

# PARTICIPATORY CLIMATE RISK ASSESSMENT REPORT



**CHURO/AMAYA WARD  
TIATY EAST SUB-COUNTY,  
BARINGO COUNTY**

## AKNOWLEDGMENTS

The Churo/Amaya ward Participatory Climate Risk Assessment report has been made possible through a concerted effort from various stakeholders. We wish to express our sincere appreciation to FLLOCA in financing and mobilizing the community, and Baringo County Government for their support and facilitation of the whole PCRA process. Most importantly the PCRA process will not have been possible without the participation and the reflection of the different representatives from the community ward Climate change planning committees representatives from the different locations of the Churo/Amaya ward, chiefs and the general community. We are also grateful to the technical team that did the PCRA at the community level, these included Esther Barasa, County Drought Information Officer, NDMA, Fridah kiptolong Environmental Officer, Dennis lagat both from Baringo County government. Lastly, we say thanks to all that may have contributed in one way or another towards the success of this process. We are however alive to the fact that Participatory Climate Risk Assessment (PCRA), is not an end in itself but rather a means for the community to build its own resilience and ensure adequate preparedness to deal with the specific hazards identified, therefore a lot of concerted effort and support will be required once the report is adopted in to support the community in actualizing both the development and contingency plans highlighted in this report.

## EXECUTIVE SUMMARY

Churo/Amaya ward is faced with various livelihood challenges. The ward has had higher uncertainties in precipitation and this has led to the ward experiencing frequent droughts. The situation is accelerated by climate change. In the past, the ward has had episodes of droughts and insecurity brought about by retaliatory attacks as the area is the passage routes for the cattle rustlers from other parts of Tiaty mainly Silale and Akwichatis. This meant that whenever there is banditry attacks of the neighbouring communities mainly Ilchamus in Mukutani ward, or Tugen in Mochongoi ward or attacks in ranches and conservancies in Laikipia County by the suspected pokots bandits then the pokots communities in Churo/Amaya ward bears the most brunt from the security forces pursuing the cattle rustlers.

A team of facilitators drawn from the County, NDMA Baringo and Baringo County Government facilitated the community to undertake Participatory Climate Risk Assessment process with key objectives of; supporting the Churo Amaya community identify and prioritize initiatives that will inform relevant stakeholders on the local needs that will bolster peace and foster development, facilitating the development of PCRA action plans (Contingency and development plans) and to train a critical mass of County technical officers on skills to facilitate PCRA exercise.

## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 Ward Demographic Profile

Churo Amaya Ward is located in Tiaty Sub County with an estimated population of 21,187 based on 2019 population census. The ward has the following locations:

Amaya Location: Mukekamar and Amaya sub locations; Churo Location: Putero, Churo and Chepelow sub locations; and Kaptuya location: Kaptuya and Tebelekwo sub locations. The ward covers an area of 289.35 sq.km. The ward is predominantly inhabited by Pokot Community.

## 1.2 Agro Ecological Zones and Livelihoods

It lies in the arid Agro climate zone. This zone has rainfall/evapo-transpiration ratio of 15-25%. The vegetation consists of woody *Commiphora* and Acacia species and grasses such as *Cenchrus ciliaris* and *Chloris roxburghiana*. The ward also falls in the pastoral livelihood zone where 90% of the population depends on pastoral livestock production for survival, both for food and cash income. The remaining 10% are dependent on various livelihood activities like Crop production, petty trade and others depend on charcoal burning and brewing.

This zone is characterized by perennial movements due to in-migration and out-migration in search for pasture and browse.

These communities are characterized by semi-permanent settlements and these affects better access to health, education, relief food distribution and markets. However, the state of infrastructure is very poor with dilapidated roads and lack of market infrastructure. This zone constantly experiences rampant cattle rustling from neighboring communities. The area is much arid and has less grassland and in bad (drought) year, all except the weakest animals will migrate to more distance “bad year grazing areas” which are generally located close or across the borders. [Laikipia, Markwet, Turkana, Samburu and West Pokot]

### **1.3 NATURAL RESOURCES**

The ward has several seasonal rivers and streams that are a source of water for livestock and domestic during rainy season. However, these streams dry up during dry spells forcing the residents to move around looking for water. Forests and shrubs also exist in most part of the ward which is a major source of firewood and traditional medicine. Kaptuya community conservancy which is a habitat of wildlife and great biodiversity of flora and fauna is within this ward. The ward also has rich fertile soils that can be exploited for agricultural production

### **1.4 CRITICAL FACILITIES**

Churo, Kaptuya, churo AIC, Amaya, Kachelitwa, dispensaries are some of critical facilities that offer health services to residents of the ward.

### **1.5 SOCIAL FACILITIES**

#### **1.5.1 Schools and Churches**

There are 18 public primary schools, two public secondary schools and 20 early childhood development centers.

The ward also contains various religious organization such as the Catholic Church, African Inland church and other Pentecostal churches that offer spiritual nourishment and other social developmental activities to the population.

#### **1.5.2 Water sources**

The major water source in the ward is Churo Springs, various seasonal rivers, boreholes, earth dams, pans, and pan dams.

### **1.6 Transport infrastructure and road network**

The ward is traversed by murrums and earth roads, there is no tarmac road traversing the ward, though it is expected that the LAPSSET corridor Tarmac road will pass through the ward.

## CHAPTER TWO

### 2.0 OBJECTIVE AND METHODOLOGY

#### 2.1 Objectives

- To determine the effects of climate change to community.
- To support the community to be able to develop community led climate change preparedness plans
- Support the community members develop a plan of action for the lobbying of community plans to feed into the development of the county contingency plans.

In the process Churo/amaya ward community would identify and prioritize initiatives that will inform stakeholders on the local needs that will bolster peace and foster development.

#### 2.2 Methodology

The Churo/Amaya ward PCRA was held between 11<sup>th</sup>–15<sup>th</sup> April, 2023 at AIC church in Churo. The PCRA collected primary data through participatory participants discussion and interviews during the actual PCRA exercise, while the secondary data sources included Kenya National bureau of Statistics, 2019 Kenya population and housing census, sectoral reports and planning documents. The facilitators were drawn from NDMA and the county government comprising of persons with previous experience in conducting Ward Climate Change Planning Committee (WCCPC) exercise. Due to constraint of resources the exercise was undertaken in five days, the facilitators had to review the PCRA exercise flow and condense the activities to fit the available time. This was achieved through extending the exercise time however the facilitators were keen to ensure that critical exercise flow was covered and that participants were able to critical reflect during each stage. For example, the PCRA flow skipped resource identification however this was made up during capacity assessment of community readiness. To ensure the community members represented all the aspects, the sample was carefully selected to represent all the locations/sub locations, genders, and age and community interest. The

PCRA focused on drought and Deforestation hazards this was mainly due to the specific interest of the community and FLLoCA which is the sponsor organisation and has interest in implementing projects aimed at mitigating the effects of drought in the region. Thus, to start off the exercise the facilitators begun by building a level awareness of the participants on Climate risk assessments and the objective and flow of the PCRA exercise. As result the community were able to come up with their own indigenous definition of climate risk assessment as follows;

**Disaster - “Nyaril”**

**Risk - “Tapan”**

**Hazard- “Kombolelyo”**

**Vulnerability- “Nyarkelyo”**

**Capacity – “Kamugtai”**

### **Summary of Participatory Disaster Risk analysis**

The identified drought hazards were then discussed using the following characteristic.

