town Council	0779286183
8	NASUR CHARLES	Ag. District Engineer	Karenga DLG	0782875674
9	AKELLO BETTY	Community Development Officer - WASH	Karenga DLG	0783577987
10	ABURA REBECCA ONYANG	Assigned District Community Development Officer	Karenga DLG	0772934523
11	NGOLE PETER MORRIS	Assigned District Commercial Officer	Karenga DLG	0773878224
12	LOPEYO SIMON NADING	Ag. District Production Officer	Karenga DLG	0771304833
13	LOGWEE FRANCIS LOKINGA	Ag. District Natural Resources Officer	Karenga DLG	0782035141
14	OKELLO JOHN POLO	For District Health Officer	Karenga DLG	0783931357
15	DADA ROSS ROMANO	Assigned District Education Officer	Karenga DLG	0782529364