$$DR = \frac{H \times V}{C}$$

### 3.0 CHAPTER THREE

#### 3.1 Environment & social -economic baseline information

##### 3.1.1 Community resource map



##### 3.1.2 Historical Disaster Profile

The table below shows the historical disaster profile of Churo/Amaya ward

Year	Event	Effects	Mitigation measures
1816	Conflict between the Maasai and Pokots.	<ul style="list-style-type: none"> <li>- Displacement of Maasai by Pokots.</li> <li>- Loss of lives and livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>- Hiding in caves and forests</li> </ul>
1888-1890	Asis and Mmurkut conflict.	<ul style="list-style-type: none"> <li>- Loss of lives</li> <li>- Loss of livestock.</li> <li>- Lack of food.</li> </ul>	<ul style="list-style-type: none"> <li>- Hiding in caves and forest</li> </ul>
1949	Korongoro age set		
1945	'Lokitam' drought  And 'chepchok' attacks by turkana.	<ul style="list-style-type: none"> <li>- Malnutrition</li> <li>- Loss of lives</li> <li>- Loss of livelihoods</li> <li>- Loss of livestock.</li> </ul>	<ul style="list-style-type: none"> <li>- Recovery of stolen animals by Grampton the white Government</li> <li>- Police station in Kangit and Kolosia was opened up</li> </ul>

1950	Kollowa Masacre(Lukas kipchech came to churo to spread the dini ya musambwa was sent by Elijah wa Masinde)	They harassed a AIC missionary in Nginyang  Caused people to be killed in kollowa on their way to mt. Elgon  Chiefs were fired	Every location paid a fine of 10,000 cattle
1952	Drought (Cherur)	- Famine  - Malnutrition  - Loss of lives  - Loss of livestock  - Migrations	
1953	Korongoro age set		
1953	Heavy Rains	- Livestock loss of sight  - Lymph node inflammation  - Loss of livestock	- Migration
1957	Korongoro		
1959 - 1960	Rinderpest disease outbreak 'Plok'	- Loss of livestock.  - Eating of wild fruits	-Provision of yellow maize and canned food.  - Chief Lokudo mobilized for Vaccination.  The cow causing the lack of rain was killed
1960	Drought caused by cheptolilia( kiplook)	- Loss of livestock.  - Eating of wild fruits	
1963-1964	Heavy rains that let to many rats that fed even on human hair (chemriang)  First white from Finland opened a mission in kapedo	- Plenty food  - School and hospital were built  - Drought in both Turkana & Pokot that made turkanas	First education in the region

		to move to kapedo to get food	
1965	<p>A morning star with a black head with a tail</p> <p>There was drought (Lokinuny &amp; Lokitwer)</p> <p>Outbreak of snake like worms from calves</p> <p>Circumcision of females in many</p> <p>Establishment of the first primary in Churo</p>	Loss of livestock	<ul style="list-style-type: none"> <li>- Powder milk</li> <li>- Canned foods</li> <li>- Relief food</li> <li>- Migration of people</li> </ul>
1970	Reestablishment the primary school by AIC for boys only and girls joined in 1976		
1975	East coast fever livestock	Caused animals not to stand loss of livestock	Herbal medicines to treat the livestock
1979-1980	<p>East coast fever livestock disease outbreak</p> <p>Drought (Lokodos)</p>	<ul style="list-style-type: none"> <li>- Loss of animals</li> <li>- Migrations</li> </ul>	- Vaccinations of cattle
1984	Drought (korim)	<p>-Loss of major livelihoods</p> <p>Migration of people and livestock</p>	<p>-Sale of aloevera.</p> <p>- Relief food distribution.</p>
1986	A star appears in the sky at 10 pm with others small around it		
1988	Kapelach initiation 1 <sup>st</sup>		
1997	Elnino 'Tanaktu'	<ul style="list-style-type: none"> <li>- Bumper harvest</li> <li>- Floods</li> <li>- Loss of lives</li> <li>- Loss of property</li> <li>- Reduced manpower</li> </ul> <p>Kapelach initiation Last</p>	<ul style="list-style-type: none"> <li>- Limited movement due to flooding</li> <li>- Campaign on public health</li> </ul>

2000	Drought (Lodonyang)	<ul style="list-style-type: none"> <li>- Famine</li> <li>- Malnutrition</li> <li>- Loss of lives</li> <li>- Loss of livestock</li> </ul>	<ul style="list-style-type: none"> <li>- Relief food by national government and partners</li> <li>( Yellow Maize)</li> </ul>
2009	Drought (Chepangan)	<ul style="list-style-type: none"> <li>- Famine</li> <li>- Malnutrition</li> <li>- Loss of lives</li> <li>- Loss of livestock</li> <li>- Migration of livestock</li> </ul>	<ul style="list-style-type: none"> <li>- Relief Food</li> <li>- Wild Fruits</li> <li>- Buying of hay</li> </ul>
2016-2017	Drought Murkutwo initiation	<ul style="list-style-type: none"> <li>- Famine</li> <li>- Malnutrition</li> <li>- Loss of lives</li> <li>- Loss of livestock</li> <li>- Migrations to other counties in search of water and pasture that led to conflicts</li> </ul>	<ul style="list-style-type: none"> <li>- Relief food by national government and partners</li> </ul>

### 3.1.2 WEALTH RANKING

### 3.2 Hazard identification

The community members listed the following as key hazards in their locations affecting their livelihoods optimal performance

1. Drought
2. Livestock diseases
3. Crop diseases
4. Floods
5. Soil erosion

6. Insecurity
7. Wild fire
8. Deforestation
9. Drugs and substance abuse

### 3.2.1 Pair-wise Ranking

Hazards	DR	LD	CD	F	SE	IN	WF	DF	DS	Score	Ranking
DR		DR	DR	DR	DR	DR	DR	DR	DR	8	1
LD			LD	LD	LD	LD	LD	DF	LD	6	3
CD				CD	CD	I	CD	DF	DS	3	6
F					SE	I	F	DF	DS	1	8
SE						I	SE	DF	DS	2	7
IN							I	DF	I	5	4
WF								DF	DS	0	9
DF									DF	7	2
DS										4	5

## 2. Hazard ranking

From this analysis, the community identified three major hazards as ranked in the following order:

1. Drought
2. Deforestation
3. Livestock diseases
4. Insecurity
5. Drugs and substance abuse
6. Crop diseases
7. Soil erosion
8. Floods
9. Wild fire

### **Hazard assessment**

The participants developed a hazard profile using the following characteristics:

- Cause, warning signs and signals, Duration, Period of occurrence, Frequency, Force, Forewarning and Effects on individual and the community. Given the characteristics the group then gave analytical description of the drought hazard.

### **Vulnerability assessment**

The participants continued by looking at whom and what is vulnerable to the drought hazard profiled earlier. The vulnerability assessment followed the hazard assessment because vulnerability is hazard specific. The groups disaggregated the human elements at risk according to;

- Gender, Age and Social –economic nature of household
  - etc. and for non-human elements they considered;
  - Productive assets (livestock, crops, shops) and Critical facilities for basic service provision
- For each of the elements at risk the degree of vulnerability and the underlying causes were given.

### **Capacity assessment**

The capacity to cope with the drought hazard discussed earlier was done in the same groups. Capacities were looked from two perspectives;

- Capacity to address the hazard; mitigation and prevention opportunities available within the community
- Capacity to address vulnerability; individual skills, knowledge and attitudes for survival and society systems to support the high-risk groups

### **Risk analysis**

This was a summary of the three assessment i.e. hazard, vulnerability and capacity assessment. It looked at drought hazard effects on elements at risks and gaps in hazard prevention and mitigation, vulnerability

reduction (survivability and community support systems) and conclusion on risk levels. It also gave recommendation for appropriate risk reduction measures that would;

- Prevent or mitigate the drought hazard
  
- Reduce vulnerability through enhancing capacity of individual to cope and community to provide support

The participant's plenary outputs on hazard, vulnerability and capacity assessments and risk analysis are provided in this report, with recommendations actions (Contingency and preparedness) required to reduce the risks.

### 3.3.2 Hazard characterization and profiling analysis

CHARACTERISTICS	ELEMENTS	ANALYTICAL DESCRIPTION OF DROUGHT	EXPOSURE VARIABLES	
			HOW WILL IT AFFECT ME	HOW WILL IT AFFECT COMMUNITY
<b>Cause/origin</b>	<ul style="list-style-type: none"> <li>- Deforestation</li> <li>- Insufficient rain causing prolonged drought</li> <li>- Overgrazing</li> <li>- Climate change</li> </ul>	<p>Drought is a natural hazard caused by insufficient rains for two consecutive seasons. It also occurs due to climate change accelerated by human activities. It is a slow onset hazard with forewarning of 4 months, its warning signs include; flowering of specific trees such as likwen, migration of bees and butterflies from west to east. Its frequency is usually after every two years and occurs in January to May, lasting for a period of 4-5 months.</p>	<ul style="list-style-type: none"> <li>- Unavailability of water and food</li> <li>- Insufficient grass for livestock</li> <li>- Migration of people and animals</li> <li>- Death of livestock and people</li> <li>- Insecurity</li> <li>- School dropouts</li> <li>- Increase in crime rates</li> <li>- depression</li> <li>- Shortage of food for the elderly</li> <li>- Lack of enough attention and support for people living with disabilities</li> <li>- Women walking for long distance in search of water</li> <li>- Lack of shelter during migration</li> <li>- Pneumonia for children during migration</li> <li>- Poor hygiene practices due to lack of water</li> </ul>	<ul style="list-style-type: none"> <li>- Congestion in hospitals</li> <li>- Early marriages</li> <li>- Malnutrition in children</li> <li>- Interruption of markets</li> <li>- Closure of schools</li> <li>- Congestion in some schools</li> <li>- Closure of roads</li> <li>- Congestion in water points</li> <li>- Insufficient drugs in hospitals</li> <li>- School drop outs</li> <li>- Breaking down of borehole</li> <li>- Breakage of marriages</li> <li>- Increase in gender-based violence</li> </ul>
<b>Force</b>	<ul style="list-style-type: none"> <li>- Heat/ rise in temperature</li> <li>- Drying of rivers</li> <li>- Vegetation and soil degradation</li> </ul>			
<b>Warning signs</b>	<ul style="list-style-type: none"> <li>- Migration of butterflies</li> <li>- Changing of star position</li> <li>- Looking at animal's intestines</li> <li>- Shedding of leaves</li> </ul>			
<b>Forewarning</b>	2-3 months			
<b>Speed of onset</b>	Slow			
<b>Frequency</b>	3 years			
<b>Period of occurrence</b>	January – May			
<b>Duration</b>	1 year			

## DEFORESTATION

### Cause/origin

- Charcoal burning
- wild fire
- Overgrazing
- Climate change

Deforestation refers to the decrease in forest areas across the world.

It's clearing or thinning of forest by human. It's one of the main issues in global land use. It is a slow onset hazard with forewarning of five years, its warning signs include; extreme logging Its frequency is usually after every five years and occurs in January to December,

### Under 5 yrs:

- Lack of parental care
- Poor hygiene
- Increased malnutrition

### 6-18 yrs:

- School dropouts
- Drug abuse
- Child labor

### 19-35yr

- Cattle rustling
- Alcoholism
- Stress and depression
- Separation and divorce
- Difficulty/complications during deliveries

### 35-60yrs

- Alcoholism
- Single parenting
- Overworking
- Lack of human resource
- Increased economic responsibilities
- Family conflicts

### Elderly

- Neglected
- Depend on their children
- Conflict with children

- Early marriages
- Malnutrition in children
- Interruption of markets
- Closure of schools
- Congestion in some schools
- Closure of roads
- Congestion in water points
- Insufficient drugs in hospitals
- School drop outs
- Breaking down of borehole
- Breakage of marriages
- Increase in gender-based violence

<b>Force</b>	-bare land -strong wind - Heat/ rise in temperature - Drying of rivers - Vegetation and soil degradation
<b>Warning signs</b>	-extreme wood logging
<b>Forewarning</b>	5years
<b>Speed of onset</b>	Slow
<b>Frequency</b>	On daily basis
<b>Period of occurrence</b>	Jan-Dec
<b>Duration</b>	Annually

			<ul style="list-style-type: none"><li>• Poor hygiene</li><li>• Low immunity</li></ul> <b>Special group</b> <ul style="list-style-type: none"><li>• High dependency rate</li><li>• Diseases</li><li>• stigmatization</li><li>• Lack of balanced diet</li><li>• Lack of exclusive breast feeding</li></ul>	
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## 1.2 Vulnerability Assessment

### 1.2.1 Non-Human Elements

	<b>LIVELIHOOD RESOURCES AND ASSETS</b>	<b>Drought</b>	<b>Deforastation</b>	<b>TOTAL</b>	<b>RANKING</b>
<b>Natural</b>	Forest	3	3	6	1
	Springs	3	2	5	2
	Pasture	3	2	5	2
	Land	2	3	5	2
	River	3	2	5	2
<b>Physical</b>	Hill	2	2	4	3
	Borehole	2	2	4	3
	Road	2	2	4	3
<b>Economic financial</b>	Livestock	2	2	4	3
	Crops	2	2	4	3
	Honey	3	3	6	1
	Business	3	2	5	2
	Fishing	2	2	4	3
<b>Social</b>	School	2	2	4	3
	Churches	2	2	4	3
	Police station	2	2	4	3
	Hospital	3	3	6	1

### 3.4.1 NON HUMAN ELEMENT

<b>Hazard profile</b>	<b>Elements at risk</b>	<b>Location of element</b>	<b>H</b> <b>i</b> <b>g</b> <b>h</b>	<b>Medi</b> <b>u</b> <b>m</b>	<b>Low</b>	<b>Reasons for level of vulnerability</b>
<b>DROUGHT</b>	<b>Critical facilities (Hospitals)</b>	Churo Kaptuya Amaya		✓		<ul style="list-style-type: none"> <li>• Congestion due to increased number of patients</li> <li>• Shortage of drugs in hospitals</li> <li>• Understaffing</li> <li>• Poor roads leading to hospitals</li> <li>• lack of source of power</li> <li>• lack of equipment's</li> <li>• poor structural conditions</li> <li>• lack of water supply</li> </ul>
	<b>Schools</b>	Churo Kachilitwa Kaptuya Amaya		✓		<ul style="list-style-type: none"> <li>• Migration of families leading to school dropout</li> <li>• Shortage of food</li> <li>• Understaffing</li> <li>• Ignorance by parents</li> <li>• Lack of water</li> </ul>

Human Elements

Hazard profile	Elements at risk	Location of element	High	Medium	Low	Reasons for level of vulnerability
Drought	< 5 years	Home Parental care	✓			<ul style="list-style-type: none"> <li>• Lack of parental care</li> <li>• Poor hygiene</li> <li>• Increased malnutrition</li> <li>• Risk from fires/burns</li> </ul>
	6-18 years male			✓		<ul style="list-style-type: none"> <li>• School dropouts</li> <li>• Cattle rustling</li> <li>• Drug abuse</li> <li>• Early marriages</li> <li>• Indiscipline cases</li> <li>• Child labor</li> <li>• Lack of spiritual guidance</li> <li>• Early parenting</li> </ul>
	6-18 years female		✓			<ul style="list-style-type: none"> <li>• Early and forced marriages</li> <li>• Lack of sanitary pads</li> <li>• Early parenting (pregnancies)</li> <li>• Complications during deliveries</li> <li>• Rape cases</li> <li>• STDs</li> <li>• GBV</li> <li>• FGM</li> <li>• School dropouts</li> <li>• Exposure to drugs</li> </ul>
	19-35 years male	Home Businesses Collages			✓	<ul style="list-style-type: none"> <li>• Family break ups</li> <li>• Cattle rustling</li> <li>• Alcoholism</li> </ul>

					<ul style="list-style-type: none"> <li>• Loan defaulters</li> <li>• Stress and depression leading to death</li> <li>• Burglary and robbery</li> </ul>
<b>19-35 years female</b>	Home Businesses Collages	✓			<ul style="list-style-type: none"> <li>• Prostitution</li> <li>• Separation and divorce</li> <li>• Diseases (HIV and Aids and STDs)</li> <li>• GVB</li> <li>• Stress and depression</li> <li>• Lack of family planning</li> <li>• Difficulty/complications during deliveries</li> <li>• Lack of balanced diet</li> </ul>
<b>36-65 years male</b>	Home Working Collages		✓		<ul style="list-style-type: none"> <li>• Lack of human resource</li> <li>• Increased economic responsibilities</li> <li>• Family conflicts</li> <li>• Witch craft and sorcery</li> <li>• Family break ups due to polygamy</li> <li>• Foreseer</li> </ul>
<b>36-65 years female</b>		✓			<ul style="list-style-type: none"> <li>• Family break ups and conflicts</li> <li>• FGM operators/circumcisers (may contract diseases)</li> <li>• Family bread winners</li> <li>• GBV</li> <li>• Alcoholism</li> <li>• Single parenting</li> <li>• Overworking</li> </ul>
<b>65 &gt; elderly</b>	Home	✓			<ul style="list-style-type: none"> <li>• Neglected</li> <li>• Depend on their children</li> </ul>

					<ul style="list-style-type: none"> <li>• Conflict with children</li> <li>• Poor hygiene</li> <li>• Witchcraft and sorcery</li> <li>• Low immunity</li> <li>• Abuse</li> </ul>
<b>Pregnant and lactating mothers</b>	Home Hospitals Markets Farms	✓			<ul style="list-style-type: none"> <li>• Lack of pre- and post-natal care</li> <li>• Lack of balanced diet</li> <li>• Lack of exclusive breast feeding</li> </ul>
<b>PLWD</b>	Home Schools Market places Secluded places	✓			<ul style="list-style-type: none"> <li>• Lack of aiding materials</li> <li>• Shortage of food</li> <li>• High dependency rates</li> <li>• Rejection by the families</li> <li>• Difficulty on accessing critical facilities</li> <li>• Immobility</li> <li>• Lack of access to medical facilities</li> <li>• Lack of basic needs</li> <li>• Harsh climatic conditions</li> <li>• Denied basic education</li> </ul>

## 1.3 Capacity Assessment

### 1.3.1 Non-Human Elements

	Existing	Required	Gaps
<b>DROUGHT</b>	Migration in search of water and pasture for livestock	<ul style="list-style-type: none"> <li>• Pasture management</li> <li>• Desilting of dams</li> <li>• Repair and maintenance of boreholes</li> <li>• Sensitization on effects of overgrazing</li> <li>• Upgrading of breeds of livestock</li> <li>• Exposure tour on dairy farming and bee-keeping</li> <li>• Capacity building on modern farming technologies</li> <li>• Land reclamation from invasive species</li> </ul>	<ul style="list-style-type: none"> <li>• Controlled grazing and soil erosion</li> <li>• Pasture harvesting</li> <li>• Lack of extension officers</li> <li>• Lack of knowledge on livestock species to keep</li> <li>• Limited financial support</li> <li>• No capacity to fight the invasive species</li> <li>• Poor market prices for livestock</li> </ul>
	Alternative sources of livelihood (poultry keeping, honey harvesting, casual labor) Availability of youth to move with livestock in search of pasture and water	<ul style="list-style-type: none"> <li>• Capacity building in proper poultry keeping methods</li> <li>• Provision/ empowerment on poultry breads</li> <li>• Empowerment of legal sources of livelihood</li> <li>• Establishment of nomadic schools</li> <li>• Encouraging those moving with animals in search of pasture and water to maintain peace</li> </ul>	<ul style="list-style-type: none"> <li>• No extension officers on poultry keeping</li> <li>• Lack poultry medicine</li> <li>• Lack of market for poultry and aloe</li> <li>• Food shortage</li> </ul>
	Cutting tree branches for livestock to feed Grazing agreements at a fee with private lands Illegal herding	<ul style="list-style-type: none"> <li>• Empower farmers to maximize their land on pasture</li> <li>• Sensitization on pasture harvesting</li> <li>• Empowerment of grazing committees</li> <li>• Training on modern irrigation methods</li> <li>• Capacity building on modern bee keeping methods</li> </ul>	<ul style="list-style-type: none"> <li>• Financial constrains</li> <li>• Lack of fencing</li> <li>• Inadequate knowledge on pasture management</li> <li>• Lack of laws on illegal herding</li> </ul>
	Formation of women and youth groups SMEs (merry go round and table banking) Traditional preservation of stuff Feeding on wild fruits	<ul style="list-style-type: none"> <li>• Empowerment of youth and women on small and medium enterprises</li> <li>• Capacity building on modern preservation methods</li> <li>• Trainings on kitchen garden farming</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of capital</li> <li>• Inadequate technical knowhow on modern farming techniques</li> </ul>

	Honey harvesting	•Training on water harvesting techniques at household level	• Inadequate knowledge on modern bee keeping methods
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### 1.3.2 Human Elements

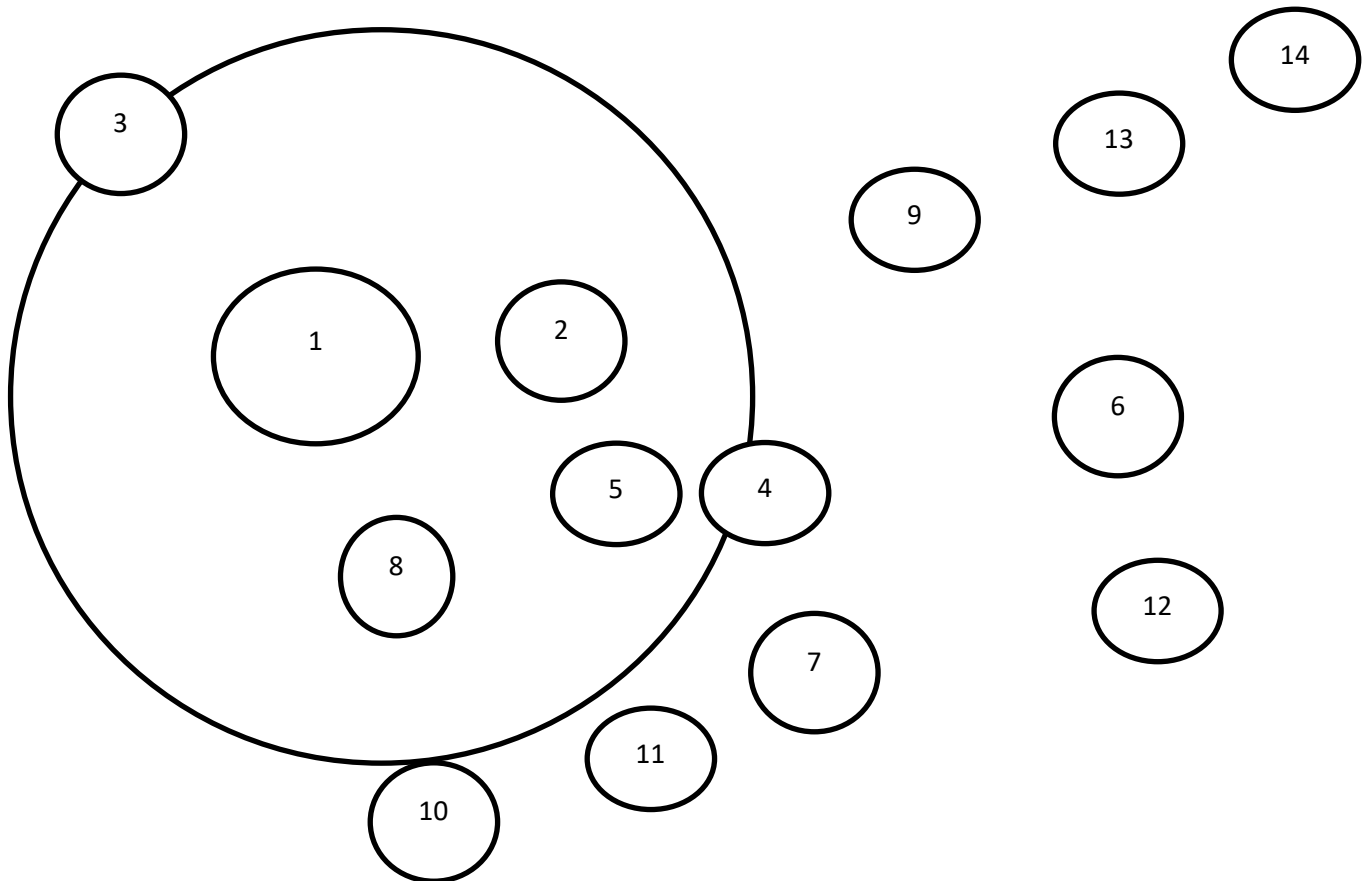
Elements at risk Individual survivability Hazard 1&2	Time element	Capacities		Gaps
		Existing	Required	
0-5 years	Before	<ul style="list-style-type: none"> <li>- Availability of food</li> <li>- Balanced diet</li> <li>- Parental care</li> <li>- School feeding program ECDE</li> </ul>	<ul style="list-style-type: none"> <li>- Improved access to medical facilities</li> <li>- Better and sustainable school feeding program</li> <li>- Good shelter</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate medical facilities</li> <li>- Food shortage</li> </ul>
	During	<ul style="list-style-type: none"> <li>- Preserved food</li> <li>- Wild fruits</li> <li>- School feeding program</li> <li>- by-products from brewing busaa</li> <li>- honey</li> </ul>	<ul style="list-style-type: none"> <li>- value addition on animal products</li> <li>- enhancing of sustainable school feeding program</li> <li>- empowering the community on keeping dairy cattle and goats</li> <li>- planting of fruit trees</li> </ul>	<ul style="list-style-type: none"> <li>- modern food preservation methods</li> <li>- lack of sustainable school feeding program</li> <li>- lack of dairy animals</li> <li>- shortage of water for fruits planting</li> <li>-</li> </ul>
5-18 years male and female	Before	<ul style="list-style-type: none"> <li>- Herding</li> <li>- School feeding program</li> <li>- Farming</li> <li>- Casual labor</li> </ul>	<ul style="list-style-type: none"> <li>- Better feeding program</li> <li>- Improved farming methods</li> <li>- Establishment of better boarding schools</li> <li>- Trained on ranching management</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate feeding programs</li> <li>- Lack of better agricultural skills</li> <li>- Inadequate boarding facilities</li> <li>- Lack of knowledge in ranching</li> </ul>
	During	<ul style="list-style-type: none"> <li>- Hunting and gathering of wild fruits and animals</li> <li>- Animal products i.e. milk, meat and blood</li> <li>- Dependency on parents</li> </ul>	<ul style="list-style-type: none"> <li>- Planting of fruit trees</li> <li>- Empowering of farmers</li> <li>- Enhancing sustainable school feeding program</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of school feeding programs</li> <li>- Lack of technological know-how</li> <li>- Shortage of water supply for fruit planting</li> <li>- Inadequate boarding schools</li> </ul>

		<ul style="list-style-type: none"> <li>- Peers cooperating by feeding among themselves</li> <li>- School feeding program</li> </ul>		
<b>18-35 male and female</b>	Before	<ul style="list-style-type: none"> <li>- Availability of food</li> <li>- Employment</li> <li>- Own property</li> <li>- Self-help groups</li> <li>- Casual labor</li> </ul>	<ul style="list-style-type: none"> <li>- Empowerment on better financial skills</li> <li>- Better livestock keeping methods</li> <li>- Sensitization on modern methods of farming</li> <li>- Empowerment to use their lands properly</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of capital</li> <li>- Lack of better livestock keeping skills</li> <li>- Lack of certified seeds</li> <li>- Inadequate skills on poultry and bee keeping</li> <li>- Lack of extension officers</li> </ul>
	During	<ul style="list-style-type: none"> <li>- Take care of children</li> <li>- Migration with animals</li> <li>- Walk for long distance in search of food and water</li> </ul>	<ul style="list-style-type: none"> <li>- Financial empowerment and trainings on business opportunities</li> <li>- Capacity building on alternative sources of livelihood</li> <li>- Establishment of pasture management</li> <li>- Empowerment on modern farming methods</li> <li>- Introduction of drought resistant crops</li> <li>- Establishment of irrigation and garden farming</li> <li>- Education on pasture harvesting, management and storage</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of capital</li> <li>- Inadequate knowledge on modern farming methods</li> <li>- Lack of improved farm tools</li> </ul>
<b>35-60 years male and female</b>	Before	<ul style="list-style-type: none"> <li>- Own land property</li> <li>- Farmers</li> <li>- Savings and investments</li> <li>- Ready available human resource</li> </ul>	<ul style="list-style-type: none"> <li>- Equipping with skills on modern methods of farming</li> <li>- Empowering with financial skills and business management</li> <li>- Pasture management ‘</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of modern farming tools</li> <li>- Lack of trained personnel on business skills</li> <li>- Poor market conditions</li> <li>- Lack of skills on irrigation</li> </ul>

		<ul style="list-style-type: none"> <li>- Traditional herbalists</li> </ul>	<ul style="list-style-type: none"> <li>- Upgrading of livestock breeds</li> <li>- Introduction of irrigation methods</li> <li>- Provision of modern bee keeping methods</li> <li>- Training on pasture harvesting and storage</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate reliable sources of water</li> <li>- Lack of extension officers</li> <li>- Lack of storage facilities</li> <li>- Lack of knowledge on modern bee keeping methods</li> </ul>
	During	<ul style="list-style-type: none"> <li>- Own property and livestock</li> <li>- Available human resource</li> <li>- Employed</li> </ul>	<ul style="list-style-type: none"> <li>- Better farming methods</li> <li>- Training on better management of property</li> <li>- Enhancing knowledge on animal health</li> <li>- Education on pasture harvesting, management and storage</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of storage units</li> <li>- Lack of agricultural extension officers</li> <li>- Inadequate skills on pasture harvesting, storage and management</li> </ul>
<b>60&gt; elderly</b>	Before	<ul style="list-style-type: none"> <li>- Settle disputes</li> <li>- Partake in traditional ceremonies</li> <li>- Available human resource</li> <li>- Business investments</li> </ul>	<ul style="list-style-type: none"> <li>- Empowering on negative cultural vices</li> <li>- Trainings on management of investments</li> <li>- Enhance access to health facilities</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of management skills</li> <li>- Lack of medical cover</li> </ul>
	During	<ul style="list-style-type: none"> <li>- Preserved foods</li> <li>- Foreseers</li> <li>- Depend on family members</li> <li>- Traditional healers</li> </ul>	<ul style="list-style-type: none"> <li>- Access to government remittances</li> <li>- Access to medical services</li> <li>- Empowerment to enhance livestock within the farm by introducing pasture management and dairy farming</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of capital</li> <li>- Inadequate medical facilities</li> <li>- Lack of financial saving schemes</li> </ul>
<b>Pregnant and lactating mothers</b>	Before	<ul style="list-style-type: none"> <li>- Availability of food</li> <li>- Traditional mid wives</li> <li>- Traditional herbs</li> <li>- Availability of water</li> <li>- Minimal family disputes</li> </ul>	<ul style="list-style-type: none"> <li>- Improved food production at household levels</li> <li>- Capacity building on maternal health care</li> <li>- Better water supply</li> </ul>	<ul style="list-style-type: none"> <li>- Minimal maternal services</li> <li>- Shortage of water</li> <li>- Shortage of food at household level</li> </ul>

			- Enhancing water facilities nearest to the people	
	During	<ul style="list-style-type: none"> <li>- Preserved food stuff</li> <li>- Gathering of wild fruits</li> <li>- Depend on family members</li> <li>- Use of traditional herbs</li> </ul>	<ul style="list-style-type: none"> <li>- Establishment of modern health facilities</li> <li>- Empowering to plant fruit trees</li> <li>- Capacity building on SMEs</li> </ul>	<ul style="list-style-type: none"> <li>- Inadequate access to health facilities</li> <li>- Lack of fruit farms</li> </ul>
<b>PLWDs</b>	Before and During	<ul style="list-style-type: none"> <li>- Proper care</li> <li>- Good health</li> </ul>	<ul style="list-style-type: none"> <li>- Capacity building in teaching people to live with PLWD</li> <li>- Support from well wishers</li> </ul>	- Lack of experts to train PLWD

## 1.4 Stakeholder analysis



### STAKEHOLDERS

1. County government
2. National government
3. NRT
4. World bank
5. SHA
6. Red-cross
7. WFP
8. Betzalel foundation
9. Catholic
10. Diguna
11. LNC
12. Mugie ranch

13. Action aid

14. Ruwa

## CHAPTER FOUR

### 2.0 WARD CLIMATE CHANGE ACTION PLANNING PROCESS

#### 2.1 Adaptation Strategies

Deforestation				
HAZARD	IMPACT	ADAPTATION STRATEGY	ADAPTATION GOAL	
			Short term	Long term
Deforestation	Soil erosion	<ul style="list-style-type: none"> <li>Planting of trees &amp; and cover crops</li> <li>Adoption &amp; implementation of laws &amp; policies</li> <li>Construction of gabions and terraces</li> </ul>	<ul style="list-style-type: none"> <li>Reduce soil erosion</li> <li>Increase food security</li> <li>Reduce risk /accident</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Increased rainfall</li> <li>Restore soil fertility</li> <li>Land reclamation</li> <li>Restore water conservation points</li> </ul>
	Loss of habitat	<ul style="list-style-type: none"> <li>Promotion of tree planting activities</li> <li>Practicing irrigation</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Increase vegetation cover</li> <li>Reduce sun intensity /Direct sunlight</li> </ul>	<ul style="list-style-type: none"> <li>Increase bio diversity</li> <li>Increased rainfall</li> <li>Restore soil fertility</li> <li>Land reclamation</li> <li>Restore water conservation points</li> </ul>

	Land slide	<ul style="list-style-type: none"> <li>• Water diversification</li> <li>• Planting trees &amp; cover crops</li> <li>• Building of gabions</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce soil erosion</li> <li>• Reduce loss of property</li> <li>• Reduce risk /accident</li> <li>•</li> <li>• Increase food production</li> </ul>	<ul style="list-style-type: none"> <li>• Increase food security</li> <li>• Provides astatic value</li> </ul>
	Drying of water sources	<ul style="list-style-type: none"> <li>• Establishment &amp; enforcement of law</li> <li>• Building of check dams</li> <li>• Conservation of water catchment areas</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Increase vegetation cover</li> <li>• Improve soil aeration</li> <li>• Improve water availability</li> <li>• Increased food production</li> </ul>	<ul style="list-style-type: none"> <li>• Restoration of water sources</li> <li>• Increase forest cover</li> <li>• Soil conservation</li> <li>• Increase bio diversity</li> <li>• Increase food security</li> </ul>
	Desertification	<ul style="list-style-type: none"> <li>• Reforestation</li> <li>• Agro-forestry</li> <li>• Establishment of drought resistant crop &amp; tree species</li> <li>• Establishment of pasture production</li> </ul>	<ul style="list-style-type: none"> <li>• Promote soil conservation</li> <li>• Increase animal feed</li> <li>• Reduce soil erosion</li> </ul>	<ul style="list-style-type: none"> <li>• Restore soil fertility</li> <li>• Increase forest cover</li> <li>• Improve livelihood</li> <li>• Increase amount of rainfall</li> </ul>

Drought				
HAZARD	IMPACT	ADAPTATION STRATEGY	ADAPTATION GOAL	
			Short term	Long term
Drought	Water shortage & drying up of water sources	<ul style="list-style-type: none"> <li>• Rehabilitation of existing infrastructure</li> <li>• Construction of boreholes</li> <li>• Planting of trees &amp; and cover crops</li> <li>• Adoption &amp; implementation of laws &amp; policies</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce soil erosion</li> <li>• Increase food security</li> <li>• Increase water availability</li> </ul>	<ul style="list-style-type: none"> <li>• Increased rainfall</li> <li>• Land reclamation</li> <li>• Restore water conservation points</li> </ul>
	Loss of livestock & bio-diversity	<ul style="list-style-type: none"> <li>• Promotion of tree planting activities</li> <li>• Practicing irrigation</li> <li>• Pasture establishment</li> <li>• Promotion of drought resistant crops</li> <li>• Rearing of drought resistant livestock</li> </ul>	<ul style="list-style-type: none"> <li>• Increase vegetation cover</li> <li>• Reduce sun intensity /Direct sunlight</li> <li>• Increase food security</li> <li>• Promotes fodder tree</li> </ul>	<ul style="list-style-type: none"> <li>• Increase bio diversity</li> <li>• Increased rainfall</li> <li>• Restore soil fertility</li> <li>• Land reclamation</li> <li>• Restore water conservation points</li> </ul>
	Land slide	<ul style="list-style-type: none"> <li>• Water diversification</li> <li>• Planting trees &amp; cover crops</li> <li>• Building of gabions</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce soil erosion</li> <li>• Reduce loss of property</li> </ul>	<ul style="list-style-type: none"> <li>• Increase food security</li> <li>• Provides astatic value</li> </ul>

			<ul style="list-style-type: none"> <li>• Reduce risk /accident</li> <li>• Increase food production</li> </ul>	
	Desertification	<ul style="list-style-type: none"> <li>• Reforestation</li> <li>• Improve agricultural irrigation</li> <li>• Agro-forestry</li> <li>• Establishment of drought resistant crop &amp; tree species</li> <li>• Establishment of pasture production</li> </ul>	<ul style="list-style-type: none"> <li>• Promote soil conservation</li> <li>• Increase crop production</li> <li>• Increase animal feed</li> <li>• Reduce soil erosion</li> <li>• Reduce cost of living</li> </ul>	<ul style="list-style-type: none"> <li>• Restore soil fertility</li> <li>• Increase forest cover</li> <li>• Improve livelihood</li> <li>• Increase amount of rainfall</li> </ul>

## 2.1.1 Co benefits of adaptation strategies

ADAPTATION STRATEGY Drought	CO-BENEFITS	FURTHER IMPROVEMENTS FOR CO-BENEFITS
Use of alternative source of energy /livelihood	<ul style="list-style-type: none"> <li>✓ Efficiency</li> <li>✓ Reduce cost of living</li> <li>✓ Reduce respiratory diseases</li> <li>✓ Reduce accident (physical injuries)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Sensitization of community on improved livelihood</li> <li>✓ Promoting on the use of alternative source of energy</li> </ul>
Planting of trees & cover crops (drought resistant species)	<ul style="list-style-type: none"> <li>✓ Increase bio-diversity</li> <li>✓ Promote antistatic value</li> <li>✓ Provides shelter</li> <li>✓ Increase honey production</li> <li>✓ Herbs production</li> <li>✓ Promote tourist attraction</li> </ul>	<ul style="list-style-type: none"> <li>✓ Encouraging tree planting</li> <li>✓ Encourage agro-forestry</li> <li>✓ Promotes conducive environment for both wildlife &amp; human being</li> <li>✓ Conservation of water catchment areas</li> </ul>
Building of terraces	<ul style="list-style-type: none"> <li>✓ Reduce siltation</li> <li>✓ Creation of employment opportunity</li> <li>✓ Conservation of water catchment areas</li> </ul>	<ul style="list-style-type: none"> <li>✓ Land reclamation</li> <li>✓ Reduces soil erosion</li> <li>✓ Changing perception</li> <li>✓</li> </ul>

Control grazing	<ul style="list-style-type: none"> <li>✓ Reduces spread of diseases</li> <li>✓ Control breeding</li> <li>✓ Reduces farmers cost of pictures</li> <li>✓ Safety of the animal</li> </ul>	<ul style="list-style-type: none"> <li>✓ Sensitization of the farmers on proper methods of grazing</li> <li>✓ Adoption of modern technology</li> <li>✓ Value addition</li> <li>✓ Rearing of improved breeding</li> </ul>
Water diversion	<ul style="list-style-type: none"> <li>✓ Land reclamation</li> <li>✓ Conveying water for irrigation purpose</li> <li>✓ Water conservation</li> </ul>	<ul style="list-style-type: none"> <li>✓ Maintenance of drainage system</li> <li>✓ Training farmers on better ways</li> </ul>
Establishment of pasture production	<ul style="list-style-type: none"> <li>✓ Improve livelihood on livestock keeping</li> <li>✓ Improves animal production</li> <li>✓ Create employment</li> <li>✓ Improves on income</li> </ul>	<ul style="list-style-type: none"> <li>✓ Proving of pasture establishment materials</li> <li>✓ Sensitization</li> </ul>

<b>ADAPTATION STRATEGY</b>	<b>CO-BENEFITS</b>	<b>FURTHER IMPROVEMENTS FOR CO-BENEFITS</b>
<b>Deforestation</b>		
Planting of trees & cover crops (drought resistant species)	<ul style="list-style-type: none"> <li>✓ Adequate rainfall</li> <li>✓ Source of income</li> <li>✓ Increase bio-diversity</li> <li>✓ Promote antistatic value</li> </ul>	<ul style="list-style-type: none"> <li>✓ Encouraging planting of indigenous tress.</li> <li>✓ Promotion of afruitation</li> <li>✓ Encourage agro-forestry</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Provides shelter</li> <li>✓ Increase honey production</li> <li>✓ Herbs production</li> <li>✓ Promote tourist attraction</li> </ul>	<ul style="list-style-type: none"> <li>✓ Promotes conducive environment for both wildlife &amp; human being</li> <li>✓ Conservation of water catchment areas</li> </ul>
Protection of water catchment areas	<ul style="list-style-type: none"> <li>✓ Reduce siltation</li> <li>✓ Creation of employment opportunity</li> <li>✓ Increase availability of water</li> <li>✓ Promotes irrigation</li> <li>✓ Conservation of water catchment areas</li> </ul>	<ul style="list-style-type: none"> <li>✓ Land reclamation</li> <li>✓ Fencing of water catchment areas</li> <li>✓ Changing perception</li> <li>✓ Proper mantaince</li> </ul>
Establishment of pasture production	<ul style="list-style-type: none"> <li>✓ Improve livelihood on livestock keeping</li> <li>✓ Improves animal production</li> <li>✓ Create employment</li> <li>✓ Improves on income</li> </ul>	<ul style="list-style-type: none"> <li>✓ Control grazing</li> <li>✓ Establishment of irrigation system</li> <li>✓ Planting of certified seeds</li> <li>✓ Proper timing of planting season</li> <li>✓ Proving of pasture establishment materials</li> <li>✓ Sensitization</li> </ul>
Use of alternative source of energy /livelihood	<ul style="list-style-type: none"> <li>✓ Efficiency</li> <li>✓ Reduce cost of living</li> </ul>	<ul style="list-style-type: none"> <li>✓ Sensitization of community on improved livelihood</li> </ul>

	<ul style="list-style-type: none"><li>✓ Reduce respiratory diseases</li><li>✓ Reduce accident (physical injuries)</li><li>✓ Reduce eye irritation</li></ul>	<ul style="list-style-type: none"><li>✓ Promoting on the use of alternative source of energy or renewable sources of energy</li></ul>
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#### 4.2 Ward level priorities

#### 4.2.1 COMUNITY ACTION PLAN

GOALS	STRATEGY ACTIVITIES	TARGETS		TIME FRAME	REQUIRED RESOURCES	RESOURCE GAPS	SOURCE OF FUNDS	RESPONSIBILITY
		LOCATION	POPULATION					
Promotion of water harvesting	<ul style="list-style-type: none"> <li>Purchase and installation of water tanks to institution &amp;HH</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	<ul style="list-style-type: none"> <li>1000HH</li> <li>20school</li> <li>6 health centre</li> </ul>	JAN – MARC 2024	<ul style="list-style-type: none"> <li>Funds</li> <li>Human resources</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> </ul>	CG NG NGOs	Community Ministry of water
	<ul style="list-style-type: none"> <li>Constriction of underground water tanks</li> </ul>	1 per location	<ul style="list-style-type: none"> <li>400HH</li> </ul>	MAR-2025	<ul style="list-style-type: none"> <li>Funds</li> <li>Human resources</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> </ul>	CG NG NDMA Action aid NGOs	Community KFS Dept of water
	<ul style="list-style-type: none"> <li>Distribution Water treatment chemicals</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	<ul style="list-style-type: none"> <li>Entire</li> </ul>	Marc-2024	<ul style="list-style-type: none"> <li>Funds</li> <li>Human resource</li> </ul>	<ul style="list-style-type: none"> <li>Lack of funds</li> <li>Inadequate personnel</li> </ul>	CG NG NGOs	Community KFS Dept of water
Restoration of water catchment areas	<ul style="list-style-type: none"> <li>Enforcements of existing laws and regulation</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	400HH	2023 October	<ul style="list-style-type: none"> <li>Human resources</li> <li>Funds</li> </ul>	<ul style="list-style-type: none"> <li>Lack of funds</li> <li>Inadequate personnel</li> </ul>	CG NG	Dep of environment Community
	<ul style="list-style-type: none"> <li>Capacity building of</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	400HH	2023 October	<ul style="list-style-type: none"> <li>Human</li> </ul>	<ul style="list-style-type: none"> <li>Lack of funds</li> </ul>	CG NG NGO	Dep of environment Community

	community				resources <ul style="list-style-type: none"> <li>Funds</li> <li>Expertise</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate personnel</li> <li>Lack of expertise</li> </ul>		
	<ul style="list-style-type: none"> <li>Public awareness</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	400HH	2023 November	<ul style="list-style-type: none"> <li>Human resource</li> <li>Funds</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> </ul>	CG NG NGOs	KFS Community Dep of environment
Adoption of alternative sources of energy	<ul style="list-style-type: none"> <li>Sensitization of community on the benefit of using renewable sources of energy</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	400HH	2023 nov	<ul style="list-style-type: none"> <li>Human resource</li> <li>Funds</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> </ul>	CG NG NGOs	Ministry of energy Community Dep of environment
	<ul style="list-style-type: none"> <li>Capacity building on energy saving jikos</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	2700HH	2024 May	<ul style="list-style-type: none"> <li>Human resource</li> <li>Funds</li> <li>Jikos</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> <li>Lack of energy saving jikos</li> </ul>	CG NG NGOs	Ministry of energy. Community. Dep of environment
Proper range land managements	<ul style="list-style-type: none"> <li>Pasture establishment strategy</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	400HH	2024 May	<ul style="list-style-type: none"> <li>Funds</li> <li>Human resource</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> <li>Inadequate</li> </ul>	CG NG NGOs	Community Livestock department

						human resource		
	<ul style="list-style-type: none"> <li>• Training of farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Entire ward</li> </ul>	20 members	Sep 2023	<ul style="list-style-type: none"> <li>• Funds</li> <li>• Human resource</li> </ul>	<ul style="list-style-type: none"> <li>• Funds</li> <li>• Human resource</li> </ul>	CG NG NGOs NDMA WFP	Community Department of livestock Department of agriculture
	<ul style="list-style-type: none"> <li>• Bench making</li> </ul>	<ul style="list-style-type: none"> <li>• Entire ward</li> </ul>	20 members	2024 June	<ul style="list-style-type: none"> <li>• Funds</li> <li>• Human resource</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate funds</li> <li>• Inadequate human resource</li> </ul>	CG NG NGOs	Community Department of livestock Department of agriculture Dep of environment
Diversification of livelihood	<ul style="list-style-type: none"> <li>• Bee keeping</li> </ul>	<ul style="list-style-type: none"> <li>• Entire ward</li> </ul>	400HH	2024 MAY	<ul style="list-style-type: none"> <li>• Training of farmer</li> <li>• Funds</li> <li>• Bee hives</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate funds</li> <li>• Inadequate human resource</li> <li>• Lack of trainers</li> <li>• Lack of enough bee hives</li> </ul>	CG NG NGOs	Community Department of livestock
	<ul style="list-style-type: none"> <li>• Capacity building of farmers</li> </ul>	<ul style="list-style-type: none"> <li>• Entire</li> </ul>	400HH	Nov 2023	<ul style="list-style-type: none"> <li>• Training of farmer</li> <li>• Funds</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate funds</li> <li>• Inadequate</li> </ul>	CG NG NGOs	Community Department of livestock Department of agriculture

						<ul style="list-style-type: none"> <li>human resource</li> <li>Lack of trainers</li> <li></li> </ul>		Dep of environment
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GOALS	STRATEGY ACTIVITIES	TARGETS		TIME FRAME	REQUIRED RESOURCES	RESOURCE GAPS	SOURCE OF FUNDS	RESPONSIBILITY
		LOCATION	POPULATION					
Awareness creation on modern livestock farming and marketing	<ul style="list-style-type: none"> <li>Public</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	400HH		<ul style="list-style-type: none"> <li>Human resource</li> <li>Funds</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> </ul>	CG NG NGOs	KFS Community Dep of environment
	<ul style="list-style-type: none"> <li>Purchase and distribution of drought resistant breeds</li> </ul>	<ul style="list-style-type: none"> <li>Entire</li> </ul>	600		<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>		
	<ul style="list-style-type: none"> <li>Capacity building on energy saving jikos</li> </ul>	<ul style="list-style-type: none"> <li>Entire ward</li> </ul>	2700HH		<ul style="list-style-type: none"> <li>Human resource</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate funds</li> <li>Lack of energy</li> </ul>	CG NG NGOs	Ministry of energy. Community.

					<ul style="list-style-type: none"> <li>• Funds</li> <li>• Jikos</li> </ul>	saving jikos		Dep of environment
Proper range land managements	<ul style="list-style-type: none"> <li>• Pasture establishment strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Entire ward</li> </ul>	2700HH		<ul style="list-style-type: none"> <li>• Funds</li> <li>• Human resource</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate funds</li> <li>• Inadequate human resource</li> </ul>	CG NG NGOs	Community Livestock department
	<ul style="list-style-type: none"> <li>• Construction of gabions</li> </ul>	<ul style="list-style-type: none"> <li>• Entire ward</li> </ul>	9 sub-location		<ul style="list-style-type: none"> <li>• Funds</li> <li>• Human resource</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate funds</li> <li>• Inadequate human resource</li> </ul>	CG NG NGOs	Community Dep of environment
	<ul style="list-style-type: none"> <li>• Controlled grazing land</li> </ul>	<ul style="list-style-type: none"> <li>• Entire ward</li> </ul>	9 sub location		<ul style="list-style-type: none"> <li>• Funds</li> <li>• Human resource</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate funds</li> <li>• Inadequate human resource</li> </ul>	CG NG NGOs	Community Livestock department

## **RECOMMENDATION**

### **Survivability**

- Establishment of fruit trees nurseries
- Desilting pan dams and preparing broken boreholes to enhance availability of water
- Empowering the community on modern methods of beekeeping and upgrading livestock feeds

### **Mitigation**

- Enhancing better feeding programs in schools
- Creating awareness on the importance of dairy cattle
- Empowering the community on modern methods of bee keeping
- Establishment of boarding school's facilities
- Sensitizing the community on importance of fruit trees and nurseries
- Government to employ extension officers
- Training the community on pasture harvesting, management and storage
- Establishment of hospitals
- Empowering the community on kitchen garden farming and farm ponds
- Construction of a mega dam for irrigation
- Establishment of hospitals and equipping
- Provision of certified seeds for fruit trees

## ANNEX

### Annex 1: PCRA Participant List

No	Name	Designation	Gender	Sub-Location/Village	Telephone
1.	Charles punden		M	Churo	
2.	Albert Kenimak		M	Kaptuya	
3.	Joel K. Lokot		M	Kachilitwa	
4.	Charles C. Topero		M	Chepelow	
5.	Lomantile David		M	Amaya	
6.	Luka Lopok		M	Kachilitwa	
7.	Kipkemoi Isaac		M	Churo	
8.	Lydia Kipopus		F	Churo	
9.	Ann Lumelei		F	Kaptuya	
10.	Emily C. Kiptigen		F	Kachilitwa	
11.	Roda Kiwai		F	Chepelow	
12.	Domoo L. Duncan		M	Putero	
13.	Felix K. Korie		M	Chepelow	
14.	Apaoui Geoffrey		M	Amaya	
15.	Musa Maklab		M	Amaya	
16.	Julius s. Loremei		M	Churo	
17.	Rev. Amos Lomoto		M	Churo	
18.	Josphat Minito		M	Kaptuya	
19.	Motonyo Lomany		M	Kaptuya	
20.	Charity Kipkulei		F	Tebelekwo	
21.	Chepuchepunya John		M	Amaya	
22.	Brenda Mutikol		F	Putero	
23.	Judith Kakuno		F	Amaya	
24.	Samuel rumotome		M	Churo	
25.	Lagat Dennis	BCG	M		
26.	Esther Barasa	NDMA	F		
27.	Fridah Kiptolong	BCG	F		
28.	Cyrus Kwenyi	NDMA	M		

### Ward climate change planning Committee

No	Name	Gender	Contact
1	Amos Lomoto	Male/Elder	0721318080
2	Roda Kiwial	Female/Elder	0714665274
3	Felix Korie	Male/Youth	0706334022
4	Musa Makilap	Male/spiritual leader	0716675561
5	Josephat Bonito	Male/CBO representative	
6	Duncan Domon	Marginalized	0722967945
7	Fridah Ameja	PWD	0748593852
8	Charles Punden	Ward admin	0715192706
9	Charles Koech	Environment Officer	0722417276



1. Resource map chero/Amaya ward



PCRA process at Churo AIC Church



Creation of resource map at Churo